

**Research on Relationship Resource Integration of Chinese
Construction Enterprises: Evolutionary Process and Balance
Mechanism**

LUO Qinwen

Thesis submitted as partial requirement for the conferral of

Doctor of Management

Supervisor

Professor Jorge Lengler, Professor, ISCTE University Institute of Lisbon

Co-supervisor

Professor DU Yifei, Professor, University of Electronic Science and Technology
of China, School of Management and Economics

March, 2017



Instituto Universitário de Lisboa

**Research on Relationship Resource Integration of Chinese Construction Enterprises: Evolutionary
Process and Balance Mechanism**
LUO Qinwen

- Spine -



**Research on Relationship Resource Integration of Chinese
Construction Enterprises: Evolutionary Process and Balance
Mechanism**

LUO Qinwen

Thesis submitted as partial requirement for the conferral of

Doctor of Management

Supervisor

Professor Jorge Lengler, Professor, ISCTE University Institute of Lisbon

Co-supervisor

Professor DU Yifei, Professor, University of Electronic Science and Technology
of China, School of Management and Economics

March, 2017

Statement of honor
Submission of master's dissertation or project work or doctoral thesis

I the undersigned state on my honor that:

- The work submitted herewith is original and of my exclusive authorship and that I have indicated all the sources used.
- I give my permission for my work to be put through Safe Assign plagiarism detection tool.
- I am familiar with the ISCTE-IUL Student Disciplinary Regulations and the ISCTE-IUL Code of Academic Conduct.
- I am aware that plagiarism, self-plagiarism or copying constitutes an academic violation.

Full name Luo Qinwen
Course Management
Student number 59598
Email address _____
Personal email address supercat@qq.com
Telephone number 13688 000 029

ISCTE-IUL, 07/11/2017

Signed 

Abstract

For the Chinese constructive industry, the enterprise's ability in integrating the relationship resources is equally important to its strength in hardware techniques. Therefore, against the background of the globalization and the perfect competition market, it seems that the research on how Chinese construction enterprises integrate their relationship resources and thus achieve their development could be rather interesting and practical. Based on the resources from the CSMAR data base, official websites of enterprises and authorized media, this thesis has collected huge amount of data about two state-owned enterprises and two private enterprises. Besides, according to the questionnaires, this thesis also explored the evolution rule of the politic-bussiness relationship within the Chinese construction industry, the balance mechanism and the process of relationship resources integration.

The results demonstrate that: (1) the develop route of state-owned enterprises is “political relationship-political relationship-bussiness relationship, while the route of private construction enterprises is “bussiness relationship-political relationship- bussiness relationship” and both of their last stages are guided by bussiness-oriented relationship; (2) construction enterprises achieve their balance between the political and bussiness relationship resources by the mutual linking and mutual triggering between them; (3) the interaction characterizes the political relationship resource and the business relationship resource, which means that because of the permeation and integration between these two resources enterprises could continuously absorb external resources and develop themselves. This thesis also points out that even though political relationship plays an important role in this whole process, construction enterprises should pay more attention to the accumulation of internal resources and abilities and return to their commercial nature in terms of a long-term development.

This thesis reveals the evolution rules of political and business relationship resources of Chinese construction enterprises and balance mechanism within them, and it also illustrates the developing process of Chinese construction enterprises and expands theoretical boundaries of current research from an external perspective. Meanwhile, according to the current development of construction enterprises, this thesis has also provides suggestions from the perspective of both government and enterprises level, which could be constructive for strategy-making or policy-making.

Key words: Construction Enterprises; Political Relationship; Bussiness Relationship; Integration; Evolution Process; Balance Mechanism.

JEL: M1

Resumo

Para a indústria de construção Chinesa, relações intra-empresariais, capacidade de integração de recursos e forte tecnologia de hardware são igualmente importantes. No que toca ao contexto de globalização e competitividade de mercado fomos estudar a melhor forma das empresas de construção chinesas poderem otimizar o seu desempenho através da integração de recursos. Este é um assunto bastante interessante e útil nos dias de hoje. Neste estudo, uma enorme quantidade de informação sobre duas empresas pertencentes ao estado e outras duas empresas privadas foi recolhido via questionário, através da base de dados “CSMAR news”, o website oficial das empresas e meios de comunicação social, com vista a explorar a relação entre a lei da evolução e o mecanismo de equilíbrio, bem como o processo de integração de recursos de relações políticas e relações de negócios entre empresas de construção chinesas.

A nossa pesquisa sugere o seguinte: (1) As empresas de construção pertencentes ao estado seguem e obedecem as relações políticas bem como ao desenvolvimento das tendências de relações de negócios, empresas privadas seguem e obedecem às tendências de relações comerciais - relações políticas - bem como ao desenvolvimento das tendências de relações de negócios, nas fases finais, estas foram dominadas pelas relações de negócios. (2) A empresa de construção compreende o equilíbrio necessário entre dos dois recursos relacionais através da ligação das relações políticas e comerciais, alavancagem, transformação mútua e ajustamento mútuo. (3) Os dois recursos relacionais de empresas de construção são interactivos. Através da penetração relacional e integração relacional e adquirindo constantemente recursos externos e absorvendo-os de forma a promover o crescimento das empresas. O estudo também constatou que, apesar da relação política ser bastante importante, as empresas de construção devem prestar mais atenção à acumulação de recursos e capacidades dentro da própria empresa se querem progredir e efectuar um desenvolvimento sustentado a longo prazo, recebendo gradualmente os dividendos da parte comercial da empresa.

Este estudo revela a lei da evolução entre as relações políticas e comerciais das empresas de construção chinesas e o mecanismo de equilíbrio necessário entre as mesmas, e baseado numa perspectiva de relações externas, o estudo revela o processo de crescimento das

empresas de construção chinesas e expande as fronteiras teoricamente existentes. Simultaneamente, dado o actual desenvolvimento das empresas de construção, algumas sugestões são lançadas respectivamente a nível nacional e a nível empresarial. Isto pode ser uma referência para o planeamento estratégico das empresas de construção e a elaboração de políticas dos departamentos governamentais.

Palavras Chave: empresas de construção; relações políticas; relações empresariais; integração; processo de evolução; mecanismo de equilíbrio.

JEL: M1

Acknowledgement

The accomplishment of this dissertation results from the help from all sorts, some of which really go beyond my words.

First and for the most, I am greatly indebted to my two supervisors, Professor DuYifei, from University of Electronic Science and Technology of China, and Professor Jorge Lengler, from ISCTE, who has managed to offer invaluable help in my research design and dissertation fulfillment. Without their strict guidance, enlightening suggestions and frank criticism, my work should never have come out in the present form. Here, I would like to show my greatest respects to both of them.

I am also grateful to UESTC and ISCTE for providing me a wonderful environment to study in. I also want to thank all the professors and teachers who have generously and patiently imparted knowledge related to the field of business management. Their commitments and enthusiasm have motivated me to further my study in this field in the future.

Many thanks also go to my classmates and friends, without their help and support, I could have not finished my dissertation.

Last but not the least, I wish everyone happy and health.

Contents

Chapter 1: Introduction	1
1.1 Objective and significance of research	1
1.1.1 Objective of research.....	1
1.1.2 Significance of research	5
1.2 Description of research problem.....	7
1.3 Definition of related concepts.....	9
1.4 Research strategy	11
1.4.1 Research objects.....	11
1.4.2 Research methods.....	11
1.5 Frame structure and chapter arrangement.....	12
1.6 Contributions	14
1.7 Conclusion	15
Chapter 2: Literature Review	17
2.1 Resource Basic Theory	17
2.1.1 Development of Resource Based Theory.....	17
2.1.2 Content of the Resource Based Theory	17
2.1.3 Qualities of Network Resources and its Exploration to RBT	19
2.2 Resource Dependence Theory	22
2.2.1 The Development and Content of Resource Dependence Theory	22
2.2.2 The application of resource dependent theory during the development of enterprises	24
2.3 An Analysis of Network-Resource-Based Enterprise Development Mechanism.....	25
2.4 Relevant Studies on Resources Integration	28
2.5 The Development and Resources Integration of Construction Enterprises.....	30
2.6 Conclusion	32
Chapter 3: Research Design	35
3.1 Research strategy	35
3.2 Overview of the Research Method	37
3.2.1 Method of Qualitative Research.....	37
3.2.2 Multiple-Case Studies	37

3.2.3 Process Analysis	38
3.2.4 Questionnaires	39
3.3 Selection of Cases	39
3.4 Data Collection	42
3.4.1 Data Source	42
3.4.2 Process of Data Collection	44
3.5 Data Analysis	47
3.5.1 Stage Division	47
3.5.2 Data Coding.....	49
3.5.3 Data Analysis.....	52
3.6 Conclusion	52
Chapter 4 : The Evolution Route and Balance Mechanism of Relationship Resources in Construction Enterprises.....	53
4.1 Introduction of Enterprises	53
4.2 Political Relationship Resources and Business Relationship Resources.....	56
4.2.1 Political Relationship Resources	56
4.2.2 Business Relationship Resources	59
4.3 The Evolution Rules of Construction Enterprises' Relationship Resources.....	61
4.3.1 Characteristics of Private Enterprises in Different Stages	61
4.3.2 Characteristics of state-owned enterprises in different stages.....	64
4.3.3 Questionnaires	66
4.4 Balance and Transfer mechanism of Integration of Political and Business Relationship Resources	68
4.4.1 Mutual Linking and Triggering	70
4.4.2 External-Resources-Based Adjustment	73
4.4.3 Inter-transformation of these Two Relationship Resources	74
4.5 Conclusions.....	75
Chapter 5: Process Analyses of Multiple Cases	77
5.1 Case Studies of Private Construction Enterprises.....	77
5.1.1 PCG	77
5.1.2 GCG	83
5.1.3 Analysis and Discussion of Comparison of these Two Private Construction Enterprises.....	88
5.2 Cases Study of State-owned Construction Enterprises.....	90
5.2.1 Analysis of case process	90

5.2.2 Comparative Analysis and Discussion on CSCEC and CRCC	95
5.3 Discussion.....	97
5.3.1 Evolution Process and Balance mechanism of Relationship Resources of Chinese Construction Enterprises	97
5.3.2 A Framework of Relationship Resources Integration of Construction Enterprises	100
Chapter 6: Conclusion	103
6.1 Major Conclusions.....	104
6.2 Theoretical Contributions	107
6.3 Practical Implication	110
6.4 Limitations	113
Bibliography	117
Appendix	127

List of Tables

Table 3- 1 Basic information of these four enterprises	42
Table 3- 2 Data Screening Criteria	43
Table 3- 3 Data Source	44
Table 3- 4 CSMAR News Data Collection	45
Table 3- 5 Other Data Collections	45
Table 3- 6 Cases	46
Table 3- 7 Questionnaire Collection.....	47
Table 3- 8 Different Periods	48
Table 3- 9 Coding	50
Table 4- 1 Periodical Features of Private Enterprises	62
Table 4- 2 Periodical Features of State-owned Enterprises.....	64
Table 4- 3 Results of Questionnaires.....	66
Table 4- 4 Survey Results of Different Periods of Private Construction Enterprises	67
Table 4- 5 Survey Results of Different Periods of State-owned Construction Enterprises.....	68

List of Figures

Figure 1- 1 Frame structure of the paper	13
Figure 2- 1 The analysis framework of extended RBT	21
Figure 4- 1 Periodical Features of Private Enterprise	67
Figure 4- 2 Periodical Features of State-owned Enterprise.....	68
Figure 4- 3 From Political Relationship to Business Relationship	71
Figure 4- 4 From Business Relationship Resources to Political Relationship Resources	72
Figure 4- 5 Adjustment and Balance of External Resources.....	74
Figure 4- 6 Transmission Routes of Political and Business Resources Relationships.....	75
Figure 5- 1 Resources Framework of PCG and their Links	78
Figure 5- 2 Resources Composition and Relationships of PCG	81
Figure 5- 3 Resources Composition and Relationships of PCG	83
Figure 5- 4 Resources Composition and Relationship of GCG	84
Figure 5- 5 Resources Composition and Relationship of GCG	86
Figure 5- 6 Resources Composition and Relationship of GCG	88
Figure 5- 7 Relationship of Different Resources during the Development.....	90
Figure 5- 8 Resources Structure and Their Relationships of CSCEC and CRCC	91
Figure 5- 9 Resources Structure and Their Relationships of CSCEC and CRCC	93
Figure 5- 10 Resources Structure and their Relationship of CSCEC and CRCC	94
Figure 5- 11 Relationship of Different Resources During the Development.....	96
Figure 5- 12 Framework of Relationship Resources Integration of Enterprises Growth	101

Chapter 1: Introduction

1.1 Objective and significance of research

1.1.1 Objective of research

Since the adoption of the reform and opening policy, the Chinese government has played a supportive role in the construction industry, owing to which construction enterprises have developed rapidly in both scale and quantity, and became a great force in the national economy. It also makes great contribution to employment, technical innovation, the upgrading of the economy structure etc. According to the data from National Bureau of Statistics (NBS), in 2014, the total construction area in China stood at 12.5 billion square meters, which is an increase of 10.4% year on year. The national production value of the construction industry registered 17671.3 billion yuan, increased by 10.2% year on year, accounting for 27.76% of the GDP (at 63646.3 billion yuan). It seems that the construction industry acts as a vital role in China's economy. With the development of the economy, the construction industry in China has become a comprehensive industry, consisting of house building, installation, municipal construction, power supply, public transportation as well as post and telecommunication engineering. From the historical perspective, the rise of the construction industry is an inevitable stage during the national industrialization. At present, China is at the economic development stage of the industrialization growth, which could necessarily mean that China's construction industry is witnessing its moment and embracing its bright future and the great potential, which may benefit national economy in turn.

It is no doubt that the rapid development in the construction industry brings unprecedented opportunities to related enterprises, and which has been well-illustrated by the fact that the number of the construction enterprise has broken its record and still keep growing. According to the 2014's data of National Bureau of Statistic of People's Republic of China (NBS below), up to 2013, there have been 79,528 construction enterprises in China, employing 44.991 million people. According to data of NBS in 2013, the labor productive in construction industry was 324,842 yuan per person by the gross output, and 62,737.5 yuan per person by added value, both of which have been promoting compared with former years.

According to the economic data, unlike other economic entities, Chinese construction industry has been growing in the pace with GDP featuring high growing speed in recent years, but in terms of the internal and external environment and its developing trend, it is undeniable that this industry is confronted with serious challenges.

Firstly, the low threshold for entering the market allows the significant increase in the number of construction enterprises, and this phenomenon inevitably leads to the fierce competition within the industry. The industry data of NBS in 2010 shows that there were over 70,000 construction enterprises in China, while the situation of the scale of construction enterprises tends to be pyramid-shaped, namely scarce in large ones, few in middle ones and numerous in small ones. It seems that a completely competitive environment has fully controlled the construction market in China, and thus fierce competitions are inevitable. It is especially the case since entering the WTO. The domestic construction industry opens to the world gradually, which enables foreign capitals and advanced techniques to flows in, and thus the development pattern of enterprises has been diversified, which contributes to the formation of an amphitheater-shaped competition. A report on China's Project Constructing and Market Researching from 2014 to 2019 indicates that generally speaking, those enterprises who equipped with the advanced technology, outstanding management skills and qualified with top-grade certificates may have an edge over the others, and therefore they could occupy a larger market share; those large and medium-scaled construction enterprises which are located in the province that boosts in construction industry and belongs to well-developed area of China, also take up a certain amount of market and the projects they execute are mainly regional and large and medium-sized; and for those small enterprises, they mainly practice in labor subcontract, business subcontract and some small-scaled projects. Different from other industries, the construction industry bid on orders by competition, which sets extremely strict criterion on enterprises in terms of the grade of qualification, the techniques they own, the ability of cost-control, the skills in management and so on. As a result, for construction enterprises, especially those large ones, to improve their competitiveness is the core to their development.

On the other hand, because of the "economic new normal", the national economy experiences a long-term development with a slower pace, consequently, the development of the construction industry has been slowed down. According to the data of NBS in 2014, the growth rate of GDP was 7.4%, decreased 0.3% on the last year (7.7%), and the prediction of Chinese Academy of Social Science shows that this rate would decrease to 6.9% in 2015. At

present, the overall situation is that the increase of the domestic economy is slowing down, and the income from the revenue the land transfer also shows a decrease trend, but meanwhile the expenditure of the local government increases and the pressure from the huge debt also exists. In this situation, it is hard to keep a high-level investment on infrastructure construction, while the investment of this kind took up 35.2% of the total output in the whole construction industry in 2014. Coupled with such economic background, the one-child policy which was executed all over the country in previous years, leads to the fact that the growth of China's population has almost reached its limit. The slowly-increasing population seems will negatively impact the domestic commercial housing market as the need is decreasing, and such recession could spread to the whole industry. Therefore, against this background, the sluggish increase in the construction industry would be the new trend.

To conclude, even though an unparalleled flourish has been taking place in the construction industry in China, the economic downturn may impose great pressure on its further development, and the domestic construction industry tends to be saturated. On the other hand, the boom of construction enterprises also intensifies the fierce competition. It is then safe to predict that in the coming years this industry will face a realignment, and those less competitive companies will be eliminated gradually.

To deal with the fierce competition, utilizing the current resources reasonably and effectively is an effective way to lower the cost and promote the competitiveness, which is calling for the resource integration. Besides, due to the resource restriction, it is somehow crucial for the construction enterprise to integrate resources efficiently, as such ability may determine its destiny. As the external pressure is increasing, to integrate the internal resource and to improve the technical capacity, management skills, the brand image and service quality are crucial to survive from the fierce competition. This is especially the truth for the construction enterprises, the factors, such as technical skills, management methods, advanced equipment, cost controlling, the enterprise's quality and its image, as well as the relationship with government, all of these are require the continuous study. It is considerably crucial for the enterprises to integrate both the external and the internal resources, and finally improve their own competitiveness to face the new challenge.

Because of the current depression market, domestic construction enterprises are promoting their competitiveness by integrating resources. The resources referred by the resource integration includes tangible resources and intangible ones. Tangible resources mainly refer to techniques and management, while the intangible resources include brand,

image, social responsibility, public relations and so on. According to the Annual Research and Consultation Report of Panorama survey and Investment strategy on China Industry, even though the amount of construction enterprises keeps increasing dramatically, serious homogenization and the low-price-based cut-throat competition lower the benefit rate. It seems that the high-speed growth in the past few years mainly depends on the benefits of the fixed-asset investment, and yet as the development in this industry has slowing down, then it may be the high time for the construction industry to consider how to transform in seeking further development. Since China has been a complete competitive market, what the enterprises facing is a comprehensive competition. The competition of this kind may possibly mean that only the overall strength rather than merely an advantage in a specific area can lead to the final win in the market. Owing to the hard work in recent years, the construction industry has achieved great improvement in integration of the tangible resources, such as the ability of techniques and management. Meanwhile, with the transition of the economic development, construction companies also increasingly value their “soft power”, namely the brand image, the social responsibilities, and the external relationship. Particularly, the external relationship, including political relationship resources and business relationship resources, seems act decisively in undertaking the contract, raising funds and getting qualifications. Therefore, since the gap of the hardware resources is narrowing down, the relationship-resource-based integration is more helpful in promoting the “soft power”, which will improve enterprises’ competitiveness.

In conclusion, to address challenges in future, utilizing relationship resources integration to improve the competitiveness is an important strategic decision as well as an inevitable trend for construction enterprises. However, there are still some questions remain unsolved, for example, for the construction enterprise, how to carry out an effective integration? What are the process and mechanism during the relationship-integration? This dissertation will take typical construction enterprises in China as the study objects, and based on these examples to analyze the process and rules of the integration of relationship resources and thus revealing the regular patterns within such process. By doing this, the current problematic issues may be addressed and hopefully a theoretical guide in integrating relationship resources could be concluded, which may have some constructive direction for the major construction enterprises in China.

1.1.2 Significance of research

The development of enterprises contributes considerably to the stable performance of the national economy, and the construction industry as a fundamental industry is the major force for the development of national economy. During the process of the industrialization and the urbanization in China, the construction industry plays a significant role in attracting and accommodating the increased population and also in promoting the rate of employment (Yang and Ou, 2014). Have been firstly gone through the long period of the planned economy and then experienced the economic boom after the opening and reform, domestic construction enterprises always develop stably and smoothly, and just until recent years the fierce competition within this industry has breathed into life.

The ever-changed social environment requires enterprises to make the corresponding strategic adjustment. However, since domestic construction enterprises still belong to the later comers in the new-born market, they objectively lag far behind its counterparties in developed countries in terms of techniques, marketing, fund raising and so on. Under the background of the global competition, it would be an interesting and practical topic to study how Chinese construction enterprises avoid their inherent shortcomings and how to integrate relationship resources. The significances of this dissertation are as follows:

(1) To provide a guide for domestic construction enterprises in integrating their relationship resources and improve their competitiveness.

Recently, even though domestic enterprises have had a significant improvement in techniques and management, there is still an obvious gap between domestic enterprises and the foreign developed ones. As the result of the further globalization, it must be an inevitable challenge for domestic enterprises to compete with the foreign ones directly. Resources, especially those superior ones which have an edge over the others, as the core factor in winning the competition are also the foundation for enterprises' strategy execution. Therefore, only by optimizing and integrating the internal and the external resources, the competitiveness could be enhanced and the sustainable development could be thus achieved.

The systematic theories about tangible resources integration have existed and already applicable to some practical issues. However, the studies on intangible resources integration, especially the relationship resources integration, are still insufficient. Provided that the comprehensive competitive market has been formed as well as the fact that the political relationship resources and business relationship resources have been the decisive elements in

achieving sustainable development, it is then of great practical importance to study the approach that the domestic construction enterprise should adopt to integrate relationship resources efficiently. By analyzing the process and rules of such integration in the construction industry, this dissertation will estimate the current strategic direction. Besides, the research on the theories of relationship resources integration could clarify and solve the problematic issues facing by those enterprises. It seems that the rules derived from the evolution may be regard as good learning material and could be an asset in improving the competitiveness of domestic construction industry.

(2) To discover the evolution process and balance system of the political-business relationship resources, which may benefit the balanced development between these two relationships within the domestic construction industry.

Due to the fact that the overall investment from an enterprise to internal resources is limited, and therefore under the pressure of resources restriction, to keep the balance among different resources is the precondition for enterprises' sustainable development and also the very reason for the resources integration. The political relationship and business relationship connect to but still different with each other. They, like the capital and the labor, can benefit the development of enterprises, while they may also occupy other resources (they need respective investment). In the situation when enterprises were pursuing maximize the profits, to integrate resources may be the preferable alternative, which requires to balance and make wise decisions between these two relationships. However, it is still an absence of a unified framework to clarify the balance system and the decision-making criterion. This dissertation will analyze data from domestic major construction enterprises and then conclude the balance mechanism for the relationship resources integration. This system is expected to guide domestic construction enterprises to make full use of resources to launch political and business activities, and realize the balanced development between these two relationships.

(3) To improve the skill in strategic management and decision-making.

Entering the WTO, answering the globalization, brings about both the opportunities for development and the challenges from those big-names in the global construction industry. Since the enhance the competitiveness is the key to success, it requires domestic construction enterprises to improve their management skills. One American Company, Dunne Blast, has concluded six major reasons for the bankruptcy after a long-term research on American enterprises, and many of which are closely related to the strategy decisions. For example, do not have a clear strategic goal; have not fully invest their rivals; cannot make the best of their

own advantages; the manage board does not fully understand the external environment; stubborn in organizing and management; lack flexibility in strategy; and the resource allocated unevenly. To conclude, the strategic decisions have a direct impact on one company's fate. Therefore, during the process of decision-making, the manager of the construction enterprises should firstly analyze the developing trend and the environment of the domestic and overseas construction market, and secondly take advantage of the internal resources. By analyzing the process of the resources integration in construction enterprises, this dissertation is expected to discover the general rules and the behavior mechanism, and then improve the strategic level of construction enterprises in China.

It seems that as the situation of the market remain depressed the national economy somehow closely connected to the following issues: How do Chinese construction enterprises integrate their resources? What are the features during this process? How to keep the balance between political and business relationship resources? By studying the process of Chinese construction enterprises' resources integration and its balance system, this dissertation hopes to either vary relevant theories on construction industry resources integration, or lead the domestic enterprises' strategic practice.

1.2 Description of research problem

Enjoying the high-speed developed economy, China's construction enterprises, as the latecomers in the new-born market, has drawn attention from the strategic management scholars, both domestic and overseas, who have harvested some fruits about Chinese construction enterprises' resources integration and internationalization strategies. However, some loopholes still can be notified in these achievements. On the one hand, the current studies mainly focus on the tangible resource integration and they have been well-developed. On the other hand, with the boost of the economy and the progress made by these enterprises, the differences in techniques and management are narrowing. However, the economic transition may highlight the enterprises' "soft power" when it comes to enhance the competitiveness, especially in utilizing the external resources which are extremely important in lowering costs, attracting projects and raising more funds.

Therefore, based on the above-mentioned opinions and the existing shortages, this dissertation tries to discuss the relationship resources integration process of Chinese construction enterprises and its balance system. The main research questions are as follows:

(1) Why should Chinese construction enterprises integrate their relationship resources?

To achieve a further development, it is vital for Chinese construction enterprises to master relevant resources and information while enterprises' external relationship network is a quick and convenient access to these resources and information above at a low cost. (Jennifer A. Starr and Macmillan, 1990a) Simultaneously, it also cost a lot to maintain this external relationship network, especially for the complicated political and business network in major construction enterprises. Therefore, the relationship resources integration is meaningful for enterprises to widen resource and information access, to cut down the cost of operation and to improve the competitiveness and the comprehensive strength. By analyzing the cases of four construction enterprises, this dissertation will have a further research on the cases of relationship resource integration and prove its significance to the development of the construction enterprises.

(2) What are the features of the evolution process of Chinese construction enterprises' relationship resource integration?

Highly efficient relationship resource integration can not only help enterprises get the information, the access, and the admittance license, but also lower the relationship-maintaining costs. Integration of both political relationship resources and business relationship resources could encourage the mutual-trust and cooperation between enterprises and governments as well as those between enterprises. It also helps to strengthen their complementary advantages, lower costs and create a favorable condition for the development of Chinese construction enterprises and the improvement of their competitiveness. Therefore, it is quite important for construction enterprises to integrate their relationship resources. However, the current theories mainly focus on the integration of resources and abilities. By researching the process of relationship resource integration of four Chinese construction enterprises, this dissertation analyzes its process and mechanism and then provides a comprehensive route to integrate the relationship resources.

(3) How to maintain a balanced development between these two relationship resources?

Integration of both political relationship resources and business relationship resources could encourage the trust and cooperation between enterprises and governments, and between different enterprises. It also helps to strengthen their complementary advantages, lower costs and create a favorable condition for the development of Chinese construction enterprises and the improvement of their competitiveness. However, in condition of the limited resource, domestic construction enterprises cannot develop political relationship and business

relationship at the same step. Limited resources force them to have different focuses in different periods. At the same time, after the opening and reform policy, China has been having a long-term reformation in both economy and system, which requires enterprises alert their strategies flexibly. As a result, it is meaningful for construction enterprises to maintain a balanced development in both political and business relationship resources. Based on case studies, this dissertation will explore the process of relationship resource integration and balance, discover its balance system, and then offer the theoretical guidance for other domestic construction enterprises.

(4) What are the essential features of relationship resources integration of Chinese construction enterprises?

Even though there exist huge differences between state-owned enterprises and private enterprises in ownership rights and management modes, they still share some similarities in resources accessing. With the development of enterprises, their relationship networks become larger and resources obtained from this network become more complicated and richer. However, both private enterprises and state-owned enterprises, they themselves are still the major elements to gain the external resources while the internal resources determine their natures. Therefore, it is an important direction to exploit the effects of internal resources on the external resources integration. This dissertation deepens the understanding of the nature of relationship resources integration and provides theoretical supplements for domestic construction enterprises to make strategic decisions.

1.3 Definition of related concepts

Main definitions are as follows:

Construction Enterprise:

The Construction enterprise refers to an economic entity working on production and operation of construction productions. According to Yang and Ou (2014), the construction enterprise features: (1) having the certain objects of production and operation; (2) having a certain amount of fixed assets and working capitals; (3) having an institutional framework and administrators; (4) having a certain amount of qualified labors; (5) having fulfill the above-mentioned terms, also having legally registered and approved, opening a bank account and qualified as a legal person. The mission that the Chinese construction enterprise shouldered in the national economy is as following: under the instruction of the nation to

provide construction products and labor service; during its production, to realize the value surplus and thus increasing national income and providing resource for the nation and the enterprise. Besides, compared to the construction enterprise in the capitalist country, the Chinese ones have distinguished features in: (1) The various economic sectors coexist, while the enterprise with socialist public ownership is in the dominate status; (2) the production and the commodity exchange are well-planned; (3) the status of labor in the enterprise should equals to the master, and this should be guaranteed by every regulation of the enterprise; (4) the individual interests of the enterprise should comply with the overall interests of the national economy. The construction enterprises in this dissertation refer to such construction company that works on constructing, extending, reconstructing and dismantling buildings and structures (including construction projects, municipal public works, track remodeling, equipment installation and decoration works).

Political relationship resources

The political relationship resources of one enterprise mainly refer to a closed link between enterprises and government or its agency which is based on some commercial or non-commercial activities. With the acceleration of globalization, Epstein (1969) pointed out that “enterprises have stepped into a politics-competition period”. As a competition tool, the political relationship resources have been regard as a key factor for enterprises enlarge the external living environment. The political relationship resources also have some potential benefits, such as to help enterprises get more resources or to reduce some troubles which may be from governmental officials or other companies. (Wei et al., 2013a) In this dissertation, the political relationship resources refer to the applicable political relationship networks, governmental individuals or groups, governmental resources and abilities and so on. By establishing cooperative relationship with governments, enterprises can gain some administrative benefits.

Business relationship resources

Business relationship resources are formed in the process of economic trade and commercial cooperation. It provides external information and resources, which may enhance the competitiveness of enterprises. Business relationship resources of enterprises exists in social networks. Johanson and Mattsson (2015) pointed out that from the perspective of network, enterprises now stay in a network system consisting of suppliers, customers, competitors and other external enterprises. Gulati (1998a;1999b) points out that in the real world, enterprises are placed in a social, professional, mutual-related network with some other

organizing elements. This relationship is not just a simple binary relationship, but an interdependent, correlated network relationship and business ecosystem. By using the current business relationship resources, enterprises can get different kinds of resources and abilities. (Burt, 1992) The major role of the business relationship resources in this dissertation is to consider business relationship resources among different enterprises as one certain kind of resource, which would be used to seek some other potential resources and to improve the core competitiveness of enterprises. The business relationship network which can be utilized by the enterprise to seek the needed resources among the industry is the very network that this dissertation refers to.

1.4 Research strategy

1.4.1 Research objects

The researching objects in this dissertation mainly refer to the large and medium-sized construction enterprises in mainland China, including both state-owned enterprises and influential private enterprises. All these objects have been running for at least 8 years which can ensure a time-spanned data base. Four Chinese construction enterprises are chosen to be objects in this dissertation. They are Pacific Construction Group (short for PCG below), Guangsha Construction Group Co., Ltd. (short for GCG below), China State Construction Engineering Corporation (short for CSCEC below), and China Railway Construction Corporation Limited (short for CRCC below), all of which meet the requirements above.

1.4.2 Research methods

In order to study the process of Chinese construction enterprises' relationship resources integration and its balance system, this dissertation chooses qualitative-research-based method, and this research method may applicable to analyze the process and the rule of the relationship resource integration and also the balance mechanism within it. The methods are as follows:

Literature Review

Throughout the literature review, this dissertation can sift and conclude the relevant frameworks and models which could be helpful in guiding this research. Before this dissertation, the author has read plenty of papers on relationship network of Chinese construction enterprises, resources integration and dualities. In addition, both English and

Chinese documents have been classified and analyzed. These preliminary research helps to establish the theoretical basis of this dissertation. By collecting, reading, classifying and analyzing these documents, the core opinions has been extracts, and the current situation as well as the feature of Chinese construction enterprises' resource integration have been concluded respectively, and moreover those deficiencies of the existed authorities have also been identified, and finally this dissertation forms its own research questions and the main theoretical opinions. The literature review of this dissertation will also play an important role in Chapter 5 which will address the process of the relationship resources integration in Chinese construction enterprises in detail. Therefore, it is a significant method for theory deduction.

Case Studies

Case studies are a common method of qualitative research. This method uses typical case as objects, helping researchers find answers and solutions by staying in a real environment. Compared with experiments, questionnaires and some other methods, this method can help researchers get rid of research bounds. (Eisenhardt, 1989) This method also has significance in the establishment of new theories. This dissertation compares and analyzes cases of four Chinese construction enterprises, abstracts the rules and roles of relationship resources integration, and finally draws the conclusion.

1.5 Frame structure and chapter arrangement

The structure of this paper is as follows:

Chapter One, Introduction. By analyzing the current situation and issues of Chinese construction enterprises, this dissertation puts forward the background and research meanings, and points out the theme. At the same time, this chapter clarifies the relevant key terms and explains the research methods, innovation points, technique routes and the total design.

Chapter Two, Literature Review. This chapter illustrates all relevant basic theories, including Resources Basic Theory (RBT), Resources Dependence Theory (RDT), relevant theories about enterprises relationship networks and integration. These theories are the basis of this dissertation and provide a solid ground for its framework and analyses.

Chapter Three, Research Design. This chapter uses qualitative research to classify enterprises into different stages, code the data and analyze them accordingly. It also has an integral description of the research ideas, methods and process.

Chapter Four, Studies on the Process of Center Shifting of Relationship Resource Integration and its Balance System. Based on previous chapters, this chapter starts from RDT and the current theories and concludes a framework which is based on the rules of relationship resource integration process in construction industry and its balance system, and finally reveals its substantive features.

Chapter Five, a Study on the Process of Relationship Resources Integration of Construction Enterprises. Based on the existing documents, this chapter analyzes and compares the cases of four Chinese construction enterprises, and reveals the forming, gaining and developing process of Chinese construction enterprises' relationship resources.

Chapter Six, Conclusion and Outlook. This chapter mainly reviews the research process and draws the conclusion. Meanwhile, this dissertation also points out the existing disadvantages and the direction of the further exploration.

The structure of this dissertation can be illustrated below.

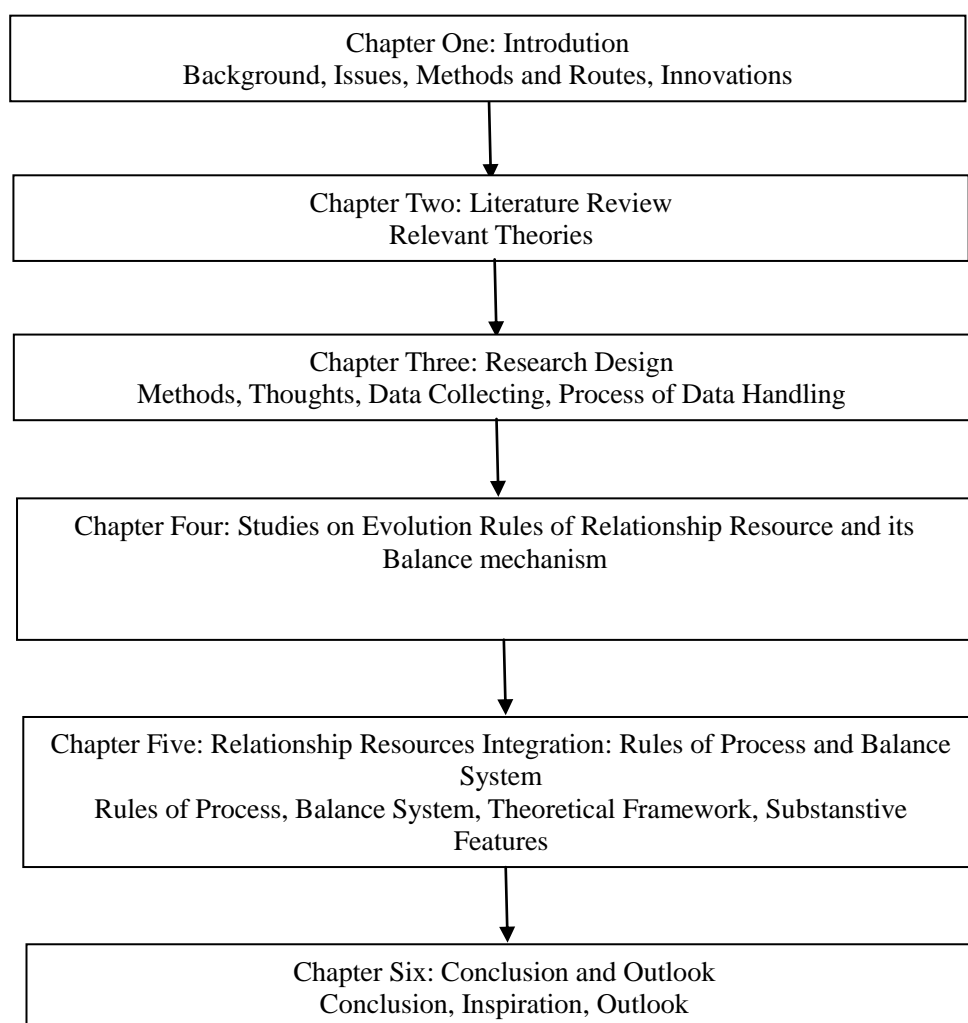


Figure 1- 1 Frame structure of the paper

1.6 Contributions

Based on the existing achievements, this dissertation will further explore these three aspects in depth.

(1) The relationship resource integration of this study is based on “the reality of China’s situation”, and reveals the process and rules of this integration.

From the perspective of RBT and RDT, this study considers the relationship resource integration of construction enterprises as the core of the research. By case-analyzing and comparative research, this dissertation studies features and rules of the process of Chinese construction enterprises’ resource integration. This dissertation takes China’s actual condition into consideration and with the descriptive case study, the research question of this dissertation has been well-explained, and thus a better understanding of this process could be rendered.

(2) Studies on Chinese construction enterprises’ relationship resource integration may develop the current theories in this area.

In the past studies, even though they also highlight the importance of resource integration, these studies mainly refer to the internal resources rather than the external ones which are also vital for the development of enterprises. Taking both internal and external resources into consideration, and coupled with abilities as driving forces, this dissertation regards external relationship resource is equally important. This research focus on the evolution rules and balance system of relationship resource integration, and thus the conclusion could deepen the existing understand on relationship resource integration of Chinese construction enterprises, and also further argue its management behaviors in relationship resource integration, which may widen the edge of current relevant theories.

(3) Through the analysis of multiple cases, this dissertation provides a framework for Chinese construction enterprises to integrate relationship resources.

The existing theories highlight the internal resources and the abilities of enterprises, while for some enterprises, it is more important to use external resources. (Mathews, 2002, 2006) By studying different stages of external relationship resources, this dissertation provides a relationship resources integration framework which is based on the mutual exchanges between internal existing resources and external relationship resources. This framework efficiently reveals the nature of the relationship resources integration of Chinese

construction enterprises and provides theoretical guidance for relevant enterprises.

1.7 Conclusion

Based on the detailed analysis of current situation of Chinese construction enterprises, this chapter points out some issues impeding the development. Secondly, this chapter holds that in the fierce competition, the relationship resource integration can improve the competitiveness of Chinese construction enterprises. Therefore, how Chinese construction enterprises avoid its shortcomings by integrating relationship resource is an interesting and practical topic. Besides, this chapter also clarifies the relevant definition, introduces research ideas, research methods, and summarizes structure and innovation points.

Chapter 2: Literature Review

2.1 Resource Basic Theory

2.1.1 Development of Resource Based Theory

The Economic Landtax Theory put forward by Ricardo et al. (1819) is the origin of the Resource-Based View (RBV) (Peteraf,1993; Makadok,2001; Buettner,2015). Enterprise' core capabilities consisting of techniques, reputation, matchmaking and so on play an important role for their development (Hall, 1992). Penrose (1959) introduced this point into her exploration of firm internal growth and evolving economy. She believed that due to the expansion essence, firms are eager to maximize the utilization of the resource they occupied into larger scope and space. It is general believed that the RBV was pioneered by Penrose (1959) however researches on this view have caused no wide attention except for Rubin's (1973).

A Resource-Based View of the Firm published by Wernerfelt (1984) in the Strategic Management Magazine pointed out that the essence of a firm is an aggregate of resources. Enterprises apply different resources in various market segments according to features of these resources, which leads to differences among different firms and that some firms can maintain advantages for sustainable competition. Wernerfelt(1984) renders a solid foundation for later scholars, and act as the source for the isolating mechanisms put forward by Rumelt (1984). Overall, the core of the RBV lies that important resources occupied by enterprises with high-performance can be converted to those enterprises' sustainable advantages.

2.1.2 Content of the Resource Based Theory

The resource-based theory (RBT) mainly considers "resources" as the starting point and the focal point for enterprises to make strategic decisions and through "resources" enterprises edges and firm growth decisions can be connected. RBT is based on two hypotheses: (1) resources owned by enterprises themselves are heterogeneous. (2) these heterogeneous resources cannot mobile among different enterprises. Therefore, those rare, unique, and inimitable resources and abilities occupied by an enterprise are the very reason that

enterprises are different from each other in a considerable long time, and that enterprises who can control resources for a long time are more likely to obtain continuous super profits and sustainable competitive advantages. The core of RBT is to regard every enterprise as a unit to analyze so as to explore how distinctive resources and abilities help to accomplish continuous super profits and sustainable competitive advantages.

RBT has imposed shocking influences on strategic management. Resources, as very important elements, endow an enterprise with super profits and sustainable competitive advantages. After a profound study on competitive advantages, Barney (1991) argued that the competitive advantage refers to a situation where one enterprise's current competitor cannot carry out the value creation strategies adopted by the enterprise and the sustainable competitive advantage means that the competitor not only cannot follow the above-mentioned value creation strategies but also cannot duplicate or obtain profits from these value creation strategies. Many scholars have pointed out that even though the competitiveness can be improved in a short time by producing or purchasing resources, this kind of competitiveness cannot sustain due to convenient accessing to these resources and constant imitation from other enterprises. Barney (1991) pointed out that if one enterprise wants to obtain sustainable competitive advantages, it must have the heterogeneous resources that are not able to mobile, most of which are valuable, rare, inimitable and irreplaceable.

The core of RBT is to understand the internal resources and abilities of one enterprise by observing heterogeneous enterprises and its focuses are to identify, distinguish, allocate and expand unique resources and abilities of this enterprise that are in close relationship with the enterprise's competitive advantages and growth (Wegloop, 1995). The reason why different enterprises have different competitive statuses is that they occupy different resources. Furthermore, the ability to get the competitive advantages is based on the heterogeneous resources that occupied by one enterprise. The competing for advantageous status is in essence the competition for the access to heterogeneous resources. The key of the competition for heterogeneous resources is to occupy exclusive resources or breaking the monopoly situation where some enterprises have exclusive resources. Specifically, the maintenance of one enterprise's sustainable competitive advantages will always be transferred into the identification, control and utility of unique and rare resources. The RBT expands the concerns of traditional enterprises strategic theories through enriching the connotation of enterprise input from labor and capital to all resource occupied by the enterprises, including enterprise abilities, processes and information.

In spite of a dominant position of the RBT in the field of strategic management research, it is still given the cold shoulder with following manifestations: (1) Although the RBT has clarified that resources are the main source of sustainable competitive advantages, it does not elucidate how to manage enterprise resources to acquire sustainable competitive advantages. (2) The RBT makes the previous dynamic “enterprise management” static and thinks that enterprises cannot sustain competitive advantages. Therefore value creation should be dynamic in essence. (3) The RBT has not taken the influence from the external environment into consideration, namely the external factors have been ignored according to the RBT. Based on these above-mentioned reasons, Sirmon and Hitt(2003), Sirmon et al.(2007) developed resource management theories through supplementing the RBT theory.

This dissertation argues that resources refer to all factors as long as they can impose impacts on enterprises’ value creation in a potential way or in real sense. Resources contains far more than natural resources, material resources and human resources, they also contain invisible ones including knowledge (Gupta and Govindarajan, 2000), information and education resources (Lv, 2001). In addition, it is fair to say that resources owned and controlled by an enterprise are resources of this enterprise. However those external resources which are impossible or hard to be controlled by an enterprise also belong to the category of the enterprise’s resource, for instance, relation network resource mentioned in this dissertation.

2.1.3 Qualities of Network Resources and its Exploration to RBT

As an important requisition to “utilize and control resources”, the relationship network of enterprises has raised the attention and interest of many scholars (Parkhe, 2006; Liu, 2007; Xu, 2008). A great number of authorities have realized that such network may have magnificent influence on the strategy and performance of enterprises (Burt, 1992; Nahapiet and Ghoshal, 1998; Podolny, 2005).

Here comes a further question: In what ways and mechanisms that this relationship network influences the enterprises growth? The author believes that this relation network contains various resources that an enterprise needs to grow from strength to strength. It seems that loads of resources attach to this relationship network, and these resources, such as political relationship resources and business relationship resources, such as political relation resource and business relation resource. Via the operation of relation network, these resources can be utilized by enterprises and possess features of sustainable competition advantage. To

some extent, they can also be considered as one reason for enterprises' success.

Marshall (1920) pointed out that the competitions and cooperation amongst enterprises can create the systematic effects (Wang, 2010), helping enterprises obtain growth ability. However the neoclassical economics assumed that the marketing trading are carried out in an anonymous way, therefore it is easy to ignore the systematic effects. Foss (1999) held that Marshall's systematic effects supplement the loophole the RBT cannot fully reveal how the network influences the competitive advantages of enterprises, and Foss defined the systematic effects as network capabilities. Dyer and Singh (1998) pointed out that specific connection between enterprises is a key resource for competition advantages, and resources can cross the boundaries between enterprises and be embedded into norms and processes between enterprises. Gulati (1999a) defined the interwoven connections among enterprises as inimitable network resources, which are inimitable. He also thought that these network resources include network structural resources, network membership resources, relation-chain form resources and network management ability resources. By revealing the cognitive differences between the RBT and the network theory, Wu (2005) argued that in most cases the analysis framework of the RBT does not contain social cognition resources, other external resources and intangible resources, but these resources exert prominent influences on the enterprises' behaviors and performances. Guo and Gao (2003) considered that current criteria to judge whether it is enterprises' resources is to see the "controllability" or "accessibility" of the resource, therefore this standard will necessarily ignore some resources that are unavailable or cannot be easily acquired by the enterprise, such as the social cognition resources and other external resources. Similarly, some enterprises set the input factor as the criteria to judge whether it is enterprises' resources, some valuable intangible resources that are produced after inputting may be neglected. Therefore, it is reasonable to define the resource in a wider idea and concentrated on outcomes. The new definition of resources is all factors that influence an enterprise to create values in a potential way or in real sense can be deemed as resources.

Rindova and Fombru (1999) emphasized the importance of resources to enterprises growth from the angle of human interpretations. This kind of resources has a broader connotation than that of RBT which believes that resources have to be owned or controlled by an enterprise. In the long run, these intangible resources rather than those tangible ones determine the competitive advantages of enterprises. In spite of being different terminologies, systematic effects, intangible resources and network resources and ability share the same

essence since they are formed connections and interactions among between nodes (namely enterprises) and are conducive to enhancing these nodes' (namely enterprises) resources and capability of competition advantages. In spite of being a key concept analyzing firm growth, they have not been taken into the analysis framework of RBT, and are neglected by most firm growth theories. Figure 2-1 is the analysis framework of extended RBT, provided by Rindova and Fombru (1999), which formulates theoretical support for this study.

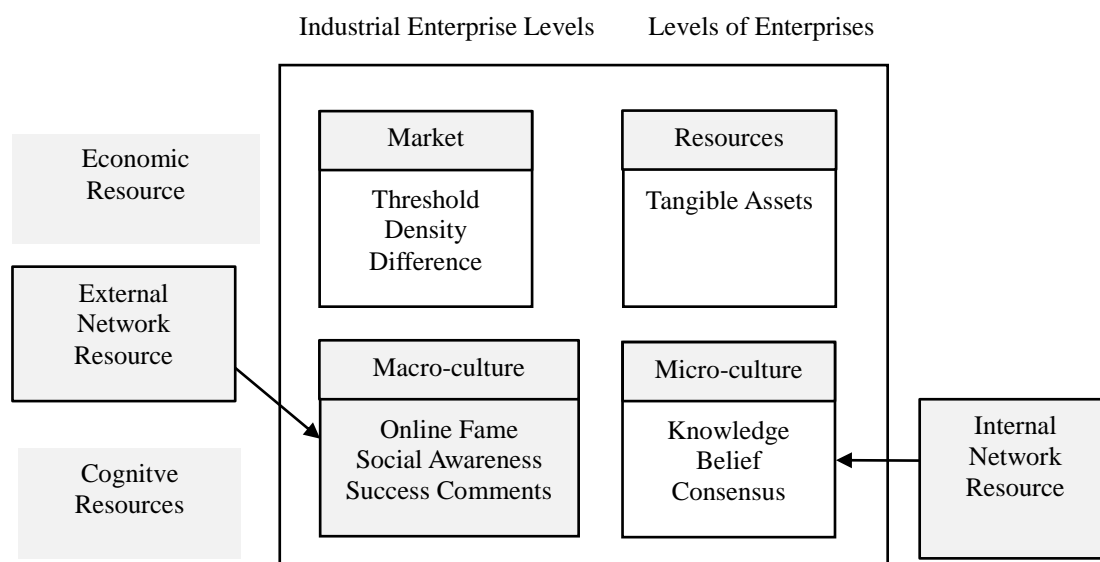


Figure 2- 1 The analysis framework of extended RBT

Rindova and Fombru (1999) classified the source of competitive advantages from four dimensions: market, resource, macro-culture and micro-culture. The upper part of Figure 2-1 can be considered as the “traditional resources” highlighted by the RBT and industrial structure theories, and the lower part takes the influences of social cognitive elements to enterprises competition advantages into consideration, namely interpretation of enterprises from individual and group perspectives. This part illustrates how cognitive elements, such as explanation, understanding, comprehension, attribution, deduction and prediction, impose impacts on the strategy interaction and then exert further influences on sustain competition advantages. Of course competition advantages also depend on reactions and rectification of external social cognisors towards competition conditions in an industry. The reason is that behaviours of an enterprise’s external network entities can effect resource allocation, evaluation of success (namely the industry change). For example, key network entities and media can influence the paradigm development in one industry through their own explanations and resource allocation, and then affect the durability of one enterprise’s

competition edges (Rindova and Fombru, 1999). In fact, different from tradition resources, these extended and “neo” resources are at the level of human interpretation to affect competition edges, and are a type of resources in the view of economic sociology (Guo and Gao, 2003). Although they exist objectively, they are not included into formal frameworks used to study resources. Different from traditional researches based on influences of internal resources to firm growth (Bloodgood, 1996; Anderson, Kheam, 1998; Westhead, 2001), they are known as “network resources”. Results of these resources that interact with other network entities for the long run are the ultimate demonstration of mutual dovetail relationship between enterprise internal and external societies.

To summarize, this may contribute to an opinion that highlights the process rather than the results. In other words, network is the trigger of resources. Moreover, the process of triggering resources depends on the continuous interaction of the participants under the embedding condition. As a result, all the types of resources which affect the enterprises’ competitive advantages are incorporated into a neo and expanded resource framework. The enterprise network resource is a special type resource type used to apperceive and implement enterprise strategies(Barney, 1991). Meanwhile, Barney(1997) also pointed out that enterprise network resources refer to those resources “which enterprises can use and control to implement their thoughts and strategic effects and to improve their performances, including all assets, capabilities, competitiveness, organizing procedure, information, knowledge and so on”. Unlike the traditional resources within boundaries of enterprises, these network resources are more resemble to valuable information that can be converted to opportunities that one enterprise can acquire. This dissertation has brought the network resources into the analysis framework of the RBT when it comes to the study on the Chinese construction enterprises’ relationship networks.

2.2 Resource Dependence Theory

2.2.1 The Development and Content of Resource Dependence Theory

Even though RBT has been a very important theory due to the systematisms put forward in this theory, it only focuses on the internal resources in one enterprise and ignores the vital influence of the external environment. On the contrary, the resource dependence theory (RDT) pays more attention to the influence of external surroundings to one enterprise and focuses on that different external surroundings can bring about enterprises’ access to different resources.

The RDT could be a good supplement to the theory of entrepreneurship, well explains the relationship between the entrepreneur entities and the their surroundings, and clarify the impact of the external environment on the activities of enterprises. Furthermore, RDT also verify the crucial role of resources between entrepreneur entities and their environment, thus forming theoretical support to the interaction between these two elements. Therefore the combination of the RBT and the RDT can provide a comprehensive research angle with consideration of both internal and external resources, not only focusing capability to control resources within enterprises, but also highlight the capability to connect resources and the external surrounding.

The basic precondition of the RDT is to consider an organization as an open system. In this system, an organization has several characteristics. First, an organization cannot operate isolatedly; second, the internal surrounding within an organization cannot provide all resources the organization need; third, an organization has to seek for necessary resources from the external surrounding in order to survive. Therefore insufficient internal resources lead to an organization's needs of other organizations. The best way to tackle the resource shortage issue is to effectively use the complementary effect of resources based on the marginal effect of organizations so as to complete trading s among different organizations.

The largest contribution of the RDT is to study the interdependent relation between organizations and environments so that organizations can alter their conditions to better adapt to the external environment through conducting different strategies. In essence, the organization environment mentioned in the RDT is not only physical elements but also series results of the interaction between organizations and the environment, for example, organization managers' selection, participation and design based on their understanding. Even in the same situation, different managers will have various understanding of this situation, thus making different choices and ways to participate and design. Therefore understanding of the current situation effects the reactions from the situation towards enterprises, which can be summarized as the "shaping feature".

In conclusion, the main points of RDT are as follows. Firstly, to meet requirements of firm growth and reduce adverse effects of uncertainties, the independence on the external resources is varied. This is because enterprises have different needs on different types of external resources, while the uncertainty exists in external resources and the deficiencies lies in internal resources. Secondly, to maintain the sustainable competitive advantages, one enterprise must continuously identify, acquire, and utilize the external resources. Thirdly,

every single enterprise's competitive advantages and characters are not necessarily identical, as both the internal resources of every enterprises and the need for the external resources are diverse. Fourthly, the status of one enterprise in the market mainly depends on the occupation of the scarce resources. This occupation may facilitate one enterprise to get high profits and maintain its competitive advantages. Fifthly, the non-substitutability of the core resources makes enterprises different from each other and allows enterprises own the edge in the competition.

2.2.2 The application of resource dependent theory during the development of enterprises

RDT plays a significant role in the research of firm growth. Romanelli (1989) pointed out that if one enterprise could occupy considerable resources, it would succeed during its founding process. The accessibility of the external resources may have a direct impact on firm growth, and such accessibility could also influence whether the enterprise could adapt to the environment or not. Based on Pfeffer and Salancik (1978) six major characteristics of surrounding structure, Brun and Tyebjee (1986) had a further study on how external surroundings influence the establishment of one enterprise. The result shows that the uncertainty, connectivity and flexibility of the environment have positive correlations with the establishment of an enterprise; while the influence character of the external surrounding has negative correlations with the establishment of an enterprise.

Underlying the relationship between enterprises and external environment, RDT holds that whether one enterprise could become successful mainly depends on whether it can obtain necessary resources from the external environment. The chance for one enterprise to survive and grow up largely depends on the relationship between the enterprise and external resources suppliers, which may possibly mean that a favorable relationship with suppliers of major resources is necessary. These are two key conditions for an enterprise to survive. For the enterprise, it is crucial for them to guarantee the development by acquiring necessary growth-oriented resources from the external environment. From the perspective of system theory, if an enterprise access to necessary resources from the external environment, the external environment should have at least two features: (1) it can provide the necessary resources; (2) these resources can be accessed to in a smooth manner. Therefore, the environment where necessary resources are readily provided could be named as directly matching resource environment, while the environment where resources can be successfully

obtained can be called indirectly matching resource environment. These two environments complement each other simultaneously and are inseparable from each other. They pose influences on enterprises as a combination. In terms of the directly matching resource environment, capitals, techniques, and human resources can directly impact the growth of one enterprise, and thus these factors belong to direct environment elements, while in indirect matching resource environment, policies, culture and market belong to indirect environment elements, as they may impact enterprises indirectly and ensure an enterprises can access to resources. The relationship network mentioned in this dissertation can be categorized as indirect environment elements.

To sum up, RDT emphasizes the mutual relationship between enterprises and their external surroundings. No enterprises can exist isolatedly and any enterprise has to survive on the basis of external environment to some extent. This is especially the case for start-ups whose organization frameworks are not well developed and necessary resources are not accessible enough. Start-ups thus have urgent needs of obtaining resources from the external environment. According to the RDT, there is a close relationship is between enterprises and their surroundings. For start-ups, a good relationship with entities in the external environment can facilitate the start-up to access and utilize external resources and development the start-up due to relatively weak resources foundation. The entrepreneur-oriented strategy requires enterprises not only reform their own organization structures but also enjoy abundant resources to sustain their advantages. Enterprises can acquire resource for their development through the external relationship network so the utilization of the RDT helps to study the relationship between the relationship network and firm growth and guides to profound researches on the relationship between the relationship network and the growth of construction firms in a systematic way.

2.3 An Analysis of Network-Resource-Based Enterprise Development Mechanism

In the previous part, this dissertation has analyzed that the relationship network, as “the condition of utilizing and controlling resources”, has been a key element for the firm growth. This is because large amounts of resources provided by the relationship network are the source of sustainable competitive advantages. Therefore, accessing to resources in relationship networks becomes the core mechanism of the enterprise growth.

It is the common knowledge that every economic organization or individual has certain “connection” and “social relationship” with the external environment, and this entity is embedded or included in a complicated and overlapped social network featuring multi-connection and multi-layer. In such a network, the relationship is the cause, and the connection is the result. It means that relationships bring about connections. Various relationships and connections constitute the basic framework of social network. The reason that the relationship of the enterprise network earns so much concern is that such network is so in close relationship with resources acquisition and firm growth. Firm growth needs resources while resources are dependent among enterprises or between an enterprise and its external organizations. Enterprises are connected with other entities in this network through various distinctive relations and resources flow through these connections between entities and organization in this network. These connections are like “umbilical cord”, transferring the required “nutrients” to different organizations and entities (Li, 2005; Wan and Yao, 2005). In terms of achieving the complementary assets, the relationship network of enterprises provides a more flexible and effective access. Theoretically speaking, the synergistic effect is a key method for enterprises to make profits. Due to fact that the amount of resource within a single enterprise is so limited, namely the deficiencies of the internal resources are always accompanying the development process, enterprises are always seeking the complementary resources to meet their need in development. Cooperation between enterprises constitutes the very channel to require complementary resources, and through such cooperation a win-win situation can be achieved. Trust, mutual benefit and understanding in this relation network can enhance the efficiency of identifying and utilizing complementary resources outside its own enterprise. It is fair to say that the channel for an enterprise to acquire resources is in the relation network the enterprise belongs to and this relation network provides important thoughts to analyze resources for firm growth and resources acquisition.

In terms of the effects of external relation network to firm growth, the concept of network resources and its theories provide an effective framework. The network resources, equally important to the material resources owned by an enterprise, mainly refer to the collection of the resources which are accessible and controllable by the enterprise through the social network and are able to accelerate the process of realizing the goal no matter these resources are visible or invisible. The network relationship theory abstracts the connection between enterprises and their external elements. Different from the theory paradigms which emphasis the structure of the network, this theory underlies the role of this network in

acquiring and controlling the external resources, and then it validates that the resources contained in the network are the key mechanism to the development of the enterprise. Furthermore, the resources contribute to the development of the enterprise cannot be confined to organizations or individuals who have direct cooperative relationship with them, because the process of resources acquisition could be expanded to organizations or individuals who have indirect cooperative relationship with them. It could possibly mean that the origin of resources may be organizations and individuals enjoying both direct and indirect connection to the enterprise, and thus the network features multiple dimensions.

It should be noticed that resources can be various in both contents and forms, such as information, capitals, knowledge, opportunities and so on. Even social network itself can be considered as one resource for growth (Fan, 2005). These network resources are essential for the development of the enterprise. Especially for those small and medium-sized enterprises short of internal resources, network resources have become their core mechanism for growth.

It is worth emphasizing that during the growth of enterprises, the internal resources and the outside relationship network do not exist independently but have prominent interactions (Yannis, 2004). It is highly likely that the external network may influence the effectiveness of internal resources promoting firm growth. To better utilize internal resources so as to achieve firm growth, enterprises should combine complementary resources within their reach no matter they are from internal or external environment. Rich external network resources mean two advantages for enterprises: first it means access to complementary resources from the external environment so that enterprise can enhance their potential in creating values; second the advantage of opportunity identification brought by the relation network can better bring internal resources of the enterprise into play. Therefore, as a carrier of network resources, the establishment of the relationship network would facilitate the effectiveness of enterprises growth. Besides, the value of the external network resources could also be influenced by internal resources, and this mainly derives from four aspects: (1) complementary recourse from the external network can only be applied to enterprise growth when they are combined with internal recourses and developed by the organization; (2) information and knowledge accessed through the external network can only be a functional part of organizing ability when they are absorbed by the organization; (3) even the organization identify external opportunities through the external network, resources and abilities within the organization are needed to take stock of this opportunity; (4) valuable resource foundation within an organization can ensure that other enterprises are more likely to establish stable cooperation

with is organization thus accumulating social capital. Overall, from perspectives of the RDT and the RBT, construction enterprises rely on external organizations to establish relationship network and obtain necessary resources for their growth from this network. It is through such a platform constituted by relation networks that construction enterprises grow from strength to strength.

2.4 Relevant Studies on Resources Integration

It is true that resources could become potential advantages for enterprises in the future but the process of transferring them into competitive edges in real sense needs some catalysis. By analyzing properties of resources, resources that can become the competitive edges are usually has the scarcity feature (Barney, 1991). However, a further research shows that obtaining rare resources are just the first step of transferring into competitive edges and more important is that the enterprise can utilize and improve the value of resources. The dynamism feature of resources determines that competitive edges would be undermined as the change of external surroundings. For example, when the outside environment keeps turbulent where the market demands have high uncertainties and the industry changes rapidly, start-ups must stay firm in continuous reforms and recourse accumulation to improve the heterogeneity of the resources required by this enterprise. However these heterogeneous resources cannot be transferred into the value of start-ups directly and used to promote start-ups to develop opportunities (Barney and Arikan, 2001). Therefore, it is necessary for enterprises to manage heterogeneous resources, namely integrate entrepreneurial resources further (Sirmon et al., 2007).

The so-called resource integration refers to a dynamic and complicated process that organizations identify, select, allocate, activate and integrate resources which have different sources, different structures and different contents so as to outstand values of an organization. After integration, resources can be a part of the competitiveness of the organization.

In terms of the construction enterprise in this research, the first step of resource integration is to identify necessary resources, and then obtain resources through various channels before producing resources bundles through allocation, and finally use these resources bundles to facilitate enterprises to gain competitive edges in the complicated market.

To sum up, resources integration has the following characteristics. First, resources need

to be activated. The dormant resources can hardly be used by enterprises and only the activated resources can produce maximum effects. Second, the resource is dynamic. The process of resource integration can be influenced by the change of surroundings. Features of necessary resources would also change due to various influences so ways of integrating resource should be flexible and adaptive. Third, resource integration should be a system. When acquiring resources, enterprises should capture the primary resource and its related resources together since there is no isolate resource and systematic resources are better to be utilized. Last resources have added values. Resources integration is a process for enterprises to improve their competitive edges by optimizing resources allocation. Only after resource integration can values be added to resources. Before integration most entrepreneurial resources are isolate and only resource integration can stimulate the maximum effects of these resources. Therefore the ability of integrating resources is normally the most difficult challenge.

From the perspective of the network, resources are in scattered networks or embedded in different network relationships. Therefore, one enterprise should establish a reasonable network relationship system and then integrate these isolate resources through interactions among various network relationships so as to create values for enterprises (Tsai and Ghoshal, 1988; Baraldi and Stromsten, 2009; Tolstoy and Agndal, 2010).

According to researches on resources integration, resources are the key element to survive and grow up, while normally enterprises are always facing the shortage of resources. Therefore, resources integration be implemented in two aspects. On the one hand, enterprises should enhance the application of the internal resources, and on the other hand, they should pay more attention to making the best use of the internal and external relationships.

It is common to classify resources as the dominant ones and the recessive ones. The dominant resources are basic resources, while most valuable resources are recessive. Therefore, during the integration, the priority should be attached to the recessive resources and less importance should be given to dominant resources. Rao(2006) classified resource integration into four categories: (1) individual and group resources, (2) horizontal and vertical integration, (2) internal and external resources and (4) traditional and new resources.

For the specific process of integrating resources, it should contain the following aspects:

The integration of internal and external resources: firstly, identification, choice and gaining valuable and matching resources, such as the intangible resources like patent and proprietary technology, and then incorporate these resources into the existed recourse system

of the newly born enterprise. Secondly, the integration of the external and the internal resources. such integration aims to activate and utilize the internal resources, which may enable the best use of the in-built resources and the acquired external resources.

The integration of individual and group resources. Firstly, the individual resources generally exist independently and thus it is necessary to systemize this resource, and by doing which the resource of this kind could be incorporated into the organized resources of the enterprise and then transfer to the organized resources. Secondly, organized resources of the enterprise also need to be incorporated into the individual resources. The resource could be added in value when the incorporation finished and the resource system has been installed.

The integration of traditional and new resources. The efficacy and the efficiency of the traditional resource could be improved by the new resource, and in return the new resource could be activated by the traditional one and then the new one can be well-exploit and well-utilized. For example, the technology and knowledge of the confidentiality could be a new resource. It is possible for the enterprise to realize the virtuous circle of the integration of the resources by applying new resources.

The integration of horizontal and vertical resources. Some resources could have some links with the others, and such resources are call as horizontal resources. Meanwhile, some resources may have some links with others in depth or in its extension, and resources of this kind are named as vertical resource. The integration of horizontal and vertical resources could be of great value in building the system of resource integration.

The author believes that through the relation network, construction enterprises can integrate internal and external resources, individual and organization resources, traditional and new resources, and horizontal and vertical resources.

2.5 The Development and Resources Integration of Construction Enterprises

Resource integration is aimed at integrating external resources. According to Wu (2002), resources integration refers to a process that with less self-investment and more social resources, the enterprise achieves its business targets through an effective market-oriented management. Huang (2004) defined resources integration as a method to use external resources, by which enterprises use their own abilities to control the external resources and then make profits. It is also reasonable to argue that the resources integration of construction

enterprises refers to a complicated and dynamic process in which enterprises identify, select, absorb and allocate various resources and create new resources according to their development process and make their resources more systematic and valuable.

First of all, construction enterprise should identify resources. To identify necessary resources is the initial step of resource integration and it should take both macroscopic and microscopic strategies into consideration. The strategy of resources identification has a close connection with the sustainable development and the general layout of the construction industry. The approach of selecting the resources is mainly based on the enterprise's strategic goals, thus being necessary to locate the certain resources, such as the market positioning, the market layout and the industry chain layout. The market positioning means to apply the proper resources to the proper industries, because different industries need the corresponding resources. For example, construction companies in the field of ports, roads, railways, bridges and tunnels need different resources and talents compared to those in the fields of real estates. The market layout refers to the specific market choice for the relative resources; for example, enterprises need to make a decision about where their focus is, in the domestic market or the international market since stakeholders' preferences in these two markets are different and thus required resources are different. The industry chain layout means that the construction companies choose specific place on the industry chain to put the external resources. And obviously, different parts on the industry chain require different resources. The microscopic strategies of resource identification involve the production and operation of construction enterprises. The rule of this selection of the resources is based on the strategic target, and it illustrated by the level of the utilization and the degree of the match. the level of the utilization is divided by their value, imitability, scarcity and irreplaceability. The higher level of the utilization is, the more sustainable competitive advantages would be endowed, and the higher risk would also be installed. The degree of match refers to the possibility in utilizing a certain resource, and it directly determine whether a certain resource can have an impact and the result comes along with it. Based on the external relationship network, construction enterprises identify opportunities and risks, and then accordingly make the right strategies for the development. Later, enterprises may take the level of the utilization and the degree of the match into consideration, by doing this they will be able to identify and select the wanted resource from the network.

Secondly, construction enterprises should acquire resources. After the identification of the required resources, construction enterprises enter in to the stage of selecting and acquiring.

The approaches to selecting are various, besides to purchase in the market, the resource also can be acquired by establishing alliance and by merger. Purchase means that enterprises buy their required resources through market, but it is obvious that the shortcoming of such approach would be the one that the technical resources and the recessive one are hardly can be bought or utilized. Resources alliance means that one enterprise cooperates with other enterprises and explores those resources which are unable to be explored by the power from one single enterprise. Resource merger means that one enterprise internalizes the external resources by tender offer or asset acquisition to the core resources from other enterprises. This requires that the resources of both sides of mergers and acquisitions are highly relevant. During the process of resources acquisition, governments, banks and academic institutions also make up the relationship network which construction enterprises use to “introduce” resources to the enterprises themselves. This can facilitate enterprises to add their values and allocate resources efficiently, and promote the growth of enterprises.

Finally, enterprises should allocate resources. The absorbed resources will make profits for construction enterprises and they also need to be allocated to different areas, including researching and developing field, organization and management field, market-exploration field, construction and production field, and after-sales and feedback field. After allocation, these absorbed resources can create new resources. For example, by training staff, these highly qualified staff can upgrade the existing techniques, or gather the idle funds for large projects. Market-exploring ability, market-identifying ability, organization and management ability and network cooperation ability can practice new resources into the basic activities of the value chain, and then this will add value of construction enterprises.

To conclude, during the process of resources integration, the construction enterprises firstly identify the external resources, and secondly, the relationship network enlarge the source of resources and the cooperation within the network accelerate the acquisition of the resource. Finally, it comes to the reasonable allocation of the resource, by doing which the construction enterprise allocates the acquired resources into the value chain and thus realize the sustainable value-adding, which represents the completion of the resource integration.

2.6 Conclusion

To sum up, to study the growth of enterprises from the perspective of relationship networks has been a hit among the academic field, and have been researched intensively. At

present, these studies have realized the significance of the establishment of relationship network for the development of enterprises and have achieved some theoretical fruits. However, in the domestic research, the theoretical development in this area is still insufficient and the contribution remains in the stage of categorizing and analyzing of those foreign literature and reference. To address the situation above, this dissertation decides to study certain cases, analyze the process of relationship resources integration, clarify the mechanism and internal rules of the growth and finally come up with some creative solutions or modes. Therefore, this dissertation is pioneering in theories and also provides practical guidance for the growth and development of Chinese construction enterprises.

Chapter 3: Research Design

3.1 Research strategy

The main issue that this research would address is the feature of the process of relationship resources integration of Chinese construction enterprises and its balance mechanism. Provided that the domestic market is full of fierce competition, the productivity tends to be saturated, and the hardware resource such as technical skills homogenized gradually, it could be a wise choice to promote the “soft” power of enterprises and thus the enterprise could set up the competitive advantages. When it comes to Chinese construction enterprises, it undeniable that the external relationship resources is an important “soft” power, which plays a significant role in project-taking, fund-raising, qualification-gaining and some other important aspects. From the perspective of the dependent objects, the external relationship resources can be separated into two categories: one is the political relationship resources; the other is business relationship resources. It may reasonable to hold that by integrating and balancing these two resources, Chinese construction enterprises could improve their comprehensive competitiveness. And the research on the feature of this process and the related balance mechanism bears some important meanings to reveal the secret of its inner logic system, which could guide the strategy-making of enterprises. Therefore, the data of four Chinese construction enterprises will be looked into.

First of all, it is worthwhile to explore the reason and the significance of the relationship resources integration which is experiencing by Chinese construction enterprises. The RDT-based view mainly focuses on the influence of enterprises’ internal core ability to their development. However, due to the homogenization of technique and capabilities of Chinese construction enterprises, the effects of external relationship resources to the competitiveness seem increasingly important. For this part, based on data of enterprises, RDT and network theory, this dissertation will declare the meaning and the essence of such integration, which may form a solid foundation for the further studies.

Second, it is also necessary to discuss the approach that Chinese construction enterprises should apply to integrate resources, and in addition to which the feature and the rule of it would be revealed as well. The integration of political relationship resources and business

relationship resources could encourage the mutual trust to be established between enterprises and government, or within different enterprises, which could increase complementary advantages and lower the costs. Consequently, the competitiveness of Chinese construction enterprises could be promoted significantly, and thus benefits such industry's further development. In addition to the existing theories and data, the news record, reference and literature of these four Chinese construction enterprises are also added in the research database. With such abundant research material, this dissertation may conclude the feature of the process of relationship resources integration of Chinese construction enterprises. Besides, the rule of this process and the mechanism which could affect the promotion of the competitiveness may also be discussed in great depth.

Third, it then comes to the general rule of the integration process between political and business relationship in China and the balance mechanism of such integration. With the limited resources, it seems crucial to maintain the balanced development between the political relationship and the business relationship, as this the decisive factor in improving the competitiveness of an enterprise. It is then reasonable to have this section to dive into the database and look into the balance mechanism and thus have it concluded within a framework.

Finally, the nature of the process of relationship resources integration of Chinese construction enterprises will be discussed in length. It is unlikely that the integration of this kind could be completed without the enterprises, while it is questionable whether the internal resources of an enterprise be affected or not. For example, whether the inner ability of an enterprise would have an influence on the acquisition of the political or the business resources? To address these questions may have significance to the studies of this process. And through multiple cases studies in different stages, this dissertation would study this process mechanism and provide a framework to explain thoroughly and systematically.

To answer these above-mentioned questions, it seems that the theory deduction may enlighten some new "recessive" knowledge. In addition, it is also the truth that qualitative study enables to summarize the general rules and balance mechanisms of the resources integration. Therefore, the database of this research includes literary documents, interview transcriptions, reference books and magazines of several cases. Yin (1994) pointed out that the multiple cases study can effectively prove the conclusion that we get from one single case. The cases chosen by this dissertation can support and prove the logic relationships one and another. Simultaneously, this dissertation uses diachronic research method, which helps to

reveal the whole dynamic process and balance mechanism of resources integration. Based on this research method, a timeline would be installed and by doing this a consistent conclusion could be drawn from the massive material. Last but not the least, conclusions of qualitative researches can be proved in many ways, which would improve the reliability of such conclusions.

3.2 Overview of the Research Method

3.2.1 Method of Qualitative Research

Compared with quantitative research, qualitative research requires researchers themselves to participate in the circumstances and then collect and analyze resources. Through observing, interviewing, and analyzing, researchers should conclude theories from the original data. This qualitative method is quite suitable for researchers to have a long term program to develop or create the new theory (Creswell, 1998; Strauss and Corbin, 1990). To classify and extract the collected data, this dissertation employs various qualitative methods including observation, encoding, and data analysis and so on. Firstly, observation. This dissertation takes seven steps to observe and research the aimed cases, namely, identifying special phenomena, refining the essence, clarifying the essence relationship, observing the phenomena, display the mode, setting aside the stereotype and explaining the phenomena. Secondly, the application of theories. Starting from the qualitative methods, analyzing cases, coding the event, classifying the case and the building of the theory are the basic steps. Finally, data analysis. The methods would be illustrated by group discussion, seminar, topic review and verification of theoretical literature.

3.2.2 Multiple-Case Studies

Compared with the one-case studies, conclusions of multiple-case studies can be proved one another (Yin, 1994), which makes the results of case studies more convincing. (Herriot, 1983) By comparing different cases, some conform rules or different results could be noted and based on which a general rule may be concluded from the similar results, while the root also could be found for those different results. All of these efforts would lead us to discover, conclude and refine theories. Multiple-case studies comply with the literal replication and the differentiated replication. Literal replication would be applied to conclude the conform rules from four Chinese construction enterprises. Meanwhile, since the aim of this study is to

conclude theories, rather than to follow the statistic rules from the massive samples, this dissertation only chooses those cases which share the similar characters and related to the research questions (Eisenhardt, 1989). The case study process of this dissertation is as follows:

First, case selection. Typical cases will fall within the category at the preliminary research stage, and then 4 to 6 cases may be selected as research objects. Second, data collection. Data will be collected from the following sources: the external industry information, news reports, and the material of listed companies and so on. The key information should be confirmed and verified, and then collected in a unified data base. Third, strategy analysis. To achieved the designed aim, the attention will be especially paid to the vertical analysis and process analysis. Methods like, comparison (mainly trans-case comparisons), conceptualization (mainly used in data-making standard, as conceptualized data helps to conclude the entire data and its classification), triangle test (triangle test is used to guarantee the reliability and validity through different channels and different people) and data confirmation (data confirmation can guarantee the data facticity) will be utilized.

3.2.3 Process Analysis

Process analysis is a research method which may end up with theoretical opinions by observing the development of one case as well as analyzing the process. The data from such analysis compares the development order of certain cases according to a certain rule and then a dependency relationship based upon the case order. (van de Ven et al., 2000) Starting from the observation of the vertical data, the process analysis makes the irregular data become regular. Therefore, the process analysis is one kind of interesting descriptive method (Wright and Zammuto, 2013).

By analyzing the chosen cases, the rules and the evolution relationships lying behind the cases will be revealed. To output the irregular data in a narrative way could display the motive of internationalization in respective development stage, the evolution process of dependent force and the rules of development. During the process of studies, the influence of process data features to the process of analysis needs more attention.

The steps of process analysis in this dissertation are as follows: first, to put the cases in the chronological order. Besides, cases will be divided into three stages. The description will not only cover the process between stages, but also includes the events within one stage. Second, to apply the related theories, namely coding the cases. The main goal of this step is to

classify the cases, and according to a certain order to categorize the information and classify the cases. Finally, to compare the development order of various cases and finds out the links among different cases. After that, the links between these collected vertical data and the order of these cases will be fully discussed, and which may contribute to concluding the general rules, mechanism and vertical relationship (Black, 2002).

3.2.4 Questionnaires

As a method for data collection in social research, a questionnaire requires researchers to design their questions with certain aim. The conclusion may be draw after the questionnaire has been edited and printed in paper and then answered by interviewees. Based on qualitative researches, a third party survey platform will be employed, and this platform will responsible for organizing a questionnaire research among more than 200 construction workers. Its result can act as the data supplement for the conclusions of this dissertation.

3.3 Selection of Cases

The aim of the research is to explore the measure took by Chinese construction enterprises in the resources integration and the mechanism of such action during the internationalization process. In terms of selecting cases, the chosen enterprises should be representative and the data and material of these objects should be accessible and accurate. The selected enterprises should have the following qualities:

- (1) Having established for more than 8 years, independent enterprise;
- (2) Independent management, having good ranking in the market share;
- (3) No oligopoly in this industry;
- (4) Easy access to adequate public data.

Criterion (1) is to make sure the selected enterprises have experienced a relatively long development period and have the independent ability in running its business, which may avoid the interference caused by the short-time management, and an independent enterprise can also avoid the influence of the financial group. Criterion (2) is to ensure the selected enterprises have a certain influence in the market, which means its representativeness and leadership among the rest enterprises. Criterion (3) is to avoid the interference from the monopoly in its operation strategies and to ensure the selected enterprises could fully be engaged in the market competition. Standard (4) is to collect and obtain diversified research

material. This research applies the multi-cases research method, which may set a high standard for the research material, and thus to choose the objective material which have been published could be helpful in the further research and gaining the deep understand on this subject.

With these four criteria, this research locates the objects among those famous construction enterprises in China.

The first step is to ensure the quantity of the cases. As the aim of the research is to explore the measure took by Chinese construction enterprises in the resources integration and the mechanism of such action during the internationalization process, it is then more convincing and inclusive in applying the multiple case studies. There is no specific requirement in the quantity of the chosen cases, but the chosen cases are strictly required to be special and typical enough in this area (Eisenhardt, 1989). It is clear that the state-owned enterprises and the private enterprises represents two typical ownerships in China. Therefore, four cases (two state-owned enterprises and two private enterprises) can realize a multi-dimension comparison and meet the requirement of specialty and typicality.

The second step is to settle down the cases. After collecting the original resources, the group discussion takes the accessibility of data and the representativeness of enterprises into consideration, and the nomination will go to Pacific Construction Group (PCG), Guangsha Construction Group (GCG), China State Construction Engineering Corporation (CSCEC), and China Railway Construction Corporation (CRCC) as study objects. The introductions of these four enterprises are as follows:

Pacific Construction Group (PCG)

PCG established in 1995, whose head office is in Nanjing. This large enterprise is major in the investment and construction of infrastructures, owning the first-class qualification of the national highways, municipal infrastructure and water conservancy. PCG has 300,000 employees and boots its core value in “honor”, “kind and brave”, and “intelligent and industrious”. It also shares the value of “kind to the employee and honor the brand” in its development and aims to become a new state-owned enterprise featuring “private for the public, one for all, share the rights, socialize the asset and owned by the public”. This enterprise ranked the 156th out of the “Top 500” of Fortune, the 1st place among all private entity enterprise in China and the 1st place of the private construction enterprises in the world (quoted from PCG official website and Baidupedia).

Guangsha Construction Group (GCG)

GCG is the first listed construction enterprise in China, recommended by Ministry of Construction. In recent years, this enterprise has been successful in capital operation, adjustment of organization structure and reform of property rights system, which allows its rapid development. There are more than 40,000 staffs, 5,000 of which are technician. Its total assets reach 12 billion yuan, and the annual output reaches 15 billion yuan. GCG owns a large market, and its business is throughout 28 regions and areas and it has offices and branches in many countries. GCG also has a good reputation in this industry. It was ranked No.12 out of 60 in 2005 by Construction Times and No.11 out of 60 in 2006 by Engineering News Record. (quoted from PCG official website and Baidupedia)

China State Construction Engineering Corporation (CSCEC)

China State Construction Engineering Corporation Ltd (in short: China Construction), formally established on December 10, 2007, was co-initiated by four Fortune Global 500 enterprises: China State Construction Engineering Corp. (CSCEC), China National Petroleum Corporation (CNPC), Baosteel Group Corporation Ltd and Sinochem Corporation. CSCEC occupies 94%, and inherited the employee and the assets from its parental companies.

The former CSCEC was established in 1982, one of the 53 state-owned key-note enterprises. Its major businesses include contract work of the house construction, the real estate development, international project contracting, infrastructural project and inspection and design of municipal project. CSCES has become the leading icon of the China's construction industry, the real estate industry, and the international contractor. Now this enterprise is the only one construction enterprise which has three top grade qualities. In 2010, it was ranked No.6 out of "25 the most respectable listed enterprises in China" by The Buffet. (quoted from PCG official website and Baidupedia)

China Railway Construction Corporation (CRCC)

CRCC was solely established by China Railway Construction Corporation on November 5th, 2007 in Beijing, and is now a mega size construction corporation under the administration of the State-owned Assets Supervision and Administration Commission of the State Council of China (SASAC). On March 10th and 13th, 2008, CRCC was listed in Shanghai (SH, 601186) and Hong Kong (HK, 1186) respectively, with a registered capital totaled RMB 12.3 billion. CRCC, one of the world's most powerful and largest integrated construction group, ranking the 79th among the Fortune Global 500, and 8th among China' s

Top 500 Enterprises, as well as 1st among ENR's Top 250 Global Contractors in 2015, is the largest engineering contractor in China.(Quoted from PCG official website and Baidupedia)

These four enterprises all have relatively impeccable information, whose data are quite typical, shown in Table 3-1. The information is mainly gained from news media, official website, books as secondary data. Each piece of information can be received from different routes and prove one another.

Table 3- 1 Basic information of these four enterprises

Name	Dated From	Ownership	Business	Rank	Leader
PCG	1995	Private	Basic infrastructure	“Top 500” of <i>Fortune</i> ; 156 th out of “Top 500” in 2015; No.1 private entity enterprise; No.1private construction enterprise	Yan Hao, Chairman, CEO
GCG	1984	Private	Housing construction, Basic infrastructure	Recommended by MOC; 18 th out of Top 500 Chinese Private Enterprises in2015; 145 th out of Top 500 Enterprises in China	Lou Ming, Chairman, CEO
CSCEC	1978	State-owned	Real Estate	The largest Construction Real Estate Enterprise and the largest construction contractor. 52th out of Top 500 in the world in 2014	Guan Qing, Chairman, CEO
CRCC	Established in 1978, Reconstituted in 2007	State-owned	Engineering construction; Real estate; Railway; Highway; Bridge; Tunnel; Urban Rail Transit	79 th out of “Top 500” of <i>Fortune</i> in 2014; 11 th out of Top 500 Chinese enterprises; No.1 Contractor in the world in 2013	Meng Fengchao, Chairman, CEO

3.4 Data Collection

3.4.1 Data Source

In order to study the process and balance mechanism of two relationship resources integration of Chinese construction enterprises, this dissertation assumes that the secondary data are objective. And then this dissertation uses the secondary data coupled with the results

from the questionnaires to improve credibility of the results, and thus the conclusion could be convincing and objective. Therefore, the database contains two components: vertical data of the objects and the feedback from the staff from these objects based upon the questionnaires have been given out. Since the vertical data should be rich and diversified (Langley, 2013), this dissertation gained large amount of data from different channels and various perspectives to evidence the points. Questionnaires were sent to staff and recycled by the third party (this dissertation chooses So Jump as the third party). To sum up, the exact data in this dissertation come as follows:

(1) Vertical data.

These data mainly come from: CSMAR data base and secondary data from some other publish channels.

First, the collected information mainly comes from the news data base of CSMAR. As the largest, the most accurate and the most comprehensive economic and financial research-based data base, CSMAR provides all authorized news documents featuring accuracy, authority and promptness. Most of the reports which contain the information on the enterprise since its establishment are accessible, and the content includes the time, specific events, relevant people and social comments. CSMAR has been regarded as a full-sample data base among the academic field, and thus the material provided by it could guarantee the reliability and validity. According to the features of this database, some criteria in selecting materials has been set (the criteria only contain the name of the enterprises and the name of their leaders). The criteria are shown in Table 3-2.

Table 3- 2 Data Screening Criteria

No.	Enterprises	Criteria
1	Pacific Construction Group	PCG or Yan Jiehe or Yan Hao
2	Guangsha Construction Group	Guangsha or Lou Zhongfu or Lou Ming
3	China State Construction Engineering Corperation	CSCEC or Guan Qing
4	China Railway Construction Corperation	CRCC or MengFengchao

Meanwhile, there are many other channels for resources collection. These secondary resources collecting from multiple channels not only can diversify the content of the information, but also can verify each other, which may increase the credibility of this research.

Therefore, any big event related to the sample enterprises and have been published all can be included into this research, and the relevant information includes: (1) enterprise yearbook, chronicle of events; (2) annual reports; (3) financial reports; (4) news reports and information on the official websites; (5) news reports from media authority; (6) published books, articles and journals about relevant enterprises; (7) books, interviews, statements of leaders; (8) analysis material; (9) other published notices and documents about enterprises. Data sources are shown in Table 3-3:

Table 3- 3 Data Source

No.	Brief Introduction	Data Source
1	enterprise yearbook, chronicle of events	Official Website;Relevant Books
2	Annual Report	Public Annual Book of List Enterprises
3	Financial Report	Public Financial Report
4	News Reports	Official Website
5	News Reports from Media Authority	Authorized News Reports by Key Word Research
6	Published Articles and Journals	CNKI Data Base; Google Scholar; Digital Library of UESTC
7	Books, Interviews, Statements of Leaders	Major Media
8	Analysis Material	Relevant Books, and Comments about Enterprises and Leaders
9	Other Public Notices and Documents	Official Website; Government Website; Media Announcement

(2) Questionnaires

Even though the secondary data have great objectiveness, they still need proving by the primary data, and thus the result can be trustworthy. Therefore, 250 questionnaires have been sent to 11 state-owned enterprises and 9 private enterprises through the third platform. 201 questionnaires have been collected and 162 (89 from state-owned enterprises and 73 from private enterprises) are valid. Based on the secondary data, the research result may be of rigorousness with the evidence from questionnaires.

3.4.2 Process of Data Collection

Data collection lasted 10 months, from February 2015 to December 2015. The first stage

is to collect and note down the enterprises' big events and other detailed and objective material from their official websites. Second, by searching different websites, news media and relevant documents to form a multi-perspective and multi-channel data base. Finally, by abstracting and verifying these materials, effective and objectively described materials have come into form. It is convincing that the secondary data which has been verified from multiple perspectives already amounts to objective and authentic, and guarantees the reliability and the validity of the research.

(1) The original data from CSMAR news data base are shown in Table 3-4:

Table 3- 4 CSMAR News Data Collection

No.	Name	Data
1	PCG	145news texts,250 thousand words
2	GCG	980news texts,500 thousand words
3	CSCEC	11447news texts,1.13 million words
4	CRCC	279news texts,210thousand words

(2) In addition to CSMAR, this dissertation also collects data from some events, relevant documents, official website and news media. See Table 3-5.

Table 3- 5 Other Data Collections

No.	Enterprises	Data	Data Source
1	PCG	70events,11-page Word documents	events/relevant documents/official website/news media
2	GCG	2001~2014annual reports,13 events, 48-page Word documents, 4 theses	annual report/event/ relevant documents/official website/news media
3	CSCEC	60 pieces of data based on annual reports, events, and relevant news	annual report/event/ relevant documents/official website/news media
4	CRCC	2007~2014annual reports, 98 political visit cases, 101 oversea projects and 53-page Word documents	annual report/event/ relevant documents/official website/news media

Based on the resources above, after the due organization and classification, this dissertation has collected abundant resources, which reveal the big event that those enterprises have went through and thus could guide our research direction. See Table 3-6.

Table 3- 6 Cases

Enterprises	Cases
PCG	1.“BT Mode” 2.the 5 th subpackage project of orbital highway of Nanjing 3.aquisition of 31 state-owned enterprises with “zero-asset” 4.poverty alleviation with industry
GCG	1.establishment and listing 2.merger and acquisition strategy 3.business cooperation strategy 4.promotion of brand influence
CSCEC	1.political interference of reformation and evolution 2.“Go Out” policy and cooperation strategy 3.Political cooperation and business cooperation
CRCC	1. political interference of reformation and evolution 2. “Go Out” policy and cooperation strategy 3.Political cooperation and business cooperation

(3) Questionnaires.

First, parametric design. To conduct the research, the importance of political and business relationship to enterprises’ management in different stages need to be considered. Current studies used to identify one enterprise’s political relationship by valuing whether there are officials acting as its chairman or chief manager (Yu and Pan, 2008; Deng and Zeng,2009; Wei et al.,2013), or identify its business relationship by valuing whether their senior managers have exchange and communications with their cooperative partners (Macneil, 1980). However, in addition to identifying such connection, it is more important to valuing the levels of such relationship. Therefore, through the measurement of costs (Frazier, 1983) and time (Zhou, 2014) to identify the level of the political relationship and the business relationship, and the result will be processed by the five-point scale method which may compare the result in different stage.

Second, making scales. According to the measurements and the methods above, valuing the strength of political relationship also involves the calculation of the time spent in communicating with governments, relevant costs and the governmental supports, while weighing the strength of business relationship may include the valuation of the time spent in communicating with other enterprises, relevant costs and others’ supports. The sample

questionnaire is attached to the appendix.

Third, providing and collecting the questionnaire. 250 questionnaires have been given out to 11 state-owned construction enterprises and 9 private ones. 201 of the questionnaire have been successfully received and 162 of which are valid (89 from state-owned and 73 from private ones). As Table 3-7 shown.

Table 3- 7 Questionnaire Collection

Type	Issue	Collected	Valid
State-owned	140	140	89
Private	110	104	73

3.5 Data Analysis

3.5.1 Stage Division

In order to analyze the process of development of each enterprise, this dissertation collected plenty of cases in the process. Meanwhile, in order to further discuss the evolution process and balance mechanism of these two relationship resources, this dissertation separates this process into three periods, namely the preliminary exploration period, the development period and the mature period:

(1) The first period, preliminary exploration period. Enterprises in this period are mainly newly-born and don not have a clear strategic goal. In order to develop in a better way, enterprises explore the market and form their own features by self-reforming and self-evolving. For example, PCG has their BT mode in its early period; by restructuring and recombining, GCG gets more funds and participated in the market competition; CSCEC gets rid of the planned economy and develops market economy.

(2) The second period, development period. After the first period, enterprises form their own special and core-competitive market economy mode. In the second period, enterprises aim at expanding marketing functions and realize a further development. In this period, the two private enterprises use the cooperation relationships with governments to get the municipal basic infrastructure programs. Through some non-profit projects, PCG and GCG gain the trust of governments and establish a friendly relationship. By these chances, these two enterprises gain the cooperation channels with local government. CSCEC and CRCC, two state-owned enterprises, expect to get rid of the political influence on the market, explore domestic business network, and develop market operation. With market operation, CSCEC

and CRCC get huge market shares in railway, highway, exploration and design, and building construction.

(3) The third period, mature period. Based on the first two periods, after about more than 20 years' development, enterprises form their own routes to develop. In this period, PCG and GCG, these two private enterprise, no longer exchange the capital for more market (utilize the large-scale acquisition of the dying state-owned market to establish the cooperation with the government) , and go back to the business capital market, paying more attention to economic effects. For example, PCG and GCG stop merger and acquisition in large scales while turn to integrate early merged enterprises and establish wider commercial partnerships to gain more market shares; by establishing a global commercial network, CSCEC and CRCC, these two state-owned enterprise, mainly explore international markets to maintain their sustainable development.

Three periods are as follows. See Table 3-8.

Table 3- 8 Different Periods

Period	PCG	GCG	CSCEC	CRCC
Frisr Period	BT mode	restructuring and recombining; getting more funds and participating in the market competition	getting rid of the planned economy and developing market economy	getting rid of the planned economy and developing market economy
	(1992—2000)	(1984—1997)	(1978-2001)	(1978-2001)
Second Period	gain the trust of governments: merging unprofitable enterprises, investing infrastructure projects	gain the trust of government: merging unprofitable enterprises, investing infrastructure projects	exploring domestic commercial network	exploring domestic commercial network
	(2001—2005)	(1998—2005)	(2002—2007)	(2002—2007)
Third Period	establishing wider commercial partnerships	Focusing on commercial network and economy effects	exploring international markets	exploring international markets
	(After 2006)	(After 2006)	(After 2008)	(After 2008)

3.5.2 Data Coding

Data coding refers to analyze and label the notes, reminders, interview records sentence by sentence, which could possibly mean to conclude the individual cases and phenomena into a conceptual scale. Coding is used to define and classify the collected data, and is conducive to our new understanding of data and the further collection of new data. This will lead researchers to the unknown fields. The aim of this dissertation is to study the relationship resources integration and its balance mechanism of Chinese construction enterprises. To gain the relevant data, to conclude and absorb the core topic from plenty of qualitative materials is necessary. Therefore, this dissertation identifies the core concepts and reveals the features and the process of the integration by strict coding process.

The coding process of this dissertation includes three parts. The first one is conceptual coding, which is initial coding. This part requires reading all the collected qualitative materials and then to finding out certain contents or sub-clauses related to this study. The second one is conceptual structure coding, which is to further conceptualize and conclude the results of initial coding. Since the original collected qualitative materials are usually disordered, the conceptualized qualitative data can have some common features. The last one is theoretical structure coding, which means to put the conceptualized materials into an aim-oriented theoretical framework, and then to establish a mode to analyze theories. Preissle (1991) argues that the qualitative studies can neither imitate others nor do things independently. All studies need structure, modification and organization jobs for data analyses. Therefore, during the process of conclusion, this dissertation strictly obeys the data collection and handling rules of qualitative researches. And then by group discussion, this dissertation further discusses and modifies various kinds of problems during the coding process. Simultaneously, since the aim of this dissertation is to integrate the relationship resources of construction enterprises, this dissertation might as well choose such cases relevant to relationship resources integration from conceptual coding; in the conceptual structure coding, this dissertation highlights the business economic relationship and political relationship of enterprises; in theoretical structure coding, this dissertation separate into two modes, business relationship resources integration and political relationship resources integration.

To sum up, the coding rule of this dissertation obeys such orders as: (1) initial material; (2) conceptual coding; (3) conceptual structure coding; (4) abstraction of theoretical structure coding process, all of which are showed as follows (initial material omitted). See Table 3-9.

Table 3- 9 Coding

No.	Conceptual Coding (Relevant Content and Subcauses) II	Conceptual Structure Coding (Conceptualize d) III	Theoretical Structure Coding (Planting into theoretical framework) IIII
1	In the mid-1990s, PCG took over some municipal infrastructure projects with BT mode(BT: Buid - Transfer). With the help of BT mode, PCG is either investor of local government, or the only contractor of construction projects. This mode helps PCG “eliminate corruption, lower the cost of supervision, remove the chance for governments to lower the prise and decrease the financial pressure of government”. With the help of BT mode, PCG grows rapidly. When Yan Jiehe, former CEO of PCG, he accurately found a dilemma of local governments that they are urgent to upgrade municipal infrastructure while are short of funds at the same time. After the success in 1996, Yan introduced this mode to some sub-developed regions.	Special business mode helps enterprises develop rapidly.	Business Relationship
2	In order to open the market of Nanjing, Yan Jiehe visit there more than 10 times and finally got three projects of culverts. When got this project, Yan had been the fifth contractor. The total bid was worth only 294 thousand yuan, 36% of which belonged to management cost. This meant that this project would lose at least 50 thousand yuan. Even though this project was opposed by most of subordinates, Yan insisted it and set it out. Even though this project lost 80 thousand yuan at last, this project finished in 70 days, which had been planned to be finished in 140 days. This project earned a huge reputation for PCG and then Yan and his company won the bid of the project of Nanjing rounding highway. This project was worth 30 million yuan, with total profits worth 8 million yuan.	By hard work, enterprises can get trust and projects.	Business Relationship
3	In 2002, PCG merged 27 money-losing state-owned enterprises, including ST Zongheng (stock code: 600862), Jiangshu Jiangyin Great Wall Doors and Windows Factory, Suqian Glass Factory, Jiangsu Shuangyang Wine and Alcohol Group, Lianyungang Wangfu Wine Company, which were worth 4 billion yuan in total. This was the beginning of Yan’s “zero-asset “acquisition. Due to this action, Yan became	With the acquisition of non-performing asset, enterprisessolve problems for government and establish a	Political Relationship

	<p>the VIP of local government and got a 6-billion-yuan contract in Nanchong. “Even though these enterprises are badly-performed, they have access to a favorable relationship with government”, said Yan Jiehe.</p>	<p>cooperative relationship with government.</p>	
4	<p>Since 2002, PCG has begun to respond the summons of the provincial party committee and provincial government and helped the poor in north part of Jiangsu Province. Unlike other enterprises which donated money and materials, Yan provided entity business. In this way, Yan began to acquire state-owned enterprises in this part. Yan didn’t deny that this action would help his enterprise win bid more or less. For north part of Jiangsu, it was vital to get rid of poverty by building roads. This was just what PCG was good at. One interior document showed that after just a few month of acquisition of ST Zongheng, PCG successfully got a 6-billion project in Nantong.</p>	<p>By merging and acquiring state-owned enterprises, enterprises solve problems for government and establish a cooperative relationship with government.</p>	<p>Political Relationship</p>
5	<p>On July 28th 2005, Yan Jiehe signed a framework agreement with SASAC (State-owned Assets Supervision and Administration Commission) of Jilin Province, that eight state-owned enterprises were transferred to PCG by the way of “zero-asset”.</p>	<p>With the acquisition of state-owned enterprises, enterprises solve problems for government and establish a cooperative relationship with government.</p>	<p>Political Relationship</p>
6	<p>During May 6th- 7th in 2014, PCG, with HualuoLunjian (a online platform) held submits in both Nanjing and Shanghai, with a topic of “sharing resources, benefiting intelligence, winning capitals”. More than one hundred entrepreneurs came to Nanjing and Shanghai and joined this submit.</p>	<p>Communication helps enterprises to develop.</p>	<p>Business Relationship</p>
7	<p>On May 25th 2013, ZouZhaojie, the vice president of PCG, was invited by LiuGong Machinery Company in Guangxi Province to take part in a sales victory meeting in Nanjing. In the meeting, Yu Yajun, the vice president of LiuGong claimed that as the most important client of LiuGong, PCG would receive the most efficient, most convenient and best service. ZouZhaojie congratulated LiuGong first and then said that as the leader in domestic construction industry, PCG built a cooperative relationship with LiuGong early in 2003. Zou also showed his gratitude and best wishes to LiuGong, expecting a better cooperation in the future.</p>	<p>Communication promotes cooperations.</p>	<p>Business Relationship</p>

3.5.3 Data Analysis

After classifying periods and coding data, this dissertation forms special data identifying different behavioral features of construction enterprises. And then, this dissertation would further explore its process evolution mechanism. The researched data shows that from the perspective of relationship network resources, construction enterprises have different features in different periods. Due to the differences of ownership, some huge differences also exist in this process between private enterprises and state-owned ones. Simultaneously, based on the qualitative studies, this dissertation used questionnaires to support the conclusions. Detailed process will be illustrated in Chapter Four and Chapter Five.

3.6 Conclusion

This chapter clarifies the route, process and methods of this dissertation, and objects of this study. It also demonstrates the process of data collecting, coding and analyzing. All of these provide thoughts, methods and data base for the further research.

Chapter 4 : The Evolution Route and Balance Mechanism of Relationship Resources in Construction Enterprises

Under the background of social system and culture featuring China's characteristics, political relationship resources and business relationship resources play an important role in the development of construction enterprises and whether these two relationship resources can be integrated in a perfect pattern or not may directly influence the development of construction enterprises. However, due to the limited amount of existing resources, domestic construction enterprises cannot keep these two relationships growing synchronously, instead they have strategic preference designed for the corresponding period. Taking these conditions into consideration, it may lead to the questions that what the practical effects will these two resources impose on Chinese construction enterprises? How does an enterprise decide its core strategic in different stages? How do Chinese construction enterprises keep the balance between these two resources since the restriction on the accessible resources? It seems that the answers to these questions are quite important to the development of domestic construction enterprises. Therefore, this chapter will analysis four enterprises' cases and with the help of the result from the questionnaires to address these questions properly. This chapter also reveals the balance system regarding the relationship resources integration within the Chinses construction enterprises.

4.1 Introduction of Enterprises

Pacific Construction Group (PCG)

October 20th, 1992, 32-year-old Yan Jianhe spent 100 thousand yuan establishing Huaian Yinjiang Construction Company, the predecessor of PCG. The first project of this company was to build three small culverts of belt freeway of Nanjing. Since they shorten the time from 140 days to 70 days and ensured the quality, Yan's team was assigned as the appointed contractor by the command department of the belt freeway. When the completion of the construction of these three small culverts of belt freeway, the net profit of this project reached 8 million yuan. In the next year, Yan's company joined to build Shanghai-Ningbo Highway, which was national priority project and raised their fame. After that, they took on

Beijing-Shanghai Highway and Nanjing Lukou International Airport Highway successively. Especially the latter one got the high comment from Huang Zhendong, the then minister of communication, and Zheng Silin, the then governor of Jiangsu Province. After achieving the success in these projects, PCG boosted its popularity. On November 27th, 1995, PCG was officially established. Since 1996, PCG has begun to take over some municipal infrastructure projects which started from Jiangsu Province and then spread to a nation-wide. The secret weapon that helps PCG realize its success is the execution mode they created, namely they firstly invest in the project for its construction and then transfer it to the government, which they named such mode as BT Mode. The so-called BT mode is the initial capitals of Build and Transfer. Under such mode, the construction company may take over the project and make the investment in the first place, and after the inspection when the construction has been finished, the company hand over the project to the relevant government department who may make the installment as agreed terms. It seems that such mode is welcomed by the government who may eager to have the infrastructure construction been executed but suffering from the financial pressure. With the help of BT mode, PCG is either investor of local government, or the only contractor of construction projects. This mode helps PCG “eliminate corruption, lower the cost of supervision, remove the chance for governments to lower the price and decrease the financial pressure of government”. With the help of BT mode, PCG grows rapidly. In 2004, PCG ranked 166th in World Top 500, and 156th in 2015. From then on, PCG has been the leader in Chinese construction industry.

Guangsha Construction Group (GCG)

Guangsha Construction Group (GCG) is the second largest private construction enterprise, which was firstly established in 1984. It is clear that in terms of established time, GCG has a longer history than PCG. In this year, Lou Zhongfu was assigned as the general manager of Chengguan Construction Company of Dongyang County, which was the beginning of GCG. In 1985, this company was renamed as Dongyang No.3 Construction Company and decided to open its market by setting Hangzhou, Ningbo and some other cosmopolitans as their strategic targets. In June 1992, GCG was firmly established, acting as the normalized joint-stock construction enterprise, which was the first batch in China and the first one in Zhejiang Province. In 1997, GCG was listed in Shanghai Stock Exchange. In July 1998, it transformed into a limited liability company. In 2002, GCG was integrated reorganization, separated from Guangsha Group and formed into an independent construction group. From then on, GCG has begun focusing on industrial and civil construction. In 2011,

GCG rank the 12th out of Top 100 of Chinese construction enterprise. In 2012, GCG ranked 8th out of the Top 60 of Chinese Contractor, elected by Construction Times and Engineering News-Record.

It is worth noting that even though both GCG and PCG are construction enterprise, they are quite different in professions. The former mainly focuses on civil and industrial construction, such as plazas and skyscrapers, and merely step into the project on road and bridge, while the latter focuses on roads and bridges mainly. However, both of the founders of these two leading enterprises take a broad and long-term view which impose a decisive effect on the development of their business.

China Railway Construction Cooperation Limited. (CRCC)

CRCC was evolved from the railway corps of the Chinese People's Liberation Party, which was set up in July 1948. In January 1984, it was renamed as the construction headquarters of MOR (Ministry of Railways). In August 1990, China Railway Construction Company was incorporated. In September 2000, it was separated from MOR and merged into SASAC (State-owned Assets Supervision and Administration Commission). In November 2007, CRCC was officially formed, and it is under charge of the State-owned Assets Supervision and Administration Commission. In March 2008, CRCC was listed in Shanghai and Hong Kong respectively. Its register capital has reached to 12.338 billion yuan. CRCC is one of the most power and the largest comprehensive construction groups in China and even in the world. It has been in Top 500 and Top 225 of the large contractors for consecutive years, and ranked 80th in 2014, 79th in 2015. CRCC also renowned as the biggest contractor bot domestically and overseas. Its business map contains 31 provinces and regions in China (except Taiwan) and 78 countries and regions. Since 1980s, CRCC has gotten 400 nation awards in contract, design, and consultant and so on.

China State Construction Engineering Corporation (CSCEC)

CSCEC, established in June 1982, is the largest construction enterprise in China and the only one in China certified for all 3 top grade Qualifications, as well as for "1+4" Qualifications and Grade A Qualification for the construction design. China Construction leads the national construction industry on the ranking of the qualifications. CSCEC has business in more than 100 countries and regions in the world (except Taiwan). Its core business lies in the architecture construction and the real estate which are characterized as complete competitive areas. CSCEC has been the most fast-growing huge-scale enterprise in China's infrastructure investment industry in recent years and has been in the Top 500 in the

past 9 consecutive years. It ranked 100th in 2012 and the 37th in 2015 and the 3rd of Top50 in China. Since the establishment, CSCEC has won 60 State Science and Technology Prizes, 4396 authorized patents, 333 patents for invention and 108 national scientific research tasks. These advantages in technics are the very reason that CSCEC realized its rapid growth.

4.2 Political Relationship Resources and Business Relationship Resources

A profitable opportunity only means the possibility of value-realization for an enterprise and to obtain, utilizing and allocating resources is a way to realize the value of an opportunity. (Yang, 2009) Since many enterprises, especially domestic construction enterprises, can almost not occupy all resources for opportunity exploitation, they must seek and obtain necessary resources from the external environment. However, it is always difficult for enterprises to obtain resources by trading in the market because new projects may have some shortages. Even if the trade takes place, the price seems too high. Under this background, relationship resources are always used to get relevant resources and supplement at a relatively low cost so that relationship-network-based social trade plays a significant role (Jennifer and Macmillan,1990). Further, the integration of the resource of this kind has been an important approach for the Chinese construction industry to utilize such social trading. By studying four construction enterprises, this dissertation finds that relationship resources mainly contain two aspects: political relationship resources and business relationship resources.

4.2.1 Political Relationship Resources

In terms of political relationship resources integration, many previous documents, both domestic and oversea, show that establishing the relationship between enterprises and politics is a popular situation existing in many countries, and such political relationship is beneficial to an enterprise itself. (Shleifer, 1997; Faccio 2006; Luo and Tang, 2009; Xu et al., 2010) in addition, it brings about the actual positive financial outcomes.(Krueger 1974; Faccio 2006; Claessens et al. 2007) Political relationship has such potential benefits, as getting more resources or avoiding troubles, and it also helps the enterprise have more access to the external resources. (Wei, 2013) Therefore, the investment to political relationship has the same function as the investment to capital or labors. Since the entrepreneurs are all profit-chasing, the benefit from the politic network could keep the balance between development of capability and investment of political relationship. (Yang, 2011) Political relationship resources are quite beneficial, for example it is much easier for an enterprise to

get loan from the bank provided that it has a well-developed political relationship can be utilized (Yu and Pan, 2008). One financial consultation statement of construction industry has mentioned:

Construction industry belongs to low-profit industry, with relatively low techniques, and has limited attraction to foreign investment. Only some large enterprises can raise money by listing or issuing bonds while other small enterprises can only get loan from banks. Characterized by high debt and low benefits, construction enterprises have huge difficulties in getting loan. As a result, most private construction enterprises are lack of line of credit and small and medium sized enterprises can hardly take out a loan. Since construction enterprises cannot get enough execution capital, construction organizations have to raise money from downstream firms or even default in payment. Difficulty of financing has been a common problem for most construction enterprises and shortage of funds has been a huge bottleneck for the development of construction enterprises.

Due to depression of the real estate industry in recent years, difficulty of financing and shortage of funds have become the most problematic issue for Chinese construction enterprises. Lou Ming, the chairman of the Board of GCG, said in an interview:

The situation which a sufficient fund cannot be guaranteed is the largest problem for private enterprises, and it also the major issue remains unsolved in expanding the overseas market. In order to ensure the project and fund can work smoothly, the contractor must have a domestic counter guarantee, which means it is difficult for some financially-weak enterprises to develop in foreign countries. Since it is not easy to get bank credit lines and L/G (letter of guarantee), GCG's oversea business is limited to some extent.

To deal with these troubles, how to raise money at a higher efficiency but a lower cost is the key for an enterprise to develop and compete. Since government has a huge impact on bank's actual operation, enterprises may make use of their political resources to get funds. Usually, an enterprise tends to gather government and banks to raise funds by this "three-party cooperation". Here, relationship resources play a significant role. For example:

Once, two projects in Jingsha County of GCG's Guizhou branch faced financial problems. Wu Haichao, the general manager of Guizhou branch, and his team did their best efforts to solve this problem. For a period, Wu tries to address the issue of the income of the capital personally, and he commuted between government and banks, trying to obtain loans at the most reasonable price. In 2011, when Jinsha BT project began to raise funds, many banks either rejected their credit or asked for a high price, and the project was even suspended. By

investigating and survey the financial market, Wu contacted the leaders of National Development Bank and invited them to visit their construction sites and subsequently got the loans.

Apart from the fund raising and getting the loan, political relationship is also conducive to qualification acquisition, administrative processing, subsidy obtainment, administration bond and so on. (This part will not be discussed in this dissertation.)

In order to seek for an extend political relationship resources, construction enterprises need to take part in politics. In China, increasingly more entrepreneurs participate in political affairs actively, some of whom are members of NPC (the National People' s Congress) or CPPCC (the Chinese People' s Political Consultative Conference) (Li et al.,2006). At the same time, many private enterprises are willing to employ the present or the past governmental officials, members of NPC or CPPCC as their directors(Chen et al., 2005). One scholar in Jiangsu Provincial Social and Science Academy pointed out:

“In order to seek for more political relationship resources, construction enterprises always building links with the present and the past government officials. Among the senior managers of PCG, there have been some former government officials.”

Simultaneously, cases in this dissertation show that the relationship between the enterprises and the government do not simply a one-way connection, namely “the enterprises seek for and use governmental supplement”. According to Yan Jiehe, once in a project in Changsha Hunan, PCG even helped the local government raise funds. Chinese government is a transforming government, so that they need the enterprise's support to help them go through this process. Therefore, the government even sometimes need enterprises to make some sacrifice, or exchange the leverage with the enterprise. Some ill-managed governments' subordinate enterprises also require instruction on capital, techniques and the market. These occasions actually provide a chance for enterprises (including both state-owned and private enterprises, it seems that even for the state-owned enterprise the connection with the local government is necessary) to build relationship with government. And also, government will also return enterprises by cooperating together, offering easy fund-raising channel and so on. For example, PCG once cooperated with governments by purchasing the local unprofitable firms:

Yan Jiehe, the founder of PCG holds the belief that paying out is ahead of harvest. By cooperating with government in an “unprofitable” way, PCG obtained various political

relationship resources, which set a solid foundation for its development. In one interview, Yan Jianhe directly pointed out that “even though these firms are weak, it helps to build a friendship with government.” Its true intention behind such acquisition is that the initiation of connection will allow further cooperation in the municipal project.

To sum up, political relationship resources are conducive to qualification acquisition, administrative processing, subsidy obtainment, administration bond. They also help enterprises to solve urgent problems. By participating political affairs, exchanging benefits, enterprises seek for more political relationship resources for creating a favorable condition for their own development.

4.2.2 Business Relationship Resources

Business relationship resources exist in social network. Harrison White, American scholar, in his paper *Where the Market Comes From* in 1981 pointed that a market comes from the development of social network which is the foundation of economic trade. Johanson and Mattsson (1988) thought that from the perspective of network, an enterprise is such a network environment that suppliers, clients, competitors and other external organizations affect and influence one another. Their relationships are not just a binary relationship but an interdependent and interlinked network relationship and business eco-system. Business relationship resources provide potential information, resources, market and techniques, with the advantages of learning ability, scale economy. (Burt, 1992) For Chinese construction enterprises, various business relationship resources can exploit group advantages into the full. Since no one can be the best in every aspect, business relationship can bridge this gap. Construction enterprises cooperate with each other by business relationship insertion. This promotes enterprises' competitiveness and strength. For example, CRCC carries out the idea of “LifeHome+” and upgrade the service in Hangzhou:

“LifeHome+” is a “comprehensive” concept, which tries to introduce social resources into community and make people's life a finished product, and tries to build a brand service system combining with medical, education, business and qualified equipment. It combines “Healthy Home”, “Educational Home” and “Enjoyable Home” and build a “community life mode”. To hit this target, CRCC cooperated with many famous enterprises to achieve a win-win situation. For example, in March 2014, CRCC cooperated with International SOS. The latter served CRCC's clients in terms of health consultant management and other medical and security aids, and for the inpatient, the service such as seeking treatment, hospitalize,

transfer, visit and emergency call which constitute an overall medical support will be installed gradually. 'It integrates many medical specialists, both domestic and oversea, into a particular time and bid them to serve clients on line.' Besides International SOS, CRCC also cooperated with educational agents, parking planning firms and some other companies in great depth. A series of business relationship integration brings enterprises good benefits and brand effects and thus enhances their competitiveness in local real estate market.

Further, in addition to improve the individual competitiveness, the integration of business relationship requires beneficial relationship from different firms in this whole industry. It is especially the case for the construction industry which is characterized by high investment, high qualification and low interests so that some projects have a relatively high criterion on qualification during bids. By using business relationship resources, members of this internal network could cooperate with one another, which helps to have complementary advantages and develop together.

One survey report from the steering group of Construction and Project Management Committee of CCIA (China Construction Industry Association) shows that cooperation with strengths, complementary advantages, long term strategic partnership and wide social resources have been some major features of construction enterprises in recent years. For example, China Construction First Division Group Construction & Development Co. ,Ltd. has established long term partnership with Korean Creation Designing Institute and some domestic strength ones; in 2004, CSCEC, together with Shanghai Construction Group won the contracting right of the main building of SWFC (Shanghai World Financial Center), which is the highest building in the world, with the total contract value of 3.9 billion yuan; TECC (Tianjin Engineering & Construction Group) has been cooperating with Centro Group of Singapore since 1988. Another good example is the cooperation between GCG and Evergrande Real Estate. Evergrande is a leading real estate enterprise in China, ranking in Top 10 of China Real Estate Enterprises in four consecutive years. Up to the present, GCG and Evergrande have had 10 cooperative projects in Hefei, Shenyang, Luoyang, Xi'an and so on, with total value of 1.6 billion yuan and total area of about 1.25 million square meters. The sharing of business relationship resources between these two enterprises strengthens their cooperation and trust, and deepens their strategic partnership which was characterized as honest, positive and mutual beneficial.

On November 21st 2010, the board chairman of GCG, Lou Zhongfu invited Xu Jiayin, the board chairman of Evergrande, to visit GCG and exchange ideas. Lou and Xu exchanged ideas

on the current national macro-economic situation and discussed the development of real estate and construction deeply. Lou said that either construction or real estate are major business areas for both GCG and Evergrante, both of whom have their own advantages and fames. At present, these two companies have cooperated with each other for many years, which set a favorable condition for their mutual understanding and mutual trust, which build the solid foundation for the further cooperation. XuJiayin showed his appreciation for this meeting and clarified the aims of this visit: the first one was to have a further discussion on their current strategic cooperation; the second one was to seek for cooperation in other fields. At noon, the meeting was finished under a friendly and cozy atmosphere, and an initial agreement on the exploration to the central market has been achieved. In addition, XuJiayin showed that Evergrante would strengthened the cooperation in 2011. By making the best use of the advantages owned by the GCG in management and the market, the cooperation may be conducted in the area of civil construction in main cities in China.

To sum up, the business relationship resources integration of China's construction enterprises can not only make up for the disadvantages of one enterprise in some certain area but also promote enterprises in the network to take group advantages. By integrating business relationship resources, construction enterprises can gather different interests of many enterprises, increasing their competitiveness and strength.

4.3 The Evolution Rules of Construction Enterprises' Relationship Resources

Political relationship brings Chinese construction enterprises such benefits as fund-raising, debit and credit, qualification and even project approval. It also helps enterprises solve many other problems which are crucial ones for their further development. Business relationship helps enterprises gather advanced resources and promote their intangible competitiveness. Both political and business relationship resources play an important role in the development of enterprises. In order to discuss their roles in different stages, this dissertation concludes their evolution rules through qualitative text analysis and questionnaires.

4.3.1 Characteristics of Private Enterprises in Different Stages

By analyzing the collected resources, this dissertation finds that the first stage of PCG

and GCG is business relationship and their second stage is political relationship and their third stage back to business relationship. See Table 4-1.

Table 4- 1 Periodical Features of Private Enterprises

Period	Cases	Motivation	Types of Resources Integration
The 1 st Period (Preliminary Exploration Period)	<ol style="list-style-type: none"> 1. With the help of BT mode, PCG promoted its competitiveness and won contracts in the early stage. BT mode solves financial problems for investors so that PCG can be quite competitive. 2. In the culvert project, PCG won the trust of the project department and finally got a bulk order. 3. Benefiting from a favorable relationship with suppliers and banks, GCG got huge funds. 	Enterprises try best efforts to obtain trust and establish business connection.	Business Relationship Resources Integration
The 2 nd Period (Development Period)	<ol style="list-style-type: none"> 1. PCG merged and acquired more than 30 nearly closed state-owned enterprises, helping government solve a huge problem. 2. In the poverty-assistance project in north part of Jiangsu province, PCG successfully recombine state-owned enterprises, which solve the financial and employment problems for government. 3. GCG believed that private enterprises should care more about politics so that it merged and acquired plenty of unprofitable state-owned enterprises. This helps GCG build a favorable relationship with local government and open the local market. 	By integrate political resources, i.e. solve problems for government, enterprises can open local markets and obtain governmental contracts.	Political Relationship Resources Integration
The 3 rd Period (Mature Period)	<ol style="list-style-type: none"> 1. PCG cooperated with LiuGong Machinery Company. 2. PCG maintains a health business cooperative relationship with banks and suppliers. 3. After 2006, GCG paid more attention to economic effects, enhancing cooperation with colleges, banks, and industry associations. 	Enterprises try to get rid of the dependence on government, integrating wide ranges of business resources.	Business Relationship Resources Integration

The First Stage: Business Relationship Dominance

In the initial stage, private enterprises have no capability to take on some large

governmental projects due to their lack of resources and influential power. They can only handle some small-scale projects to win the acknowledgement from the outside. This stage is a capacity-accumulation period, which is led by the business relationship. For instance, the early PCG accumulated their funds, techniques and human resources through some small-scale project; GCG eventually got large orders by maintaining a healthy business relationship with suppliers.

The Second Stage: Politics Relationship Dominance

After the first stage, private construction enterprises have accumulated large amount of funds, techniques and human resources. It then reaches the stage for the private construction enterprises to realize their expansion. It is traditionally held that it is more urgent for the private enterprises to have a political sense, so in terms of the employment of the resource, they transmit their focus on political relationship and use it in fund-raising, loan, qualification, administrative examination and approval, governmental project and some other aspects which are beneficial for them to address some problematic issues and then realize the further development. In this stage, private construction enterprises need to use some non-benefit or even money-losing projects to keep a healthy relationship with local government and then gain more projects in the future. For example, by paying debts for the local government and creating new jobs for locals, PCG established a solid relationship with the government and expand their market in the north Jiangsu Province during the North Jiangsu Aid Project. It also well-illustrated by GCG in expanding their market and building the network with the local government when they helped the local government to conquer the deficit status.

The Third Stage: Business Relationship Dominance

It is convenient for the enterprise to raise funds and win the bid for governmental projects if a well-developed political network has been in form between the enterprise and the government. However, with the development of enterprises themselves and in the pursuit of further growth, they cannot merely rely on political relationship. Therefore, in this third stage, private enterprises are not satisfied with the situation in which their destiny are mainly controlled by the projects from the government, and switch their focus back to business and market gradually. They build business cooperation relationship with other enterprises widely. For instance, PCG cooperates with LiuGong Machinery Company; GCG cooperated with domestic colleges, banks and industrial associations. These examples shows that the commercial-centered relationship network could also be great value in promoting competitiveness.

4.3.2 Characteristics of state-owned enterprises in different stages

According to the collected resources, it is noticeable that CSCEC and CRCC share similar periodical features: the first two stages are political relationship dominance and the last stage is the business relationship dominance. See Table 4-2.

Table 4- 2 Periodical Features of State-owned Enterprises

Period	Cases	Motivation	Types of Resources Integration
The 1st Period (Preliminary Exploration Period)	1. Led by the central government, CSCEC and CRCC have developed into modern enterprises by stripping bad asset and redundant staff off, raising funds directly, and merging and recombining.	Under the background of political interference, enterprises take part in the market operation for their own development.	Business Relationship Resources Integration
The 2nd Period (Development Period)	1. After the hard time of early stage of reformation and opening, CSCEC and CRCC gradually got rid of the institutional restriction of planned economy. By integrating different social resources, they improved their competitiveness. 2. By enhancing cooperation with PetroChina, Nanling Civil Engineering, Vossloh and some other companies, CRCC expand its business to the downstream of the industrial chain, which remarkably improve its influence in resource and processing fields. 3. Cooperating with colleges and institutions, CSCEC received various fruits. Its ability of independent research and development, innovativeness and competitiveness have all been promoted.	Enterprises gradually integrate different business resources in order to improve their competitiveness.	Business Relationship Resources Integration
The 3rd Period (Mature Period)	1. CSCEC and CRCC were listed in Shanghai and Hongkong respectively. By raising funds, both widened their domestic and oversea business. Listing of these two show that they both have get rid of the political restriction and	Enterprises get rid of the political restriction and take part in the market competition competitively.	Business Relationship Resources Integration

	<p>take part in the market competition competitively.</p> <p>2. CRCC and CSCEC continued to expand their industrial chain and value chain, and established health business relationship with domestic and oversea enterprises and governments.</p>		
--	--	--	--

The First Stage: Political Relationship Dominance

The two state-owned construction enterprises considered in this research were originally established by the government in the planned economy era. Since the early 1980’s, they began to accept the reform of state-owned enterprise and also took part in the market-oriented reformation. For example, led by the central government, CSCEC and CRCC stripped bad assets and unnecessary staff off, raised funds directly, merged and re-organized and then finally develop into modern enterprises, which enable them to participate in the market even with the political interference. However, due to the political interference, most of their projects are political tasks which clearly lead by the government. Therefore, their first stage falls within the political relationship dominance.

The Second Stage: Political Relationship Dominance

After the first transforming stage, CSCEC and CRCC got rid of the restriction from the planned economy system gradually, and by doing which social resources had been introduced and their competitiveness had been thus enhanced. Since their major businesses were still government projects or political assignment, this stage is still political relationship dominance. They made the use of their existed political resources to build the cooperative relationships with colleges, enterprises, administrative departments and government at all levels to get involved in projects. For example, CSCEC made considerable innovation achievements and improve its abilities in independent research and development as well as the capacity in innovation through the connection they built with universities and research institutions. It is no doubt that with all these resources, the enterprise made a great leap in innovation, researching skills and the competitiveness.

The Third Stage: Business Relationship Dominance

The background of this stage was that the external environment which filling with the pressure from the international competition is co-existing with a prosperous situation within the enterprises, as they have achieved significant development and the reform is ever-deepening. To boost their competitiveness, state-owned enterprises tried to get rid of

the political restriction and built wide business cooperation with both domestic and overseas firms. It is then clear that the business relationship dominates this stage. On the one hand, CSCEC and CRCC kept expanding their industry chain and value chain, and established favorable commercial relationships with other companies and governments both internationally and domestically. On the other hand, CSCEC and CRCC were listed in Shanghai and Hong Kong respectively, by doing which they could expand the business by raising more fund from the whole market. Their listing shows that they cast off the political restriction and fully engaged in market competition.

4.3.3 Questionnaires

In this section, this dissertation utilizes questionnaires to verify the above-mentioned features, namely the correctness in the division of different development stages and the regularity of the utilization of the political resources and the business resources within enterprises. 250 questionnaires have been given out to 11 state-owned construction enterprises and 9 private ones. 201 of the questionnaire have been successfully received and 162 of which are valid (89 from state-owned and 73 from private ones). By matching the results of the questionnaire and the conclusion from the case study, the applicability of this research is thus evidenced.

First, in terms of the separation of different periods, the results show that the periodical classification in this research presents the current circumstance in general, with merely 3 exceptions, which occupy less than 2 % of the total objects. See Table 4-3.

Table 4- 3 Results of Questionnaires

Sort	Period	Numbers of Questionnaires
State-owned	First	19
	Second	39
	Third	28
	Others	3
Private	First	24
	Second	35
	Third	14

Second, periodical features. The questionnaire includes such index as time spent on political and business relationships by leaders, expense to maintain these two relationships

and so on, and at last gives a total scoring.

(1) Questionnaire results of private construction enterprises. Table 4-4 shows that in the first stage, private enterprises get 1.900 in political relationships while 2.300 in business relationships, and thus business relationship leads. In the second stage, private enterprises get 3.243 in political relationships and 2.658 in business relationships, and therefore political relationship dominates. In the third stage, private enterprises get 3.282 in political relationships 3.753 in business relationships, so business relationship back to stage.

Table 4- 4 Survey Results of Different Periods of Private Construction Enterprises

Private enterprises	Political Relationships			Business Relationships		
	Time	Cost	Average	Time	Cost	Average
FirstStage	2.187	1.613	1.900	2.538	2.062	2.300
SecondStage	3.526	2.960	3.243	2.751	2.565	2.658
Third Stage	3.453	3.111	3.282	4.152	3.354	3.753

According to the data above, the developing routes of political and business relationships can be illustrated as figure 4-1.

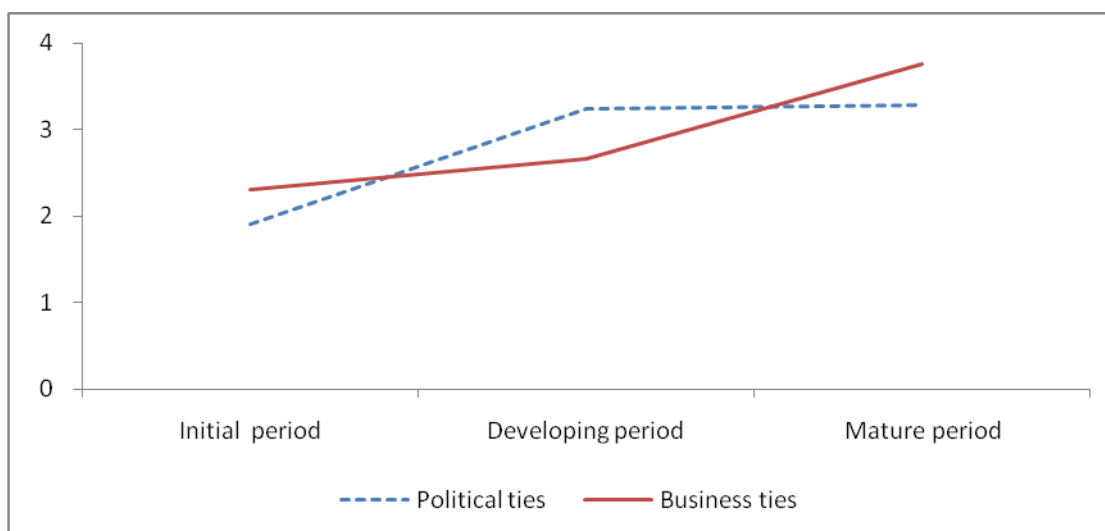


Figure 4- 1 Periodical Features of Private Enterprise

(2) Questionnaire results of state-owned construction enterprises. Table 4-5 shows that in the first stage, private enterprises get 2.785 in political relationships and 1.682 in business relationships, and therefore political relationship leads. In the second stage, private enterprises

get 2.982 in political relationships and 2.639 in business relationships, and thus political relationship dominates. In the third stage, private enterprises get 3.168 in political relationships and 3.755 in business relationships, so business relationship back to spotlight.

Table 4- 5 Survey Results of Different Periods of State-owned Construction Enterprises

State-owned enterprises	Political Relationships			Business Relationships		
	Time	Cost	Average	Time	Cost	Average
First Stage	2.682	2.888	2.785	1.384	1.981	1.682
Second Stage	2.828	3.136	2.982	2.423	2.856	2.639
Third Stage	2.985	3.351	3.168	3.285	4.225	3.755

According to the data above, the developing routes of political and business relationships can be illustrated as figure 4-2.

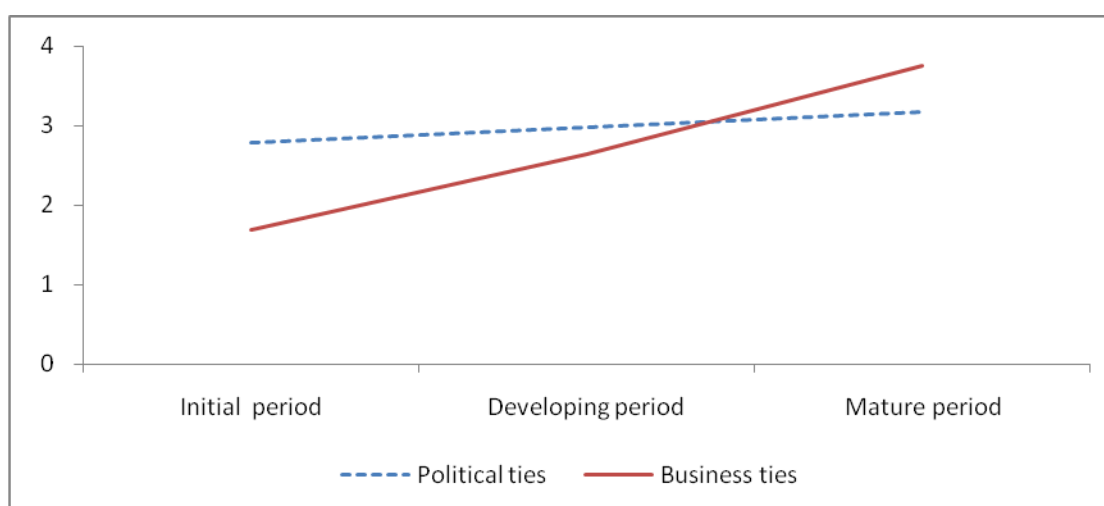


Figure 4- 2 Periodical Features of State-owned Enterprise

These statistics illustrate that the evolution route of private construction enterprises is business relationship – political relationship – business relationship while the evolution route of state-owned construction enterprises is political relationship – political relationship – business relationship. The results are almost the same as the results of the previous theoretical analyses.

4.4 Balance and Transfer mechanism of Integration of Political and Business Relationship Resources

Relationship resource can be one internet-as-medium resource, which is based on mutual trust among enterprises in the alliance network. Members of the alliance may have economic advantages through relationship resources (Xiao and Zhang, 2011). The integration of

political relationship resources and business relationship resources can encourage the trust between enterprises and government, enterprises and enterprises, strengthen mutual advantages and lower the costs. This creates favorable condition for Chinese construction enterprise to improve the competitiveness. However, both political relationship and business relationship need consecutive resources to maintain and guarantee. Since enterprises are restricted by resources, Chinese construction enterprises usually make a choice when they facing these two resources. It means that under the condition of resource restriction, domestic construction enterprises cannot keep political and business relationship developing simultaneously. They have to employ different strategic focus to cope with corresponding developing stages. Organization dualism argues that the rapid change of external market and increasingly fierce competition provide many uncertainties to enterprises (Wang and Li, 2012) . Organization dualism means one enterprise can keep its uniformity and efficiency as well as adaptation to the environmental changes when it manages its own business. (Duncan, 1976; Tushman, 1997; Birkinshaw, 2004). Compared with weighing, organization dualism enhances two simultaneous separated or opposite options, rather than a decision between two choices. (March, 1991; Eisenhardt, 2000; Gavetti, 2000; Raisch, 2008). According to this, the balance between two controversial or competing activities or actions has positive influence on the creativity and performance of enterprises (March, 1991; Atuahene-Gima, 2005; Simsek, 2009). During the process of sustainable growth of organizations, enterprises with organization dualism are more likely to handle the uncertainties of the external environment. Therefore, in the integration of relationship resources of Chinese construction enterprises, to keep a balance between political relationship resources and business relationship resources is a component of the establishment of organization dualism, which is conducive to the sustainable and healthy development.

During the process of growth of organizations, the organization with dualism does help to handle the instabilities of the external environment. Therefore, during integrating relationship resources of Chinese construction enterprises, to keep the comprehensive balance between political relationship resources and business resources relationship is a component to establish an organization with dualism, which does help to handle the instabilities and promote its healthy development.

Since Chinese construction enterprises have to keep this balance under the back ground of resources restriction, they have to maintain the flexibility of these two resources in order to use the resources the most effectively and promote their competitiveness. What has to be

noted here is that the transferring mechanism in this process has been rarely studied before. To bridge this gap, this chapter works on case studies of four construction enterprises. The results show that there exist three balance and transferring mechanisms here: 1) mutual linking and triggering each other; 2) mutual translation; 3) adjustment through absorbing new relationship resources. The next section will illustrate these three mechanisms in detail.

4.4.1 Mutual Linking and Triggering

From the perspective of the network, both political relationship resources and business relationship resources of Chinese construction enterprises both exist in one common social network, so that they must have links with each other. According to the LLL theory Mathews(2006), if enterprises are inferior in the area of techniques, management and finance (Fagerberg, 2005; Kumar, 2013; Lynch, 2016), it is hard for them to exploit new business with their inner resources (Dunning,1981;1988;1991;2001;2015), however, to establish some links can result in leverage effects and thus trigger new external resource. As a result, since both these two relationship resources which can be utilized by Chinese enterprises are in the same social network, they should have certain links with each other. When there is imbalance between these two resources, one will trigger the other to keep the balance. This process includes two aspects:

(1) Political relationship resources link and lever the business relationship resources.

The purpose of relationship resources integration is to match different resources with different abilities. When one enterprise's resources cannot meet the requirements of its strategic targets, it must try hard to seek for breakthroughs of business relationship. At this time, in a shared network, its political relationship resources can act as the intermediary agency to link with business relationship. Especially in the Chinese construction industry, governments always act as this role among different enterprises. For example, to answer the call of Jiangsu provincial government to aid the northern part, PCG invested in the north part of Jiangsu Province by investing in Huaiyin Great Wall Decoration Doors and Windows Factory, purchasing some non-beneficial companies, such as Suqian Glass-making Factory, Jiangsu Shuangyang Wine Group and so on. In these cases, PCG made a successful use of political relationship resources to trigger new business relationship network. This kind of action brings huge chances of market-expansion, which can be seen in Figure 4-3.

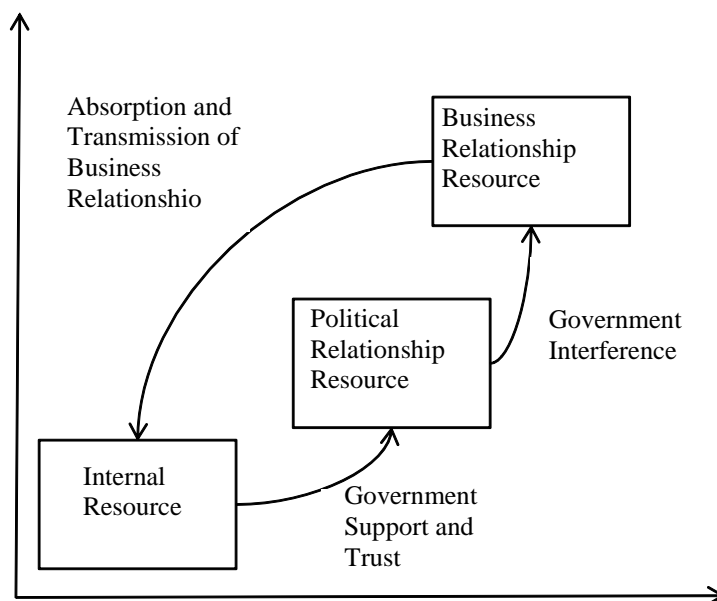


Figure 4- 3 From Political Relationship to Business Relationship

(2) Business relationship resources trigger political relationship resources

Similar to the principle that political relationship resources trigger business relationship resources, when business relationship resources of one enterprise cannot meet the requirement of its strategic targets, it must try to trigger the political relationship. Here, in a common network, business relationship resources can be the connection between enterprises and government. For instance, some enterprises build the relationship with local government by participating in some local facility construction projects. During this process, construction enterprises are more likely to use business projects as a link, to show their qualification or power and finally win the trust of government. This does not merely happen in domestic market, companies like CSCEC, CRCC, also inclined to use this method to gain political relationship resources in the overseas market to gain the opportunities to engage in the project. Xie and Mao (2003) have mentioned a case of the American branch of CSCEC in expanding their overseas market in the interview with Sun Wenjie, the general manager of CSCEC:

Starting with consultant service, the American branch of CSCEC (short as “the American branch” below) assigned a professional to Haier to provide consultant service. After gaining Haier’s trust, they had a chance to cooperate with Haier on the project of establishment of the Refrigerator Factory. As the general contractor, they introduced more than 100 subcontractors and suppliers, which created hundreds of job opportunities. After 11-month hard working, these Chinese construction workers showed their high-level techniques and management level and won appreciation from local government and their counterparts. As a result, the American

branch consecutively won the bid of South Carolina State Middle School, worth 22 million dollars, by beating more than 20 other contractors.

In addition, a special situation (which is common in China) is that the basic economic system of the socialist primary stage, mainly composed of public system and various ownership, indicates that the government, as the owner of the state-owned companies, play roles of both politics and business. Therefore, under this condition, it is safely to say that business relationship resources naturally born with political relationship resources. For Chinese construction enterprises, their business relationship network contains some non-business motivation, namely those factors which is in fact to make the business relationship resource as an agent to link the political relationship. According to Yan Jiehe, “to merge some state-owned enterprises is to win the trust of government, and to undertake all those project is aimed to gain the population among the public (or the government).”

To sum up, Chinese construction enterprises use business relationship resources as an intermedia to link and trigger political relationship resources to win the political trust, which brings benefits in many fields, such as the bid of the local construction projects, the application of varied kinds, and the administrative approval. As shown in Figure 4-4.

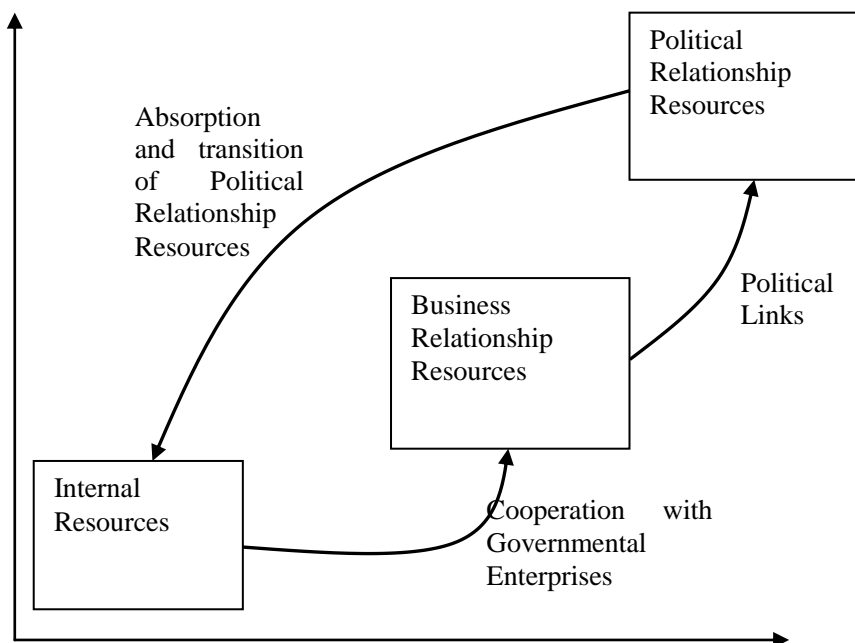


Figure 4- 4 From Business Relationship Resources to Political Relationship Resources

4.4.2 External-Resources-Based Adjustment

Based on the views of the resource-match theory, in terms of all the combination of resources, between the different types or among the various elements, they should complement each other (Lichtenstein and Brush, 2001) The research conducted by Lavie et al.(2011) shows that maintaining the balance within a dual behavior could be achieved by crossing fields, which means that the enterprise could apply the resource in one field into another to make up the absence of some resources. In other words, the most direct method to fill to the shortage of internal resources is to gain resources from the outside.

In order to keep the dynamic balance between political relationship resources and business relationship resources, Chinese construction enterprises need to absorb the certain external resources constantly to restore the balance. For example, as a private enterprise, PCG was lack of political relationship resources at the very beginning, which means that it was hard for them to get the governmental projects without the trust from the government. Led by Mr Yan Jiehe, they offered the government considerable help in “shouldering the responsibility in taking over the Non-performing asset from some state-owned enterprise” and “aiding the poverty population by providing employment opportunities”, which enabled them valued by the government and finally won the trust of government. This has well-defined the process of acquiring the political resource from the external environment, and thus realize the matching of resources. As a result, the foundation for the further cooperation with the government has been formed. It is also the case for the business resource. After accumulating some political relationship resources, the enterprises have begun to transfer their focus from political relationship resources to business relationship resources. for instance, the Evergrand has expand its commercial cooperation with other business entities as well as with the government. This change is an inside-out process. When resources are unbalanced, enterprises can absorb complementary resources from the external environment and then transfer them into internal resources. PCG’s transmission process can be seen in Figure 4-5.

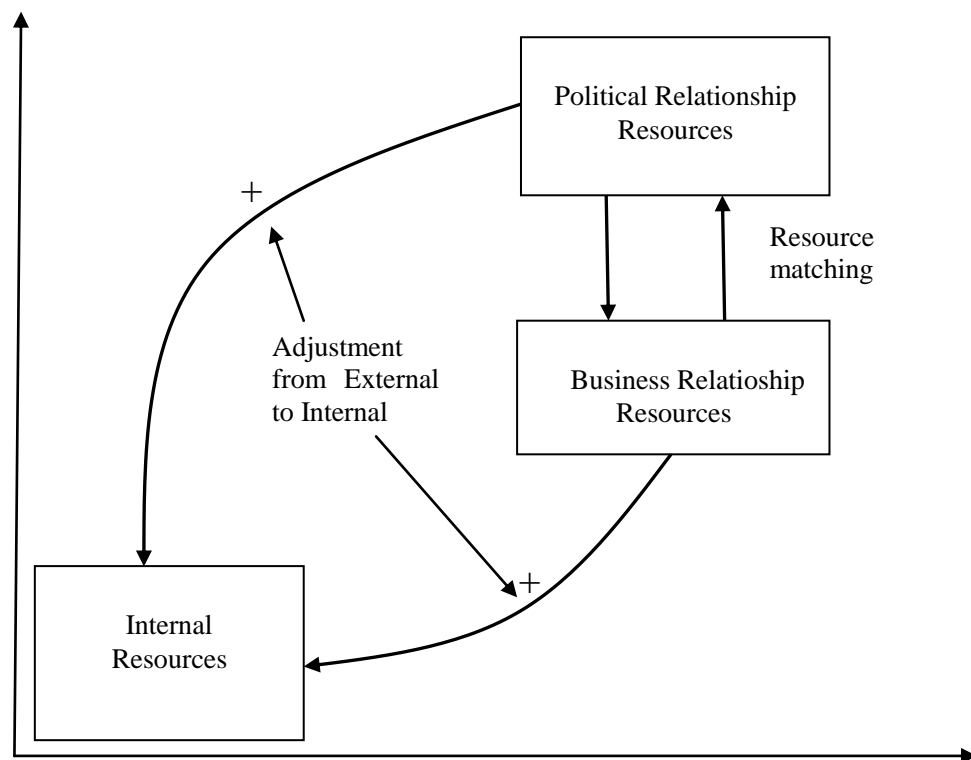


Figure 4- 5 Adjustment and Balance of External Resources

4.4.3 Inter-transformation of these Two Relationship Resources

From the perspective of scene dualism, it is quite easy for enterprises to fall into a dilemma in choosing the preferred resources. For Chinese enterprises, no matter they choose to develop one single relationship, either the political resources or the business resources, or they choose to develop the both relationships at the same time; they will finally fall into a dilemma and put themselves into an unfavorable position (Wang and Jun, 2011) . Therefore, it is significant to promote their ability in dualism. In some dual organizations, this dilemma can be unified through a certain mechanism and as a result realize the coordination and the consistency.

Under the background of Chinese social system, the great number of state-owned enterprises seems enable the government act both politically and commercially, which means that these two relationship resources have a common entity. When an enterprise has a business relationship with a governmental enterprise, the political links must be installed and vice versa. It seems that in terms of conducting this research, the classification would not necessarily according to an absolute standard, and it could rely on the fact that which relationship is in the dominate position. An example is the cooperation of CRCC and Kunming Railway Transit Group in the project of the construction of temporary dwellings,

both of which are state-owned enterprises. On one hand, government takes responsibilities for their operation and developments; on the other hand, they have the business cooperated in the complete competition market. It shows that their cooperation contains both the business element and the political one. In the relevant documents, this dissertation finds wording, such as “regardless of interest” and “without condition”, which indicates that during that period their cooperation is more likely to be a political relationship. Even though the business relationship cannot be ignored, and yet it is obviously weakened. Therefore, it is reasonable to argue that these two relationship resources can be transformed with each other since both of them have dualism.

Therefore, both political and business relationship resources have an equal importance to Chinese construction enterprises. When imbalance happens or the current resource does not match the development strategy, enterprises can choose to enhance or ignore some internal resources, and switch the dominate resource and finally regain the balance. Figure 4-6 shows this process.

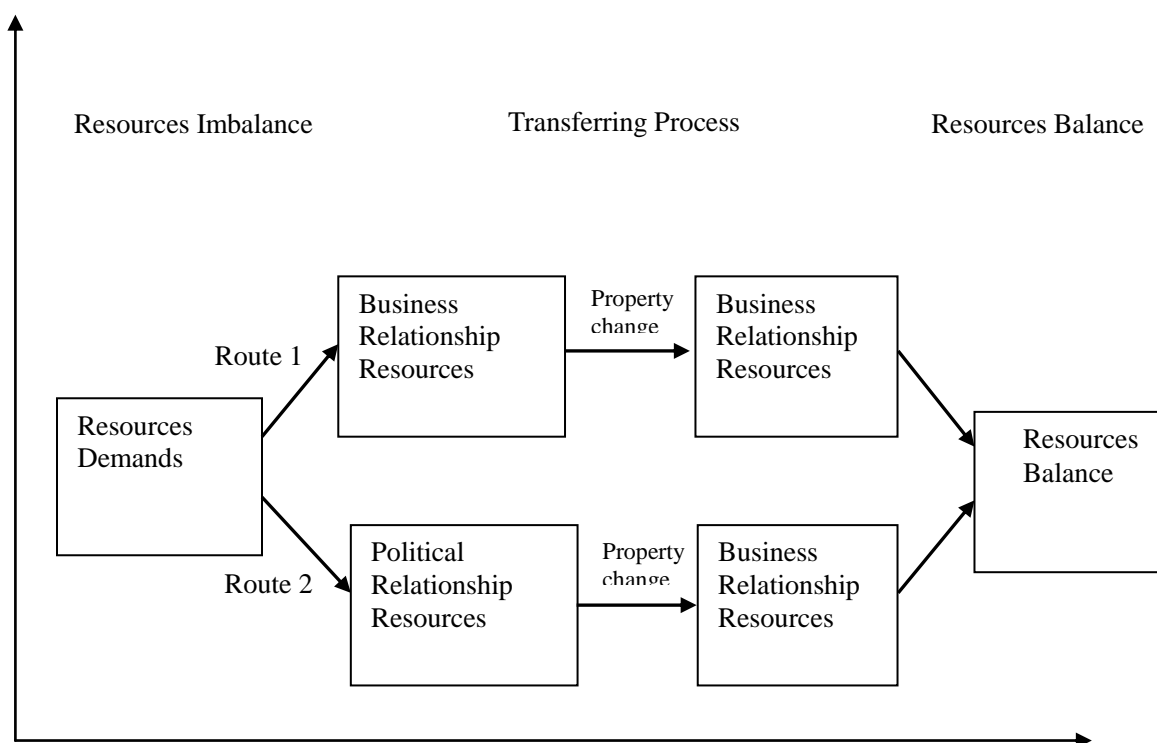


Figure 4- 6 Transmission Routes of Political and Business Resources Relationships

4.5 Conclusions

This chapter describes the importance of both political relationship and business

relationship to the growth of enterprises, and concludes the evolution rules of these two relationship resources by qualitative researches and questionnaires. Finally, three balance systems have been fully discussed. In the following chapters of this dissertation, the process analysis covering multiple cases will be employed to gain a deeper understand of the process of resource integration and to reveal the substantive characteristics.

Chapter 5: Process Analyses of Multiple Cases

Social relationships have been weighed greatly in China, because of which there is a subtle connection between the relationship and the interest. It seems that a certain relationship could shape the behavior of an enterprise and even the strategic decision of it. Among all kinds of relationship, the informal relationship is put on an outstanding position. Different from the common concept of a contract-based relationship, such relationship, containing both the political relationship and the business relationship, constitutes the channel for the enterprise to communicate with the outside. The cooperation which is established on the basis of a favorable relationship may contribute to lowering the cost and acquiring more external resources. It within the common sense that the quality of the relationship determines the treatment that one could receive (Wu et al.,2014), and therefore the relation network has been regarded as a vital resource for the enterprise. It is also the truth among Chinese construction enterprises. On the one hand, a social network between themselves and the domestic clients, suppliers of different levels or their competitors should be built, which could be an asset for enterprises to receive the updated information from the market. On the other hand, in the construction industry, to build the social connection with the government and its administrative departments of different levels is helpful to overcome the limitation in the systematic aspect and thus obtain orders. It is especially the case for the infrastructure construction industry. Therefore, relationship resource integration has a huge influence on the development of Chinese construction enterprises. Bearing this in mind, this chapter will compare two private construction enterprises with two state-owned ones, in order to reveal the process and the characteristics of the relationship resources integration within construction enterprises.

5.1 Case Studies of Private Construction Enterprises

5.1.1 PCG

5.1.1.1 Analysis of stages

The First Stage (1992-2000)

Before 1996, PCG had a little volume of business, merely relied on those trivial ones. At that time, their major construction projects were Shanghai-Ningbo Highway, Beijing-Shanghai Highway, and Airport Express of Nanjing. Owing to the high quality and good working efficiency, these projects won the reputation for PCG. Consequently, the local government naturally paid more attention on this company. Its good reputation was wide-spread after the project in Nanjing, as the then Minister of Transportation, Huang Zhendong and the general governor of Jiangsu Province, ZhengSilin both speak highly of it. However, Yan Jiehe knew that it is still crucial for them to attract more projects in order to achieve a better and rapid development rather than satisfied by these trivial achievements. The previous working experience in the state-owned enterprise and the profound knowledge in management featuring Chinese character endowed Yan with the opinion that it is vital to establish a healthy relationship with the government, and this could be the condition that ensure the surviving in Chinese construction market. Therefore, Yan provided those governments who eagerly to carry out infrastructure constructions, while facing financial difficulties with his “BT Mode” construction program. The BT Mode was developed and owned by PCG only, and with such distinguished mode PCG established the commercial cooperation with the local government, and operated as both investors and the only contractor of the project. It seems that the BT Mode boosts in zero cost in supervision and zero possibility in corruption. In addition, as PCG was the only contractor, the competition was merely existed. Consequently, PCG experienced its fast development and its mode was wide-spread and studied by the counterparties.

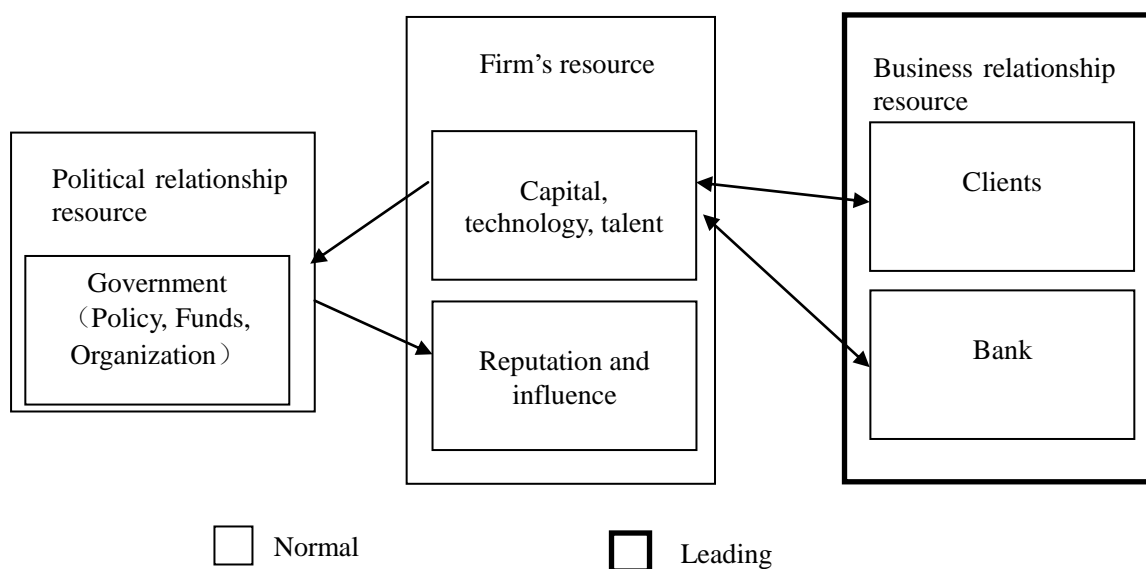


Figure 5- 1 Resources Framework of PCG and their Links

According to the analysis above, PCG in this stage used some small projects to gain the initial funds, techniques, and human resources to trigger political relationship resources and then won the bid of the government projects. During this process, PCG gained the intangible resources, such as reputation and influence, which accelerated its growth in Jiangsu Province without any doubt. It is obvious that BT Mode is a method to trigger political relationship resources and the resources which previously owned by enterprises are the basis to support the application of such mode. In terms of the business relationship, PCG maintained the relationship with suppliers and banks actively to obtain resources, and apply these resources to support BT Mode and finally won the orders. However, this relationship has not been mutual yet. This may be because PCG only had reputation within Jiangsu Province and can hardly influence other suppliers located in the rest of the country. As a result, PCG mainly relied on itself to maintain the relationship of this kind, and to expand business on this foundation it built with its own effort. All the relationships and links above can be shown in Figure 5-1.

The Second Stage (2001-2005)

Thanks to the previous successful experience, PCG planted BT Mode to other less developed regions in Jiangsu Province to expand its business. With the population of BT Mode, PCG became welcomed by many local governments, and some of which even sought for the cooperation forwardly. This may not only enhance the relationship network of PCG with the government, but also spread the good reputation of PCG in return. From 2001 to 2005, PCG won 17 awards, including 6 national awards and 11 provincial awards, such as the award of the best construction enterprise in Jiangsu. All of these awards helped PCG expand their reputation among Jiangsu Province and more importantly PCG has been national-renowned. Undoubtedly, these fruits came from both PCG's high quality and efficiency and also their healthy relationship with the local government.

In 2002, PCG stepped into its 10th year in building roads and bridge of the construction industry. Just in this year, the central government allows private enterprises to declare the qualification of the general contractor and PCG successfully won the general qualification of municipal engineering construction with the experience of their past-10-year accumulation. After that, PCG purchased Jiangsu Dongchen Highway Company at the price of 80 million yuan so that the latter's qualification of the general contractor was consequently merged into PCG. In terms of this, one of their middle-class officials of PCG said, "Thanks to these two qualifications, PCG got the general contract project and thus we can develop extremely fast in

2003.” One document of PCG shows that since the second half of 2003, the total value of major projects, including those have been contracted and those have been executed by PCG, has reached 50 billion yuan.

In addition, apart from acquiring the strategic resources relevant to its major business, PCG also purchased some companies whose businesses are non-principal or low-relevant to PCG. In fact, these acquisitions are an important method for PCG to modify the relationship with local government. Yan Jiehe said, “The gross profit of infrastructure construction is above 25%. After 10-year accumulation, PCG already has stored huge amount of cash waiting to be invested.” At that time, PCG responded the call of Jiangsu Provincial Party Committee and Provincial Government to help the poverty areas in the north part of Jiangsu. Unlike other enterprises, merely act like charity to give financial support or donate living materials gratuitously, PCG carried out their “poverty reduction through the real boost in economy”. As a result, PCG began to purchase state-owned enterprises in the north part of Jiangsu Province, the first one was the Huaiyin Great Wall Decoration Doors and Windows Factory who was about to broke, and other companies, such as Suqian Glass-making Factory which was facing insolvency, Jiangsu Shuangyang Wine Group who was in financial deficit for many years, Lianyungang Wangfu Wine Limited Company whose asset-liability ratio already amounted to 300% and so on. Absolutely, this “poverty reduction through the real boost in economy” could definitely help PCG to get some projects in infrastructure construction. Since they have successfully helped these state-owned companies solve problematic issues in debts and employment, which may indirectly aid the government accordingly, PCG won the trust from the local government. It is then said by a middle-class official in PCG that this movement could be considered as one strategic decision by PCG. For example, after PCG purchased the non-performing assets of some a state-owned enterprise in Nantong, they successfully got an order there, which is worthy of 6 billion yuan.

To purchase state-owned enterprises can also help PCG to promote their reputation and influence. When it comes to the reason what was the motive for PCG to regroup state-owned enterprises, Yan Jiehe said, “Even though BT mode is profitable, it hardly can bring us reputation. Comparatively, recombination of state-owned enterprises, especially some famous ones, does promote our fame. It is quite noticeable for the public that if we can help an enterprise in trouble back to life, and then the PCG will be wide-acknowledged and well-recognized. PCG is unwilling to accept well-performed enterprises because even though we can make them better, we still hardly can get the reputation as those enterprise was

performing good. On the contrary, PCG is willing to handle enterprises with lots of problems. Nobody can do it, but we can. This is what we pursuit.” Up to the end of 2005, PCG merged more than 31 state-owned enterprises, which accelerate their development in the field of infrastructure area.

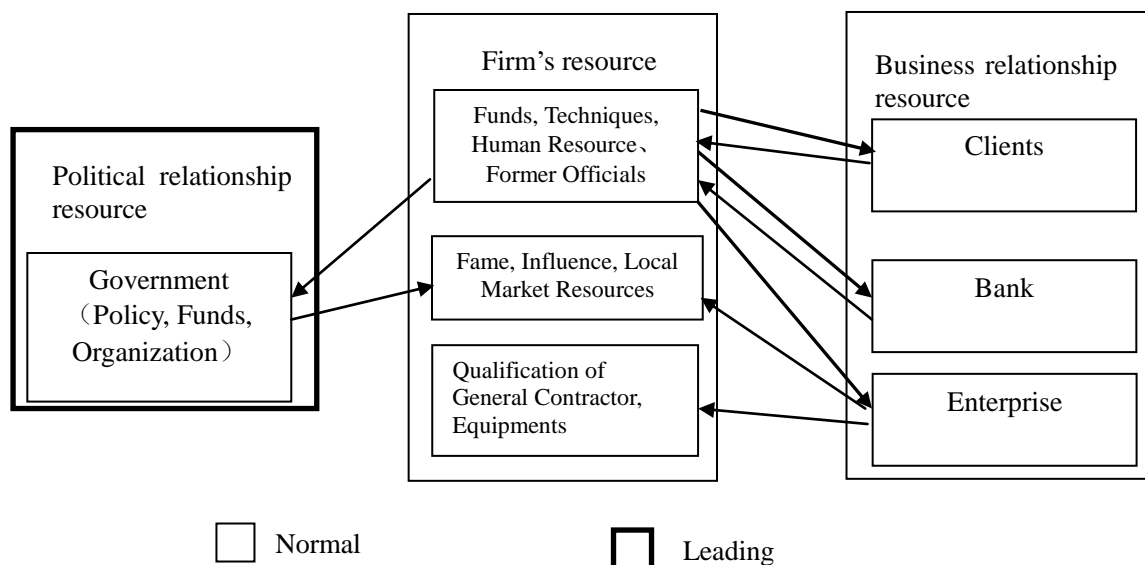


Figure 5- 2 Resources Composition and Relationships of PCG

Analyses above show that in this stage PCG did more efforts to trigger political relationship resources. On one hand, back up by the adequate capital resources from the previous accumulation, PCG purchased and recombined the heavily defective state-owned enterprises, which released the pressure of the local government; on the other hand, PCG employed former government officials as their senior managers. For example, Cai Shudong, the former officer who responsible for Nantong’s economic development, is in charge of the communication with the local government by utilizing his political network which was previously formed. In terms of business relationship, PCG directly endowed the qualifications of general construction from the purchased state-owned enterprises, and by doing this it got the access to the construction of highway and bridge. Recombination of ST Zongheng allowed PCG to enter the machinery industry, and by using the platform of ST Zongheng, PCG integrated subsidiary machinery assets. At the same time, PCG also sought for strategic partnership with some domestic suppliers, such as Guangxi Liugong Group Co., Ltd who is the leading role in the heavy industry. Meanwhile, since PCG had some national reputation, some suppliers and local banks sought for cooperation with them. Thus, a mutual interaction was constituted. The relationships among enterprises, politics and business can be seen in

Figure 5-2.

The Third Stage (2006 - now)

Since 2006, PCG has stopped their purchase but begun to integrate these enterprises. At the same time, in order to integrate resources in a better way, PCG construction department was separated into three different branches: Shanghai Susun Group, PCG and Beijing Great Wall Construction Group, which located in Shanghai, Nanjing, and Beijing respectively. In the view of PCG, they have two links: the link “Nanjing – Shanghai - Beijing” is a circle of industry, capital and politics, which focuses on management and SusunGroup is the core of this link. And the other link, focusing on operation, is to isolate three major parts: construction, industry and investment. PCG did their intersection management through these two links. In terms of the market, PCG held the belief of “exploiting” “defense” “expansion” and “seamless joint”. It means to use culture exploits market, to use standard to defend market and to use emotion to expand market and then PCG could have a “seamless joint” with the local government. With the rising of their reputation and the development of BT Mode, the government began to seek for cooperation with PCG forwardly, rather than the passive role they used to be. For example, on May 13th, 2013, invited by Inner Mongolia Alex government, Wang Xueping, the CEO of the 16th group of PCG, Hong Ruijie, the COO of the 16th group, went there to investigate the local conditions. They were warm welcomed by the local government, and had a deep communication and reached a consensus on the infrastructure construction of Grape Pier Industrial Park in Luanjingtan Demonstration Area. On the other hand, Yan Jiehe also acted as the economic counselor for some local governments, such as Huainan City in 2010 and Yingkou City in 2011, which was also conducive to a closer relationship with government. In terms of the business relationship resources, PCG also built relationships with domestic top universities, including Shanghai Jiao Tong University, Xi'an Jiao Tong University, Southwest Jiao Tong University, Tongji University, to reserve talented people for their medium or high level management. Simultaneously, PCG had an active interaction with banks and suppliers in order to build a better partnership. For example, on May 25th 2013, ZouZhaojie, the vice CEO of PCG, answered the invitation of Guangxi Liugong for their “100 Machines Celebration”.

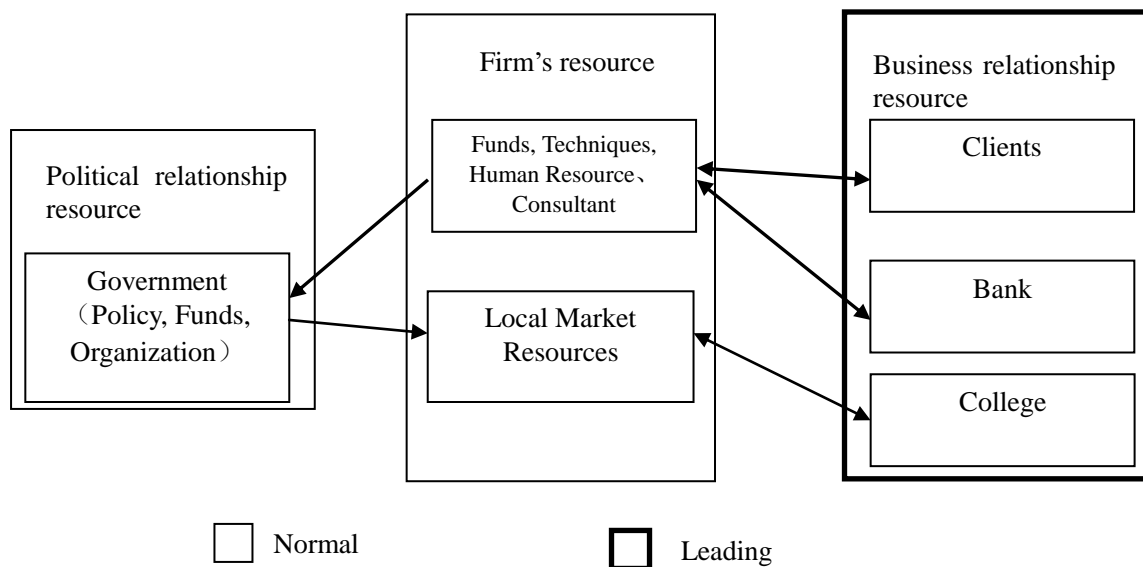


Figure 5- 3 Resources Composition and Relationships of PCG

Analyses above show that PCG has the mutual interaction in both political and business relationship aspects and this interaction tends to be strengthened. After the entry of World Top 500, PCG has had more frequent political interactions. By integrating these markets, PCG extends their market by “emotions” and this exploration brings numerous reputations to PCG. As a result, some governments, suppliers and banks seek for cooperation with PCG forwardly. However, they also realize that they are still lag behind some enterprises which directly subordinated to central government in technology and management. This stimulates PCG to develop their human resources by cooperating with colleges. The relationships among enterprises, politics and business can be seen in Figure 5-3.

5.1.2 GCG

5.1.2.1 Analysis of Stages

The First Stage (1984 -1997)

Before 1992, GCG was merely a nameless county firm in Dongyang County, whose business was only developed in Jinhua, Ningbo and Hangzhou. At the beginning of 1992, in order to promote their influence, Lou Zhongfu decided to reorganize Dongyang No.3 Construction Company. At that time, Dongyang No.3 Construction Company certainly unable to be a group with only 10 thousand staff and 50 million yuan assets. However, Lou

persuaded the leaders of construction teams and government officials of Jinhua and Dongyang. Besides, Luo communicated with the officials who in charge of the inspection and assessment. As a result, the first construction group company in Zhejiang Province, GCG, came into being officially. Two months later, this county company started their joint-stock system reformation. Owing to Lou’s efforts, GCG survived in the fierce competition with the state-owned enterprises and entered the final list. It is then became the only private enterprise in Jiangsu which completed joint-stock system reformation in that year. One year later, GCG got the final permission of their reformation and raised 100 million yuan. Lou said, “our aim, obviously, is to be listed.” According to the then laws and rules, 3-year operation was the basic criterion for a limited liability company to be listed. From June 1993 to June 1996, GCG just hit this requirement. Due to Lou’s hard work, in December 1996, GCG got the permission of the ministry of construction. After that, GCG got the only one place from China Securities Regulatory Commission by beating some state-owned construction enterprises. On April 1st, 1997, “Zhejiang Guangsha” was listed in A-share, issuing 350 million shares.

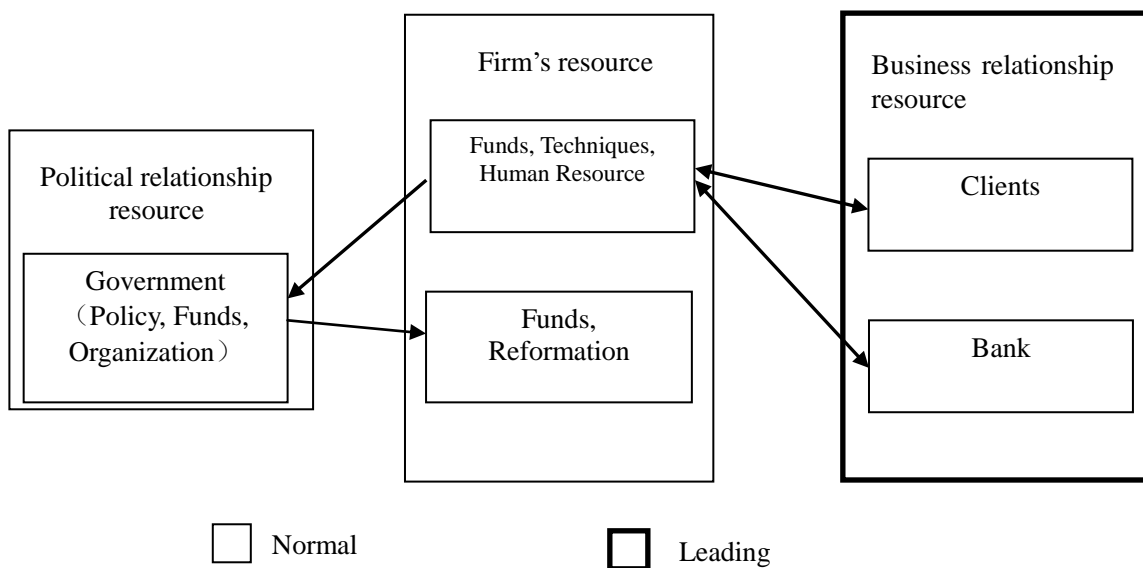


Figure 5- 4 Resources Composition and Relationship of GCG

As the above-mentioned analysis, GCG mainly employed the business relationship as it still young in this business and remain inferior in power and strength. However, GCG triggered political resources through business resources in this stage, and then successfully reformed into a listed company from a small county company. It is safely to say that political relationship resources and business resources both played an important role in this process. The integration of these resources changed GCG in terms of its system significantly and

helped GCG raise a considerable amount of funds, which may contribute to its further development extensively. In terms of business relationship, GCG maintained the relationship with suppliers and banks forwardly but mutual interaction did not come into form. Since the reputation of GCG at that time only existed in Zhejiang province, it was hard for GCG to attract suppliers nationwide. As a result, they needed to protect this relationship all by themselves, and based on which to support its business. Relationship among enterprises, politics and business can be seen in Figure 5-4.

The Second Stage (1998 - 2005)

After 1998, the market within the Zhejiang Province cannot satisfy GCG anymore, so they began to step out of Zhejiang province and started its third expansion by raising funds and merging companies. Since 1998, GCG has merged lots of state-owned enterprises, including Chongqing Yijian Construction, Hangzhou Jiangong Construction, Beijing No.2 Construction, Beijing Zhongdi Construction, Shanxi Road and Bridge Construction, No.6 Branch of Hubei Construction, and so on. During the purchasing process, GCG came up with such concepts as “to merge enterprises means to merge market” and “to exchange capital for market”. These merged enterprises were almost local stars with scales and powers. By purchasing them, GCG raised their reputation quickly. In the next six years, the total asset value of GCG rose from 1.8 billion yuan to 14 billion yuan, ranking top three among all Chinese private construction enterprises. And their market layout became more reasonable and complete.

In addition to expand the market, human resources are the another aimed area of GCG to merge and purchase state-owned enterprises. To retain talents, to use talents well and then to import talents were their talent strategic target. With the intensity of competition, GCG found that the imperfect operation and management method had been their bottleneck for their further development. Lou Ming said, “In the past, we emphasized greatly on expansion and scales. But looking back, we find our operation and management have hindered our further development.” GCG held the belief that “they need to change the way of thoughts more frequently rather than change people, and anyone who doesn’t change his thoughts must be replaced.”

In fact, compared to the state-owned enterprise purchased by PCG, they shared similarities with those purchased by GCG and meanwhile differences also exist. It is the same that all these enterprises were experiencing serious difficulties in their operations, and already became the “burden” for the government, so the government eagerly hoped that some enterprises could reorganize them and then improved their situations. GCG’s acquisition

solved these problems for government to a large extent, and by merging and purchasing GCG closed their relationship with local governments. This conformed to their traditional notion that “private enterprises must adhere to politics”. The difference is that these enterprises all shared the relevant businesses with GCG, such as roads and bridges, water conservancy, decoration and so on. It seems that GCG took more “business” elements into their merge and acquisition than PCG.

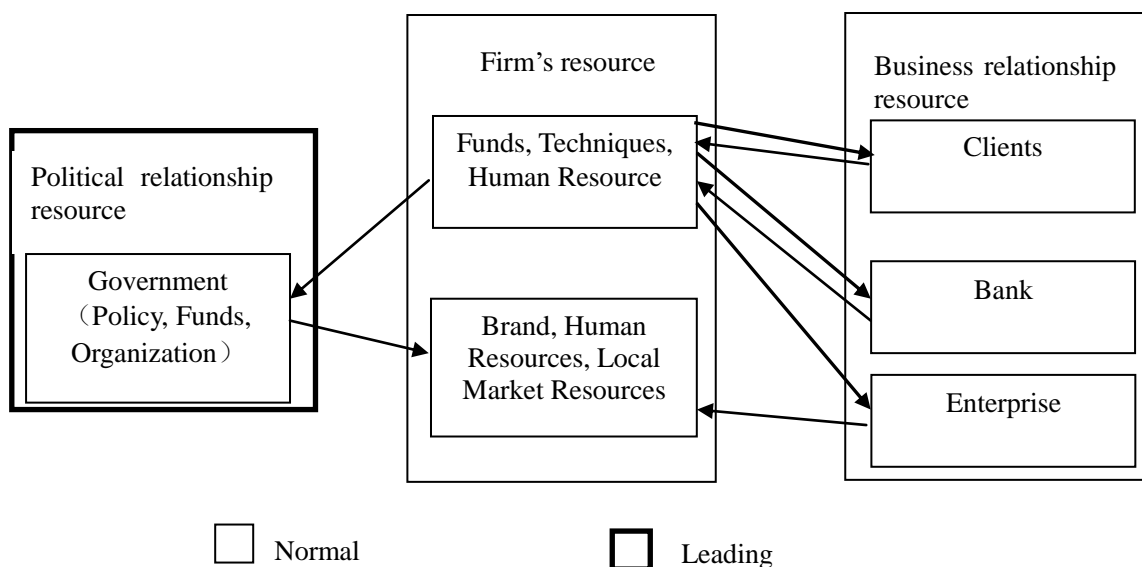


Figure 5- 5 Resources Composition and Relationship of GCG

In this stage, GCG paid more attention to opening new market. However, their expansion plan was facing some limitations, because it was quite difficult for companies from other areas to enter into the local markets. With this situation, GCG began to merge the local companies to open the market. With the process of acquisition, their market layout became more reasonable, and scales also became larger. Besides, GCG established strategic partnership with suppliers, such as the relationship with the leading role in the heavy industry, namely Guangxi Liugong Group Co., Ltd. At the same time, due to the nationwide acquisition, GCG gained the reputation. Consequently, some suppliers and banks sought for cooperation forwardly, and a mutual interaction had been installed. All relationships among enterprises, politics and business can be shown in Figure 5-5.

The Third Stage (2006 - Now)

In 2006, the strategy of GCG, on the one hand, transferred from highlighting the scale, market shares and market expansion to paying equal attention to both quality and quantity, especially the quality. In terms of the performance and scale, special attention should be

attached to performance and ability to make profits, and meanwhile the abilities in basic management and risk control also been underlined when considering issues on the operation and management. In terms of the mode of project operation, they paid much attention to EPC, BT, BOT and so on. Based on the reality of reformation of domestic construction investment system, GCG took full advantages of their own brand, credit, fund-raising, capital operation, designing, purchasing and so on, to participate some other new project operations. On the other hand, GCG highlighted technological progress and took techniques as the main component of their core competitiveness. In 2007, GCG and Zhejiang University established “Zhejiang University --- GCG Technology Research and Development Center”, which had got more than twenty important academic results. In 2009, Zhejiang University, Utsunomiya University of Japan and GCG built cooperation network and undertook a project from Zhejiang Science and Technology Office, called “A Study of Development and Application of Construction Living Periodical Environment Loading Evaluation System”, which promoted GCG’s abilities to save energy and build green house in a large scale. In 2012, GCG cooperated with Zhejiang University again and established “Zhejiang University – GCG State Construction Practice Education Center” in order to deepen their cooperation in scientific researches and talent training. Through cooperation with universities and colleges, GCG sought for breakings in techniques in order to gain more technological fruits, and thus further expand their business area by acquiring the top-grade qualification successfully.

In terms of political relation, GCG participated in industrial association to integrated the political relationship, such as China Construction Association, Zhejiang Private-owned Enterprise Association, Hangzhou Construction Association and so on. On one hand, these associations can either integrate techniques, funds, human resources for members or establish a network with cultures, reputations, and influences in it. On the other hand, since the most leaders in these associations previously employed by the government, they also provide a political linking platform for their members, on which enterprises and government can communicate with each other in a more convenient manner. For example, the Chairman of China Association of Construction Enterprise Management is also the vice director of the State Council Leading Group for West Region Development; the Chairman of China Construction Association is general engineer of Ministry of Housing and Urban-rural Development. At the same time, GCG did their best effort to play a more important role in these associations, and thus improve their influence in these communities.

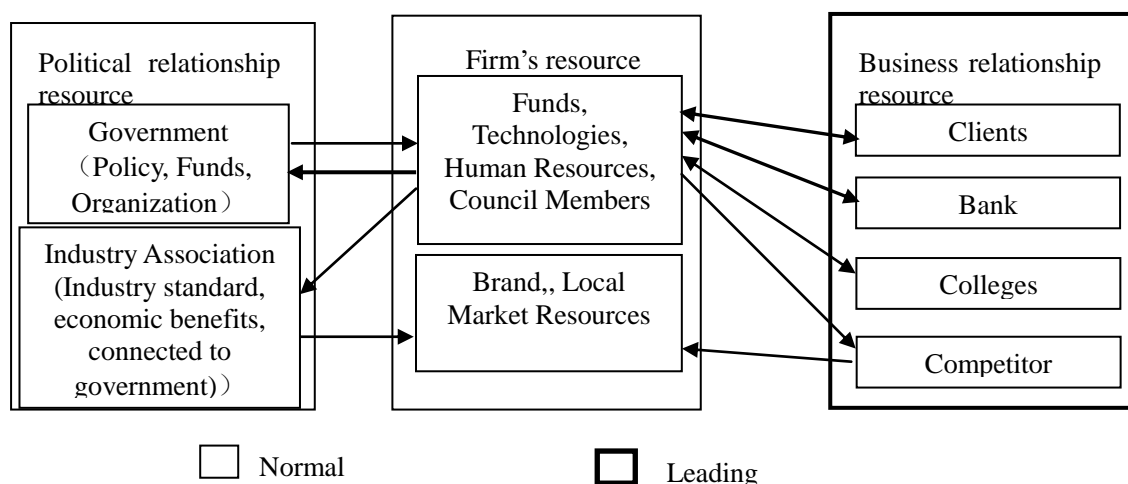


Figure 5- 6 Resources Composition and Relationship of GCG

In addition, GCG also cooperates with other domestic large-scale real estate companies actively, such as Agile Property and Evergrande. Even though these companies are actually their domestic competitors, GCG still cooperates with them in order to learn from each other and improve themselves all around which may enable them to participate in some new projects featuring high-end and large-scale. See Figure 5-6.

5.1.3 Analysis and Discussion of Comparison of these Two Private Construction Enterprises

After studying these two enterprises, this dissertation finds that during the process of integration, enterprise resources, political relationship resources and business relationship resources can influence one another and encourage common evolvement at the same time. On the one hand, the integration of enterprise resources is conducive to the production of political relationship resources and business relationship resources; on the other hand, political relationship resources and business relationship resources react on the development of enterprise resources positively. These two cases illustrate that enterprises utilize existing resources to trigger the certain relationship members and integrate policies, techniques, funds and talents from these members. These resources are conducive and supportive to the growth of enterprises in reverse. Resources brought by political relationship and business relationship guarantee the maintenance of the relationship.

There is a common element in both cases that relationship resources are multi-target-oriented, which can hit complex and difficult target and create more enterprise resources. This is motivated by the project cooperation mechanism of the relationship network.

Through different cooperation projects, enterprises could integrate and allocate different relationship network resources according to the new requirement of the project (e.g. the infrastructure construction). The resources integration is conducive to the production of the new and valuable resources and then enterprises could accumulate their resources. So, this repeated process becomes a virtuous circle in which enterprises realize their development and become more attractive to new relationship resources. That is the reason that the growths of enterprises are always accompanying with the increasing of the members in the network. Therefore, this dissertation holds the belief that enterprise resources, political relationship resources and business relationship resources can influence one another and evolve at the same time. On one hand, the integration of enterprise resources is conducive to the production of political relationship resources and business relationship resources; on the other hand, political relationship resources and business relationship resources react on the development of enterprise resources actively.

The effects of political relationship resources to the development of private construction enterprises are either positive or negative. For example, the integration of political relationship resources enlarges the influence of enterprises. However, the more political relationship resources help enterprises, the more enterprises rely on these resources. Once the political relationship is deviced from enterprises, enterprises themselves will be influenced negatively. For example, the enterprise may shoulder the collateral damage if a government official who has connect with this enterprise is investigated because of his or her violation in law. It seems that in the social network, the exit of this important connect knot can result in the destruction of the entire network, and jeopardize the interests of its members . Meanwhile, political relationship is also a sensitive topic for enterprises so that the maintenance of this relationship is sometimes non-transparent and unstable. Therefore, this dissertation argues that the effects of political relationship resources to private construction enterprises are either positive or negative.

To sum up, by integrating enterprise resources, political relationship resources and business relationship resources, enterprises finally form a complex, spiral-rising system based on the mutual interaction among “enterprise resources—political relationship resources---business relationship resources”. See Figure 5-7.

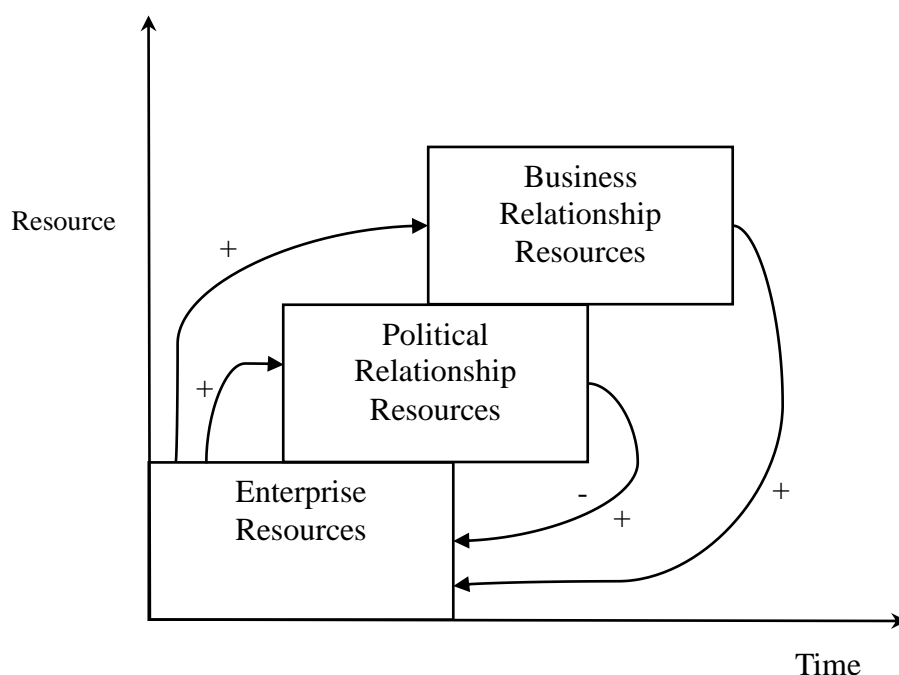


Figure 5-7 Relationship of Different Resources during the Development

5.2 Cases Study of State-owned Construction Enterprises

5.2.1 Analysis of case process

CSCEC and CRCC were officially established during central government’s first reformation to state-owned enterprises in 1980s. This reformation accommodates separation between government and enterprises, introduction of modern enterprise regime, enterprises’ independent management, responsibility for their own profits and loss, self-government and self-development. In general, these two enterprises experienced three stages of development.

1978 – 2001: The stage of reformation evolution

Third Plenary Session of the 11th Central Committee of the Chinese Communist Party transferred the party’s work center to economic construction. Since the central government carried out the policy of opening and reformation, national large-scale construction enterprises got rid of the limitation of the Great Culture Revolution step by step. In 1979, the General Administration of Building Construction suggested to expand the sovereignty of enterprises; in 1980, 2.5% legal profit of state-owned enterprises was recovered; in 1981, economic responsibility of construction industry was popularized; in 1984, effects of Lubuge; in 1988, planned profits began to run. All these above had a positive effect on the reformation

and development of Chinese state-owned enterprises. However, large-scale state-owned enterprises in planned economy system had their own disadvantages: “iron rice bowl” system (security job system), heavy historic burden, inflexible operation and management. All these let them to be defeated before those private construction enterprises or small-scale construction contractors. In addition, such unhealthy phenomena as payment-cutting, advanced-fund also limited the development of many state-owned enterprises. In order to rejuvenate these enterprises, many enterprises which had been attached to ministries and commissions, began to break away from the administrative management of government and became market-oriented enterprises. CSCEC and CRCC were born under this condition. And by getting rid of the unhealthy assets and extra staff, raising funds, merging and reorganizing, these two finally developed to large-scale enterprises.

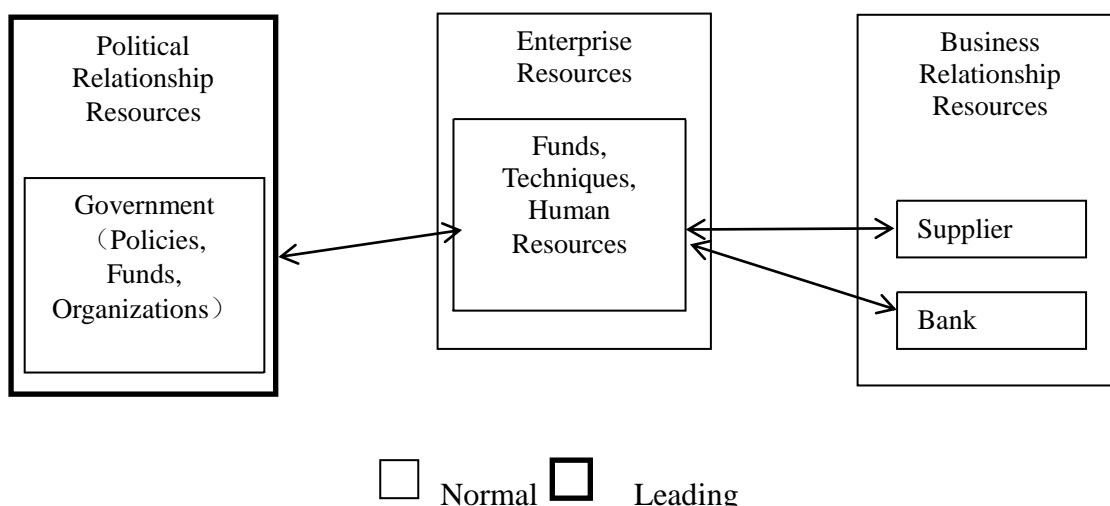


Figure 5- 8 Resources Structure and Their Relationships of CSCEC and CRCC

During this process, these two enterprises began to establish modern enterprises led by government. But they were still in the planned economy system. Due to the limitation of their own business, their market shares mainly depended on government, especially railway establishment. Simultaneously, the business relationship network of these two enterprises also contains political elements, and their market actions could also carry some “political target”. For example, Qinhuangdao-shenyang Railway, acting as the first passenger dedicated railway in China, carries huge strategic signification and government had a huge positive impact on this project. Chinese government inclined to use administrative methods to establish links between enterprises and external organizations. See Figure 5-8.

2002 --- 2007: the stage of rapid development

After suffering the labor pains from the early stage of opening and reformation, CSCEC

and CRCC almost got rid of the limitation of planned-economy system and became the leading roles in Chinese construction industry, especially in railway, highway, exploration and design, building construction and so on. Since 2000, the continuous prosperity of real estate industry and the development of traffic system provide a healthy environment for the development of CSCEC and CRCC. The rapid development of national economy and the stable promotion of fixed-asset investment provide not only a huge “cake” for these two enterprises but also a favorable environment for their rigid development. Much dependence on nation macro-economic policy and the high investment magnify their rigid features more obviously. In a bid to get rid of this situation, they must explore the oversea market. In fact, these two enterprises got the oversea managerial authority in 1980s when most of the project were government assistant projects. After the WTO entry, domestic construction market received a more fierce competition. Under this condition, CSCEC and CRCC realize that they must “go outside” to ease the domestic competition. In addition, in a bid to compete with foreign construction enterprises, CSCEC and CRCC have been investing more in technical innovation.

With the development of CSCEC and CRCC, their relationship networks have been strengthened stone by stone. Even though politic relationship still occupies the leading position in this stage, business relationship grows quite well. Due to the background of central government, these two enterprises have enjoyed a rapid development since 2001, and thanks to the rise of their reputation, some governments and business partners cooperate with them forwardly. Thus, mutual interaction takes place. These relationships above among enterprises, politics and business can be seen in Figure 5-9.

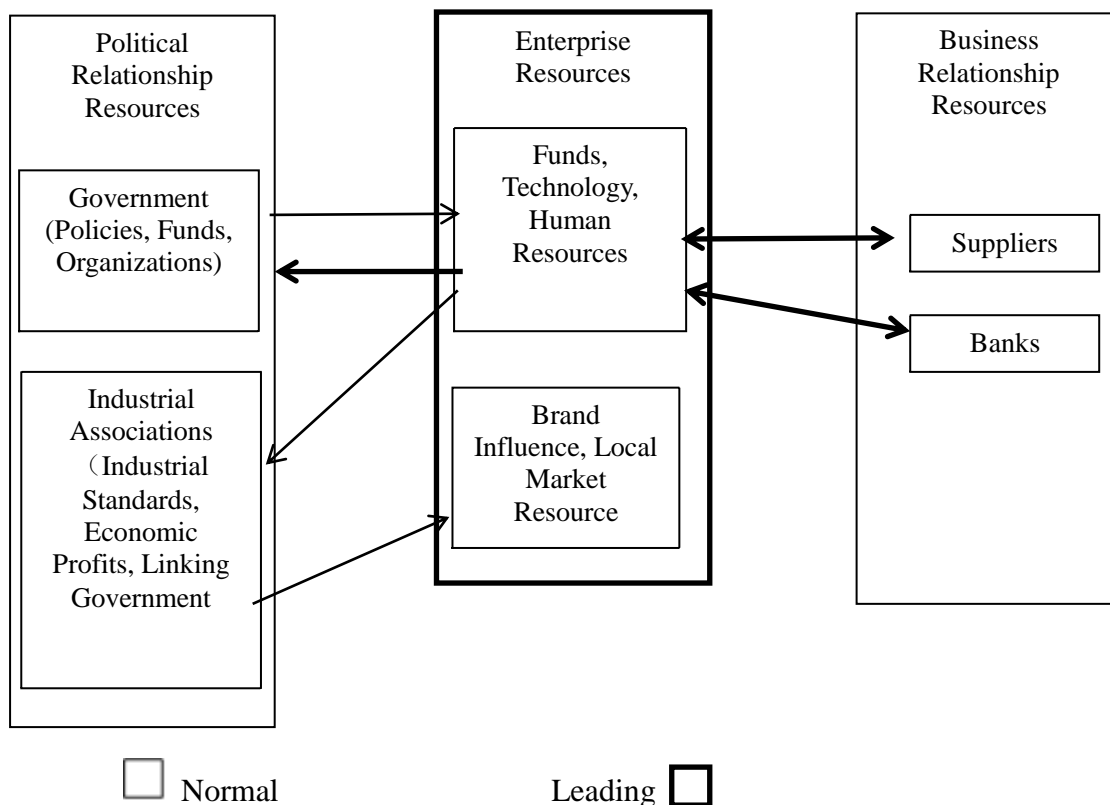


Figure 5- 9 Resources Structure and Their Relationships of CSCEC and CRCC

2008 --- Now: the stage of maturity

After the second stage, these two enterprises stepped into a stable development. Due to the effect of market reformation, these two enterprises begin to turn to business relationships. In 2014, CRCC invested almost 8.7 billion yuan in research and development, with a year-on-year growth of 13.08%. At the same time, these two enterprises also cooperated with colleges and universities. CRCC established innovation alliances with seven universities, including Zhejiang University, Central South University, Southwest Jiaotong University, Beijing Jiaotong University, Lanzhou Jiaotong University, Shijiazhuang Tiedao University and Dalian Jiaotong University. CSCEC maintains cooperation with Tongji University, Wuhan University, Shandong University, Guizhou Normal University, Huhuan University of Technology.

In March 2008, CRCC was listed in Shanghai and Hongkong respectively, raising funds for some major projects, operation and debt-payment. These projects include track system project of China railway track systems group co., LTD, Xiufeng Mountain Villa project in Changsha and so on. On December 8th, 2007, CSCEC, allying PetroChina, Baosteel Group, Sinopec, established China state construction co., LTD, and was listed in July 2009. On June

18th 2010, CSCEC took the opportunity of aid to Xinjiang Construction. Led by the central government and Xinjiang local government, CSCEC merged and reorganized some Xinjiang local companies. By merging Xinjiang Construction Engineering Group, CSCEC built a “West Plate” complex within construction, investment and oversea business. This action helped CSCEC explored and occupied Xinjiang market and then radiated to Middle East construction market.

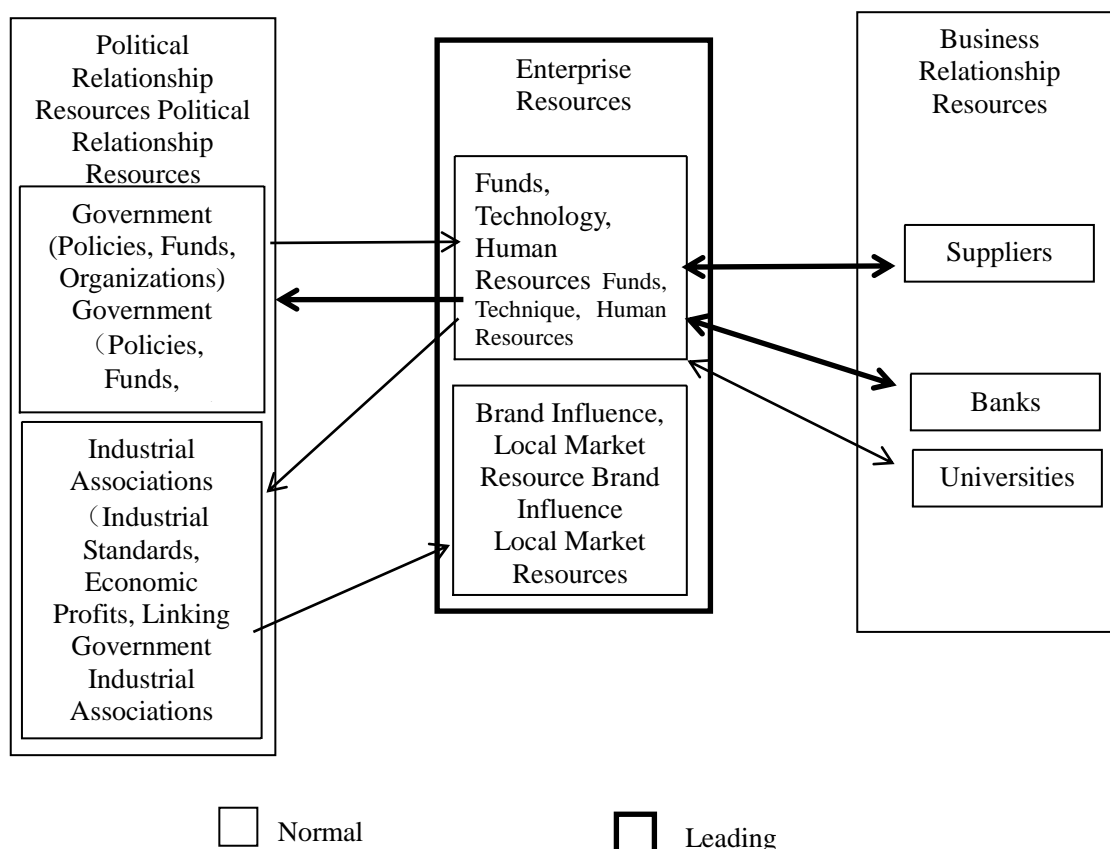


Figure 5- 10 Resources Structure and their Relationship of CSCEC and CRCC

These analyses above show that with the development of enterprises themselves, their market was enlarged as well, from domestic market to overseas one. Absolutely, competitions came as well. Therefore, in this stage, the resources structure of relationship network changed a lot. This change mainly referred to: for political relationship, these two enterprises kept cooperating with both domestic and oversea governments. And this change mainly stayed in national strategic level, such as some construction aid projects; for business relationship, these two enterprises continuously explore their industrial chain and value chain, building strategic partnership with some external companies. For example, CRCC constantly deepened their strategic cooperation with Sinopec, Minmetals, CNMB, Anshan Iron, Wuhan Iron, Panzhihua Iron, Shougang Group, Heibei Steel and so on; they also cooperated with some logistics

companies, including China Cosco, Sinotrans; in order to extend their industrial chain, they also cooperated with some neighboring industrial companies, including Petro China, Ningling Civil Engineering, Vossloh. At the same time, by highlighting the cooperation with domestic universities, both CSCEC and CRCC have got lots of innovative fruits with promotion of independent research and development and innovative ability, all of which will raise their market competitiveness. It is obvious to see that state-owned enterprises are more international than private ones. Relevant relationships can be shown in Figure 5-10.

5.2.2 Comparative Analysis and Discussion on CSCEC and CRCC

Through these cases above, during the process of resources integration, there is a mutual interaction among enterprise resources, political relationship resources and business relationship resources. On one hand, the integration of enterprise resources accelerates the production of political relationship resources and business relationship resources; on the other hand, both political and business relationship resources have positive impact on the increase of enterprise resources. What should be enhanced is that enterprise resources here are formed compulsively by government, and the establishment of relationship network also contains administrative intervention. These two cases illustrate that enterprises use existing resources to trigger special relationship members, integrate resources like policies, techniques, talents for these members. And these resources also promote the growth of enterprises' resources in reverse. Political and business relationship resources guarantee the maintenance of relationships. During this process, the positive role of enterprise resources works under administrative intervention to some extent. Herein, administrative intervention in this dissertation only focuses on state-owned enterprises.

To sum up, by integrating enterprise resources, political relationship resources and business relationship resources, state-owned enterprises form a complex, spiral-like system with mutual interaction among “enterprise resources --- political relationship resources --- business relationship resources”. Here comes Figure 5-11.

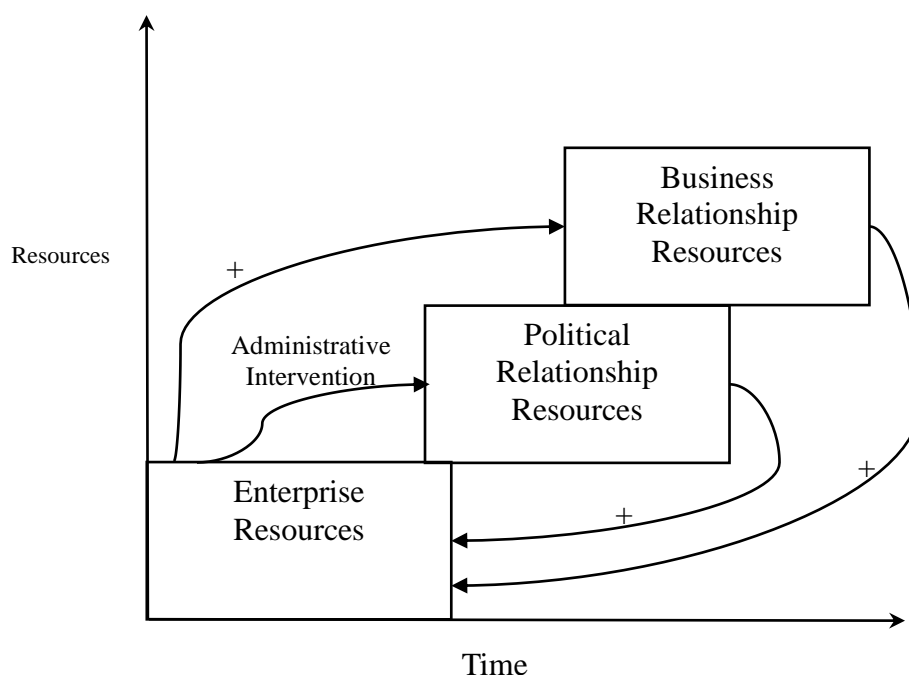


Figure 5- 11 Relationship of Different Resources During the Development

Compared with private enterprises, state-owned enterprises have advantages in political relationship triggering. In fact, this advantage also happens in business relationship. For example, they have more chances and priorities to raise funds from large state-owned banks. However, it is worth noting that, deriving from of the governmental background, the establishment of these relationship networks is subject to the administrative intervention, and does not necessarily belong to the normal business action. Therefore, the enterprise resources may also include some intangible political resources, which private enterprises rarely have. On the other hand, political relationship resources have no negative impact on enterprise resources since state-owned enterprises are connected with politics all the time. Even though they lose one of their “informants” in government, they can still establish relationships under administrative intervention. However, it may hold that this administrative intervention has fewer impacts on market actions as the time goes by. This is because with the development of enterprises, they themselves have more influences on network members so that some of markets do not necessarily require the administrative triggering. Enterprises enhance the relationship with other members, in a bid to extent the market. For example, to establish strategic cooperative partnership with government.

5.3 Discussion

5.3.1 Evolution Process and Balance mechanism of Relationship Resources of Chinese Construction Enterprises

Based on the big databass, this dissertation studies cases of four Chinese construction enterprises, and analyzes the evolution process, balance system and the aims of these two relationships. This research shows that as an intangible asset, relationship resource can lower the cost considerably and increase the external chances. It is well-known that political relationships and business relationships are positive to enterprises' capacity, especially in emerging market(Lee et al., 2016). It can help to overcome the limits of weak infrastructure (Xin and Pearce, 1996) and seize the opportunity in uncertain times (Heide and Wathne, 2006). Many scholars recognize that in emerging economies such as China, managers build relationships not only with managers in companies but also with government officials (Dong et al., 2013). Political relationships can improve both firm survival and performance (Zheng et al., 2015), because the government controls important information and scarce resources. At the same time, establishing business relationships with other firms (Stuart,2000; Keijl et al.,2014), Financial Institutions, universities and research institutes (Baum et al.,2000) can facilitate firm's external innovation search and have positive impact on its innovation (Zhang and Li, 2010).

For private enterprises, they start with business relationship, accumulate funds and techniques and then use these owned resources to explore political relationship and finally come back to business; for state-owned enterprises, the first two stages are both political dominance, and finally they prefer the market. Meanwhile, the maintenance of relationship resources needs costs. Under the background of resource restriction, relationship resource integration and the balance between these two relationships have a huge influence on enterprises' competitiveness. In China, it has practical significance to study the integration of this two relationships and their balance mechanism.

In the following parts, this dissertation will sum up the evolution routes of business and political relationship of Chinese construction enterprise, their balance mechanism and establish a relevant framework.

(1) The evolution process of political relationship resources and business relationship resources of Chinese construction enterprises. The analyses of multiple cases and the results

of questionnaires illustrate that the evolutions of these two kinds of resources share the same rule while both differences and connections exist between state-owned enterprises and private enterprises.

In the first stage, due to their limited competitiveness, PCG and GCG could not get the attention of government, because of their inferior position. Under this condition, they paid more attention to the business relationship which was used to obtain construction projects and accumulate powers. Therefore, business relationships acted as the guidance for private enterprises due to the fact that their weak internal competitiveness hardly can help them to gain good political relationship resources. Meanwhile, politics-based CRCC and CSCEC were under the wings of governments at the very beginning so that they have an easier access to the political projects and the attention of the government. Thus, political relationship resources were their guidance. Here, this dissertation comes up with such propositions below:

Proposition 1: In the first stage, business relationships play a guidance role for private enterprises while political relationships play a guidance role for state-owned enterprises.

In the second stage, with the development of private enterprises, they build complicated interests relationship with governments and get attention from governments during their expansion. At that time, mere development of business relationship cannot meet the requirement of enterprises' exploitation. With the social system featuring Chinese characteristics, they need to have more frequent interactions with governmental departments in the field of projects, administration approval and even policy making, and therefore a healthy cooperation relationship with governments was established. For example, by purchasing those non-profitable state-owned enterprises, PCG won the trust of the local government, and then the construction projects. Therefore, in the second stage, the center of private enterprises transfers from business relationship to political relationship. It is notable that for the state-owned enterprises, in the second stage, CRCC and CSCEC responded to the government and accepted marketization. However, it is obvious that these state-owned enterprises cannot get rid of the political restriction completely at one time. This dissertation finds that in the second stage, the state-owned enterprises still have an obvious preference to political relationship so this dissertation raises this proposition:

Proposition 2: In the second stage, both private and state-owned enterprises are guided by political relationship.

In the third stage, private construction enterprises have established a closed relationship with governments and can smoothly tackle business expansion, project approval, financial

loans and some other aspects. In this stage, private construction enterprises enter into a mature period. Even though political elements bring about convenience for their development, their major task is to exploit new market, since inevitably there is filled with competition with state-owned enterprises in bidding government projects. Besides, in the third stage, the private enterprise's goal is to expand the market, and yet the realization of this target cannot merely rely on governmental projects as it requires more business connections. For example, in the third stage, PCG and GCG established a healthy business connection with other partners. Therefore, for private construction enterprises, their guidance transfers from political relationship to business relationship. On the flip side, CRCC and CSCEC continued to respond to the national marketized reformation, trying to get rid of their dependence on governmental projects. After the second stage, these state-owned enterprises have had some marketized achievements in the third stage, participating in the complete market competition. The data of this study shows that in the third stage, state-owned enterprises have been guided by business relationship so that this dissertation raises this proposition:

Proposition 3: In the third stage, both private and state-owned enterprises are guided by business relationship.

According to proposition 1-3, the main trends of the guidance of Chinese construction enterprises can be concluded as follows: for private construction enterprise, it is business relationship --- politics relationship --- business relationship; for state-owned construction enterprises, it is political relationship --- political relationship --- business relationship. For private construction enterprises, they start with business relationship, accumulating funds and techniques, and then utilize existing resources to exploit political relationship. In the later period, they return to business. For state-owned enterprises, their first two stages are guided by political relationship and in the last period they get rid of the restriction of politics and go to the market. This conclusion explains the transformation of the role of Chinese construction enterprises between political relationship and business relationship and illustrates construction enterprises in different stages choose different strategies to cope with the external environment. This is a kind of strategic dynamic, promoting the development of construction enterprises. Therefore, this dissertation raises this proposition:

Proposition 4: Construction enterprises in different stages choose political or business relationship resources respectively. This strategic dynamic promotes the development of the sustainable development of enterprises.

Simultaneously, both state-owned enterprises and private enterprises would finally return

to business essence even though the construction industry is easily affected by politics. This renders a significant enlightenment: political relationship can bring a series of benefits to enterprises but cannot help enterprises have a long-term development. Enterprises should pay more attention to the growth of internal resources and ability and return to market in the end. Therefore, this dissertation has these propositions:

Proposition 5: Both private and state-owned construction enterprises will finally return to business essences.

Proposition 6: Political relationship can bring a series of benefits to enterprises but cannot help enterprises have a long-term development. Enterprises should pay more attention to the growth of internal resources and ability and return to market in the end.

(2) The balance mechanism of two relationship resources of Chinese construction enterprises.

The data of this dissertation illustrates that there are three balance mechanisms: a. mutual linkage and triggering between these two relationship resources; b. mutual transmission of these two relationship resources; c. altering by gaining certain external relationship resources. Based the content of Section 4.4, this dissertation raises this proposition:

Proposition 7: Construction enterprises integrate and balance these two relationship resources by mutual linkage and triggering, mutual transmission and mutual altering between political and business relationship resources.

5.3.2 A Framework of Relationship Resources Integration of Construction Enterprises

After the detailed analysis of two private construction enterprises and two state-owned ones, it seems that the growth of construction enterprises could be illustrated by Chapter Two to a large extent. Even though the private and the state-owned have differences in resource-gaining, the essence is still the same. According to the collected documents and material on these four enterprises, it is safe to say that the competition among the domestic and the foreign market are both fierce, for instance, some famous international contractors have took up a place in domestic market for a long time, such as Hochtief (Germany), and Skanska (Sweden). Obviously, domestic construction enterprises are far behind these international powers in technological innovation, and this gap makes domestic enterprises in the inferior position, especially in the international market. Generally speaking, compared to the state-owned company, this unfavorable condition could be a more serious issue for the private enterprise, as those state-owned companies back up by the nation, which possibly

implies that they enjoy an abundant financial and technic support, while the private one mostly depend on its own. Thus, this gap has a more negative impact on private construction enterprises. In addition, since the history of Chinese construction industry is relatively short, it transfers from traditional planned economy system to modern enterprises so that their management systems have not been well-developed. For example, different branches can still compete viciously even though they belong to the same enterprise. This phenomenon hugely damaged internal resources and influence enterprises' development negatively. However, with the development of enterprises, the relationship network becomes larger and enterprises can get more and richer resources from it. As a result, some "unknown" construction enterprises grow to domestic, even international power. In order to hit this target, construction enterprises usually adopt strategies of relationship permeation and relationship integration. This strategy brings endless resources to the network and provides huge power for further development of enterprises. Here comes Figure 5-12.

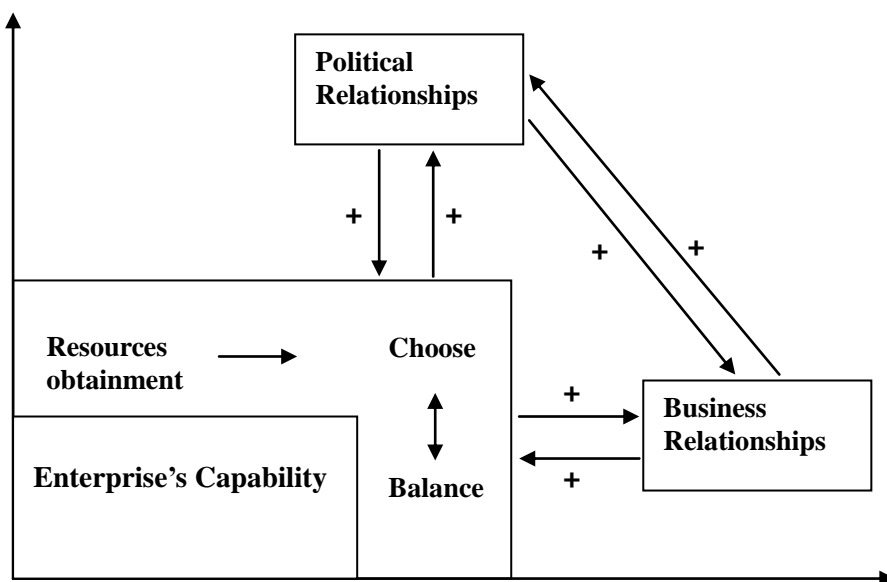


Figure 5- 12 Framework of Relationship Resources Integration of Enterprises Growth

First, according to the development to construction enterprises, from the perspective of relationship network, enterprises can use relationship permeation strategies. They take full use of relationship network to obtain relevant resources in order to promote their own development. There is no doubt that government plays a significant role in Chinese construction industry so that it is quite important for enterprises to establish relationships with government, especially in the starting stage. In the starting stage, enterprises which are limited by their inferior competitiveness and reputation, need to explore the market and accumulate

resources with the help of government. For example, the “BT Mode” healed the “pain” of the local government, so the local government’s recognition helped them raise their reputations in local areas rapidly; by using Lou Zhongfu’s personal political background, GCG successfully established a close relationship with government, which is conducive to their later reformation and listing. In addition, enterprises also need to establish network with their business partners and get the necessary supplement. For example, the cooperation between GCG and China Zheshang Bank as well as National Development Bank. This dissertation also argues that it is necessary for construction enterprises to use the network permeation strategy in the existing relationship network. In other words, this permeation is actually one certain type of integration of existing resources in relationship network. For example, PCG’s “Exploration, Maintenance, Expansion” is a manifestation of this strategy.

Second, after years of operation, resources and relationships of enterprises are promoted. Enterprises themselves should apply the relationship resources integration more frequently to adjust and upgrade their existing business and political relationship network. The distinguished attention should be paid on some business relationship which may push the independent development of enterprises, and reduce the reliance on the government. This could possibly mean that the pattern should change from the ‘government-oriented and enterprises-initiative’ to the ‘enterprises-oriented and government-initiative’. It is obvious to see that the method that these two private construction enterprises entered local market is mainly by merging and purchasing state-owned enterprises. This method can not only help to enhance the cooperation with government but also make the market layout more reasonable. As a result, the strategy of relationship integration has been fully undertaken by private construction enterprises, which has a huge strategic meaning for the development of enterprises.

Chapter 6: Conclusion

As a backbone of our economy, the status of Chinese construction industry has realized a significant improvement. It is foreseeable that in the coming decades, it will become one of the most important industries in promoting Chinese national economy. Therefore, studies on construction enterprises raise huge interests among Chinese scholars. Since 2001, when China entered in WTO and opened its construction market to the rest of the world, lots of large-scale multi-international companies have been swarming into the domestic market. This indeed brought fiercer competitions. In addition, the rapid upgrade of information communication technology and the complexity and uncertainty of the international market has set a higher benchmark for the construction enterprises in flexibility, efficiency, and learning ability. The developing mode of construction enterprises has undergone a major evolution and the traditional competition mode among individuals has been replaced by the competition among alliance unions.

In the environment of “new competition”, the growth of construction enterprises cannot simply rely on their internal resources and the management within an entity, but also should depend on the condition, behaviors and the inter-cooperation of the external resources. At this moment, the complex dynamic external market requires enterprises who is seeking a bright future to spare reasonable attention on the external environment rather than entirely rely on internal resources and abilities. It has been a method and a strategy for the single enterprise to achieve growth in a complex business environment by establishing official or informal partnership with external organizations, by crossing enterprise boundaries and gaining network resources with the help of network relationship. Simultaneously, increasingly more researches have focus on the political and business network which formed in the complex business environments, especially these new market enterprises which are born and breed in the special systematic environment.

Therefore, by establishing a massive database, this dissertation studies the balance process and internal mechanism of four Chinese construction enterprises in relationship resources integration, reveals process rules and essential features in the complex relationship network and then provides a theoretical guidance for the strategic decision-making of current Chinese construction enterprises. The first five chapters introduces the processes of the

absorption of relationship resources and formation of relationship network, and comes up with a comprehensive frame working by following five steps: studying background, theories, studying methods, process rules and balance mechanism, as well as process analyses of multi-cases. This chapter will sum up major conclusions of this dissertation, clarify the theoretical and practical significance of this study and point out some weaknesses and the future direction.

6.1 Major Conclusions

Focusing on Chinese construction enterprises, this dissertation has comprehensively analyzed the process that construction enterprises absorb political and business relationship resources through relationship network in different stages, and its impact on enterprises' development. This dissertation has also paid much attention to the analysis of the strategic balance of relationship resources. By studying cases, this dissertation has clarified the role of external relationship network in the growth of construction enterprises. The conclusions are as follows:

(1) By analyzing the developing trend of the growth of Chinese construction enterprises, this dissertation reveals the evolution routes of political and business relationship resources for both private and state-owned enterprises. The study shows that as an intangible asset, relationship resources lower the trading cost considerably and add the external opportunities for enterprises. In the first stage, due to their own inferior position, private construction enterprises merely can attract the attention from government. As a result, they shift to business relationship and used it to win more projects and thus accumulate their experience and advantages. On the contrary, these two state-owned enterprises responsible for the political target at the very beginning, which could possibly mean that they naturally attached more attentions from governments of all levels. At the same time, their major businesses were mainly governmental projects, and this no doubt indicates that the political relationship dominates their relationship network. In the second stage, with the strength of their own merits, private construction enterprises began to receive more attentions from the government. In this situation, private enterprises had more connections with governmental departments, which allows private enterprises to establish a friendly partnership with governmental departments, and thus change their guidance from business relationship to political relationship. Meanwhile, these two state-owned enterprises responded to the call of government and began to undertake marketization. Since they could not totally get rid of

political restriction, state-owned enterprises still bound by an obvious political relationship. In the third stage, private construction enterprises have stepped into a mature era. Even though political relationship brought about lots of conveniences for their development, their further growth still requires the deeper engagement in the market. Therefore, the center course of private enterprises is market expansion at this very moment, which requires more business cooperation and communication with other companies. As a result, the dominant relationship switch to the business-oriented one. However, state-owned enterprises in this stage have achieved success and have completely engaged in market competition already. So it is no doubt that the guidance is business relationship. All in all, private construction enterprises follow a route as “business---politics---business”: they start with business relationship, accumulate funds and techniques, and then explore political relationship and finally get back to business. State-owned enterprises follow a route as “politics---politics---business”: they experience two stages of political guidance and finally go to the market without political restrictions. This conclusion illustrates the fact that the political relationship and business relationship played different roles in Chinese construction enterprises in the corresponding period; it also demonstrates that either for the private enterprise or for the state-owned enterprise, it will eventually return to business. It is also the truth when it comes to the construction industry which would be easily interfered by some political issues. This is an important enlightenment for the relationship studies between enterprises and governments: political relationship indeed could bring about benefits, but it is certainly not the decisive element. If enterprise expects to have long-term development, it would be better to return to the market eventually.

(2) This dissertation has analyzed the balance mechanism of relationship network during the growth of construction enterprises. Relationship resource is such a kind which takes network as an intermediary agent. As two aspects of relationship resources, political relationship resources and business relationship resources should be integrated and their integration is highly likely to enhance the trust and the cooperation between enterprises and governments and also those among different enterprises, which could complement each other's advantages, lower the cost of trade and create favorable conditions for the development of construction enterprises. Both political and business relationship resources require sustaining investment to maintain and guarantee. Therefore, due to the limitation of resources, construction enterprises may have different strategic preference for some certain stages. This is conducive to enterprises' responses to the uncertainty of external environment

during the process of their growth. Therefore, during the integration of relationship resources of construction enterprises, to keep the overall balance between political and business relationship resources could be helpful to their sustained healthy growth. After analyzing four enterprises, this dissertation finds that there are three balance mechanisms for relationship resources integration: (1) mutual linking and triggering between these two relationship resources; (2) mutual transferring between these two relationship resources; (3) adjusting by gaining some new relationship resources. To sum up, the integration and the balance of these two relationships are based on the mutual linking, mutual triggering, mutual transferring and mutual adjustment.

(3) Based on the relationship network, this dissertation has analyzed the internal mechanism of the growth of construction enterprises. As the fact that the relationship network which acts “the condition in utilizing and controlling resources” has become the key factor during the development of construction enterprise, this dissertation refers to the analyzing framework of Rindova and Rombu (1999), and categorizes the relationship resources into the framework of fundamental theory of resources. These resources are the result of the long-term interaction between construction enterprises and the market network. The triggering of relationship resources relies on the constant interaction between enterprises and markets. The function of the relationship network in acquiring and controlling external resources has been highlighted, and it is also worthwhile to underline the effect of the integration in terms of the external resources. Therefore, a theoretical mode which can be described as “construction enterprise---relationship network---relationship resources---integration of relationship resources---growth of construction enterprises” has been established.

(4) This dissertation has analyzed the interaction of different relationship resources in relationship network during the growth of construction enterprises. The development of construction enterprises could be considered as the result of relationship interaction among suppliers, clients, governments, competitors and the intermediary organizations. The process of growth demonstrates the interaction between construction enterprises and different entities in markets, and this interaction can help construction enterprises absorb business and political relationship resource. During the process of integration of relationship resources, on the one hand, the integration of enterprises is conducive to the production of political and business relationship resources; on the other hand, both political and business relationship resources have positive impacts on the promotion of enterprise resources. Construction enterprises use their existing resources to trigger special relationship members, integrate policies, techniques,

funds and human resources for these members, and simultaneously, these resources are also conducive to the promotion of resources and then support the growth of enterprises. Resources brought by both political and business relationship guarantee the maintenance of relationships. In this way, enterprise resources, political relationship resources and business relationship resources can interact and evolve simultaneously during the process of growth. Network is an essential feature of markets and industries. From the perspective of relationship network, the enterprise boundaries tend to be obscure while the connection among participates in different market becomes closer. It is increasingly more important for the growth of enterprises to explore, evaluate and utilize market opportunities and since the opportunities for growth mainly come from the relationship network owned by enterprises themselves, enterprises may choose more relationship resources to explore the market. Therefore, this dissertation holds the belief that the interaction between construction enterprises and their relationship network is the core feature of the growth of the current construction enterprises, and theoretical studies of construction enterprises will move from “enterprise---environment” to “enterprise---network”. This dissertation also argues that relationship commitment will replace market commitment and become the key feature of enterprises’ growth, and the establishment, exploration and promotion of the relationship network of construction enterprises will become the first question for enterprises to solve.

6.2 Theoretical Contributions

The theoretical contributions of this dissertation mainly in three aspects:

(1) To reveal the evolution rules of political and business relationship of Chinese construction enterprises.

Relationship ability is one of the core abilities of construction enterprises. In terms of political relationship and business relationship of Chinese construction enterprises, there are numerous relevant documents: relationship between enterprises and clients (Tian, 2001; Yang, 2002; Tian, 2003; Reinartz et al.,2004; Wang and Dong, 2004; Chang and Wang, 2007; Theoharakis et al.,2009), relationship among enterprises (Dyer and Singh,1998; Takeishi, 2001), management of relationship (Johnson et al.,2007; Wu et al.,2010; Zhou and Li, 2010; Liu and Zhong, 2011), relationship rental (Dyer and Hatch, 2006) and so on. These researches cover many situations among different enterprises, between enterprises and clients as well as enterprises and governments, most of which, however, only focus on western enterprises or

study political or business relationship respectively. Few researches focus on Chinese enterprises and the evolution rules of these two relationships. The acquisition of the relationship resources which is concerned by this research is about the construction industry surviving in the market bearing Chinese character. Besides, the process and rules of relationship resources integration of construction enterprises have been fully illustrated. From the perspective of “RBT” and “RDT”, this dissertation focuses on the relationship resources integration, and the deeper understanding on the process and rules of resources integration of Chinese construction enterprises has been achieved by case analysis and questionnaire. In addition, the issues on the balance mechanism have also been clearly addressed by the descriptive case study. It is then safe to conclude that both private and state-owned enterprises will get back to business relationship, which may differ from the results of existed authorities. It seems that even though political relationship could have great influence on construction enterprises, business relationship still vital to the further growth of enterprises. In other words, no matter how complex the situation is, the commercial nature of one enterprise determines how successful it can be.

(2) To reveal the balance mechanism between political and business relationship of Chinese construction enterprises.

Relationship resources are used to absorb relevant resources and information at a relatively lower level so that relationship-resources-based social trade plays a significant role. Starr(1990) shows that seeking for political relationship has great meaning for enterprises (Frye and Shleifer, 1997; Faccio, 2006; Luo and Tang, 2009; Xu et al., 2010), and can result in some actual economic benefits (Krueger,1974; Faccio,2006; Claessens et al.,2008), and also bring about more supplements and fewer troubles (Wei, 2013); at the same time, business relationship put enterprises in a mutual influential network (Johanson, 1988), and enterprises can absorb different resources and abilities in this network (Burt, 1992). However, as later-comer firms in a new market, Chinese construction enterprises which seek development under special social system (Dore,1990; Anderson and Engers,1994), do not have the traditional advantages in technology and ability owned by the enterprises in the developed country (Mathews,2002;2006; Luo and Tung,2007; Luo and Rui,2009; Kedia et al.,2012; Gaffney et al.,2013), so the Chinese construction enterprises face “double dependency” (Du,2012; Du and Pang, 2014; He and Du, 2015; Du et al., 2016). Domestic construction enterprises do not keep a simultaneous connection with both political and business relationship since limited resources force them to have different strategy in different stages.

Meanwhile, after opening and reform policy, China has been facing continuous reformation in both economy and political system. Under this situation, enterprises should cope with these paradoxes and conflicts according to the ever-changing environment (Smith and Lewis, 2011). Therefore, it is of great importance for construction enterprises to keep a balanced development between political and business relationship resources. The current studies of balance mechanism usually focus on the hardware and inner abilities of enterprises (Tushman and Iii, 1996; Raisch and Birkinshaw, 2008), such as individual-group (March, 1991), discovery-utility (Smith and Tushman, 2005) and profit-social responsibilities (Margolis and Walsh, 2003) and so on. Few studies focus on the choices between business relationship and political relationship. By analyzing relationship resources integration and the balance process, this dissertation reveals its balance mechanism, which could be insightful to the current study.

(3) The existing theories about enterprise growth always overlook the external relationship of enterprises, so that this dissertation comes up with a framework of relationship resources integration. From the perspective of external relationship, this framework reveals the growth mechanism of Chinese construction enterprises and expands its theoretical boundary.

The growth of enterprises is based on resources. Resource-based theories hold that the absorption of resources and the ability to develop resources have been the key elements in the growth of enterprises. The unique abilities and special resources acquired by the enterprise consist of the driving force of its the growth, and determine the speed, the pattern and the limit of such development (Chandler, 1977; Penrose, 1995; Wei and Sun, 2014), and closely related to the enterprises' competitive advantages (Wegloop, 1995). Therefore, the existing theories are mainly based on RBT, focusing on enterprises' internal resources and abilities and explaining the competitive advantages and differences (Wei and Sun, 2014) from the perspective of the build-in abilities. For enterprises, it is hardly possible for them to maintain their sustainable competitive advantages only by internal resources, so it is inevitably for them to seek growing resources from the external environment (Romanelli, 1989; Mathews, 2002, 2006). Therefore, the external environment is equally important and also amount to a driving force. The discussion also covers the process of relationship resources integration, evolution rules and balance mechanism during the development. Consequently, the conclusion of this dissertation may deepen the study of relationship resources integration of Chinese construction enterprises, and introduce the external relationship to explain the managerial behaviors of relationship resources of Chinese construction enterprises and explore the

existing theoretical boundary of the resources integration.

6.3 Practical Implication

After studying the forming process, evolution rules and balance mechanism of Chinese construction enterprises' business and political relationship, and analyzing the evolution trend, different cases and results of questionnaires, this dissertation discusses the rule and the balanced mechanism within such development and then proposes a process framework of the growth of a construction enterprise. It is then conclude a theoretical guidance for strategy implementation for enterprises and policy setting for governments.

First is the enterprise level. Construction is a special industry which mainly deal with the project features long-term, complex processes, and the cooperation with government departments, partner companies and banking systems. Every links requires a fine management, especially for the mentioned political relationship and business relationship, which require a long-term strategic design. Here are some suggestions of this dissertation:

(1) To establish extensive political and business links, and to carry out long-term development strategies.

Due to the special system and cultural environment, the political relationship and business relationship of Chinese construction enterprises have great importance to the long-term development. From the perspective of political relationship, extensive political relationship resources can be conducive to the submission and approval of new projects, bid for governmental constructions and financial loan; from the perspective of business relationship, extensive business relationship can fully develop the collective organization advantages. Since no one enterprises can be the most professional in every field, business relationship successfully cover this shortage. Therefore, Chinese construction enterprises should have a long-term strategic plan, and establish wide ranges of business partnership and political partnership in order to enhance their own competitiveness.

(2) To exchange profits between different enterprises as well as enterprises and governments.

Chinese government is a reforming government, which also needs supplements from enterprises. It means that in some conditions enterprises need to sacrifice themselves for government or exchange benefits with government. Especially for some local governments, they need supplements of capital, techniques and market to breed their non-profit state-owned

enterprises. This provides an opportunity for both state-owned enterprises and private enterprises (this dissertation thinks that state-owned enterprises also need to establish political relationships with local governments) to establish political relationships with local governments. In a response, governments in different levels are likely to facilitate enterprises in project-getting, fund-raising and so on. Through this kind of benefits exchange, enterprises can get profitable returns. GCG and PCG are two outstanding examples.

(3) To balance political and business relationship and return to business at a right time.

Both political relationship and business relationship have huge and profound impacts on construction enterprises and then the balance between these two resources is conducive to the stable development of enterprises. This dissertation renders three different balance mechanisms: mutual linking and triggering between two relationship resources; mutual transformation between two relationship resources; and adjustment by absorbing new relationship resources. Any mechanism can be used to adjust resources allocation when enterprises' internal resources are discordant, and then achieve the stable development of the enterprise. Meanwhile, this dissertation also believes that the commercial-oriented nature is the essence of one enterprise and this nature also determines its final route. Therefore, Chinese construction enterprises should be aware that cooperation with government brings both benefits and risks, and merely can help them to be stronger eventually. Chinese construction enterprises, especially private ones, should transfer their strategic center to business itself at a right time. Only this can maintain a sustainable development.

(4) To utilize "relationship" well to absorb more resources and improve self-capability, rather than confined by the immediate interests brought by the relationship.

This dissertation believes that even though both political relationship and business relationship play an important role in absorption of external resources and development of enterprises, it does not necessarily mean that any enterprise can have a long-term development by merely depending on the "relationship". It is worth noting that "relationship" can bring some conveniences in resources absorption and resources integration, while the promotion of self-ability is still the key momentum determines the long-term development of enterprises. These four cases also demonstrate that the enterprises' own resources and abilities act as the precondition to use some "relationships". In the process of resources integration, enterprise resources, political relationship resources and business relationship resources mutually influence one another and evolve simultaneously. On the one hand, integration of enterprise resources accelerates the production of political and business relationship resources;

on the other hand, political and business relationship resources have positive influence on the growth of enterprises' resources. Therefore, for Chinese construction enterprises, they should pay more attention to the establishment of their own ability since it is much more important for enterprises to promote their core competitiveness by using "relationship" to absorb resources rather than to get some short-term benefits.

Second is the national level. The rapid development of Chinese construction industry in recent years is mainly due to the "rapid urbanization", national investment in infrastructure construction, flow of private capital and the exploration of construction market. The high-speed development of Chinese construction enterprises is the joint efforts of both government and enterprises so that government should maintain the balanced development of the macroscopic national economic as well as support the operation of enterprises in the microscopic sense. Here are some detailed suggestions:

(1) To simplify the process of declaration and approval, to provide the favorable political policy and to encourage a fairer competition.

From the perspective of national level, enterprises' seeking for political relationship reflects a kind of "rent-seeking" pursuit, which is not a health social phenomenon, while it can benefit the enterprise in several aspects. The situation in which enterprises seek for political relationship indicates that some relevant regimes still need improvement. For example, the administration process regarding to the construction industry is relatively complicated and troublesome, and therefore a fairer policy and an easier process for declaration and approval are highly required. At the same time, the government should also protect the legal rights and the rightful interests of domestic construction enterprises in promoting a fair competition, only by doing this a healthy development if the construction industry can be achieved.

(2) To support and promote the cooperation among enterprises.

It is obvious that enterprises will finally get back to business relationship and business cooperation is significantly conducive to the sound development of enterprises. Even though business organizations or enterprises are the main body of business cooperation, government can still be a trigger in this situation. For example, the local government helps PCG to get commercial loans. Therefore, government can be a supporter to assist enterprises in establishing business alliance and thus to promote the business cooperation among different enterprises.

(3) To encourage technical innovation and to promote the overall strength of domestic construction enterprises

Technical innovation is an eternal topic in the current society. Even though this dissertation focuses on political and business relationship, it is undeniable that the growth of enterprises cannot stand away from the technical innovation. At present, Chinese construction enterprises still have their own limitation, even though they enjoy the rapid development with considerable large scale. It is undeniable that they lag behind their counterparties in developed countries in technologies, such as the application of large machinery, environmental protection and scientific management. Under the background of globalization, government should carry out more policies to simulate the technical innovation and improve the core competitiveness of domestic construction enterprises.

(4) To encourage enterprises to “go out”, namely engage in international markets, and fight for taking up more space in the international market.

Currently, even though the unprecedented prosperity features the domestic construction industry, the economic downturn pressure still jeopardizes the further expansion of this industry and it seems that the domestic market the market tends to be saturated. Since the construction industry plays a major role in the national economy, the wane of this industry is highly likely has an adverse effect on the development of the overall economy. As a result, from the perspective of the national level, the government should carry out new policies to stimulate enterprises to exploit new market, especially to share the international market. It is reasonable to argue that to exploit the international market can not only expand scales and living places for Chinese construction enterprises, but also help to build an profound political and business relationship with international competitors, both of which are conducive to the absorption of global resources and the promotion of core competitiveness.

6.4 Limitations

Based on CSMAR data base, official news websites, authorized media and professional journals, this dissertation collects large amount of data and information of these four Chinese construction enterprises as researching materials. After encoding and analyzing all these data, this dissertation reveals the evolution rules and balance mechanism of both political and business relationship of Chinese construction enterprises, and come up with a relationship-based framework for the growth of enterprises. At the same time, based on

multi-perspective data, this dissertation utilizes questionnaire results to prove the conclusion of qualitative researches, guaranteeing the reliability and validity. This dissertation has experienced several modifications on structure and contents, and the data and the conclusions have been proofread for many times. Due to some conditions and reasons, there are still some limitations in this dissertation which need to be discussed further:

(1) All the research objects are large-scale enterprises, two private enterprise and two state-owned enterprises, as a result small and medium-sized enterprises are exclusive from this study. The sifting mechanism in choosing research objects considers later comparison between the private enterprises and the state-owned enterprises and a further discussion about the internal rules and differences. Due to the specialty of construction industry, it is unlikely to collect abundant research materials about small and medium-sized enterprises, so that they are not fully discussed in this dissertation. To bridge this gap, this dissertation has interviewed many small and medium-sized enterprises by questionnaires which conducting by a third party, and the result shows that small and medium-sized enterprises tend to have the same behavior pattern as the one in large-scale enterprise. However, it still need to point out that since this result does not take the process analysis and the case study to conduct a detailed and well-supported research, it remains possible that there are some unique features of small and medium-sized enterprises, which requires further studies later.

(2) In this dissertation, the balance mechanism of these two relationship resources is based on the description and statistics of major cases, and therefore the analysis process of qualitative data may contain some subjective elements which may have negative influence on the result. In terms of the balance mechanism of the two relationship resources, this dissertation summarizes three major methods through four case studies. Even though this dissertation tried hard to keep the accuracy and the adequacy of the data, and several discussions with other academic teams also have been conducted, the conclusion may barely contain every possible situation, which needs further studies to discuss and verify.

(3) The study on the development of enterprises remains insufficient, and the further research is required to compliment the conclusion of this disseration. The growth of enterprises contains various elements, and the concept of “relationship”, introduced by this research, coupled with some new opinions enriches the current theories. However, due to the several limitations, this dissertation has not fully discussed in this topic, and only the political and business relationship are taken into consideration while in fact the influence of “relationship” to enterprises contains several levels, varied situations and some other elements.

In the later studies, the issues on how the “relationship” affects the growth of enterprises may be fully discussed. In addition, “relationship”-based enterprises’ growth theories could be completed and enriched by multi-case studies, empirical studies and some other research methods.

Bibliography

- Andersen, O. & L. S. Kheam (1998). Resource-based theory and international growth strategies: an exploratory study. *International Business Review*, 7(2): 163-184.
- Anderson, S. P. & M. Engers (1994). Strategic investment and timing of entry. *International Economic Review*: 833-853.
- Atuahene-Gima, K(2005). Resolving the capability—rigidity paradox in new product innovation. *Journal of marketing*, 69(4): 61-83.
- Baraldi, E. & T. Strömsten (2009). Controlling and combining resources in networks—from Uppsala to Stanford, and back again: The case of a biotech innovation. *Industrial Marketing Management*, 38(5): 541-552.
- Barney, J (1991). Firm Resources and Sustained Competitive Advantage. *Journal of Management*, 17(1): 99-120.
- Barney, J. B(1997). *Gaining and sustaining competitive advantage*: Addison-Wesley Reading, MA.
- Barney, J. B. & A. M. Arian(2001). The resource-based view: Origins and implications. *Handbook of strategic management*, 124188.
- Baum, J. A., T. Calabrese, & B. S. Silverman(2000). Don't go it alone: Alliance network composition and startups' performance in Canadian biotechnology. *Strategic Management Journal*, 21(3): 267-294.
- Bloodgood, J. M., H. J. Sapienza, & J. G. Almeida(1996). The internationalization of new high-potential US ventures: Antecedents and outcomes. *Entrepreneurship: Theory and Practice*, 20(4): 61-77.
- Buettner, R(2015). *Analyzing the Problem of Employee Internal Social Network Site Avoidance: Are Users Resistant due to Their Privacy Concerns?* Paper presented at the HICSS-48 Proceedings.
- Burt, R. S(1992). V The Social Structure of Competition.
- Chandler Jr, A. D(1977). Strategy and Structure: Chapters in the History of the Industrial Enterprise (Cambridge, Mass., 1962). *The Visible Hand: The Managerial Revolution in American Business*: 17-24.
- Claessens, S., E. Feijen, & L. Laeven(2008). Political connections and preferential access to finance: The role of campaign contributions. *Journal of Financial Economics*, 88(3): 554-580.

- Creswell, J. W.(1998). Five qualitative traditions of inquiry. *Qualitative inquiry and research design*: 47-72.
- Chang, J. K. & Y. G. Wang(2007), The Key Dimension of Customer Relationship Capability and Its Driving Process to Customer Assets - Based on Customer Perspective, *Management World*, 11, 162-163.
- Dong, M. C., C. B. Li, & D. K. Tse(2013). Do business and political ties differ in cultivating marketing channels for foreign and local firms in China? *Journal of International Marketing*, 21(1): 39-56.
- Dore, R. P(1990). British factory, Japanese factory: The origins of national diversity in industrial relations: *Univ of California Press*.
- Du, Y. F(2012). Latecomer's Maginot Line Dilemma: When Technology Transfer Meets Customer Power. *The SMS Special Conference*.
- Duncan, R. B(1976). The ambidextrous organization: Designing dual structures for innovation. *The management of organization*, 1: 167-188.
- Dunning, J. H. & M. McQueen(1981). The eclectic theory of international production: a case study of the international hotel industry. *Managerial and Decision Economics*, 2(4): 197-210.
- Dunning, J. H(1988). The eclectic paradigm of international production: A restatement and some possible extensions. *Journal of international business studies*, 19(1): 1-31.
- Dunning, J. H(1991). The eclectic paradigm of international production. *The Nature of the Transnational Firm*, 121.
- Dunning, J. H(2001). The eclectic (OLI) paradigm of international production: past, present and future. *International journal of the economics of business*, 8(2): 173-190.
- Dunning, J. H(2015). Reappraising the eclectic paradigm in an age of alliance capitalism, *The Eclectic Paradigm*: 111-142: Springer.
- Dyer, J. H. & H. Singh(1998). The relational view: Cooperative strategy and sources of interorganizational competitive advantage. *Academy of management review*, 23(4): 660-679.
- Dyer, J. H. & N. W. Hatch(2006). Relation - specific capabilities and barriers to knowledge transfers: creating advantage through network relationships. *Strategic management journal*, 27(8): 701-719.
- Du, Y. F. & X. Y. Pang(2014), Derivative Enterprise's Technology Research and Market Ability Development Path——Based on the Longitudinal Case of East Steam Resin, *Journal of University of Electronic Science and Technology of China(Social Sciences Edition)*, 16(6), 46-51.
- Du, Y. F. & QingSong, W. & LiHua, Chen(2016), Influencing Factor on Internationalization of Emerging Market Firms and Future Research, *Journal of University of Electronic Science*

and Technology of China(Social Sciences Edition),18(4).

Eisenhardt, K. M(1989). Building theories from case study research. *Academy of management review*, 14(4): 532-550.

Eisenhardt, K. M. & J. A. Martin(2000). Dynamic capabilities relationships: what are they? *Strategic management journal*, 21(10-11): 1105-1121.

Epstein, E(1969). The corporation in American politics. *Englewood Cliffs, NJ: Prentice Hall*.

Faccio, M(2006). Politically connected firms. *The American economic review*, 96(1): 369-386.

Fagerberg, J. & M. M. Godinho(2005). Innovation and catching-up. *The Oxford Handbook of Innovation*. Oxford University Press, New York: 514-543.

Foss, N. J(1999). Networks, capabilities relationships, and competitive advantage. *Scandinavian journal of management*, 15(1): 1-15.

Frye, T(1997). A Politics of Institutional Choice Post-Communist Presidencies. *Comparative political studies*, 30(5): 523-552.

Gaffney, N., B. Kedia, & J. Clampit(2013). A resource dependence perspective of EMNE FDI strategy. *International Business Review*, 22(6): 1092-1100.

Gardner, R. M., T. A. Pryor, & H. R. Warner(1999). The HELP hospital information system: update 1998. *International Journal of Medical Informatics*, 54(3): 169-182.

Gavetti, G. & D. Levinthal(2000). Looking forward and looking backward: Cognitive and experiential search. *Administrative science quarterly*, 45(1): 113-137.

Gibson, C. B. & J. Birkinshaw(2004). The antecedents, consequences, and mediating role of organizational ambidexterity. *Academy of management Journal*, 47(2): 209-226.

Gulati, R. 1998. Alliances and networks. *Strategic Management Journal*, 19(19): 293-317.

Gulati, R(1999). Network location and learning: The influence of network resources and firm capabilities relationships on alliance formation. *Strategic management journal*, 20(5): 397-420.

Gupta, A. K. & V. Govindarajan(2000). Knowledge flows within multinational corporations. *Strategic management journal*, 21(4): 473-496.

Guo, J. G. & JingMei, Gao(2003), Networks, Resources and Competitive Advantages:A Firm-Sociological View, *China Industrial Economy*, 3, 79-86.

Hall, R. 1992. The Strategic Analysis of Intangible Resource. *Strategic Management Journal*, 13(2): 135-144.

Heide, J. B. & K. H. Wathne(2006). Friends, businesspeople, and relationship roles: A conceptual framework and a research agenda. *Journal of Marketing*, 70(3): 90-103.

Herriott, R. E. & W. A. Firestone(1983). Multisite qualitative policy research: Optimizing description and generalizability. *Educational researcher*, 12(2): 14-19.

- He, J. and YiFei, Du(2015), Latecomers'"Value-Competence"Dual Circle and Customer Lock-In: A Longitudinal Case Study, *Chinese Journal of Management*, 12(1), 20-28.
- Huang, S. Y(2004), Strategic Transformation of Using Enterprises' Resources, *Journal of Chengdu University (Natural Science)*,23(4), 56-59.
- Johanson, J. & L.-G. Mattsson(1994). The markets-as-networks tradition in Sweden, *Research traditions in marketing*: 321-346: Springer.
- Johanson, J. & L. G. Mattsson(2015). *Internationalisation in Industrial Systems — A Network Approach*: Palgrave Macmillan UK.
- Johnson, P. F., R. D. Klassen, M. R. Leenders, & A. Awaysheh(2007). Utilizing e-business technologies in supply chains: the impact of firm characteristics and teams. *Journal of Operations Management*, 25(6): 1255-1274.
- Kedia, B., N. Gaffney, & J. Clampit(2012). EMNEs and knowledge-seeking FDI. *Management International Review*, 52(2): 155-173.
- Keijl, S., V. Gilsing, J. Knobens, & G. Duysters(2014). Recombining for Breakthroughs: The Role of the Alliance Network, Portfolio, and Partners. Paper presented at the Academy of Management Proceedings.
- Krueger, A. O(1974). The political economy of the rent-seeking society. *The American economic review*, 64(3): 291-303.
- Kumar, V., R. Mudambi, & S. Gray(2013). Internationalization, Innovation and Institutions: The 3 I's underpinning the competitiveness of emerging market firms. *Journal of International Management*, 19(3): 203-206.
- Langley, A., C. Smallman, H. Tsoukas, & A. H. V. D. Ven(2013). Process studies of change in organization and management: unveiling temporality, activity, and flow. *Academy of Management Journal*, 56(1): págs. 1-13.
- Lavie, D., J. Kang, & L. Rosenkopf(2011). Balance within and across domains: The performance implications of exploration and exploitation in alliances. *Organization Science*, 22(6): 1517-1538.
- Li, H., L. Meng, & J. Zhang(2006). Why do entrepreneurs enter politics? Evidence from China. *Economic Inquiry*, 44(3): 559-578.
- Lichtenstein, B. M. B. & C. G. Brush(2001). How do "resource bundles" develop and change in new ventures? A dynamic model and longitudinal exploration. *Entrepreneurship: Theory and Practice*, 25(3): 37-37.
- Lee, S.-H., S. R. Bao, & G. O. White III(2016). The Influence of Business Ties and National Culture on Foreign-Subsidiary Capability Building in an Emerging Market. *Journal of Asia-Pacific Business*, 17(4): 318-341.

- Luo, Y. & R. L. Tung(2007). International expansion of emerging market enterprises: A springboard perspective. *Journal of international business studies*, 38(4): 481-498.
- Luo, Y. & H. Rui(2009). An ambidexterity perspective toward multinational enterprises from emerging economies. *The Academy of Management Perspectives*, 23(4): 49-70.
- Lynch, R. & Z. Jin(2016). Knowledge and innovation in emerging market multinationals: The expansion paradox. *Journal of Business Research*, 69(5): 1593-1597.
- Li, G. H(2005), On the Scientific Thinking Mode of Modern Managers, *Commercial Research*, 21(329), 20-20
- Liu, J. & ShaoChun, Z. (2011), The New Development of Learning Theory at the InternetAge-Connectivism, *Studies in Foreign Education*, 38(1), 34-38.
- Liu, X. F. (2007), Research on the Relationship between Network Embedding and Differentiation Strategy and Firm Performance, doctoral thesis, ZheJiang University.
- Luo, D. L. & QingQuan, T. (2009a), Political relations, social capital and policy resource acquisition: empirical evidence from Chinese private listed companies, *The Journal of World Economy*, 7, 84-96.
- Luo, D. L. & QingQuan, T. (2009b), The Performance of Institutional Environment Evidencefrom China' s Private Listed Companies, *Economic Research Journal*, 2(108),106-118.
- Lv, L. Z. (2001), On the position and function of new resources in the new economy, *China Soft Science*, 9, 21-25.
- Makadok, R(2001). Toward a synthesis of the resource-based and dynamic-capability views of rent creation. *Strategic Management Journal*, 22(5): 387–401.
- March, J. G(1991). Exploration and exploitation in organizational learning. *Organization science*, 2(1): 71-87.
- Margolis, J. D. & J. P. Walsh(2003). Misery Loves Companies: Rethinking Social Initiatives by Business. *Administrative Science Quarterly*, 48(48): 268-305.
- Mathews, J. A(2002). Competitive advantages of the latecomer firm: A resource-based account of industrial catch-up strategies. *Asia Pacific Journal of Management*, 19(4): 467-488.
- Mathews, J. A(2006). Dragon multinationals: New players in 21st century globalization. *Asia Pacific journal of management*, 23(1): 5-27.
- Parkhe, A., S. Wasserman, & D. A. Ralston(2006). New frontiers in network theory development. *Academy of Management Review*, 31(3): 560-568.
- Peng, M. W. & Y. Luo(2000). Managerial relationships and firm performance in a transition economy: The nature of a micro-macro link. *Academy of management journal*, 43(3):

486-501.

Penrose, E(1959). *Theory of the Growth of the Firm*.

Penrose, E. T(1995). *The Theory of the Growth of the Firm*: Oxford University Press, USA.

Peteraf, M. A(1993). *The cornerstones of competitive advantage: A resource-based view*.

Preissle, J(1991). *The choreography of design: A personal view of what design means in qualitative research*. Paper presented at the Qualitative Research Conference, University of Georgia, Athens.

Qiao, L. and ZhanMing, J. (2009), Guanxi and Internationalization Entry Mode Strategic Choices, *Science of Science and Management of S.& T.* 30(9), 109-113

Raisch, S. & J. Birkinshaw(2008). Organizational Ambidexterity: Antecedents, Outcomes, and Moderators. *Journal of Management*, 34(34): 375-409.

Reinartz, W., M. Krafft, & W. D. Hoyer(2004). The customer relationship management process: Its measurement and impact on performance. *Journal of marketing research*, 41(3): 293-305.

Rindova, V. P. & C. J. Fombrun(1999). Constructing competitive advantage: The role of firm-constituent interactions. *Strategic management journal*, 20(8): 691-710.

Romanelli, E(1989). Environments and strategies of organization start-up: Effects on early survival. *Administrative Science Quarterly*: 369-387.

Rubin, P. H(1973). The Expansion of Firms. *Journal of Political Economy*, 81(4): 936-949.

Rumelt, R. P(1984). *Toward a Strategic Theory of the Firm*.

Rao, Y. D. (2006), Enterprise resource integration process and capability analysis, *Industrial Technology & Economy*, 25(9), 72-74.

Salancik, G. R. & J. Pfeffer(1978). A social information processing approach to job attitudes and task design. *Administrative science quarterly*: 224-253.

Shleifer, A. & R. W. Vishny(1997). A survey of corporate governance. *The journal of finance*, 52(2): 737-783.

Sheng, S., K. Z. Zhou, & J. J. Li(2011). The effects of business and political ties on firm performance: Evidence from China. *Journal of Marketing*, 75(1): 1-15.

Simsek, Z(2009). Organizational ambidexterity: Towards a multilevel understanding. *Journal of Management Studies*, 46(4): 597-624.

Sirmon, D. G. & M. A. Hitt(2003). Managing resources: Linking unique resources, management, and wealth creation in family firms. *Entrepreneurship theory and practice*, 27(4): 339-358.

Sirmon, D. G., M. A. Hitt, & R. D. Ireland(2007). Managing firm resources in dynamic environments to create value: Looking inside the black box. *Academy of management review*,

32(1): 273-292.

Smith, W. K. & M. L. Tushman(2005). Managing Strategic Contradictions: A Top Management Model for Managing Innovation Streams. *Organization Science*, 16(5): 522-536.

Smith, W. K. & M. W. Lewis(2011). Toward a theory of paradox: A dynamic equilibrium model of organizing. *Academy of Management Review*, 36(2): 381-403.

Stuart, T. E.(2000). Interorganizational alliances and the performance of firms: A study of growth and innovation rates in a high-technology industry. *Strategic Management Journal*: 791-811.

Starr, J. A. & I. C. Macmillan(1990a). Resource Cooptation Via Social Contracting: Resource Acquisition Strategies for New Ventures. *Social Science Electronic Publishing*, 11(1): 79-92.

Starr, J. A. & I. C. MacMillan(1990b). Resource cooptation via social contracting: Resource acquisition strategies for new ventures. *Strategic Management Journal*, 11(4): 79-92.

Strauss, A. & J. Corbin(1990). *Basics of qualitative research*: Newbury Park, CA: Sage.

Takeishi, A(2001). Bridging inter - and intra - firm boundaries: management of supplier involvement in automobile product development. *Strategic management journal*, 22(5): 403-433.

Theoharakis, V., L. Sajtos, & G. Hooley(2009). The strategic role of relational capabilities in the business-to-business service profit chain. *Industrial Marketing Management*, 38(8): 914-924.

Tolstoy, D. & H. Agndal(2010). Network resource combinations in the international venturing of small biotech firms. *Technovation*, 30(1): 24-36.

Tsai, W. & S. Ghoshal. 1998. Social capital and value creation: The role of intrafirm networks. *Academy of management Journal*, 41(4): 464-476.

Tushman, M. & C. O'Reilly(1997). Ambidextrous organizations: Managing evolutionary and revolutionary change. *Quality Control and Applied Statistics*, 42: 215-218.

Tushman, M. L. & C. A. O. R. Iii(1996). Ambidextrous Organizations: MANAGING EVOLUTIONARY AND REVOLUTIONARY CHANGE. *California Management Review*, 38(4): 8-30.

Tian, T. S. (2001), Customer relationship management of the road, Machinery Industry Press.

Tian, T. S. (2003), Behind the real estate brand is the customer relationship, Shanghai premises, 3, 57-59.

Van de Ven, A. H., M. S. Poole, K. Dooley, & M. E. Holmes(2000). Organizational change and innovation processes: Theory and methods for research: Oxford University Press, New York, NY.

Wegloop, P(1995). Linking firm strategy and government action: Towards a resource-based

- perspective on innovation and technology policy. *Technology in Society*, 17(4): 413-428.
- Wellman, B.(2002). Designing the Internet for a networked society. *Communications of the ACM*, 45(5): 91-96.
- Wernerfelt(1984) A RBV of the Firm *Strategic Management Journal*
- Westhead, P., M. Wright, & D. Ucbasaran(2001). The internationalization of new and small firms: A resource-based view. *Journal of business venturing*, 16(4): 333-358.
- White, H. C(1981). Where do markets come from. *Advances in Strategic Management*, 17(2): 323-350.
- Wright, A. L. & R. F. Zammuto(2013). Wielding the willow: Processes of institutional change in English county cricket. *Academy of Management Journal*, 56(1): 308-330.
- Wan, T. and XiaoTao, Y. (2005), Social capital, regional economic development and social integrity, *Journal of Socialist Theory Guide*, 5, 40-42.
- Wang, X. Y. (2010), Research on the present situation and Development Countermeasures of Henan Industrial Clusters, *China Economic & Trade Herald*, 17, 022.
- Wang, Y. D. & JunHua, L. and ShuJun, Z. (2011), Ambidexterous Organization: the Theoretical Evolution and the Research Prospect, *Academics*, 12, 135-144.
- Wang, Y. G. and DaHai, D. (2004), Customer relationship management research status, deficiencies and future prospects, *China Business and Market*, 18(6), 52-56.
- Wei, G. and QiXin, S. (2014), A study on the relationship among organizational resources, strategic initiative and performance of small and medium sized Enterprises -- Based on the perspective of resource based view, *China Soft Science*, 9, 117-126.
- Wei, X. H and ZhiQiang, D. and Yuan, L. (2013), Political relations, institutional environment and labor income share: An Empirical Study Based on the survey data of private enterprises in China, *Management World*, 5, 35-46.
- Wu, A. Q. (2005), Enterprise Network Growth - A New Field of Research on Foreign Enterprise Growth, *Foreign Economies and Management*, 27(10), 10-17.
- Wu, J. Y. (2002), Red Miracles - Coca-Cola's Promotions, *PR Newsletter, Businessman*, 7, 48-48.
- Wu, X. B. and ChaoQun, Z. and Ying, W. (2014), Relationship between social network, entrepreneurial self-efficacy and entrepreneurial intention, *Science Research Management*, 35(2), 104-110.
- Wu, Y. and BingJia, S. and HongMing, W. (2010), Construction of Evaluation System of Enterprise Customer Relationship Management Capability Based on Value Chain, *Modern Management Science*, 5, 6-8.
- Xin, K. K. & J. L. Pearce(1996). Guanxi: Connections as substitutes for formal institutional

- support. *Academy of Management Journal*, 39(6): 1641-1658.
- Xie, T. and Lei, M. (2003), State-owned large enterprises in the fully competitive industry as a result in the construction of the company has the confidence to join the ranks of the international construction industry leader - China Construction Engineering Corporation Sun Wenjie, general manager of the interview, *Architecture*, 1,005.
- Xu, X. X. and Zhuo, Y. and Xing, L.(2010), On the Frontier of Corporate Political Relations, *Foreign Economics & Management*, 3, 26-32.
- Xu, G. N.. (2008), Research on the Influence of Relationship Embeddedness on the Performance of Technology Innovation, doctoral thesis, ZheJiang University.
- Yin, R. K(1994). Case study research. Design and methods. *Thousand Oakz: Sage*.
- Yang, J. and YuLi, Z. and XiaoFei, Y. and Ying, Z. (2009), Relationship Strength, Relationship Resources and New Firm Performance: An Empirical Study Based on Behavior Perspective, *Nankai Business Review*, 4, 44-54.
- Yang, Q. J. (2011), The Growth of Enterprises: To Build Political Connections or Capability? *Economic Research Journal*, 10, 54-66.
- Yang, Y. H (2002), Customer relationship management: Value orientation and enabling technology, Northeast University of Finance and Economics Press.
- Yang, Y. S. & YangHong, O. (2014), International Practice and Exploration of Chinese Construction Enterprises, *China Market*, 41, 66-72.
- Yu, G. M. and HongBo, P. (2008), The Relationship between Politics, Institutional Environments and Private Enterprises' Access to Bank Loans, *Management World*, 8,9-21.
- Zhang, Y. & H. Li(2010). Innovation search of new ventures in a technology cluster: the role of ties with service intermediaries. *Strategic Management Journal*, 31(1): 88-109.
- Zheng, W., K. Singh, & W. Mitchell(2015). Buffering and enabling: The impact of interlocking political ties on firm survival and sales growth. *Strategic Management Journal*, 36(11): 1615-1636.
- Zhou, X. L. and ZhiYuan, L. (2010), Comprehensive Evaluation of Customer Relationship Management Capability Based on Catastrophe Theory, *Statistics & Information Forum*, 25(11), 23-27.

Appendix

Sample Questionnaire of English Version

Construction enterprise questionnaire survey

Thank you for taking the time to participate in our survey. The results of this questionnaire are only used for academic research, thank you for your participation and support. We wish you have a nice day!

1.what's the type of ownership of the company you work for?

- State-owned
- Private
- other

2.The age of your company?

- Within 2 years
- 2 years to 5 years
- Old than 5 years

3.What is your business volume? [single answer] [compulsory]

- Below 5 million
- 5-20 million
- Above 20 million

4.What is your net profit rate? [single answer] [compulsory]

- No profit currently
- Below 5%
- 5%-10%
- Above 10%

5.Which stage below does your company belong to ? [single answer] [compulsory]

- Stage of reformation evolution
- Stage of rapid development
- Stage of maturity
- Other _____

6.In what level does your company spend specialized costs on government-relevant activirelationships?
[single answer] [compulsory]

- Much
- Normal
- A little

None

7. How much attention does your company pay to the relationship with governmental departments?

[single answer] [compulsory]

Almost no 1 2 3 4 5 **Very much**

8. How much time do the seniors spend on relationship with governmental departments?

[single answer] [compulsory]

Never 1 2 3 4 5 **Most of time**

9. How much attention does your company pay to the relationships with other companies or cooperative partners?

[single answer] [compulsory]

Almost no 1 2 3 4 5 **Very much**

10. How much time do the seniors spend on relationship with other companies or cooperative partners?

[single answer] [compulsory]

Never 1 2 3 4 5 **Most of time**

11. What is the name of your company? [Fill in the blank]
