



**School of Built Environment**

**Change and continuity: Making sense of marketization in the Chinese  
construction sector**

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## Abstract

Since the announcement of the Open-Door policy in 1978, a plethora of reform initiatives have been introduced into the Chinese construction sector, calling upon the contributors to the construction process to adopt new ways of conducting business. This is especially true for contracting firms. However, the processes by means of which contracting firms organise themselves in response to a rapidly changing operating environment is notably neglected in the existing literature. The current research aims to address this imbalance by adopting a sensemaking perspective. Contracting firms are viewed not as quasi-fixed entities but rather as organising processes through which managers continuously make sense of a changing operating environment. Therefore, the task of organising is seen to be synonymous with sensemaking, which comprises a combination of continuously interactive discursive and material practices. The primary research interest lies in accessing managers' sensemaking processes. Of particular importance are the ways in which managers appropriate the changing environment within which they operate and how this influences their socially constructed roles.

Three case studies of state-owned contracting firms in the Chongqing City region are presented as a means of illustrating the ways in which managers make sense of the ongoing processes of marketization. Diverse voices are accessed through semi-structured interviews and documentary analysis. It is concluded that managers' sensemaking practices take place at the nexus between contracting firms and the broader operating environment. Informed by their past experiences, managers are seen to continuously establish their own personalised mental maps for the purposes of navigating through the changing environment. Managers from the same firm produce diverse, even contradictory, interpretations of the same event as they continuously respond to 'reality in flight'. Chinese managers are seen to selectively mobilise a mixture of market-based terminologies together with remnants of quasi-military terminology for the purposes of legitimizing their actions. Policy initiatives, such as 'bid and tender', 'project management', 'firm', 'government' and 'PPP' are found to be particularly relevant to Chinese managers. It is contended that managers in state-owned firms retain a partial self-identity as 'cadres of the party' while at the same time reluctantly absorbing the notion of being an 'employee'. It has further been demonstrated that construction activities have been subject to an ongoing process of projectification. However, despite the introduction of quasi-contractual relationships between market-based entities, the long tradition of *guanxi* and the dominant role of government are not easy to overcome. It is concluded that the processes of marketization in the Chinese construction sector are continuously shaped and re-shaped by the sensemaking practices of senior managers.

## **Declaration**

I confirm that this is my own work and the use of all material from other sources has been properly and fully acknowledged.

Beibei Qin

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## Abbreviations

BIM: Building Information Modelling

BT: build and transfer

CCIA: China Construction Industry Association

CM: construction management

CPC: Communist Party of China

CQCEGC: Chongqing Construction Engineering Group Corporation Limited

CQMCHURD: Chongqing Municipal Commission of Housing and Urban-Rural Development

MOHURD: Ministry of Housing and Urban-rural Development

NBSC: National Bureau of Statistics of the People's Republic of China

PLA: People's Liberation Army

PPP: Public-Private-Partnership

PRC: People's Republic of China

SASAC: State-owned Asset Supervision and Administration Commission of the State Council of China

SLA: service level agreements

SMEs: small-medium sized enterprises

SOE: state-owned enterprises

SWOT: strengthes, weaknesses, opportunities, threats

TCP: Transaction cost perspective

TFP: total factor productivity

USA: United States of America

WTO: World Trade Organisation

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# **1. Introduction**

## **1.1 Introduction**

The purpose of this chapter is to provide an introduction to the thesis and to explain the adopted structure. Initially, the research context will be described. Particular emphasis is given to the changing policy landscape within which Chinese contracting firms operate. The research is justified with reference to the increasing level of interest in the way firms organise themselves in rapidly changing environments such as that which prevails within China. This is then followed by the formal statement of the research aim and objectives. Thereafter, consideration is given to the adopted research methodology and underlying theoretical position. Finally, the overall structure of the thesis is presented together with a brief overview of each chapter.

## **1.2 Research context**

### **1.2.1 The marketization of the Chinese construction sector**

The People's Republic of China was established in 1949 following the Chinese Civil War. The immediate problem that the new Chinese government faced was how to develop the economy. At the time, the soviet style of economic development was generally perceived as the best example for China to follow. The notion of a 'planned economy' was commonly accepted by the political leadership as the desired direction of travel. The Chinese government at the time saw itself very much as the 'commander' in charge of economic development. The primary means through which economic policies were implemented was the Soviet-style 'five-year plan'. Particular priority was given to 'heavy industry development' specifically targeted at sectors such as steel production. Other industries were positioned as being in support of the strategically important heavy industries. Construction was notably positioned as serving the needs of the heavy industries, without any clear conceptualisation of comprising a 'sector' in their own right. In the early 1950s parts of the People's Liberation Army (PLA) were renamed as 'Engineering Army' with the specific remit of 'undertaking the construction task'. The aim was to better serve the needs of the prioritised heavy industries. Progress was however disrupted by the ill-fated Great Leap Forward in the 1960s and the subsequent political chaos of the Cultural Revolution which extended into the mid-1970s. Following this period of economic stagnation, the Chinese government



once again stood at the crossroads in terms of deciding which road to follow in ensuring the badly needed economic development.

In 1978, Deng Xiaoping, by then the highest leader of Chinese Communist Party, announced the Open-Door policy. The announcement is generally viewed as the point at which China started to buy into the idea of the 'market economy' which had long-since prevailed in western countries such as the USA and UK. It was also the point at which the sense of a defined 'construction sector' was established, rather than seeing it as a secondary activity which served the prioritised heavy industries. Deng (1980) notably argued that the construction sector '*should be a pillar industry of the Chinese economy with the aim of increasing revenue for the state*'. The Chinese construction sector thereafter started to experience continuous reforms aimed at achieving the espoused social market economy. Policy announcements sought the gradual introduction of elements of competition in what had previously been a command-and-control economy. At the same time, a changing cast of actors was introduced in order to fulfil the requirements of a market-based economy. It was at this point that contractors were allocated an increasingly important central role in the development of China's economy.

Successive reforms have since called upon contractors to adopt a variety of new roles, goals and ways of conducting business. Notably, the previous 'engineering armies' were reallocated to specific regions and transformed into state-operated 'contracting enterprises'. Phrases such as 'improving economic effectiveness' and 'energizing contracting firms' started to be used in policy documents. Concepts such as 'output value', 'revenue', 'profit' and 'loss' were also progressively introduced. These were very quickly re-framed as performance targets with significant implications for the expectations placed upon the still emerging concept of 'management'.

In the early 1990s, the announced national strategy of developing a '*socialist market economy*' required contracting firms to become '*independent market entities*'. In consequence, the language of Western management was progressively introduced into Chinese contracting firms. The admission of China to the World Trade Organisation (WTO) in 2001 further reinforced the trend towards a market-based economy coupled with a widespread recognition of the need to adhere to international norms. During the process of responding to the new competitive landscape, the embryonic Chinese contracting firms inevitably experienced a range of problems which demanded government attention. Examples included: debt default, poor health & safety and recurring quality problems. The consistent tendency of government was to blame such problems on illegal market behaviours by contracting firms. Subsequently, the regulation of market behaviours became one the main policy themes. Alongside these developments, it

was common to find policy documents requiring Chinese contracting firms to learn from best practice in the Western construction sector. Particular examples include the ideas of general contracting, Build-Transfer (BT) and most recently Public-Private-Partnership (PPP).

As with all such policy initiatives, however, the impact on contracting firms' practices was by no means straightforward or even consistent. In addition to the changing policy landscape, the Chinese construction sector also witnessed dramatic increases in construction demand. The demands of a rapidly growing economy, coupled with a changing policy landscape, required Chinese contracting firms to operate in ways which were very different from those which had previously prevailed. To explore how Chinese contracting firms organise themselves in response to this rapidly changing landscape is the central aim of this thesis.

### **1.2.2 Recent research: change process and the social turn**

Researchers interested in the transition of the Chinese construction sector have tended in the past to focus more on structural changes or top-down policy initiatives on the sectoral level. There has been a marked lack of interest in understanding how Chinese contracting firms have organised themselves in response a rapidly evolving policy landscape. By the early 2000s the relentless emphasis on the 'social market economy' was beginning to attract researchers' attention to the capabilities of Chinese contracting firms which were necessary if they were to be competitive. A recurring theme was the discourse of 'learning from the West'. Researchers frequently borrowed theories that had been developed in the western construction sector for the purposes prescribing the critical success factors which had to be addressed if Chinese contracting firms were to be successful (cf. Sha, 2004; Lu, 2008; 2009; 2010). Even those who were interested in how Chinese contracting firms should best organise themselves looked for prescriptive recipes. For instance, Sha (2004) sought causal relationships on the basis of Winch's (1989) discussion of the extent to which the structure of Western contracting firms is determined by transaction costs. In the wake of China's admission to the WTO in 2001, researchers such as Lu et al. (2008) and Ye et al. (2010) focused on western competitiveness theories for the purposes of providing improvement recipes for Chinese contracting firms. However, the exclusive focus was on instrumentalist recipes of what contracting firms *should* do, rather than the empirical reality of what contracting firms were *doing* in response to the rapidly changing landscape. The literature on Chinese contracting firms is still almost exclusively dominated by instrumentalist research rooted in a positivist paradigm. Contracting firms are invariably viewed as static entities, or at best entities undergoing defined transitions between static periodic end points. The internal processes through contracting firms

continuously organise themselves in response to the changing environment remains almost entirely neglected.

In contrast to the literature which is specific to China, the more generic literature is informed by a diversity of perspectives which provide more nuanced insights into the interplay between contracting firms and environment within which they operate. Winch (1989; 2001) was one of the earliest researchers to attempt to explain the structure of (British) contracting firms using the transaction cost perspective. However, he argued that contracting firms' pursuit of structural flexibility cannot be explained by the static analysis of transaction costs. Instead, he argued that the structure of contracting firms can only be understood with reference to the evolving institutional structures which govern how they operate. Inspired by Pettigrew (1987), Green et al. (2008b) focused research attention onto the processes through which particular contracting firms organise themselves in response to environment change. It was argued that contracting firms can be better understood in terms of their constituent practices. Processes of change hence constituted in terms of enacted practices. Such an approach accords significant agency to senior managers while recognising that they are constrained in terms of their interactions with other influential actors. Hence the agenda shifts from quasi-static analysis of transaction costs towards a mode of understanding which privileges continuous change over stability.

In recent years, the role of individual managers in the transition process has been increasingly recognized by Western construction researchers, not least in mediating the interplay between firm and environment (cf. Fellows, 2010) Others argue that the field of construction management is experiencing a 'social turn' (Harty and Leiringer, 2017; Sage and Vitry, 2018). Researchers increasingly borrow from the social sciences and the generic management literature to understand the change processes of construction firms. This is accompanied by an increasing diversity of theoretical lens. Examples include discourse analysis (Gottlieb and Jensen, 2016; Schweber, 2013), institutionalism (Bresnen, 2017) and sensemaking (Green, 2011; Fellows and Liu, 2017). A common argument is that the complex changing process of the construction sector cannot be understood in isolation of the day-to-day practices of practitioners. In contrast to the mainstream literature on Chinese contracting firms, the current research follows the example of the above-named researchers in emphasizing the active role of practising managers. The key theoretical contribution rests on the adoption of a sensemaking perspective as the means of understanding how organising process is enacted on a day-to-day basis.

### 1.3 Aim and objectives

The stated aim of the research is to explore how Chinese contracting firms organise themselves in response to the changing environment within which they operate. Organisations such as contracting firms are viewed as essentially comprising continuously unfolding processes of organising (cf. Langley et al., 2013). Informed by sense-making theory, the emphasis lies on the continuous processes through which organisational members create meanings of events and take actions in response to the changing environment within which they operate. In other words, sensemaking is held to be synonymous with the micro processes of organising (Weick, et al, 2005). It follows that the day-to-day sensemaking practices of senior managers within the targeted firms serve as a direct proxy for the micro-processes of organising. More specifically, sensemaking focuses attention on the way managers continuously ascribe themselves with different roles as they seek to appropriate and enact the environment within which they operate. Particular emphasis is placed on the cues they extract from the environment as these are used retrospectively to produce plausible accounts for the purposes of initiating action (Weick et al., 2005). It is further argued that such ongoing processes of sensemaking are embedded within and hence inseparable from managers' material and discursive practices (Nicolini, 2012). In order to legitimize their action, managers often selectively mobilise macro discourses such as policy discourses (Abolafia, 2012). It is hence through such sensemaking practices that contracting firms respond to the changing environment within which they operate.

Following on from the above, the research objectives are as follows:

- 1) To establish how managers within contracting firms interpret the environment within which they operate;
- 2) To explore the lexicon of terms mobilised by managers within Chinese contracting firms in describing the challenges which they face;
- 3) To understand the diverse range of organisational responses by Chinese contracting firms to the unfolding processes of marketization;
- 4) To investigate the roles which managers ascribe to themselves in the continuous process of organising;
- 5) To ascertain the extent to which policy initiatives shape the day-to-day practices of practising managers in Chinese contracting firms.

Informed by a sensemaking perspective, the research focus is on practitioners' accounts of events. In this respect it provides a badly needed counterbalance to the dominant approach to researching Chinese contracting firms on the basis of supposed causal relationships between factors. The contribution to knowledge lies in the insights provided into the day-to-day challenges experienced by practising managers. The seven properties of sensemaking provided by Weick (1995) are operationalized to direct the researcher's attention to the micro processes of organising. In order to provide insights into micro-level sensemaking processes a case study approach is adopted. As Flyvbjerg (2006, p. 235) argues, *'the advantage of the case study is that it can 'close in' on real-life situations and test views directly in relations to phenomena as they unfold in practice'*. Three state-owned contracting firms in the Chongqing City region were selected as appropriate case studies. Each case study relies on multiple sources of data including semi-structured interviews and analysis of official documentary sources.

#### **1.4 Key theoretical principles**

**Becoming:** This research adopts Chia's (1995) argument that people, organisation and society are processes of becoming, rather than static entities. Change is viewed as the normal status of people, organisations and society in this research. Therefore, this research refuses to view Chinese contracting firms as static entities as is so common in the mainstream literature. Instead, an organisation such as a contracting firm is viewed as an organising process. Hence the ways in which organisational members continuously act and interact are seen as an inherent part of the marketization process of the Chinese construction sector.

**Individuals:** Adopting the becoming ontology, the current research highlights the role of individuals in the organising process, which has been consistently neglected in the mainstream literature on Chinese contracting firms. Individuals are argued to play an active role in the becoming process of contracting firms and the construction sector. People have values and desired outcomes which they strive to achieve. In other words, individuals are not viewed as rational agents that instrumentally follow pre-determined goals but as subjective individuals who continuously (re)produce their own realities. Recognizing the role of individuals, the emergent practices are not viewed as 'problems', but as an inherent part of reality construction. Thus, it is important to understand the continuous interplay between individuals within contracting firms and the construction sector within which they operate.

**Sensemaking:** The adopted sensemaking perspective views the organising process in terms of how individuals create meaning of events and the way in which these meanings inform subsequent actions

(Weick et al., 2005). Sensemaking theory portrays the operating environment as equivocal and ambiguous, in which organisational members ask questions of 'what happened here' and 'what should I do'. The former question brings events into existence through the creation of meaning, while the second question materializes the constructed meaning into actions. Hence the organising process is comprised of organisational members' sensemaking practices.

**Subjectivity:** There are multiple meanings of 'subjectivity' in this research. First of all, this research highlights that people create meanings of their own actions. The research aims to reflect and understand people's interpretations of their actions. Secondly, practitioners' interpretations are not viewed as objective facts which are value free. Instead, practitioners' interpretations are accepted as subjective and actively involved in the social construction of meaning. The research aims to reflect the diversity of subjective meanings as continuously constructed by practitioners. Thirdly, the researcher accepts that she herself is not objective or value free, but influenced by past experience and the adopted theoretical position.

**Weak social constructionism:** As discussed in the preceding paragraph, the research aims to highlight the subjective realities constructed by individuals. But it needs to be made clear that the existence of external material facts is not be denied. Organisational members' sensemaking processes are seen to be embedded in material facts, artefacts and practices. Material realities recursively influence organisational members' interpretations and shape the options for action (Nicolini, 2013). Therefore, the current research highlights practitioners' social constructed realities, while also admitted the importance of material practices. Such an informed research philosophy is often labelled as 'weak social constructionism' (Goldman, 1999).

**Language:** The adopted sense making perspective highlights the centrality of language. The core of sense making lies in communication. Circumstances are talked into existence, which is the basis on which actions are initiated. Therefore, language is not only important for the purposes of sharing information sharing, but it is also the medium through which reality is created. Hence terminologies and stories are important parts of reality which deserve more understanding. The meanings of terminologies are further seen to be social constructed by individuals in interaction with others. Therefore, the interviewed managers' original Chinese terminologies are presented as an important part of the marketization of the Chinese construction sector. This also provides opportunities for Chinese-speaking readers to avoid any misunderstandings caused by the adopted translation, but also to develop their own interpretations.

## 1.5 Structure and summary

This section will present the structure of the thesis. The contribution of each chapter in turn is described, including key aims and arguments.

**Chapter two** describes the transition of the Chinese construction sector from the planned economy of the 1970s towards the espoused 'social market' of the modern era. Particular attention is given to the policy discourses provided by the Chinese government calling for various marketization reforms. The aim is to portray the changing policy landscape of the construction sector over the last seven decades. The analysis includes a review of the different roles, goals and recommended management techniques described in key policy documents. The discussion is used to justify the key empirical research question of how Chinese contracting firms organise themselves in response to the changing policy landscape.

**Chapter three** reviews the existing academic literature with a view to understanding the interplay between contracting firms and the boarder context within which they operate. The literature review extends beyond sources which are specific to Chinese contracting firms to those which relate to generic arguments about the way construction activities are organised. A diverse range of perspectives is reviewed and analysed with particular attention to the underlying assumptions. It is argued that the sensemaking perspective provides the most compelling account of the way in which contracting firms organise themselves. On this basis, the empirical question is reframed in terms of how Chinese managers make sense of the changing environment within which they operate. Hence managers' accounts of events become both research object and raw material.

**Chapter four** presents and justifies the adopted methodology as a means of answering the stated research questions. It starts by clarifying the research philosophy which is embodied in the adopted sensemaking perspective. The current research will be distinguished from the existing mainstream literature on contracting firms on the basis of the type of knowledge which is generated. This will be followed by a discussion of how sensemaking theory is operationalized in order to provide insights into the organising process in Chinese contracting firms. Thereafter, previous studies in the construction management field that have mobilised a sensemaking perspective are reviewed. A multiple case study approach is argued to be suitable for the purposes of providing rich insights into the micro-level sensemaking processes of practising managers. The strategy of case selection and research techniques for data collection in each case is also provided. The chapter is concluded by a reflexive consideration of

the adopted analytical process of iterating between theory and data. Finally, issues of research ethics are discussed, and the overall validity of the adopted approach is justified.

**Chapters five, six and seven** present the three selected case studies. Each chapter is structured according to six identified themes. These six themes are (i) 'organising for the market', (ii) 'competition', (iii) 'bid and tender', (iv) 'management structure', (v) 'project management' and (vi) 'roles of the state'. Emphasis is given to the expressed views of the managers who were interviewed. Multiple voices are deliberately preserved for the purposes of providing different insights into the dynamics of the organising process. The seven properties of individuals' sensemaking are mobilised as analytical lenses for the purpose of understanding how the interviewed managers actively create meaning.

**Chapter eight** discusses the emergent issues from the three studied cases. The discussion is based on cross-case comparison with appropriate references to the previously cited literature. It commences with a discussion of the common features observed from three studied cases. This is followed by a discussion of the lexicon of terms from which managers draw their discursive resources. The discussion progresses to a discussion of contracting firms' different responses to policy initiatives, thereby challenging the prevailing assumption in the China-specific literature that policy initiatives are implemented in homogeneous way. It will be argued that policy initiatives are better viewed as the initiators of complex and unpredictable processes of change which play out over time. Particular attention is given to managers' interpretations of particular concepts introduced by policy initiatives. Examples includes: 'bid and tender', 'project management', 'firm', 'government', 'PPP' and 'competitiveness'. The ascribed meanings of these terms are further compared across cases and with reference to the academic literature. It will be argued that meanings of such discursive resources are socially constructed through practitioners' enactment.

**The conclusion chapter** provides an overall summary of the thesis and addresses the extent to which the stated research aim and objectives have been achieved. Particular attention is given to the contribution to knowledge, followed by a reflection on the research limitations. Finally, recommendations are made for future research directions.



## 2. Change and Transition in the Chinese Construction Sector: The Policy Context

### 2.1 Introduction

Since the foundation of the People's Republic of China (PRC) in October 1949, the Chinese construction sector has undergone a series of significant transitions. The announcement of the open-door strategy by the Chinese government in 1978 is widely viewed as a turning point from a planned towards a market economy. Since then, China has generally experienced unprecedented levels of economic growth in tandem with rapid urbanization. It is within this context that China's central government has issued a series of policies relating to the construction sector that have affected both contractors and professional services. The purpose of this chapter is to describe the ongoing transition of the Chinese construction sector from the 'command and control' economy of the 1970s towards the espoused social market. The transition could be meaningfully described as a process of marketization although there is little expectation that this plays out as a linear and predictable process.

The chapter begins by presenting an analysis of a series of policy documents related to China's construction sector that were issued by the Chinese central government beginning in the 1950s. Attention is initially given to the period between the 1950s through the late 1970s, labelled as 'Soviet-style construction'. The chapter then outlines a second policy period during the 1980s that is described as 'energizing contractors' in the Chinese construction sector economy before moving on to illustrating the changing policy domain of the 1990s which is labelled as 'Social market economy fitness.' The fourth and final policy period described in this chapter concerns 2000 to the present, which many have designated as the 'regulation of market behaviour.'

The four periods described above have often been delineated by discrete policy announcements. However, the transitions from one to the next have been gradual rather than abrupt. As a result, the final section of this chapter discusses the goals, expectations and managerial techniques stipulated in policy documents for the construction sector and contracting firms, and argues that the different forms of language that were mobilized during each period are significant in themselves. Given any possible distortions of translation, the Chinese interpretation of key concepts will be maintained to allow readers to make their own judgments regarding the accuracy of the translation.

Each section concludes with a review of the primary descriptive statistical data relating to the Chinese construction sector for each period, respectively. These data were sourced from the People's Republic of China's National Bureau of Statistics of the (NBSC). Hence, it is understood that the data may well be biased towards confirming the success of the mandated Chinese policies. In contrast to equivalent agencies in the West, the NBSC is not committed to produce data that are independent of government policies. However, even independently produced UK construction sector statistics cannot necessarily be accepted as representative of reality. Therefore, for the purposes of this research, such statistics can provide insight into structural transitions of the Chinese construction sector as a consequence of practitioner response to marketization. However, the question of what happened on the ground cannot be accessed through statistics alone. In fact, how Chinese contracting firms organise themselves to compete in the rapidly changing Chinese construction landscape is the central question of this research.

## **2.2 Soviet-style construction from the 1950s to the 1970s**

After the foundation of the PRC, the priorities of the Chinese government shifted away from securing victory in the civil war towards 'healing the wounds of war' (Mao, 1949a), primarily by focusing on economic growth, cultural development and national defence. The soldiers of the People's Liberation Army (PLA) were hence required to 'join the production work' (Mao, 1949a). Notably, Mao visited the Soviet Union in 1950 with the explicit purpose of understanding how Soviet factories and farms were organised. During this time, Mao stated that 'the Soviet Union is our best teacher; we have to learn from them,' (Mao 1949b). The era of learning from the Soviet model had begun.

At the time, the Soviet Union was perceived as an exemplar of a communist state. Hence, the Chinese government began to draw from the Soviet and similar discourses that concerned heavy industrial development. In 1954 and 1958, the Soviet Union and China signed technical assistance agreements, in which the Soviet Union agreed to assist China with a series of major scientific and technological research projects (Li and Mikoyan, 1954, Guo and Mazarev, 1958). Thereafter, China's first five-year plan was developed and approved by the First National People's Congress in 1959. The very practice of issuing five-year plans was learned from the Soviet Union. Soviet experts advised China on how to develop this plan, including on investment allocations and production targets for different departments, methods to realize these targets and ways to manage factories. As heavy industries such as steel, coal, electricity and manufacturing held the highest priority in this economic development process, these sectors alone accounted for 58.2% of investment in the first plan. Other activities, such as developing the Chinese

construction industry, were positioned in roles that served these industrial production sectors. In August 1952, the Chinese government created the Ministry of Construction Engineering, its first administrative ministry established to perform industrial construction tasks (*Jianzhu Gongcheng Bu*, 建筑工程部). The Chinese government clearly saw itself in the role of ‘general commander’ of economic development, a status that remains largely in place in current China.

### **2.2.1 Building installation organisations to ‘finish construction tasks’**

At this time, Chinese construction activities were viewed specifically as service operations in support of ‘the required measures to realize the industrial development plan’ (National People's Congress, 1955, p. 5). As a result, the concept of the Chinese ‘construction sector’ as a unit of economic activity was not yet established. Rather, the government took direct control of key resources such as capital, material, equipment and labour in order to complete the construction tasks necessary to realise industrial production (生产单位, *shengchan danwei*). Hence, China formed its ‘Engineering Army’ (工程兵, *gongchengbing*) comprised of divisions of the People’s Liberation Army (PLA) populated almost entirely with military personnel, the vast majority of whom were conscripted from rural areas. In effect, the Engineering Army served as a building installation organisation that completed construction tasks directly allocated by several of China’s central government ministries. According to the People's Revolutionary Military Committee and Governmental Administration Council (1952), 41 divisions and 11 corps from the PLA were reallocated to these ministries, for a total of 465,000 soldiers (excluding the 150,000 soldiers in Xinjian). These divisions were then renamed according to the types of construction projects to which they were assigned. For example, a division that was tasked with railway construction was renamed as ‘the x Division of the PLA for Railway Engineering,’ a division that was assigned to construct hydraulic projects was likewise renamed as ‘the x Division of the PLA for Hydraulic Engineering,’ and so on. Hence, the Engineering Army was primarily peasant conscripts who worked under the direction of a cadre of politically-trained officers. Military discipline was tight, and little leeway was given in the way in which orders were implemented.

The above-described ‘building installation organisations’ were required to ‘learn the advanced experience of industry construction from the Soviet Union’ (National People's Congress, 1955, p. 5). One policy, the Decision on Strengthening and Developing the Building Industrial Sector (State Council, 1956) identified a number of techniques to assist various building installation organisations with the aim of improving their ‘technology, organisation, and management.’ The main mechanisms recommended included industrialization (工业化); duration (工期定额) and budget quotas (预算定额); mixed labour

teams (混合工作队); piece-wage systems (计件工资) and welfare-like schools. These terms are explained below.

Planned heavy industry projects such as metallurgical factories were commonly large-scale and were located in designated cities. For example, cities such as Anshan Shi, Jilin City, Fushun City and Shanghai had existing factories that produced steel, coal or electricity (National People's Congress, 1955). As a matter of policy, industrial projects were clustered together in assigned cities or districts that were then designated as 'construction bases' (建筑基地). In these construction bases, manufacturing plants were established to produce prefabricated parts for factory buildings. In terms of this process, industrialization was defined in terms of the ambition to 'use more concrete and prefabricated parts for the purposes of minimizing construction time and saving construction material' (National People's Congress, 1955, p. 5). Further, in this sense, the term 'industrialization' conveyed a sense that construction activities should be organised in a similar way to the manufacturing industry, with fixed factories and roles allocated by China's State Council and its relevant ministries.

The term 'mixed-labour teams' referred to all specialist building installation organisations that were required to work in the same construction base. The relationship between these specialist organisations was interestingly labelled as 'subcontracting' (分包), an entirely nominal designation given that all construction tasks were allocated by government departments. The terms 'duration quota' and 'budget quota' referred to productivity standards based on time and resources per unit of construction workload. The Chinese government developed and promoted these standards to ensure that national plans for constructing industrial projects could be supported through 'accurate' calculations. The term 'piece-rate wage system' referred to a payment regime whereby workers could get paid in accordance with their productivity. Such systems can be linked back to Taylorism, which remained popular in the West until the 1950s. The recommendation of management techniques derived from Taylorism implies that construction activities were to be treated in a similar way to types of manufacturing. It is also worth noting that scientific management was similarly popular in Stalin's Soviet Union (Liu, 2018). Finally, in order to improve worker productivity, the State Council (1956) committed to the provision of welfare facilities such as schools, nurseries, hospitals and colleges.

During this period, the title of 'contractor' had not yet been established, and while the phrase 'construction firm' occasionally appears in the policy documentation, it tended to be used to refer to building installation organisations with names such as 'x Division of the Engineering Army'. Moreover, the role of management in building installation organisations was so vague that descriptions of what

managers were responsible for cannot be found in the available documentation. However, it can be assumed that military chains of command were still dominant within these building installation organisations. Further, around this time the title of ‘official commander’ shifted from the Chinese Military Committee to the State Council and individual ministries became responsible for various ‘heavy industry’ sectors. For example, the former Ministry of Railways was put in charge of railway construction and the former Ministry of Metallurgy then construct and ran metal processing and manufacturing factories. However, there is a notable absence of literature sources which shed light on if and how these changes influenced the pre-existing military style of command and control.

China’s first five-year plan was commonly reported to be success. In his report on the second five-year plan, Zhou Enlai (1956), China’s premier in the mid-1950s, asserted that nearly all of the measures stipulated in the first plan were realized, and some targets were even reported to have been exceeded. Figure 2.1 indicates the scale of construction during this period. The gross output of the Chinese construction sector in 1956 was 14.6 billion yuan, which increased approximately 70% between then and 1959.

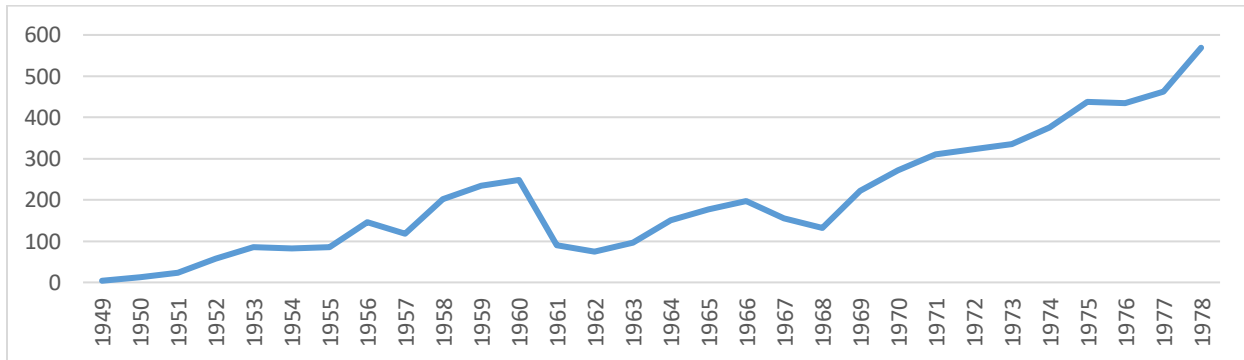


Figure 2.1: Gross output of the Chinese construction sector, 1949-1978. Unit: 100 million yuan

Source: Chinese Statistical Yearbook, 1984

### 2.2.2 Chaos in the 1960s and 1970s

After the encouraging success of its first five-year plan (Liu, 2018) the targets the Chinese government set out in its second five-year plan (1958-1962) reflected a growing degree of confidence among policy makers. This period, commonly known as the ‘Great Leap Forward’ (大跃进), saw the proliferation of pro-China slogans such as ‘to exceed America and Britain in 10 years’ (十年赶超英美) and ‘how brave people are, how much we can produce’ (人有多大胆，地有多大产). However, the second five-year plan was subsequently deemed to have been ‘too ambitious’ and even to have ‘defied the laws of

science' (Liu, 2018). Certainly, the targets of the second plan were seen to have exceeded available production capability. Hence, the 'Great Leap Forward' was not such a large leap forward after all, and the subsequent failure of the second five-year plan marked a setback for China's economic development. The corresponding slump in construction between 1960-62 can be seen in Figure 2.1. It wasn't until 1970 that construction sector output was returned to 1960 levels.

Following the failure of the second five-year plan, significant debate ensued regarding the main aims of the third five-year plan (i.e. 1966-1970). At the time, some policy makers maintained that priority should be given to solving challenges of food and clothing production. However, Chairman Mao insisted on a renewed focus on war preparation and the construction of military infrastructure. The prevailing geopolitical climate during this period was characterised by stark tensions not only between China and the Soviet Union but also between China and the United States of America (USA) and, to a lesser extent, India. Consequently, according to the Communist Party of China's official website (CPC) (2018) this resulted in the 1964 announcement of a new strategy called 'Three Line Construction' (三线建设).

The 'Three-Line Construction' strategy referred to the construction of industrial factories for weapons production in three so-called 'line areas'. These line areas consisted of three collections of provinces and cities grouped according to geographical location. The first line area comprised strategic areas, such as provinces that border of Soviet Union and India, which had large numbers of industrial factories and long coastlines. The third line area comprised mountainous regions in western China, such as Sichuan, Guizhou, Yunnan, Shanxi, Gansu, Ningxia and Qinghai, as policy makers perceived the geography of western China as suitable for hiding military industrial factories from foreign attacks. The second line area referred to the region between the first and the third line areas. Informed by this strategy, many building construction organisations were deployed to these outlying provinces to construct factories for weapons and metallurgical production.

In 1966, China's Chairman Mao began the Cultural Revolution. The accompanying policy announcements shifted the country's focus away from economic development and toward 'class struggle'. During this time, normal economic activities were severely disrupted and many factories were closed. In the records of many contracting firms it was common to find descriptions stating that many companies were crippled. Moreover, almost all industrial leaders were criticized and denounced, all management rules were abolished, and construction activities generally descended into anarchy. These descriptions provide a sense of the effect the Cultural Revolution wrought on still embryonic Chinese construction

companies. The prevailing sense of political chaos and disruption didn't stop until the Gang of Four were removed from power in October 1976.

However, according to data provided by the NBSC, the Chinese construction sector's rate of gross output grew during this period. As Figure 2.1 shows, the gross output of the Chinese construction sector increased from 400 million yuan in 1949 to 5.69 billion yuan in 1978. Of course, official statistical data must always be treated with caution, as doubts about the reliability of these data are far from rare and are by no means limited to China. However, China's NBSC Director from 1981 to 1984, Li Chengrui, described how economic data for this period were obtained. According to Li (1984), while data collection at the national level was suspended from 1967-1969, it continued for sectors such as the Chinese national bank. Li (1984) further argued that statisticians in some local governments continued their work during these years. At any rate, in 1970 national economic data for this period was subsequently recovered due to the inclusion of data for sectors such as banking, railway, transportation, commercial and international trade. Li (1984) argued that these data are relatively reliable, and MacFarquhar and Fairbank (1987) agreed, as they are congruent with certain events that followed. Further, the increasing value of gross output that the data show during these years is likely, as many leaders and workers continued working during this time.

Thus, the long-term legacy of the Cultural Revolution lies in the resultant unbalanced economic structure that dominated during this period. The Great Leap Forward and the Cultural Revolution that followed can be viewed as marking the end of the Chinese policy of learning from Soviet Union. The chaos caused by the Cultural Revolution destabilised the legitimacy of Soviet-style policies in China and prepared the ground for the transition to its subsequent Open-Door strategy.

### **2.3 Energising contractors in the Chinese construction sector in the 1980s**

In 1978, the Third Plenary Session of the 11<sup>th</sup> Central Committee of the Communist Party of China marked a departure from the previous rhetorical emphasis given to the Marxist notion of 'class struggle.' The national strategy of 'Open Door' shifted to one of 'economic development'. This period marked intense discussion on how best to organise Chinese economic activities and whether the nation should continue Soviet-style policies or learn from those of the West. After the failure of the quasi-great leap forward from 1976-1978, attention moved toward economic development discourses in western countries such as the UK and the US. This shift can be observed in several of Deng Xiaoping's speeches about construction activities. Deng was China's deputy-premier until 1978 and was confirmed as its

state leader that same year by the 11<sup>th</sup> Central Committee of the Communist Party. Deng is widely viewed as ‘the chief designer of [China’s] reform and opening-up’ (改革开放的总设计师):

*‘In many capitalist countries, the construction industry is one of the three pillars of the economy; this is not unreasonable. We didn’t value the construction industry before, and viewed construction activities as accessory to heavy industrial projects. Residential buildings are of course important to people’s lives. But they can also be an important industry that promotes production and increases incomes. We need to change our belief that construction activities are money-losing; instead, they are money-making and can increase revenue for the state. Otherwise, this can’t explain why capitalist countries view it as an important pillar of their economy’.* (Deng, 1980, p.3)

In this paragraph, ‘capitalist countries’ refers to the western nations such as the US and UK. At this time, the logic of ‘learning from western countries’ was formally announced and became widely accepted by Chinese policy makers in their economic reform policies. Following this logic, construction activities began to be framed in terms of sectors. However, the purpose of this shift was also to ‘increase revenue for the state’, thereby it remained a reflection of Soviet-style of thinking. The reform agendas that followed, including those within the construction industry, were characterized by a process of introducing market mechanisms and readjusting the level of centralised planning.

### **2.3.1 Construction enterprises as ‘economy entities’**

To realize this new level of desired ‘economic effectiveness’ (jingji xiaoyi, 经济效益), construction firms, previously known as ‘building installation organisations’, were assigned different roles and renamed ‘engineering contracting firms’ (工程承包公司). According to China’s Provisional Regulations on Reform of the Management of the Construction Sector and Basic Construction (The State Council of the People’s Republic of China., 1984), ‘engineering contracting firms’, ‘construction banks’, ‘designers’ and ‘suppliers’ were listed as the main types of actors in this reconfigured construction sector. Among these actors, engineering contracting firms were given a central role. As discussed above, while these firms had previously been quasi-military, in 1982 titles such as ‘x Division of Engineering Army’ were withdrawn and firms were re-designated as state-owned construction enterprises. Some firms were allocated to specific cities or provinces, while others were allocated to government ministries. Moreover, soldiers were re-designated as construction workers The State Council of the People’s Republic of China & The Military Commission of the Central Committee of the Communist Party of



China, 1982). It should be noted that engineering contracting firms have never been firms in the western sense, as they have always been owned by either China's national or local governments.

In 1980, China introduced the notion of competition with the aim of 'energizing' (搞活, *gaohuo*) the engineering contracting firms and increasing its economic performance. At this time, phrases such as 'output value', 'revenue', 'profit' and 'loss' began to be commonly discussed and became important indicators of success for these policy initiatives. According to China's National Construction Committee et al. (1980), state-operated construction enterprises were given broader operational autonomy, although doubts remain regarding the extent to which these changes translated into practice. However, it is important to note that for the first time, state-operated construction enterprises were allowed to independently enter into contracts, on the condition that 'allocated tasks are finished'. Contracting firms even began to be allowed to keep some of their profits. In addition, bidding and tendering practices were recommended, thus introducing the first elements of market competition.

Beginning in the 1980s, Chinese contracting firms also began to be portrayed as 'economic entities,' which meant they were required to practice independent accounting and take responsibility for their finances (The State Council of the People's Republic of China., 1984). Thereafter, the question of how to motivate state-owned enterprises, including construction enterprises, became a main perennial concern. In addition, the concept of a 'contract responsibility system' (chengbao jingying zerenzhi, 承包经营责任制) was promoted for all state-owned enterprises. This policy was informed by the increased grain yields that resulted from the 'family-contract responsibility system' (jiating lianchan chengbaozhi, 家庭联产承包制) in Chinese land reform policies in 1978.

Under this new system, managers were required to sign contracts with their local industrial administrative departments regarding management indicators such as profits. However, frequently these policies were announced only to be subsequently suspended before being reintroduced (Du, 1987). One acknowledged challenge with this system concerned the distribution of profits between the central government and enterprises (Wang, 2005). Concepts such as statutory profits, fixed profit rates and income taxes were promoted in various policy documents aimed at regulating the ways that profits should be distributed. However, while these concepts often changed, there was a general 'lacking of codification and routinization' in the process (Child, 1996). At the same time, western researchers (cf. North, 1990) viewed codification and routinization as essential to market function.

In the face of these ambiguities, many Chinese managers were understandably reluctant to engage in these initiatives (Du, 1987). In the case of China's Jilin Province, Du (1987) found that various motivation strategies were adopted by state-owned contracting firms, such as setting profit goals, returning some or all profits back to the enterprises or linking profit performance to the salaries of both managers and staff. However, the contract responsibility system by no means translated directly to a reduction in government interference. In fact, Du (1987) argued that the significance of the contract responsibility system was in the way it changed the pattern of government interference. Ultimately, the industrial administrative departments retained responsibility for decision making even if they were less likely to intervene on a daily basis.

After 1978, diverse types of construction enterprises emerged in China. According to the NSBC (2016), the number of Chinese state-operated and collective-owned engineering contracting firms increased from 6,604 in 1980 to 13,327 in 1990 (see Figure 2.2 below). In addition, China's 'rural construction teams' (nongcun jianzhu duiwu, 农村施工队), which were mainly comprised of peasant collectives to support agricultural production, numbered 80,400 in 1984 with 6.83 million workers (Fu, 1984). Also in 1984, the Chinese State Council officially recognized the status of privately-owned firms for the first time since 1956, when the private sector was eliminated. At the time, as public perception of the phrase 'private ownership' was closely related with the term 'capitalism,' the notion of 'private ownership' was not without controversy. In fact, many Party members argued that the very existence of private firms directly contradicted the Marxist conception of socialism, while others feared that state-owned firms would become less competitive than private ones (Ahlstrom and Bruton, 2001). On the other side of the argument, many expressed concern regarding the weak legal protection provided for private firms, as markets are ultimately dependent upon the status of firms as independent legal entities. Ahlstrom and Bruton (2001) described this environment as being 'hostile' to privately-owned firms, which might explain why many rural construction teams were registered as 'collective-owned contracting firms.' In fact, statistical data on privately-owned contracting firms was not provided until 1995 in China's Statistical Yearbook. From then on, different ownership structures of engineering contracting firms in the Chinese construction sector experienced continuous transition.

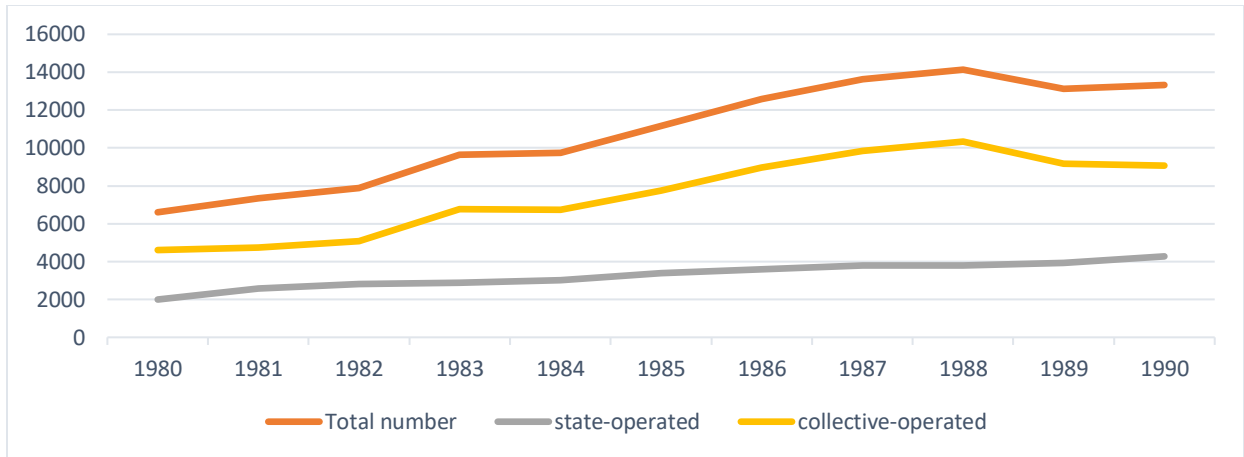


Figure 2.2: Chinese construction enterprises from 1980 to 1990

Source: National Bureau of Statistics of China (2016)

### 2.3.2 'Project way construction' (xiangmufa shigong, 项目法施工)

In the late 1980s, the 'project way construction' initiative (项目法施工) was recommended for the purposes of improving the operational efficiency of construction enterprises (Ministry of Construction, 1991). This policy was seemingly informed by the success of the Lubuge hydropower station project in Yunnan, China, part of which was completed by a management team from a Japanese contractor who were placed in charge of a local Chinese labour force. As the Japanese management team shortened the project's construction period and reduced its construction cost, its management force was thus widely perceived to be more effective than its Chinese counterparts on the same project (Ministry of Finance of China, 1992). After noting the Japanese team's success on the project, the Chinese State Council directed five Chinese ministries to 'learn from Lubuge.' These five ministries and a few state-owned contracting firms began the discussion on how best to organise and manage construction activities. This is widely remembered as 'Lubuge shock' (Wang and Huang, 2006; Yang, 1987). The Lubuge case was interpreted by those involved as evidence to support 'project way construction' and 'management and labour-level separation' (管理层与劳务层分离). Here, the distinction between the 'management' and the 'labour' level can be equated to that of the 'general contractor' and 'labour-only contractor.' Qualification business licenses were introduced to separate the 'management level [i.e. the general contractor]' and the 'labour level' [i.e. the labour-only contractor] (Ministry of Construction, 1989). In

addition, construction labour bases in Chinese counties<sup>1</sup> were introduced to act as governmental construction labour agencies that supplied labour-only contractors to urban general contractors (Ministry of Construction, 1992). This policy was embedded in the context of the prevailing *hukou* system, which categorizes citizens into urban and rural categories for the purposes of restraining migration. At the time, migration of rural labourers to urban areas was only allowed under the condition that urban work units and rural administrative units, such as towns and counties, reached labour usage agreements (Chan and Zhang, 1999). These construction labour bases were designed to be a legal channel that enabled rural labours to obtain permission to temporarily work on urban construction sites.

China's 'project way construction' policy also served to emphasise that construction is delivered through projects, which it implied should be the central focus of Chinese construction enterprises. From this point onward, terms such as 'construction site,' 'project,' and 'project manager' began to enter the lexicon of the Chinese construction sector (e.g., Mayo and Liu, 1995; Lam and Chen, 2004). Zhang Qinglin, the director of the Construction Management Department in the Ministry of Construction from 1984 to 1993, was the main official proponent in promoting 'project way construction.' According to Zhang (1992, p.2), the meaning of the project way construction policy was grounded in 'the adoption of the project as the essential unit of production of contracting firms, thereby creating an inner market of labour, material, equipment, capital and technology.' Hence, this can be seen as a further attempt to break away from Soviet-style resource allocation policies and a move toward market-based mechanisms of resource allocation. Moreover, the new policy highlighted the role of 'project manager' and therefore reinforced the emerging recognition of professional management. Zhang (1992) further recommended two additional practices, the 'project manager responsibility system' and 'project independent calculation' (i.e. accounting). It was also suggested that 'responsibility contracts' (责任承包) should be signed between the firms and project managers. These contracts might perhaps best be understood as service level agreements (SLAs). In 1996, China's Ministry of Construction introduced the term 'project management' as the preferred means of managing construction projects. At the time, the Ministry explained that this would involve the creation of 'temporary project management departments' to

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<sup>1</sup> There are five levels of administrative districts in China, from highest to lowest: province, city, county, town and village. Counties are viewed as the connection between rural area and urban area, which is why county offices were designed to recruit construction laborers and to supply general contractors to urban area.

manage projects. However, there is very little information available on how these new project management practices were implemented.

### **2.3.3 An emerging sense of ‘employment’**

During this period, the roles of managers and soldiers who worked in engineering construction firms were transformed. In terms of enterprise management, the Chinese government introduced a ‘system of overall responsibility by factory managers’ (厂长负责制) as a way to encourage ‘factory managers’ (厂长) to take responsibility of their factory or enterprise. Moreover, this policy could also be seen as an attempt to separate state-owned contracting firms from their industrial administrative departments. However, according to China’s National Plan Committee and Ministry of Urban-Rural Construction and Environmental Protection (1984), factory managers should be appointed by the industrial administrative department. The ‘factory managers’ were expected to not only take responsibility of their firms but also to ‘follow the state’s new policies.’ As above, such arrangements reflected the government’s reluctance to give full autonomy to state-owned firms. However, Child (1996) observed that over time an increasing emphasis of managers on economic targets began to triumph over the vaguely-defined ideological goals of Party organisations and secretaries.

At this time, China’s Provisional Regulation on State-Operated Construction Enterprises’ Operational Rights Expansion (National Construction Committee et al., 1980) adopted the terms ‘fixed labour’ (固定工) and ‘temporary labour’ (临时工). In addition, its use of the term ‘hire’ indicated a new relationship between labour and construction enterprises. This reflected a marked departure from attempts to challenge the existing norm of lifelong tenure, widely referred to as the ‘iron rice bowl’ (*tie fanwan*, 铁饭碗). Such destabilization prepared the ground for subsequent layoffs in the 1990s, which are discussed in the following section. On this point, the desire to motivate labourers was one main policy theme, and the state also recommended that contracts should be signed between managers and individual labourers. One example of this practice would be the policy of ‘fixed salary percentage of per-yuan production value’ (百元产值工资含量包干), which meant that a fixed proportion of firm income based on production value should be earmarked in order to motivate the workforce (The State Council of the People’s Republic of China., 1984). However, the implementation of all of these policy initiatives was not linear and were subject to much resistance, reinterpretation and sometimes backwards.

## 2.4 Socialist market economy fitness in the 1990s

In 1991, the Soviet Union collapsed into a series of quasi-independent republics, of which the Russian Federation was by far the largest and most powerful. The collapse of the Soviet Union was undoubtedly a shock to Chinese leaders, and this, combined with various domestic challenges at the time, was sufficient to raise questions regarding the continuation of China's Open-Door policy. In response, in January 1992 Deng Xiaoping visited several cities in southern China, including Shenzhen, Zhuhai, Shunde and Shanghai. This event was widely known as 'Deng's southern tour' and is broadly viewed as the confirmation of China's strategy of further opening up its markets. In 1992, the State Council of the People's Republic of China. (1992) announced the national strategy of building 'the socialist market economy' (社会主义市场经济). According to the Chinese State Council (1993: 1), the socialist market economy is 'a system in which, under the state's macro-control, the market works as the main way to allocate resources.' It is worth noting that this market system very specifically, and paradoxically, began under state control. Of particular interest is the emphasis the government gave to the role of contracting firms in the market, including not only state-operated and collectively-operated firms, but also private and foreign-based firms that were allowed to operate in China since the late 1980s. This was the first time the government had explicitly stated its intent to delegate more power to market forces.

### 2.4.1 State-owned contracting firms as 'independent business entities' in the market

It is clear from the policy discourse discussed above that Chinese contractors, including state-operated and collective-operated ones, were increasingly expected to behave as independent business entities in the marketplace. On this point, China's main policy mechanism was the creation of a 'modern enterprise system' (现代企业制度), and slogans such as 'clarity of property rights' (*chanquan qingxi*, 产权清晰), 'clarity of rights and responsibilities' (*quanze mingque*, 权责明确), 'separation of enterprises from the government' (*zhengqi fenli*, 政企分离) and 'scientific management' (*guanli kexue*, 管理科学) were widely used to describe the meaning of this espoused system. In 1994, thirty-five Chinese state-operated contracting enterprises were announced as pilot units for the purpose of exploring how this modern enterprise system might be implemented. Later, in 1995, China's Ministry of Construction (1995c) issued a directive that called upon construction enterprises to restructure and reorganise themselves into 'corporations' (公司制). This new designation clearly positioned construction enterprises even more as independent business entities. Meanwhile, the government established itself as the prime investor in construction enterprises. This policy was somehow designed to solve the

contradiction of 'public ownership' (*gongyouzhi*, 公有制), which was perceived as one of the most important features of socialism then and now, along with the need for independent business entities in a construct market economy (Wang, 2005). The term 'state-owned' replaced 'state-operated' seemingly to express an expectation of increased independence in terms of how firms were managed.

Some implications of this change agenda can be directly observed in NBSC data (2016). As Figure 2.3 shows, since 1995, the year data first began to be available in China's Statistical Yearbook, the number of state-owned and collective-owned contracting firms began to decrease while those in 'other' category rapidly increased. According to the NBSC, the 'others' included firms under various forms of ownership, such as joint stock-holding partnerships, joint ventures, limited liability companies, companies limited by shares, privately-owned enterprises, individual business, and others. However, it can be reasonably suggested that a certain number of state-owned and collective-owned contracting firms transferred their status into other types of corporations in China's centrally-managed register of information.

However, the implementation of the China's modern enterprise system was by no means straightforward. Zou and Zhang (1999) surveyed thirty pilot state-owned enterprises in 1998, three years after the announcement of this policy, and found that only five enterprises had established the practice of conducting shareholder meetings, only twenty-two had established board meetings, and only twenty-three had set up monitoring boards. This study provided rare insight into the diversity of ways in which these pilot enterprises chose to respond to China's modern enterprise policy initiative. It is notable that despite the fact that in 1999 board meetings had been set up in 73.3% of these firms, the previous way of decision making remained in over 60% of these 30 firms. In addition, Zou and Zhang (1999) found that approvals by administrative departments in place for half of these firms, while joint meetings between the enterprise and Party organisations was the main decision-making mechanism in three of the firms. Thus, even though these firms changed their organisational settings in response to this new policy initiative, the inherent 'stickiness' of their existing work practices cannot be underestimated.

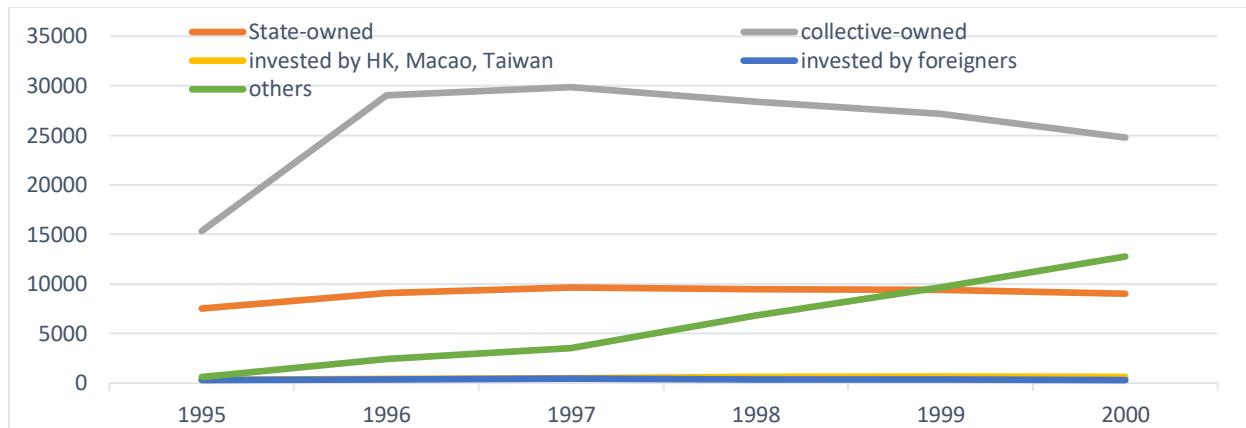


Figure 2.3: The number of contracting firms by ownership category

Source: National Bureau of Statistics of China (2016)

#### 2.4.2 The 'management' lexicon

In the early 1990s, the word 'management' began to be widely used in connection with Chinese contracting firms, and their 'level of management' (管理水平) was described as 'determining firms' market position and competitive success' (Ministry of Construction, 1995a, p. 2). Meanwhile, how to manage contracting firms to improve their competitiveness became an important theme of Chinese policy documents. The emphasis on competitiveness reflected the China's increasing awareness of the market way of working. In addition, the state also recommended management concepts such as 'standardization' (标准化) and 'project management' (项目管理) as central components of China's modern enterprise system. Here, the concept of project management was re-portrayed as 'an essential way to realize the fitness of market mechanisms,' and 'standardization' referred to the notion that construction enterprises should establish standardised operating routines (Ministry of Construction, 1995b). Perhaps most importantly, the government recommended that contracting firms should develop standards for technology, management and job standards. In terms of technology standards, firms were suggested to develop technical requirements with respect to materials, equipment, quality and safety, which were to be equal to or higher than national requirements. In terms of management, standards and requirements for technology management, quality management and finance management were suggested, as were employment standards for regulating job tasks, responsibilities, worker's rights and assessment requirements and procedures. These suggestions reflected the government's intention to set workplace standards in state-owned firms that were informed by western management ideas. Of course, the implementation of these concepts was rarely straightforward.



Another theme concerning state-owned enterprises that appeared in Chinese policy documents at this time was to 'reduce the burden' (*jianfu*, 减负). As discussed in Section 2.2.1, state-owned construction enterprises (called 'building construction organisations' at that time) were required to provide soldiers with canteens, nurseries, schools, colleges, hospitals and residential housing (State Council, 1956). However, this system was recast to the position that it 'should be provided by the government' (*shehui zhineng*, 社会职能) and was suggested to be transferred to local governments, so that state-owned enterprises could 'meet the requirements of the socialist market economy' (The State Economic and Trade Commission of the People's Republic of China et al., 1995). Two slogans used to promote this policy were 'redirect laid-off workers' (*xiagang fenliu*, 下岗分流) and 'downsize staffs and improve efficiency' (*jianyuan zengxiao*, 减员增效). Moreover, Zou and Zhang (1999)'s survey of thirty pilot state-owned enterprises for modern enterprise system, found that 70% of the firms experienced separation of 'non-production business' (*fei shengchan jingying*, 非生产经营) from their main business. In fact, the surveyed 20 enterprises reported 78,242 total staff redundancies or an average 2,608 per firm, 50.5% of which were terminated by the end of 1997. According to Gao (1999), from 1995 to 1998, the total annual number of laid off workers in China (including the construction sector) was 5.64 million, 8.91 million, 9.40 million and 6.10 million, respectively.

The downsizing of state-owned contracting firms and collective-owned contracting firms can be observed from statistical data. As Figure 2.4 shows, the number of employees in state-owned and collective-owned contracting firms dramatically decreased after 1992, a phenomenon that can be attributed to China's 'reduce the burden' policy initiative. The period between the late 1990s and the early 2000s saw chaos due to large-scale layoffs caused by the redefinition of state-owned firms and labours. Terminated workers staged numerous protests and demonstrations (Cai, 2002).

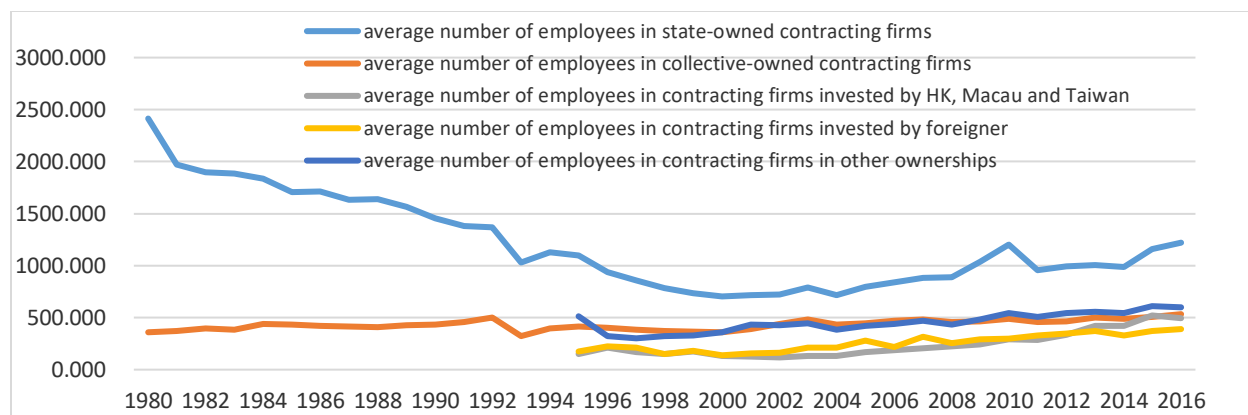


Figure 2.4: Average number of contracting firm employees by ownership category

Data source: National Bureau of Statistics of China (2016)

One result of these policies was the dawning sense that people who were designated as ‘employed’ could now become unemployed, indeed a radical break from the ‘iron rice bowl’ discussed previously. And like their counterparts in the West, Chinese construction firm employees were now required to create value for their firms. No longer were these workers seen as ‘family members’ to whom enterprises had obligations with respect to health care, housing and education. This radical change was viewed by some as a threat to the legitimacy of the Chinese Communist Party (Lee, 2000). As a result, policy documents were issued to establish new mechanisms for the provision of employee pensions, health insurance and unemployment insurance. However, despite these policy announcements, funding shortfalls for these social welfare programs were severe. In response, the state proposed that the central government, local governments and all state-owned enterprises were to each provide a third of the funding for these programs, irrespective of whether they could afford it or not. Of course, the implementation of these proposals was uneven, and delays in pension and insurance payments were common. This economic period and its broad-scale restructuring caused widespread bitterness, anger and helplessness among the Chinese populace.

### 2.4.3 Emphasis on Party organisations in contracting firms

According to China’s Ministry of Construction (1995c), firm managers were now expected to work as employed professionals, a title that replaced their previous status as functionaries in ‘state cadres’ (国家干部). According to official policy documentation, operational responsibilities were now delegated to appointed managers who were expected to sign employment contracts with their firm’s board of directors. In addition, salaries were now tied to the economic performance of firms, which was

commonly framed as a mandate 'to maintain and increase the value of state-owned assets' (国有资产保值增值). However, as Zou and Zhang (1999) reported in their study of thirty pilot state-owned enterprises, at this time 53.3% of firm chairman respondents maintained their previous administrative titles and remuneration package. It is also notable that 70% of managers were appointed by the Industrial Administrative Department, while only 30% were appointed by their respective directorship boards. The right to appoint, dismiss and promote managers seemingly remained the province of administrative officers.

Chinese policy documentation also often referred to the entity of 'party organisation' (党组织) in connection with construction firms, which suggests that the ability of firms to operate in accordance with market demands remained constrained by centralized policy requirements. Notably, the party organisation was expected to play a core political role by ensuring that 'enterprises follow and carry out Party and state policies' (Ministry of Construction of the People's Republic of China, 1995c). Such a requirement reflected the Chinese government's reluctance to allow contracting firms to become truly 'independent.' The party organisation was positioned a much stronger role at this time than in the 1980s, when its role wasn't as clearly defined and Party secretaries often found themselves wrestling with directors (Child, 1996).

Moreover, under China's 'social market economy fitness' strategy, party leaders were allowed to assume senior management roles and to participate in decision-making processes. It is notable that privately-owned firms were also required to support and expand the party organisation. According to Song Ouyang, deputy minister of the Organisation Department of the Communist Party of China Central Committee, by 2006 over 85% of private firms had set up their own party organisations. In addition, an increasing number of private entrepreneurs were also found to have become members of the Communist Party after temporary suspension in 1989 (Dickson, 2007). However, It is unclear from the literature if party organisations that were attached to private firms followed different patterns than those in state-owned firms. At any rate, at this time managers obviously required time to become familiar with China's quickly introduced market rules of working, which became an important theme of policy initiatives from 2000 onward.

## 2.5 Market behaviour regulating (2000s onwards)

### 2.5.1 Dramatically increasing privately owned contracting firms

In line with China's rapid pace of urbanization and economic development since the late 1990s, its investment in fixed assets, particularly construction projects, increased dramatically. As Figure 2.5 shows, according to data provided by National Bureau of Statistics of China (2016), investment in fixed assets increased from 3,000 billion yuan in 2000 to 50,126.5 billion yuan in 2013. Correspondingly, investment in construction projects increased from 1,873.9 billion yuan in 2000 to 34,115.5 billion yuan in 2013. The increasing investment in buildings and infrastructure resulted in a rapid expansion of the Chinese construction market.

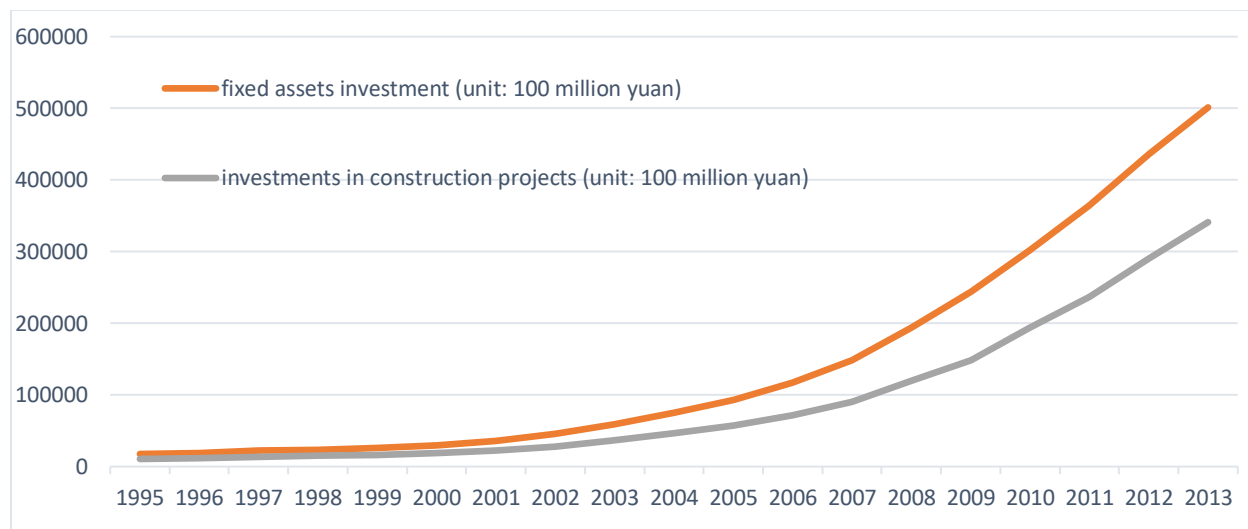


Figure 2.5 The increasing investment in fixed assets (including the construction projects)

Data source: National Bureau of Statistics of China (2016)

During this period of rapid construction sector expansion, the Chinese government retained control over large scale state-owned firms perceived to be of strategic importance. Beginning in the late 1990s, the phrase 'grasp the big, release the small' (*zhuada fangxiao*, 抓大放小) has been widely used to describe the strategy of restructuring Chinese state-owned firms. In 2003, China established its state-owned Assets Supervision and Administration Commission of the State Council (SASAC) as a special department to 'supervise and manage' (*jianguan*, 监管) state-owned firms. In addition, Chinese provinces and cities were now required to establish similar departments to supervise and manage firms owned by local governments. The SASAC's responsibilities included the appointment, dismissal and assessment of high-

level personnel such as board directors and general managers; the review of important decisions and submit to government for approval; and the establishment and management of supervisory boards in state-owned firms (State Council, 2003). However, while the SASAC's formation was generally viewed as a separation of the functions of Chinese firm owners and government control (Jiao, 2012), it should be noted that the SASAC is directly controlled by China's State Council, which suggests that the central government has been reluctant to turn state-owned firms into wholly independent market entities. In fact, the role of Chinese central and local administrative departments in the construction sector has been described as 'to guide, regulate, monitor the behaviours of market entities, establish and keep fair competition, and regulate market behaviour' (Ministry of Housing and Urban-rural Construction of the People's Republic of China, 2010a). Thus, statements such as these can be viewed as the government's legitimization of its intervention in the construction market.

At the same time, China's small and medium state-owned enterprises were restructured, over half of them were privatized, wholly or partially. In addition, the announcement of the Property Law of China in 2007 was widely viewed as an official legal protection of private rights. However, this announcement was by no means without controversy, and debates about whether private ownership contradicted with China's socialist vision were common (Dickson, 2007). The new policy was also seen as a sign of the central government's more favourable attitude towards private ownership during the tenure of Hu Jintao, who was elected as the CCP's general secretary in 2002. At any rate, the number of contractors in the Chinese construction market rapidly increased, especially those in China's 'other' designation, which indicated private ownerships. According to the NBSC, this 'other' category comprised stock-holding joint partnerships, joint ventures, limited liability companies, companies limited by shares, privately owned enterprises and individual businesses. As Figure 3.1 shows, the number of contractors working within this category increased from 613 in 1995 to 69,680 in 2013, while the number of state-owned and collective-owned contractors decreased slightly during this period. Thus, this trend can be reasonably viewed as the result of China's promotion of a modern enterprise system.

### **2.5.2 'Behave honestly and legally' policy discourse**

China's entry to the World Trade Organisation (WTO) in 2001 was widely viewed and propagandized as the point at which China joined the trend toward globalization. Thereafter, notions such as markets, globalization and 'to be geared with international standards' (*yu guoji jiegui*, 与国际接轨) began to dominate China's domestic policy agenda. As a result, senior construction managers were subsequently expected to become familiar with western concepts such as market competition, marketing, information

technology, alignment and risk management. More significantly, contractors were also now expected to behave legally within construction markets. A common introduction to many national policy documents was 'In order to regulate the market behaviours of..., ' which suggests that government officials felt it necessary to make such expectations explicit which is telling in itself. In addition, terms such as 'honesty', 'legality', 'anti-corruption', 'quality management', and 'safety management' were repetitively emphasized in policy documents. Moreover, most policy documents issued after the early 2000s share the narrative of 'solving the exposed problem.' As a result, this period is widely seen as a process in which Chinese firms continuously adjusted themselves to market way of business conducting which was introduced rapidly since 1990s.

#### **2.5.2.1 Follow the contract**

At this time, one common challenge was project payment delays, which had been an increasing problem since the late 1980s (Zhang et al., 1993). This issue was brought into the spotlight by one event. In October 2003, Wen Jiabao, China's premier, assisted Xiong Deming in acquiring her husband's salary, who at the time was a peasant construction worker in Chongqing. This event was widely reported by the media and was followed by the creation of special program to 'inspect for delayed payments of peasant workers of over 100 days' (*bairi qianxin dajiancha*, 百日欠薪大检查) in Chongqing, Beijing, Hangzhou and other cities. These salary delays were widely blamed on delayed project payments under China's multi-tier subcontracting system (*cengceng fenbao*, 层层分包), which could be viewed as an unintended side effect of the emphasis on separating management and labour, a practice that had occurred since the 1990s. Encouraged by this emphasis on management, many top-tier contractors shifted their focus to winning projects, after which they outsource their construction to multi-tiered arrangements of subcontractors (Ngai and Lu, 2010). In order to win projects in China, it is common for many contracting firms to self-finance construction in advance and then requesting payment from clients (Wang et al., 2006). However, when these payments are delayed for firms, they are delayed for subcontractors as well. Peasant workers, who are at the end of this chain, ultimately suffer the most.

In response, in January 2004 China's State Council announced a program to 'clear up debts in three years' (*sannian qingqian*, 三年清欠) to manage issues such as delayed project payments and resultant delays to peasant workers. According to Wang Guangtao (2007), then head of the Ministry of Construction, by the end of 2003 the amount of delayed project payments totalled 186 billion yuan, with 33 billion yuan in delayed compensation for peasant workers. Most of these delayed payments were arguably the responsibility of government departments, as many were short on funding but were

nonetheless constructed because they were ordered by top-level government officials (Zhang et al., 1993). To address this issue, a special team comprised of officials from six ministries was organised, and construction firms were encouraged to claim back payments according to the Law of Contracts. This program seemingly strengthened adherence to contract law, both for government departments and construction firms.

In addition, concepts such as contract guarantees (合同担保) and legal offices (法务办公室) were recommended repeatedly in several policy documents. In 2007, the government suggested that contracting firms should establish internal legal offices to provide their managers with legal advice (Ministry of Construction of the People's Republic of China, 2007a). Moreover, China's Ministry of Construction (2004) recommended a range of measures for guaranteeing contracts. Contract guarantees, such as bid, client payment, contractor performance and contractor payment were subsequently recommended and added to the policy discourse. A special inspection office was also established that was in charge of 'recording, investigating, collecting evidence and proposing disposal suggestions for illegal market behaviours' (Ministry of Housing and Urban-Rural Development of the People's Republic of China, 2010). These actions could be viewed as reinforcing a sense of conducting business according to written contracts and law, which had been progressively introduced since the 1980s.

### **2.5.2.2 Safety and quality management**

Another example of an issue that arose at this time problem concerns safety and quality management, which was also repeatedly addressed in Chinese policy documentation. Terms such as 'safety production' (*anquan shengchang*, 安全生产) were addressed not only in the construction sector, but many other sectors, such as manufacturing. Here, the clear expectation was that contractors should strictly adhere to compulsory quality and safety standards. However, these standards were not without criticism. Early safety standards were criticized as focusing primarily on improving physical working conditions, rather than management routines (Fang et al., 2004). As a result, policy documents issued in the late 2000s revealed an increasing emphasis on the establishment of standardised management routines. Contracting firms were now required to set up special safety management departments and allocate a designated number of safety managers for every project. General managers and deputy senior managers in charge of safety were also required to regularly inspect construction sites (i.e. on no fewer than 25% of active workdays). However, the literature is unclear as to the extent to which firm managers complied with this requirement.

It is notable that several special inspection programmes regarding concerns such as safety and quality management have been announced since the 2000s (e.g. Ministry of Construction of the People's Republic of China 2007b; Ministry of Construction of the People's Republic of China, 2008b; Ministry of Housing and Urban-Rural Construction of the People's Republic of China, 2010b). Most of these programmes were launched by the Ministry of Construction. With respect to these inspections, particular reference to specific accidents was made, as many were initiated by tragic fire or safety accidents. In addition, the Ministry of Construction (2006) introduced the new 'administrative director of safety production responsibility system' (*anquan shengchan shouzhang zerenzhi*, 安全生产 *shou zhang* 首长责任制), which required administrative directors to pay more attention to safety concerns. The government departments are obviously playing important role in this process. However, it is unclear to what extent Chinese managers responded to these new safety regulations.

### **2.5.2.3 General contracting**

In the 2000s, the central government again recommended the practice of general contracting to Chinese contracting firms. However, the government's definition of the term 'general contracting' in the 2000s had changed from its first recommendation in the 1990s. Previously, as discussed in Section 2.3, the phrase 'general contracting' was used to distinguish between 'management level' and 'labour level'. However, the Ministry of Construction (2003) issued a document in which the term 'general contracting' had been extended to include design capabilities and new procurement methods. Examples mentioned in this document included approaches such as engineering-procurement-construction, design-build, built-transfer, built-operation-transfer, turn-key and public-private partnerships (PPP). Particularly, since 2014 the State Council has repeatedly promoted PPP as a way to address the skyrocketing debts accrued by local governments. The rationale for introducing these new methods was that *'they are the main international procurement methods, and Chinese contracting firms should connect to these international conventions in order to improve their international competitiveness'* (Ministry of Construction of the People's Republic of China, 2003, p.1).

However, contractors of course cannot simply choose their preferred procurement methods, as this decision rests with clients. But contractors are now expected to adapt to these new procurement arrangements. While it is unclear from the literature how contracting firms have organised themselves in response to this expectation, it seems likely that most firms, regardless of their capabilities, have been keen to label themselves as 'general contractors' (Li, 2005). Even small and medium-size firms who were



encouraged to organise themselves as ‘specialist contractors’ have also strangely been keen to call themselves ‘general contractors.’

### **2.5.3 Emphasis on professional roles**

In terms of professional titles, the central government has recommended that the ‘project manager’ title be replaced by that of ‘registered constructor.’ Generally speaking, while being a registered constructor is regulated under the license to operate as a project manager, registered constructors take very limited responsibility for their work. Instead, contracting firms take full responsibility of any quality or safety defaults caused by individual registered constructors (Sha, 2004). As a result, the distribution of responsibility between individual constructors and contracting firms is significantly different from those in western construction context. The Chinese government’s intention to learn from western norms has been observed in many recent policy documents. For example, a recent Ministry of Housing and Urban-rural Construction (2014) document recommends individual professional certification while suggesting that the certification requirements for contracting firms should be weakened. In addition, certificate qualifications for several types of professionals were cancelled and the registration requirements, such as identification of assets, numbers of registered constructors and equipment, for the remaining ones were cancelled. The rationale for this change was stated as *‘let market work as the key mechanism to allocate resources, and further streamline administration and delegating authority’* (Ministry of Housing and Urban-Rural Development of the People’s Republic of China, 2015). However, the current literature is unclear how individual contractors who previously worked under the umbrella of a firm over last three decades have responded to such policy initiatives.

Since the 2000s, the number of construction labourers has increased dramatically. The majority of Chinese construction labourers, widely referred to as ‘peasant workers’ (*nongmingong*, 农民工), are from rural areas, and how to manage this workforce has become a long-term social problem. In 2015, the term ‘construction worker’ was suggested to replace ‘peasant worker’ (Ministry of Housing and Urban-Rural Development of the People’s Republic of China, 2015). This could be viewed as an attempt to give a professional identity to peasant workers who work within but generally don’t commit themselves to the construction industry.

Along with professional identity, another topic that has attracted the government’s attention is how to provide professional training. Over time, state proposals regarding who is responsible for providing training for workers have changed. Since the ‘reducing the burden’ policy of the 1990s, most of the

colleges and vocational schools that owned by state-owned contracting firms were either transferred to their local governments or closed. As a result, according to the Ministry of Construction (2005), the responsibility for providing training was then seemingly delegated to the 'construction bases'. However, a document issued by the Chinese State Council assigned this responsibility to local government departments, educational programs, training organisations or subcontractors. But, in a document issued by the Ministry of Construction (2008a), the responsibility was assigned to the Ministry of Construction and Ministry of Labour and Social Security and their subordinate local departments.

To address this issue, demonstration training projects were required to be selected from construction firms. The contracting firms selected for these pilot projects were asked to provide funding to train workers to work on these demonstration projects. Under this arrangement, the contracting firms can then recoup the training fees for those workers who passed the exams. In 2015, the responsibility of training construction workers was re-assigned to contracting firms. At the time, China's Ministry of Housing and Urban-Rural Development stated that, 'contracting firms are the main actor in providing training to construction workers. Contracting firms should provide training to their 'self-owned' construction workers by developing training bases, setting up vocational colleges or cooperating with special training organisations' (2015). Here, the term 'self-owned' rather than 'employed' was used, which suggests some ambiguity in relationships between contractors and labour.

The shifting discussion on who should take responsibility for worker training in China could be viewed as the state's attempts to address migration to urban centres following the rapid expansion of its construction sector since the 2000s. However, following China's 'separation of management and labour' and 'reduce the burden' policies, very few self-employed workers work in state-owned contracting firms. Most construction workers work for private labour-only subcontractors (LOSCs) with significant ambiguity in terms of their employment status. More tellingly, such LOSCs are not officially required to follow government policies as state-owned subcontractors are. To this point, Ngai and Lu (2010) interviewed peasant workers on eight construction sites in 2008, thirteen years after China's Law of Contract was announced. The authors found that these workers frequently faced difficulties in being paid, let alone receiving adequate training. Nevertheless, the researchers also found that these workers operate as casual labourers even without signing contracts with subcontractors. Moreover, most of the interviewees reported that they were unaware of the existence of employment contracts. In this context, implementing the policy initiative to create a new profession of 'construction workers' in China seems that it won't be straightforward.

## 2.6 Summary

This chapter reviewed the changing policy context of the Chinese construction sector after the foundation of the People's Republic of China in 1949. As discussed above, in line with the transition of the Chinese economy as a whole, China's concept of its construction sector also changed, and in fact was expected to achieve different aims during different periods (see Table 2.1). Specifically, before China enacted its Open-Door policy, construction activities were not framed in terms of a 'construction sector,' but rather were positioned as a means of support for heavy industrial development. At this time, contracting firms, which were referred to as 'building installation organisations,' were simply expected to complete state-assigned tasks. Lastly, the Chinese government functioned as the 'general commander' in charge of economic development, while building installation organisations worked in a predominantly military fashion.

In contrast, after China announced its Open-Door policy in 1978, it redefined its construction activities in a sectoral sense, and the new aim of this construction sector was described as 'earning money for the state.' During this period, the main theme of construction-related policy initiatives concerned 'enlivening contractors' to 'improve economic efficiency.' Moreover, it has been argued that concepts such as decentralization, contract responsibility and project management were newly mobilized to motivate contracting firms to pursue profit. As a result, firm managers shifted their focus to market concerns such as profit and loss, and the introducing of concepts such as fixed and temporary labour destabilized the relationship between contracting firms and labourers that had long been taken for granted. In addition, the policy initiatives enacted during this period were found to be incompatible with this tendency towards vicissitude, thereby causing significant ambiguity for managers in terms of understanding how they were expected to respond.

After Deng's southern tour, a new Chinese national strategy of socialist marketization was announced with the aim of transitioning to a social market economy. Correspondingly, the construction sector was expected to fit into this new but vaguely-defined economic system. Contracting firms became distinguished by different types of ownership, and state-owned contracting firms were expected to become 'independent market entities' while nonetheless being allowed only limited independence. In addition, concepts such as markets and competition were introduced into the policy discourse over a relatively short period, and the idea of the modern enterprise system was mobilised to guide these rapid changes for state-owned contracting firms. The Chinese government's interpretation of the modern enterprise system could be observed from many new phrases contained in its policy documents, such as

‘clarity of property rights,’ ‘clarity of rights and responsibilities,’ ‘separation of enterprises from the government’ and ‘scientific management.’ However, while additional initiatives such as standardization and ‘reducing the burden’ were successively and quickly introduced, it has been noted that practitioners didn’t engage with these concepts until the 2000s.

The decade after China’s entrance into the WTO is arguably the period in which practitioners were required to adjust to a quasi-market way of operation. During this period, the main theme in policy documents was regulating the market behaviour of these firms, which were now expected to behave according to legal requirements. In addition, following contracts and safety and quality management practices were emphasized repetitively in policy documents. However, alongside the new aim of emphasizing marketization, direct government interference, such as organised national inspections, was also prevalent. These practices have been argued to be a reflection of the remaining major role the government took in regulating the Chinese construction sector.

Table 2.1 Changing managerial techniques and senior management identities as dictated by Chinese policy documents

	1950s-1970s	1980s	1990s	2000s-onward
Construction sector	Soviet-style construction	Enlivening contractors	Socialist market economy fitness	Regulating market behaviour
Contractors	Building installation organisations	State-operated construction enterprises	Construction enterprises	Construction enterprises
• Goals	Finish ‘construction tasks’	Investment effectiveness	Independent corporations	Operate legally and honestly
• Managerial concepts	Industrialization, quotas, mixed labour teams	Competition, project way construction  Construction method	Modern enterprise system, standardization, project management	Contract guarantees, legal offices, quality and safety, general contracting, project management, market competition
Role of senior managers	Commanders of soldiers	Factory managers appointed by the government	Employed managers (no more state cadres), Party organisation	Employed managers, Party organisation for state-owned contractors

During this marketization period the expected role of senior construction managers also changed. Between the 1950s and 1970s, senior managers operated more like military commanders, as oversight of contracting firms were transferred from the PLA. However, after the Open-Door policy was announced, these commanders were required to shift into factory management roles and were required to assume the responsibility of operating construction enterprises. In the 1990s, China's required modern enterprises system positioned senior managers as employees who worked for owners, not the state. In addition, leaders of Party organisations embedded in state-owned contracting firms were now required to follow national policies.

Each successive policy announcement therefore requires practitioners to reconfigure their self-ascribed roles and responsibilities. Moreover, the policy discourses are significant in themselves, as they shape and condition the landscape within which construction firms operate. However, the way in which policies play out in practice should not be viewed as straightforward. There are many examples in the literature of Chinese firms either not responding to these new policies or implementing them in diverse ways. Thus, the question becomes one of what happened on the ground during this period for Chinese construction firms, or, in other words, how did these firms organise themselves in order to survive in this rapidly changing landscape? To address this question, the following chapter reviews the literature on the interplay between organisations and their environmental context.

### **3. The Chinese Contracting firms Responding to Marketization**

#### **3.1 Introduction**

The preceding chapter reviewed the changing policy context of the Chinese construction sector since 1949. As discussed previously, to date little research exists regarding how Chinese contracting firms organise themselves in response to their ever-changing context. The purpose of this chapter is to review and critique the existing literature on Chinese contracting firms and how they are organised. However, this review is not limited solely to Chinese organisations, but rather includes literature on the way firms organised. The review also refers to the broader organisational literature in order to provide deeper insight into the interplay between organisations and the environments within which they operate.

The chapter is divided into five sections based on the dominant theoretical perspectives and primary research concerns found in the literature. For each section, particular attention will be given to assumptions regarding actors, organisations and their context. The chapter first outlines the literature related to the essential characteristics of the Chinese construction sector, which is labelled as 'the classic macro-level perspective'. Bearing in mind that this sector is dynamic and rapidly changing, the chapter then reviews the literature on the concept of transaction cost perspective (TCP), which is derived from the field of economics. TCP focuses on how transaction costs determine boundaries between markets and contracting firms. Then, the chapter discusses the adaptation perspective, which asserts that firms actively organise themselves in different ways in response to the same policy stimuli. The particular interest of the adaptation perspective lies in how contracting firms should respond to the 'analysable' environment within which they operate. The chapter then progresses to the process perspective, which challenges the assumption that strategy guides practice in an instrumental way. The primary research concern of this perspective concerns the ways in which managers interact with each other and how accumulative practices unfold over time. On the basis of this analysis, it will be argued that the mainstream literature is flawed in viewing contracting firms as essentially static entities. The fifth section then reviews the sensemaking perspective, which portrays the organising process as one in which members of organisations continuously seek to make sense of events. Of particular importance here is the need to understand how practitioners interpret the transition within China towards an espoused social market economy.

## **3.2 The classic macro-level perspective on Chinese contracting firms**

Since China's announcement of its Open-Door policy in 1978, the progression and transition of the Chinese construction sector has attracted ever-increasing attention from the global construction management (CM) research community. Early studies about Chinese contracting firms focused on macro-level sectoral change. The underlying assumptions of this body of literature are reviewed in the following sub-sections.

### **3.2.1 Structural change in the Chinese construction sector**

Early studies of Chinese contracting firms frequently focused on structural change at the macro-level. In particular, early researchers typically focused on issues such as investment, GDP, firm numbers, gross output value, market structure and productivity. For instance, Chen (1997) described the Chinese construction sector's increasing investment in fixed assets from 1989 to 1994 and the corresponding increasing output. The steadily accelerated growth of Chinese investment in fixed assets and construction projects is shown in Figure 2.5 in Chapter Two.

Chen (1997) paid particular attention to the diversity of these investment sources. As Table 3.1 shows, the period between 1985 to 1992 witnessed a significant change in the proportion of investments from various sources. It is worth noting that domestic loans increased dramatically during this period. At the same time, investment from 'self-generated funds' increased from 34 billion yuan in 1985 to 124.3 billion yuan in 1993, and while 'self-generated funds' was not specifically defined, it would seem that they would comprise funds from state-owned contracting firms. Moreover, the corresponding proportion of direct state budget investment decreased slightly during this period. This changing proportion of investment sources is indicative of the policy initiatives that followed the introduction of the Chinese Construction Bank and its mandate to improve economic efficiency (see Section 2.3). According to the NSBC, self-funded investment in 2016 totalled 41,382.86 billion yuan, or 67.08% of total investment. The 2016 state budget was 3,621.17 billion yuan, or 5.87% of total investment (see Figure 2.5). Clearly, somewhere amid China's transition toward a market-based economy, its government ceased to be its sole source of investment, with other sources of capital contributing in ever-increasing proportions.

Table 3.1 Capital construction investment of state-owned units (billion Yuan)

	1985	1990	1991	1992
State budget	38.1	36.4	34.8	30.8
Domestic loans	18.8	37.9	52.7	83.1
Foreign Investment	7.4	22.4	24.0	33.4
Self-generated funds	34.0	53.0	74.7	124.3
Others	9.2	20.8	25.4	29.6
Total investment	107.4	170.4	211.6	301.3

Source: China Statistical Year Book 1993 (from Chen, 1997)

Along with the changing structure of its investment sources, the Chinese construction sector experienced continued dramatic re-structuring during this time. Chen (1997) selected indicators such as ‘number of enterprises in different ownerships’, ‘employment in enterprises in different ownerships’ and ‘gross output value of enterprises in different ownerships’ to represent the changing nature of Chinese contracting firms. It is notable that for this study, contracting firms were only distinguished in terms of their ownership, which is common to in much of the mainstream literature. This could be viewed as a response to China’s announcement of its national ‘socialist market economy’ strategy that assigned different roles to state- and privately-owned firms (see Section 2.4). Statistical data for this period, which is normally sourced from the NBSC, is commonly cited without critical reflection on its reliability. In fact, the possibility that the NBSC published favourable data to support Chinese national policies is neglected by almost all of the mainstream literature. As Figure 3.1 shows, the number of Chinese state-owned contracting firms peaked in 1997 and then rapidly decreased over the following decade. The most striking point here seems to be the rapid growth of privately-owned contracting firms, which in 2016 accounted for 91.21% of total firms and 84.79% of total industry output (also see Figure 3.2). Further, 2001 seems to have been a turning point for the sector, as both employee numbers and the value of privately-owned contracting firms began to exceed those of state-owned firms (see Figures 3.2 and 3.3). It is clear that, in these studies, the construction sector is viewed as a series of points, and contracting firms are viewed as ‘black box’ entities.



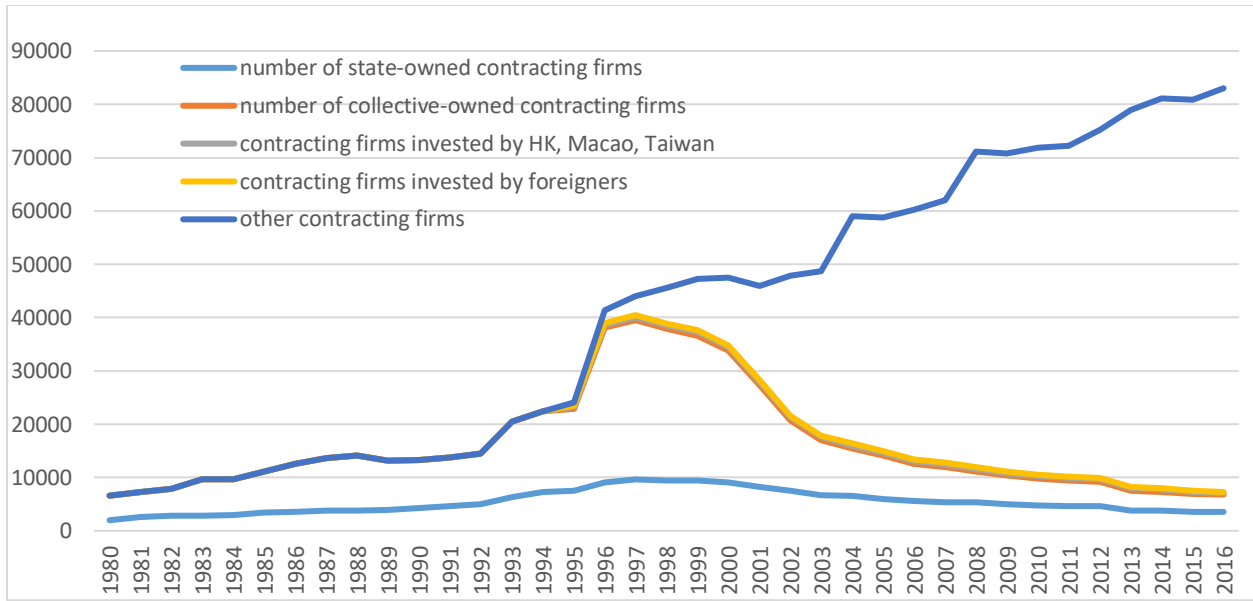


Figure 3.1 Number of contracting firms by ownership category

Source: National Bureau of Statistics of China

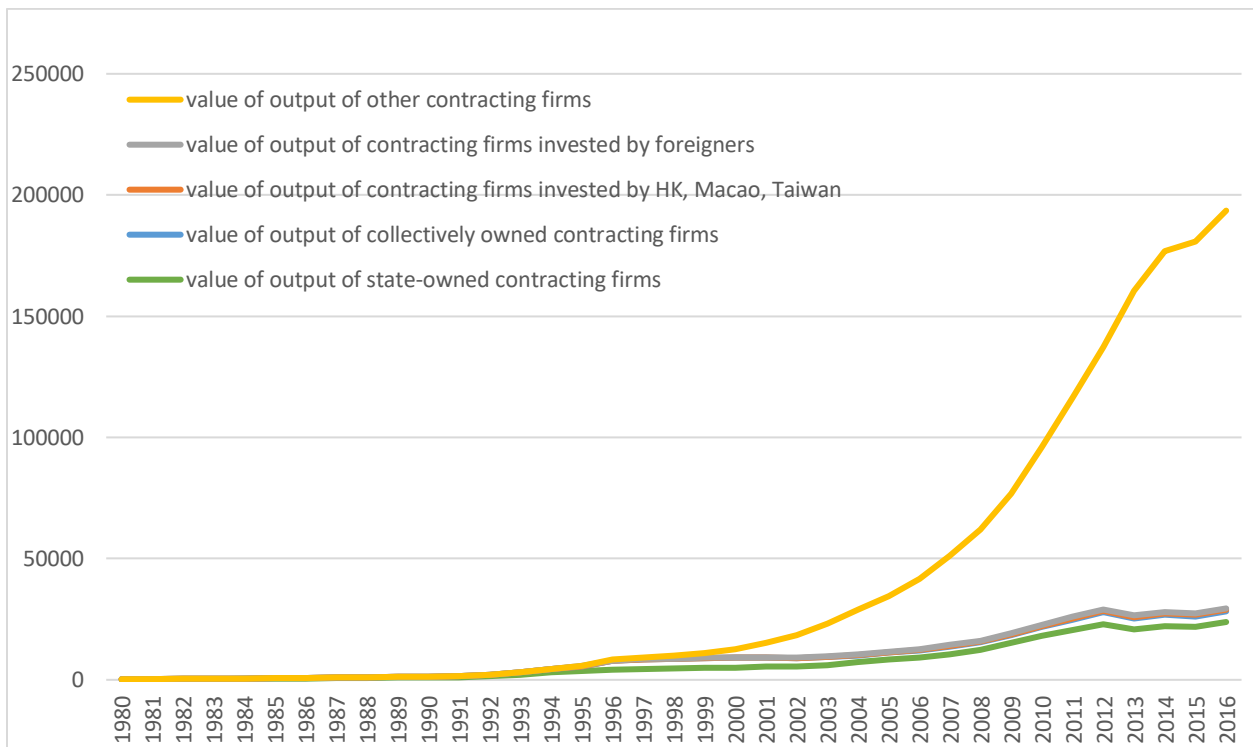


Figure 3.2 Value of contracting firm output by ownership category

Source: National Bureau of Statistics of China

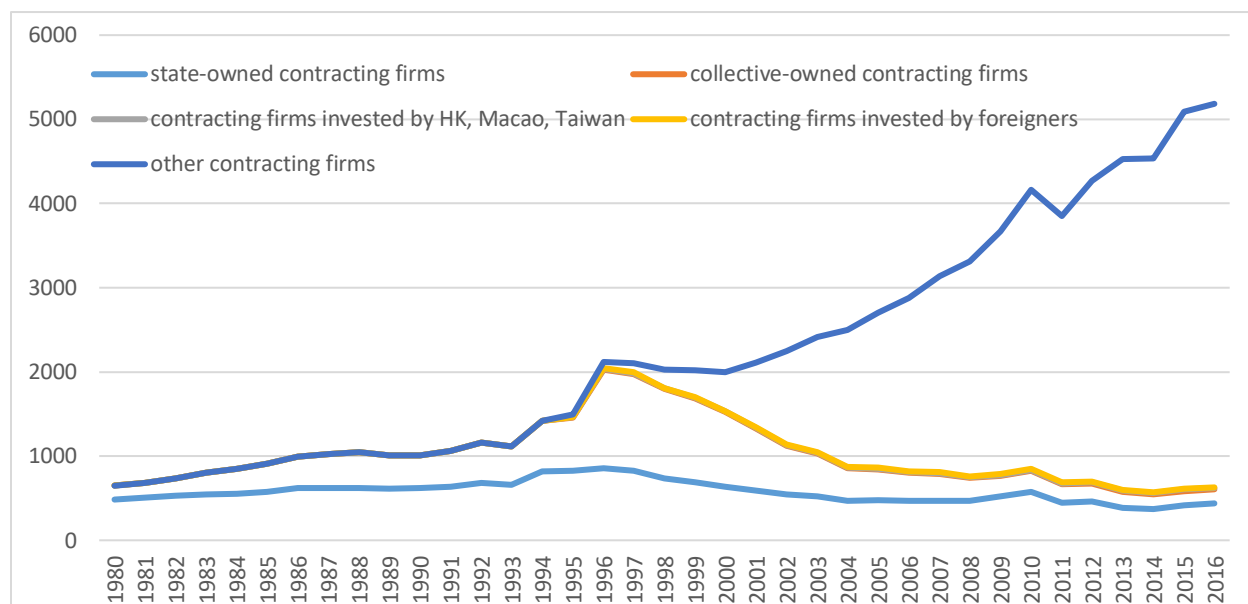


Figure 3.3 Number of contracting firm employees by ownership category

Data source: National Bureau of Statistics of China

Given the increasing number and diversity of Chinese contracting firms from 2000 onward, research studies began to describe the sector using concepts such as ‘market structure’ and ‘productivity’. The use of these concepts by Chinese scholars can be viewed as a direct response to the sustained emphasis on the notion of the ‘social market economy’. It is notable that researchers in this field routinely operationalize such concepts into different indexes. For example, Zeng et al. (2005) used a ‘concentration ratio,’ which refers to the market share of the top  $n$  firms in an industry to represent their market structure. In this paper, the authors argued that in 1997 the concentration ratio of the Chinese construction sector was lower than its western counterparts. This suggests that large-scale Chinese contracting enterprises had a relatively low market share while biggest share was taken by small or medium-sized contracting firms. However, Liu et al. (2013a) provided a notable dissenting voice to this argument by maintaining that the Chinese construction sector operates as a quasi-monopoly run by state-owned contracting firms.

Such contradictions reflect different views on how the idea of ‘market structure’ should best be operationalised. For instance, Liu et al. (2013a) operationalized ‘market structure’ by using indicators such as unit price of funds, capital and labour and ratio of total revenue, return, loans to total assets. The data for these indicators were taken from the 2009-2011 annual reports of 21 listed Chinese

contracting firms. However, it is notable that the author used three-year averages to calculate indicators in order to *'reflect each enterprise's size and financial conditions during those three years'* (p. 739). This suggests the underlying assumption that contracting firms are essentially static entities. Also, the data Liu et al. (2013a) used were limited to large-scale publicly listed contracting firms, while Zeng et al. (2005) and Huang et al. (2013) used statistical data from NBSC. Here, the assumption is that these researchers intended to provide 'objective' representations of the Chinese construction sector. These conflicting descriptions of the Chinese construction sector can be attributed to the use of different factors and data sources. Therefore, the reality of the Chinese construction sector cannot be separated from those who produce it. Hence, this suggests that researchers should recognize that the possibility that practitioners construct their own realities of with respect to the Chinese construction sector's transition, a topic that remains largely unexplored in the literature.

Another concept used by researchers to analyse the Chinese construction sector is 'productivity'. Again, the concept of 'productivity' is typically operationalized into different indexes. Xu et al. (2005) interpreted 'productivity' as 'output per employee' and calculated the productivity of the Chinese construction sector in 2000. The authors' primary concern was stated as: *'to provide a competitiveness model for the Chinese construction sector,'* and they cited the relatively low productivity of the Chinese construction industry as one feature of relatively 'low competitiveness'. However, Wang et al. (2013, p.1059) used the concept of 'total factor productivity,' (TFP) and stated that *'TFP is a significant factor used to measure the development potential and competitiveness of a certain production unit.'* This reflects Wang et al (2013)'s view that firms compete by improving productivity. In this paper, TFP was operationalized into indicators such as total assets of construction enterprises, number of employees, power of machinery and equipment owned, value added to the construction industry and gross output value of the sector. Using NBSC data, Wang et al. (2013) argue that TFP in China increased steadily from 2006 to 2010. Wang et al (2013, p. 1069) further interpret this increase to be *'mainly due to progress in science and technology'*, although the evidence for such an interpretation is unclear. Further, Chen et al. (2018, p. 2836) and Liu et al. (2016), who are affiliated with the same research team, made similar arguments. The fact that researchers are interested in concepts such as 'market structure' and 'productivity' suggests a recognition that firms are increasingly required to compete in the marketplace. However, the literature is again unclear on whether Chinese construction sector practitioners share the same interest in productivity as does the research community.

Few will deny that the Chinese construction sector has undergone a prolonged period of market restructuring. However, these and other early studies focused solely on measuring the structural changes in the Chinese construction sector. In taking this direction, researchers selected discrete factors that they further operationalized into various indexes. Researchers also mobilised different data sources such as NBSC statistical data or firms’ annual reports. As a result, many early researchers largely assumed ‘objective’ representations of the Chinese construction sector that were subjectively constructed. Despite this, these early studies did provide insight into the changing landscape of the Chinese construction sector. However, as discussed previously, the overriding tendency was to view the sector as a series of fixed points at which time data was collected, while largely neglecting the changing processes during these points. In other words, many early researchers viewed contracting firms as ‘black box’ entities and lacked insight as to how these firms were organised.

**3.2.2 Chinese construction sector represented by policy initiatives**

Another body of literature describes the ongoing transition of the Chinese construction sector by primarily focusing on successive policy initiatives. Here, the underlying assumption is that the transition of the Chinese construction sector can be represented by policy initiatives alone. In China, policy initiatives are issued by both central and local governments, such as China’s State Council and Ministry of Construction. Figure 3.4. shows the structure of China’s central government as of 2018.

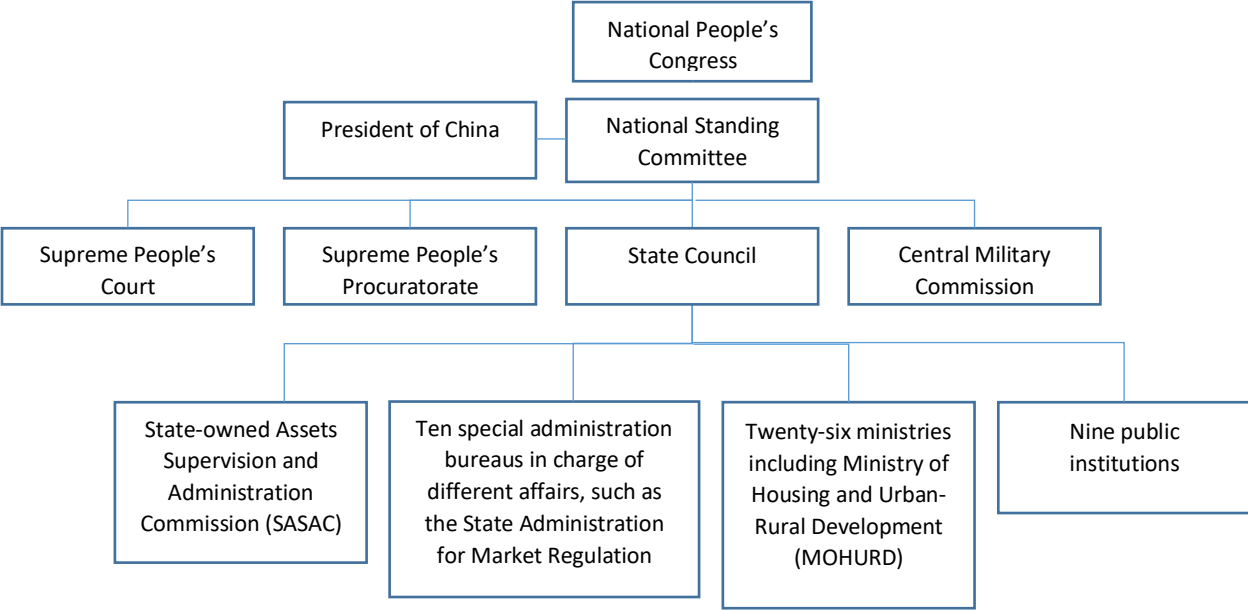


Figure 3.4 Structure of China’s central government, 2018

Source: Chinese Central Government, 2018

Of course, China's central government has experienced several rounds of re-structuring since the People's Republic of China was established (Luo and Gale, 2000). Local government bureaus in charge of construction, such as the Chongqing Municipal Commission of Housing and Urban-Rural Development (CQCHURD), are now authorized to make local regulations under the condition that they do not conflict with central government policies. In China, policy initiatives are issued mainly through policy documents, government reports, regulations, and legislation (Jiang, 1997, Lam and Chen, 1997). Generally speaking, the literature views these policy initiatives as both the main driver of China's transition toward a market-based system and also the very solution to many of the nation's challenges. For example, Li (2001, p. 259) stated that, *'China's economic reforms and open-door policy have brought remarkable achievements. A great economic miracle with enormous potentials is unfolding in China'*. Clearly, the Chinese government has played a significant role in shifting policy directions from a planned to a market economy. However, many researchers argue that China's economic growth has been predicated solely on government reform (Li, 2001). Conversely, western researchers largely interpret economic growth as 'the result of market demand,' as they generally tend to take the notion of market-based economies for granted. These divergent plots reveal some of the differing perceptions researchers have on the role of government and policy initiatives in Western and Chinese economic contexts. Further, these positions suggest different ways of viewing interactions between governments and actors such as contracting firms.

Moreover, it is commonly assumed that Chinese policy initiatives are implemented in a direct and consistent manner. For example, Zou et al. (2007) produce an account of the historical development of tendering, contract management and health and safety management procedures in China. In their account of bidding and tendering practices, they found:

*'This situation was critical and presented a strong and urgent need for the introduction of a proper management system governing the tendering practice. Consequently, in 1992, the Ministry of Construction issued a new regulation specifying management measures for controlling tendering practices. ...The implementation of the regulations was effective in controlling the inundation of many problems in the market.'* (Zou et al., 2007, p. 166)

The above excerpt is striking in its assumption that policy initiatives immediately produce desired effects. Here, there seems to be an assumption that the Chinese system adjusted to the new policy regime in an entirely predictable manner. Further, this suggests that the researchers assumed that the entire construction sector adjusts in a homogeneous manner irrespective of the diverse contexts and

traditions in different parts of China. And while the word 'implementation' is mentioned, its actual process is seeming to be neglected entirely. Thus, the overriding assumption here is that reform initiatives are implemented in an entirely instrumental and homogenous manner throughout the Chinese contracting sector.

In addition, the lexicon of management ideas explicit in these policy initiatives (see Section 2.6) often draws directly from western management discourse. Phrases such as '*learn from western advanced management methods*' and '*in line with international conventions*' are common in many policy documents issued after China announced its Open-Door policy. Such language suggests that many policy initiatives in the Chinese construction sector have been 'borrowed' from market-based economies such as those in the UK and the US. However, only a few researchers considered the extent to which such policy initiatives have been implemented in this sector, and those who did largely limited their investigations to the binary choice of 'implemented' versus 'not implemented', thus neglecting a myriad of other possibilities.

For instance, Shen and Song (1998) studied the extent to which clients, designers and contracting firms participated in bid and tender practices. In this study, the researchers distributed a questionnaire survey about participation in bid and tender practices to 77 clients, contractors and designers, nearly half of whom were required by the Ministry of Construction. Hence, this study's methodology may have been flawed, as many of its respondents could have been biased by a perceived need to 'follow the policies.' In addition, the researchers were not clear if the sampled firms were state-owned or private. Nevertheless, the percentage of respondents that reported they used bidding and tendering was strikingly low. Shen and Song (1998) found that only 43.7% of projects were awarded as a result of tendering in 1996, nearly two decades after China's government announced this very policy. As a result, the researchers labelled this low rate of 'adoption' as 'problematic'. The possibility that Chinese firms adopting tendering processes may, in some cases, equate to simply going through the motions is of course valid. However, the diverse ways in which contracting firms might respond to such policy initiatives was completely ignored in this study. This suggests that the interplay between the changing context within which contracting firms operate is largely taken for granted and underexplored. Thus, one can conclude that Chinese contracting firms are viewed as 'black box' entities, the structure of which remains unknown.

### **3.3 Transaction cost perspective (TCP)**

The preceding section reviewed the classic macro-level perspective on China's construction sector. This section reviews the transaction cost perspective (TCP), which has been used mobilised by several researchers to provide insights into the interplay between construction environments and contracting firms. Derived from the field of economics, TCP provides insight into production transaction arrangements and how boundaries between markets and firms are determined. This section will highlight the need to critically rethink the concepts of 'market', 'firm' and 'project' and will question the centrality of transactions in the Chinese construction context.

#### **3.3.1 Governance of project transactions**

Along with introducing discourses related to market economics, over time researchers have started to mobilise western market theories to study the Chinese construction sector. For example, TCP was employed by researchers such as Sha (2004) and his associate Hua (with Sha, 2013). Both are followers of Western construction management academics, such as Winch (1989, 2000, 2001, 2006), Lingard et al. (1998), Lai, (2000) and Bridge and Tisdell (2004, 2006). These researchers have all mobilised TCP as a means of understanding how the construction sector is organised.

Before fully discussing this literature, it is necessary to briefly explain the classic TCP. Derived from the field of economics, TCP portrays the world as being composed of transactions by which parties exchange goods, services and/or money. However, contrary to classic economic theory, which assumes that the transactions between market actors are costless, Coase (1937) pointed out that production transactions are not costless. Specifically, production transactions between market actors based on price mechanisms that generate costs, such as contract negotiation, formulation, and implementation. Further, the transaction costs of price mechanisms can be high, under which situation transactions are argued to be better to be conducted in hierarchical organisations such as firms. Moreover, resource allocation in hierarchical organisations of course also generate costs. Finally, the boundaries between markets and firms are argued to be determined by efficiency, that is, whatever governance arrangement generates the least transaction costs. However, despite the consideration of the boundaries of firms, TCP focuses primarily on transactions rather than on organisations such as firms.

The original TCP concept was later developed and mobilised into diverse streams, two of which have been used in the construction management literature. One stream follows Williamson's (1981) operationalization of Coase's (1937) idea of the boundaries that firms establish to govern project

transactions. Williamson (1981) argued that the boundaries of hierarchical organisations are assumed to be determined by transaction costs generated by uncertainty, opportunism and asset specificity. In this context, ‘uncertainty’ refers to the notion that the environment that organisations operate in is complex and difficult to predict, ‘opportunism’ refers to the assumption that firms are self-interested and will nearly always take the opportunity to raise prices and ‘asset specificity’ refers to the advantage firms gain in holding specific assets. The overriding assumption of TCP is that transactions should be governed efficiently in a given market. Applying TCP to interpret the construction sector, the construction project is commonly argued as the product used in market transactions. During the project production process, clients interact with multiple actors in a manner that differs from customers in manufacturing markets, who generally interact with production process only once (Winch, 2001). Based on this thinking, Winch (2001) proposed a project governance structure in both vertical and horizontal directions (see Figure 3.5). ‘Vertical governance’ refers to transactions between clients and the first-tier suppliers who have direct contract with these clients. ‘Horizontal governance’ refers to transactions between first-tier suppliers and human resources and subcontractors. How project transactions should be governed in order to reduce transaction costs is the primary concern of this body of literature.

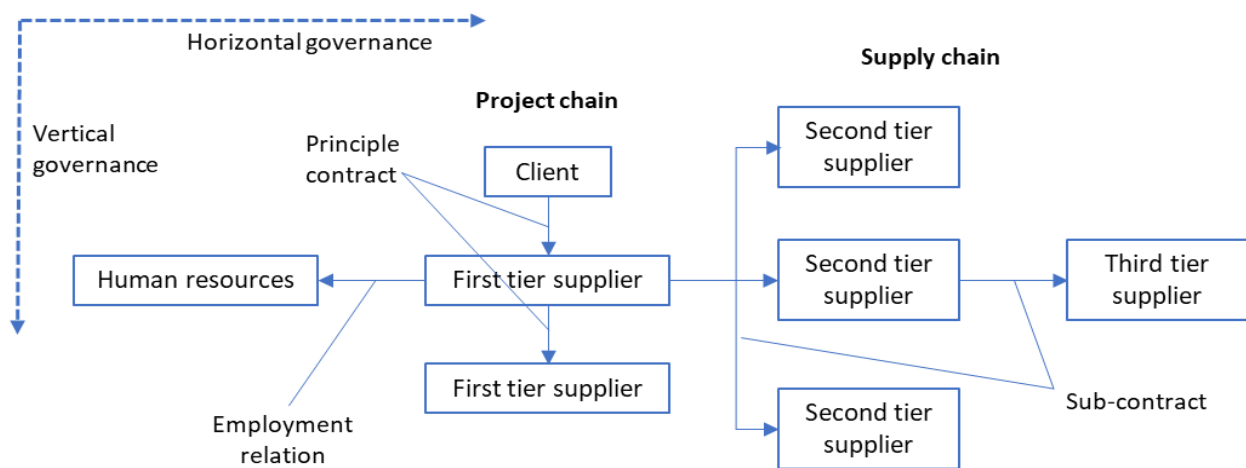


Figure 3.5 Vertical and horizontal transaction governance in the construction project value system.

Cited from Winch (2001)

The majority of this literature focuses on vertical governance of the types of transactions shown in Figure 3.5. Specifically, primary concern is given to provide clients with recommendations of ‘make or buy’ according to static transaction cost parameters. For example, Walker and Chau (1999, p. 168) analysed potential transaction costs for clients who construct projects themselves, including the costs of *‘identifying projects, setting up a design office and a contracting organisation, hiring all necessary*



*personnel and monitoring their performance*'. Frequency of construction is argued as one important parameter that determines whether clients should either 'make or buy'. For those cases of purchasing in the market, contract strategies such as design-build (DB), traditional construction management or public-private partnership (PPP) are further suggested to be selected according to transaction costs.

Different contract strategies generate corresponding project governance structures, and many suggest that they also generate different transaction costs. For example, Sha (2011) compared the transaction costs potentially generated by uncertainty, information asymmetry and specialized knowledge under DB, traditional Construction Management and design-bid-build approaches, and Carbonara et al. (2016) explained the potential transaction costs generated by PPP contract strategies. In addition, the criteria for contractor selection is also suggested to be determined by transaction costs. Lingard et al. (1998) argued that the transaction costs generated by 'lowest bid price wins' criteria do not necessarily result in the best value. After contracts have been formulated, it is often very costly to switch contractors, which suggests that contractors may engage in opportunistic behaviours that can generate additional transaction costs (Winch, 1989). To investigate absolute lowest transaction costs, Lingard et al. (1998) suggested the use of multi-parameter quantitative evaluation models. The overriding assumption here is that clients should accept a project organisation structure according to positivist prescriptions in order to minimize transaction costs. However, as Winch (2000) noted, clients, in particular public clients, are commonly regulated to adopt certain contract strategies and contractor selection methods rather than to decide purely according to economic transaction costs. This is also the case for the Chinese construction sector, in which public clients are required to adopt particular proscribed contract strategies. One typical example of this behaviour concerns the overwhelming 'popularity' of PPP in the Chinese construction sector. Here, the assumption that economic transaction cost is the only criterion that drives clients to make decisions on project governance seems arbitrary and inconsistent with clients' day-to-day reality.

Many researchers focus on the horizontal governance structure (see Figure 3.5), specifically the question if general contractors should own or subcontract labour and equipment. One important pioneer in this work, Winch (1989), criticized the emphasis on project governance in the TCP literature by arguing that project organisation does not follow the 'hierarchy organisations' that Coase (1937) and Williamson (1981) presented. Instead, the author asserted that clients, principal contractors and sub-contractors interact through subcontracting contracts, which are market-based transactions (Winch,

1989, Lai, 2000), and that contracting firms are the organisations that allocate resources in hierarchical ways.

Winch (1989) also analysed the uncertainty and opportunism contracting firms tend to face, including uncertainties in project management and opportunistic behaviours that can occur after contracts are awarded. In particular, he argued that transaction costs in market governance and between general contractors and subcontractors tend to be high. According to TCP, project transaction costs should reduce as general contractors integrate transactions such as those among design professionals and other specialists. However, Winch (1989) pointed out that such suggestion seemingly contradicts the observed structure of British contracting firms, as firms routinely outsource activities in order to achieve the flexibility required to manage uncertain workloads. In particular, British firms seem to emphasize cash flows rather than employing assets to reduce transaction costs. Moreover, Winch (1989) explained that the current pursuit of flexibility through outsourcing can only be understood through the context of the state, clients and professionalism. This argument tracks with Coase's (1960) and North's (1990, p. 12) assertion that '*when it is costly to make transactions, institutions matter*'. In other words, the structure of general contractors in practice cannot be explained solely by economic transaction costs, and social context should be taken into account.

### **3.3.2 Institutional arrangement for project transactions**

The social and institutional context in which organisations such as contractors are embedded is another important topic in the TCP literature. From this perspective, the construction sector is best viewed as a system of actors—including clients, architects, contractors and suppliers—that conduct transactions according to the rules of a game (Winch, 2000). However, the fact that the construction sectors of different countries and regions comprise actors with different roles and responsibilities is commonly recognized (e.g. Winch and Campagnac, 1995), as is the variation in the transactional rules between actors in different construction contexts, which many CM researchers commonly label as 'business systems.' The *Building Research & Information's* (2000) special issue on construction business systems in the European Union illuminates the construction business systems in several European countries, including the UK (Winch, 2000), France (Campagnac, 2000), the Netherlands (Bremer and Kok, 2000), Italy (Bologna and Nord, 2000) and Germany (Syben, 2000), and concluded that no matter the country, transactional rules in the construction sector were found to be embedded in national business systems.

Winch (2000) also creatively highlighted the need to understand construction systems from a dynamic perspective and refused the dominant view of considering them as static entities. Specifically, the author maintained that the rules governing actors' interactions track social transitions, although he provided few insights into micro-change processes. Further, Winch argued that *'just as patterns of behaviour become institutionalized so that they act back upon the actors through the process of structuration (Giddens, 1984), the rules of the game come to be seen as given, normal the only way to do things'* (2000, p. 90). Hence, the institutional arrangements of transactions between actors often reflect their historical context and its evolution.

The caveat of not taking actors and their behaviour for granted is particularly important in the Chinese construction sector. Sha (2004) provided a snapshot of the Chinese business system by focusing on actors and the transaction rules between them and argued that in 2004 the Chinese government still played the dominant role in resource allocation as both client and regulator. As a result, at this time the organisations named as contractors, supervisors and labour-only subcontractors still hadn't fully adopted market-based rules for transactions. Interactions between these actors have long since been argued to be embedded within the historical tradition of Chinese *guanxi*. Such practices have been commonly criticized to be closely related to corruption (Zhang, et al, 2016; Li, 2011). Chen and Partington (2004) argued that project managers frequently make effort to establish both working and personal relations with clients in order to secure future projects. Hence, it follows that the mechanism for resource allocation in China were in the process of changing from solely centralized planning to a mixture of centralized planning and market-based competition. However, such processes have yet to be fully understood within China's institutional context.

### **3.4 Adaptation perspective: Competitiveness strategies in the Chinese context**

The preceding section critiqued the assumption that organisational structures are determined solely by market transactions. This section will review the adaptation perspective, specifically with respect to how contracting firms actively respond to their environment, as this perspective assumes that organisations can and must adapt in response to their context. Particular attention will be paid to literature on Chinese contracting firms, followed by a review of the prevailing focus on competitiveness strategy found in this literature. Finally, this chapter argues that the literature neglects the actual actions contracting firms take in response to their environment.

### 3.4.1 Organisations and their environment

The adaptation perspective assumes that organisations can and must adapt in response to the environments within which they operate. This perspective is derived from contingency theory, which recognizes that organisations adapt to their context (Lawrence and Lorsch, 1967). It differs from many classic theories such as Taylorism, which assumes all firms operate within the same 'environment'. However, as Miles and Snow (1984, p. 10) argued, '*successful organisations achieve strategic fit with their market environment and support their strategies with appropriately designed structures and management process*'. This suggests that organisations are typically portrayed as having an active role in adopting strategies in response to the environment within which they operate.

A primary topic within this body of literature concerns how to analyse a given environment. Generally speaking, the underlying assumption in this work is that an 'objective' environmental reality exists that is 'out there'. Perhaps the most famous analytical framework that illustrates this notion is Porter's (1980) 'five forces' model that he described in *Competitive Strategy*. Here, Porter's core assumption was that the environment within which firms operate can be represented through simplified factors. Specifically, when discussing his understanding of the US market, Porter (1980) proposed the factors 'competitive rivalry', 'threat of new entry', 'threat of substitution', 'supplier' and 'buyer.' This assumption is generally also shared by researchers of China's construction environment. For example, Cheah and Chew (2005, p. 558) proposed an analytical model of Chinese construction sector by combining various existing models. Their model includes factors such as '*government policies*', '*condition of capital markets*', '*condition of other industrial markets*', '*conditions of commodity and resource market*', and '*trends of new technologies*.' The SWOT (strengths, opportunities, weaknesses and threats) analysis is another such model suggested by researchers such as Lu et al. (2009), Ling and Gui (2009) and Lu et al. (2013) to analyse Chinese construction context. Overall, it is generally assumed in the research community that these and other ostensibly 'analytical' models can be used to accurately represent external reality.

Hence, in this context the management role is limited to monitoring the environment in order to gain necessary information, which suggests that this role is therefore reduced to that of an information processor (Simon, 1972). Moreover, managers are typically assumed to make decisions rationally and neutrally, despite the fact that the commonality of subjective perceptions of environment have long been addressed by numerous researchers (e.g. Child, 1972; North, 1990). As Lu (2010, p. 1317) stated:

*'...the paper provides an augmented SWOT analysis approach for strategists to conduct strategic planning in the construction industry. It also contributes fresh insights into strategic planning by introducing rationally analytic processes to improve the SWOT analysis.'*

Clearly, in this literature managers are commonly assumed to be neutral and rational in terms of analysing their environment and making decisions despite comprehensive evidence that they are not at all capable of acting rationally (e.g. Pettigrew, 1985). Another subtle assumption in much of the literature is that Chinese managers possess the level of autonomy necessary for making decisions. However, as the previous chapter discussed, Chinese managers, especially those who work in state-owned contracting firms, are required to follow government's requirements. Thus, the assumption that Chinese managers in these firms have full autonomy in terms of decision making is doubtful at best.

### **3.4.2 Prevailing focus on 'competitiveness' recipes**

Another main topic in the adaptation perspective literature concerns 'competitiveness,' or that a primary objective of firms is to gain a competitive strategy. This 'competitive strategy' is a notion that seen as highly persuasive to researchers who study Chinese contracting firms. For example, Ling et al. (2012, 40) argue that contractors '*need to be competitive in order to survive and grow,*' and while their suggested cocktail of techniques is nuanced slightly differently, it is essentially derived from the Western discourse of competitiveness (cf. Barney, 1991, Teece et al., 1997 and Porter, 1985). Examples of other key phrases include 'differentiation', 'focus', 'cost leadership', 'a variation of tactics', 'relationship formation', and 'relationship cultivation'. Phrases such as 'differentiation', 'focus' and 'cost leadership' can be seen to be derived from Porter (1985)'s ever-popular contribution to competitive-positioning theory. Moreover, Lu et al. (2008) adopted the term 'competitive advantage' in setting out their expectations of how Chinese contractors should operate. Further, they proposed eight supposed 'techniques' that might bring competitive success. Again, the lexicon here is directly derived from Western discourse, and includes examples such as 'project management skills', 'organisation structure', 'resources', 'competitive strategy', 'relationship', 'bidding', 'marketing', and 'technology'. While doubts remain on how these terms are interpreted, it is in itself significant that they are discussed by Chinese researchers. However, one key question is whether Chinese practitioners also discuss these notions. Put another way, these studies seem to proscribe what Chinese contractors *should* do while providing little insight into what they *actually* do.

In addition, studies such as those cited above routinely rely on the use of questionnaire surveys, within which categories are often predefined by selected soundbites derived from the competitiveness discourse. Competitiveness theories operate as the source of hypotheses and propositions that are then tested by empirical data. However, while ideas derived from Anglo-American economies are seemingly assumed to be suitable for the purposes of understanding the Chinese construction sector, western competitiveness theories were developed largely according to researchers' understandings of how firms and markets work in a neoliberal context. As a result, theories such as the Five Forces Model have been criticized as not suitable for emerging economies such as China's, not least because of the role government often plays in their economic processes (Narayanan and Fahey, 2005).

One example of this unsuitability arises when researchers make specific references to Chinese government policies. For example, Lu et al. (2008) refers to the Chinese government's 'lay-off' policy and to its determination in promoting a 'modern enterprise system.' Also, Shen et al. (2004) were notable in referring explicitly to mechanisms that were introduced through government policy documents, including systems related to business licenses and qualifications, quality monitoring, project supervision, tendering, qualification management, initial capital and owner responsibility. The very act of referring to government policies reflects researchers' subconscious understandings of the significant role government plays in the Chinese construction sector. However, such linkages are again largely based on researchers' conjecture about what managerial techniques contractors should adopt, rather than what they are currently doing in practice.

It is worth noting that for the studies cited above, the term 'competitiveness' is consistently viewed as a 'thing' that can be gained. Here, the underlying assumption is that contracting firms are static entities and that 'competitiveness' is one of their properties. Further, it is commonly assumed that competitiveness 'recipes' can be applied to all contracting firms in the same manner, as if all firms can be equally competitive in the marketplace. Such assumptions are often criticized as '*acontextual, ahistorical and aprocessual*' (e.g. Pettigrew, 1985, p. 15). Specifically, these 'recipes' are assumed to be universally valid for contracting firms irrespective of their context as well as suitable for any contracting firm at any point in time, which neglects the organisational context that has developed historically. Besides, even though researchers have often demonstrated that strategies differ in their effectiveness, they have provided few insights as to how and when to implement a given strategy. For example, Porter (1991) admitted that the dynamic processes that firms can use to achieve better market position lack understanding. This suggests, as Langley et al. (2013) observed, that little 'know-how' knowledge is

provided in this body of literature. As a result, what happens on the ground in Chinese contracting firms remains largely unknown. Therefore, research attention should be shifted to how contracting firms restructure themselves in response to environmental change.

### **3.5 Process perspective**

The preceding section reviewed the adaptation perspective, which suggests that firms actively adapt to dynamic circumstances. As stated previously, while the existing literature on contracting firms tends to focus on providing 'recipes' of what contracting firms should do in response to 'instrumental' agents, what contracting firms actually do in responding to contextual changes has been neglected. This section reviews the process perspective, which shifts the research focus to the processes through which contracting firms organise themselves in response to environmental change. First, the section explains why the process perspective is essential by reviewing the literature on unintended outcomes of strategy implementation processes. This follows with a discussion of the implicit assumptions of the process view and an identification of the primary research concern. Finally, the section discusses competing processual views.

#### **3.5.1 Emergent 'strategies'**

As observed in the preceding section, the adaptation perspective in the construction management literature focuses on 'competitive strategy' while providing few insights on the processes of organisation. As discussed previously, many researchers have questioned whether managers formulate strategies as adaptive perspectives, and thus some have shifted their attention on how strategies are formulated within firms on the ground. Here, one of the most influential studies is Mintzberg and Waters (1982)'s longitudinal case study on strategy formulation in a food retailer, which was part of their larger research program on tracking strategies. Through comparisons of what leadership plans stipulated out and what the firm actually does, Mintzberg and Waters (1982) found that strategies are often not always planned, but rather emerge. The researchers found that the studied firm ended up doing unintended things, which should not necessarily be viewed as chaos. In fact, Mintzberg and Waters (1985) argued that both deliberate and emergent strategies were found in the organisational change processes for the studied firm. As a result, they suggested that 'strategy' should be viewed as a term that refers to a 'pattern of decision making' (Mintzberg and Waters, 1985). Mintzberg and Waters' work is widely viewed to be the origin of the process-based view, which powerfully shifted the primary research focus in many fields to tracing the processes of how decisions are made in firms.

Other construction management researchers have observed similar unintended outcomes during particular strategy implementation processes. For example, Bresnen et al.'s (2004) case study on how members of organisations in a project-based organisation respond to managerial change initiatives demonstrated that unintended responses such as ignorance and resistance were exhibited by members of organisations. The authors argued that the responses of middle managers are embedded in existing organisational structures, and that the implementation of strategies in firms on the ground has been found to be heavily influenced by existing organisational contexts. Thus, strategies should not be viewed as separate from the broader organisational change processes.

In fact, Green et al. (2008b) found that the future opportunities firms enjoy depend on their current situation, which is shaped by its past. This suggests that instead of focusing on short-term organisational strategies, researchers should view organisational changes in processes by taking into account the past, present and future of organisations. Thus, this research shifts its focus to exploring how organisations have restructured themselves over time in response to environmental changes. As Pettigrew (1985, p. 36) argued, *'the process itself is seen as a continuous, interdependent, sequence of actions and events which is being used to explain the origins, continuance, and outcome of some phenomena'*.

### **3.5.2 Assumptions of the process perspective**

For the process perspective approach, the environment is assumed to be unanalysable, which differs significantly from adaptation perspective. Here, managers are assumed to have bounded rationality and to respond to their environment on the basis of limited information (Simon, 1957). In addition, many have argued that social and cultural context also influences how managers perceive the environment within which they operate. As Pettigrew (1992, p. 10) argued: *'context is not just a stimulus environment but a nested arrangement of structures and processes where the subjective interpretations of actors perceiving, learning, and remembering help shape process'*. Thus, context plays an active role in the process perspective, which differs from other perspectives in that it assumes that relationships between environments and organisations are instrumental, a situation that Pettigrew labelled as a 'hard mechanism' (1985). For example, drawing from the process perspective, Green et al. (2005) compared the interpretations of experiences of managerial ideas of 'supply chain management' produced by practitioners from the UK aerospace and construction sectors. By analysing features of their industrial context and related practices in practitioners' interpretations, the researchers found that practitioners mobilised different features in the two industries to justify their ways of mobilising 'supply chain management.' Moreover, those mobilised features of industry were found to differ from those that



appear in the literature on supply chain management. Therefore, in order to understand the processes that emerge in the construction management context in response to environmental changes, it is essential to get access to the members of organisations' interpretations of these processes.

In addition, given the recognition of emergent of unintended 'strategies', the process perspective highlights the role collective efforts, including leadership, play in organisational change. In fact, several researchers have demonstrated that organisational change is a collective endeavour (e.g. Green et al. 2008b). Under this approach, in contrast to some of the previously reviewed perspectives, members of organisations are not assumed to be rational economic actors, but rather individuals who have diverse motivations and pursue certain outcomes. Further, this perspective argues that managers spend more time reacting to events rather than planning for them (Mintzberg, 1973). In addition, Pettigrew (1985) persuasively argued that organisation is not 'purely neutral' and labelled this activity as 'political'. This suggests that for the construction management context, managers selectively mobilise their environment and structure in order to legitimise their actions in order to achieve desired outcomes. Therefore, one could argue that members of organisations' interpretations of their environment compete for legitimacy during organisational change processes.

Thus, the process perspective highlights the influence that organisations have on their given environment, which suggests that the relationships between organisations and their context is assumed to be interactive. As a result, this perspective concludes that over time organisations are not only shaped by but also shape the environments in which they operate. A striking example of this phenomenon concerns how different actors take action in response to given policy initiatives. For example, Bresnen (2009) explored the process through which actors interact and take action to shape local partnering practices in response to partnering policy initiatives. The author found that members of organisations initiated emergent practices on the basis of the organisational context and local practices, rather than instrumentally following what policy initiatives required. Moreover, these emergent practices in turn became the context in which practitioners further interact. In addition, during this process, some practices endure while others are changed. Bresnen (2009, 2017) and Chan (2018) further champion the need to understand the structural change process by investigating the interaction between human agency and structure. Through ongoing interactions, the construction environment within which firms operate is progressively shaped. In terms of the Chinese construction sector, marketization should be viewed as a process of transition within which a range of actors interact. The

resultant material practices progressively shape structural change, but at the same time they are also shaped by it.

### 3.5.3 Towards a strong processual view

However, competing voices exist in the process perspective literature. In essence, this perspective can be divided into a 'weak' and a 'strong' process view, depending on the assumptions about whether an organisation is constituted by objects or processes (Chia and Langley, 2004). The 'weak' process view privileges processes, but assumes that organisations is eventually reduced to material substances positioned in space and time. In addition, this view assumes that boundaries between organisations and environments are clear. For example, Pettigrew (1985) suggested both an 'outer context' and 'inner context.' Moreover, processes are viewed as 'periodic intervals,' rather than ongoing ceaseless events. The primary concern lies in how qualities of *things* change through processes. Pettigrew (1992, p. 11) argued that we should try to understand '*how and why things—people, organisations, strategies, environments—change, act and evolve over time*'. Influenced by this assumption, his research aims to provide explanation of change by causal relationships between variances. In order to achieve this aim, Pettigrew (1992), suggested reducing competing interpretations of events to a 'convergent' version of a sequence of events.

However, it is notable that Pettigrew (1992) himself admitted that organisational change is not a linear, singular process. The weak process view is commonly criticized for failing to fully appreciate the centrality of time. According to the weak process view, as Pettigrew et al. (2001) stated, time is compressed into 'comparative statics' so that causal relationships between variants can be explored. As a result, the causal relationships between variants ignore time, and are thus unable to provide 'know-how' knowledge such as what to do, when to do it and in what context (Sandberg and Tsoukas, 2011).

By contrast, the strong process view privileges processes, arguing that organisations should be viewed as organising processes during which action and things are reifications of processes (Langley et al., 2013). In other words, the essence of organisations is change, which is composed of chains of events and experiences. As a result, actors and organisations are continuously constituted by experienced processes. The famous metaphor is man cannot step into the same river twice given by Heraclitus. Tsoukas and Chia (2002) further contended that environment is continuously reconstituted through processes of actions and interactions, and that individuals, organisations and their environment are in a continuous interacting flux. The research question then is '*how processes themselves (sensemaking,*

*decision making, performing, identifying, etc) emerge, develop, grow, and decline'* (Langley et al., 2013). Thus, the strong process view helps to provide a narrative explanation of how sequences of events unfold over time, in which situations are placed in a 'temporal, contextualized form with a plot'. Practitioners' different voices of their experience of studied phenomena are valued. The strong process view provides more insights into 'what is going on here'.

Following the strong process view, the current research views Chinese contracting firms as organising processes and that the Chinese construction sector is a continuously transitioning process. In line with this strong process view, as Langley et al. (2013, p. 11) argued, the challenges are '*to unravel processes as they happen so as to develop an understanding of their underlying logic while providing a theoretical interpretation that reaches beyond description and can speak to other situations*'. That means, for the sake of the current research, the primary research concern shifts to understanding the logic underlying the processes of Chinese contracting firms for the marketization of the construction sector. The following section discusses sensemaking theory, which Langley and Tsoukas (2010) argued is the best approach to investigating organisational processes.

### **3.6 Sense making perspective**

It has been argued that the current research adopts a strong processual view, which concerns how processes emerge, unfold and develop. The purpose of this section is to review the sensemaking perspective, which arguably provides the best account of organising process. Consideration will first be given to how sensemaking perspective contributes to an understanding of the organising process. This section then argues that organising is accomplished through organisational members' sensemaking processes, and discusses how assumptions about individuals, organisations and their environment are informed by a sensemaking perspective. It follows by identifying the centrality of the language in practitioners' accounts producing, both individually and collectively, after which the significance of terminologies and stories used by Chinese managers is discussed. Finally, the chapter concludes with the interplay between members of organisations' sensemaking and structural change.

#### **3.6.1 Organisational members' sense-making as the micro-process of organising**

As the preceding section discussed, taking a strong process-based view can highlight events and experiences. Meanings of events are continuously constructed during the organising process by recalling and projecting past and future experiences. Adopting a sensemaking perspective can help to explain how individuals construct meaning, which is central to understanding organising process (Hernes and

Maitlis, 2010). In other words, as Sandberg and Tsoukas (2015, p. 8) stated, *'sensemaking is homologous to organising: the latter is achieved to the extent that the former is accomplished.'* For this reason, adopting a sensemaking perspective is commonly seen as an effective means of understanding organising process.

Further, through adopting a sensemaking perspective, the complexity of organisations and the world can be more fully appreciated. As Weick et al. (2005, p. 410) argued,

*'the language of sense-making captures the realities of agency, flow, equivocality, transience, accomplishment, unfolding, and emergence, realities that are often obscured by the language of variables, nouns, quantities, and structures.'*

For instance, the construction sector consists of various types of organisations, including designers, contracting firms, suppliers, consulting firms, subcontractors, government bodies, and quasi-government organisations (Dubois and Gadde, 2002), all of whom interact in diverse ways. For the Chinese construction sector, the transition from a centralized planning economy to a market economy created further complexity for the interactions of the actors involved (Sha, 2004). Further, contracting firms frequently comprise employees from different countries and educational backgrounds who work together to complete complex construction projects. Moreover, every construction project is undertaken by multiple individuals who come from various organisations who hold different interests at different stages. In addition, these individuals may have come from diverse cultures and backgrounds, which means they may notice different events and derive different meanings from these events (Fellows and Liu, 2016).

Green and May (2005, p. 500) use the metaphor of 'carnival' to describe the complexity in the construction sector:

*'Within the carnival, a dazzling array of seemingly unrelated activities are being simultaneously undertaken by individuals and groups with diverse agendas seeking to satisfy diverse needs and desires. This frenzied activity, however, invariably takes place with more synergy than conflict, and with a dynamic complexity that is beyond the intelligence of any single agent to understand.'* (Burgoyne and Jackson 1997, p. 60 [cited by Green and May 2005, p. 500])

In the face of such complexity, every member of an organisation, particularly its managers, tries to make sense of complex circumstances (Daft and Wigginton, 1979). Put another way, practitioners notice events that they perceive as important and create meanings from these events. Therefore, instead of

assuming which events are important to practitioners, which is an approach that often appears in the mainstream literature, it is more important to focus on events that actually make sense to practitioners. Consequently, the sensemaking process of members of organisations can be positioned at the centre of equivocal and complex organising process. With respect to the organising process of Chinese contracting firms, one important question concerns which events Chinese managers make sense of during complex marketization processes. The following subsection discusses how organising process is accomplished by organisational members' sensemaking activities.

### **3.6.2 Organisational sensemaking processes**

As discussed above, the organising process is accomplished by the sensemaking processes of their members. This sensemaking perspective approach offers insight into how practitioners create meaning to events and act correspondingly. Weick et. al. (2005, p. 409) argued that sensemaking:

*'unfolds as a sequence in which people concerned with identity in the social context of other actors engage ongoing circumstances from which they extract cues and make plausible sense retrospectively, while enacting more or less order into those ongoing circumstances'.*

Specifically, the sensemaking processes of individuals begins with noticing signs in equivocal circumstances and then asking the question 'what is the story here?' This question brings events into existence. Individuals notice events that are meaningful to them (Weick et al., 2005). This process is guided by the mental maps that members of organisations construct from past organising experience. These maps are then labelled and sorted into certain categories, which can potentially suggest future actions. For this reason, it is important to understand the language Chinese managers use in their accounts.

The second question individuals ask in the sensemaking process is 'what should I do?' This question brings constructed meanings into existence, which means they are then materialized into actions. Actions are critical in any sensemaking approach. As Hernes and Maitlis (2010, p. 30) argued, *'action is a prerequisite for creating meaning. The world cannot be known as such but is brought about by acting upon it. It does not lie there ready to be interpreted, but has to be made sense of.'* This suggests that for members of organisations, action is an essential part of the sensemaking process. Through sensemaking, members of organisations create both organisational contexts and environments, a process that Weick (1995) is labelled as 'enactment.'

During the organising process, members of organisations continuously interact not only physically but also symbolically. In an ethnographic study of strategy implementation processes, Gioia et al. (1994) found that in order to produce accounts, strategy team members drew not only from what others said, wrote and did, but also from their past experiences. Gioia et al. (1994, p. 363) argued that *'people take into consideration the realized or likely outcomes of their own actions or those of other significant stakeholders in trying to understand what to do next'*. Further, the people that members of organisations interact with are neither physically nor symbolically limited to these organisations. Rather, the boundaries between organisations and the context environments in which they operate tend to be blurred and in constant flux (Mackay and Chia, 2013). Through ongoing interactions, individuals construct meaning of events by drawing from other events, both reflexive past and imagined future events. As Langley and Tsoukas (2010) argued, *'events are nested events'*. In this way, members of organisations continuously produce temporal accounts by engaging in ongoing interactions.

Moreover, members of organisations generally produce accounts of events that align with those they have constructed from past experiences. Specifically, when seeking to derive meaning from events and initiate actions, members of organisations typically ask questions such as *'Who am I?', 'What should I do?', 'What matters to me?' and 'Why does this matter to me?'*. In other words, members of organisations seek to create meaning from events that are plausible to them and that correspond to their identity. As a result, in an organisational context, interpretations that seem plausible to managers may not be plausible to other employees. Thus, accuracy is secondary in creating meaning, and *'objective'* realities of environments exist separately from individuals. Notably, this conflicts with many of the perspectives reviewed in this chapter, such as the transaction cost perspective, the adaptation perspective and the weak process perspective (see Pettigrew, 2001). Despite the recognition that managers tend to have limited access to information, researchers of these perspectives obstinately assume that managers nonetheless act rationally on the basis of complete and accurate information. This conclusion also differs from Pettigrew's (2001) weak process perspective, which suggests that one can reduce competing interpretations into *'convergent'* versions of events. As a result, one can assert that diverse interpretations of events produced by members of organisations exist not only as representations of their particular reality but also constitutive dynamics of organising process.

Finally, organisational processes can only be understood through the diverse accounts and experiences of their members. Tsoukas and Chia (2002, p. 571) argued that *'only a direct perception of reality will enable one to get a glimpse of its most salient characteristics—its constantly changing texture, its*

*indivisible continuity, the conflux of the same with the different over time*'. However, members of organisations can give temporal accounts of events that provide a snapshot of the flying 'reality' of organisational sensemaking processes. Moreover, such snapshots can provide situated specificity of 'lived realities' from which members of organisations can initiate actions that may make sense to other members. In this way, the primary research focus can then shift to individual accounts of events, which are not only the research object but also its raw material (Langley and Tsoukas, 2010). With respect to this research project, the focus then shifts to how members of organisations produce accounts of events of their experiences in responding to marketization.

### **3.6.3 Sensemaking, language and structural change**

The adoption of a sensemaking perspective highlights the central role language plays as circumstances emerge into existence. As Weick et al. (2005, p. 409) argued, *'sense making involves turning circumstances into a situation that is comprehended explicitly in words and that serves as a springboard into action'*. Further, communication is considered to be central to organisational sensemaking processes. As a result, discursive language becomes a resource that individuals use to create realities, which then suggest actions. Consequently, its combined focus on material and discursive practices positions sensemaking within the broad spectrum of practice-based research.

The microprocesses involved in managers' sensemaking frequently draw from institutionalized discursive resources in order for them to gain legitimacy for their actions. Foster et al. (2017) argue that historical narratives provide strategic resources that practitioners can selectively draw upon to make sense of their lived experiences. Practitioners are of course also obliged to echo current policy narratives, but since the Open-Door strategy they can also derive additional legitimacy by drawing resources from international improvement narratives. In the words of Foster et al. (2017): *'some organisations might be successful at legitimating themselves by constructing historical narratives that reference specific rules, values, and practices that were borrowed from foreign field(s) or organisation(s)'* (Foster et al, 2017, p. 1188). A case study of such was provided by Abolafia (2010), who demonstrate how different interpretations of circumstances linked to an economic recession were constructed by members of the Federal Open Market Committee in the US during a 1992 meeting. By analysing meeting records, the author found that committee members drew from macro-plots related to operating models in order to select and interpret events and to initiate actions. Abolafia (2010) further argued that any failure to invoke broader institutionalised discourses could increase risk and reduce legitimacy. For the

sake of the current research, the question concerns which broader discourses Chinese managers draw upon to produce their accounts of events.

Essential aspects of broader discourses available to members of organisations are often introduced through change programmes or policy initiatives, which are commonly viewed as events that trigger and provide space for practitioners to make sense of their roles and responsibilities. However, change programmes could be better viewed as providing new interpretative codes through discursive templates (Tsoukas and Chia, 2002). Discursive templates can provide new ways of talking and acting by amplifying changes which in turn can legitimize new practices. Similarly, policy initiatives should be viewed as strategic interventions that provide discursive resources for practitioners to draw upon in order to make sense of circumstances (Tsoukas and Chia, 2002; Gottlieb and Jensen, 2012).

However, the introduction of discursive templates can only be viewed as the beginning of any process of change, as whether they are taken up by practitioners is uncertain. For example, after examining two case studies of how two British contracting firms remain competitive, Kao et al. (2009) found that the managers they interviewed didn't discuss any ideas for improvement that were suggested by industrial reports. A notable exception is the idea of 'partnering,' which interviewed practitioners identified as resonating with their past organising experience. In other words, these practitioners selectively drew from discursive resources that made sense with their organising experience. Leiringer et al's. (2009) case study on how a British contracting firm enact PFI also found that practitioners mobilised the label of 'PFI' in order to win projects. Only a few specialist units for project financing were established, while other routinized business practices in the studied firm were not seen influenced. In terms of this current research, massive policy discourses have been introduced into the Chinese construction sector (see Chapter Two). However, what and how discursive terminologies and ideas Chinese practitioners enacted remains largely unknown.

Further, the meaning of discursive ideas that practitioners adopt is socially constructed. In fact, even discursive ideas promoted with required procedures or codes, the meaning of the idea is constructed by a process in which practitioners collectively make sense of their roles and responsibilities. Gottlieb and Jensen's (2012) ethnographic case study on how project actors in Denmark enacted 'partnering' requirements provides such an example. When required to implement the idea of 'partnering', practitioners didn't follow the provided procedures instrumentally, but rather rethought their own roles and responsibilities by referring to both the procedures and their situated context. Hence, the meaning of discursive ideas is largely constructed by situated practitioners. However, with respect the Chinese



construction sector, the meanings of discursive terminologies and ideas Chinese managers use in their terminology is presently underexplored.

During ongoing organisational processes, members of organisations typically generate recurring categories of situations and habits (Tsoukas and Chia, 2002). These recurring categories can be viewed as institutionalized representations of situations, actors, actions and assumptions of what an organisation is and what it should do. As Hernes and Maitlis (2010, p. 29) argued, *'experience is what provides for continuity in processes, furthermore that continuity is made possible by human-made abstractions from experience, which help shape experience in turn.'* Further, members of organisations routinely respond to the world according to categories constructed during past experiences. Of course, these categories are subject to reinterpretation and modification and are often abandoned in future sensemaking processes (Daft and Wiginton, 1979). During sensemaking processes, as members of organisations notice and respond to expected and unexpected events they continuously update these categories. As a result, organisational change can be viewed as a *'reweaving of actors' webs of beliefs and habits of action to accommodate new experiences obtained through interactions'* by Tsoukas and Chia (2002, p. 567). For this research, the question concerns which institutional categories Chinese managers have developed in their sensemaking processes.

### **3.7 Summary**

This chapter reviewed the literature on the interplay between organisations and their environments with respect to the question of how Chinese contracting firms restructure themselves in response to marketization (see Chapter Two). Particular attention was paid to critically reviewing multiple theoretical perspectives that contain a broad range of assumptions concerning various actors, firms and environments. To conclude, the chapter presented why a sensemaking perspective was adopted to address the research question for this study.

Researchers who employ the traditional macro-level perspective of investigating the Chinese construction sector primarily concern themselves with providing 'objective' reality, which supposed exists externally from its practitioners. Generally speaking, these researchers tend to construct 'reality' though selecting factors such as 'construction investment', 'number of contracting firms', 'gross output value', 'market structure' and 'productivity'. Moreover, researchers often operationalize these factors into different indexes supported by data from various sources. A few researchers have also used policy initiatives as another indicator to produce an 'objective' reality for the sector with the tendency to

assume that Chinese policy initiatives have been implemented in entirely instrumental ways. However, while the literature has provided many valuable insights into the changing structural and policy landscape of the Chinese construction sector, it has been argued that these assumed 'objective' realities cannot exist independently from researchers who produced them. The overriding assumption that the construction sector can be viewed as a series of fixed points has been criticized as neglecting what is undoubtedly a dynamic process. It has been further critiqued that the interplay between this rapidly changing landscape and contracting firms has been taken for granted and thus underexplored.

The interplay between the Chinese contracting firms and its context has been discussed by researchers who have drawn from the transaction cost perspective (TCP). Derived from the field of economics, TCP focuses on market transactions and assumes that the structure of any given firm is determined by its transaction costs. Further, for the construction sector, a TCP approach assumes that projects constitute the transactional product. However, a debate has emerged in the construction management literature as to which type of organisation allocates resources in a hierarchical manner. Some researchers view the project organisation as the 'hierarchy organisation' and focus on providing lists of transaction costs of different project governance arrangements to clients. On the other hand, others view contracting firms as the 'hierarchy organisation' and focus on analysing potential transaction costs. Here, the overriding assumption is that minimizing transaction costs is the only criterion that governs clients or contracting firms in their decision to 'make or buy'. However, it has been argued that merely providing suggestions is inconsistent with the practice, and that the social and institutional context of transactions must be taken into account. In fact, the literature on institutional arrangements of project transactions for the construction industry in different countries has demonstrated that the institutional arrangements of project transactions are embedded in the broader historical evolution of their respective business systems. In addition, it has been argued that institutional arrangements of 'markets', 'contracting firms' and other actors in the Chinese construction sector should be understood from the standpoint of their historical evolution from the perspective of centrally-planned resource allocation.

The adaptation perspective assumes that organisations can and must adapt to changing environments through making and implementing strategies and emphasizes the role managers play in this adaptation process. Here, the primary focus lies in providing managers with models of how to understand environments or 'competitiveness recipes.' However, it has been argued that this perspective concerns itself with what managers should do rather than how they actually did. Moreover, the overriding assumption is that managers behave in a rational and instrumental manner has been criticized as failing

to recognize the inherently bounded rationality of biased human beings. Also, competitiveness guidelines have been criticized for their lack of consideration of both environmental and organisational contexts. Most importantly, competitiveness guidelines rarely provide 'know-how' knowledge, which suggests that they neglect the process of how contracting firms restructure themselves in response to changing environments.

The process perspective derives from a broad range of ethnographic case study literature on how strategies are made and implemented, in which observed emergent strategies and unintended outcomes highlight the continuity between past, present and future. Many have argued that strategies are best viewed as patterns of decision making, which has shifted the focus to the processes of how decisions are made. Particularly, the focus lies in providing micro-level situated specificity on given sequences of events (i.e. what happened, who did what, and when) during organisational change process. Further, organisational change processes have been argued as collective endeavours in which members of organisations are governed not only by bounded rationality, but also their desires and pursuits. Under this perspective, the multiple interpretations managers build regarding their environment compete for legitimacy. According to the process perspective, organisations are not only shaped by but also actively shape their environment. The 'weak' process view, which reduces processes to material objects and focuses on causal relationships between variants, has been criticized as failing to fully appreciate the centrality of time. By contrast, this research has adopted a 'strong' process view, which argues processes are composed by events and experiences, while materiality and actions are viewed as reification of ongoing processes. Thus, the research question shifted to how processes emerge and develop. Moreover, many have suggested that practitioners' narrative accounts of sequences of events is the best means to investigate the processes Chinese contracting firms undertook during the marketization of China's construction sector.

Finally, it has been argued that the sensemaking perspective offers the best account of organising process not least because it is designed to provide insights to the complexity of changing processes. Organisation is widely asserted to be an ongoing process that members of organisations continuously make sense of events. By explaining how members of organisations create meaning and initiate action, the sensemaking perspective provides explanation of how organising process is accomplished. Further, for the current study the accounts of events of members of organisations are argued to constitute both research subject and raw material, as they reflect not only their constructed realities but also dynamic organising process. The centrality of language is also highlighted in this study, especially because

members of organisations selectively draw from broader discourses to interpret their actions and gain legitimacy. In addition, change programmes and policy initiatives are argued to be important sources providing discursive templates that encourage members of organisations to amplify and legitimize their actions. This study adopted a sensemaking perspective in order to address the question of how Chinese contracting firms organised themselves in response to marketization. Informed by this perspective, the research question was reframed to address Chinese managers' accounts of events. Therefore, the research objectives include:

- 1) To establish how managers within contracting firms interpret the environment within which they operate;
- 2) To explore the lexicon of terms mobilised by managers within Chinese contracting firms in describing the challenges which they face;
- 3) To understand the diverse range of organisational responses by Chinese contracting firms to the unfolding processes of marketization;
- 4) To investigate the roles which managers ascribe to themselves in the continuous process of organising;
- 5) To ascertain the extent to which policy initiatives shape the day-to-day practices of practising managers in Chinese contracting firms.

The following chapter will outline and support the methodology that was developed to meet these objectives.

## 4. Methodology

### 4.1 Introduction

Despite extensive literature on Chinese contracting firms there remains an absence of work relating to the way managers navigate China's changing policy landscape. Notably, the experiences and voices of senior managers seems to be missing. As Chapter Three argued, this study employed a sensemaking perspective as a means of providing insights into the ways in which Chinese contracting firms organise themselves in response to their dynamic operational environment within which they operate. The purpose of this chapter is to explain the methodology used to achieve raised research objectives in this study. The chapter firstly considers the research philosophy that underpins the sensemaking perspective, particularly as an approach that challenges the largely-debated dichotomy of positivism vs interpretivism. It then argues that 'positivism' and 'interpretivism' can be viewed as notions that provide a foundation for diversifying research philosophies in the construction management field, particularly in China. The chapter then reviews the process of how researchers produce knowledge and argues that a reflexive approach to knowledge production was adopted in this study.

Moving on, the chapter considers operationalization of the sensemaking perspective as a research method. Weick's (1995) seven properties of sensemaking as initial theoretical concepts that directed the research strategy for this study. Here, each of these properties is explained and a methodological justification of the way each was operationalized is provided. The chapter follows with a review of studies that purport to have adopted a sensemaking perspective in researching construction industry phenomena. Here, consideration is given not only to the range of ways researchers have mobilised sensemaking ideas, but also their associated research strategies.

The chapter then reflects on how the study's research strategy was developed. It discusses the issue of generalisability, explains the decision to adopt a case study research method and defines how specific cases were selected. Thereafter, the chapter discusses the study's data collection methods and techniques, including semi-structured interviews and document review. Then, the chapter outlines the researcher's data analysis process with particular attention to the importance of applying a sensemaking perspective as part of an iterative process that moved between consideration of qualitative data and

theoretical concepts. Here, the author argues that this was a discovery-based process involving thematic analysis and cross-case comparison. Finally, the chapter discusses research ethics and validity.

## **4.2 The methodological implications of the sensemaking approach**

The proposed research adopts a sensemaking perspective as a means of providing insights into the ways in which Chinese contracting firms organise themselves in response to the dynamic environment within which they operate. However, theories are not separated from method, but rather has its own methodological implications (Van Maanen. et al., 2007). This section discusses the particular methodological implications of adopting a sensemaking perspective.

### **4.2.1 Research philosophy informed by the sensemaking perspective**

The research philosophy selected for this study reflects the essential tenets of sensemaking. The sensemaking perspective concerns the way in which individuals construct subjective interpretations of what happened as their basis for initiating action. However, it should be noted that sensemaking perspectives do not exclude external material facts, but rather are embedded in situated contexts that encompasses diverse material and discursive resources (Nicolini, 2012, p.7). In addition, material realities recursively influence not only the interpretations of actors, but also their range of options for taking action. Hence, this research highlights the socially constructed realities of practitioners while also acknowledging the existence of the material facts that exist independently from them. This informed research philosophy is often labelled as ‘weak social constructionism’ (Goldman, 1999). The recognition of both people’s subjectively constructed and objective realities tends to blur the alleged boundary between ‘positivism’ and ‘interpretivism’. Hence, this position contends that research cannot be simply divided into the two distinct camps of ‘positivism’ and ‘interpretivism’. ‘Positivism’ and ‘interpretivism’ are better viewed as notions that address different research philosophes. Much of the persuasiveness of the concepts of positivism and interpretivism is that they have provided foundations for changing research philosophies in research fields (Weber, 2004).

There is evidence of growing diversity of research philosophies in construction management research (Leiringer and Dainty, 2017). In previous decades, this field was dominated by a focus on providing ‘objective’ knowledge, which is supposedly entirely separable from the perceptions of practitioners. In addition, the literature in this field was often presented in the form of ‘objective’ findings that ‘could’ ostensibly be applied in any context. As a result, the role of individuals in shaping studied phenomena in

construction management was largely ignored (Fellows, 2010), and the role researchers played in the process of knowledge production was not recognised.

In recent years many research fields have witnessed a growing emphasis on accessing the subjective realities of practitioners and exploring how knowledge is socially constructed. This is certainly true among Western academics in the construction management field. This shift in thinking is evidenced by various current conversations on the relative merits of positivism and interpretivism. However, in the Chinese construction management research field such debates remain rare, and as yet there is little evidence of diverse research philosophies being applied by researchers interested in the Chinese construction context. Therefore, the researcher supports the use of mobilising the notions of positivism and interpretivism in academic conversations and is comfortable in labelling the current an interpretivist research approach to support this new diversification in research philosophy.

Generally speaking, the role of theory differs in positivist and interpretative research (Schweber, 2015). In positivist research, theory is often mobilised as a source of hypotheses drawn to address patterns of variables and empirical data is collected and analysed to test these hypotheses. A widely-used example from the literature of the use of positivist research is one that seeks to account for the interplay between firms and environments with respect to the transaction cost perspective (TCP) (see Section 3.3.1). Researchers have broadly mobilised TCP to generate hypotheses relating to the transaction costs involved in different organisational structures in order to make recommendations based on listed transaction costs about whether or not contracting firms should subcontract services. The generated knowledge relating to assumed relationships between discrete variables is labelled by Tsoukas (1994) as 'mechanistic knowledge'. By contrast, in interpretivist research theories are mobilised as tools to direct researchers' attention to processes or meanings in order to understand observed outcomes. For example, the current study adopts a sensemaking perspective to emphasise that organising process is accomplished through organisational members' sensemaking. Organisational members make sense through producing accounts of what happened. Sensemaking theory hence directs the researcher's attention toward sensemaking properties in members' accounts of their fluid environments. The research therefore tends to be more exploratory in nature and is characterised by an iterative dialogue between theoretical concepts and emergent data (see Section 4.6). The produced knowledge is labelled by Tsoukas (1994) as 'contextualist' knowledge. Hence theories are mobilised in different ways in different research philosophies, thereby producing different types of knowledge.

#### 4.2.2 Reflexivity

Reflexivity refers to the need for researchers to acknowledge and understand their role in the process of knowledge production. Specifically, when producing knowledge, researchers' inherent assumptions can affect the way they undertake research, which can in turn influence their findings and conclusions (Johnson and Duberley, 2003). Calls for awareness of the influence researcher subjectivity has on the process of producing knowledge are not only important for interpretivist researchers, but also for positivist researchers (Holland, 1999). Too often, positivist researchers in organisational fields produce work that positions produced knowledge as objective fact, which suggests a lack of recognition of how the assumptions of researchers affect their objects of study and resultant claims. Reflecting on researchers' subjectivity in the knowledge production process can improve research reliability.

Many researchers who study organisations are aware that the role they play in producing knowledge generates different types of reflexive accounts (Chia, 1996; Holland, 1999). Chia (1996) classified these accounts into three types based on how researchers view their practices. The first type describes the researcher's role as an objective observer who separates herself from her tools and methods. However, this notion can be criticized with respect to the overwhelming positivist practice of providing 'objective' knowledge. Chia's (1996) second type states that researchers recognize that organisational research is an inherent activity of the research process. But how the researcher's preconceived notions influence selected research strategies and resultant findings can be presented falsely as a linear process. Chia (1996) criticized these types of reflexive practices for failing to recognize that organisational research is a process by which researchers continuously move back and forth between literature and data. In addition, Chia (1996) argued that organisational research should be viewed as:

*'a form of intellectual practice involving the de-structuring of established taken-for-granted conceptual categories with a view to revealing the organisational codes and micro-practices which prefigure the establishment of such categories of thought.'* (Chia, 1996, p. 55)

Here, emphasis is given to the researchers' sensemaking during the iterative process of moving between theory and emergent data. In other words, reflexivity in knowledge production was viewed as an essential part of this study which is the third type of reflexivity suggested by Chia (1996). In particular, this study suggests that researchers should reflect on the iterative process of how organisational processes come to be defined, how research strategies are selected and how data are analysed and interpreted.



Chia's (1996) argument is consistent with the sensemaking perspective adopted in this research. It is notable that he based his argument on viewing organisations as organising process that exhibit continuous micro-practices. Chapter Three argued that these micro-practices constitute organising process that are synonymous with organisational members' sensemaking processes. As the aim of this study is to provide insight into the sensemaking processes of members of Chinese contractors, the researcher has embraced a processual reflexivity informed by a sensemaking perspective.

For the sake of the current research, reflexive account of how an organisation such as a contracting firm defined as an organising process through which organisational members make sense has been provided in Chapter Three. This chapter reviewed the literature on perspectives regarding the interplay between organisations and their environment. Concepts and underlying assumptions embedded in these perspectives were critically reviewed in a critical and equal manner to see which, if any, resonated with practitioners' accounts. The process of how the research strategy was selected will be reflected on Section 4.3 and 4.4. Section 4.5 outlines the data collection method and Section 4.6 explains how these data were analysed, interpreted and presented. The recognition of the need to incorporate a reflexive approach came at the end of the thesis writing. Therefore, the final reflexive account was produced on the basis of retrospective sensemaking of the research process in the last stage of writing this thesis.

### **4.3 Sensemaking ideas as previously mobilised in construction management research**

As the preceding section argued, the sensemaking perspective adopted in this study provided a foundation for understanding the organising processes of Chinese contracting firms. This section explains how sensemaking ideas were mobilised for the purpose of achieving the research objectives. First, the section reviews Weick (1995)'s seven properties of sensemaking and the extent to which these concepts were operationalized. It follows by reviewing a range of ways other researchers have mobilised sensemaking ideas in a construction context. On the basis of this review, the section then argues that the insights offered by the existing literature are insufficient and the research strategy was developed to address the research objectives to provide insights of complex organising process.

#### **4.3.1 Operationalization of Weick's (1995) seven properties of sensemaking**

As Chapter Three discussed, organisational members' sense making can be seen to be constitutive of the micro-process of organising. In order to provide insights into the organising processes of Chinese contracting firms, this study focuses on the sensemaking processes of managers. To guide the study design, the researcher employed Weick's (1995) seven properties of sensemaking as initial theoretical

concepts. An understanding of how best to operationalize these seven properties was based on literature predominately related to western construction practices.

*Property 1: Retrospective*

Individuals tend to construct their perceptions of 'what happened' retrospectively (Weick, 1995). Chapter 3 argued that organisations can be viewed as processes that comprise chains of events and experiences. More specifically, how practitioners construct their perceptions of events can provide insight into the dynamics of the sensemaking processes of managers and thus broader organising process. Actors, organisations are continuously constituted by experienced processes (Langley et al., 2013). Creating meanings of events is an attentional process, which suggests that individuals pay particular attention to events that are meaningful to them. Moreover, an individual's current situation inherently influences what they notice when they remember and reflect. As a result, this research focused on how managers pay attention to events that are, in retrospect, meaningful to them.

*Property 2: Focused on and by extracted cues*

Sensemaking theory argues that the environment is inherently equivocal and thus subject to multiple interpretations of 'what is happening' (Weick, 1979). In order to understand how individuals construct their personal sense of reality, sensemaking theory suggests that researchers explore the features that actors consider worthy of focus, which are labelled as 'cues'. In turn, these cues constitute the mental maps that organisational members use to navigate the changing environment within which they operate. However, such maps are continuously open to change and continuously shift due to subsequent sensemaking processes. Weick (1995) suggests that many cues adopted by individuals tend to be major events and unexpected trends, which individuals variously labels as issues, risks or opportunities. Hence, the focus of this research was in exploring the cues managers extract when navigating their changing environment.

*Property 3: Enactive of sensible environment*

*Enactment* is an important component of sensemaking (Weick, 1995). Practitioners are said to 'enact' their environment through taking action, which in turn shapes the environment that they again must further make sense of. Hence, enactment is a recursive process that concerns both thinking and acting (Smircich and Stubbart, 1985). In this way, cognition and action are

connected in iterative loops by which individuals create not only their respective organisations, but over time also the environment within which they operate. Thus, the sensemaking perspective highlights the creative role of individuals in the interplay between human agency and environment. Hence, this study focused on how managers have enacted particular policy initiatives that in turn shaped the environment within which they operate.

*Property 4: Social*

Sensemaking is a social process by which actors interact with each other (Weick, 1995; Maitlis, 2005). In this sense, interactions are not limited to face to face physical interactions, but include the imagined or implied presence of others, which Blumer (1986) labelled 'symbolic interaction'. For example, a sensemaking approach considers speeches, talks, stories, rumours and symbolic objects to be of central importance to an organisational process. Sergeeva (2014b) attempted to mobilise this concept to interpret the process through which organisational activities are labelled as innovations. However, this intention was not quite carried through into empirical analysis. The current study gave attention to the social interactions of managers as they engaged in their accounts.

*Property 5: Grounded in identity construction*

When individuals construct meanings of events, they continuously question their self-identity (Weick, 1995). Brown and Phua (2011) reviewed identity storylines produced by western construction practitioners and grouped them into four overlapping categories: professional identity, ethics, relational aspects and competence. It needs to be clear that individuals' identities are not fixed, but instead are involved in a recursive process of formation that is updated during their ongoing sensemaking processes (Gioia and Thomas, 1996). In their case study in a Swedish contracting firm, Löwstedt and Räisänen's (2014) provided an example of the way in which practitioners' identities are pushed and pulled. Sergeeva and Green (2019) illustrated how British practitioners continuously legitimize their identities by drawing from both personal informal roles and institutional innovation narratives. Brown et al. (2005, 2006) found that practitioners can develop multiple identities that are in a constant state of flux over time. Hence, this study recognised that sensemaking processes are inseparable from identity work and thus paid particular attention to managers' identity storylines.

*Property 6: Driven by plausibility rather than accuracy*

Sensemaking theory also suggests that individuals produce interpretations of complex situations that they find plausible for the purposes of informing their actions (Weick, 1995). Researchers often fail to recognise that accuracy is of secondary importance to plausibility in individuals' sensemaking. One reason for this phenomenon is that achieving complete accuracy is not possible due to the constraints of the 'bounded rationality' of the amount of information that practitioners can access and compute (Simon, 1972). The other reason why plausibility should be prioritised is that managers often pay attention to different features of events according to what they deem as important. Therefore, it is more feasible to understand what is plausible for individuals rather than to assess the extent to which their accounts were accurate.

#### *Property 7: Ongoing*

Finally, Weick (1995) argues that the sensemaking process is ongoing and without beginning or end. For this research, this suggests that through enactment, managers continually create new situations that in turn initiate the need for further sensemaking. Thus, the organising process can be viewed as being constituted by numerous processes through which members of organisations recursively seek to understand their given environment.

The above seven properties of sensemaking were important in shaping the research design for this study. They also had important implications for both its data collection and analysis methods. The following subsection reviews a range of study designs deployed by construction management researchers who have claimed allegiance to sensemaking processes.

#### **4.3.2 The 'sensemaking' approach as mobilised by CM researchers**

This sub-section reviews several studies for which researchers with a specific interest in construction have applied a sensemaking approach. Particular attention was given to the ways in which sensemaking concepts were mobilised and the corresponding research strategies.

Since the beginning of the 2000s, many western construction management researchers have looked to sensemaking theory as a means of understanding construction sector practice. This tendency could be viewed as indicative of the increasing recognition of the role practitioners play in construction contexts (Fellows, 2010, Dainty, 2000). Thiry's (2001) work is an early example of considering the significance of individual's sensemaking activities in the value management process. The author challenged the dominant positivist assumption that practitioners should follow value management prescriptions instrumentally and argued that participants construct their own accounts of situations based on

sensemaking processes. Further, he asserted that value management is best understood as a process of sensemaking. Thereafter, researchers such as Bresnen and Marshall (2001), Green et al. (2005) and Fernie and Thorpe (2007) mobilised the concept of sensemaking to provide critical insights into the largely taken-for-granted practice of borrowing management ideas from the manufacturing sector.

The subsequent decade witnessed an apparent increase in the number of construction-related studies that recognized the role of sensemaking. For example, the notion of sensemaking was applied to managerial concepts such as partnering (Gottlieb and Jensen, 2012) and emotional intelligence (Lindebaum and Cassell, 2012). Other researchers apply sensemaking to decision-making in architectural service procurement (Volker, 2012); project management (Fellows and Liu, 2016; 2017; 2018); innovation (Sergeeva, 2014b) and technology implementation (Linderoth, 2017). However, it is notable that many of these studies did not view sensemaking as synonymous with the process of organising. Certainly, very few studies have adopted a sensemaking approach to understand how contracting firms adapt to rapidly changing policy landscapes.

Clearly, the sensemaking perspective has been mobilised in diverse ways by researchers, in no small way because it comprises a broad spectrum of approaches. Some studies draw only lightly from sensemaking without commitment to the particular properties reviewed above, and the idea of 'sensemaking' is on occasion equated with practitioners' interpretations of their own experience. For example, Green et al. (2005) used the interpretations of UK aerospace and construction sector practitioners regarding how context can influence their understanding of support their views on supply chain management. The study Attention was given to the comparative contextual features that practitioners referred to for the purposes of justifying their views on supply chain management. Emphasis was given to the idea that practitioners construct meaning around their actions, which resonates with the notion that practitioners retrospectively construct their own realities. A similar way of mobilising sensemaking can be found in Fernie and Thorpe's (2007) study of practitioners' interpretations of 'supply chain management', and Lindebaum and Cassell's (2012) research on practitioners' interpretations of emotional intelligence. For these researchers, 'sensemaking' concerns a research orientation that focuses on practitioners' ongoing interpretations of their relevant experience with particular attention paid to the identification of emergent themes. For these researchers, sensemaking is something that can be accessed through semi-structured interviews.

Further, other studies have given the sensemaking approach greater theoretical meaning. In these cases, sensemaking is conceptualized as an essential component of studied phenomena and also serves

to guide research design. But even here there has been little homogeneity in terms of the adopted approach. For example, Gacasan et al. (2016) conceptualized project managers' expertise as knowledge accumulated from their experience of making sense of events, particularly through extracting cues from critical incidents. This study was conducted in two parts, the first of which concerned interviews with 9 experienced project managers from Australia and the Philippines. The interviewees were asked to recall critical incidents that they experienced and to explain their features. Content analysis was conducted to identify critical incidents and features of change that project managers highlighted in their accounts. Identified features of change were categorized into three groups and labelled as 'feedback', 'contextual cues' and 'tacit knowledge.' 'Contextual cues' were explained as '*perceived mainly through the senses in the extraction of information from the physical environment*' (Gacasan et al., 2016, p. 497). In the above studies, the authors seemingly absorbed the idea that practitioners develop personal perceptions. However, how these perceptions are constructed is seemingly misunderstood by the authors when they refer to this process as 'information extraction from the physical environment'. The relationships between practitioners and the environment within which they work is instrumental in nature. Given this assumption, it is not surprising that the second part of Gacasan et al.'s (2016) study concerned a quantitative questionnaire survey that asked 23 experienced project managers and 78 inexperienced project manager trainees to prioritise a pre-prepared list of cue factors. This suggests that Gacasan et al. (2016) seemingly mobilised sensemaking theory in a positivist way to generate hypotheses that could then be tested empirically.

A different way to mobilise sensemaking can be observed in Linderoth's (2017) study of technology implementation, which was conceptualized as a process by which practitioners make sense of technology through extracting cues. Linderoth (2017) defined 'cues' as institutional logic and local practices that actors mobilise in order to make sense of technology. Here, 'institutional logic' referred to the institutionalized rules and practices of interactions between actors. A case study was conducted in a Swedish medial context including interviews with relevant participants in two discrete time periods. Technology usage records during these two periods were also collected. Using the concept of cues allowed Linderoth (2017) to look through her data and discern four episodes of how practitioners make sense of technology by drawing from technological features as well as institutional logic and local practices. For example, the author found that actors made sense of a 'bridging' feature in the studied technology by drawing from the power relations between medical specialists and general practitioners. Linderoth (2017) mobilised sensemaking in an interpretative way to direct her attention in data analysis

and interpretation. Thus, even those researchers who pledge allegiance to sensemaking perspectives frequently mobilise them in different ways in their research design.

In fact, it is common to see a range of different research designs and approaches to data analysis in studies that mobilise sensemaking concepts in an interpretative way. For example, Volker (2012) conceptualized the procurement of architectural services as a process through which decision makers and architects interact in order to collectively make sense of project requirements and ambitions. The researcher conducted an ethnographic case study approach on the tendering processes for two projects: a primary school and a university faculty building. For each case, participant observation, secondary document and interview data were collected. Such a research design allowed Volker (2012) to conduct intensive analysis of the social interactions of actors across both cases to investigate how concepts such as supply and demand were interpreted and how different value judgements were involved in making decisions. Similarly, Sergeeva (2014a) conceptualized innovation in terms of the narratives that practitioners mobilise to make sense of their organisational activities by conducting interviews with thirty practitioners from different firms. The author operationalized Weick's (1995) seven properties of sensemaking, including 'social interaction,' to analyse interviewees' accounts. However, her process of data interpretation was limited to finding evidence of the seven sensemaking properties in the empirical data. For example, in order to demonstrate the presence of the 'social interaction' property in the innovation process, the author cited the quotation, *'to my mind, because it is evolving activity, it has to be a collective one. People spark ideas. That interaction that actually produces the next thought ....'* However, while this quotation suggests practitioner recognition of the importance of social interaction in the innovation process, the author's research design provides very few insights into the types of social interaction that are embedded in this innovation process at the micro-level. This is perhaps inevitable given that the interviews were conducted with practitioners who were scattered from across the sector, rather than from bounded cases. Thus, using particular case studies of contracting firms in situated contexts may be more suitable for research which aims to provide rich insights into complex micro-level sensemaking processes.

#### **4.4 Case study as research strategy**

The preceding section argued for constructing research designs that focus on particular cases situated in specific contexts and that this approach can provide greater empirical insight into complex processes at

a micro-level. Following this argument, this section explains the research design of this study in terms of how it fulfils the research objectives. Case study selection details will also be explained in detail.

#### **4.4.1 Towards Case study**

As the preceding chapter stated, this research aims to provide insights into the complex organising processes of Chinese contracting firms by focusing on the sensemaking processes of firm actors. Considering the complexity of the organising process, particular cases at the organisational micro-level are suitable to provide rich description of 'what is going on' (Tsoukas, 2009). The notion of a 'rich description' refers to a detailed account of socially-interpreted complex organising processes (Weick, 2009).

The significance of 'rich description' lies in rejecting the possibility of time- and context-free generalization espoused by many positivist researchers. Informed by this naïve assumption, positivist researchers often question research on particular cases in terms of 'how particular cases can be generalized', and arbitrarily criticize them for 'failing to generalize' (Flyvbjerg, 2006). For many positivist researchers, 'generalization' refers to what degree particular cases are representative of broader populations, and priority is given to abstract generality over empirical particulars. In recent years many research communities have witnessed an increasing recognition of the importance of studying particular cases. In this sense, many researchers tend to view particular cases as representative of theoretical generalities. In other words, these researchers view particular cases as a subset of generals and ask 'what is the case study of...'

Tsoukas (2009) criticized this view in terms of the way it highlights abstract theory while downplaying the significance of empirical particulars. He argued that engagement with empirical particulars is an essential precondition of developing general theories, which, in turn, serve as tools to explore particular cases and are open to change based on new empirical data. Tsoukas (2009) labelled this recursive process 'heuristic generalization'. This current study aligns itself with this heuristic generalization position. Specifically, informed by sensemaking theory, the proposed research seeks to provide rich description of particular cases of how Chinese contracting firm organises itself in response to changing environment.

In considering accessing to the best data, there are two research strategies are available, case study approach and ethnographic studies. Both have merits and limitations. The ethnographic approaches inherently require a sustained presence in the field for observation and participation (Bryman, 2015).



The researcher deemed this approach to be too time-consuming and thus not appropriate for the current study. Conversely, case study research approaches provide the opportunity for detailed and intensive analysis on discrete cases (Bryman, 2015). The case study approach, as Flyvbjerg (2006, p. 235) argued, also has the advantage of presenting a diversity of participant views of the phenomenon under study. Therefore, cases study was selected as the research strategy to achieve the research aim of providing rich description of organisational members' sensemaking during organising process.

Case study research yields rich empirical accounts by using various data sources such as semi-structured interviews and documents (Eisenhardt, 1989). For this study, conducting semi-structured interviews produced opportunities for respondents to relate their stories of their organisational experiences. As the preceding chapter argued, members of organisations make sense of their professional context through asking questions such as 'what is the story here?' Thus, stories are foundational to organisational sensemaking processes. As Ricoeur (1984) argued:

*'A story describes a sequence of actions or experiences done or undergone by a certain number of people... These people are presented either in situations that change or as reacting to such change. In turn, these changes reveal hidden aspects of the situation and the people involved, and engender a new predicament which calls for thought, action, or both. This response to the new situation leads the story towards its conclusion.'* (Ricoeur, 1984, p. 150)

Moreover, members of organisations tell stories by selectively drawing upon broader narratives (Boje, 2001). Therefore, a distinction between the concepts of 'story' and 'narrative' was made in this study. The stories collected in this research provide insight into the lived realities that practitioners use to initiate actions. Here, the use of the term 'lived reality' suggests that respondents' interpretations during interviews are not viewed as fixed external realities, but as interpretations of events that are continuously subject to change (Sergeeva and Green, 2019).

In order to get access to diverse voices and perspectives, written stories of organising processes can also be obtained from written texts in documents. However, for this study archival texts were not viewed as objective reality, as written accounts of events by individuals are often seen to differ from those produced by members of organisations. For example, Löwstedt and Räsänen's (2012) narrative analysis of accounts of seven events in a Swedish contracting firm found that respondents tended to describe these events as discontinuous and discrete while document writers tend to frame them in as incremental strategic plans. Thus, written texts can be viewed as subjective accounts by archivists that

serve a particular purpose at a particular time. Thus, by collecting different stories produced by diverse members of organisations, a researcher can get access to a snapshot of complex organising processes.

In terms of case study approaches, the question of what is and what is not the case is critical, as there are different ways of defining cases. For example, Yin (2013) suggests defining cases in terms of variables. Here, the assumption is that any given case 'can' be represented by one or two variables. However, this contradicts the complexity of the organising processes as informed by sensemaking perspective. Ragin and Becker (1992) suggested defining cases using specific boundaries, such as places or temporal periods. These two suggested parameters to mark particularity highlight the physical position of places and numerical order of time. With respect to time, an emphasis on temporal structure can conflict with the qualitative nature of time as suggested by the sensemaking perspective.

Specifically, time is often seen as added to narratives during storytelling processes to allow actors to make sense of events. In his case study of how stakeholders make decisions during infrastructure project development, Chan (2012) found that respondents alternatively compressed or stretched time to legitimise announced strategies. Therefore, time was not deemed to be an appropriate boundary condition for this study. However, with respect to place, as Chapter Three argued, when informed by a sensemaking perspective the line between organisations and their environment is often blurred. As a result, the practitioners' sensemaking processes are embedded in their social context (Daft and Weick, 1984). Thus, to best understand the complex organisation processes of contracting firms in response to changing environments, the researcher defined study cases as contracting firms in a local construction context.

Following this, a regional construction sector was selected as the appropriate construction context within which contracting firms organise themselves, partly because of the geographical characteristics of construction work. Moreover, important differences lie not only in different market structures, project types and technologies (cf. Han and Ofori, 2001), but also in the nuanced interactions between actors. In addition, data availability was a key consideration in selecting a regional construction context.

The researcher was also aware that conducting case study research on Chinese firms is difficult due to sensitivity about confidentiality. Personal contacts are extremely important in facilitating data collection and in convincing Chinese practitioners to cooperate. The researcher obtained her master's degree in Chongqing University and has an established a network of contacts with local researchers and government officials. As a result, the Chongqing construction sector was selected as the regional

construction context of study, and specific contracting firms were selected from this area. Moreover, Chongqing has experienced rapidly changing policy and market environments for contracting firms.

#### **4.4.2 Multiple case studies**

After defining case as contracting firms in Chongqing construction sector, the following question concerned how many cases to include. The criterion for deciding an appropriate number of cases was how many were sufficient to achieve the research objectives. For the purpose of the current study, the research aims to understand how contracting firms organise themselves in response to marketization. Chapter 3 argued that members of organisations from different firms develop a diverse web of beliefs and habits of actions resulting from their past organising experience. And as Eisenhardt (1989) maintained, cross-case comparison can facilitate the identification of similarities and differences of theoretical constructs. Thus, in order to understand different facets of managers' sensemaking processes, multiple cases were required.

Case study selection followed Stake's (2013, p. 23) three criteria, namely: i) is the case relevant to the topic; ii) do the selected cases provide diversity across contexts; and iii) do the cases provide opportunities to learn about complexity and context? Notably, these three criteria differ from Yin's (2013) emphasis on population representativeness as the primary case selection criterion. This research, as the preceding chapter stated, highlights the dynamic complexity of the context within which contracting firms operate. Facing such complexity, rich insights as to how contracting firms organise themselves is significant. Therefore, the criterion of whether cases are representative of the population of the Chinese contracting firms is inconsistent with this study's theoretical position. Instead, Stake's (2013) three criteria serve the research aim to provide diverse cases of managers' sensemaking processes, through which contextual details can also be revealed.

According to the criteria introduced above, the researcher's initial intention was to select both state- and privately-owned firms in order to provide diversity. Access to state-owned contracting firms was facilitated through pre-existing contacts with key governmental officials. However, while efforts were also made to secure access to privately-owned contracting firms, and two interviews were conducted with senior managers from two privately-owned contracting firms, further access was found to very difficult. Ultimately, three state-owned contracting firms of varying sizes, all of which are key competitors in Chongqing's construction sector, were selected as study cases. It is notable that here a broad definition of 'state-owned enterprises' is adopted:

*'the term state-owned enterprise is used in the broadest sense to mean all industrial and commercial firms, mines, utilities, transport companies, and financial intermediaries controlled to some extent by government. SOEs are distinguished from the rest of the government because they are expected to earn most of their revenue from the sale of goods and services, are self-accounting, and have a separate legal identity' (Shirley, 1983, p2).*

Such a broad definition is consistent with the theoretical position of the current research. Specifically, the selected state-owned firms are separate legal entities in name, but they are to some extent all controlled by the government. To protect the confidentiality of the selected firms, their names were anonymized as East Construction, South Construction and North Construction, respectively.

Case studies on state-owned contracting firms were ideal in addressing the research objectives. As Chapter two discussed, most reform policies during China's marketization process were issued to promote change in state-owned contracting firms, which were originally established as branches of China's Engineering Army in the 1950s, when its economy was centrally planned. Since this time, reforming state-owned contracting firms to address China's shifting economic goals has been one of the most important policy themes since the announcement of its Open-Door policy. Thus, state-owned contracting firms can provide insight into how managers make sense of rapidly changing policy and market landscapes. In addition, these firms play an important role in Chongqing's construction sector, as state-owned firms are generally perceived as key market players that compete for large-scale projects. Practitioners' accounts of past experiences with marketization process in state-owned firms provide excellent access to the 'lived realities' within which managers initiate actions.

The three contracting firms selected for this study have followed diverse evolution paths. Specifically, East Construction was established in 1965 in order to serve two local steel factories and has since operated continuously in Chongqing. It is one of the largest contracting firms in Chongqing, with over 30 subsidiaries and 2016 revenue of around 16 billion yuan. South Construction originated as an in-house local government construction team that was then restructured as a privately-owned contracting firm. In 2015, it was sold to a local state-owned contracting firm and hence returned to the state-owned sector. With 150 employees as of 2016, this firm was selected to represent small- to medium-scale contracting firms, which comprise the majority of Chinese contracting firms. Finally, North Construction focuses on infrastructure construction projects and reported revenue of over 8 billion yuan in 2016. Thus, the different trajectories of these three firms served to illuminate diverse facets of Chinese managers' sensemaking processes. Table 4.1 lists additional details about these firms.

Table 4.1 Case study details of selected firms

Cases	Ownership status	Brief description
East Construction	State-owned (central government)	East Construction, established in 1965, is one of the largest contracting firms in Chongqing. With over 30 subsidiaries, it focuses on housing, metallurgical engineering and road infrastructure projects. In 2016, it reported a staff of nearly 5,000 and revenue of around 16 billion yuan.
South Construction	State-owned (local government)	South Construction became a state-owned firm in 2015 when it was acquired by a Chongqing state-owned construction company. It focuses on housing and infrastructure projects. In 2016, it reported a staff of 150 and revenue of around 500 million yuan.
North Construction	State-owned (central government)	North Construction is a subsidiary of one of China's largest contracting firms. The firm focuses on infrastructure projects such as highways, tunnels, railways, bridges and pipelines. In 2016, it reported a staff of nearly 1,800 and revenue of over 8 billion yuan.

## 4.5 Research techniques for data collection

The preceding section introduced the case study research strategy and the selected cases. This section explains the data collection techniques used in this study. As the previous section discussed, because using multiple data sources can provide rich description of managers' sensemaking, the researcher both conducted semi-structured interviews and reviewed secondary documents. The following sub-sections elaborate on how these two research techniques were mobilised to fulfil the research objectives.

### 4.5.1 Semi-structured interviews

This study used semi-structured interviews as its main data collection technique. Conducting semi-structured interviews allows researchers to ask questions about a topics of interest and provides space for interviewees to provide their own understandings of introduced topics (Bryman, 2015). For this study, as storytelling is a central element of respondents' sensemaking processes, interviewees were especially encouraged to tell stories of their past organising experience. To facilitate this process, the interview questions were designed to provide more space for interviewees to tell these stories in their ways.

To ensure that the interview questions made sense to participants, the researcher conducted pilot interviews with three managers from one contracting firm and adjusted the questions according to their responses. The questions that were posed in the final interviews and the supporting rationale for each

appear in Appendix A. As De Fina (2009) stated, researchers also need to be aware of their influence on the accounts produced by interviewees. For this research, the interviews were viewed in part as 'narrative encounters', which means that interviewees and researchers co-construct accounts of events. The introduction of the research intent and the interview questions provided respondents with an initial sense of what the researcher wanted to learn. Here, it is worth recognising that the structure of interview questions can influence participants' storytelling (Cunliffe et al., 2004), as can the researcher's presence and reactions. For this study, any judgement or disbelief expressed by the researcher would risk discouraging the interviewees from narrating their experiences. Therefore, all interviews were conducted in a manner of respect, engagement and encouragement.

The researcher focused on senior and operational managers working in the selected firms as interviewees. Senior managers play a strategic role in interfacing with the changing environments and generally hold positions of influence such that their interpretations can initiate action. Operational managers also typically have space to (re-)interpret or enact change initiatives (Balogun and Johnson, 2004). Interviewing both senior and operational managers ensured that a diversity of perspectives could be collected.

For the East Construction case study, semi-structured interviews were conducted with 22 managers, including four senior managers and eighteen operational managers from both the firm's headquarters and its subsidiaries. For the South Construction case, seven senior managers and six operational managers were interviewed. Five senior managers and three operational managers were interviewed for the North Construction case, and the researcher conducted two interviews with three participants to obtain further information on particular topics. Therefore, here eleven interviews were conducted in total. Respondent details, including their current titles, educational backgrounds and career experience are listed Appendix B. All interviews were recorded and transcribed with interviewee consent.

#### **4.5.2 Documents**

In addition to collecting primary data from semi-structured interviews, the researcher also examined secondary data in the form of company histories, annual reports and other documents. As Section 4.4 argues, these documents were viewed as accounts written by a particular author for a particular purpose and time. Thus, the text of each of these documents was critically reflected.

For the East Construction case study, the researcher obtained three types of secondary data documents. The first consisted of two historical records edited in 1986 and 2006, respectively, by a special editing

committee in the firm (see Table 4.2). One record concerns key events that occurred between 1965-1985 that the committee perceived to be important in 1986, and the second relates to events from between 1986-2005 that were perceived to be important by editing staff in 2006. The first record (i.e. 1986) states its publication was in response to *'the requirement of the Notice to Compile Records of the Metallurgical Industry in Sichuan Province issued by the Sichuan Metallurgical Bureau in December, 1983'* and the second record (1986-2006) was written *'in order to take responsibility for history and future colleagues and respond to the need for enterprise spirit civilization and enterprise culture construction.'* Special editing committees were organised to collect and edit information retrospectively for both two records. In addition, the researcher also obtained the firm's annual reports from 2000 to 2016. These reports, which summarize the firm's operations over the closing fiscal year and state its plans for the following year, are typically written by its staff in the Bureau of Enterprise Management and are presented by the firm's party secretary its annual end-of-year staff conference. These annual reports are required for submission to the firm's parent company. Finally, the researcher collected documents regarding management techniques written for industrial conferences by the firm's communication staff.

Table 4.2 Interviewees' name, current role and career experience

<b>Name of cases</b>	<b>Ownership status</b>	<b>Collected documents</b>
East Construction	State-owned (central government)	Annual reports (2000-2017); Historical records (1965-1985; 1985-2006); List of projects; Change initiative reports for industrial conferences
South Construction	State-owned (local government)	Annual reports (2015-2017); List of projects
North Construction	State-owned (central government)	Annual report (2017); Documentation of management procedures; Documentation of firm history; Biographies of selected firm leaders.

For the South Construction case, the researcher obtained two annual reports (2015 and 2016) that were written by its Department of Enterprise Management staff. In addition, the researcher accessed a list of projects constructed by the firm from 2008 to 2017, which provided details for each project, including clients, turnover, project management staff and construction periods.

For the North Construction case, the researcher obtained two annual reports (2016 and 2017) written by its Enterprise Strategy Department as well as biographies of several staff members who worked at the firm's parent company for over 30 years. These accounts were written to publicize the '*working spirit*' (gongzuojingshen, 工作精神) of these staff members. The researcher also obtained a list of the firm's projects that were under construction at the time of access.

Additional documents used in this study include the Chongqing Statistical Bureau's Construction Sector Yearbook and CQMHURDC's Annual Report of Chongqing's Construction Sector. Annual reports are normally edited by select CQMHURDC government officials for the purpose of reporting to the central government. Local policy documents were also used to provide the researcher with additional context.

#### **4.6 Data analysis and case study writing**

This section explains how the case study data was analysed both for each case and across cases. As the data was collected using qualitative research techniques, they constitute rich and mainly unstructured story material. However, unstructured stories are not easy to analyse (Dainty et al., 2000, Bryman, 2015). Qualitative data analysis is often less straightforward than that of positivist research, with less reliance on following clearly defined procedures. Instead, analysing qualitative data involves using interpretative theoretical concepts to guide the researcher in understanding their data. In addition, the presence of emergent data may require researchers to revisit the literature for theoretical concepts more appropriate to explain emergent data. Van Maanen et al. (2007) stated that emergent data should be respected in order to balance between the primacy of theory and the primacy of data. As a result, data analysis is best conducted as an iterative process of understanding collected data and incorporating appropriate theoretical concepts (Green, 2009). In other words, data analysis is a process in which researchers, with theoretical concepts in mind, make sense of qualitative data (Weick, 2002). How a researcher notices, interprets and presents data requires reflexivity. In this way, how researcher subjectivity can influence observations and interpretations of data can be better understood.



The researcher used NVivo 11 to assist in the data analysis process. Notably, NVivo 11 was used as a tool to facilitate the process of identifying and storing codes and themes only. On this point, Blismas and Dainty (2003) cautioned software users to critically consider whether the codification systems provided by any software under consideration are suitable for a given research design. With this in mind, NVivo 11 was deemed suitable for the purpose of coding and storing sub- and main storylines. In addition, the researcher made all decisions related to scanning, judging and interpreting the data were reserved for the researcher, rather than relegating them to the software.

#### **4.6.1 Thematic analysis**

The data analysis process commenced with multiple readings of all interview transcripts to make initial sense of the data. The researcher then conducted thematic analysis to illustrate respondents' storylines regarding their past organisational experiences. Informed by the adopted sensemaking perspective's emphasis on language, the researcher was particularly interested to respondents' storylines that resonated with the policy discourses discussed in Chapter Two, including remarks concerning bidding and tendering processes, project management and competitiveness. Moreover, the researcher was sensitive to the diversity of perspectives that were expressed by interviewees. As Chapter Three discussed, for this study organisation was viewed as a dynamic process through which members of organisations construct their own meanings of events. Therefore, a range of respondent perspectives were coded, particularly those that related to different attitudes, evaluations and practices. These initial codes were then classified as subthemes and labelled in accordance with interviewees' storylines. In addition, as repetition is an essential criterion for identifying themes (Bryman, 2015), subthemes were checked across cases to ascertain if they were highlighted by managers from different firms. Those subthemes that were commonly repeated by interviewees were then categorized into themes that reflect unique episodes in practitioners' organisational experience.

For each case, multiple readings of collected documents were then conducted to identify and cross-check key themes highlighted by managers during their interviews. This cross-checking allowed the researcher to triangulate the existence of events stated in the respondents' accounts. However, this should not suggest that the interviewee transcripts were 'corrected' based on these secondary documents. On the contrary, any differing viewpoints that emerged between the two were celebrated as being indicative of the complex dynamics of the sensemaking process.

#### 4.6.2 Theoretical comparisons across cases

The data interpretation process was an iterative one that involved the researcher searching the literature for theoretical concepts appropriate to interpreting the data. During this process, comparisons across cases were conducted to find similarities and differences in respondent accounts. Summary tables were used to track these cross-case similarities and differences, which helped to ensure the rigor and depth of the evidence (Eisenhardt and Graebner, 2007). In these tables, respondents' storylines were included to make sure the similarities and differences were clear, and that they provided sufficient context to ensure that the researcher's interpretations were plausible.

Initially, the researcher was almost overwhelmed by the richness of the collected data. During the thematic analysis process, she was impressed by some commonalities across cases. First of all, all three studied firms are commonly constantly evolving, which strongly resonates to the assumption of contracting firms as ongoing organising process informed by sensemaking perspective. Thereafter, the researcher noticed that managers commonly produced accounts by plots events into stories, which resonates to storytelling suggested by sensemaking perspective. Terminologies used by managers from the three studied firms in their storytelling were then noticed. Particularly, the researcher focused on how practitioners selectively mobilised macro policy discourses to make sense of their organisational experience. Another commonality between cases was managers' diverse perspectives, which suggested the interpretive role of managers in organising process.

The researcher was aware that the organising process is accomplished by managers' sensemaking. In other words, firms organise themselves in response to the changing environment that is informed by managers' constructed meanings of events. This process, termed 'enactment,' is one of Weick's (1995) seven identified sensemaking properties. In comparing managers' storylines of policy initiatives, the researcher was surprised by how respondents constructed different meanings of key events. Particular attention was then given to how managers enact to the commonly highlighted public-private partnership (PPP) policy that China's central government issued in 2014. The researcher then compared the constructed meanings of this event that emerged in the interviews and the actions of managers across all three case studies. Such comparisons provided insight into the range of ways that managers from three studied firms enact to changing environment. Moreover, it was clear that managers' perception of their roles and responsibilities (labelled as 'identity') and ways of interacting with other actors were changed through their enactments to PPP policy initiatives. This resonates to that meanings of discursive resources were constructed through managers' enactment informed by the sensemaking

perspective. Thereafter, more attention was given to managers' storylines of other discursive resources, including 'bid and tender', 'project management', 'corporation' and 'government'. Attention to these ideas was informed not only by policy discourse but also the reviewed literature. Therefore, respondents' storylines and their related discursive ideas were compared to concepts in western literature, which provided insight into the differences in their meaning between Chinese and western construction contexts. Through these comparisons, insights were provided into change and continuity of ongoing marketization processes in the Chinese construction sector.

#### **4.6.3 Case study writing**

Case study writing is a process through which a researcher selectively identifies and interprets key storylines that emerge from data. However, a common question in this process concerns how to balance between simply describing participant accounts and weaving theoretical frameworks into them (Tsoukas, 2009, Flyvbjerg, 2004). For this study, the researcher sought to balance between relating interviewees' stories of their organisational experience and providing theoretically-informed accounts of these stories. As Flyvberg (2004, p. 400) argued:

*'when a researcher seeks to offer a thick description of a particular phenomenon, keeping the overall theoretical framing to a minimum, their account lends itself to multiple theoretical framings—the account becomes less complete and more open-ended, and is susceptible to several interpretations'* (Flyvberg, 2004, p. 400).

Thus, in the case study writing process, empirical data should be framed theoretically so that the evidence of the researcher's work to encompass data and theoretical concepts can be persuasive. For this research, all case studies were structured according to its six identified themes and their sub-themes. For each theme, respondents' storylines were structured by signalling potential properties of sensemaking.

During the case study writing process, the researcher took great care in translating from Chinese to English. As awareness of and sensitivity to discursive language is supported in this study in part by its sensemaking perspective, its data and language are argued to be constitutive and representative of Chinese managers' realities. Hence, an obvious challenge arises in that the act of translation into English could distort or misrepresent the original interview text. For this reason, the Chinese phrasing of key discursive terminologies was retained for readers who are familiar with Chinese and China's construction sector to form their own interpretations.

The difficulties of precisely expressing the meaning of foreign participants' responses to non-native scholars in academic writing is widely recognised (Crompton, 1997). For this study, this challenge arose not only due to the potential for errors in grammar or syntax, but also because the way Chinese managers make sense of events may well differ from their western counterparts. To overcome this challenge, the researcher confirmed the translations of all quotations appearing in the final document with her supervisor, a native English speaker and researcher with a thorough understanding of western construction sectors. Any confusions were discussed openly. This not only helped clarify any misunderstandings that arose from translation, but also facilitated the identification of significant differences between Chinese and Western managers' sensemaking processes. Finally, the researcher engaged an experienced proof-reader to correct any errors in grammar or syntax.

#### **4.7 Research ethics**

Research ethics concern issues of how researchers treat research participants (Bryman, 2015). For this study, the researcher obtained participant consent for all data collection, fully explained the aim of the study to interviewees and made sure they understood what kind of data she would collect. All interviewees were free to decide whether they want to take part in the process and to withdraw at any point. All interviewees signed a consent form as evidence of their willingness to participate.

The researcher took three measures to avoid causing harm to participants. First, all interviews were conducted in a respectful and encouraging manner. Second, any personal views of the interviewees were kept confidential by the researcher and were not discussed with other participants. Third, the names of all interviewees and their employers were anonymized so that they could not be recognized.

Researchers should also ensure data confidentiality to avoid any potential harm to participants. For this research, all digital data were stored on a password-protected laptop and all written documentation was stored in a locked office cabinet kept by the researcher. The researcher will delete and/or destroy all data and documents upon completion of her PhD.

#### **4.8 Research validity**

Research validity concerns the integrity of a given research design and its findings. Bryman (2015) suggested several dimensions of validity for qualitative research, including coherence between research design and generated findings, whether findings are useful in understanding everyday life and if findings

can be generalized to other contexts. This section discusses the validity of this research according to these dimensions.

First, the research design and generated findings are internally coherent with respect to this study. This work focused on how Chinese contracting firms organise themselves in response to the marketization in the Chinese construction sector. Informed by sense-making theory, particular attention was given to how managers make sense of their context and the relationships between these factors and structural changes in the sector. An interpretivist research philosophy was applied to achieve the research objectives. This study collected data from multiple case studies, which can provide rich descriptions of both practitioners' interpretations and their context. As a result, respondent accounts of events served as both the raw material and the object of analysis.

For each case study, data were collected from different sources in order to cross-check events and diverse interpretations. In addition, an iterative process between data review and literature searches allowed the researcher to analyse the data for each case. Key themes in respondent accounts, particularly the managers' terminology and stories around distinct themes were identified. During this process, the data were found to resonate with Weick's (1995) proposal of seven properties of sensemaking, which were used to interpret respondents' storylines. The resultant analysis was structured to include respondents' terminology and diverse voices and presented the patterns that emerged from the managers' stories with respect to their sensemaking processes. In sum, the research design and the research findings are coherent.

Bryman's (2015) second dimension of research validity concerns whether findings can be used to understand people's everyday organising life. This aim of this research (see Chapter Three) is to understand practitioner responses to changing environments, which clearly speak to understanding the organisational lives of its participants. The interpretative research epistemology of this study allowed practitioners to highlight the unique episodes that they experienced. The language and stories of participants were presented in the case study results. As Chapter Three argued, language, as informed by sensemaking theory, was an important part of respondents' realities. Finally, these sensemaking-related stories revealed part of the 'lived realities' within which Chinese managers initiate their actions.

The third dimension of qualitative research validity Bryman (2015) suggested is whether findings can be generalized to other contexts. This commonly found interpretation of 'generalisability' in research is rooted in a positivist epistemology under which case studies are often criticized as unable to be

generalized. However, as argued in Section 4.3.2, this study highlights the significance of particular cases and supports the heuristic generalization as suggested by Tsoukas (2009). Case study researchers also highlight the value of building knowledge about particular cases in a specific context. This context-based knowledge is argued as advantageous for learning, as readers are invited to connect with and interpret stories with respect to their own experiences. Moreover, the case studies included in this research illuminated participants' diverse perspectives on their experiences with marketization processes, which could challenge the dominant assumption in the mainstream literature that policy initiatives are implemented instrumentally. In turn, this could encourage more investigation into practitioners' sensemaking concerning other transitional economies.

#### **4.9 Summary**

This chapter has discussed the rationale for adopting the methodology used in this research. First, the chapter clarified the study's research philosophy as informed by a sensemaking perspective. Specifically, this research highlights realities constructed by organisational members, but also recognizes material realities. Such a research approach challenges the dichotomy of positivism and interpretivism and asserts that these concepts should be viewed as tools that provide space for research interests and philosophical change. Second, this chapter argued that this research supports this approach and classified this study as interpretative research. It has also been argued that how researcher-produced knowledge requires reflexivity in both positivist and interpretivist research contexts. Thus, this chapter explained how knowledge was produced in this study, including how the research strategy was selected, how the data were collected and analysed and how its theoretical claims were reached.

Informed by a sensemaking process, this research has produced contextualist knowledge of how Chinese contracting firms organised themselves in response to marketization. It has been argued that sensemaking perspectives work to direct the researchers' attention to understanding the sensemaking processes of managers. To this end, the study applied Weick's (1995) seven properties as its initial theoretical framework. After reviewing a range of ways that sensemaking approaches have been mobilised in the construction management literature, the researcher concluded that a case study research approach was the most effective way to investigate complex organising processes at the micro-level.

Further, a case study approach to this research provided rich descriptions of complex organising processes, which in turn revealed empirical insights into theoretical concepts, with a recognition of

complex, discursive and cognitive aspects of organising processes. Such an approach provided a snapshot of members of organisations' sensemaking processes by capturing their first-person accounts. To understand a range of managers' sensemaking processes informed by their organisational experience, multiple case studies were conducted. These cases were confined to a range, specifically, contractor firms operating in Chongqing's construction sector. Three state-owned contracting firms with different trajectories were selected, and for each the researcher conducted semi-structured interviews with senior and operational managers and collected secondary documentation.

Data analysis was conducted as an iterative process between examining emerging themes and considering theoretical concepts. Cases were written to balance providing rich descriptions of particular cases and providing empirical insights of theoretical concepts. At the end of this chapter, the ethic and validity of this research were also discussed. The following three chapters discuss the case study results.

## **5. Case Study One: East Construction**

### **5.1 Introduction**

This chapter presents the results of the first case study based on East Construction. First, a brief overview of East Construction is given along with a description of the data that were collected. This is followed with a summary of the identified themes in managers' accounts of events produced by their retrospective sensemaking of past organising processes. These themes were labelled as 'market behaviour', 'competition', 'bid and tender', 'management structure: Trajectory from the past', 'project management' and 'roles of the government'. Interviewees' discursive terminologies and related storylines in each theme are then presented in detail.

### **5.2 Overview of East Construction**

East Construction is a state-owned contracting firm. This company, which was formed in 1965 as a specialist firm working for two iron and steel factories in Chongqing, China, currently operates in 19 Chinese provinces and in countries such as Nigeria and Georgia. The company focuses on several market sectors, including housing, infrastructure and metal processing factory projects. As Chapter Two discussed, metal processing factory projects were referred to 'metallurgical projects' by Chinese practitioners. According to the firm's annual report, its 2016 revenues were around 16 billion yuan and it retained nearly 5,000 employees.

Over the past fifty years, East Construction has experienced a succession of ups and downs in terms of its output (see Figure 5.1). The firm experienced a period of instability during the Cultural Revolution of the 1960s and 1970s, and its revenue in 1977 was around 13 million yuan. After the announcement of China's 'Open Door' policy in 1978, the firm's revenue increased consistently until 1988, when it reported an output of over 200 million yuan. Since that time, East Construction has again experienced several ups and downs in terms of its output, but after 2000 the firm's revenue rapidly increased and accelerated further in late 2000s. After a slight decrease in 2012, the firm's output again increased, and in 2016 it reported revenues of nearly 16 billion yuan, or over 1,000 times its 1965 figure.



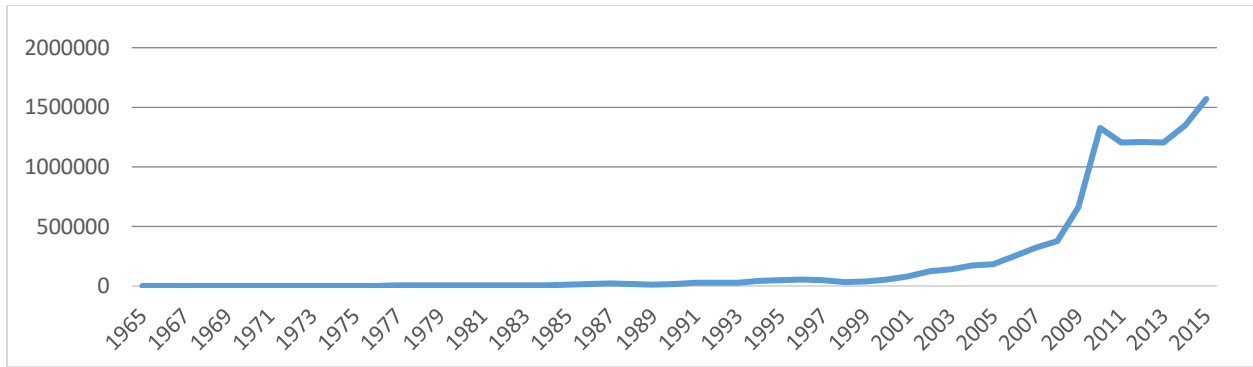


Figure 5.1 Value of output of East Construction (1965-2016). Unit: 10,000 Yuan

Source: the record of East Construction and annual reports

The decades from 1965 to 2015 also witnessed changes in profits for East Construction (see Figure 5.2). Having suffered losses during the Cultural Revolution, the firm’s profits recovered slightly in the 1980s, but experienced losses again between 1994 and 2004. After 2004, firm revenues again began to increase, and since 2007 the firm has experienced dramatic increases. In 2016, it achieved record profits of 630 million yuan.

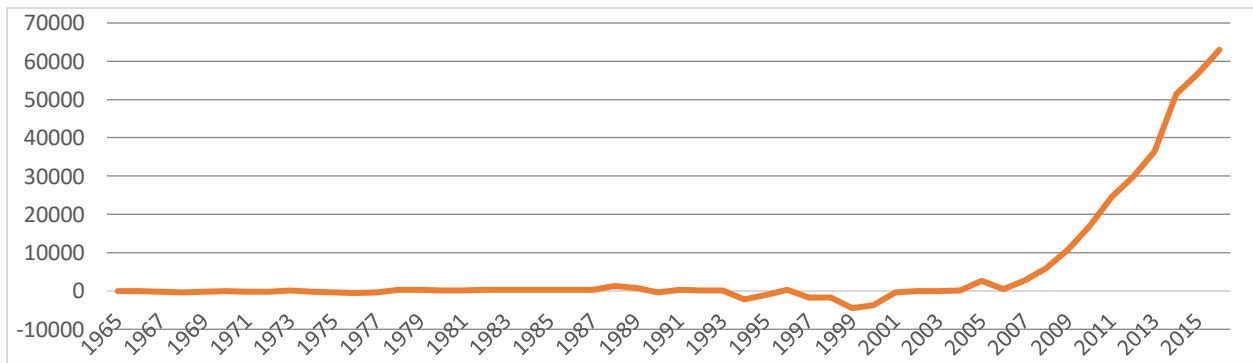


Figure 5.2 Profit of East Construction (1965-2016). Unit: 10,000 Yuan

Data source: the record of East Construction and annual reports

East Construction’s staff numbers have undergone different trends over the last five decades (see Figure 5.3). In the 1960s, its employee numbers fluctuated, but the early 1970s witnessed a rapid increase in staff, reaching 10,600 in 1972. After a slight decrease over the following five years, the firm’s employee numbers again began to increase. In 1988, its staff numbers were the highest in its history, exceeding 13,600. Since then, a steady decrease in its number of employees can be observed. A dramatic drop occurred in 2000, from over 10,000 employees in 1999 to around 5,600 in 2000. After a period of slight

growth, these numbers decreased from 7,700 in 2003 to around 3,100 in 2007. Since that time, the firm's employee numbers have slowly increased, reaching around 4,800 in 2016.

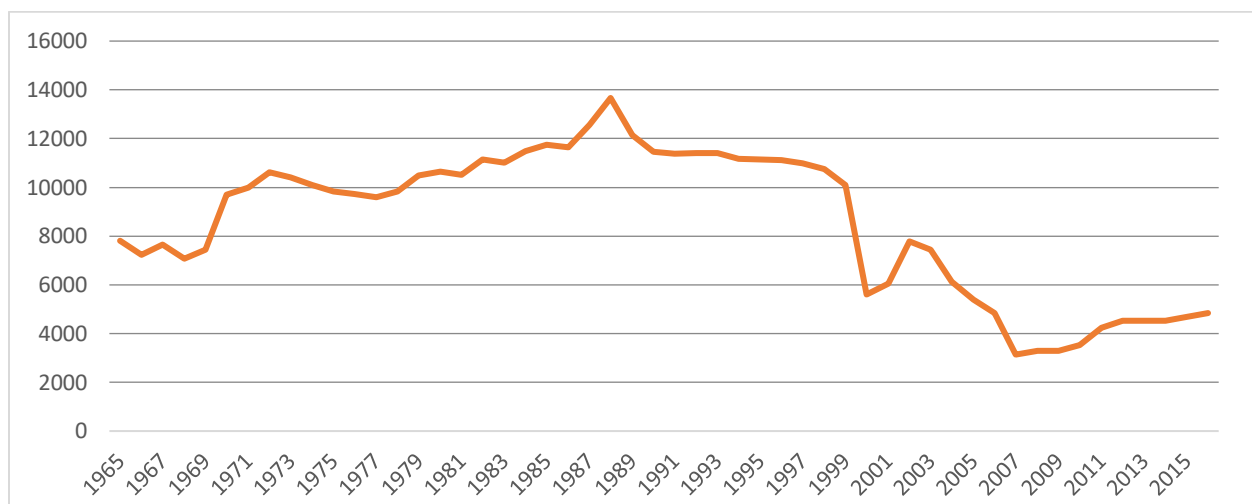


Figure 5.3 East Construction employee totals (1965-2016)

Data source: the record of East Construction and annual reports

### 5.3 Organising for the market

This section presents interviewees' storylines concerning how East Construction organised itself in response to perceived market changes. It begins by describing interviewees' market terminologies and points out the ideas interviewees discussed and their related storylines. The section then argues that this use of market terminology reflects the interviewees' emerging understanding of China's new social market economy. The section follows by presenting interviewees' perceptions of the various sub-markets within their work environment. In particular, practices identified in interviewees' narratives that were performed in response to market perceptions are presented.

#### 5.3.1 Interviewees' market terminology

The term 'market' was used by all East Construction interviewees, although they attached different meanings to this term in their storylines. The term was sometimes used to refer to a certain general context, such as the 'Chongqing market'. However, in many cases, the word 'market' took on a more specific meaning in that it referred to winning project bids. For example, Interviewee 5, the Market Bureau director associated project bidding with markets in his statement about current management emphases:

*'We all have some problem with his (the Chairman of the Board's) overemphasis on 'control'. If the staff in charge of markets is not valued by a contracting firm, who will win projects? If there was no market, what will you manage on the earth?'* (Interviewee 5, Market Bureau director)

Interviewee 5 also associated the term 'market' with projects bidding in his interpretation of the problem of 'overemphasis on control'. He noticed the Chairman of the Board's attitude toward project bidding staff and management staff as the cue for such a perception, and argued that the staff who are in charge of project bids should be valued more highly compared to staff who are in charge of, say, human resources.

The term 'market' was also found to refer to a mechanism of resource distribution. For example, in response to the question of how certain projects were won, Interviewee 7, the deputy director of the Personnel Management Bureau, stated that, *'we have to take part in market competition. It is crucial to us.'* Here, the word 'market' is closely related to bidding and tendering. When asked to explain how subcontractors are selected, Interviewee 2 stated that:

*'The project managers previously had the right to choose subcontractors and set their fees. They had too much autonomy. But now it is the market that decides how to distribute work, not the project managers. We introduced bid and tender.'* (Interviewee 2, deputy general manager)

Here, project managers have seemingly been forced to relinquish much of their control over the appointment of subcontractors. Interviewee 2 recalled what it was like before the 'bid and tender' practice was introduced, as this practice was interpreted to change the way that resources are now distributed. It seems here that the bid and tender process in the market provides an 'objective principle' that replaced the 'subjective judgement' of project managers. In other words, Interviewee 2's argued that the introduction of the bid and tender process now allows the market to control the distribution of the factors of production.

In addition to the common usage of the term 'market', nearly all interviewees highlighted the term 'marketing' (yingxiao, 营销) in reference to how they work to win projects. Sometimes, they also used the word 'operate' (jingying, 经营) as a synonym for 'marketing'. For example, many interviewees repeated the statement *'you have to operate continuously'*. Participants also recalled the previous and somehow continuing habits of practitioners who were not willing to compete to win projects, a process they labelled as 'wait, depend, request' (deng, kao, yao, 等靠要). However, the interviewees all seemed to agree that firms cannot survive based on the 'wait, depend and request' model.

In addition, almost all interviewees used phrases such as ‘break in the market’ (chuang shichang, 闯市场), ‘run in the market’ (pao shichang, 跑市场) and ‘expand the market’ (kaituo shichang, 开拓市场). The use of these phrases reflected an awareness that they need to make an active effort to win project bids. In particular, the phrase ‘run in the market’ seemingly expresses a sense that practitioners should go to different places and speak with different people in order to win projects. In addition, many interviewees identified interaction activities such as collecting information, communicating with clients, inviting clients to visit construction sites, looking for *guanxi*, and engaging in bid and tender processes. Many interviewees also stated that ‘*marketing is everywhere*’, which seemingly reflects their acceptance of the idea of the ‘market’. Here, it is noteworthy that the word ‘market’ did not appear in the 1985 record book written by the firm’s special editing committee. In sum, the use of market terminology can be viewed as a reflection of managers’ changing mental maps.

### **5.3.2 Fluctuating metallurgy project market**

In their accounts, many interviewees paid particular attention to changes in the metallurgy market, most likely because East Construction was first established to serve two metallurgy factories in Chongqing. Many interviewees highlighted their perceptions of China’s fluctuating metallurgy market. Some interviewees discussed the situation that occurred after all projects for these two steel factories had been completed. They noticed the gradual dearth of metallurgy factory projects by highlighting that at that time there was ‘no work to do’, and labelled this period as ‘very difficult’.

In response, the firm started to shift its attention into other construction project types. ‘*We were forced to begin to work on civil buildings*’, Interviewee 5, the director of the Market Bureau, said. Here, the term ‘civil buildings’ (minyong jianzhu, 民用建筑) refers to projects such as hospitals, residential buildings, commercial buildings and factories, and implies an underlying comparison to the metallurgy projects formerly allocated to the firm by its military supervisors. Interviewee 2, the deputy general manager in charge of project management, highlighted that this change forced the firm to take on different clients, as opposed to those they had worked with for a long time. Interviewee 2 further argued that, ‘*they (previously long-term clients) could understand and tolerate the stupid things we do, but now it was important for us to follow market rules and do a good job*’. Here, it seems as if the expansion into the civil buildings market pushed East Construction’s practitioners to follow market principles in dealing with various market actors.

However, although East Construction moved into civil building projects, its attention to the metallurgy project market did not cease. Many interviewees remarked on the recovery of China's metallurgy market in the early 2000s and a corresponding increase in factory plant projects. As a result, metallurgy factories in locations such as Guizhou, Kunming, Liupanshui and Tianjin were constructed. *'We took on participants in almost all large-scale steel factory plants in China'*, Interviewee 6, the director of the Project Management Bureau, said with pride. *'I was managing the first steel factory plant project in Kunming and the client asked me to take another one at the same time'*, recalled Interviewee 2, the Deputy General Manager. In fact, from 2001-2005, the firm's metallurgy project revenue reached 5 billion yuan annually. On this point, all interviewees' interpretations were consistent with the data provided in the firm's 2006 official record (see Figure 5.4).

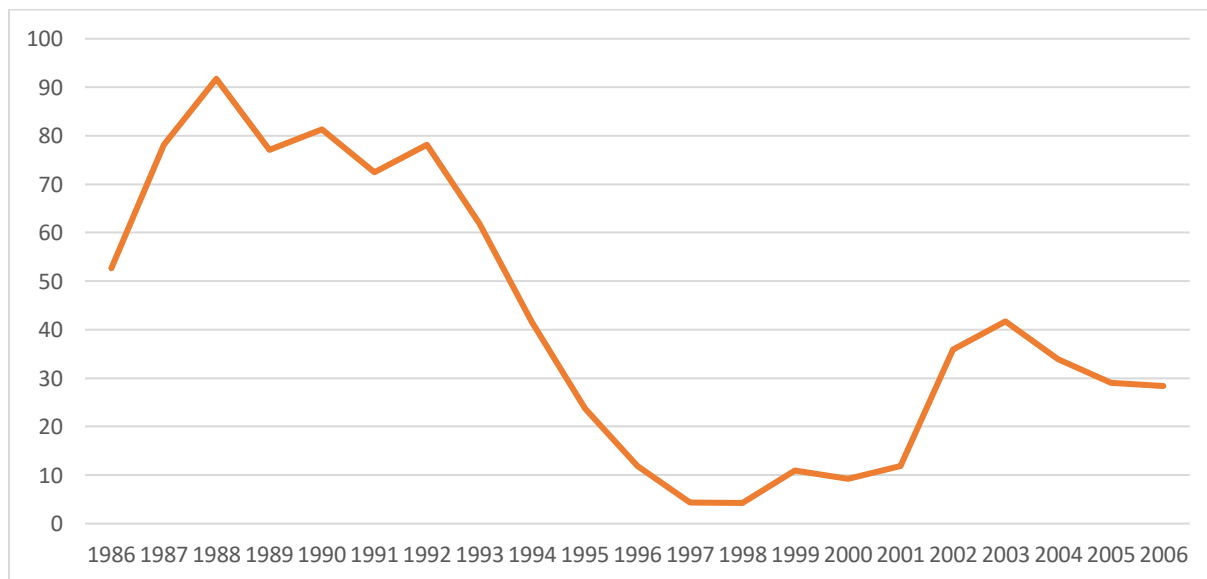


Figure 5.4 Percentage of value of metallurgical projects (source: internal archival<sup>2</sup>)

Many interviewees recalled the year 2008 as the peak of China's metallurgy market. When asked to interpret the shift in focus from steel factory to civil building projects, Interviewee 2 stated:

*'Around 2008, all steel factories were increasing their production capacity. It was crazy. We recognized some sort of hidden crisis. The state would adjust it sooner or later, we thought. We also noticed that the approval of new steel factory plants was not as easy as before. We captured that signal and made a correct decision to pay more attention to Chongqing, which was*

<sup>2</sup> This archive is one official historical record written by a special editing committee for the purpose of reporting to its administrative bureau and marketing in 2006.

*in a period of high development after Bo was appointed as its Municipal Party Secretary. We thought it would be a great opportunity for us.*' (Interviewee 2, deputy general manager of East Construction)

Thus, Interviewee 2 noticed that gaining approval for new steel factories, the most common of all metallurgy project types, was becoming increasingly difficult at this time, which signalled a market change. This change was deemed a 'crisis' that required action. Here, it is notable that Interviewee 2 did not mention any consideration of supply and demand-related factors of steel production. Moreover, Bo's appointment as Municipal Party Secretary was considered an 'opportunity for the firm', and in response, more attention was directed toward increasing civil project work. Interviewee 2 also felt fortunate that the firm shifted its Chongqing market focus in time and argued that *'we didn't suffer losses like those firms that continued working in metallurgy projects'*. Clearly, such a perception was established through comparisons with other contracting firms. However, Interviewee 5 reported that East Construction still constructs a few metallurgy projects, as *'we need to complete some projects to keep our special grade qualification certificate in metallurgy construction'*. In fact, metallurgy projects accounted for 10% of East Construction's total revenue in 2016.

### **5.3.3 Prevailing civil construction market**

Nearly all interviewees highlighted the robust civil construction market in Chongqing at this time. The years between 2008 to 2014 were commonly labelled as a period of 'great development' and 'great construction' (dafazhan, dajianshe, 大发展, 大建设). Moreover, most interviewees highlighted Bo's appointment as Chongqing's Municipal Party Secretary in 2008 as a key event that represented the start of this period. Additionally, the announcement of the policy to promote 'public rental housing' (gongzufang, 公租房) and the 2010 approval of the Liangjiang New Area as China's third national development zone were other events that many interviewees emphasized and labelled as 'great opportunities'. As Figure 5.5 indicates, according to data from annual company reports, the value of all new contracts increased by 400% between 2008-2016. Moreover, projects such as public rental housing in Liangjiang's New Area and Bonded Port Area were constructed in the 2010s. In addition to residential projects, several interviewees also highlighted commercial and infrastructure projects such as roads and factories. Here, it seems that East Construction's managers paid attention to several markets, rather than one particular market.

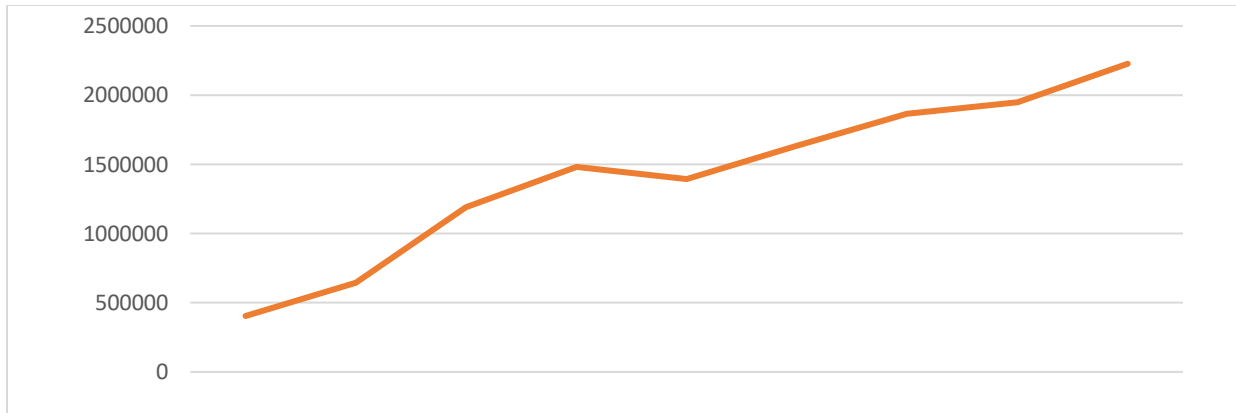


Figure 5.5 Value of new signed contracts of East Construction (2008-2016). Unit: 10,000 Yuan (Source: annual company reports)<sup>3</sup>

Many interviewees also highlighted the appointment of Bo as ‘dual principal’ and Sun as Chongqing’s Municipal Party Secretary in 2012. Moreover, they generally labelled Bo’s subsequent fall as the end of the era of ‘great development, great construction’ and the beginning of a ‘difficult’ period. Interviewee 5, the Director of the Marketing Bureau, described how *‘the construction speed slowed down’*. For several managers in charge of project bidding, the meaning of Sun’s appointment was that *‘project allocation was not allowed anymore, and we had to win projects through market competition’*. In response to these perceived market changes, subsidiaries were redefined as ‘market entities’ that were expected to win projects by themselves, rather than relying on project allocation from the main office. In addition, in 2014 two marketing divisions in the main office were changed into individual subsidiaries and renamed the First and Second Business Departments. Many other regional subsidiaries such as Yinchuan and Shandong were also established.

Interviewees expressed a range of attitudes toward these changes. Here, it is interesting to note that nearly all interviewees stated that, *‘it is what Mr. Yao required’*, but they extracted different features from these actions to create meanings that they found plausible. For example, the general manager of East Construction extracted a cue of increased scale, which referred to the value of the firm’s output, and argued that increasing the number of market entities was the correct decision. However, the deputy general manager in charge of project management stated that these actions were taken in order to manage *‘the conflicts between marketing staff and project management staff in terms of who should take the responsibility for project losses’*. Here, the relationship between different staff members was

<sup>3</sup> Annual company reports were written by secretaries of chairman of Board of Directors. These reports were submitted to the firm’s parent company and read in annual staff conference.

extracted as a cue to justify this action. The deputy general manager of East Construction, who is in charge of human resource management, gave another example of extracting different cues. In reference to this event, he stated that *'the staff can understand different aspects such as marketing and construction'*. However, he insisted that the two business departments should remain as East Construction's marketing platform, which was a different position from what the change initiative required. He further commented that *'some of the leading groups of these two secondary units perceived themselves as independent units only by mistake. Their role as a marketing platform was weakened'*. Thus, the deputy general manager observed a changing understanding by managers of 'who they are' and 'what they should do' in the two business departments.

To some degree, middle managers shared a negative attitude toward these changes. Some marketing staff pointed out the lower quality of new projects and described this as *'very problematic'*. For example, the firm's Market Bureau director used the metaphor of 'fist and figures' to argue that increasing the number of subsidiaries is not as good as having two strong marketing offices, particularly in terms of level of awarded projects. This metaphor was shared by some other marketing staff. The Six Subsidiary's party secretary attributed these low-end projects to the fact that *'the resources owned by secondary units are very limited'*. Here, the term 'resources' referred to 'guanxi with government officials and finance firms'. A few other interviewees confirmed this view. Another negative factor raised by several interviewees was waste in the human resources department. For example, the director of a previous marketing office who was appointed as party secretary of the First Business Department stated that:

*'...there was a waste of human resources. I had to hire and train new staff. Those subsidiaries who had spare staff were not willing to lend their staff to me.'*

Apparently, she remembered her experience with inadequate staffing resources in connection with these changes. In addition, middle managers also commonly stated that *'we are just executing layers; what we can do is execute the order'* as justification for their actions. Thus, middle managers drew from their identities to justify what they did. Finally, many middle managers identified the notion of 'executing layers' to label themselves and explain how they responded to senior managers' orders.

#### **5.3.4 Desire for high-end projects**

Many interviewees expressed their desire for acquiring 'high-end projects' (gaoduan xiangmu, 高端项目) and they explained the firm's proportion of residential projects at the time as 'low-end projects' (diduan xiangmu, 低端项目). According to the firm's 2017 annual report, residential projects accounted



for a large proportion of the value of its new contracts. When asked what kind of projects are high-end projects, the Director of the Project Management Bureau responded, *'by high-end projects, I mean those large-scale, iconic public buildings, metro line projects and railway projects'*. The deputy general manager of East Construction expressed the same view, but also highlighted the importance of maintaining the value of the firm's output, arguing that *'we don't have that many resources to make sure all projects are high-end projects. We still need low-end projects to make sure the firm achieves its intended scale.'* Here, it seems that the interviewees hoped to maintain a balance between high-end projects and low-end projects.

Many interviewees expressed their preference for projects initiated by the government, as *'The payment for these projects is guaranteed.'* As a result of this preference, most residential projects constructed by East Construction were funded by local governments or local financing platforms. The most recent example concerns one that was highlighted by Interviewee 17, the general engineer of the first subsidiary: the 'anti-poverty' projects (*fupin xiangmu*, 扶贫项目) that were constructed in Guizhou in 2017. Another example was a residential project in Xiushan, a small county in Chongqing, which was completed with investment from a local financing platform. Several interviewees expressed their unwillingness to deal with privately-owned real estate developers. For example, the party secretary of the First Business Department argued that:

*'We don't want to deal with real estate developers. There is no guarantee of their capital chain. Most are privately-owned firms. They normally register a limited liability firm for each building project. These firms don't take any responsibility for potential losses. The bosses have already transferred their capital abroad. I bought one house previously, but didn't get the house. This is so common now.'* (Interviewee 15, party secretary of the First Business Department)

Interviewee 15 remarked on the often unreliable capital chain that real-estate developers tend to rely on. She recalled her personal experience of a failed housing purchase as an example to support her argument that these developers transfer capital abroad. This unwillingness to work for privately-owned real estate developers was shared by several interviewees.

Infrastructure projects were generally viewed as a 'rising sun' market by interviewees, which means that they have a good future. For example, when asked about future plans, Interviewee 15, the party secretary of the First Business Department, answered:

*'We are going to focus on infrastructure projects such as underground utility tunnels. These are the 'rising sun industries' (zhaoyang chanye, 朝阳产业). The government promotes these industries. The prospects of these industries are definitely very good.'* (Interviewee 15, party secretary of the First Business Department)

In Interviewee 15's account, government support was the reason that infrastructure projects have a good future, which suggests that many believe that a particular market can increase as long as the government promotes it.

Generally speaking, PPP is argued to be the preferred financing model for these infrastructure projects, which requires that firms invest in projects. PPP projects were generally perceived as *'the direction of the future'*, which suggests another example of confidence in government support. However, many interviewees emphasized an event when East-Sun Construction, East Construction's parent company, issued a policy to constrain the investment behaviour of its subsidiaries.

As a result, the firm announced three principles regarding bank loans, which were commonly referred to as the 'Three Nos' policy. First, parent firms would not take responsibility for subsidiaries' investment failures (*budoudi*, 不兜底). Second, subsidiaries' investments will not be included in the parent firm's financing statements (*bubingbiao*, 不并表). Third, the parent firm will not guarantee any investments (*budanbao*, 不担保). The announcement of these three principles was commonly argued as a response to *'huge losses caused by past investment failures'*. As a result of this policy, the firm's Investment and Financing Bureau was established. Managers interpreted the function of this bureau as *'controlling investment behaviours'* rather than supporting these activities. This policy was commonly interpreted as making *'loans from banks impossible'* and *'constraining East Construction in investing in PPP projects'*.

Managers expressed some concern about the firm's future based on this limitation in engaging with PPP projects. The director of the Market Bureau used the metaphor of *'chained hand and foot'* to express his confusion in following the parent company's requirements. He labelled the period after the announcement of this policy as a 'bottleneck' for the company, and expressed the concern that missing opportunities for PPP projects at the current stage will prevent East Construction from ever reaching the top tier of firms. While this concern was shared by several interviewees, many of East Construction's managers in seemed to be convinced that waiting was their only choice. In fact, several made the statement that *'we are waiting to observe whether our parent company will ease the policy this year or next.'* Conversely, the deputy general manager of the Transportation Subsidiary highlighted three PPP

projects that it won by negotiating with banks and clients. Obviously, managers continuously interact with their present organisational context in order to shape their future organisational context.

### **5.3.5 Summary**

This section presented the various meanings of 'market' that interviewees discussed in their storylines. All interviewees addressed the word 'market' in their interpretation of how East Construction reorganised itself in response to marketization. The word 'market' was variously used to refer to 'certain types of projects', 'certain contexts', 'project acquisition' and 'mechanisms of resource distribution'. Phrases such as 'open market', 'run in the market' and 'marketing' reflect interviewees' awareness that they have to be proactive in order to win projects.

Market changes were seen as important in interviewees' accounts, and nearly all highlighted their perceptions of the fluctuating metallurgy market and their entrance into the civil project market as responses. The civil construction market was generally perceived as prevailing, and almost all interviewees placed particular emphasis on the social housing projects that emerged during the 'great development, great construction' period brought about by Bo's appointment as Chongqing's Municipal Party Secretary. Moreover, several interviewees highlighted difficulties in acquiring projects in Chongqing after Bo's fall. In response, East Construction established multiple regional subsidiaries, which it defined as 'market entities', with the expectation that they would win projects themselves. In addition, interviewees commonly expressed their longing for high-end projects. However, many interviewees stated that the Three Nos policy constrained their opportunities of winning large-scale PPP projects, and that such constraints could affect the future of the firm.

## **5.4 Competition**

This section presents interviewees' storylines regarding 'competition', a notion closely connected with 'markets'. All interviewees employed competition-related terminology and used terms such as 'competition', 'competitiveness' and 'core competitiveness'. Nearly all expressed their perception that '*inevitable competition*' is one key component of the reality of the changes in the firm and their hopes to '*avoid competition*'. In addition, many interviewees highlighted the government's trust in state-owned firms such as East Construction. The section concludes by presenting interviewees' accounts of East Construction's competitiveness.

### 5.4.1 Securing projects

Interviewees used the word ‘competition’ commonly in their discussions about project acquisition. Here, word ‘competition’ generally referred to the project bidding process. The practice of bid and tender was closely connected to the term ‘competition’ in interviewees’ interpretations. For example, when asked to recall how projects were acquired in the 1990s, Interviewee 5 stated:

*‘There was no Law of Bid and Tender in China at that time. This mainly depended on guanxi. After the Law of Bid and Tender of China was implemented, public bid and tender processes were adopted. We needed to compete. The Law of Bid and Tender was implemented around 2000. Before that, acquiring projects depended on guanxi. If you were a state-owned firm, the project would be allocated to you at a regulated price.’* (Interviewee 5, Market Bureau director)

Interviewee 5 highlighted the announcement of China’s Law of Bid and Tender in 2000 as one of key significance. Several interviewees referred to the importance of this law in injecting competition into project acquisition, which departed from the previous practice of government allocation of projects. However, it is notable that nearly all interviewees stated that several projects, such as many in Liangjiang New Area and Yinchuan New City, were still allocated by government officials. Thus, it seems as if the mechanism for project distribution is a mixture of old and new.

The perception that ‘*competition is becoming more and more intensive and cruel*’ was shared by almost all interviewees. In particular, many interviewees saw Bo’s fall in 2012 and the appointment of Sun as the Municipal Party Secretary in November of that year as the beginning of a ‘difficult period’, and made statements such as ‘*no project allocation is allowed anymore*’ and ‘*we need to join market competition*’. For example, the director of the Market Bureau recalled that:

*‘Before Bo’s fall, we had many projects allocated by the local government. The government wanted to meet tight deadlines for construction. But, after Sun Zhengcai came, local government interference was no longer allowed. The pace of development slowed down and the number of allocated projects was reduced dramatically. We need to compete in the market.’* (interviewee 5, Market Bureau director)

It is noteworthy that Interviewee 5 noticed the new party secretary’s negative attitude toward government interference and the subsequent reduction in allocated projects. Perhaps more significantly, this was argued as the reason why East Construction had to compete in the market. This

perception was shared by several interviewees, some of whom argued that the construction market is now in a situation of ‘complete competition’.

Moreover, almost all interviewees emphasized the need to reduce costs, as *‘the revenue for projects won from competition is relatively low’*. In response to this perceived cost pressure, the firm established its Project Budget and Settlement Bureau. As the deputy general manager in charge of project management explained:

*‘Why did we establish the Project Budget and Settlement Bureau? The aim was to emphasize the role of quantity surveyors. Previous allocated projects were usually large scale and they didn’t go through market competition. Now we need to go through the market competition process to win projects. The revenues are normally lower than the previously allocated projects. If you can’t calculate and manage them better, projects result in losses.’* (Interviewee 2, deputy general manager of East Construction)

It is significant to note that exposure to competitive processes seemingly pushed managers to restructure the firm’s practices. Actions to reduce project costs, such as establishing a special bureau, were seen as responses. Some interviewees also emphasized the practice of introducing bid and tender in subcontractor and material supplier selection as one action to *‘place cost pressure on subcontractors’*.

#### **5.4.2 Hopes to avoid competition**

Interestingly, some interviewees expressed a hope to avoid competition, while many saw competition as inevitable. Many interviewees stated that they preferred the period of project allocation. For example, when asked how a subway infrastructure project was obtained, the Engineering Group director replied:

*‘This project was directly allocated by the local government. We had many contacts with the governmental platform companies. Our guanxi with the municipal government was more significant. So, we previously had many allocated projects. That particular project was approved by the Chongqing Development and Reform Commission (chongqingshi fagaiwei, 重庆市发展和改革委员会).’* (Interviewee 6, Engineering Bureau director)

The above statement is indicative of a frequently expressed view that in the past, *guanxi* with high-level officials previously helped East Construction to win projects. However, also common was the perception that project acquisition through government allocation is still possible. The director of the Market Bureau provided one example concerning how projects were won in Yinchuan:

*'By coincidence, we secured a contract with the Yinchuan government. We caught the opportunity to work on the Binhe New District. We covered out costs first and then began the construction. Then we received more and more projects. But, we experienced a slowdown this year. We didn't get that many projects. The head had changed, and after the head changes it is typically difficult to get projects. The municipal party secretary of Yinchuan changed, and we lost our guanxi.'* (Interviewee 5, Market Bureau director)

The above statements emphasise Interviewee 5's concern about the loss of the firm's *guanxi* with Yinchuan's municipal party secretary in 2016. This event suggests that the loss of *guanxi* with the Yinchuan government resulted in subsequent difficulties in acquiring projects, and that municipal party secretary helped the firm avoid competition. Several interviewees also highlighted that interactions such as reporting to top government officials and inviting them to visit the firm's home office and construction sites were actions that can build *guanxi*. In fact, East Construction's website featured news of the newly-appointed Municipal Party Secretary of Yinchuan visiting several of its construction sites in 2017. Here, there clearly seems to be a publicity campaign aimed at gaining new party secretary's trust in order to win project contracts.

Moreover, past experiences with project allocation were found to affect the way practitioners consider the future. For example, the firm's Technology and Innovation Centre director stated that perceptions regarding future project acquisition are commonly learned in marketing meetings. *'We don't have enough contacts with top-level officials. We need to develop this kind of guanxi'*, he argued. Apparently, past experiences with winning project contracts through *guanxi* with government officials has influenced practitioners' perceptions that they need to develop *guanxi* in order to win future projects.

In addition to the hope of direct project allocations, some interviewees also expressed their desire for local protection policies to reduce competition. The deputy director of the Personnel Management Bureau expressed her wish that local governments would provide the firm with more 'support and help':

*'Other provinces have some requalification requirements to protect their local contracting firms. I want to appeal for more support and help from our local government when we compete in Chongqing. At least we could have some policies to make us feel the sweetness of home.'*  
(Interviewee 7, deputy director of Personnel Management Bureau)

Here 'support and help' refers to setting protectionist requirements for the bid and tender process so that local contracting firms can enjoy bidding advantages over firms from other provinces. Interviewee 7

recalled the firm's past experiences with failed project bids as a result of local protection policies to support her appeals for such policies in the Chongqing market.

### 5.4.3 Local government trust in state-owned firms

It is notable that nearly all interviewees highlighted client trust in state-owned firms such as East Construction, particularly with respect to government officials. It seems that such trust can be traced back to past experiences with project allocation. Some interviewees stated that in the 1990s, *'if you were a state-owned enterprise, projects would be allocated to you at a regulated price'*. This government trust in state-owned firms seems to have continued into the 2010s. One significant example concerns Interviewee 5's story of how projects in Liangjiang New District were acquired:

*'Since arriving in Chongqing Bo promoted the Liangjiang New District. Many projects, such as rental housing, factories and infrastructure were allocated to us. He believed in state-owned firms, mainly our firms and Chongqing Construction Group [another of Chongqing's state-owned contracting firms].'* (Interviewee 5, Market Bureau director)

It is significant that the practice of allocating projects to state-owned firms seems to still be continuing as a result of government officials' trust. Many interviewees argued that this trust was won by the firm's ability to *'construct projects properly'*. For example, the deputy general manager of the Transportation Subsidiary argued that, *'it's mainly about the clients' recognition that we obtained. If you can't construct projects properly, nobody will give projects to you, no matter how low the price is'*. This suggests that interviewees do not take project allocation for granted, but rather are aware that they need to work to win clients' trust.

Many interviewees distinguished East Construction from other privately-owned firms. Some stated that privately-owned firms *'do not follow rules'*, which referred to failing to abide by regulations and laws. For example, the Sixth Subsidiary's party secretary stated that *'privately-owned contracting firms value money too much and are thus unwilling to invest in an enterprise culture and good construction management'*. Moreover, the deputy director of Personnel Management Bureau argued that *'private contracting firms do not submit tax returns and insure staff like East Construction does'*. This suggests that many managers perceive East Construction to be firm that behaves legally and honestly.

#### 5.4.4 Understandings of competitiveness

The word ‘competitiveness’ was commonly used by nearly all interviewees and was frequently mobilised to explain why the firm consistently acquires projects. However, it is interesting to note that interviewees had different understandings of why East Construction wins these projects. For example, some interviewees highlighted the importance of capital. The deputy general manager of East Construction talked about how the firm takes advantage of its financing capabilities to win projects:

*‘We used our capital advantages to gain market share. The biggest projects we acquired using the built-transfer procurement method were the subway infrastructure and the museum in Nanchuan. Almost 3 billion yuan were mobilised. Of course there was a bid and tender process, but it was far less intensive. Only accountable contracting firms can finance that much money, which beats most market competitors.’* (Interviewee 2, deputy general manager of East Construction)

In essence, the argument here is that East Construction’s capital advantage helps it to win large scale projects, as small and medium-sized contracting firms cannot afford these outlays. The perception that capital is extremely important in winning project contracts was shared by many interviewees in charge of project acquisition. As the firm’s Market Bureau director argued, *‘it is an era to play with capital. If you don’t invest, you can never be top tier’*. Many interviewees also argued that while East Construction has the ability to borrow from banks, its parent company doesn’t allow such activities, and they expressed their helplessness that this limitation prevents the firm from acquiring more large-scale projects.

Many interviewees highlighted the project management expertise that has helped East Construction win projects. For example, the party secretary of the Third Business Department argued that the firm’s demonstrated project management expertise helped them win residential projects in Xinjiang. He explained that this is why the client contracted the firm to construct houses abroad. Similarly, the party secretary of the Sixth Subsidiary argued that well-managed projects in Xiushan, a county in Chongqing, helped the firm to win contracts on another two projects. Activities adopted by East Construction to improve its project management expertise are discussed in Section 5.7.

A few interviewees also emphasized that the firm’s technological advantage is helpful in winning projects contracts. For example, the deputy general manager of the Transportation Subsidiary argued that the subsidiary moved from simple earthworks projects to more technologically demanding work:



*'You can't just do earthworks. It is too simple, and you lose competitiveness. It is so simple that any private firm can do it. Now we are working on large-scale projects such as bridges and tunnels. Private firms are not able to do these projects, as the starting points and technological requirements are higher.'* (Interviewee 18, deputy general manager of the Transportation Subsidiary)

This statement emphasises the level of competition between East Construction and other privately-owned contracting firms. It seems that technologically-demanding projects became the Transportation Subsidiary's key focus. However, it is not clear how the firm has reorganised itself to increase its technological expertise.

#### **5.4.5 Summary**

This section presented interviewees' accounts regarding competition. All interviewees used terminology related to competition and argued that competition is both inevitable and growing over time. However, at the same time some interviewees seemed to hope that they can still avoid competition, and expressed a desire for direct project allocation and localized protection policies. In addition, many interviewees highlighted government officials' trust in state-owned firms such as East Construction. It seems that such trust has made government officials more willing to contract public projects to state-owned firms. Some interviewees also distinguished East Construction from privately-owned firms, which were described as 'not following the rules' with respect to quality and safety management.

Interviewees commonly used the term 'competitiveness' to refer to 'how we compete for projects'. Some highlighted East Construction's financing capabilities and argued that they help the firm win large projects using various financing modes. Some interviewees highlighted the firm's high project management standards, which have also helped win projects from repeat clients. A few interviewees stated that the firm's technological capabilities help it to win out over privately-owned competitors. Here, it seems that interviewees had their own interpretations of the term 'competitiveness'.

#### **5.5 Bid and tender**

This section presents interviewees' interpretations of their experiences with the bid and tender process. Here, it is worth noting that that all interviewees were somewhat reluctant to discuss the details of how they win projects through bid and tender. This section presents three different meanings of the phrase 'bid and tender' present in the interviewees' accounts. The first sub-section presents storylines that

discuss incomplete project information and prequalification conditions, and show that ‘bid and tender’ often referred to a mechanism for selecting firms that introduced competition into the project acquisition process. The second sub-section presents accounts in which ‘bid and tender’ was interpreted as just a formality. Finally, the third sub-section discusses interviewees’ shared perceptions of the common practice of bid collusion.

### **5.5.1 Bid and tender as the mechanism to select contracting firms**

In many cases of project acquisition, ‘bid and tender’ was interpreted as a mechanism for selecting contracting firms. In managers’ storylines, bid and tender was commonly viewed a process that *‘allowed clients to award projects to their preferred contracting firms’*. This interpretation was perhaps a result of interviewees’ experience of government officials or public clients allocating projects to contracting firms. All interviewees repeatedly highlighted phrases such as ‘information’ and ‘qualification certificate’. This sub-section presents the attitudes and practices that emerged from their narratives.

#### Incomplete project information

All interviewees highlighted the importance of obtaining sufficient project information. Here, ‘information’ referred to clients’ project construction plans. Nearly all highlighted practices such as reviewing the construction plans of local governments or socialising with people who work in design institutes. More importantly, ‘information’ also referred to detailed project investment plans. All interviewees shared the perception that information about investment in and design of potential projects is often incomplete, and agreed that they need to increase their efforts in obtaining as much information as they can. In addition, it seems that clients often use information to ensure that their preferred contracting firms wins their project contracts. For example, the party secretary of the Sixth Civil Engineering Subsidiary talked about an ongoing pre-bid campus construction project in Guangxi:

*‘We are still working on this project. Our guanxi helped us to get involved. But we are still discussing conditions. If the clients favour you, they will give you more information. You can learn more about the project. Then the possibility that you win the bid increases. This is all we can do. What is left is to wait for the result.’* (Interviewee 16, party secretary of the Sixth Civil Engineering Subsidiary)

Here, emphasis was given to the *guanxi* that helped the firm to become involved in this project. As stated previously, ‘*guanxi*’ refers to relationships with friends or acquaintances, and in this context, ‘finding *guanxi*’ seems to be the first step of project involvement in the managers’ interpretations this

situation. Finally, nearly all interviewees took incomplete project information for granted, and whether clients favour a firm or not was argued to be the key criterion in deciding if firms can acquire complete project information. The term 'information' also referred to details about competitors, such as their potential bids and numbers of competitors. Some interviewees highlighted how they acquire information on competitors and estimate their pricing strategies in order to help win projects.

#### Setting conditions for prequalification

Several interviewees claimed that clients often set prequalification conditions before the bidding process. In particular, qualification certificates were highlighted by all interviewees, and there seemed to be universal agreement that qualification certificates serve as the 'entrance ticket' for this process. For example, when asked why a 'special class qualification certificate' (*tejjizhi*, 特级资质) for transportation projects is important, one Interviewee answered:

*'The special class certificate is the highest qualification. We currently have the first-class qualification certificate, so we can't bid for transportation projects if the client requires the 'special class qualification' for the prequalification.'* (Interviewee 18, deputy general manager of the Transportation Subsidiary)

Here, it seems that clients commonly set a qualification certificate class as one important condition for project prequalification. According to many interviewees, if a firm has a special class qualification certificate it is qualified to bid for any transportation projects. Practices such as capital investment, the establishment of a technology centre and organising staff training sessions were highlighted by some interviewees as the key requirements for the firm being awarded 'registered constructor' status.

However, the dominant interpretation of why firms secure qualification certificates is that they do so solely to meet required conditions and not as a means to improve their management. For example, the Market Bureau director, who is in charge of upgrading qualification certificates for East Construction, stated that the investment for a special grade application is more than 10 million yuan. As part of its preparations for applying for this qualification, the firm established its Technology Centre in 2008. As the director of the Technology and Innovation Centre recalled:

*'Our Technology Centre was established in 2008. The main aim, to be honest, was to secure a qualification certificate upgrade. We wanted to apply for the special class of the general contracting qualification certificate. There was a requirement of a technology centre, which is why the Technology Centre was established. It was just a concept, a name, at the beginning. It*

*was just another title for the existing Technology and Quality Bureau. It was two titles for one group.'* (Interviewee 11, Technology and Innovation Centre director)

Here, it is notable that establishing the firm's Technology Centre was interpreted as primarily a response to the qualification certification requirements. Thus, it seems as if nothing has changed except a for a new title hung on the wall. Another activity some interviewees highlighted concerns encouraging staff to pass the registered constructor examination in order to meet the qualification certificate upgrade requirements. As the Deputy general manager in charge of human resource management recalled:

*'This is the requirement for qualification certification. We applied for three special class qualification certificates. Human resources was one of the most important requirements. This requires certain amount constructors to pass the exam and to have a registered constructor certificate. This is very important. You need to reach the required number of registered constructor certificates. Otherwise you need to borrow these certificates, which costs a lot.'*  
(Interviewee 3, deputy general manager)

Clearly, in his storyline Interviewee 3 extracted the requirement of number of registered constructors as a cue to justify actions such as organising training sessions. Moreover, no consideration was given to whether employees gained any knowledge or went through proper training in the process of gaining professional certifications.

### **5.5.2 Bid and tender as just a formality**

In some accounts of how project contracts were acquired, bid and tender was seen as '*just a procedure to go through*'. In many of these cases, the clients and contracting firms agreed that the firm would secure project contracts prior to the bid and tender process. There was common example, direct project contracting (*zhijie fabao*, 直接发包), in which interviewees perceived bid and tender to be just a formality. For example, when asked how the contract for an anti-poverty housing project in Guizhou Province was acquired, Interviewee 17, the general engineer, replied:

*Interviewee 17: This project came from the bid and tender process.*

*Researcher: I thought it was allocated by the government.*

*Interviewee 17: No, allocation is something that was done in the planning economy.*

*Researcher: I noticed that many projects in your firm were allocated directly by the government?*

*Interviewee 17: Yes, but we went through the bid and tender procedure afterward.*

*Researcher: Of course, but in the case of this project, did the government come to you first and then you went through the procedure?*

*Interviewee 17: Yes, but they still want good firms and normally go to state-owned firms such as ours. This project is quite large, 260,000 m<sup>2</sup>, and the construction period was only a third of the normal period. (Interviewee 17, general engineer Second Civil Engineering Subsidiary)*

It is notable that Interviewee 17 distinguished a difference between the terms ‘allocation’ and ‘direct contracting’ in this conversation. Here, the notion of ‘allocation’ was argued as something that was applied during the planned economy period. Moreover, he argued that going through the formality of the bid and tender process was separate from ‘allocation’. Thus, in these cases bid and tender procedures are viewed as a means of making direct allocation of contracts seem legal.

### **5.5.3 Bid collusion**

Many interviewees also agreed that bid collusion is ‘very common’ in their industry. While there was a period when the rule that ‘*the price that is closest to the ‘base bid price’ (biaodi, 标底) wins the project*’ governed the project contract process in Chongqing, the First Business Department’s party secretary argued that, ‘*those who can get information about the base bid price from the cadres in charge of the project can win the project*’. Here, the practice of setting a ‘base bid price’ is viewed as a holdover from the government’s past practice of controlling investments in the planned economy era.

Many interviewees emphasised the rule that ‘*firms that offer the closet price to the average offered price win the projects*’ (*pingjunzhi zhongbiao, 平均值中标*). However, many interviewees stated that in response, some firms collude with each other to bid on projects. Interviewee 15 gave an example of how East Construction won a one particular project by outmanoeuvring two other groups that were engaged in bid collusion:

*‘Some contracting firms intended to collude on bids, but they didn’t succeed. We took advantage of a loophole of in the rules. The regulations stated that the firm whose bid is closest to the price that is 6% lower than the average price will win the bid. The maximum price was also regulated. There were two groups that were fighting. We knew there were firms who were rigging their bids, but we didn’t know any more details than that. After the bidding was opened, we knew that the first group had more partners and offered higher prices, while the second group had*

*fewer partners and offered a lower price. We landed in the middle of these two groups, and we won the bid.'* (Interviewee 15, party secretary of the First Business Department)

Seemingly, Interviewee 15 noticed this situation when he investigated what was going on with this project. Notably, winning the bid was further described as 'capability and luck'. Here, 'capability' seems to refer to the information that the firm obtained and its judgement regarding the attitudes of their competitors, on which they based their offer. The word 'luck' seemingly refers to the fact that their analysis of their competitors' bids was correct. Of course, many cases exist in which East Construction was 'unlucky' and didn't win projects in this way.

Surprisingly, there seems to be a road in Chongqing that is well known as the 'accompanying bid road' (*peibiao yitiaojie*, 陪标一条街). According to the party secretary of the First Business Department, registered contracting firms rent buildings on this road for the sole purpose of bidding on projects:

*'Some non-local contracting firms delegate two or three people to register in Chongqing. They then use these firms' qualification certificates and business licenses. These people can 'operate' a contracting firm by just renting a house and buying a few laptops and printers. They can use their business license and qualification certificate to bid. They don't even know what they need to do if they win a bid. They are just living by entering the bids of others.'* (Interviewee 15, party secretary of the First Business Department)

While Interviewee 15 probably gave these examples to illustrate extreme examples of bid collusion, they were confirmed by nearly all interviewees.

#### **5.5.4 Summary**

This section presented interviewees' accounts regarding the bid and tender process. To many interviewees, bid and tender is simply a mechanism for selection contracting firms. Nearly all interviewees emphasized that they go to great efforts to obtain information about projects, which suggests that project information is often incomplete. Moreover, it seems that many clients tend to take advantage of this incomplete information to intervene in the of bid and tender process. Nearly all interviewees accepted this situation as a given without questions or criticism. The practice of prequalification was also highlighted by most interviewees, particularly with respect to qualification certificates. Most were proud of the special grade that firm received and viewed this as a validation of its capabilities. Finally, many interviewees highlighted practices such as capital investment, establishing

a technology and innovation centre and organising staff training courses to prepare for registration exams.

Many interviewees also viewed the bid and tender process as just a formality, in particular for cases in which projects were effectively allocated by local governments. Interviewees agreed that contracting firms and government officials often reach an understanding prior to undergoing the bid and tender process. Here, the bid and tender process is seemingly followed only to make contracts appear legal.

Many interviewees highlighted their perception that bid collusion is common in the industry. They identified various criteria for winning bids used in Chongqing, including offering bids that are either closest to the base bid price, closest to the average bid price wins or lowest overall. Correspondingly, they highlighted many types of collusion practices, such as obtaining information of the base bid prices in advance and colluding with cooperating with other firms to influence price averages.

## **5.6 Management structure: Trajectory from the past**

This section presents interviewees' accounts of the trajectory of the firm's structural changes. It begins by discussing their views on East Construction's parent company, then presents their interpretations of the home office's role as the 'platform for management and control', and follows with their accounts regarding the firm's subsidiaries, which are frequently referred to as 'secondary units'. Communist Party organisation in East Construction was another topic that many interviewees highlighted. Finally, the section presents interpretations about the firm's staff.

### **5.6.1 The 'upper units': Parent company**

As stated previously East Construction's parent company, East-Sun Construction, is a state-owned contracting firm. According to its homepage, East-Sun Construction is '*the earliest troop and the main force for steel industry construction in China*'. It is worth noting military terms such as 'troop' (duiwu, 队伍) and 'main force' (zhulijun, 主力军) are used to describe the firm's role in the construction of heavy metallurgy projects. The East-Sun Construction houses over 30 direct subsidiaries, including 15 contracting firms, 13 design institutes and 5 research institutes. The firm's 2017 revenue was over 240 billion yuan and also in 2017, it announced that it was to be acquired by another large-scale state-owned firm. This event was interpreted as 'an arrangement of the state' by some interviewees.

Nearly all interviewees used the phrase 'upper units' (*shangji danwei*, 上级单位) to refer to East Construction's parent company. It is notable that all interviewees used the word 'unit' (*danwei*, 单位) in

their accounts. In this context, the term 'unit' originates from the 1950s, when the newly-established Chinese government attempted to develop a planned economy, and refers to organisations that people work in or that provide services, such as schools, hospital and staff accommodation. Interviewees commonly used the term 'upper unit' to refer to the firm's organisational hierarchy. For example, several interviewees stated that the reason why East Construction began to construct projects abroad was because *'the upper unit required us to do so'*. Moreover, the Overseas Subsidiary's party secretary argued that *'the parent company required us to have overseas markets, so we had to 'go out' (zouchuqu, 走出去)*. In response, he stated that they found *guanxi* with a contracting firm in Zhejiang Province and became as their subcontractor. The deputy director of the Personnel Management also recalled that the firm revised its assessment and promotion regulations in response to the 'upper unit's requirements'. It is clear that these interviewees took these requirements as a given.

Many interviewees also highlighted the benefits of being part of East-Sun Construction, mainly with respect to project acquisition. In response to questions about how particular projects were acquired, they commonly answered that *'they were allocated by the parent company'*. For example, the Transportation Subsidiary's deputy general manager stated that a recent express road project was allocated by East-Sun Construction, which is project's main investor. *'We didn't need to compete'*, he added. In addition, the parent company's design institutes and other subsidiaries are also sources of projects, as they can also bid on projects as general contractors. Thus, it seems as if the firm can acquire projects from its parent company with less competition.

### **5.6.2 East Construction's home office**

East Construction's home office is located in Chongqing. Nearly all interviewees referred to the home office as *'jiguan'* (机关), a term that was commonly used in China's planned economy. As Figure 5.6 shows, the home office housed 17 departments at the time of data collection. These departments are referred to as 'bureaus' (*chu*, 处), another common term used in the planned economy.



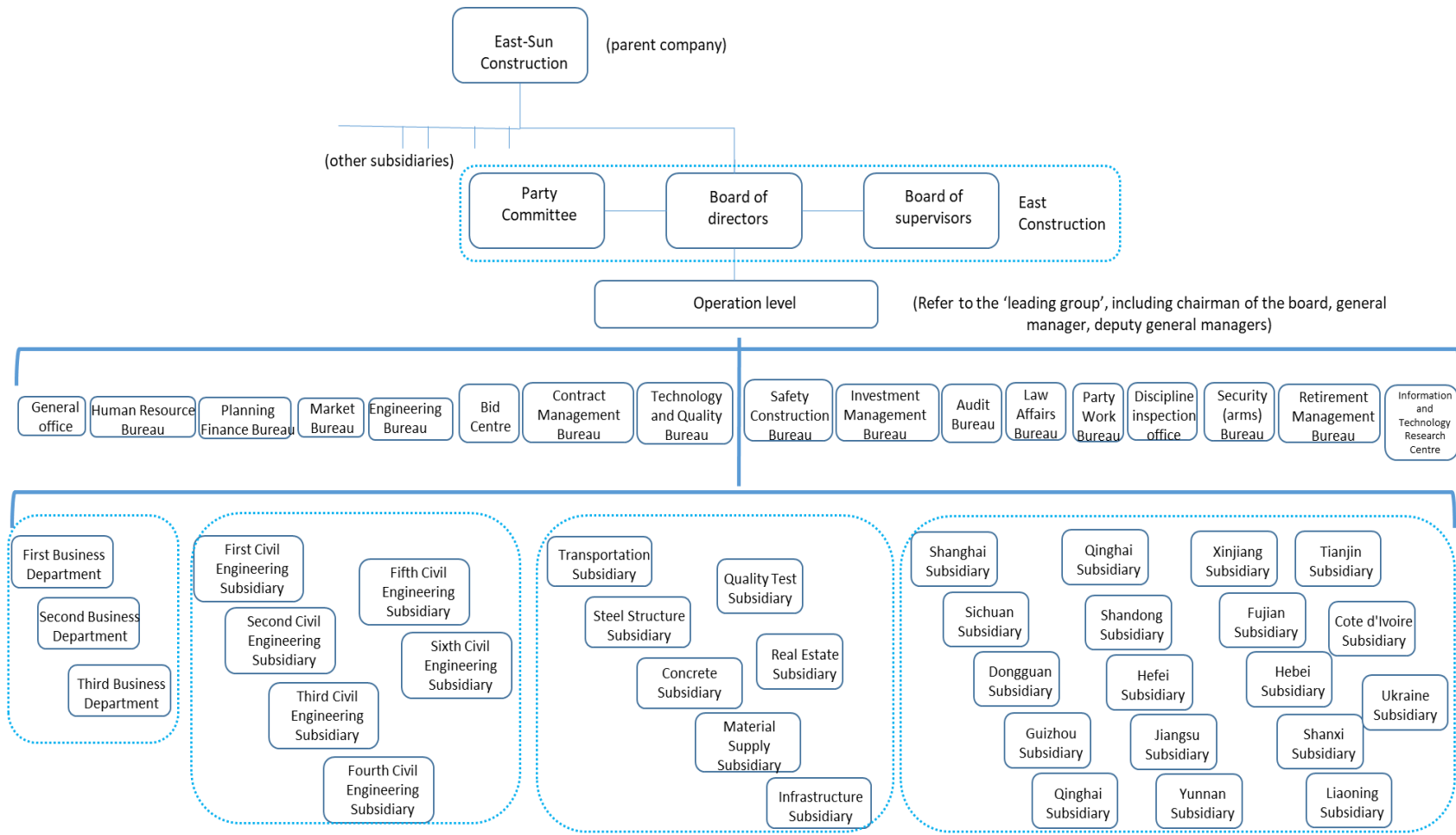


Figure 5.6: The organisational structure of East Construction in 2016 (Adapted from East Construction's web home page)

Nearly all interviewees who worked in East Construction's home office argued that their primary responsibility is to coordinate a '*control and management platform*' of subsidiaries. For example, when asked about the purpose of the firm's Marketing Bureau, its director argued:

*'I just build a platform for all secondary units. I collect, classify and coordinate information about new projects. I am also in charge of upgrading the firm's qualification certificate...'* (Interviewee 5, the director of the Market Bureau)

Clearly, Interviewee 5 described the Marketing Bureau as a platform for the collection, classification and coordination of project information. Similarly, the firm's Bid and Tender Centre was described by its director as the platform that controls all main production factors. The director of the Engineering Bureau gave another example, and argued that the purpose of the Engineering Bureau to serve as a platform for monitoring project management activities in the firm's secondary units:

*'We previously did the work of checking project management activities. But now, the secondary units do this job. We, as the home office, just check their reports.'* (Interviewee 6, Engineering Bureau director)

However, some interviewees expressed their disagreement and confusion about being described as a platform. For example, the deputy director of the Finance Bureau didn't agree with the assessment of this office as a 'platform for cost management'. He argued:

*'The lead group wants to portray the Finance Bureau as a platform for cost management. However, what we are actually in charge of is only expense reimbursements. The real place for cost management should be the construction site.'* (Interviewee 12, deputy director of the Finance Bureau)

Clearly, Interviewee 12 noticed the senior managers' portrayal of his bureau's role, but disagreed with this assessment and argued that this was inconsistent with its primary function, i.e. to reimburse expenses. This suggest that some push and pull in identity occurred during the firm's restructuring.

### **5.6.3 Subsidiaries**

At this time, East Construction has over 30 subsidiaries. It is notable that these subsidiaries are commonly referred as 'secondary units' (*erji danwei*, 二级单位), which highlighting their place in the firm's hierarchy. Nearly all interviewees who worked in these subsidiaries described their function as '*just an executing layer*' (*zhishi zhixingceng*, 只是执行层), and many claimed that '*the home office*

*makes the policies and decisions, the only thing we can do is to execute.*' Here, it seems as if these managers ground their identities in their relationship to their senior managers at the home office.

Some interviewees highlighted East Construction's announcement of its new 'construction group' (集团化管理) strategy in 2011. In order to execute this strategy, many argued for the acquisition of several design institutes and the establishment of specialist subsidiaries, such as transportation, civil engineering and installation (see Figure 5.6). The director of the Marketing Bureau commented that *'our subsidiaries cover all specialists in the entire supply chain. This means we can work for anyone in the construction chain'*. However, he also stated that in some cases the firm has too many subsidiaries for the same specialty, particularly civil engineering:

*'We have six civil engineering subsidiaries, each with around 200 -300 staff. However, their scale is too small. They should be combined into three. Then they can be strong enough to win bigger projects.'* (Interviewee 5, Market Bureau director)

Here, the argument seems to be that a discrepancy exists between the present staff numbers in many subsidiaries and the numbers that are required to win large-scale projects. Specifically, the perception is that subsidiaries for the same speciality should be reduced and their staff should be reallocated to other subsidiaries. A few other managers shared this view, including the general engineer for the Second Civil Engineering Subsidiary, who observed that *'other firms are trying to strengthen each speciality'*. Here, the argument is that *'specialists should be strengthened'*.

Many interviewees also highlighted the way that subsidiaries had been repositioned as 'market entities' (*shichang zhuti*, 市场主体). Several middle managers discussed the sense of competition that exists between subsidiaries, and the director of the Marketing Bureau expressed his concern that subsidiaries often compete for the same projects, which occurs *'quite frequently'*. The party secretary for the Sixth Civil Engineering Subsidiary also recalled competition between his and other subsidiaries:

*'It is common that three or four of us [subsidiaries] compete with each other. The home office needs to coordinate these conflicts. For example, we were following one project, but people from the Second Business Department were following the project as well. The home office said the one who obtained the client's invitation can use East Construction's brand to bid for it. The client has already investigated our firm. The Second Division is still pursuing the invitation for the project. But, actually, we already obtained the (client's) invitation.'* (Interviewee 16, party secretary of the Sixth Civil Engineering Subsidiary)

It is important to note that East Construction's subsidiaries are not independent 'legal entities' (*duli faren danwei*, 独立法人主体), which means that they need to use East Construction's qualification certificate in order to bid for projects. The home office decides which subsidiary can use the firm's certificate to bid. Here, it seems that interviewees agree that the first subsidiary that obtains a client's bid invitation can use East Construction's certificate.

#### **5.6.4 Party Committee: 'Lead a good troop' (*daihao duiwu*, 带好队伍)**

To date, the role of Communist Party committees in Chinese state-owned firms has attracted little attention in the literature. Moreover, while the existence of party committees is commonly known, it is rare to find people who will discuss them. Fortunately, interviewees in this study did not avoid discussion about this topic. This sub-section presents interviewees' stories about the party committee, party committee meetings and the party secretary.

#### The role of the party secretary (*dangwei shuji*, 党委书记) and party committee (*dangwei*, 党委)

Several party secretaries working in East Construction's subsidiaries were interviewed for this research. The interviewees agreed that the party secretary's primary job is to 'lead a good troop' (*daihao duiwu*, 带好队伍). The notion of a 'party committee' (*dangwei*, 党委) refers to the core members of a party organisation present in a firm or company. The party secretary of the Sixth Civil Engineering Subsidiary described his job thus: '*as a party secretary, you need to manage the lead group and lead a good staff troop*'. It is noteworthy here that he used the term 'troop', a word from a military lexicon. The party secretary of the First Business Department shared this view. She formerly worked as deputy director of a market office and was appointed party secretary three years ago. When asked about changes in her work after being appointed as party secretary, she replied:

*'It was a big challenge. I needed to build a system for 'party development' (dangjian, 党建). This is not only about recruiting new party members. I needed to do 'ideological work' (sixiang gongzuo, 思想工作). I needed to talk to people who have problems. I am also in charge of staff assessments. I need to recruit new people, to attend party lectures, to learn the new documents about not only the 19<sup>th</sup> congress, but also Xi Jinping's speeches and anti-corruption. In order to prevent and remind, I also need to organise talks with staff from time to time.'* (Interviewee 15, party secretary of the First Business Department)

It was notable that Interviewee 15 used a negative tone in discussing the past, and stated that *'there was not that much learning previously'*. She stated that her new tasks include, but are not limited to, 'attending party lectures', 'learning new party documents', 'training new party members', 'doing ideological work with staff' and 'assessing staff'. Through interactive practices such as attending party lectures and familiarizing herself with new documents, the Interviewee seeks to 'keep aligned with the party'. Party members are also required to watch events such as the 2017 opening and closing ceremonies of the 19<sup>th</sup> National Party Congress. Here, 'party development' was interpreted to mean party member recruitment and ideological work. Moreover, 'ideological work' was taken to mean speaking with staff whom she perceives as 'having a problem', although this was not entirely clear.

Another role of the party secretary that many interviewees emphasized is personnel management. Interviewees agreed that the party committee plays a role in personnel management, particularly in managing cadres. Here, 'cadres' refers to senior and middle managers in the firm's home office and senior managers in its subsidiaries. There seems to be a consensus that the party committee has the right to 'promote and demote staff' (*yongrenquan*, 用人权), including to 'employ and engage' (*pinyong*, 聘用) and 'appoint and dismiss' (*renmian*, 任免). The deputy director of the firm's Personnel Bureau addressed the practice that applies to cadre management that the Communist Party issued to East Construction. She recalled that:

*'We revised the Method of Cadre Management in our firm. Previously, we didn't use the 'Regulation for the Selection and Appointment of Cadres in Party and Government', the core document issued by the state. Rather, we incorporated many statement from this document into our Method of Cadre Management, such as 'loyalty to the party (dui dang zhongcheng, 对党忠诚)', 'four requirements before promotion (fanti sibi, 凡提四必)', 'avoiding promotion of people with illness (fangzhi daibing tiba, 防止带病提拔)'. (Interviewee 7, deputy director of the Personnel Management Bureau)*

It is notable that 'loyalty to the party' was highlighted as an extremely important criterion for staff assessment, and interviewees used phrases such as 'political quality' (*zhengzhi sushu*, 政治素质) and 'party spirit' (*dangxing*, 党性) as synonyms for the phrase. Another point that the deputy director of the Personnel Management Bureau highlighted was 'don't discuss state leaders and policies' (*wanyi dang de da zheng fangzhen*, 妄议党的大政方针), particularly in public.

*'Honestly, in state-owned firms, you need to be careful about your conversations in public places. You can't speak your mind like in other kinds of firms. You can't ridicule leaders. This is one difference between state-owned East Construction and private firms. This is part of the 'political quality' (zhengzhi sushu, 政治素质).'* (interviewee 7, deputy director of the Personnel Management Bureau)

Clearly, Interviewee 7 viewed 'public discussions about disagreement with state policies' as 'lacking political quality'. It seems that staff can either follow national policies or keep their disagreement to themselves. Here, it seems that party loyalty is also a critical criterion in promotion decisions.

The slogan of 'absolute leadership of the party' (dangde juegui lingdao, 党的绝对领导)

Many interviewees repeated the statement 'assure the absolute leadership of the party' (确保党的绝对领导). Xi Jinping's attendance at a meeting of state-owned firms was highlighted as a key event by some, and afterward the slogan 'absolute leadership of the party' seems to have become a key component of their organisational life. The secretary of the board of the directors stated that:

*'Recently, it was very clearly required that the party secretary is the chairman of the board of directors. This is required because it can assure the 'absolute leadership of the party' (dangde juegui lingdao, 党的绝对领导) for the firm. It is very important. Particularly, Xi very clearly positioned China's state-owned enterprises as the economic base of the party's rule in his speech to a national conference of state-owned firms. This was to declare the party's absolute control over state-owned enterprises.'* (Interviewee 4, the Secretary of the Board of Directors)

It seems that the Interviewee developed his perception of the firm's changing role through Xi's speech, during which state-owned firms were positioned as 'the economic base of the party's rule'. Xi's statement was also directly quoted by Interviewee 4 and other interviewees to justify their actions. The notion that the party secretary must serve as the chairman of the board of directors was highlighted as one means of assuring the party's control over state-owned firms. In the case of East Construction, Mr. Y, the chairman of its board of directors, also serves as party secretary.

Another practice, prioritizing party committee meeting to support the party's position of absolute leadership, was highlighted by several interviewees. Here, 'party committee meetings' (dangweihui, 党委会) refers to those of senior party members. Many argued that these meetings were to take priority over the firm's board meetings. As the secretary of board of directors explained, the rationale here was

to ‘make sure the decisions made in party committee meetings are approved in board meetings’, It seems that this requirement was intended to ensure that the party’s values were always considered first. Interestingly, some interviewees perceived this as ‘just a matter of hierarchical change with no change in the outcomes’. The deputy director of the Personnel Management Bureau gave an example related to staff promotion:

*‘Staff promotion plans now need to be submitted at party committee meetings. Previously, they would be discussed at board meetings. But this change doesn’t change the outcome. This is because members of the party committee meeting also serve as the firm’s board of directors.’*  
(Interviewee 7, deputy director of the Personnel Management Bureau)

Here, the argument seems to be that the outcomes of many decisions did not change even after the party committee was placed in charge. One reason for this was that most senior party members are also on the firm’s board of directors. It seems as if these two practices, i.e. ‘prioritizing party secretary meetings’ and ‘senior managers should be party members’ both serve to assure the party’s rule.

### **5.6.5 Staff**

The firm’s staff were a consistently important theme in interviewees’ accounts. Many interviewees used different terms to refer to staff at different hierarchical levels. Nearly all interviewees used the phrase ‘leading groups’ (lingdao banzi, 领导班子) for to senior managers and senior party members in the firm, and agreed that decisions ‘need to be made by the leading groups’. However, many senior and middle managers repeatedly used the phrase, ‘That is Mr. Y [the chairman of the board]’s decision....’ For example, in response to the withdrawal of market offices at the home office, many middle managers stated, ‘That was Mr. Y’s decision; it is not good for us to comment on this.’ Moreover, the deputy general manager said, ‘This is Mr. Y’s decision— I am just a spectator,’ and the general manager argued that ‘I am very clear about his role as the big boss. I told him that I obey his decisions.’ Here, the word ‘obey’ (*fucong*, 服从) was used to express the sense that Mr. Y, the chairman of board, is the person who makes the final decisions.

Almost all interviewees also emphasized the term ‘cadres’ (*ganbu*, 干部). According to the deputy director of the Personnel Management Bureau, ‘cadres’ refers to senior and middle managers in the home office and senior managers in its subsidiaries. It seems as if the firm’s cadres are divided into different levels. As the deputy director of the Personnel Management Bureau explained:

*'We classified cadres into several categories. One category is 'divisional level' (chuji ganbu, 处级干部), which includes the 'leading group' of the secondary units and the directors or deputy directors of the bureaus in the home office. The second category is 'sectional level' (keji ganbu, 科级干部), which includes the middle managers in the secondary units and section heads. The principle of personnel management is that the party committee has the 'right to promote and demote staff' (yongrenquan, 用人权), including 'employ and engage' (pinyong, 聘用) and 'appoint and dismiss' (renmian, 任免).'* (Interviewee 7, deputy director of the Personnel Management Bureau)

Here, it is clear that the firm's cadres are classified into a divisional and a sectional level. Many interviewees agreed that almost all cadres are comprised of party members, and the party committee was commonly claimed to have the right of cadre management. This situation seems to rank party organisation members over firm managers, which seems to privilege party organisation membership over employment status.

Some interviewees highlighted the practice of assessing cadre performance every two years, which was introduced as a motivational measure. Two performance targets, 'output value' (chanzhi, 产值) and 'new contract value' (xinqianhetong, 新签合同额) were highlighted by interviewees, nearly all of whom repeated the statement that, *'we have to acquire new projects that value xxx yuan if we are going to meet performance targets.'* The deputy director of Personnel Management Bureau added that *'if the cadres can't fulfil their targets, they might lose their position'*. During the interview period, the middle managers' performance assessments were taking place, and several interviewees stated that many within the firm felt anxious about these assessments. It seems as if the assessment process gives the cadres a sense of crisis. However, such assessments are not followed very stringently. In fact, the deputy director of Personnel Management admitted that *'no cadre has been demoted. We need to consider stability.'* Thus, it seems that the assessments are mainly used to give cadres the sense that they may lose their jobs if they don't perform.

Some interviewees remembered a period of staff layoffs (*xiagang fenliu, 下岗分流*) at the beginning of the 2000s. It was argued that this event was necessary to 'reduce redundant staff' and introduce a sense of 'job posts'. Figure 5.3 shows that East Construction employee numbers decreased slowly at this time but sped up in 1999 and 2000. By the end of 2000, the firm had 5606 employees half of its 1995 number, and this decline continued until 2007. However, some interviewees still tended to refer to staff



as ‘troops’, and many used the phrase ‘manning quotas’ (*bianzhi*, 编制) to refer to staff numbers, reflecting a lingering sense of military operations. Moreover, staff included in the quotas were still commonly referred to as ‘having iron rice bowls’, or permanent jobs.

#### **5.6.6 Summary**

This section presented interviewees’ accounts about East Construction’s management structure. Most interviewees used the phrase ‘upper units’ to refer to its parent company, and many reflected on examples of how East Construction organised itself in response to requirements or policies issued by East-Sun Construction. A strong sense of ‘obeying’ was observed, and many interviewees highlighted the home office’s role as the ‘management and control platform’. Some who work in the home office agreed with this characterization, while others interviewees expressed their confusion and disagreement with this role. Subsidiaries were commonly referred as ‘secondary units,’ and some interviewees expressed their concern about in East Construction’s relatively large number of subsidiaries and argued that they should be combined to form strong specialist offices.

Many interviewees discussed the party organisation and seemed to agree that the party secretary’s role is to ‘lead a good staff troop’ by managing personnel. Practices such as cultivating new party members, holding ideological talks with staff, learning Xi’s speeches and watching the Communist Party’s national congress opening and closing ceremonies were highlighted by interviewees. In addition, the Communist Party’s cadre management rules seemingly applied to cadre management practices at East Construction. The slogan ‘party’s absolute leadership’ was commonly emphasized by interviewees, and party loyalty was viewed as extremely important criterion for assessment and promotion. While many interviewees highlighted the new practice of prioritizing party committee meetings above company board meetings, some interviewees argued that this does not change any decision-making processes.

Staff were commonly classified into different types, and the phrase ‘leading group’ was commonly used by interviewees to refer to East Construction’s senior management, who seem to be fully charge of decision making activities. However, many senior and middle managers stated that ‘It is Mr. Y (the chairman of the board)’s decision’. Interviewees commonly referred to East Construction’s management groups as cadres. Finally, performance targets for senior managers of subsidiaries were highlighted, and most interviewees identified two criteria: value of new contracts and value of turnover.

## 5.7 Project management

This section presents interviewees' interpretations of project management, which was an important term that they frequently mentioned. It first presents storylines concerning 'project way of construction' and 'being the management layer' and follows with accounts the relationships between East Construction and its project management teams. It includes interpretations of practices, attitudes and comments and discusses the topic 'quality and safety management'.

### 5.7.1 'Project way of construction'

When asked about how the firm manages projects, many interviewees highlighted the influence of a major policy announcement: 'project way construction' (*xiangmu fa shigong*, 项目法施工) in 1980s. Many agreed that before the 2000s, construction sites were referred as 'work areas' (*gongqu*, 工区), and some commented that work areas were '*basic units for fighting* (*zhandou*, 战斗). The term 'command post' (*zhihui bu*, 指挥部) was also used to describe a way to run construction activities. Interviewees recalled that at this time, all units worked together in the same work area, and many used the phrase 'parallel construction' (*pingxing shigong*, 平行施工) to describe this process, which suggests that work units were independent from each other and thus had no professional relationships. These phrases all reflect strong military terminology, most likely influenced by the interviewees' past experiences of working in the 'Engineering Army'. Nearly all interviewees highlighted a Japanese contracting firms' success in the Lubuge project at the beginning of 1980s and the Ministry of Construction's subsequent announcement of the 'project way construction' initiative. '*The state began to promote the project way of construction*', recalled the Market Bureau director. A few interviewees also recalled practices such as organising training courses as one way the Ministry of Construction made sense of this process.

It seems that for many interviewees, 'project way construction' meant the separation of the 'management layer' (*guanli ceng*, 管理层) from the 'labour layer' (*zuoye ceng*, 作业层). Here, 'management layer' refers to management staff and technicians, and 'labour layer' to those who perform physical construction work. Many interviewees repeated the phrase, '*We are the management layer, we do project management only*' to define their role in the firm.

However, according to several interviewees, many of East Construction's employees do physical construction work. The director of the Engineering Bureau stated that '*we have all kinds of manual*

*workers, such as carpenters and steel benders*'. After the introduction of the 'project way construction' policy, labourers were now referred to as the 'labour layer' and were perceived as 'a burden for construction'. Moreover, the term 'subcontractor' (*fenbao*, 分包) was introduced to redefine the relationship between the management and labour 'layers', and the term 'labour layer' was replaced by 'labour-only subcontractor layer'. On this point, many interviewees commented that, 'we don't need to feed the labour when we don't have construction work to do'.

At this time, the term 'construction site' was also introduced into the management lexicon to replace 'work area'. For example, the firm's Engineering Bureau director argued that the 'project way construction' initiative broke the perception of the 'permanent work area'.

*'The word 'project' highlights the provision that project departments reorganise after the project is finished. Previously, 'work area' was more like a fixed grassroots unit.'* (Interviewee 6, Engineering Bureau director)

Here, it seems that the introduction of new terminologies changed interviewees' perceptions about projects and injected the sense that projects and project management teams were temporary.

### **5.7.2 Redefining the relationship between the firm and project management teams**

All interviewees highlighted one key event: the announcement of the 'one system, five mechanisms (*yiti wuzhi*, 一体五制)' initiative. This initiative was announced by Mr. xxx shortly after his appointment as East Construction's general manager in 2000. Here, the shared perception was that 'project managers had too many rights (*quanli gouda*, 权利过大)', which was argued to be the reason for this policy. This suggests that project managers had the right not only to keep and disburse project funding at will, but also to select subcontractors and material suppliers. A common problem highlighted by many interviewees was that project managers took advantage of these rights to 'put money into their own pocket' (*ba ziji yaobao chuaifei*, 把自己腰包揣肥). For example, Interviewee 21, who worked as a project department accountant in the late 1990s, described that 'project managers subcontracted work to subcontractors that had good *guanxi* with them and pocketed the extra.' This was commonly argued as the reason of that the firm experienced both project losses and company losses in late 1990s. It is notable that interviewees highlighted the feature of 'firm loss and profit' in their interpretations. Interviewees' claims of 'firm losses' is supported by 2006 data from the official record. As Figure 5.2 shows, East Construction experienced losses from 1996 to 2001.

Interviewees were broadly in an agreement that the ‘one system, five mechanisms’ initiative redefined the relationship between East Construction and its project managers. The phrase ‘centralized management and control (*jizhong guankong*, 集中管控)’ was used by all interviewees to describe the changes that followed. For example, most highlighted that practices such as project funding and the right to select subcontractors and material suppliers were now centralized to the home office. In particular, the project bank accounts that were once controlled by project managers were withdrawn, and all project funding began to go to East Construction’s main account. Moreover, the home office also assumed control of all project funding accounts, began checking and approving project managers’ expense accounts, and, replacing project managers, began to employ project accountants. Another practice interviewees highlighted involved introducing bid and tender practices to select subcontractors and material suppliers. Bid and tender centres were established in the firm’s subsidiaries, and in 2014, a bid and tender centre was established in the home office, replacing those in the subsidiaries. All interviewees used the phrase ‘centralized bidding and purchasing’ (*jizhao, jicai*) to summarize these changes. Many interviewees maintained that the project manager should play the role of ‘executor’ (*zhixingzhe*, 执行者), and the Project Management Department was labelled as an ‘executing agency’. Terms such as ‘manufacturing shop’ and ‘chief’ were used by some interviewees to highlight their shared perception that the role of project managers is to manage at the project level.

When asked about the implications of the ‘one system, five mechanisms’ policy, many interviewees perceived that ‘this regulated the process’. The word ‘regulate’ (*guifan*, 规范) was used by almost all interviewees. For example, the deputy general manager of the Transportation Subsidiary commented that ‘*it is not up to a particular person now, it is up to the rules, to whose prices are the lowest. It is the norms that now regulate people*’. For him, the meaning of the ‘one system, five mechanisms’ policy lies in providing fixed procedures and criteria for activities such as selecting subcontracting firms and material suppliers. Another example was that project management staff salaries were determined according to firm regulations, which replaced the former tendency for project managers to make these decisions. East Construction’s deputy general manager remembered the many project inspections he made to enforce this change. Many interviewees argued that these new procedures and criteria ‘*protected the cadres in East Construction*’ (*baohu ganbu*, 保护干部). For example, to support this argument, the Sixth Civil Engineering Subsidiary’s party secretary compared East Construction and the Chongqing Construction Group. Ltd., their main competitor:

*'Nobody got caught taking bribes in our firm. Look at how many were arrested in the Chongqing Construction Group. This is because we regulated project management; they [project managers] don't have the authority.'* (Interviewee 16, the party secretary of Sixth Civil Engineering Subsidiary)

Notably, the number of Chongqing Construction Group's staff that were arrested on bribery charges was extracted to justify the implementation of the 'one system, five mechanisms' policy. Here, the argument seems to be that the new procedures and criteria reduced opportunities for cadres to take bribes.

In addition, many interviewees argued that the decision to centralize subcontractor selection and material purchases was motivated by cost reduction measures. Several interviewees used the phrase 'scale effect' (*guimo xiaoying*, 规模效应) to interpret the perceived benefit of centralized bidding and procurement policies, and some highlighted practices such as establishing long-term partnerships with material suppliers. For example, East Construction's deputy general manager argued that:

*'It is a question about wholesale and retail. The retail price per ton of steel is definitely higher than the wholesale price per ton. We have a strategic partnership with producers, such as Dazhou Iron & Steel Group, Ltd. We use quantity to get lower prices (yi liang huan jia, 以量换价). Without this large scale, nobody will play with you.'* (Interviewee 2, deputy general manager of East Construction)

Notably, the phrase 'wholesaler and retailer' was used to interpret the lower material prices East Construction was able to secure by scaling up its orders. This suggests that cost reductions are rooted in its managers' mental maps.

However, a few interviewees interpreted this event differently, namely those in charge of project acquisitions. They stated that these new procedures and criteria reduced their bargaining power in winning project contracts. For example, the Steel Structure Subsidiary's marketing manager argued:

*'The construction sector is a long industry chain. If I can only manage one part of it, the social guanxi is very limited. Project acquisition can be very difficult. For example, I had some guanxi with one material supplier, who had guanxi with the owner of one project. We reached agreements that he helped me win projects and I guaranteed he worked as the material supplier. However, I can't guarantee they win bids now, because of centralized bid and material procurement.'* (Interviewee 19, manager of Market Department in the Steel Subsidiary)

Here, the emphasis was given to the feature of increased difficulty in winning project contracts. Cooperation with particular subcontractors or material suppliers who have *guanxi* with project clients was argued as essential in winning projects. It seems that the new procedures and criteria for selecting subcontractor and material suppliers reduced the possibility that pre-chosen candidates could win bids. The Market Bureau director shared this perception, and stated that *'marketing should rely on technology and guanxi; overemphasis on control and management is not helpful'*. These statements can be viewed as an implication of his role in winning project contracts.

### **5.7.3 Emphasis on quality and safety management**

Many interviewees emphasized the importance of quality and safety in project management. In particular, senior managers seemed to be in agreement that quality and safety management closely relates to winning project contracts. Some interviewees also reflected on how East Construction seems to be excluded from the metro line project market. For example, the director of the Technology and Innovation Centre argued that,

*'The government officials value safety a lot. We had one safety accident and didn't deal with it very well. Competition for metro line project is very intense. Then we were squeezed out of the game.'* (Interviewee 11, Technology and Innovation Centre director)

Notably, the government's attitudes toward safety were extracted in Interviewee 11's account of a safety accident. This accident was interpreted as disobeying the government's emphasis on safety, which resulted in the firm not being awarded metro line projects any longer. The underlying assumption of this argument is that government officials have great influence over which firms are awarded projects. It seems that East Construction emphasised quality and safety management after this event.

Interviewees also commonly argued that profit can be sacrificed to achieve quality and safety management targets, and highlighted the practice of using 'risk responsibility contracts' between project managers and firms. 'Risk responsibility contract' refers to a contract signed by a firm and its project managers that regulates the managers' rights and responsibilities. The general manager of East Construction pointed out the difference between a 'risk responsibility contract' and a 'responsibility contract', which is typically adopted in privately-owned firms. It was also argued that project managers are not required to maximize cost-saving practices under these contracts. This argument was supported by the firm's deputy general manager, who explained that *'the award for cost-saving will not be increased once it reaches certain amount'*. He continued:

*'We require project managers to spend all of their safety budgets. If they just spend 5 million yuan, instead of the required 10 million yuan, they won't be rewarded.'* (Interviewee 3, deputy general manager of East Construction)

Here, it seems that priority was given to quality and safety management over cost-saving measures.

Another practice many interviewees highlighted was relatively large project management teams. They emphasized that the posts in project management teams are clearly defined. One project manager claimed that, *'Our project management team is comprehensive, having at least one staff member in each function post. For example, quality, safety, budget, construction, technology. The divisions of duties are very clear.'* And while Interviewee 20 admitted that the cost of large project management teams is high, he emphasized that *'you have to spend if you want have a good construction site and satisfy the owner.'* Apparently, quality and safety management are also viewed here as a priority over cost-saving.

A few interviewees described the difficulties caused by the high costs of large project management teams in terms of being awarded projects. The deputy general manager of the Transportation Subsidiary discussed difficulties in one negotiation that were the result of a large project management team:

*'The price for this express road project was low. We told them our project management is very good. We need to spend money to achieve the standard management level. So, our costs are relatively higher than others. But, they didn't agree with our management fee. Our chairman of the board and our general manager went to Beijing several times to explain.'* (Interviewee 18, deputy general manager of the Transportation Subsidiary)

Here, it seems that clients lack an understanding of the costs related to emphasising quality and safety management. In fact, 'expenses for quality and safety management' were commonly described as conflicting with 'project acquisition' in managers' accounts.

#### **5.7.4 Summary**

This section presented interviewees' accounts related project management. Terms such as 'project' and 'project management' were commonly used by interviewees. These accounts primarily concerned 'separation of management layers from the labour layer' and 'redefining relationships between the firm and project management team'. Interviewees commonly argued that East Construction focuses solely on the 'management layer'. The practice of layoff was interpreted as to realize the separation of the 'management layer' and the 'labour layer'. The term 'subcontracting' was used to describe the

relationship between these two layers, and a few interviewees argued that the word 'project' introduced a sense that as construction activities are temporary, project management teams are temporary as well.

Most interviewees highlighted the 'one system, five mechanisms' policy that the chairman of the board announced in 2000. All interviewees interpreted this event as one that redefined the relationship between the firm and its projects. Here, the shared perception was that 'project managers had too many rights', which was argued to be the reason for both project losses and firm losses. In addition, the practices of centralized rights for project funding, subcontractor selection and material supplier selection were highlighted. Most interviewees argued that these practices serve to 'regulate' organisational activities, and some argued that they reduce costs. However, interviewees who are in charge of project acquisition complained that these practices tend to constrain cooperation with subcontractors or suppliers that have *guanxi* with clients. It seems that interviewees emphasized differing aspects in order to interpret these changes.

Many interviewees also emphasized quality and safety management. The practice of drawing up 'risk responsibility contracts' between the firm and project managers was highlighted. Here, the argument seems to be that these contracts do not encourage project managers to reduce costs and that project managers should spend more on quality and safety management. It is notable that interviewees commonly described investments in quality and safety management as in conflict with winning contracts.

## **5.8 Role of the state**

This section presents interviewees' accounts of their interactions with state institutions. Multiple roles of the state emerged from their interpretations. First, the section presents accounts in which the government plays the role of project client. It is notable that local governments serve as clients not only for infrastructure projects, but also residential projects. Second, the section discusses storylines in which both central and local governments serve as policy makers, and argues that government actors change their mind frequently. Finally, the section follows with narratives in which the government plays the role of market monitor.



### 5.8.1 Local governments as a main source of project allocation

Almost all interviewees highlighted the role local governments play as the main source in project allocation. Most of their accounts related to how projects are allocated by top government officials. Phrases such as *'allocate the project to us directly'* (*zhijie fabao*, 直接发包) and *'government's ratification'* (*pi*, 批) were commonly used by many interviewees, who identified the 'leaders of the municipality' (*shilingdao*, 市领导) as key actor in this process. Here, 'leaders of the municipality' refers to the municipal party secretaries, city mayors and directors of the Development and Reform Committee (*fazhan gaige weiyuanhui*, 发展改革委员会). Interviewees seemed to agree that these leaders can directly allocate government projects to East Construction, and gave the XY public housing project, LJ New District and YC New District as examples. However, many participants argued that competition remains in the project allocation process, and agreed that the Chongqing Construction Engineering Group Corporation Limited (CQCEGC) is their main competitor. Several interviewees also used a family-related metaphor to describe their relationship with the local government: *'East Construction and CQCEGC are nephews and sons to the government.'* This metaphor suggest that these firms rely on local government and often view it as a 'parent'. The reason for the local government's preference for the CCG was commonly argued that the CCG is managed by local SASAC while East Construction is managed by central SASAC.

Many interviewees also highlighted officials' eagerness to achieve certain 'political goals' (*zhengji*, 政绩) in their interpretations of why projects are directly allocated to East Construction. For example, the deputy general manager interpreted the awarding of the XY public housing project as *'the government wanting to achieve their political goal of a large amount of public housing.'* Another example is projects awarded within the YC New District. As the Market Bureau director explained, *'we discussed with the Yinchuan City leader about his political goal and how East Construction can contribute to these goals.'* The party secretary of the First Business Department said that their latest factory project was allocated because *'the government wants to attract this large firm to move to Chongqing.'* Here, it seems that top government officials have the right to directly allocate projects and are willing to use this right to fulfil their political goals.

The phrase *'seize the construction deadline'* (*qiang gongqi*, 抢工期) was closely connected with these allocated projects. The party secretary of the First Business Department discussed how they met a tight deadline for one of these allocated projects:

*'We were working 24 hours every day during the last weekend to meet the deadline. We made it, and the site looked very large and ready for plant installation. The investor came to visit the site on Monday. They were very happy about the well-prepared site and decided to invest 100 billion yuan to construct their factories.'* (Interviewee 7, party secretary of the First Business Department)

Clearly, meeting this deadline was the primary priority in this project. To accomplish this goal, staff worked overnight during a weekend, which this interviewee viewed as normal, emphasising the fact that the *'leaders were very satisfied with our work'* justified the extra-long work hours.

That the municipal party secretary's attitudes are crucial in the project allocation process seemed to be a consensus shared by many interviewees. Generally speaking, they said that Mr. Sun's appointment as the municipal party secretary in 2014 as a point after which *'project allocation was not allowed.'* Many interviewees also argued that *'project allocation is now more and more difficult. We need to compete in the market now.'* Apparently, reducing the number of directly-allocated projects compelled firms such as East Construction to compete in the market.

Some interviewees highlighted recent public clients' unwillingness to intervene in the bid and tender process. For example, the party secretary of the First Division highlighted the announcement of China's 'anti-corruption policy' (*fanfu changliang*, 反腐倡廉) by General Party Secretary Xi Jinping.

*'There are strict inspections of bidding and tendering currently. The [public] clients are not willing to get involved in this. All they care about is that the procedure is legal. They are avoiding risk and taking responsibility. They don't care about who wins the bid as long as the procedure is legal.'* (Interviewee 15, party secretary of the First Business Department)

Inspections of local government bidding and tendering processes that were implemented by the central government seem to be the main impetus for the adoption of the anti-corruption policy. Informed by these inspections, public clients seemingly got the sense that they should not intervene in this process. Here, it seems as if the announcement of the anti-corruption policy changed the priorities of public clients to risk avoidance over working with their preferred contracting firms.

### **5.8.2 Central and local government as policy maker**

Many interviewees stated that the government also plays a role of policy maker, and often said that *'there is a document issued by the central/ local government.'* One example is the late 1990s policy to

'redirect laid-off workers (*xiagang fenliu*, 下岗分流). Here, the Market Bureau director explained that 'it is the state's policy that if a firm cannot continue, it needs to give its staff a living allowance for 20 years'. However, he also maintained that such allowances are not provided until many years later.

According to the interviewees' stories, it seems that government officials tend to change their minds about policy quite often. The policy about employee stock ownership is one such example. The secretary of the Board of Directors pointed out that employees were allowed to purchase shares when East Construction was changed into a limited liability company in 2001. However, in the mid-2000s the firm bought back the employees' shares because '*there was a regulation issued by the central government that employees could not have the stock at that time*'. Interestingly, employees were again eventually allowed to buy company shares: '*recently the state is encouraging employees to have stock in the firm. You can go back to check the document.*' According to this interpretation, this policy about employees holding shares in the firm changed three times. Here, interviewees seemed to take frequent policy changes for granted and expressed a sense of the need to obey these policies.

Many interviewees also expressed confidence in policy changes. For example, when the party secretary of the First Division discussed why a building information modelling (BIM) centre was established in East Construction, she explained that the reason was because '*the government is promoting BIM, so its development prospects must be very good.*' Here, instead of highlighting market demand or advances BIM could bring, the official's explanation was accepted. Similarly, in response to a question about future plans, many interviewees stated, '*we are going to do projects for sunrise industries promoted by the government, such as an underground pipeline*'. This confidence comes perhaps from interviewees' past experiences with the government's effect on the industry.

A few interviewees expressed their confusion about particular government-issued policies. For example, the general engineer of the Second Civil Engineering Subsidiary discussed his confusion with various conflicts in industrial standards that were issued by local governments and the central government. The phrase '*not down to earth*' (*bujie diqi*, 不接地气) was used to express his perception of these policies. An example of regulation about steel tubing was given:

*'It is regulated that the thickness of the steel tube should be 3.6mm. But I am sure that in the Chongqing market you can't find any steel tube that conforms to this standard. The thickness is normally 2.8 mm.'* (Interviewee 17, general engineer of the Second Civil Engineering Subsidiary)

Here, the participant criticized the fact that the required steel tube thickness was not available in the Chongqing market. Notably, the Interviewee stated that only readily available steel was used in the firm's projects. In other words, the standard that was perceived as not 'down to earth' was ignored.

### **5.8.3 Government as market supervisor**

Many interviewees stated that the government plays the role of market supervisor. For example, a few participants related how the government manages conflicts between the firm and peasant workers. As the general engineer of the Second Civil Engineering Subsidiary stated:

*'We signed contracts with peasant workers. They state that we won't pay if the workers don't follow the standards. But who dares not to pay them? One fen (分, =0.01 yuan) less is not possible, otherwise they will go to the government to protest. The governmental offices will go to our firm immediately. We will be required to pay, regardless of whether we have a valid reason.'*  
(Interviewee 17, general engineer of the Second Civil Engineering Subsidiary)

Here, it seems that government officials can directly order firms to pay peasant workers no matter what. It is worth noting that these workers tend to protest in front of government buildings, rather than go through legal procedures. It seems as if actors such as peasant workers also view the government as the market supervisor.

Many interviewees also highlighted the comments of government officials as an important measure of quality. For example, in her justification of direct project allocation, the party secretary of the First Business Department argued that *'leaders from the MOHURD came to inspect this project and said this way is better than others'*. Here, recognition by officials was used to justify direct project allocation. Visits by government officials were also viewed as a signal of quality. For example, in order to underscore the firm's good project management practices, the deputy general manager of the Transportation Subsidiary argued that *'the director of the Guizhou Provincial Transportation Department came to our construction site and was very pleased with our work'*. Apparently, the interviewees viewed official recognition and visits as affirmation of effective project management work.

### **5.8.4 Summary**

This section presented interviewees' stories of their interactions with government actors. The findings suggest that the Chinese government plays multiple roles in its interactions with the firm, the most important of which is as the client. Nearly all interviewees highlighted their experience of top

government officials allocating projects, and argued that government officials tend to allocate projects to achieve their political goals. Moreover, they stated that the phrase 'seize the construction deadline' closely relates to these projects. Finally, some interviewees stated that over time public clients were less willing to intervene in the bid and tender process due to stricter inspections.

The interviewees also identified the government's role as the policy maker. Many participants recalled several rounds of changes to a particular policy. Interestingly, many interviewees tended to take frequent policy changes for granted, and while a few expressed confusion and disagreement with particular policies, most of them expressed unquestioned confidence in all changes in policy.

The government was also identified in the role of market monitor. A few interviewees gave examples of how local government officials pushed contracting firms to pay peasant workers. Overall, many interviewees viewed government officials' visits and recognition as their criteria for 'doing a good job.'

## **5.9 Summary**

This chapter presented the data analysis of the East Construction case study and the six themes that emerged from interviewees' accounts. The following chapter presents the data analysis from the South Construction case study.

## 6. Case Study Two: South Construction

### 6.1 Introduction

This chapter presents the results of the South Construction case study. As Section 4.4.2 discussed, South Construction was a privately-owned contracting firm until 2015, when it was sold to a large state-owned contracting firm. As a result, compared to the East Construction case study, available documentation was very limited. Therefore, the second case study focuses primarily on accounts produced by interviewees in response to the interview questions. The chapter first gives an overview of South Construction and follows by discussing six themes that emerged from the interview data regarding how South Construction reorganised itself in response to the marketization process. As with the first case study, these themes were labelled 'market behaviour', 'competition', 'bid and tender', 'management structure: Trajectory from the past', 'project management' and 'role of the government'.

### 6.2 Overview of South Construction

South Construction was established in Chongqing in 1992. It was previously an in-house construction team controlled by the Chongqing Bureau of Housing Management, but in 1992, a policy was announced that banned government organisations from maintaining construction teams. As a result, with the help of foreign investment the construction team was reconstituted as a construction firm. Information on the identity of these foreign investors is not publicly available and was seemingly unknown to the interviewees.

Various owners have been involved with South Construction. Mr. X was remembered as its owner since the beginning of 2000s, and Mr. L took over as the firm's only shareholder in 2007. In 2008, another two shareholders, Mr. Z and Y, were introduced into the firm. Staff who had previously worked for Mr. Z and Y were then brought into South Construction. In 2013, Mr. Z and Y sold their shares to Mr. L, and in April 2015, South-Sun Construction, a local state-owned contracting firm, acquired South Construction. In June 2016, South-Sun Construction appointed Mr. S as the general manager of South Construction.

Historically, South Construction's main business has been in housing projects. However, in 2011 the firm began to take on infrastructure projects under the build-transfer (BT) financing mode. At the same time, it continued its housing project work. South Construction reported revenues of around 5 billion yuan in 2011, which was its highest to date. However, its revenues have since quickly declined. According to the

firm's 2016 annual report, the value of its output in 2016 was 36,131 million yuan with profits of -5.94 million yuan. Its staff numbers in 2016 were around 60.

### 6.3 Organising for the Market

The market was is an important theme that emerged in the interviewees' accounts of its reorganisation in response to marketization. This section presents interviewees' descriptions of market changes and the firm's corresponding actions. First, it discusses interviewees' use of market terminologies, including their various definitions of the word 'market'. This follows with descriptions of the shrinking housing project market and practices that the firm adopted in response.

#### 6.3.1 Market terminology

All the interviewees from South Construction used market-based terminology in their interviews. They all used the 'market', albeit with different definitions and in reference to different contexts. For example, the Department of Marketing manager commented on the flexibility of interest rates for bank loans and argued that *'it is like this in the Chinese market'*. A few interviewees referred to the market in terms of supply and demand relationships. For example, the firm's Contract Management Department manager argued that *'the commercial buildings market in Chongqing is not good, as supply exceeds demands'* in his account of commercial building.

Some interviewees also referred to 'market' as a mechanism of resource distribution. For example, in his account of how South-Sun Construction won its first residential building projects, South Construction's former chairman stated that *'these projects were not obtained through market practices, but project allocations'*. In this case, the term 'market' closely relates to bid and tender practices, which introduced competition into the Chinese construction sector. For example, the Department of Contract Management manager explained why bid and tender is essential in selecting labour subcontractors:

*'There is no regulation that requires you to use bid and tender for labour subcontracting. Because it is kind of the internal bidding. If the workload increases, we can't just talk face to face to decide prices. If you say 500 yuan per unit, I say 400 yuan per unit, there is no supporting evidence to decide which one is reasonable. It is not scientific. After all, we are in market economy, so we need to compare.'* (Interviewee 34, Contract Management Department manager)

Here, it is clear that a market approach to resource distribution is not taken for granted. Instead, comparison in the bid and tender process was argued as a ‘scientific’ way of selecting subcontractors.

At the same time, many interviewees used the word ‘market’ to refer to different types of projects. In addition, nearly all interviewees used phrases such as ‘run in the market’ (*pao shichang*, 跑市场), ‘expand the market’ (*kaituo shichang*, 开拓市场), and operations (*jingying*, 经营). The use of this terminology reflects interviewees’ awareness of the efforts required to win project contracts. In particular, almost all interviewees highlighted the ‘real estate market’ as South Construction’s main business. Some interviewees emphasized the ‘public bidding market’ (*gongzhao shichang*, 公招市场), referring to projects that are funded by local governments or government financing platforms. These publicly-funded projects are required to select contracting firms through public bid and tender processes. The following subsection describes interviewees’ descriptions of different types of project markets.

### **6.3.2 Falling real estate markets**

Interviewees commonly discussed the real estate market in their accounts of market changes. This is most likely because residential projects have been South Construction’s main area of business since its establishment. The announcement of a package of financing and currency policies in response to the 2008 global financial crisis was commonly highlighted by interviewees as a key event. Many interviewees remembered a prosperous time after this event. *‘It was a golden period from 2008 to 2012,’* said the deputy general manager in charge of project acquisition. *‘House sales were really good back then.’* It seems that expanding real estate market during this period resulted in South Construction’s growth, which attracted two other investors. In 2008, two new shareholders, Mr. Z and Mr. Y, joined South Construction. Both Mr. Z and Mr. L took a 40% share, while Mr. Y held 20%.

Interviewees seemed to agree that after 2013 the real estate market ‘went downhill’ (*zou xiapolu*, 走下坡路). Some interviewees highlighted several new central government policies connected to housing price controls as a cause and labelled this as ‘the beginning of a very difficult period’. Examples of these policies include the Notice to Curb Rapidly Increasing Housing Prices in Some Cities Resolution, which the State Council issued in April 2010. This document was generally referred to as the ‘Ten Rules’. Wen Jiabao, the Chinese State Council Premier, announced the Notice of Further Regulating and Controlling the Real Estate Market in January 2011, a document that was widely referred to as the ‘New Eight Rules’. These policies required banks to constrain loan lending for both real estate developers and house



buyers. Almost all interviewees stated that *'Selling houses was difficult after these policy announcements'*. Many interviewees further argued that real estate developers had problems acquiring capital to pay bank loans and contracting firms. Many real estate developers, especially small and medium companies, went bankrupt during this period.

In response to the weakening real estate market, Mr. L's decision to stop pursuing housing projects was emphasized by many interviewees with different interpretations. Some interviewees, such as the deputy general manager and the accounting manager, expressed agreement with this decision and argued that *'this was for capital risk avoidance'*. They further highlighted that it was routine for clients and real estate developers to avoid paying for projects on time and in full. At this time, the norm in the real estate housing market was for contracting firms to finance projects in advance with their own capital and to recoup their payments after the homes were sold. Many interviewees remembered South Construction's capital stresses caused by delayed payments after 2013. However, some interviewees who were in charge of the project acquisition expressed their anger at this decision, stating that this caused further difficulties in winning contracts. They stated that this *'blocked the possibility for further project acquisition, particularly projects funded by the government'*. According to local bid and tender regulations, the project construction is affected by a firm's 'integrity credit', which is weighted 10% in the bid evaluation process. Reducing the number of projects normally leads to lower integrity credit ratings. Clearly, managers extracted different interpretations of Mr. L's decision.

It seems like the recession of the real estate market also reduced investor confidence in South Construction. In 2013, Mr. Z and Y sold their shares to Mr. L, and in 2015, Mr. L sold South Construction to South-Sun Construction, a state-owned contracting firm in Chongqing. South-Sun Construction agreed to finance South Construction's outstanding debts. Some interviewees criticized Mr. L's decision and stated that *'those private bosses ran away after feeling the construction sector is not profitable'*. However, a few interviewees interpreted this event in a positive light. For example, the deputy general manager (Interviewee 24) stated that *'Mr. L was responsible, as he found a good new boss for the firm.'* Interviewees also agreed that South Construction relies on South-Sun Construction's senior managers to win project contracts. For instance, when asked about his future plans, Mr. S, the current general manager of South Construction, explained that the firm is working with its new parent company to participate in some large residential or infrastructure projects. It seems that South Construction now works as a subcontractor for South-Sun Construction.

### 6.3.3 Summary

This section presented interviewees' interpretations of and terminologies about the market. They interpreted the term 'market' alternately to mean 'a context', 'a relationship between supply and demand', 'a way of resource distribution' and 'different types of projects'. In particular, almost all interviewees constructed their stories of market change by shedding lights into 'a falling real estate market'. A common perception of the market changes at this time was is that 'house selling became difficult', which was commonly argued as the reason for payment delays in real estate projects. In response to the weakening housing market, activities such as ceasing to win new real estate projects were highlighted. Managers extracted various aspects to interpret this event. Furthermore, Mr. Z and Mr. Y and L lost their confidence in South Construction and sold it to South-Sun Construction, a local state-owned contracting firm.

## 6.4 Competition

This section presents the interviewees' descriptions of and shared perceptions about competition. It discusses interviewee perceptions of the competitive situation between state-owned contracting firms and privately-owned contracting firms as well as their understandings of competitiveness.

### 6.4.1 Intense competition

Nearly all interviewees used the term 'competition' in their interpretation of project acquisition. Most interviewees' storylines about competition concerned professional rivalries with other firms, and the degree of competition referred to their number of competitors. Many interviewees argued that competition between contracting firms has increased over time. For example, the South Construction's former chairman referred to his experience in selecting contracting firms in the 1990s:

*'At the end of 1990s, the construction market began to be chaotic because an increasing number of firms started to operate in the construction business. There was 'little soup for so many monks'. Competition in the construction market began to intensify. When I was working in the firm, it was the clients who invited and treated us for dinner. Then the tide reversed—now the firms invite and treat clients to dinner.'* (Interviewee 22, former chairman of South Construction)

Here, it is clear that Interviewee 22 constructed his sense of 'intense competition' on the increased number of contracting firms. The metaphor of 'little soup for so many monks' demonstrates his

awareness of supply and demand in the construction market. The changing practice of who treats whom to dinner was highlighted as not only a representation of but also a response to increased competition.

Most interviewees expressed a general sense of 'intense competition' in the future, and a few stated their anxiety about this situation. For example, the Department of Contract Management manager explained South Construction's future direction:

*'The construction sector is shrinking. The future is anxiety-provoking. At the moment, there are so many small or medium firms and the mid-to-high end contracting firms are relatively few. The competition is intense. In the future, cooperating with large scale contracting firms will be seen more often.'* (Interviewee 34, Contract Management Department manager)

It is clear that Interviewee 34 has noticed fluctuations in the number of contracting firms of different sizes as a cue in his account. Here, the argument seems to be that cooperation with large scale contracting firms is the response that small-medium enterprises (SMEs) such as South Construction will take. The underlying perception is that large-scale contracting firms will win most future projects, while SMEs will work as subcontractors for these projects. This perception was shared by several managers including South Construction's current general manager, who argued that the firm was trying to establish connections with large-scale contracting firms. Examples he gave include *'the China Railway Group Limited, the China Railway Construction Corporation Limited and China Gezhouba Group Company Limited'*. These three contractors are large-scale firms in the Chinese construction sector. For example, the China Railway Construction Group Limited had 62.93 trillion-yuan worth of revenue in 2016, making it the third largest contracting firm internationally. This seemingly suggests increasing sub-contracting tiers.

#### **6.4.2 Government favouritism toward state-owned contracting firms**

Several interviewees expressed their perception of unfairness between state-owned and privately-owned contracting firms in project competition. South Construction's general engineer stated that government officials give *'too much'* support to state-owned contracting firms and *'too little'* support to privately-owned firms. One particular aspect of this support that he highlighted was the allocation of projects by the government to state-owned firms, and he gave CQCEGC as an example. *'CQCEGC is only able to find projects from mayor, but unable to find projects from market'*, he argued. Many interviewees shared this perception of unfair resource distribution toward state-owned firms, and the

sense that government projects will be given to state-owned contracting firms was taken for granted by several interviewees.

Another aspect of unfairness that interviewees highlighted concerned applying for bank loans. Several interviewees agreed that interest rates for bank loans are flexible depending on the banks' confidence in applicants. Here, the perception is that banks have much more confidence in state-owned contracting firms and normally give them lower interest rates. For instance, the general engineer of South Construction explained the issue of winning new projects:

*'One simple example is that banks compete to provide loans to state-owned contracting firms. Their interest rates might be even lower than their base rate. Banks believe that they won't lose if they lend the money to SOEs, which have capital, capability and guanxi. For privately-owned firms, by contrast, banks increase their interest rates for loans. Sometimes, banks might even refuse to provide loans to privately-owned firms. You can see that the state doesn't provide enough support to privately-owned firms.'* (Interviewee 26, the general engineer)

Here, the emphasis was given to banks' different attitudes toward state-owned and privately-owned contracting firms. The relatively higher bank loan rates and lower loan approvals that privately-owned contracting firms face were perceived as unfavourable for competing with state-owned contracting firms. It is notable that Interviewee 26 characterized this situation as 'the state doesn't provide support to privately-owned contracting firms'. It seems that he views banks as part of the government.

A few interviewees questioned the state's purported goal of 'market economy development'. For instance, the general engineer argued that 'there is no fair market environment,' which is viewed as a fundamental condition of a market economy. He used the metaphor that '*parents can't over protect kids*' to argue that '*the government shouldn't give too much protection to SOEs*'. This phrase reflected the shared perception of a family-like relationship between the state and SOEs and that SOEs 'should improve their efficiency to compete with others'. It is perhaps in the context of this unfavourable situation that managers commonly commented that South Construction's sale to a state-owned contracting firm was good, as it allowed it to compete as a state-owned firm.

#### **6.4.3 Multiple understandings of competitiveness**

The interviewees agreed that South Construction is currently trying to recover from its recent losses and that it should to develop its own strengths in project acquisition. Most interviewees' storylines concerned how the firm's disadvantages in project acquisition. For example, the deputy general

manager in charge of project acquisition highlighted these disadvantages in terms of project financing and construction:

*'South Construction has no advantage in terms of project acquisition. It is very difficult now. There are two key points for PPP projects; the first one concerns financing costs. If other firms' costs are 3% while our firm's cost is 5%, we need to reduce our profit rate accordingly. The second point concerns construction costs. If our construction costs could be 2%-3% lower than others, this means the firm would have advantages over other firms. The high financing costs could then be compensated. This is a matter of project management.'* (Interviewee 27, deputy general manager)

Clearly, Interviewee 27 noticed the firm's disadvantages in project acquisition, which he labelled a 'difficult situation'. It is notable that he analysed the situation from cost perspective and used market competition terminology. Here, it seems as if neither South Construction's financing costs nor construction costs are competitive. A few interviewees mentioned the importance of *guanxi* in obtaining lower financing rates, while some highlighted project management as a way to reduce construction costs. However, no practical solutions were suggested.

Several interviewees highlighted the importance of establishing long-term relationships with labour-only subcontractors and material suppliers. The firm's general manager argued that he was trying to acquire one labour-only subcontractor, and the Department of Marketing's manager highlighted the need to have a long-term relationship with a material supplier. However, in their justifications of these actions they emphasized the costs of requiring cash advances and payment delays. It seems that the meaning of long-term cooperation with labour-only subcontractors and material suppliers concerns passing on capital pressure to subcontractors and material suppliers.

#### **6.4.4 Summary**

This section presented the interviewees' interpretations of competition. Interviewees shared a perception that competition is becoming more intense for the firm, which mainly refers to an increased number of contracting firms competing for projects. Interviewees also agreed that large-scale contracting firms increasingly winning large-scale projects, a situation that will continue into the future. Several interviewees highlighted the practice of establishing relationships with large-scale contracting firms and working as their subcontractors as a response to this situation.

A common observation among interviewees that competition between state-owned and privately-owned firms is unfair. All interviewees stated that *'the government is giving too much support to state-owned firms'*. They shared the perception that state-owned contracting firms win government projects and that this situation is taken for granted. Some interviewees further pointed out the unfavourable conditions for privately-owned contracting firms when applying for bank loans. Here, the argument seems to be that *'there is no fair competition between state-owned firms and privately-owned firms'*. Based on this perception, many interviewees felt fortunate that South Construction was sold to a local state-owned contracting firm, which means that it could take advantage of its parent company's status to win projects. A few interviewees also identified additional practices to reduce costs, such as working with labour-only subcontractors under long-term relationships.

## **6.5 Bid and tender**

The bid and tender process emerged is an important theme in the interviewees' interpretations of how the firm reorganised itself in response to marketization. This section presents the different meanings of 'bid and tender' that were offered by the interviewees. Finally, the interviewees' perception of bid collusion is presented.

### **6.5.1 'Bid and tender' as a mechanism to select contracting firms**

The notion of 'bid and tender' was widely stated by interviewees as a mechanism to select firms. Many argued that this mechanism brought a sense of competition to project acquisition. Interviewees reflected on how they endeavour to win projects, including collecting privileged project information and borrowing qualification certificates as well as the conditions for prequalification and bid collusion.

#### Incomplete project information

In most interviewees' accounts of acquiring project contracts, the available information about these projects was seen as incomplete. Surprisingly, all interviewees took this situation for granted. They highlighted the approaches they typically adopt to obtain more project information. For example, the firm's Department of Marketing manager explained his concerns about incomplete information for a project in Yunnan province:

*'There are not many days left before the bid submission deadline. The pre-qualification requirements have been issued. We haven't got enough information about this project. We made an offer around 600 million yuan before. But when I was there yesterday, I learned from a*

*friend that the value of this project should be around 1 billion yuan. Some sensitive key information hasn't been obtained. It probably because our guanxi is not enough now. We need to ask senior managers in our parent company for help. Our top leaders may need to contact some people in person.'* (Interviewee 33, Marketing Department manager)

Here, it is clear that the client has not provided enough detailed information on the project. As a result, there appears to be a large gap between Interviewee 33's estimate for the project and the client's estimate. Moreover, the interviewee interpreted his lack of information as 'the guanxi is not enough'. The term *guanxi* commonly refers to friends, acquaintances (*shuren*, 熟人) or other personal relationships. It seems that having strong guanxi with clients is the key to obtaining project information.

Some interviewees also recalled how they obtain information about clients' payback capabilities, particularly for BT financing model projects. For example, the firm's former general manager explained how they won the contract for a large infrastructure project in Banan District:

*'Several contracting firms competed for this project. But we had a different evaluation of the payback capabilities of the local government. The reason I believed that they could make their payments is that I have an acquaintance who provided me with more information.'* (Interviewee 25, former general manager of South Construction)

Here, Interviewee 25 discussed this situation with an acquaintance and acted on this information in deciding to bid for the project. It is notable that he didn't mention any fiscal information provided by the local government. This suggests that the interviewees tend to rely on information provided by personal informants, instead of trusting official information provided by the government.

Interviewees seemed in broad agreement that clients often take advantage of information to influence which firms win contracts. For example, the firm's Department of Marketing manager explained that:

*'If our guanxi is just normal, the client may can only give you enough information about the project for you to prepare. If the guanxi is good enough, the client may adjust the bid documents to favour our firm.'* (Interviewee 33, Marketing Department manager)

The argument seems to be that *guanxi* is a key criterion in the relationships between clients and firms. In other words, clients work with contracting firms based on personal guanxi, rather than treating firms equally and professionally. Nearly all interviewees shared this perception. One example concerns the former board chairman's (Interviewee 22) account of how South-Sun Construction uses its *guanxi* with

local governmental officials to win PPP projects. According to him, South-Sun Construction can help firms build up their *guanxi* with local governments if the firms agree to subcontract a certain amount of work to them in return. Interviewee 22 further argued that if large scale central government-owned firms contact local government officials, their relationship is typically only ‘business to business’, a relationship that does not help non-local large-scale contracting firms win contracts. Clearly, personal *guanxi* with clients remains extremely important in clients’ contractor selections.

### Prequalification

Several interviewees described the prequalification process with respect to project bidding. Particular attention was given to qualification certificates (*zizhi*, 资质) in their interpretations of project acquisition. In this context, a ‘qualification certificate’ regulates a firm’s business scope and is issued by China’s Ministry of Housing and Urban-Rural Development. South Construction has four first-grade qualification certificates that cover buildings, roads, mechanical and electrical installation and interior design, respectively. The South Construction’s general manager expressed confidence that the firm ‘has good qualification certificates’. Clearly, qualification certificates are an important criterion in evaluating contracting firms.

A qualification certificate is one important prequalification conditions for project bidding. In fact, example, the Department of Finance manager listed the qualification certificate as the first client condition in her explanation of how the firm won several infrastructure projects in BT model:

*‘These projects are promoted by local governments. The local government was trying to find some good contracting firms. First, those that had high-grade qualification certificates. Second, the capability to finance projects. HBC was the first of three contracting firms in Chongqing back then. That’s why we won those projects.’* (Interviewee 29, Finance Department manager)

It seems that the qualification certificate is used by clients as prequalification for infrastructure projects. This view was confirmed by one interviewee, a government officer who works in the CQCHURD. When asked how the firm was selected for their latest bridge project, he stated that he used qualification certificates as a barrier for entry in selecting contracting firms. Many interviewees also highlighted the practice of borrowing other firms’ qualification certificates when bidding for projects. This practice results in ‘joint-operation projects’ (*lianyingxiangmu*, 联营项目) which are discussed in Section 6.7.1.



### Difficulties caused by low 'integrity credits' (*chengxinfen*, 诚信分)

There are three main parts of the bidding evaluation process. The first is the economic bid (*jingjibiao*, 经济标) or commercial bid (*shangwubiao*, 商务标), which refers to the offered bid price. The second is the technology bid (*jishubiao*, 技术标), or the evaluation of a firm's construction plans. The third is a firm's 'credit of integrity' rating (*qiyechengxin*, 诚信分), which concerns an enterprises' market behaviour and construction site management records. The Chongqing Municipal Commission of Housing and Urban-Rural Development (CQMCHURD) is in charge of determining an enterprises' credit of integrity rating and requires all government-funded projects to take this rating into account in evaluating bids. The weighting of these three parts is determined by clients. Nearly all interviewees who are in charge of project acquisition agreed that in most cases, the economic bid accounts for 90% of this weight and the credit of integrity rating 10%. Interestingly, the technology bid is typically not assigned any weight.

Some interviewees highlighted the South Construction's relatively low 'integrity credit' rating and attributed this to Mr. L's decision to stop bidding on real estate projects. Project records are considered in the integrity credit scoring system for firms. Here, the general perception was that this low rating makes it difficult for South Construction to win publicly-funded projects contracts. As the deputy general manager in charge of project acquisition stated:

*'Honestly, this scoring system kind of protects state-owned contracting firms such as CQCEGC. Previously, South Construction's score was very high, and it ranked third in the Chongqing construction sector. It was pretty good. Liu's decision to stop bidding for projects kind of blocked our possibilities to bid on publicly-funded projects. I witnessed our ranking drop to 10, 20 and then 60. Now we just got 90 marks. What does 90 marks mean? The general level is 70 marks. We lost the possibility to win publicly-funded funded projects. Take CQCEGC as an example, its mark is around 150. South Construction's is 90. The weight of this in bid evaluation is 10%. That means our firm needs to lower 6% of its bid if we want to get the same bid evaluation score. This is almost impossible.'* (Interviewee 27, deputy general manager)

Here, the emphasis was given to the project bid that the firm could offer in explaining the meaning of its low integrity credit rating. As the integrity score is a required part of the bid evaluation process that accounts for 10% of its weight, the firm can rarely offer competitive bids for publicly-funded projects. As a result, the firm's only option seems to be to continue to bid on publicly-funded projects and to acquire projects from its parent company in order to gradually improve its integrity credit rating.

### 6.5.2 'Bid and tender' as a formality

Interestingly, many interviewees interpreted the bid and tender process as just a formality. In fact, several highlighted their experience of knowing that they had already won project bids before the bid and tender procedure began, quite often with respect to housing projects. For example, the firm's former general manager addressed the importance of client negotiation in his explanation of how to win housing project contracts. He claimed that, '*normally you negotiate with the housing developers. Once you have a deal with the clients, you can then go through the procedure of bid and tender*'. Thus, in cases such as these, bid and tender becomes merely a formality.

This was also the case for some instances of winning government-funded project contracts. For example, in discussing how the firm won its latest project, the current general manager stated:

*'Interviewee 23: We signed agreement with the government.*

*Researcher: So, bid and tender was not used?*

*Interviewee 23: No, we are going to go through the bid and tender procedure.*

*Researcher: Did any other contractors compete?*

*Interviewee 23: No, only my firm. This project is a building project to provide housing for the property's original occupants. The government requisitioned their land and promised to repay with houses many years ago. But the government hasn't fulfilled its promise. The local government couldn't manage this problem and thus found a large investment group to help. They wouldn't find anybody to bid if they went through the normal bid and tender procedure.'*

*(Interviewee 23, the general manager)*

It is clear that Interviewee 23 knew that his firm would win the contract even before bidding. Thus, in this case the bid and tender process was just a formality to meet legal requirements. The firm's former chairman also confirmed this explanation of how some projects were won:

*'The CQMCHURD, as the shareholder, didn't intervene in our management that much. But they did give us lot of support for projects. For example, the first infrastructure project that South-Sun Construction built was given to us by the CQMCHURD. It was an overpass bridge. The procedure was completed. The result was given by going through the procedure of bid and tender.'*

*(Interviewee 22, former chairman of South Construction)*

Clearly, the interviewee was sure that his firm would win the project contract before the bid and tender process began. For him, this process became just a formality.

### **6.5.3 'Bid and tender' as a way to select project management teams and subcontractors**

The notion of 'bid and tender' was also used by some interviewees to describe how they selected their project management teams or labour contractors. The firm's Department of Technology manager explained how project managers are chosen:

*'Once we win a project, we organise a bid inside our firm to decide which team to manage the project. We ask different teams to bid. They need to provide information about the intended construction cost and profit. We then sign contracts with the project management team.'*

(Interviewee 31, Technology Department manager)

It seems that the firm uses an internal 'bid and tender' process to select its project management teams, and that projected cost and profit are two important evaluation criteria. Thus, the bid and tender process is used as a way of reducing costs and increasing profits. Section 6.7.1 further discusses the character of the resultant relationships between the firm and its project management team.

The Department of Contract Management manager expressed a similar sense of the bid and tender process in terms of selecting labour contractors:

*'Actually, labour contracting doesn't require bid and tender. It is an internal matter. There is no compulsory requirement. But, when the business becomes larger, we can't just discuss this between the two of us. We may bargain over prices between 400 or 500. There is no supporting basis for these prices, and they are not scientific. After all, we are in a market economy, so we need to compare.'* (Interviewee 34, Contract Management Department manager)

Here, it seems that the notion of 'bid and tender' is employed as a method to determine labour costs through comparison, and that the logic of science is used to justify its necessity.

### **6.5.4 Bid collusion**

Bid collusion was one important topic that interviewees discussed in their storylines about bid and tender. Notions such as 'malicious competition' and 'malicious low bidding' were closely related with the bid and tender system when the criterion of 'lowest price wins project' was still in use. For example,

South Construction's former chairman reflected on his experiences with of giving up on the bidding process for some PPP projects:

*'Previously, PPP projects were not promoted very well. The main reason was malicious competition and low bid. These winning criterion for these projects was 'the lowest price wins the bid'. Some contractors can make their profit rates even lower than the interest rate. How can they achieve this? Of course they can't achieve this. They made their bids ridiculously low in order to win projects. The contractors who won these projects didn't proceed with these projects, but rather argued with the client. Two projects, won in this way by some contractors last year, are still hanging there.'* (Interviewee 22, the former chairman of South Construction)

Interviewee 22 emphasized how some contracting firms offer unreasonably low bids in the hope to make extra capital using change claims after winning a project. Here, the argument seems to be that these projects were either not constructed as planned or cost extra capital. Knowing that a firm cannot win against unreasonably low bids offered by its competitors, giving up on the bidding process was perceived as the only action to take. It seems that the unreasonably low bids offered by some firms squeezed those who prefer to bid in a reasonable way. This was commonly argued as the reason why the criterion of 'price which is closest to the average offered price wins the bid' was introduced.

Several interviewees also expressed their perception that 'project bidding under the new evaluation criteria is out of control'. Some even used the metaphor of '*weather-dependent mealtimes*' (*kantianchifan*, 看天吃饭) to describe their perception that winning project contracts relies on luck, and many expressed a sense of helplessness. Many interviewees also highlighted the practice of colluding with other firms to bid for projects using pre-determined prices to ensure that the selected contractor can win the project, and a few managers described the practice of registering more than one firm to participate in the bidding process. The deputy general manager in charge of project acquisition argued that '*the whole Chinese market is like this—bid collusion is normal*'. Many interviewees stated that while they are aware that these practices are illegal, this is the only way for them to compete, as all other firms do so.

### **6.5.5 Summary**

This section presented interviewees' interpretations of different meanings of the 'bid and tender' process. 'Bid and tender' refers to the mechanism for selecting firms to award projects. Almost all interviewees stated that while project information was often incomplete, this situation was taken for

granted, and activities such as 'finding guanxi' were highlighted as their response. Interviewees agreed that the clients sometimes take advantage of project information in order to intervene selecting winning firms, and highlighted the practice of prequalification as one way to influence this process. The practice of 'borrowing other firms' names' was mentioned as a response to legal requirements for qualification certificates. On this point, South Construction seemingly suffers from a low integrity score, which has resulted in difficulties for the firm in winning publicly-funded contracts.

Bid and tender was also interpreted as simply a procedure to follow. It seems that for many projects, contracting firms and clients reach agreements prior to the bidding process, and go through this process only to make sure that project contracts are legal. The bid and tender practice was also referred to as a market mechanism for selecting project managers and subcontractors, and that comparing bids is arguably a scientific and rational way of deciding reasonable prices.

Finally, many interviewees shared the perception that bid collusion is common in the construction sector. Different criteria for winning bids, such as awarding the project to the lowest bidder and the bid that is closest to the average price wins were pointed out by interviewees. However, it seems that firms commonly adopt different bid collusion practices in response in order to win projects, such as 'offering unreasonably low bids to win a contract' and 'cooperating with other firms to make sure one particular firm wins the bid'.

## **6.6 Management structure: Trajectory from the past**

All interviewees highlighted structural changes management in their descriptions of the company's process of reorganisation. In particular, they pointed out events such as the ownership changes and their importance in this process. Many interviewees stated that the firm's management is unprofessional, and some addressed subsidiary establishments or cancellations. In addition, a few interviewees expressed their understanding of the party committee with respect to South Construction and its latest ownership change in 2014.

### **6.6.1 Owners (*gudong*, 股东)**

Ownership changes were key events in the reorganisation process that all interviewees remembered. Moreover, the term boss (*laoban*, 老板) was frequently used as a synonym for owner. Many interviewees remembered that in 2008 Mr. Z bought a 40% share of the firm and Mr. Y bought a 20% share. This event was commonly viewed as the starting point of a golden period for South Construction.

According to the deputy general manager (Interviewee 24), these two bosses '*brought their staff and projects to South Construction*' and cooperation between the three owners was 'perfect.' Mr. Z was skilled at winning bids and negotiation, Mr. Y was adept at construction technologies and Mr. L had sufficient capital to fund projects. This argument could be supported by South Construction's growth between 2008 to 2013.

Many interviewees pointed out that Mr. Z and Y sold their shares to Mr. L in 2013, who then became the firm's sole owner. Several managers offered different explanations of why this event occurred. For example, the manager of the Department of Financing stated that this was due to challenges as a result of Chongqing's falling construction market, but the deputy general manager (Interviewee 24) argued that it happened because the three owners had different attitudes as to whether staff should be allowed to run their own businesses within the firm. However, nearly all interviewees agreed that South Construction began to experience challenges following the change in ownership.

In April 2015, Mr. L sold his shares in South Construction to South-Sun Construction, a local state-owned contracting firm. Interviewees expressed different attitudes about this event. South Construction's former general manager expressed anger and commented that '*private bosses only know money-earning. He ran away after he learned that he couldn't earn money from the construction sector.*' Clearly, he drew a distinction between private ownership and state-ownership and stated that private owners value short term gain, not operating businesses out of long-term interest. Conversely, the firm's current general manager commented that '*this was because Mr. L didn't manage the firm well, as he doesn't have a construction background*'. By contrary, the deputy general manager interpreted this event argued that '*Mr. L is a responsible man, as he tried to find a solid new owner for the firm.*' Clearly, interviewees disagreed on this point and framed accounts that were plausible to them.

Nearly all interviewees emphasized the fact that South-Sun Construction became the owner of South Construction. They commonly constructed the meaning of this event as 'South Construction became a state-owned firm'. Some interviewees used the term 'system' (*xitong*, 系统) to refer to the relationship between South Construction, South-Sun Construction, its owner and the government. Several interviewees stated that '*South Construction is part of the system*', which was argued to be beneficial for the firm, particularly in terms of winning bids. For example, the general manager explained how their latest project was won:

*'We are working with a large Chinese investment group. We are partners. We are in the same system. We are all controlled by one government ministry. This group is in charge of investment for this PPP project, and our firm is in charge of construction. However, the qualification certificate is not enough for this project. This project requires special grade, but South Construction has only first grade. So another large state-owned contracting firm is involved as the main contractor and is in charge of 70% of the project. Our firm in charge of constructing the other 30%.'* (Interviewee 23, general manager of South Construction)

Here, argument seems to be that South Construction could not have acquired this project if hadn't been owned by South-Sun Construction and were not in the 'system'. Clearly, South Construction takes advantage of this situation as an opportunity to cooperate with large-scale investors or other contracting firms within this system. Such benefit was commonly described by a metaphor: *'we can get a lift from South-Sun Construction'*.

### **6.6.2 Unprofessional management**

Almost all interviewees perceived that the firm's management was unprofessional before South-Sun Construction became its new state-owned owner. Here, it seems to have been common for bosses such as Mr. L, Z and Y to intervene in South Construction's daily management. For example, the former general manager's explained how Mr. L declined his five-year strategy plan for the firm:

*'I made a very detailed five-year strategy plan for the firm. However, the boss, Mr. L, changed his mind very quickly. I suggested he should expand the market by continuously winning bids. However, he didn't listen to my suggestions and insisted on suspending project bidding. He felt the firm was not making money for him and he decided to sell it.'* (Interviewee 25, the former general manager of South Construction)

Obviously, Interviewee 25 was discontented with Mr. L's decline of the five-year strategy plan and his suggestion of market expansion. Most interviewees agreed that management in the firm was heavily influenced by Mr. L's values and priorities.

Many interviewees remembered that a number of organisational activities lacked rules and routines. The deputy general manager gave an example with respect to employee performance assessments:

*'We were privately-owned—the boss made the decision. He evaluated the performance of everyone. The outcomes might be ex parte. Mr. L might give you lots of awards if he thought you*

*contributed more. He might give you less if he was not happy with you. Now, we are state-owned firm and are following performance assessment routines. It is more objective.'*

(Interviewee 24, deputy general manager)

Clearly, Mr. L was intervening in the daily business of the firm, such as its employee performance evaluations. It seems that Mr. L was the one who gave sense to middle managers such as Interviewee 24. Interviewee 24 pointed out a change in the practice of following norms and routines as one meaning of South Construction being sold to a state-owned contracting firm. Interestingly, most interviewees expressed a perception that the firm has become more 'normative' since South-Sun Construction has taken ownership.

Many interviewees also discussed conflicts between the implementation of management norms and consideration of *guanxi*, and argued that Mr. L valued *guanxi* over management norms. For example, the general engineer described his perception of the difficulties in implementing management routines:

*'I tried to introduce some management routines used by CQCEGC into South Construction. However, I found that it was very difficult to implement them, as things are done randomly in private firms like South Construction. The boss made decisions out of impulse. For example, we had some punitive measures for project managers if they failed to meet their requirements. If the boss is in a good mood that day, he might cancel these penalties, such as fines. Or if some of his friends said nice words about someone, he would also cancel the penalties. Mr. L made decisions opposite those of the former general manager. After all, he is a businessman, and he cares only about whether these things can make money for him.'* (Interviewee 26, general engineer)

Here, the argument seems to be that making money was Mr. L's most fundamental value, which was further argued as one key feature of all privately-owned contracting firms. For Interviewee 26, the shift in valuing management norms and their implementation over *guanxi* was highlighted as the reason behind the new general manager's appointment.

### **6.6.3 Subsidiaries**

South Construction has a few subsidiaries. Interestingly, it seems that many of these subsidiaries were established only for the purposes of bidding on projects. In response to the question why the Chengdu subsidiary was established, the deputy general manager stated:



*'We intended to bid on some projects in the Sichuan province. There is a requirement that you have to register a subsidiary in Sichuan province if you want to bid for projects there.'*

(Interviewee 24, deputy general manager)

According to her account, establishing Chengdu Subsidiary was seen as a response to the requirement to register a subsidiary in Sichuan province order to be eligible to bid on projects there. Moreover, she stated that this subsidiary currently has no staff at the moment *'because of the project is finished'*. Clearly, the word 'subsidiary' here means only a title.

Another example a few interviewees highlighted concerns material supply subsidiaries. The firm's Department of Technology manager explained how material supply subsidiary was used to manage 'joint-operation projects' (*lianying xiangmu*, 联营项目),

*'We required the project managers of joint-operation projects to purchase material from one of our subsidiaries. This subsidiary is an independent legal entity. To negotiate with project managers of joint-operation projects, we made a deal that they need to purchase material through this subsidiary. The cash flow of the material supplement is very helpful—we can use it as a platform to apply for bank loans.'* (Interviewee 31, Technology Department manager)

It seems that the main meaning of the material supply subsidiary is to operate as a platform that can be used to secure bank loans. Interestingly, the subsidiary is not expected to make any profit. This is probably because of the special relationships between joint-operation projects and South Construction, which is discussed in Section 6.6.2.

#### **6.6.4 Party organisation**

Some interviewees highlighted changes in South Construction's party organisation after it became a state-owned firm, and recalled that party organisation was 'just a name board' (*yikuai paizi*, 块牌子) before this event. As the deputy general manager and deputy party secretary explained:

*'We had a party organisation before as well. The party organisation and the labour union were all in the Department of Enterprise Management. There were name boards of them, but, you know, the staff were the same people.'* (Interviewee 24, deputy general manager and deputy party secretary)

It seems that the party organisation didn't previously serve any specific functions in South Construction. Activities related to the party organisation, such as singing contests, were said to be 'nothing serious'.

The manager of the Department of Enterprise Management Such shared this view, and argued that ‘we did nothing real except shouting slogans before we became a state-owned firm.’

Several interviewees highlighted the change in the meaning of the party organisation after South Construction became a state-owned firm. They argued that the ‘membership credentials’ (*zuzhi guanxi*, 组织关系) were transferred to South-Sun Construction’s party organisation. The phrase ‘membership credentials’ refers to the administrative relationship between party organisations in different hierarchies. In this context, this means that South Construction’s party organisation is supervised by South-Sun Construction’s party organisation. In July 2017, South-Sun Construction appointed a party secretary, after which interviewees noted several changes. For example, the deputy general manager and deputy party secretary emphasized that the approval of the party secretary was added to the norms of the decision-making process. Also, the Department of Enterprise Management manager claimed that the communist party lexicon began to be introduced into meetings and conversations. She explained:

*‘Now, political awareness was addressed. Many things were connected to politics. Previously we never mentioned anything about the Communist Party. We were a privately-owned firm, so we just needed to do the things we had to do and get good outcomes. We did nothing real, but rather just shouted slogans. But now we were required to put the party work into practice. We now organise training for party members, such as watch the opening and closing ceremony of the 19<sup>th</sup> National Congress of the Communist Party of China.’* (Interviewee 32, Enterprise Management Department manager)

It seems that the firm’s organisational activities began to adapt to and be interpreted through party language. Interviewees also mentioned practices such as ‘watching ceremonies’ and ‘watching patriotic education movies’. It is notable that Interviewee 32 used a negative tone when discussing these changes and commented that they were useless and ‘time wasting’. Clearly, she was proud of the firm’s previous policy of ‘being pragmatic’ and getting things done.

### **6.6.5 Summary**

This section presented the interviewees’ interpretations of the firm’s past management structure. All interviewees highlighted South Construction’s ownership changes, in particular Mr. L’s sale of the firm to a state-owned firm. However, while the interviewees offered different interpretations of this event, one common emphasis was that South Construction became a state-owned firm that was ‘part of one

governmental system'. All interviewees viewed this as an opportunity for the firm to acquire more projects from the system.

Almost all interviewees distinguished between private and public ownership practices. One shared perception was that private owners generally only value money-earning potential, rather than running a long-term business. Interviewees commonly argued that the firm was managed in an unprofessional way when Mr. L was the owner, and it seems as if he intervened in the firm's daily management practices. Some interviewees recalled examples in which the firm lacked norms or routines while others stated that many management routines and norms were simply not implemented.

For some interviewees, the firm's subsidiaries seemingly were established only to serve as tools. Some argued that a few regional subsidiaries were established in order to bid for projects in response to client requirements for local contracting firms. Other subsidiaries, such as the material supply subsidiary, was seen as established only to aid in securing bank loans.

The meaning of 'party organisation' also seems have changed after South Construction was sold to a state-owned contracting firm. Before this event, the term 'party organisation' was interpreted as 'just a name board'. Practices such as attending sports matches or concerts were highlighted. However, the party organisation seemed to take on a different role after the ownership change. For example, South-Sun Construction appointed a party secretary, and practices such as attending the opening and closing ceremonies of key party events and using party language in the firm were highlighted by some interviewees. However, a few interviewees described this change in a negative tone and argued that these new practices were useless.

## **6.7 Project management**

Project management was is a common theme in interviewees' interpretations of the firm's process of reorganisation. Most interviewees highlighted the relationship between the firm and its project managers and the presence of joint-operation projects (*lianying xiangmu*, 联营项目).

### **6.7.1 Relationships between the firm and project management teams**

Many interviewees' storylines concerning project management mainly related to the relationship between the firm and project managers. The phrase 'internal contracting' was used to describe how projects are assigned to project managers. The firm's former general manager explained how he selected project managers and management team:

*'After we won a project, I asked several project managers to come bid for the project. They needed to provide an offer about their aimed construction costs and profit. Then, the best offer won the project. The firm signed a contract with the project manager. If they managed to make more profit, for example 2% of the project turnover, they could keep it as a reward.'* (Interviewee 25, the former general manager of South Construction)

It seems that competition was introduced into the internal project assignment process. This means that the relationship between the firm and project managers is based on project contracts. Additional profit was argued to be a reward for project managers in order to compel them to reduce costs.

However, the relationship between the firm's project managers and their teams seems more like cooperation, rather than employment. This interpretation was confirmed by the firm's Department of Technology manager. In response to the project management of a former housing project, he argued:

*'The housing project in the Banan District was contracted to three separate project management teams. These teams are among those who frequently work with South Construction. The project manager is always assigned by South Construction, but other management staff were appointed by the project managers. These staff then sign employment contracts with the firm.'*

(Interviewee 31, Technology Department manager)

Interviewee 31 used the word 'cooperation' to describe the relationship between the firm and project managers. Here, it is notable that in his interpretation project management staff are recruited by the project manager, rather than the firm, and the fact that staff are first selected by the project manager and then sign contracts with the firm reinforces the loose relationship between the firm and the project management staff. It seems like that South Construction doesn't train or retain project management staff unless they are selected as member of a particular team.

A few interviewees used the term 'take-ism' (*nalai zhuyi*, 拿来主义) to describe the firm's attitude toward project management staff recruitment and highlighted its reluctance to providing training for these staff members. For example, the deputy general manager in charge of project acquisition stated:

*'Many staff left South Construction along with the declining number of projects. There was no training provided to the staff. We are not like firms such as the China State Construction Engineering Group or China Railway Limited which recruit newly graduated students every year and provide systematic training to them. South Construction is different. We just do business. Most staff are employed by other firms. We are using take-ism. We can't spend that much*

*money and time to train students. Chinese businessmen are in fickle mood. Nobody is aiming to run a hundred-year-old store. Most of them are playing with capital in a rushed mood.'*

(Interviewee 27, deputy general manager in charge of project acquisition)

Here, emphasis was seemingly given to saving costs by employing staff with work experience, rather than spending time and money to train newly graduated students. However, this suggests that project management staff leave the firm upon completion of their projects. It seems like that making money in the short term is South Construction's overwhelming preference.

### **6.7.2 Joint-operate projects (lianying xiangmu, 联营项目)**

Almost all interviewees pointed out that most projects in South Construction are joint-operation projects. 'Joint-operation projects' refers to those projects that are primarily run by a project manager rather than contracting firms such as South Construction. According to most interviewees, in most joint-operation project cases, project managers who have personal *guanxi* with clients win the project. Project managers then borrow the firm's certificate of 'legal entity' to go through the bidding process. The reason contracting firms need to be involved is that according to China's Law of Construction, bid procedures and contracts can only be signed by a registered contracting firm with a qualification certificate. Official project contracts are normally signed between contracting firms and clients. A few interviewees argued that it is common to find joint-operation projects in all contracting firms in Chongqing, although the proportion of joint-operation projects differs from firm to firm.

Here, it seems that project managers and contracting firms agree on management fees and management scope before signing contracts. The term 'management fee' refers to the price that project managers pay for using a contracting firm's qualification certificate. Many interviewees explained that this rate ranges from 1% to 2% of project turnover. 'Management scope refers to the aspects of a project in which contracting firms such as South Construction can intervene, such as cost, safety and quality management, subcontractor selection and material supplier selection. The general engineer argued that these negotiations often depend on a firm's situation, such as its qualification certificate, integrity scores and operations. South Construction are seemingly in a relatively negative situation, as *'its qualification certificate is not that strong and its integrity scores are not high'*.

It seems that many conflicts exist between South Construction and project management teams for joint-operation projects. Many interviewees described the management of joint-operation projects in South Construction as 'insufficient and problematic'. Here, the shared perception seems to be that *'the extent*

to which South Construction can manage these projects is very limited'. One particular point many interviewees mentioned is that the project management norms established by the firm cannot be implemented in these projects. For example, the deputy general manager stated:

*'Each team has its own ways to manage projects. They do not listen to us. Take cost management as an example—they think it is not necessary to draft budget management and budget plans. They believe they can earn money without doing this. They think these management methods are redundant.'* (Interviewee 27, deputy general manager)

Here, it is notable that project management staff refuses to follow the firm's requirements concerning standard budget planning. A few interviewees stated that to some extent, this lack of budget management explains why the firm cannot obtain accounting information for joint-operation projects.

Another example of limited management over projects concerned difficulties in having project managers attend monthly production meetings. As the general engineer recalled:

*'We require the project manager come to the firm and attend a production meeting every month. They need to report about costs, quality, safety and progress. We can then make plans for next month. Even such a small requirement is not met. Many didn't come to this meeting. I said that we were not using our weapons very well. What are our weapons? The norms we established, particularly economic means such as penalty. We decided to impose a fine of 500 yuan immediately if the project manager don't come to the meeting. Now the meeting is better attended than before.'* (Interviewee 26, general engineer)

Here, emphasis was seemingly given to South Construction's inability to constrain project managers. It is of course difficult for the firm to manage projects if basic information such as costs, quality and progress cannot be obtained. The firm's Department of Project Management manager argued that his job is to *'check whether they have essential procedures records, such as expert argumentation signature.'* It seems that the firm's control over these projects does not extend beyond no making sure all procedures required by law have been followed.

Interviewees agreed that a lack of project control caused many problems for the firm. For instance, the Department of Project Management manager stated that he spent more time on solving problems than on regulating project management behaviour. He gave an example of how he spent more than a year on solving a quality-related problem for a factory building project that was caused by an unprofessional project management team. Many interviewees also addressed lawsuits caused by project managers'

dishonest behaviour, such as 'fake salary payment records, fake employee lists, delayed payments to material suppliers and peasant workers'. According to the Department of Enterprise Management manager, the firm established a law department in response to growing numbers of lawsuits. In the face of these challenges, many managers agreed to reduce the firm's number of joint-operation projects and to focus more on self-operated projects in the future.

### **6.7.3 Summary**

This section presented interviewees' storylines that concerned project management. Many interviewees highlighted the loose relationship that exists between the firm and project managers. Here, it seems that project managers have the right to choose their staff for particular projects. Some interviewees used the term 'take-ism' to explain the firm's reluctance to invest in project management staff training.

Joint-operation projects was another primary topic in interviewee interpretations of project management. They identified one common issue as the firm's '*insufficient and problematic*' management over joint-operation projects. Several interviewees also highlighted difficulties in enforcing management norms, including refusal to follow budget plans and to attend monthly production meetings. A lack of control of joint-operation projects seemingly caused problems such as quality issues and lawsuits. In response, the firm established a law department to address the increasing number of lawsuits. The interviewees all agreed the firm should reduce its number of joint-operation projects, and focus more on self-operated projects.

## **6.8 Role of the state**

In interviewees' accounts, the state seemingly plays multiple roles. The following section presents managers' interpretations of how the government plays the role of owner of state-owned contracting firms. This section discusses how local governments assume the role of the project client, how the state plays the role of policy maker, and how the government plays the role of market supervisor.

### **6.8.1 Government as project client**

All interviewees highlighted the local government's role as the project client, particularly for large-scale infrastructure projects. They identified several Chongqing Municipal People's Government institutes as project clients, such as CQMCHURD, the Chongqing Finance Bureau and other district governments. According South Construction's former chairman, the CQMCHURD, particularly its Bureau of Infrastructure, is currently the primary source of large-scale infrastructure projects in Chongqing. These

government institutes all favour using the PPP financing model for these projects. Here, the shared perception of managers was that *'the government is promoting PPP projects, so we are going to shift our focus to them as well'*. This suggests that the local government takes advantage of its role as client to promote policy initiatives such as PPP.

Nearly all interviewees agreed that government-backed projects are beneficial, particularly in terms of payment. Many emphasized that *'the payment on government projects is good, so much better than that of real estate developers'*. This perception can be viewed as a reflection of a special programme implemented in the 2000s to 'clear up delayed payments in three years'.

However, some interviewees also emphasised the need to be cautious about if government agencies can achieve repayment, particularly for projects using financing models such as BT or PPP. For these projects, local governments pay back project debts through revenue. It is commonly argued that local government revenues mainly comprise state appropriations, tax revenue and penalties. The former general manager of South Construction's former general manager remembered one infrastructure project that used a BT financing model and how he made an effort to make sure this client was able to repay the firm:

*'We have to pay particular attention to their capability for payment. They have to provide supporting material for this revenue and a commitment letter promising that they are going to pay any unexpected expenses. These have to be written into the contract. In the case of the Shizhu County Government, we checked their fiscal revenues and their land resources to evaluate the payment risk. We had a friend there who provided us a lot of information about this.'*

(Interviewee 25, the former general manager)

Clearly, the emphasis here is given to the importance of obtaining information of clients' payment capabilities. Activities such as asking clients to provide a commitment letters for expenses and finding a colleague who had information about the Shizhu County Government were highlighted.

### **6.8.2 Government as policy maker that frequently changes its mind**

The interviewees also highlighted the government's role as a policy maker in their accounts. They used terms such as require (*yaoqiu*, 要求) and allow (*yunxu*, 允许) and repeated statements such as *'the government requires us to pay peasant workers directly'* and *'the government issues policies to control the housing market'*. The government seems to take a largely administrative approach to its interactions with contracting firms during the process of policy implementation. For example, the firm's former general manager explained how project construction was promoted:



*'Project construction was promoted after the Lubuge project. The Ministry of Construction promoted this. Contracting firms were required to change correspondingly. In China, the top level promotes and the bottom level needs to make a move.'* (Interviewee 25, former general manager)

The metaphor of 'top' and 'bottom' levels was used to represent the relationship between the government and the contracting firms and expresses a strong hierarchical sense between them. As a result, response to policy initiatives issued by the Ministry of Construction is largely taken for granted.

However, according to the interviewees' interpretations, the government seems to change its mind quite often. It not rare to find in their comments that certain practices were allowed in the first place, but 'not allowed' later. For example, the firm's former general manager explained that employees were allowed to hold shares of the state-owned contracting firm he worked for in the late 1990s. But later, *'this was not allowed and the shares were taken back'*. Another example concerned PPP project policies. The deputy general manager in charge of project acquisition stated that *'previously, the government provided lands or other things as a guarantee.'* But, it seems as if this is no longer the case, as *'there was a document issued this year that doesn't require the government to provide guarantees anymore'*. Here, the government changed its mind about whether it is required to provide guarantees for PPP projects. The rationale the government gave for this decision was *'to prevent finance risks and maintain the stability of the society'*. While this rationale seems appropriate, the style of 'solving exposed problems' to some degree reflects a lack of stable rules of actors' interactions.

### **6.8.3 Government as market supervisor**

According to some interviewees, the government also plays the role of market supervisor in the construction sector. For example, in response to a question about changes in the sector, the firm's former general manager argued that:

*'There are more inspections. Previously, the government only supervised the quality of projects. They didn't intervene in the enterprise. Then, they set up the Supervisory Office of the Construction Safety (jianzhu anquan jianduzhan, 建筑安全监督站).'* (Interviewee 25, the former general manager)

Here, it seems that CQMCHURD organised administrative inspections and set up the Supervisory Office for Construction Safety to monitors construction safety management. In another example, the

CQMCHURD inspects construction sites and notes their performance, which is information that is then used in evaluating bids. Clearly, these agencies supervise the local construction market.

Some interviewees expressed their support for government supervision. For example, the general engineer was pleased that the SASAC supervises and inspects senior managers of state-owned contracting firms,

*'There is nobody who can manage the heads of privately-owned contracting firms. The heads can do whatever they want to do. By contrast, there are always people who can supervise senior managers in the state-owned firms. The SASAC is like a sword on top of the senior managers of the state-owned firms. The inspection team of the central government also inspects these firms.'*  
(Interviewee 26, general engineer)

Interviewee 26 viewed SASAC's inspection and supervision processes as good for regulating behaviour. Here, emphasis was seemingly given to the fact that because the heads privately-owned firms do not generally behave honestly and legally, they need oversight from SASAC or other inspection teams.

#### **6.8.4 Government as the head of state-owned contracting firms**

Many interviewees commonly highlighted the role the Chinese government plays as the head of state-owned contracting firms. For example, South Construction's former chairman explained that the CQMCHURD used to be one owner of South-Sun Construction, and the general manager of South Construction stated that *'the Finance Bureau of the Jiulongpo District has a 100% share of South Construction'*. However, this latter argument conflicts with the claim that South-Sun Construction is the owner of South Construction. Thus, the Jiulongpo District's Finance Bureau appears to be the nominal owner of South Construction, while South-Sun Construction controls South Construction in practice.

Many interviewees also pointed out that as owner, the government can bail out state-owned contracting firms on the edge of collapse. South Construction's former chairman explained how South-Sun Construction survived in the falling real estate market with the help of local officials:

*'We owed the bank about 17 billion yuan. We didn't have money to pay back the loans. The local government secretary organised three meetings for us to address our debts with the bank. If our firm were to go bankrupt, the bank would have definitely lost money. The bank also evaluated our background (beijing, 背景). Our firm had a good record, we never fall. But what could we do if we couldn't pay back the loan? So, during these meetings, all state institutes that have guanxi*

*with us were invited, including the Supreme People's Procuratorate and CQMCHURD. The government set a tone (dingdiaozi, 定调子) of supporting our firm and helping us to overcome difficulties. We made lots of agreements. One point that I remember very clearly is that the due date for the loans was postponed for two years, without interest.'* (Interviewee 22, former chairman of South Construction)

Here, it seems that government officials helped the firm to alleviate some of its financial pressure. Emphasis was given to the important role the firm's guanxi played with local governmental officials. The government officials expressed confidence that they would not let the firm go bankrupt. However, some other interviewees ironically stated that *'of course the government won't let these firms fall, they won't fail themselves, will they?'* Clearly, state-owned firms are perceived to be part of the government. By contrast, in the case of privately-owned contracting firms the achieved consensus was that *'nobody cares about the death of privately-owned firms'*.

Some interviewees also argued that the government often imposed its values on senior managers in state-owned firms in its role as owner. Several interviewees stated that government officials value the scale of the state-owned firms over making a profit. The general engineer reflected on how senior managers at the CQCEGC, the firm he worked for almost 20 years, followed this priority:

*'The senior managers in the state-owned firms don't care that much about profit, they care more about the scale, the performance. When I was at the CQCEGC, I did a comparison. In 1998, the output of the CQCEGC was around one billion yuan. Huang Qifan, the mayor of Chongqing, visited the CQCEGC, and required that the output of the CQCEGC must reach 50 billion yuan as soon as possible. However, the profits made when the output was one billion yuan and 50 billion yuan were almost the same. He didn't care about profit; this is a less important indicator. If the output of the CQCEGC could reach 50 billion yuan, the CQCEGC would then be among China's top 500 companies. Thus, the Chongqing SASAC and the government will feel that they 'have face' (youmianzi, 有面子), which means the senior manager did a good job. But privately-owned contracting firms are different. They care primarily about profit. It means nothing to gain scale if this doesn't increase profits.'* (Interviewee 26, general engineer)

The CQCEGC is Chongqing's largest state-owned contracting firm. It is notable that the Mayor of Chongqing could impose requirements such as increasing its scale on the CQCEGC. Here, it seems that state-owned firms such as the CQCEGC are part of the government and therefore serve as indicators of

the performance of government officials. Here, the feature that government officials value scale was highlighted, particularly the goal of 'to be among China's top 500 companies'. Ironically, the CQCEGC's profits did not seem to change after it increased its scale. It seems that managers in state-owned firms and privately-owned firms differ in terms of how they value profit and scale.

#### **6.8.5 Summary**

This section discussed the interviewees' accounts of the multiple roles the Chinese government plays in the construction sector. Government, particularly local government, was seen as playing the important role of project client. It also seems that governments take advantage of being the main source of projects to promote their policy initiatives. Interviewees shared the perception that local governments are reliable clients, as their investment primarily comes from public sources, including central government appropriations and tax revenues. A few interviewees also highlighted the need to remain cautious about the ability of local governments to finance projects using models such as BT and PPP.

Moreover, many interviewees stated that the government also plays the role of policy maker. The interaction between government and contracting firms was described using terms such as 'require' and 'allow', which suggests that contracting firms are required to implement policy initiatives. In addition, many interviewees highlighted the fact that government policies change quite often, and gave examples related to holding shares in state-owned firms and PPP-funded projects. The government also plays the role of market supervisor of the construction market, and agencies such as the Supervisory Office for Construction Safety were given as examples. A few interviewees argued that these agencies tend to directly intervene in the firm's internal management decisions.

Another important role the government plays is as the head of state-owned firms. According to the interviewees, many government departments can serve as the owner of state-owned contracting firms. Here, the consensus was that local governments will rescue state-owned firms from the edge of collapse, but privately-owned firms can go bankrupt, as local governments rarely save them. Some interviewees argued that the values and priorities of government officials are imposed upon senior managers in state-owned contracting firms. In particular, a few interviewees argued that senior managers in state-owned contracting firms tend to value scale over profit.

## **6.9 Summary**

This section presented the themes that emerged from interviewees' accounts for the second case study. The terminologies of South Construction's managers and related stories were discussed.

## **7. Case Study Three: North Construction**

### **7.1 Introduction**

This chapter presents the results of the third selected case study on North Construction. First, an overview of North Construction is given. Data collected include semi-structured interviews with eight managers and two annual reports. Then, Sections 7.3 to 7.8 present the emergent themes in managers' accounts of events during North Construction's process of reorganisation in response to marketization. Notions, definitions, attitudes and practices around each theme highlighted by interviewees during the interview are presented in detail.

### **7.2 Overview of North Construction**

North Construction is a contracting firm based in Chongqing. It used to be the seventh subsidiary of North-Sun Construction. The home office of North-Sun Construction is located in Changsha, Hunan province, China. In 2006, around 30 staff from the seventh subsidiary were reorganised as the North Construction Subsidiary. In 2007, the North Construction Subsidiary was awarded two projects, including a bus station in Chongqing, and moved to Chongqing in December of that same year.

In 2009, North Construction was combined with Anhui Subsidiary and was restructured as the Road and Bridge Subsidiary of North-Sun Construction. The Road and Bridge Subsidiary was intended to focus on infrastructure projects. In 2012, the Road and Bridge Subsidiary was withdrawn, while its railway projects and staff were transferred to North Construction.

In December 2016, North Construction became an independent company with legal qualifications. North-Sun Construction and North-Moon Construction are the two owners of North Construction. North Construction mainly focuses on infrastructure projects such as metro rail and stations, roads, bridges and railways. North Construction has experienced rapid growth since 2008. In 2017, the value of its new contracts was around 20 billion yuan and it employed 2,000 people.

### **7.3 Organising for the market**

Terminologies such as 'market', 'marketing', 'open the market', and 'develop the market' were used by almost all interviewees in their response to how North Construction organises itself in response to

marketization. All interviewees highlighted the prevailing infrastructure market in the Chinese construction sector and emphasized changing financing modes for infrastructure and practices as responses to it.

### **7.3.1 The increasing infrastructure markets**

Almost all interviewees referred to the word ‘market’ as encompassing different projects in various locations, rather than as a verb (i.e. to market). Phrases such as ‘open Chongqing market’, and ‘open railway market’ were used by interviewees. Many interviewees described how North Construction tried to break into the Chongqing market in 2007. The Chongqing market was perceived as a strong one, as it is a city with several mountains and rivers and thus requires bridges and tunnels for economic development. Tunnel and bridge projects in Chongqing are perceived as suitable for North Construction, due to its focus on infrastructure projects. In order to open up this market, practices such as offering low project bids were seemingly used. The deputy general manager in charge of acquiring projects interpreted this practice as the firm focusing more on gaining project experience than on profit. Several interviewees identified another activity, i.e. organising observation tours to construction sites. It seems that these tours (*guanmohui*, 观摩会) helped North Construction to develop its influence and reputation which further helped the firm in acquiring projects. These observation tours are still being conducted to demonstrate project management levels to potential clients.

Almost all interviewees paid particular attention to the infrastructure market. They shared the perception that this market had grown since 2008, when the Chinese government announced a package of financial and currency plans in response to the global financial crisis. These plans comprised serial infrastructure investment plans in urban and rural locations. This policy package was widely referred as ‘4,000 billion yuan to save the market’ (*wiwanyi jiushi*, 四万亿救市) and was generally viewed as the starting point of a flourishing real estate and infrastructure market. North-Sun Construction is widely believed to be the best subsidiary in the real estate market within North-Moon Construction.

Many interviewees highlighted the infrastructure project contracts for tunnels, roads and bridges acquired by North Construction since 2007, as well as the increasing number of Chongqing metro line projects. Several metro station projects in Chongqing were won by offering low bids, and metro line projects in other cities such as Shenzhen, Nanning, Qingdao were also highlighted. However, interviewees also stated that these projects were ‘allocated’ by North-Sun Construction or North-Moon Construction.

Several interviewees highlighted the Shenzhen RMN Station project as the starting point for North Construction's work on metro station tunnels using shield tunnelling machines (*dungouji*, 盾构机). According to the manager of Human Resource Department, in response to this opportunity, six staff members were sent to similar China Railway projects to learn how these projects are managed. At the same time, several experienced staff members from other tunnel infrastructure firms were hired. The RMN station project was commonly claimed to be 'a large success', and it spurred the propaganda slogan '*manage RMN, manage any projects without difficulty*' (*ganhao RMN, zoubian tianxia doubunan*, 干好 RMN, 走遍天下都不难) that was used for winning further projects. It seems that the construction site was visited by many potential clients who were then convinced that North Construction and North-Sun Construction would be a good choice for their metro line projects. In response to the increase in these projects, the firm purchased around 27 shield tunnelling machines. In 2017, North-Sun Construction and North-Moon Construction won several additional metro line projects in Chongqing and allocated these to North Construction.

The rail market is another important market for North Construction that was highlighted by many interviewees. Many remembered that the railway market was only partially open in 2005. '*Bid and tender for railway projects was allowed*,' recalled the manager of its Human Resource Department. Several interviewees stated that the transformation of China's Ministry of Railways into the China Railway Corporation in 2012 was the event that many interpreted as the beginning of the official extension of the railway market. In response to the expansion of this market, in 2009 North Construction and Anhui Subsidiary were merged and renamed as the Road and Bridge Subsidiary. According to a few interviewees, measures such as hiring senior cadres from the China Railway Company were taken. It seems that these cadres helped to build connections for acquiring projects. The TZL Railway was the first railway project awarded to the Road and Bridge Subsidiary. According to some interviewees, in order to adapt to the railway market, North Construction adopted several traditional practices, such as organising fancy opening ceremonies, which North-Moon Construction viewed as a waste of money. In any event, through these practices, North Construction began to engage with the railway market.

However, in 2012 the Road and Bridge subsidiary was withdrawn, and the reasons for this have been interpreted differently. The deputy general manager in charge of project acquisition explained that this was because the company didn't win enough projects. Conversely, the manager of the Human Resource Department argued that this was because the two previous subsidiaries didn't cooperate well, as both of them had previously existed for a long time before they were merged.



As a result, the railway projects under construction by the Road and Bridge Subsidiary were allocated to North Construction. The manager of its Human Resource Department commented that:

*'From the perspective of North-Sun Construction, it is kind of digesting hidden losses, a way to deal with non-performing assets. But North-Sun Construction didn't give up the railway market. This loss is kind of tuition fee for a railway project education. We didn't earn any money, but we did train staff. It is exactly because we constructed the Taizonglin railway project that we then got the YQ Railway, the HSH Railway and other railway projects.'* (Interviewee 40, the manager of the Human Resource Department)

Clearly, Interviewee 40 emphasised the fact that staff were trained to in support of his positive tone regarding the failure of Road and Bridge Subsidiary. This allocation was interpreted as providing an opportunity for recent success in winning railway projects.

Several interviewees also talked about the real estate market and stated that since 2014 it had been 'falling' while the infrastructure market was 'enlarging'. This could be viewed as an influence of the parent company's past experience with real estate projects. As a result, North-Sun Construction shifted its strategy from infrastructure projects to house building projects. For North-Sun Construction's 13<sup>th</sup> five-year plan, its turnover goal proportions for real estate projects, infrastructure projects and investments were set as 50%, 40% and 10%, respectively. Several interviewees also used the phrase 'business diversification', which suggests that infrastructure projects were becoming more important. In response to this shift, in December 2016 North Construction was changed to an independent legal entity and was divested by both North-Sun Construction and North-Moon Construction.

### **7.3.2 The prevailing PPP financing mode for large-scale infrastructure projects**

All interviewees addressed the growing popularity nationwide of PPP projects since 2014. PPP is a project financing mode that introduces both public and private capital in investments in large-scale infrastructure projects. The deputy general manager in charge of project acquisition argued that *'infrastructure project investment by local governments is reducing, while PPP projects are growing more and more.'* The deputy general manager in charge of financing and project acquisition agreed with this perception, and stated that, *'over 80% of infrastructure projects are PPP projects.'* This high percentage of PPP projects existed seemingly because in 2014 the central government announced a policy that no longer allowed BT financing modes and called for PPP financing modes. Several interviewees interpreted

this event as *'changing the Chinese construction sector completely,'* and further argued that it provided a large opportunity for North Construction.

Some interviewees also highlighted the multiple profit-making opportunities of PPP projects. The manager of the Department of Enterprise Strategy explained that:

*'Take the No.9 metro line project—the investment is 19.7 billion yuan. We worked with North-Sun Construction as its general contractor. North-Sun Construction invested 70%, which is around 14 billion yuan. For this investment they claimed 17% profit rate. The construction work for North Construction cost around 8 billion yuan. North Construction claimed a 5% profit rate for construction work. There will be profits during this operation.'* (Interviewee 41, manager of the Department of Enterprise Strategy)

Emphasis was given to profit opportunities for both investors and contractors. It seems that North Construction relies on its parent companies to win PPP projects, and the practice of relying on North-Sun Construction or North-Moon Construction investments in projects was highlighted by several interviewees. Moreover, it seems that PPP projects provide more opportunity for joint ventures. Several interviewees explained that North Construction can use its parent companies' qualification certificates and past project records to compete with other firms.

Some interviewees assigned meaning to this policy announcement by highlighting the reduced number of competitors. As the deputy general manager in charge of project management stated, *'PPP projects normally cost more than several billion-yuan, and privately-owned contracting firms don't have enough capital. Only state-owned contracting firms have that kind of capability to finance.'* It seems that the scale of projects that adopt PPP financing modes is large—around 200 to 300 million yuan—which limits the competition to large-scale contracting firms.

The importance of capital in responding to these large-scale PPP projects was commonly highlighted. One common perception is that it is easy for North Construction to receive bank loans due to its past profit and good credit rating. In response to the popularity of PPP projects, North Construction established a financing department in 2017. Interviewee 36 was appointed as the deputy general manager in charge of financing and project acquisition in 2016, who was very keen on PPP projects and claimed that *'investment is becoming our main business.'* He labelled construction work as a *'low-end'* job that *'can be subcontracted if they don't have enough staff.'* Here, it seems that the role of project financing in contracting firms was emphasized.

Some interviewees expressed different opinions on PPP projects. For example, the deputy general manager in charge of project management extracted the features of lacking experience in investment and increased workload. He pointed out the question of *'how to coordinate this increased work to make sure we can perform contracts'* and labelled this as a 'challenge' for the firm. This concern was shared by the Safety Department monitoring manager, who extracted the feature of complicated project management structures and argued that 'project management is more difficult.' For PPP projects, a special project vehicle is required that has *'increased management hierarchies'*. The deputy general manager in charge of contract management extracted the feature that clients had begun to leave the PPP project tasks of land acquisition and demolition to the contracting firms. In response, a special team of five to six staff was established to coordinate land preparation activities. It seems that the interviewed managers constructed diverse meanings from this event based on to their job roles.

### **7.3.3 Summary**

This section presented interviewees' storylines about perceived market changes and the responses adopted by North Construction. Many interviewees paid particular attention to the growing infrastructure market and recall how North Construction entered into Chongqing's rail project market in 2007. Activities such as winning projects by offering low bids and organising observation tours were argued as used to build North Construction's reputation in the Chongqing market. Many interviewees viewed the 2012 RMN Metro line station project allocated by the North-Sun Construction as the starting point for the firm's entry into the metro line project market. Activities such as purchasing shield tunnelling machines, sending staff to learn from other contracting firms and hiring experienced staff from competitors were highlighted by many interviewees as responses to acquiring additional metro line projects. Many interviewees also spoke about their experiences of acquiring railway projects, involving practices such as hiring senior cadres from China Railway, their main competitor.

Interviewees commonly highlighted the rise of the PPP financing mode for infrastructure projects and argued that this was an important opportunity for North Construction. Interviewees extracted different features to create meanings of the PPP policy document announcement and subsequent PPP promotions. A few interviewees suggested that investment would grow to be the main business of contracting firms, and some highlighted the multiple opportunities for project profits using the PPP financing mode. Moreover, it seemed as if North Construction had come to rely on their parent companies' investments and allocations for projects. In addition, in 2017 the firm established a financing department to respond to the increasing demand for project financing. However, some interviewees

emphasized their perceptions of difficulties caused by the PPP financing mode, such as an expanded range of tasks, more complicated project management structures, and increased land preparation work.

## 7.4 Competition

In answering questions of how project bids were won, all interviewees discussed the term ‘competition’. This section first presents the interviewees’ views on competition and followed by interviewees’ storylines related to the trust given by government to state-owned firms. Finally, the interviewees’ understandings of competitiveness are discussed.

### 7.4.1 Reducing competition extent

All interviewees used terms such as ‘competition’ and ‘competitiveness’ in their interpretations of North Construction’s reorganisation process. For almost all interviewees, the word ‘competition’ was closely related to the phrase ‘bid and tender’ with respect to project contracting. The consensus was that the bid and tender process brought a sense of competition to the Chinese construction sector.

However, interviewees seemingly had different perceptions of the competition situation. For example, the deputy general manager in charge of project acquisition argued that the building construction sector was in a position of ‘perfect competition’ (*wanquan jingzheng*, 完全竞争), and stated that ‘*North Construction can’t enjoy project allocation like its counterparts in railway industry and needs to compete for projects.*’ Conversely, several interviewees perceived that industry competition had in fact been weakened, i.e. the number of contracting firms that participate in project bidding had reduced. Moreover, the deputy general manager in charge of financing and project acquisition argued that the competition situation changed from ‘*perfect competition*’ to ‘*oligopoly competition*’ (*guatou jingzheng*, 寡头竞争). He explained:

*‘Previously, there were numerous small contracting firms that could bid for projects such as roads. The value of these projects was no more than 200 million yuan. This is perfect competition. But for PPP projects, the players are all big contracting firms. There are normally four or five firms, and no more than 10 contracting firms come to bid. This is a kind of oligopoly competition.’* (Interviewee 36, deputy general manager in charge of financing and project acquisition)

Here, the argument seems to be that the number of competitors had reduced over time.

Many interviewees also felt that overall competition and the number of competing contracting firms should be reduced. For example, the deputy general manager in charge of project acquisition expressed his willingness to see a reduction in the number of contracting firms:

*'We need to avoid homogeneous competition. It is wasteful if we all do the same work. Now we have excess production capability. Take the construction sector as an example—there are dozens of central government controlled state-owned contracting firms. China Railway, China Communication, China Energy Engineering Construction, etc. We all work on construction, purchasing equipment, hiring staff. However, there are not enough projects in the market. It is a kind of over-capability. Integrating these firms would be good to avoid repetitive input, like what the government did.'* (Interviewee 35, deputy general manager in charge of project acquisition)

It is notable that this interviewee labelled competition between firms as 'homogeneous' and mobilised the logic of 'supply and demand' to interpret the situation. However, the argument here seems to be that supply and demand should be matched by integrating state-owned contracting firms administratively, rather than allowing failing firms to go bankrupt.

#### **7.4.2 Trust for state-owned contracting firms**

Many interviewees highlighted the government's trust in state-owned contracting firms to manage projects. For example, the deputy general manager in charge of project management explained the competitive system for PPP projects,

*'The government trusts state-owned firms to work on PPP projects. The government is not willing to deal with privately-owned contracting firms. There is no discrimination in policy documents, but there is in practice. Privately-owned contracting firms are not capable and are short on capital for PPP projects.'* (Interviewee 37, deputy general manager in charge of project management)

It is notable that Interviewee 37 stated a difference in what is written in policy documents and what goes on in practice. The word 'discrimination' was used to describe privately-owned contracting firms' position in the competitive system. Moreover, privately-owned contracting firms are seemingly unable to obtain large amounts of capital for PPP projects. By contrast, North Construction, a state-owned firm, can easily obtain loans of over several billion yuan from banks. *'It mainly depends on whether the firm is state-owned firm or privately-owned firm,'* Interviewee 37 stated. Here, it seems as if whether a firm is publicly or privately-owned is the main criterion for bank loan approvals.

Several interviewees also pointed out that state-owned firms could not go bankrupt like privately-owned firms. For example, the deputy general manager in charge of projects winning argued that:

*'We can't have complete marketization—letting state-owned firms go bankrupt. Many people will lose their jobs. There is the problem of stabilization. You can't let those firms die. You have to absorb the weak ones into strong ones and arrange for new jobs for these people.'* (Interviewee 35, deputy general manager in charge of project acquisition)

Interviewee 35 was confident that North Construction would not go bankrupt. It is notable that the need to avoid job losses was used to justify the plausibility of not letting state-owned firms go to bankrupt. Here, it seems as if the government was still perceived as having the responsibility for protecting jobs. The stated practice of absorbing weak firms into strong ones reflects a practice of administrative resource re-distribution rather than market resource re-distribution.

#### **7.4.3 Understandings of competitiveness**

Many interviewees used the notion of 'competitiveness' in their interpretations of North Construction's organisational process but attached different meanings to this term. Some interviewees used the word 'competitiveness' to refer to the firm's main business. For example, the manager of Enterprise Strategy Department stated that, *'the core competitiveness of North-Sun Construction is housing construction.'* However, other interviewees interpreted 'competitiveness' as the reasons why North Construction is able to compete and win projects. One commonly stated reason was the firm's ability to obtain bank loans or find investment partners. Here, it seems as if being a state-owned contracting firm is helpful in allowing North Construction to obtain bank loans. And in response to a question about firm's future plans, some interviewees also highlighted the plan to take the firm public in order to 'facilitate financing'.

Several interviewees argued that North Construction's technological advantage has helped it to win bids. The RMN metro station project in Shenzhen was widely argued as the starting point of firm's buildup of a technological advantage. In response to a question of why North Construction wins an increasing number of metro line projects, the Human Resources Department manager argued:

*'We were considering building up our professional advantage when we constructed the RMN project. The shield tunneling machines are more professional than traditional tunneling procedures. This is our core competitiveness for opening the market. We have professional*

*teams and the equipment to construct these projects. Clients are convinced that we are a trustworthy contracting firm.*' (Interviewee 40, Human Resources Department manager)

Here, the interviewees seemingly emphasized that its professional teams and equipment gives North Construction firm a technological advantage, and they highlighted several technologically complex projects that the firm has constructed. For example, North Construction won one section of the ZW railway project, a 35 km stretch of which almost exclusively comprises tunnels and bridges. This section was commonly argued to be the 'most difficult part' of the project. The Human Resource Department manager argued that *'the very fact that clients are willing to give the most difficult section to us demonstrates our core competitiveness.'* Other examples include the QS Tunnel project in Sichuan Province where the altitude is over 3,000m and geological conditions are complex. The Enterprise Strategy Department manager highlighted that *'China Central Television came to report on our project several times.'* Interviewees agreed that these technologically complex projects *'build our reputation and establish North Construction's brand.'*

A few interviewees identified several practices the firm undertakes to maintain its technological advantage. For example, the deputy general manager in charge of technology and innovation emphasized the establishment of the firm's Department of Technology and Design. The role of this department is not only to provide technological support for projects, but also to highlight its procedures and technological achievements. Moreover, a special tunnel research institute is being planned, and the firm has hired several tunnel construction researchers as well as some well-known experts. Some interviewees also identified activities such as winning awards, which served to *'demonstrate North Construction's technological advantage.'* For example, the deputy general manager in charge of technology and innovation stated, *'Yesterday, I went to Beijing to accept a technology award. We won a ministerial and provincial-level award for one of our technologies.'* Ministerial and provincial level awards are given by ministers or provincial governments. These awards were commonly argued to demonstrate that *'North Construction is at the forefront of technology'*. In order to win these awards, it seems as if the firm adopts specific plans to win awards for each project prior to construction.

#### **7.4.4 Summary**

This section presented interviewees' storylines regarding competition. The interviewees expressed their different perceptions of the competition environment. Many perceived that the competition field was winnowing over time, in other words, fewer contracting firms were bidding for projects. In fact, it seems

that the number of contracting firms competing for large scale projects that use the PPP financing mode is far fewer than before. Some interviewees also maintained that the number of state-owned contracting firms should be administratively reduced in order to 'avoid homogenous competition'.

Several interviewees highlighted the trust the government places in state-owned firms with respect to competition, and many repeated the statement that 'government officials trust state-owned firms.' Here, seems that banks also trust state-owned firms, as status as a state-owned or a privately-owned firm was argued to be the main criterion for loan approval. A few interviewees also pointed out that state-owned firms will not go bankrupt like their privately-owned counterparts, for reasons of 'stability'.

Several interviewees used the term 'competitiveness' in their storylines, with some referring to it as the main business focus. But for other interviewees, 'competitiveness' refers to the reason why North Construction can compete in the market and win bids. Finally, interviewees also discussed of how technological advantages help North Construction in acquiring projects.

## **7.5 Bid and tender**

All interviewees identified the bid and tender system in their interpretations of how the firm organises itself in response to marketization. Here, 'bid and tender' was interpreted as the mechanism used to select contractors, labour-only subcontractors and material suppliers.

### **7.5.1 Bid and tender as mechanism for project contracting**

The interviewees agreed that the bid and tender system brought a sense of competition to the Chinese construction market and that it is closely connected to marketization. For example, the deputy general manager in charge of project acquisition argued that '*there was no concept of 'market' and competition because there was no need for bid and tender until late 1990s.*' In response to the introduction of this system, the firm's Department of Operations was renamed the Department of Marketing. Here, the term 'marketing' was interpreted as '*competing in the market by going to bid and tender*'.

#### Incomplete project information

Incomplete project information was also highlighted by many interviewees. The consensus was that project information is often not provided in full to all competitors at the project bidding stage, a situation that the Enterprise Strategy Department manager labelled as 'information asymmetry' (*xinxi buduichen*, 信息不对称) by. As for how the firm manages this situation, he explained:



*'The first thing is to obtain information. Then you need to promote the firm and you need to convince the clients that you are capable of building the projects. Third, you need to have guanxi with some people. There is a lot of information asymmetry. There are so many firms that want to win this project. The government or the governmental officials give this project to you, not other firms. There are different interest chains. For example, for the No. x metro line project, we had a marketing team and our chairman was the team leader. There must be someone who is in charge of project approval. We need to go through channels to reach the final decision-maker for this project. We asked several people for help to make sure that we got involved in this project and accessed the information that would maximize our chances of winning the project.'*

(Interviewee 41, Enterprise Strategy Department manager)

Clearly, Interviewee 41 took this situation of incomplete information for granted, and connected the provision of Information and the decision of government officials to 'give this project to a contracting firm.' Here, the argument seems to be that clients use information to intervene in deciding which contracting firms win particular projects. In response to this situation, establishing *guanxi* with the government officials who make these decisions was emphasized, as were activities such as organising special teams with the general manager as the team leader and finding people who can reach government officials.

#### Bid evaluation criteria

Some interviewees addressed various bid evaluation criteria, and several recalled that North Construction won several projects by offering low bids. For example, the deputy general manager in charge of project acquisition explained how the firm won one tunnel project in late 2000s:

*'...that project was won because we offered the lowest bid. In the 2000s, the criterion was normally that the lowest bid wins the project. Since the 2010s, it is normally the one that is closest to the average price that wins the bid. When the criterion was that the lowest bid wins, contracting firms reduced their bids desperately. However, after they won a project with a low bid, the firm might experience losses or reduce project quality.'* (Interviewee 35, deputy general manager in charge of project acquisition)

It seems that many contracting firms offered unreasonably low bids to win projects when the criterion of 'lowest bid wins the project' was in use. The fact that this raised concerns such as reduced project

quality was emphasized. However, the criterion that ‘closest bid to the average offered price wins the project’ has been in use since 2010.

However, confusingly, the Department Of Enterprise Strategy manager still discussed how a contracting firm can win a project based on the lowest price. He argued that:

*‘You still need to compete after you get involved in project bidding. Say the budget for a project is 20 billion yuan. The price offered really depends on the firms’ capability. Firm A could bid 18 billion yuan for the project by optimizing design. Firm B might offer 17 billion if they just want to get the project and make less profit. But North Construction can offer 15 billion yuan, given that we have the best technology and cost management practices. In this case, those who can’t match this bid are squeezed out. We can then win the bid.’* (Interviewee 41, Enterprise Strategy Department manager)

Clearly, the Interviewee 41 maintained that the criterion of ‘lowest price wins the project’ can push firms to improve efficiency in order to bid competitively for projects. However, this raises the question as to how the criterion of ‘closest bid to average offered price wins the project’ can push firms to improve their efficiency. Thus, emphasis of this criterion seemingly lies in providing an objective way of distributing projects.

### **7.5.2 Bid and tender as a mechanism to select subcontractors and material suppliers.**

Some interviewees also referred to the bid and tender system as the mechanism for selecting subcontractors and material suppliers. The deputy general manager in charge of contract management labelled this as ‘marketization,’ and explained that:

*‘Clients used to provide material in the 1990s and early 2000s, but now it is quite rare. It is a phenomenon of the process from a planned economy to a market economy. Local governments once required material such as steel to be produced by local plants. Now local protection is gradually breaking down. All material is procured through bid and tender and is completely marketized.’* (Interviewee 39, deputy general manager in charge of contract management)

It seems that introducing the bid and tender system for subcontractors and material suppliers changed the distribution of administrative resources. As a result, interaction between material suppliers and contracting firms seemingly were shifted into a market format. Moreover, bid and tender centres were established in the firm that were in charge of selecting of subcontractors and material suppliers, and an

e-commerce platform for material supplier bids was established. In addition, the phrase ‘sunlight procurement’ (*yangguang caigou*, 阳光采购) was often used to highlight that this process could be monitored by the public to improve its transparency.

However, a few interviewees expressed doubts about the transparency of the bid and tender process in selecting subcontractors and material suppliers. As the deputy general manager in charge of project management explained:

*‘We have a bid and tender centre. Previously it was part of the Department of Project Management, and it was later separated from the Department so that it could have independent space and be free of interference. But this was just on a superficial level. There are so many things going on under the surface. It looks like normal competition on the surface, but there are actually a lot of things that are secret.’* (Interviewee 37, deputy general manager in charge of project management)

Here, emphasis was seemingly given to the fact that the bid and tender centre was created to be independent and to avoid any interference in the selection process. However, it seems like the past tradition of interference hasn’t disappeared, but rather has mixed with the new procedure.

### **7.5.3 Summary**

This section presented the interviewees’ storylines concerning the bid and tender system. All of them saw this system as a mechanism for facilitating projects, and there was consensus that the bid and tender process introduced a sense of competition into the construction market. However, the challenge of incomplete project information also seemed to be taken for granted by almost all interviewees. Here, it seems as if clients can take advantage of the availability of project information to influence which firm wins a given project. Several interviewees also discussed bid evaluation criteria, and some argued that an unreasonably low bids were commonly offered when the ‘lowest price wins the project’ criterion was used. As a result, a new bid evaluation criterion of ‘average price wins the project’ was introduced. However, this raised the question of how this new criterion could push firms to improve their efficiency.

Bid and tender seems have been introduced as a mechanism to select subcontractors and material suppliers, which seemingly changed the ways contracting firms interact with material suppliers and subcontractors. Practices such as establishing an independent bid and tender centre and an e-commerce platform were seemingly taken to improve transparency. However, it seems that the practice of covert interference in who may win bids continues.

## 7.6 Management structure: Trajectory from the past

Management structure was an important theme that all interviewees addressed in their accounts. This section presents the key themes they highlighted. First, their interpretations of parent companies will be discussed, followed by their storylines about North Construction's subsidiaries, in which many highlighted the 'standardization' of the firm's organisational process in response to marketization. Finally, there is a section concerning North Construction as an employer that covers motivation and performance targets, among other topics.

### 7.6.1 Parent company

North Construction is one subsidiary of North-Sun Construction. Based in Changsha, Hunan Province, North-Sun Construction is a subsidiary of North-Moon Construction, a state-owned contracting firm. As Figure 7.1 shows, the SASAC owns North-Moon Construction, which was previously an engineering bureau that had been directly controlled by China's Ministry of the Building Engineering since the 1950s. According to the Chinese Construction Sector Yearbook (1985), in 1979 there were five engineering bureaus under the direct control of China's Bureau of Building Engineering. These five bureaus were referred to by numbers and were located in Beijing, Tangshan, Wuhan, Guiyang and Changsha, respectively. In 1979, their average number of employees were 22,481, 20,980, 15,576, 16,197 and 8,348, respectively. In 1982, with the State Council's approval these six bureaus and several additional design practices were re-organised as North-Moon Construction, which was then announced as an '*independent legal entity that has independent operational rights*'. Ironically, in 1983, China's Ministry of Urban-Rural Construction and Environment Protection announced that another 21 divisions from the Engineering Army were combined and renamed as the Seventh Bureau, while another 22 were renamed as the Eighth Bureau and allocated to North-Moon Construction. Apart from these eight former engineering bureaus, North-Moon Construction contains seven publicly-listed subsidiaries, seven design practices, several investment subsidiaries, and many specialist and foreign subsidiaries. As some interviewees stated, '*we have firms throughout the whole supply chain*'. In 2017, the value of the firm's new contracts was over 2 trillion yuan.

Located in Changsha, North-Sun Construction is one of North-Moon Construction's building engineering bureaus. It has 18 subsidiaries of which North Construction one (see Figure 7.1). In 2017, the value of its new contracts was around 200 billion yuan. Many interviewees mentioned the special position North-Sun Construction occupies within North-Moon Construction with pride. Some interviewees used the

phrase ‘soldiers at the head of the row’ (*paitoubing*, 排头兵) to describe the role of the North-Sun Construction, reflecting the lingering military sense of their understanding of the relationship between the parent company and subsidiaries.

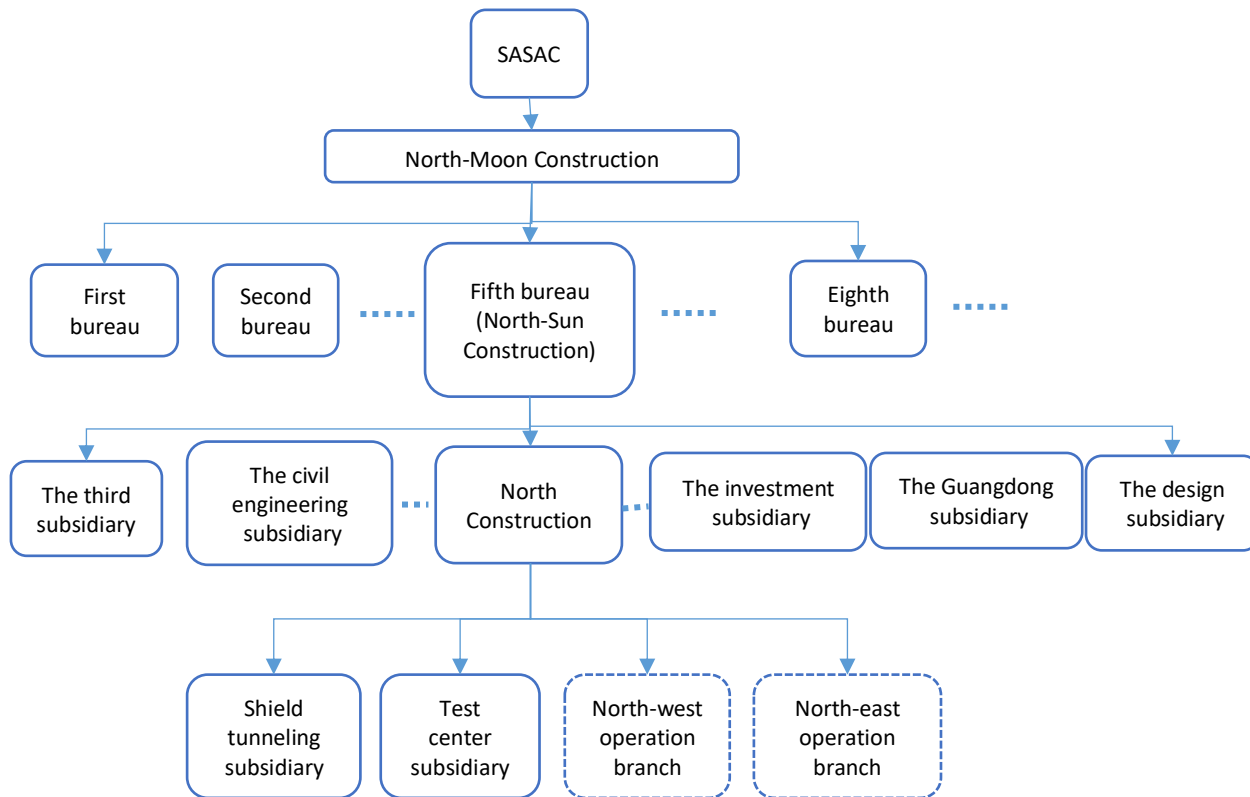


Figure 7.1 The organisational structure of North-Moon Construction.

Nearly all interviewees highlighted the fact that North-Sun Construction is currently expanding its operations into residential and infrastructure projects in Africa, responding to North-Moon Construction’s 13<sup>th</sup> five-year plan aimed at infrastructure and expansion. Many argued that performance targets (*zhibiao*, 指标) and assessment (*kaohe*, 考核) the tools used by the parent company to make sure its strategy is implemented in its subsidiaries. Value of new contracts and turnover are two performance targets that all interviewees highlighted. In its Notice of Classification of Subsidiaries and Cadres, North-Sun Construction addressed five performance targets against which its subsidiaries are assessed: value of new contracts, turnover, profit, profit per staff, and submitted capital. Some interviewees also highlighted the practice of ranking and classifying subsidiaries. For example, the Enterprise Strategy Department manager argued that, ‘subsidiaries are classified into three echelons

(*tidui*, 梯队) according to the assessment of these targets.’ Here, the military term ‘echelons’ was used to describe different groups of subsidiaries. Several interviewees also discussed another practice of ‘weeding out’ subsidiaries that have continuously failed to meet performance targets. When this occurs, projects and staff are typically reallocated to other subsidiaries.

Many interviewees addressed the benefits of being part of the organisation. One metaphor, ‘*a good tree provides good shelter*,’ was used to describe how North Construction can benefit from its relationship with North-Sun Construction and North-Moon Construction. Several interviewees also stated that these parent companies allocate the projects they have won to North Construction. For example, the deputy general manager in charge of project acquisition explained the meaning of becoming a subsidiary of two parent companies as, ‘*we are now a direct subsidiary of North-Moon Construction. Projects won by North-Moon Construction can now be allocated to us.*’ Another benefit addressed by some interviewees was that North Construction can easily use the accumulated knowledge from the parent company as a resource. For example, the firm can get trained or experienced staff for its PPP projects or infrastructure projects from its parent companies. The term ‘rich inside resources’ was used by some interviewees to refer to advantages they receive from the parent company.

However, not all storylines about North Construction’s parent company were positive. A few interviewees highlighted the competition among North-Sun Construction’s subsidiaries, and several highlighted the norm of regulating the number of subsidiaries in a particular regional market. Some interviewees discussed decision-making conflicts that can arise between the parent company and North Construction. For example, the manager of the firm’s Enterprise Strategy Department described his struggle with the establishment of the testing centre as a subsidiary of North Construction.

*‘I just went to Beijing to coordinate the establishment of the testing centre. The home office didn’t approve our application to set up this centre. They wanted us to wait until next year. But we needed to apply for a tax discount to the local government. So we did register the testing centre. Beijing was very unhappy about this. I was there to deal with this.’* (Interviewee 41, Enterprise Strategy Department manager)

Here, it seems that the home office and North Construction had differing opinions about establishing the testing centre, as Interviewee 41 highlighted the need to apply for a tax discount to justify this action. However, the parent company still rejected North Construction’s application.

## 7.6.2 Subsidiaries

Over the last decade, North Construction experienced rapid growth in the value of its new contracts, which increased from 40 million yuan in 2008 to around 20 billion yuan in 2017, according to the deputy general manager in charge of project acquisition. However, several interviewees addressed the management challenges that have resulted from this rapid increase. The main issue many interviewees addressed concerns how to restructure the organisation to manage its projects in different provinces.

In 2008, the firm's original five departments were subdivided into 13 departments in order to manage its increasing number of projects, according to the Human Resource Department manager. According to him, the staff numbers in North Construction's home office increased from 46 in 2010 to 112 in 2016. However, he expressed his concern with the difficulties of managing projects located in over 20 provinces, a concern that was shared by the Safety Monitoring Department manager:

*'We previously worried about winning projects. Now we worry about staff, particularly how to change our organisational structure to fit the increasing number of projects. This is the most important problem at the moment. Winning projects is not a problem given the economic trends. But we didn't have enough accumulated management staff, which led to the current conflicts.'*  
(Interviewee 42, Safety Monitoring Department manager)

Here, the argument seems to be that the firm's current organisational structure cannot fulfil its project management needs, which was labelled as 'the most important problem'. In response, activities such as establishing subsidiaries or local operating branches were taken. As the manager of the Enterprise Strategy Department explained:

*'Is it pragmatic to let the home office in Chongqing manage projects located in over 20 provinces? The geographical range is too broad, which causes high management costs. This is not good for meticulous management. We set up the shield tunnelling machine subsidiary in 2014. As of last year, they started to manage projects in central China. Last month, a north-west local operation branch was established that is in charge of managing projects in this area and also in charge of project acquisition. Now we are planning to establish a north-east operational branch.'* (Interviewee 41, Enterprise Strategy Department manager)

Here, seems that a subsidiary was established in Changsha and was named the 'shield tunnelling machine subsidiary,' while another two local operational branches were established. Clearly, the firm reorganised itself in response to increasing project numbers.

### 7.6.3 Standardization

Almost all interviewees spoke of standardization (*biaozhunhua*, 标准化) in the firm with pride. The term ‘standardization’ was often used interchangeably with the phrase ‘fine management’ (*jingxihua guanli*, 精细化管理). ‘Fine management’ was claimed to be one outstanding advantage of not only North Construction but also North-Sun Construction. For example, the deputy general manager of project management argued that *‘the China Railway is learning fine management from us’*. This statement was supported by the deputy general manager of technology and innovation, who worked for the China Railway for many years and joined North Construction in 2014.

However, interviewees discussed the terms ‘standardization’ or ‘fine management’ differently. Some interviewees highlighted the standardized procedures of different organisational activities. For example, when asked to give an example of standardization, Interviewee 36 replied:

*‘Take investing in projects as an example. I can discuss this with the bank today or next week. Standardization regulates things such as which department is in charge of negotiations with banks, how many days they require to finish a job, and which department is in charge of new firm registrations. This is standardization.’* (Interviewee 36, deputy general manager for finance and project acquisition)

For Interviewee 36, ‘standardization’ meant setting up standard procedures for organisational activities. He further addressed the feature of reducing reliance on individuals, stating that *‘these standards can teach new staff members to quickly learn how to do their jobs. This can then reduce their dependence on individuals.’* Thus, for him the meaning of standardization seems to lie in organisation according to procedures, rather than relying on individuals. Several interviewees also discussed employee training practices such as summarizing procedures and requirements for different organisational activities.

Some interviewees emphasized standardized project construction procedures. For example, the deputy general manager in charge of project acquisition highlighted the implementation of standard construction procedures for the ZLS Tunnel project. He highlighted the feature of *‘keeping the construction sites orderly and avoiding safety accidents’* by the implementation of standard construction procedures. Here, the argument seems to be that implementing standardized project construction procedures helped the firm to enter the Chongqing market.



Some interviewees addressed the practice of using quotas for material consumption and project management costs. When asked to give an example of standardization, the deputy general for contract management explained:

*'For example, material fees account for a large proportion of cost. Materials such as steel and concrete are essential for almost all projects. We have a standard amount of different materials for every mile of road. After so many years, we have set up quotas for material consumption, and we manage material according to these standards. In this way, we can avoid any wasted material, which further prevents project losses.'* (Interviewee 39, deputy general manager for contract management)

Here, emphasis was seemingly given to the feature of avoiding material waste and project losses to justify using quotas. The deputy general manager for technology and innovation shared this view, and argued that, *'there are quotas for materials and cost. You need to explain why and how you are going to use even one yuan and get approval. Otherwise, you can't spend any money.'* Thus, it seems that the firm used standardization as a tool to control costs.

#### **7.6.4 Employees**

How North-Sun Construction motivates its staff was a story that interviewees commonly addressed. Their storylines mainly concerned attempts to redefine the relationship between the firm and its staff. Some interviewees discussed a 2003 event in which all staff members were laid off and had to compete for posts:

*'There were around 7,000 staff back then. Mr. L laid off all staff, including the lead group. All staff had to then compete for their posts. From the lead group members to secondary units, departments and normal staff, all cards were shuffled. This is a wall-breaking movement. It doesn't matter how strong a background you had, no advantages were given to anyone. The result was that many capable staff were selected and those who got the position because of guanxi or were incapable were eliminated. This is the point when North-Sun Construction changed from a traditional state-owned firm to a market-oriented state-owned firm.'*  
(Interviewee 41, Enterprise Strategy Department manager)

Here, the phrase 'wall-breaking movement' (*pobi yundong*, 破壁运动) seemingly refers to the previous relationship between staff and the firm, and many interviewees mentioned the slogans 'staff can come and go, cadres can be promoted and demoted, incomes can be increased and decreased' (*renyuan*

*nengjinnengchu, ganbu nengshang nengxia, shouru nengzeng nengjian*, 人员能进能出, 干部能上能下, 收入能增能减). In this context, 'staff can come and go' meant that employees were no longer considered permanent, 'cadres can be promoted and demoted' referred to using performance as an assessment, and 'income can be increased and decreased' meant staff salaries would be determined by performance. Moreover, the interviewees addressed how the criteria were changed with respect to the term 'post,' as 'whether this person is capable for the post' was now favoured, as opposed to a particular staff member's 'background' (*beijing*, 背景) or '*guanxi*'. The argument here seems to be that the shifting the relationship between the firm and its staff prepared the ground for the introduction of a more employment-based system.

Almost all interviewees highlighted the practice of assessing individuals by performance targets. It seems that performance targets and assessment are useful tools to motivate the firm's staff. The interviewees used phrases such as 'gold bar' (*jintiao*, 金条) and 'tiger' to describe the practice of rewarding staff or assessing penalties based on performance targets. Here, 'gold bar' refers to rewards such as salary increases or promotions, and 'tiger' means penalties such as demotions or salary reductions. The 'tiger' metaphor expresses the possibility that staff can be 'bitten' if they don't meet performance targets. The deputy general manager in charge of project acquisition maintained that these targets can motivate staff, and said:

*'We don't feed shirkers in our firm. Even though we are state-owned firm, we don't do this. Otherwise it harms our firm. If everyone wants to eat from the same big pot, nobody will work hard. We all need to compete, otherwise we are going to be weeded out.'* (Interviewee 35, deputy general manager in charge of project acquisition)

Clearly, the Interviewee addressed the feature that the 'firm needs to compete' to justify the importance of staff motivation. Conversely, the Human Resource Management manager explained that applying performance targets can '*avoid managing according to human favours*'. For him, the meaning of performance targets lies in management according to objective criteria, rather than by *guanxi* or other personal favours.

While some interviewees discussed the new employment relationships, many still used terminology from China's planned economy era. One example is the phrase 'manning quotas' (*bianzhi*, 编制), which refers to employees who were registered as official staff in the firm. Some interviewees equated staffing

in personnel quotas as having an 'iron rice bowl' (*tiefanwan*, 铁饭碗). For example, the Human Resources Department manager explained employees' various contract statuses:

*'In state-owned firm like ours, there are staff with official personnel quotas. The phrase manning quotas follows the way that the state manages its staff. It is a real iron bowl. There are some dispatching staff. The layer lower than dispatching staff is temporary staff.'* (Interviewee 39, Human Resources Department manager)

Here, it seems that the firm's staffing hierarchy is divided into three layers. Those in manning quotas are viewed as the top layer, followed by dispatch staff and temporary staff. 'Dispatch staff' refers to employees who sign contracts with human resource agencies and are dispatched to work for firms. *'It is for cost saving'*, Interviewee 39 explained. It seems like that North Construction doesn't provide insurance for dispatched staff, and it is reasonable to assume its temporary staff receive even fewer benefits. The ongoing use of these terms reflects the lingering perception of staff in state-owned firms.

Another example concerns management groups that some interviewees referred to as 'cadres,' which suggests that some managers in state-owned firms are still often viewed as cadres of the government. In particular, almost all interviewees referred to senior managers as the 'lead group' (*lingdao banzi*, 领导班子). Moreover, some interviewees argued that senior managers in both state-owned and privately-owned contracting firms use a different decision-making logic. For example, the deputy general manager in charge of financing and project acquisition argued that senior managers in state-owned contracting firms are more willing to budget for safety management. He explained that:

*'The punishment for safety accidents is not enough. The operation of privately-owned contracting firm is a kind of short-term behaviour. This means that private bosses might work for just one project and earn 50 million yuan and quit if any problems occur. They just want to maximize profits and are unwilling to pay for safety management. However, in state-owned firms, earning money like 10 million yuan or 50 million yuan from one project has less influence on me. For me, earning 50 million yuan only means I might have rewards such as 50,000 yuan. It doesn't matter that much. But if any safety or quality accidents occurred, I might lose my position. That's why I care about quality and safety more.'* (Interviewee 36, deputy general manager in charge of financing and project acquisition)

Here, the argument seems to be that differences in managers' decision-making logic are embedded in how much senior managers could be rewarded if they lowered safety management expenditures.

### 7.6.5 Summary

This section presented interviewees' accounts about the trajectory of the firm's structural changes. Many interviewees identified North-Sun Construction as the parent company of North Construction, North-Moon Construction as the parent company of North-Sun Construction, and the SASAC as the owner of North-Moon Construction, with direct control over its operations. Several interviewees stated that *'we are soldiers at the head of two rows: one is infrastructure construction, another one is the overseas construction'* to describe the role west North-Sun Construction plays in North-Moon Construction. Here, 'performance indicators' are seemingly used as tools to control and classify the firm's subsidiaries. Moreover, many interviewees used the military terminology of 'echelons' (*tidui*, 梯级) to refer to different classes of subsidiaries, and stated that subsidiaries that cannot fulfil performance targets are gradually 'weeded out'. And despite mentioning several conflicts, many interviewees also highlighted the benefits of being part of North-Sun Construction, particularly in terms of project allocation and knowledge sharing.

Several interviewees pointed out North Construction's rapid increase in projects over the last five years. However, some emphasized that these projects exist in different locations and argued that this can increase project management challenges. The practice of establishing a subsidiary in Changsha and branches in other cities was highlighted as a response to this increasing number of projects.

Many interviewees highlighted the 'standardization' present in North Construction and argued that it distinguishes North-Moon Construction from its competitors. However, 'standardization' was interpreted differently by the interviewees, as some used it to mean standard procedures for management activities such as bid preparation, others emphasized standard procedures for project construction, and a few discussed standardized material or time management practices for project construction.

Almost all interviewees remembered a story of how staff were motivated during the marketization process in which all staff members were laid off and then had to compete for posts. This event seems to have been a 'wall-breaking movement' that disrupted the previous relationship between staff and the firm and replaced it with a new one. Finally, the slogan 'gold bar and tiger' was commonly used to refer to the practice of using performance targets to motivate staff. However, managers still tend to use terminology from the planned economy era, such as 'manning quota' and 'cadres'.

## 7.7 Project management

Project management is another important theme that emerged from interviewees' storylines of how the firm organised itself in response to marketization. In particular, labour subcontracting is a theme that many interviewees discussed. Finally, nearly all interviewees highlighted the relationship between the firm and its projects, which is presented in the second sub-section.

### 7.7.1 Labour only subcontracting

Many interviewees recalled that hundreds of staff such as steel benders and brick layers were once laid off on a previous project in the early 2000s. In response to the question of why these workers were laid off, the manager of the Department of Safety Monitoring explained that:

*'We started to focus on management only as a way to reduce the burden. We don't need to pay for insurance and pensions now. This reduced the firm's costs. Previously, we needed to pay for the labourers every day, no matter whether they worked or not. But with labour subcontracting, we just pay for the days that the labourers work. Labourers leave after the project is finished. Our firm avoids losses in this way.'* (Interviewee 42, Safety Monitoring Department manager)

Clearly, this interviewee explained staff layoffs in terms of his perception of 'what the organisation should do,' which in this case was to 'focus on management only'. Grounded in an organisational role, these layoffs were seen as 'reducing burdens'. Here, the argument seems to be that subcontracting labour saved costs, and emphasis was given not only to avoiding insurance and pension payments but also those incurred by floating workloads. Conversely, the manager of the Human Resource Department interpreted these layoffs by addressing the difficulties of management. *'Management staff and workers were all old friends. It was hard for management staff to manage those labourers'*, he said. Here, the meaning of the layoffs seems to lie in producing opportunities for better management.

Interviewees agreed that most labour-only contractors are family firms. In response to the question of whether labour-only contractors employ long-term staff, the deputy general manager in charge of contract management explained that:

*'Some specialized tasks require long-term employed staff. Normal types of tasks, such as brick laying, don't require long-term employed staff. Normally, these labourers come from the same village or town. Some of them become familiar with the work and bring more family members or*

*fellow villagers to construction sites. It is these types of skilled workers that teach inexperienced ones.* (Interviewee 39, deputy general manager in charge of contract management)

Here, it seems as if many labourers do not have proper training before they begin their jobs, but rather they learn on construction sites from experienced labourers. And while Interviewee 39 seemed to be quite comfortable with this situation, a few interviewees expressed concern over this lack of training. For example, to interpret this situation the manager of the Department of Safety Management remembered what training was like when he began his career, and stated that *'by the time I started my career, all beginners had a master to teach us. The beginners normally spent one or two years learning skills.'* He expressed his hope that proper training could be provided. However, no practices to address such a change was mentioned.

### **7.7.2 Relationship between the firm and project management teams**

Nearly all interviewees addressed the relationship between the firm and its project management teams. One general perception shared by all interviewees was that *'the project management team used to have too many rights'*. For example, the deputy general manager in charge of project management stated:

*'The relationship between the firm and project management teams was loose. Project management teams had too many rights. Since 2003, managing every function line was promoted by North-Sun Construction to reduce the project managers' rights. It is like the relationship between national and local tax bureaus. Once you take control of the capital, you can control the project management team. Project capital was gradually centralized.'*

(Interviewee 39, deputy general manager in charge of project management)

It is notable that the analogue of national and local tax bureaus was used to describe the relationship between the firm and project management teams. Here, emphasis was seemingly given to redefine the nature of interactions between the head office and project management teams. The phrase 'Managing every function line' (*xiantiao guanli*, 线条管理) was addressed, which refers to strengthening functional department control over project management decisions. 'Function lines' refers to different functional departments, such as accounting, human resource management, safety management, quality management, technology management and contract management. The right to make decisions was seemingly taken by these departments, a process that the manager of Human Resource Department labelled as a 'matrix management system'.

Several practices taken to realize ‘managing every functional line’ were addressed by interviewees. For example, the deputy general manager in charge of contract management practices pointed out that project capital was centralized and controlled by the head office, and the manager of the Human Resource Department highlighted the practice of functional departments selecting project management staff. In the latter case, project managers are nominated by general managers and approved by these groups. Other members are nominated by deputy general managers who are charge of additional functional departments. In this way, the head office maintains the right to appoint project management staff. Another practice that home office makes plans in four aspects for every project, including construction, construction sites, commercial and accounting was highlighted by the deputy general manager in charge of project management. Additionally, special inspections organised by different functional departments were mentioned by several interviewees as a way of maintaining the home office’s control over project management teams.

### **7.7.3 Safety management**

Many interviewees addressed safety management in project management activities. Zero accidents seem to have become an important criterion of project management quality. For example, when the deputy general manager in charge of project acquisition described a well-managed project, he said that *‘we constructed the ZLS Tunnel. We did the best job. There were no safety incidents. We finished the work very quickly. We handled the complex geological conditions very well.’* Clearly, ‘no safety incidents’ seems to be a major criterion for evaluating project management work.

Some interviewees also emphasized the announcement of China’s Safety Production Law. In response, North Construction established a Department of Safety Monitoring, under which each project management team was required to appoint a safety manager for each project and ensure that a safety manager is a member of the project lead group. However, the implications of implementing this requirement on the ground will seem to take time to realize. In fact, the Safety Monitoring Department manager admitted that while the firm adopted this practice, it won’t be radical change. As he stated:

*‘...it is a process for a project manager to accept that one more department will intervene. We are required to have one safety manager in each project, and this safety manager must be part of the lead group. However, the safety manager normally has little say. It might be because of their work capability. Most likely it is related to project managers’ support and sensitivity. Some*

*project managers do not support this part of the job. Staff sensitivity to safety is not enough.'*  
(Interviewee 42, Safety Monitoring Department manager)

Here, the emphasis was that project safety managers have little say in project management matters even though they are required to be part of the lead group for all project management teams. It seems that project managers still 'lack of sensitivity of safety'.

#### **7.7.4 Summary**

This section presented interviewees' storylines with respect to project management. Many interviewees explained that North Construction focuses on 'management only'. Some interviewees recalled a major labour layoff event and interpreted this as the starting point for labour subcontracting practices. Many interviewees drew upon cost-saving logic, particularly with respect to reducing costs of insurance and pensions and floating workloads to justify labour contracts. A few argued that subcontracting labour helps to avoid management difficulties. However, a few also expressed concern over the lack of labour training, as most labourers are only employed temporarily for projects by labour-only contractors.

Nearly all interviewees highlighted a change in the relationship between the firm and its projects. The notion of 'managing every function line' was repeatedly used by many interviewees. Here, the argument seems to be that departments in the main office have the right to manage different aspects of projects. Practices the firm adopted to realize the main office's control over projects include lead groups appoint project managers, departments in home office appoint project management team members, centralizing project funding in the main office; and dictating project plans and inspections.

Some interviewees also highlighted safety management practices. Here, it seems that 'no safety accidents' became an important criterion for project management quality. Several interviewees discussed the firm's Department of Safety Monitoring, which was established in response to the new Safety Production Law that requires that a safety manager be appointed to all project management teams as a member of the lead group. However, the implications of this practice on project managers were not seen as radical, as managers are still perceived to lack sensitivity to safety management.

#### **7.8 Multiple roles of the state**

In managers' storylines of past organisational processes, interactions with the state emerged as a common theme. The following subsections present the different roles that emerged in these storylines.



### 7.8.1 Local governments as project clients

All interviewees stated that local governments play the role of the client. Interviewees from North Construction highlighted the conflicts between the responsibility of local governments to invest in infrastructure projects and their budget shortfalls. The deputy general manager in charge of project management referred to the State Council's 2008 policy package to 'save the market' during financial crisis. This package included several infrastructure investment plans worth around 4,000 billion yuan, and is thus widely referred to as the '4,000 billion-yuan policy' (*siwanyi jihua*, 四万亿计划). Here, the argument seems to be that this policy pushed local governments toward greater investment in infrastructure projects. Moreover, interviewees shared the perception that '*local governments don't have money*,' which refers to the fact that local governments do not have sufficient budgets to pay for the level of infrastructure construction that they are required to finance. The deputy general manager in charge of financing and project acquisition attributed this to the proportion of revenue allocated to the central government and local governments. Interviewees agreed that the '*central government takes most of the tax revenue while local governments take less*'. Here, it seems that the revenue local governments receive is not enough to pay for infrastructure projects.

Setting up financing platform firms (*rongzi pingtai gongsi*, 融资平台公司) seems to be one practice that local governments use to address project funding shortfalls. These firms are established by different local government branches to finance infrastructure projects. Examples interviewees gave included the Chongqing City Construction Investment Corporation (重庆城投) and the Chongqing Metro Line Corporation (重庆轨道交通). These firms can receive loans from banks with guarantees such as government promissory notes that assure that all loans will be paid with tax revenue or with land within an administrative area. In the latter case, banks or contracting firms receive pledged land if local governments can't pay their loans. Another practice is promoting various financing modes for projects. Many interviewees recalled the popularity of the BT mode, which requires contracting firms to pay for projects upfront, with local governments repaying the firms five or six years later. In this way, local governments can postpone payment for projects.

Several interviewees addressed a policy, the Guidance of Strengthen Local Governments' Debt Management, that the State Council issued in September 2014. This policy encouraged local governments to '*promote PPP modes, encourage private capital to invest and operate infrastructure projects through concessions*' (State Council, 2014. p. 8). The announcement of this policy is generally viewed as the closing point for BT financing modes and the starting point of PPP financing modes. In

response to the question of the meaning of this policy document, Interviewee 36, the deputy general manager in charge of financing and project acquisition, argued that:

*'This policy forbids local governments to borrow only for infrastructure construction. Previously, local governments constructed infrastructure using fiscal revenue or bank loans borrowed by financing platform firms or the Built-Transfer financing mode. Local governments were found to have debts of over 20 trillion yuan in total. This was very scary. However, local economies and societies need to develop continuously. That's why they promoted PPP.'* (Interviewee 36, the deputy general manager in charge of financing and project acquisition)

Emphasis was given to the debts incurred by financing local infrastructure projects over several years, which was stated as over 20 trillion yuan. Obviously, five or six years of postponement through the BT financing mode is not enough for local governments to absorb the enormous costs of constructing infrastructure projects. According to Interviewee 36, this policy was designed to reduce local government debt by introducing private capital with the PPP financing mode. However, it seems that introducing PPP could not in fact reduce these debts, but rather only extend the payment period. In other words, local governments remain responsible for financing infrastructure projects.

### **7.8.2 Government as a policy maker that frequently changes its mind**

Many interviewees interpreted government as playing a role of policy maker. In addition, they recalled several policy changes and their effects on the firm. For example, the deputy general manager in charge of project management referenced policy changes with respect to home purchases and bank loans:

*'The state's policy and its financing policy were changed. The MOHURD limits house transactions. Banks use a strict financing policy. Medium or small-scale housing developers can't obtain loans from banks. The real estate market is falling. Secondly, the state asked local governments to regulate land transfers, limiting the number of lots and the location of land that the local government can lease every year.'* (Interviewee 37, deputy general manager in charge of project management)

Clearly, Interviewee 37 noticed these policy changes and took them for granted without questioning their rationality. It seems that other actors such as banks have also taken these policies for granted.

### **7.8.3 Government as market supervisor**

According to many interviewees, the government also plays the role of market supervisor, a fact that nearly all interviewees took for granted. For example, the deputy general manager in charge of project acquisition explained that the state combines various contracting firms in order to achieve *'more ordered management over the market.'* Here, the 'state' refers to the SASAC. He argued that:

*'The construction sector is experiencing continuous integration. There are over 100 state-owned contracting firms. These firms will be reduced into no more than 50 in the future. Who eats whom is the question. Of course, those firms that are large-scale and regulated will eat those smaller firms.'* (Interviewee 35, deputy general manager in charge of project acquisition)

It seems that the government manages mergers and acquisitions of state-owned contracting firms. Interviewee 35 interpreted this as *'to avoid excess capabilities and to manage the market in an all-sided and well-ordered way'*. Clearly, the state plays a role of market supervisor.

Another example of government supervision was given by the manager of the Department of Safety Monitoring. He highlighted the government's monitoring and management functions, stating that:

*'We manage and monitor projects directly. We issue notices of rectification to project managers if we find any problems. We are similar to the monitoring and management department in the government over the market. We are this kind of monitoring department in our firm.'*

(Interviewee 42, Safety Monitoring Department manager)

It is notable that this interviewee compared the interaction between the Department of Safety Monitoring to the government's monitoring and management department over the market to explain the role of this new department. Linking these two suggests that Interviewee 42 assumed that the relationship between government and market is hierarchical, as it is with firms and projects.

### **7.8.4 Government as owner of state-owned firms**

Many interviewees interpreted the government as playing the role of North Construction's owner. For example, in response to the question of whether the government allocates any appropriations to North-Sun Construction, Interviewee 35, the deputy general manager in charge of project acquisition, strongly denied this, and stated:

*'The state does not give us appropriations. Instead, we need to submit our profit to the state to support the construction of our state. The SASAC sets the performance targets for our profits. A certain proportion of our profit needs to be submitted to the state. We are not asking anything from the state. Instead, we are contributing to the state.'* (Interviewee 35, deputy general manager in charge of project acquisition)

Clearly, emphasis was given to the that the firm must submit its profits to the state. Here, 'state' refers to the SASAC. It seems that the SASAC also controls the firms' investments, as the state approves all decision-making outcomes.

The SASAC seemingly also takes advantage of its ownership role to require North-Moon Construction to implement government and party policies. The 'eight-point austerity rules' (*baxiang guiding*, 八项规定) was one example highlighted by a few interviewees. These rules were issued by the Central Party Committee in 2012 and called for a 'change in working style' (*gaibian gongzuo zuofeng*, 改变工作作风) and to 'connect with the common people closely' (*miqie lianxi qunzhong*, 密切联系群众): One interviewee stated:

*'After the eight-point austerity rules [were issued], firms were not allowed to purchase expensive cigarettes and wine. It is actually controlled by the SASAC. Layer by layer, North-Moon controls the bureaus, its subsidiaries, the bureaus control their subsidiaries and the subsidiaries control their projects. A lot of meetings were organised to publicize and implement these regulations.'* (Interviewee 35, deputy general manager in charge of project acquisition)

Clearly, the SASAC takes advantage of being the owner of North-Moon Construction in order to promote the Central Party Committee's policies. Organising meetings and inspections within different layers seems to be the practice SASAC uses to promote these policies.

### **7.8.5 Summary**

The interviewees' storylines about their interactions with the state were presented in this section. Local governments often play a client role in projects, but many interviewees argued that local governments operating as clients often do not have large enough budgets to pay for infrastructure projects. This is attributed to the low tax revenues that local governments receive. Interviewees highlighted practices such as establishing financing firms to apply for bank loans and using financing modes such as BT or PPP. However, although new financing mode can postpone payback dates for project debts, local

governments ultimately still pay for projects. In addition, the government was also found to play the role of policy maker and market supervisor as well as acting as the owner of state-owned firms. Finally, a few interviewees argued that the SASAC often takes advantage of its ownership status to promote the government or party policy initiatives.

## **7.9 Summary**

This chapter presented the emergent themes in interviewees' interpretations of how North Construction organised itself in response to marketization. The next chapter will discuss these three case studies by referring to existing academic literature and policy initiatives.

## 8. Discussion

### 8.1 Introduction

These three case studies have provided rich insight into how Chinese contracting firms organise themselves in response to marketization. This chapter discusses the primary findings that emerged from the three case studies that were analysed to address the raised research objectives. Consistent with the sensemaking perspective adopted in this research, attention will first be paid to the continuous changes the three studied contracting firms have experienced. This will be followed by a discussion of managers' roles in this continuous organising process. Here, consideration will be given not only to the common feature that managers anchored their memories in events, but also to managers' diverse interpretations of these events. Emphasis will be given to the active role of managers in responding to 'reality in flight' in organising process according with respect to the sensemaking perspective. This will be followed by discussing managers' extended lexicons evident in their accounts.

The chapter will then compare the three firms' diverse responses to policy initiatives. Particular attention will be paid to how these responses are influenced by the respective organisation's path dependencies. On this basis, the common assumption in the literature that policy initiatives are implemented in homogeneous ways will be challenged, and it will be argued that the research focus should shift to how managers enact policy initiatives and on the implications of their daily practices. It will be further argued that policy initiatives should be viewed as strategic interventions that introduce discursive resources that can be mobilised and socially constructed by situated practitioners.

The chapter will then progress to compare and discuss discursive resources commonly mobilised by managers who participated in the case studies. Particular attention will be given to commonalities and differences in their interpretations of the terms 'bid and tender', 'project management', 'firm', 'government' and 'PPP'. Their storylines will be compared not only to interpretations found in policy documents but also to meanings embedded in Western construction contexts. It will be argued that both change and continuity among the interactions between actors are evident as the result of managers' sensemaking processes toward marketization. Finally, managers' storylines of 'competitiveness' will be discussed in terms of how their storylines resonate with broader discourses. Here, it will be argued that managers selectively draw upon broader discourses to make sense of their day-to-day organisation life.

## **8.2 Constantly evolving contracting firms**

The results of the case study analysis illustrate the complex organising processes embedded within a rapidly changing construction context. The perspective adopted in this study allowed the researcher to identify a range of issues that are commonly neglected in existing literature. It is clear from the identified themes that emerged from the analysis of these cases that multiple activity threads exist in their complex organising process. The studied firms organise themselves in response to perceived market changes, competition situations, noticed policy initiatives and internal tensions. All three firms were in a process of continuous change during the data collection period. The overriding commonality across the three case studies is that all of these firms exist in a continuous process of organising.

As a result, these continuously changing firms stand as a direct challenge to the dominant static assumptions in the existing literature on contracting firms. As Chapter Two discussed, the overriding assumption in the literature is to view firms as static entities or steady points (e.g. Sha, 2004, Lu, 2008), which clearly does not track with the accounts of ongoing organising process provided by the participants in this study. In this respect, the perspectives (e.g. Chia and Langley, 2004; Tsoukas and Chia, 2002; Weick, 2005) that highlight change are more consistent with the accounts provided by managers. It is important to acknowledge that the researcher does not claim that these case study analysis results are objective, factual representations of the respective firms, but rather that they are directly relevant to and indicative of the way these firms will most likely organise themselves in the future.

## **8.3 Managers' memories anchored in key events**

These three case studies also produced managers' storylines of past organising process. Adopting a sensemaking perspective served to reveal the accounts of managers, which is an underexplored topic in existing literature on Chinese contracting firms. One notable commonality in managers' stories is that interviewees consistently anchored their memories to key events. In all three cases, it was common to find that managers referred to diverse events in order to explain organising activities. For example, interviewees from East Construction frequently highlighted events such as, 'Bo was appointed as Municipal Party Secretary in 2008, and construction market in Chongqing started to expand...', or 'in 2012, Bo was announced in a 'dual-principle' status, construction speeds began to slow ...', or 'Sun was appointed as the Municipal Party Secretary in 2014, but he doesn't allow project allocations....' These managers all perceived and responded to these events in their organising experiences. By contrast,

almost all interviewees from South Construction highlighted events such as the Chinese central government's announcement of the 'Ten Rules' and the 'New Eight Rules', which were policies that were issued to constrain housing prices. These policies were commonly referred to as the beginning of the 'falling real estate market in Chongqing'. Managers from North Construction also highlighted the central government's announcement of a package of '4,000 billion yuan to save the market' as the beginning of their perception of an expanding infrastructure project market. Thus, managers from all three firms retrospectively noticed and responded to different events in the complex changing construction contexts within which they work.

Notably, interviewed managers rarely used statistical data to describe market changes, which contradicts some research findings (e.g. Chen, 1997). Interestingly, it was also rare that any manager mentioned concepts such as Porter's Five Forces model (1980). Moreover, interviewees did not mention that they apply 'centralization ratios' (Zeng et al. 2005) or SWOT methods (Lu, 2010) to scan market environments. In this respect, this research supports the arguments of Weick (1995) and Langley et al. (2013) that managers produce narrative explanations of sequences of events to create meaning of events and to initiate actions.

Perhaps more importantly, managers from all three firms referred to different events. For example, managers from East Construction and North Construction frequently referred to local government construction plans. The frequent references to local government plans seem to have been informed by their previous experience of winning publicly-funded projects from local government. However, managers from South Construction notably paid relatively less attention to local government construction plans. This could be explained by their relative lack of experience of acquired publicly-funded projects from such sources. In contrast, managers from East Construction paid particular attention to the attitudes of local government officials toward project allocation. They commonly perceived these officials to be reluctant to intervene in project distribution processes due to the central government's recent inspections of project bidding practices. This attention to the attitudes of officials could have been informed by the managers' past experiences of receiving allocated projects from these officials. It could further be suggested that their past experiences of different types of projects affect which events that managers notice in complex changing environments. Moreover, it is interesting to note that the interviewed managers rarely referred to the material differences between different types of projects. It would seem that previous experience of working for specific clients was much more influential than the differences between types of project. Another example of how past organising



experience affects the attention of managers is their varying emphasis on Party policies and the activities of their parent companies. In particular, several managers from East Construction and North Construction often remarked on the strategic plans and orders of their respective parent companies. However, managers from South Construction rarely mentioned this factor, which could have been influenced by their experiences of when South Construction was a privately-owned firm without a parent company.

Managers also seemingly noticed a range of events that were informed by their past organising experience. In this respect, the sensemaking models that suggest that managers tend to develop their own mental maps of scanning environment (e.g. Tsoukas and Chia, 2002; Weick et al., 2005) may be more meaningful than those that assume that all managers scan their environments dispassionately using universal models (e.g. Cheah and Chew, 2005). Moreover, as Weick et al. (2005) argued, organising activities provide their members with a given set of cognitive categories and habits of action. However, it is important here to again be clear with respect to the role of theory. It cannot be meaningfully argued that this study found this theory to be true in practice. It is more reasonable to say that this particular aspect of sensemaking theory draws attention to the way managers continuously draw from their previous experiences.

#### **8.4 Managers' diverse and sometimes contradictory voices**

It is notable that managers expressed different and even contradictory perceptions of phenomena. For example, interviewees from East Construction commonly described competition as 'inevitable' and 'increasingly cruel' and highlighted their experience of winning projects through local government allocation. Thus, their perception that competition is becoming increasingly 'cruel' is seemingly influenced by their past experience of benefitting from project allocations. Managers from South Construction argued that competition is 'consistently intense' and explained that because the firm had previously been privately-owned it had thus been exposed to market competition. However, interviewees from North Construction commonly argued that competition is 'normal' and highlighted their past experiences of competing in local construction markets. Interestingly, in contrast to practitioners from the other two firms, many interviewees from North Construction also argued that 'the extent of competition is reducing' based on the number of competitors in recent bidding processes to those in previous processes. Thus, the way managers interpret recent changes is seemingly informed by their past experience of winning bids.

Interestingly, some managers from the same firms constructed different meanings from the same events. For example, in the case of East Construction, managers extracted different features from the event that their two marketing bureaus were reconfigured as independent subsidiaries (see Section 5.3.3). In the case of South Construction, managers highlighted different aspects to interpret the event that the business was sold to a local state-owned contracting firm (see Section 6.2.2). In the case of North Construction, managers offered a range of interpretations of the event that the Road and Bridge Subsidiary was withdrawn (see Section 7.3.1). Clearly, managers often selectively extract particular aspects of the same events to produce accounts that make sense to them. Thus, contrary to what Pettigrew (1994) suggested, the research findings suggest that it would be difficult to find any ‘convergent version’ of explanations for events outlined by the case study interviewees. This could be due to the fact that managers tend to extract different cues to create meanings from events (Weick, 1995). This seemingly confirms Weick (1995)’s argument that accuracy seems secondary in these managers’ accounts.

These diverse and sometimes even contradictory perceptions found in the data contrast with the dominant assumption in the literature that managers are rational economic agents who produce ‘objective’ realities (see Porter, 1980; Lu et al., 2013). In this study, interviewees did not refer to any quasi-mathematic calculations in their interpretations of either changing markets or competition. As a result, the data seem to suggest that managers are subjective individuals who retrospectively construct realities that are plausible to them with respect to organising process (Weick, 1995). Moreover, managers initiate actions to respond to changing environments based on these constructed realities. This broader finding relates to the need to focus on ‘reality in flight’ during organising process (cf. Weick, 2005, Langlely, et al. 2013).

### **8.5 Managers’ extended lexicons**

The sensemaking perspective adopted in this study highlighted ‘reality in flight’, which served to address the phenomenon of Chinese managers’ language that has long been neglected in the literature. For all three case studies, the findings show that managers routinely use an extended lexicon in describing their responses to marketization processes. For example, interviewees frequently cited terms such as ‘market’, ‘competition’, ‘corporation’, ‘profit’, ‘loss’ and ‘cost’. This is important, because for managers to even employ such terms illustrates of a significant shift in thinking from the days when top-down state planning was taken entirely for granted. Moreover, complex concepts such as ‘bid and tender’,

‘project management’, ‘corporation’, and ‘competitiveness’ also emerged in the managers’ accounts, although this does not suggest that the meaning of these concepts is commonly accepted.

However, the use of this market-based terminology notably co-exists with a lexicon derived from a previous era. In particular, managers from East Construction and North Construction employed military terms such as ‘soldiers’, ‘troops’, ‘cadres’ and ‘manning quotas’ that were derived from Soviet-style Construction policy discourse (see Section 2.2). This suggests that the use of these terminologies can be seen as constituent parts in the social process of marketization, and that marketization is a process through which military terminologies are hybridized by market lexicons. Both East Construction and North Construction used to be divisions of the Engineering Army and operated for decades in China’s planned economy. Hence, managers in these firms who experienced China’s transition to a market economy have been exposed to debates about marketization over an extended period, and thus could hardly help but to absorb some market terminology. It is worth noting that interviewees from South Construction did not use military terminology, perhaps because it was established as a privately-owned firm in the early 1990s. As such, managers there have little residual memory of the ‘way things used to be’, and hence much less of an imperative to make sense of the market transition.

Moreover, managers from East Construction and North Construction tended to mobilise new terminologies from the ‘behave honest and legally’ policy discourse discussed in Section 2.4. For example, they were found to use terms such as ‘honesty’, ‘regulated’, ‘safety management’ and ‘quality management’ in their interpretations of market behaviour. By contrast, very few managers from South Construction used these terms in their accounts, but rather tended to employ notions derived from ‘social market fitness’ policy discourse. This is perhaps indicative of the firms’ differing trajectories, not least in terms of their interactions with government agencies in their daily sensemaking processes. Thus, it seems plausible that managers selectively mobilise such mixed terminologies as part of an ongoing sensemaking process (Weick, 1995). This mixture of terminologies can be viewed as evidence of both changes and continuity as the Chinese construction sector seeks to respond to policy directives in favour of marketization.

## **8.6 Contracting firms’ diverse responses to policy initiatives**

The case study analysis findings further highlight significant challenges that confront the implementation of policy initiatives in these very different organisations. Particularly, each firm has initiated diverse responses to commonly highlighted policy initiatives. For example, in terms of project management,

interviewees from South Construction reported that the firm still faces difficulties, while interviewees from East Construction and North Construction confirm that they have already accepted the fact that their main offices control their project management teams. Another example concerns diverse responses to PPP policy initiatives. While managers at East Construction were reluctant to procure bank loans and tend to avoid financial risk, managers at North Construction had begun to work closely with their parent company on investing in PPP projects. In addition, managers at South Construction have also begun to work with large-scale contracting firms as their sub-contractors, as the firm does not have sufficient qualifications and financial capacity at the moment to bid for PPP projects. Importantly, it is notable that managers tended to refer to the past experiences of their respective firms to justify their responses, which suggests the importance of path dependency in shaping the opportunities and challenges of contracting firms (e.g. Pettigrew, 1985; Green et al. 2008a). These firms are markedly different from one another, and are composed of multiple subsidiaries that run a range of projects with very different path dependencies.

These diverse responses to policy initiatives challenge the positivist argument in the Chinese construction sector literature that all Chinese contracting firms respond to policy initiatives instrumentally and in a homogeneous fashion. As Chapter Three discussed, researchers such as Zou et al. (2007) assume that policy initiatives are implemented in an entirely instrumental and homogenous manner throughout the sector. Such an assumption seems naïve, as the very idea of a market is grounded in stimulating firms to take a broad range of action to populate that market. Here, the diverse responses given by interviewees further contradict the binary choice of 'implement' vs. 'not implement' for policy initiatives that Shen and Song (1998) suggested. Instead, the diverse meanings and corresponding actions reported by managers in these firms strongly support the argument that managers enact policy initiatives based on their situated context (Bresnen, 2009). In many respects, the enactment of policy initiatives by contracting firms tends to shape the opportunities a given firm enjoys or the difficulties it must face in the future (Green et al., 2008). In addition, this broader finding supports Weick's (1995) and Nicolini's (2013) argument that organisations emerge from members' sensemaking of changing environment.

Perhaps more importantly, the managers in all three firms seemingly tend to rethink their roles and responsibilities during the process of enacting policy initiatives. For example, managers from all cases commonly stated the perception that 'we are market entities' in their responses concerning the bid and tender process and frequently highlighted that 'we are the management layer' in their accounts of

project management. In their interpretations of PPP policy initiatives, interviewees with North Construction highlighted the firm's intended role as a 'construction and investment group', while managers with South Construction emphasized their role as a 'subcontractor for large-scale firms'. Further, managers with North Construction highlighted their perceived methods of interacting with public clients for projects that use the PPP financing model. Clearly, for practitioners the implications of policy initiatives are more nuanced in terms of their influence with respect to their roles and responsibilities through the process interacting with other actors. Moreover, managers tend to make sense of changes based on their shifting identities (Weick, 1995). In this respect, the interviewees' storylines support the argument that policy initiatives should be viewed as strategic interventions, a process that allows practitioners to use discursive resources to rethink their roles (Tsoukas and Chia, 2002; Gottlieb and Jensen, 2012). The following sections discuss the meanings of discursive resources constructed by interviewees from all three firms.

### **8.7 Meanings of 'bid and tender' as constructed by Chinese managers**

The Chinese government's 1999 Bid and Tender Law formally introduced the concept of 'bid and tender', which was confirmed by managers from all three firms. All interviewees seemingly accepted the reality of operating within a market system and the basic principles of market competition, and were in broad agreement that the bid and tender process was the primary mechanism of market competition. Further, these concepts were seen to apply to the appointments of main contractors and subcontractors. Interviewees' use of phrases such as 'introduce a rule for selecting [sub-]contractors', 'regulate cadres' and 'reduce bribery' suggest that the meaning of bid and tender lies in injecting objective rules to reduce individuals' indiscretion in decision-making processes. Hence, the meaning of 'bid and tender' in the Chinese construction sector has been constructed to mean providing objective rules to limit interventions in the project bidding process. Of course, Western managers would take 'bid and tender' almost entirely for granted as a constituent part of a competitive market (see Winch, 1989, Lai, 2000). But for the interviewees, this phrase was commonly perceived to relate to a loss of control.

The interviewees also seemed to agree that many clients are willing to go to some length to manipulate the tendering process. The practice of prequalification was widely viewed as a means for clients to control which firms are awarded contracts. The process of requiring firms to prequalify prior to tendering is of course common in the West, but its credibility depends crucially upon transparency, as firms need to know prequalification criteria in advance in order to have confidence that they are

evaluated fairly. Yet, it seems that many Chinese clients often fail to provide enough information to allow firms to compete on an equal basis. And while this practice conflicts with China's Law of Bid and Tender (National People's Congress, 1999), which explicitly requires clients to provide the same level of detailed information to all parties, several interviewees suggested that clients routinely provide more information to the firms that they favour or with whom they have *guanxi*. Such practices inevitably undermine the credibility of the bid and tender process as a market mechanism. However, the *idea of guanxi* is deeply embedded within Chinese culture and is not so easily overcome.

Many interviewees also alluded to the way in which some contractors manipulate bid evaluation criteria in order to win project bids. Specifically, they stated it is common practice to attempt to obtain information from government officials relating to pre-existing internal price estimates. Such information clearly affords an unfair advantage, as the State Council of the People's Republic of China (1984) states that the '*the price which is the closest to the pre-tender estimated price wins the project*'. Moreover, the common stories of offering artificially low bids to win projects obviously conflict with China's Law of Bid and Tender (National People's Congress, 1999), which states that 'suspiciously low prices should be eliminated'. The interviewees also frequently took issue with subsequent re-negotiation of contracts. Such claims are seemingly consistent with Lingard et al.'s (1998) finding of the long-term consequences of systemic reliance on awarding contracts to the lowest bidder in the UK construction sector (see Section 3.3.1). In addition, the interviewees argued that the difficulties of always accepting the lowest bid has led to the introduction of a revised evaluation criterion in the Chongqing region of '*the price that is the closest to the average price wins the project*'. However, they also maintained that this alternative approach encouraged collusion among competing firms in controlling bid prices and outcomes. Many interviewees also stated that because clients and contracting firms routinely make deals prior to the tendering process, bid and tender is 'just a procedure to go through'. This confirms Sha (2004)'s observation that most practitioners in China view the bid and tender process as a 'mere procedure' to ensure that project distribution is legal. Hence, in this respect, the traditional practices of project allocation still coexist with the introduction of bidding and tendering.

## **8.8 Project management' storylines as constructed by Chinese managers**

The case study results further revealed the acceptance of terms such as 'project' and 'project management' into practitioners' lexicons. The notion of 'project management' was a key component of the managers' accounts of how the construction process is organised. It is evident from the study

analysis that when managers in China discuss 'project management' they are usually referring to the separation of management and labour. Phrased slightly differently, managers are concerned with the projectification of the construction process, not least in terms of redefining the relationships between various parties. Of particular note is the recognition that the parties involved are now *contractual* parties. Thus, the notion of 'project management' relates to contractual arrangements through which projects are initiated and delivered. Such contractual arrangements of different parties of course are taken for granted in the Western construction sector (Winch, 1989; Lai, 2000). As Section 3.3 discussed, in this context projects are assumed to be market products and project organisations are argued to be organised by contractual arrangements without any question of mobilising transaction cost perspectives (Winch, 2001, Walker and Chau, 1999). As a result, the notions of 'main contractor' and 'subcontractor', which the Chinese central government promote by awarding administrative qualification certificates, have therefore been subsumed within the idea of project management.

Equally evident was the way in which the term 'project management' was applied to how firms organise themselves, particularly in terms of their increased reliance on subcontractors who are themselves organised on a contractual basis. As a result, construction workers in China have been exposed to unprecedented levels of change compressed into a relatively short period in which significant numbers were suddenly deemed redundant and euphemisms such as 'reducing the burden' became commonplace. Interviewees then seemingly began to take labour-only subcontracting for granted. This increased reliance on subcontracting practices tracks Winch's (1989) observations of contractors' overreliance on subcontracting to pursue 'structural flexibility' in the UK construction sector. Green (2008) found that the pursuit of structural flexibility leads contractors to over focus on 'contract trading' and become less willing to provide training, which could ultimately harm the sector. This result is seemingly evident in Chongqing, as several interviewees expressed their reluctance to provide worker training.

Moreover, it is also evident that Chinese contracting firms have redefined their interactions with project managers. The interviewees emphasised the role of the 'home office' as a centralized platform for control, while over time the role of project managers has been recast as 'chef' that follow instructions. This seemingly consistent with Chen and Partington's (2004) observation that project managers commonly perceive themselves as 'employees of the firm', rather than 'independent manager of the project'. This is seemingly different from the role of contractor-based project managers in the West. Specifically, in western construction sectors, project managers operate under advisory control and

receive technical advice and assistance from division engineers (Winch, 2004), with the 'home office' seemingly exercising less control in this process. However, the meaning of the term 'project management' as constructed through Chinese practitioners' accounts seems to differ in diverse ways from those in the western construction context (cf. Morris, 2012). This suggests that researchers such as Lu et al. (2008), who take for granted that 'project management' in China means the same as in the West, should pay more attention to the different meanings of concepts such as 'project management' in practice.

### **8.9 Meanings of 'firm' constructed by Chinese managers**

The term 'firm' was another key constituent in the accounts produced by the interviewees. This could be viewed as indicative of China's notion of the 'modern enterprise system' in the 'social market economy fitness' policy discourse that was first promoted in 1992 (see Section 2.4). Here, it is evident that managers commonly associated the term 'firm' with stories of transitioning towards 'independent market entities'. Particular emphasis was given to the fact that state-owned contracting firms are now required to win projects actively by themselves. Evidently, special operations and project acquisition departments were established in all three studied firms. Moreover, performance indicators that emphasize the value of new contracts that are linked with managers' salaries are seemingly the primary tool for encouraging state-owned contracting firms to actively bid for projects.

As part of China's transition to a market-based economy, the notion of employment contracts were introduced in East Construction and North Construction to break the 'iron rice bowl' relationship between firms and staff, and the introduction of performance-based salaries was seen as a tool to incentivise managers. However, while many interviewees from East Construction and North Construction argued that lower-level staff can be easily dismissed, upper-level managers seemingly kept their permanent positions in these firms. This could be interpreted as the result of consistently framing the role of managers as 'cadres of the party/government'. This emphasis on party/government cadres suggests that managers in these firms must follow orders, just as soldiers in the former Engineering Army had to obey their supervisors. Clearly, for these two firms, the relationship between the firm and its staff is a mixture of the old and the new. However, this particular relationship clearly differs from North Construction's situation, as its managers commonly highlighted that they are employees who 'earn wages'. This type of mixed relationship clearly also differs from the taken-for-granted employment relationship suggested by the transaction cost perspective (Coase, 1937).



In addition, this sort of relationship can potentially affect managers' values and priorities. For example, managers with East Construction and North Construction commonly value scale over profit generation in their decision-making processes. This is evident in managers' emphasis on maintaining the scale of their respective firms and in their interpretations of why to pursue public housing projects for little profit. In addition, this shows in managers' explanations of they consistently work to acquire international projects, often at a loss. By contrast, perhaps influenced by their past experience as a privately-owned firm, managers with South Construction commonly highlighted the importance of profit and argued that increasing scale without increasing profit is undesirable. The different priorities given to scale and profit were commonly suggested as one primary difference between state-owned and privately-owned firms. Moreover, these managers' prioritization of scale is notably different from those of western managers, who are argued to prioritize profit (Fellows and Liu, 2017; Leiringer et al., 2009). Moreover, the emphasis on scale over profit can be viewed as a holdover of the expectation embedded in the policy discourse of 'Soviet-style construction' of building organisations to fulfil material outputs and quotas (see Section 2.2). Additionally, managers from East Construction and North Construction also commonly perceived that priority was given to following set procedures over efficiency. This obviously contradicts the assumption in TCP that efficiency is a firm's first priority (Williamson, 1985). Therefore, managers in state-owned contracting firms should not be assumed to share the same values, beliefs and assumptions of their western counterparts as some researchers have suggested (see Sha, 2004; Lu, 2008).

The fact that some managers prioritize scale and following procedures was seemingly supported by the understanding that state-owned firms could not go bankrupt as a result of competition. In fact, the interviewees agreed that government officials will always save state-owned contracting firms from bankruptcy. Notably, the government officials that emerged in managers' storylines are not necessarily those that work in their organisations, but rather those with whom their senior managers have good *guanxi*. For example, the interviewees listed practices such as convincing banks to postpone loan repayment and allocating projects to state-owned firms in financial trouble. Thus, these storylines sharply contradict the state's original intention to encourage managers in state-owned firms to take their own risks and not depend on government support (the Chinese State Council, 1992). Moreover, the still widely employed 'father-son' metaphor in the sector suggests that state-owned firms' strong dependence on government intervention will not be easy to overcome. This notion also contradicts the assumption in classic western economics that failed firms should go bankrupt in order to best reallocate resources (cf. Coase, 1937, Williamson, 1985). Moreover, the interviewees agreed that no privately-

owned contracting firms enjoy such support. In other words, unlike privately-owned contracting firms or their western counterparts, state-owned firms are not quite 'independent market entities'.

The case study results further highlighted several contradictions that confront senior managers in Chinese state-owned contracting firms. As part of their transition to independent market entities, East Construction and North Construction each established a Board of Directors and a Board of Supervisors to redefine the government's role as owner and separate it from daily management activities. As a result, the firms' managers are ostensibly authorized to make their own decisions (also see Section 2.4). However, the interviewees stated that directors and managers in these two firms are required to be party members. Further, managers with East Construction and North Construction maintained that they are obligated to follow government and party policies, although they frequently conceded that they had a range of options in terms of how best to respond. However, it is notable that managers with South Construction did not express any such perceived obligations, which of course are not typically present in western construction sectors. In a neo-liberalist context, managers are expected to respond to policy initiatives only if they are convinced by the business case (see Green, 2011; Schweber, 2013).

The perceived obligation to follow Party orders can be viewed as one that stems from longstanding party organisation of state-owned contracting firms. Here, the role party organisations play is to ensure that firms follow Party policies. The interviewees agreed that the role of the Party in firms has been increasingly emphasised in recent years, as evident by the widely-repeated slogan of 'make sure of the Party's absolute leadership'. As a result, decision-making procedures have been changed in these firms, and the Party secretary has become the final decision maker, which ensures that decisions are consistent with Party policies. Specifically, this emphasis on following Party policies contradicts the assumption in classic western economic theories, such as TCP, that firms should have full decision-making rights (Coase, 1937; Winch 1989). This strongly confirms Mayo and Liu's (1995) finding that under the China's current system, 'total autonomy for state-owned contracting firms' can never be achieved.

### **8.10 The multiple roles government play in Chinese managers' storylines**

The case study findings further serve to highlight the roles that governmental organisations play in the day-to-day organising life of managers. Evidently, managers from all three firms interact with a range of government organisations that, despite their different roles, they typically referred to as the 'government'. This suggests that these organisations are commonly viewed as being under central

government control. Clearly, this is different from the Western construction context which, as North (1990) argued, political systems comprise different interest groups that compete to legitimize different priorities. In the managers' storylines of their interactions with government organisations, they seemed to agree that government organisations tend to play multiple roles in the industry, including project clients, policy makers, market supervisors and firm owners. However, while these roles perhaps sound similar to their counterparts in the Western context, the nuanced differences lie in the ways that managers from state-owned contracting firms interact with the government.

#### **8.10.1 Government as project client**

Managers from all three firms commonly highlighted the role local governments play as project clients. Local officials are required to fund infrastructure projects in their respective administrative regions with revenue that includes central government appropriations, tax revenue and other income. However, as Section 8.7 discussed, government officials were often seen to manipulate project bidding outcomes, and managers seemed to be particularly sensitive to local officials' attitudes toward interference in project bid and tender processes. It was equally evident that local officials take advantage of their role as project clients to promote change initiatives such as BIM.

In addition, it was commonly argued that local government revenue is generally insufficient for funding infrastructure projects, the demand for which is large due to rapid urbanization. To address these revenue shortfalls, local officials typically establish financing platforms to obtain bank loans using future fiscal revenue and property as collateral. As local governments are commonly deemed to pose low financial risk in terms of repayment, it is understandable why managers tend to be keen on projects funded by local governments or their financing platforms. Another response to project capital shortfalls is central government financing models such as BT and PPP (see Section 2.5.2), which require contracting firms to finance projects in advance and recoup their losses after construction. This seemingly is the reason why managers commonly highlighted the importance of financing capabilities in winning project bids. In this respect, managers' responses about how to win project contracts are embedded in the social practices of their context. As Nicolini (2013) suggests, practitioners' sensemaking processes are grounded in their context.

#### **8.10.2 Government as policy maker**

The managers' common storyline that 'the government announced a law/regulation/policy...' reflects the central government's role as policy maker in the Chinese construction industry. This finding is

consistent with the Chinese central government's self-defined role as regulator (Luo and Gale, 2000). It is notable that managers also commonly highlighted that the central government frequently changes its policies, which is supported by Lam and Chen's (2004) analysis of regulations regarding foreign designers and contractors that changed several times in a decade. This suggests that policies can hardly be viewed as immutable rules if they keep changing. In this respect, the research findings support the notion that transitional economies such as China's lack stable interaction rules between actors, which are the foundation of efficient markets (see Child, 1996; North, 1990). North (1990) further argued that stability between market actors is key in reducing the uncertainty managers face. This could explain why interviewees consistently highlighted the necessity of noticing policy changes, as was discussed in Section 8.3.

As some interviewees pointed out, what further underscores the uncertainties faced by managers is that government officials themselves frequently seem to ignore policies. As stated previously, local governments in China also operate as project clients. However, interviewees commonly stated that governmental officials supersede market-based principles of project distribution by allocating projects for the purpose of 'attracting investment' or 'regional economic development'. As Lam and Chen (2004) suggested, these actions could be viewed as part of the government's discretionary power to adapt rules to local circumstances. Thus, senior government officials seemingly prioritize flexibility in economic goals over than following regulations. Moreover, Sha (2004) further argued that government officials seemingly pursue personal interests as incentivised by their own performance indicators.

Embedded in these uncertainties and in complex environments that lack stable rules, managers seemingly tend to seek personalized interactions. One notable example is that managers seek out contacts to obtain information on local government's payment capabilities when bidding on projects rather than relying on government-published fiscal information. This is also evident in the practice of government-owned contracting firms finding local practitioners to help them gain access to local officials. Interviewees also highlighted the importance of personal *guanxi* in winning bids and distinguished this practice from 'business to business' interactions. This finding is seemingly consistent with those of transitional economy researchers such as Narayanan and Fahey (2005), who argue that relationship-based interactions are distinct from institutional perspectives. Here, the broader implication is that practitioners embed their sensemaking in their given context.

### 8.10.3 Government as market supervisor

The interviewees also commonly perceived the government as playing the role of market supervisor. The managers' perceptions of this role were seemingly constructed through their interactions with government officials. It is notable that in order to promote project management practices in China, the MOHURD incorporated the designations of 'main contractor' and 'subcontractor' into its administrative requirements for awarding qualification certificates. This suggests that the government's practice of using administrative avenues to promote changes is not easy to overcome. It is also notable that managers from all three firms commonly referenced inspections organised by both central and regional government organisations, such as MOHURD, CQMCHURD and its auxiliaries, the Supervisory Office for Construction Safety and the Supervisory Office for Construction Quality. Aside from these inspections, government agencies also seemingly supervise market competition by integrating large-scale contracting firms officially owned by the SASAC, which could be interpreted as a tool that government uses to supervise market competition. Clearly, the interviewees suggested that government plays a supervisory role in the market consistent with China's 'socialist market economy' strategy, in which the state positions itself as macro-controller of the market (see Section 2.4). Notably, this practice differs from the western construction context, in which governments typically try to guide firms using market-based practices. In this context, firms typically enact changes that they are convinced are in their best interest, not by government policy. Here, the argument is that the Chinese government promotes changes through bureaucratic procedures rather than by empowering the market.

Another common storyline that managers shared is that many practitioners appeal to the government in matters of contract enforcement. For example, peasant workers often directly contact local governments in salary disputes rather than appealing to the court system, and managers of both state-owned and privately-owned firms recognize the necessity of government in regulating the behaviour of senior managers. In addition, these accounts reinforce the fact that the government plays a role of market supervisor in requiring practitioners to follow regulations and honour contracts. Here, the Chinese government seemingly plays the superior role in enforcing regulations among market actors and tends to downplay the rules of actors' interactions in the market. This is a fundamental difference between Chinese and western construction sectors, as in the West market activities are regulated by legal systems in which governments typically have the same legal standing as privately-owned firms. As North (1990) argued, in western contexts court systems play the role of contract enforcer and prioritize impersonal rules of actors' interactions. In many respects, the managers' storylines of their interactions

with government organisations supports Winch's (2000) and North's (1990) argument that interactions between state-owned firms and actors such as government are embedded in a national context.

### **8.11 Interpretations of PPP as constructed by Chinese managers**

This discussion has previously touched upon the public-private partnership (PPP) model with respect to the diversity of responses among the interviewees. However, it is important to further develop the argument regarding the meaning of PPP as constructed by the practitioners in this study. Nearly all interviewees highlighted the importance of the 2014 PPP policy initiative and agreed that the government requires firms to use the PPP financing model for most infrastructure projects. Thus, the Chinese government has seemingly taken advantage of its role as public project client to promote policy initiatives such as PPP. The interviewees explained that the central government promotes this model in order to address the high debt loads of many local governments' as a result of consistently borrowing to fund infrastructure projects that they were required to construct. It was in this context that the PPP policy initiative was announced. Thus, the rationale for the PPP financing model differs from the PFI initiative in the UK in that it was created to 'add value for the clients' (Leiringer et al., 2008).

Managers commonly agreed that large-scale state-owned firms typically act as primary investors in infrastructure projects in the PPP financing model. East Construction and North Construction and their parent companies seemingly invest in infrastructure projects to various degrees. The interviewees consistently maintained that privately-owned firms are rarely in a position to become involved in these projects, which supports Zhang et al. (2015)'s finding that privately-owned Chinese firms have largely been squeezed out of participating in PPP projects. This can be argued to be indicative of government officials' longstanding biased favour toward state-owned firms and the fact that privately-owned firms consistently struggle to secure bank loans. Clearly, this differs from the State Council's policy (2014), in which PPP was touted as a model for cooperation between the government and private investors. Ironically, in the translation of 'PPP', the term 'public' refers to government, while 'private' refers to state-owned firms, which is consistent with Zhang et al.'s (2015) findings.

The willingness of state-owned firms to invest in infrastructure projects is likely influenced by their past experiences with the Built-Transfer (BT) and Build-Operate-Transfer (BOT) financing models. As Section 2.5 discussed, China's Ministry of Construction introduced these two models prior to PPP. Under the BT and BOT models, contracting firms were required to assume all construction costs in advance and were paid back upon construction completion. This seemingly eased managers into adopting the same

practice under the PPP model, albeit under the label of ‘project investor’. Here, investors are given concession to operate projects for 20-30 years and collect all revenue, after which the properties are returned to the local government. Projects that use the PPP financing model include bridges and roads, which can generate substantial revenue from fees, but also those that do not directly generate returns through their operation, such as public housing, parks and renovations around Olympic venues. For these latter projects, it is notable that local governments retain control of revenue management in order to guarantee payment. Any payment risks are typically underwritten by local governments, a process that serves as a guarantee to contractors. This model differs from the PFI projects in the western construction sector, in which contracting firms assume all upfront costs and then hope to secure returns from stakeholders (Leiringer et al. 2009). In the Chinese construction context, the difference between the PPP and BT financing models seems to lie in the length of their repayment period. The typical repayment duration for PPP projects ranges from 20-30 years, while it is 3-5 years for BT projects. Thus, many interviewees viewed PPP as an extension of the BT model with a longer repayment period. This could be why many researchers, such as Zhang et al. (2005) categorize these models into the same group.

Perhaps even more important were the nuanced implications of PPP policy initiatives in managers’ perceptions of their roles and the resultant organisational restructuring, a topic that is commonly underemphasized in existing construction management literature. As Chapter Three discussed, the existing literature on PPP primarily focuses on identifying critical success factors (e.g. Osei-Kyei and Chan, 2015), reviewing announced policies and actors involved in PPP projects (e.g. Zhang et al., 2015), without touching upon actors’ responses to these factors. Based on the study findings, managers at all three firms have changed their perceptions of their firm’s role over time. For example, managers with North Construction commonly describe their firm’s role as ‘an investment, construction and operation group’, and activities such as recruiting financial expertise and establishing financing and investment departments were evident. Some managers even expressed the tendency to subcontract construction tasks and focus instead on capital management and providing construction management knowledge. Managers with East Construction commonly expressed the concern that the firm can only work as a general construction contractor, as it is constrained by its parent company from investing in projects. Managers with South Construction stated that they were currently working on a project subcontracted by a general contractor. Clearly, contracting firms’ roles have changed with respect to the PPP policy initiative, which has seemingly resulted in greater subcontracting tiers within the Chongqing construction market. However, it is also evident that the three firms also commonly construct projects

under traditional financing arrangements. As Leiringer et al. (2009) argued, based on their observation of contracting firms' responses to PFI projects in the UK construction sector, it would be naïve to assume that the PPP policy initiative could bring about radical change in China.

Based on the analysis results, it seems that interviewees in all three contracting firms have largely continued to conduct the same professional tasks that they have done in the past. Despite this, one nuanced change managers highlighted is that construction staff now take the more responsibility for site preparation. It seems that clients took the introduction of the PPP model as an opportunity to shift this responsibility to contracting firms, who now operate as both investor and contractor. As the clients in this model are local governments, the contracting firms seemingly do not dare to argue with this shift, and in response have recruited new staff to coordinate construction site preparation. This resonates with Gottlieb and Jensen's (2012) case study finding that project management actors collectively make sense of 'partnering' by renegotiating their roles and responsibilities. For the current study, this suggests that practitioners tend to consistently update their institutionalized roles and responsibilities in the sensemaking process, as Chan (2018) and Linderoth (2017) have argued. Here, the broader implication lies in a recursive institutional process through which institutions are made and remade through practitioners' sensemaking practices (Nicolini, 2013).

### **8.12 Managers' diverse storylines about competitiveness**

As presented in the study results, changes in Chinese market systems have introduced the term 'competitiveness' into the interviewees' lexicon. Managers' storylines about competitiveness concern how they win project bids through competition. Notably, managers did not tend to employ the term as an 'object', which contradicts researchers such as Lu et al. (2008), who argue that competitiveness 'could' be gained by applying provided recipes. However, instead of mechanistically following these recipes, managers mobilised the word 'competitiveness' to help them make sense of their experience. By investigating managers' storylines related to 'competitiveness', this study provides insight into how Chinese managers' enact the term 'competitiveness' and its related material manifestations in contracting firms' restructuring processes.

To various degrees, the interviewees' storylines about competitiveness resonate with the literature on competitiveness theory and broader policy discourses to various degrees. For example, managers from East Construction and North Construction discussed the professional teams and advanced technological equipment they employ in large-scale construction projects, which could be viewed as resonating with



the terminology of the resource-based view (Barney, 1991). In addition, interviewees' stories about winning projects on the basis of the firm's reputation for efficient project management also resonate with the resource-based view's terminology of 'reputation' (Barney, 1991). Moreover, stories of learning new financing modes such as BT and PPP resonate with the dynamic capability view's concept of 'learning' from the dynamic capability view (Teece et al., 1997). Managers from all three firms commonly highlighted financial capacity as a key component in winning project bids. This common perception could be viewed as one that is embedded in the popularity of project financing models such as BT and PPP, which require contracting firms to fund projects in advance. However, managers' stories of how their firms benefit from their financial capabilities rarely found resonance with the competitiveness literature for Chinese contracting firms (e.g. Lu et al., 2008). Of course, this could be because at the time Lu et al. (2008) was published, financing models such as BT and PPP were not promoted in China by public clients. However, this is more likely due to the fact that the sensemaking perspective adopted in this research allows practitioners' interpretations to be heard, which has long been neglected by the dominant positivist research approach.

Many interviewees related stories of winning project bids by leveraging their *guanxi* with government officials. Generally speaking, the construction management literature considers *guanxi* as related to the competitiveness of Chinese firms (Lu et al., 2008). The fact that most interviewees discussed *guanxi* can be viewed as a reinforcement of the system in the Chinese construction sector of merging conventional business principles with personalized *guanxi* approaches. As Section 8.7 discussed, both public and private clients in China frequently manipulate project bidding procedures to favour the contracting firms with which they have *guanxi*, which runs contrary to conventional business principles. Managers also commonly highlighted ways that they tend to establish *guanxi*, such as frequent visits with senior managers and organising meetings with senior officials. These activities mirror the findings of Kao et al.'s (2009) case study research on UK managers' activities in realizing 'local embeddedness'. The authors found that the managers they studied tended to emphasize the recognition of local stakeholders' needs and engagement with local policy agendas. However, the difference between these findings and those of the current study lie in the fact that the Chinese interviewees emphasised the need to recognize and serve government officials' attitudes and desires. This finding could be viewed as embedded in the commonly highlighted fact that Chinese government officials tend to disregard professional business principles in allocating projects (see Section 8.10). Here, the controversy of course lies in becoming over-embedded in particular relational ties and the risks of corruption in the Chinese construction sector.

In all three cases, managers' storylines were found to strongly resonate with the broader policy discourses reviewed in Chapter Two. For example, nearly all managers frequently referred to the benefits of being part of a group, an idea that tracks with the social market economy fitness policy discourse (see Section 2.4). These benefits include project allocations from parent organisations and using their qualification certificates and project records to assist in project bidding processes. Managers also highlighted activities such as reconfiguring firms into centres to strengthen key areas such as design and research. These activities were commonly justified as helping to 'establish supply chains' inside the firm. However, it seems as if managers also expect these 'supply chains' to operate in an administrative fashion, not in a market fashion as is commonly seen in the western construction sector (e.g. Kao et al., 2009). Moreover, interviewees' emphasis on 'group companies' and 'supply chain' rationales seemingly contradicts their storylines of seeking structural flexibility. Paradoxically, managers from all three firms also commonly highlighted achieving structural flexibility by outsourcing construction activities, and state that they primarily focused on management activities and took labour subcontracting for granted. Interviewees with South Construction mobilised this idea even further, as the firm tends to also outsource project management activities. Here, the rationale seems to lie in using floating workloads to best manage market competition. In addition, the notion of outsourcing labour seems to have come from the 'project way construction' concept embedded in the 'social market fitness' policy discourse (see Section 8.8). Further, the Chinese managers' pursuit of structural flexibility tracks with research on their western counterparts, such as British contracting firms (e.g. Winch, 1998).

The contradictory storylines of 'group benefits' and 'structural flexibility' could be attributed to the notion that managers negotiate a plethora of day-to-day paradoxes and contradictions in part by drawing upon broader institutionalized discourses to legitimize their actions. As Abolafia (2018) argued, any failure to invoke broader institutionalized discourses would increase the risk and reduce the legitimacy of managers' rationales. Thus, the broader emphasis here lies in understanding the contextualized processes through which managers introduce discursive resources such as 'competitiveness', a topic that is commonly neglected within construction management research literature.

### **8.13 Summary**

This chapter discussed a number of empirical insights into the interplay between Chinese contracting firms and environment within which they operate. Of particular importance is that the sensemaking perspective applied in this research underscored the nature of consistent change in organisations such

as contracting firms. This contrasts with many previous findings in the literature on Chinese contracting firms, which tend to treat firms as static entities. Of particular interest was the active role managers play in organisational processes. The way managers produced narrative explanations of sequences of events that they use to initiate their actions was central in understanding the interplay between the case study firms and their continuously changing environments. If the organising process is to be understood, it cannot be accessed without understanding 'reality in flight'. Hence, the research emphasis should be shifted away from providing prescriptions of what firms should do in order to understand the way managers negotiate coherent accounts of the environment within which they operate. Thus, the managers' extended lexicon that they produced in their accounts is argued to be an important part of their realities of marketization.

In all three case studies, managers' diverse responses to policy initiatives were more nuanced than the usual dichotomy of 'implement' vs. 'not implement'. The research findings show that managers tended to enact policy initiatives according to their situated organisational contexts that were in turn shaped by path dependencies. In this respect, the three cases provided a sharp contrast to the many idealised accounts in the literature that all contracting firms implement policy initiatives in a homogenous way. As a result, the announcement of policy initiatives has been argued to be the beginning of the process of change. Further, the three cases demonstrated how managers' roles, responsibilities, and interactions with other actors change during the process of enacting policy initiatives. Moreover, these initiatives are argued to be strategic interventions that provide discursive resources that practitioners can mobilise to legitimize their actions. Therefore, the meanings of these introduced discursive resources are socially constructed by situated practitioners, a topic that remains largely unaddressed in the literature.

Perhaps the most significant finding from the case study analysis concerns the meanings of discursive resources that managers construct through managers' enacting process. The introduction of market mechanisms such as 'bid and tender' routinely cause practitioners to rethink their roles and their interactions with others. In addition, bidding and tendering cannot be understood in isolation of social markets and their associated ongoing processes of projectification. It has further been suggested that bidding and tendering processes are routinely distorted by deeply embedded practices of *guanxi*. Moreover, practitioners seemingly feel diminished by the apparent necessity to relinquish control to the marketplace. Hence, bidding and tendering is often perceived as a bureaucratic process that lends itself to manipulation in the cause of reducing uncertainty.

In this study, 'project management' can be understood as the projectification of construction processes, which can serve to redefine relationships between parties. Here, practitioners redefined their roles as 'focusing solely on management', which resulted in a rapid reduction of directly employed workers and increased reliance on subcontractors. Practitioners also took project management as a means to redefine the relationship between firms and project managers. Thus, decision-making powers were seemingly centralized into the respective firms' head offices, while the role of project managers was downplayed to that of 'chef' who do what they are instructed to do.

Managers also seemingly accepted the fact that as a 'firm' they must actively compete for projects and introduce employment contracts in order to break the longstanding practice of the 'iron rice bowl'. However, while low-ranking staff were commonly perceived as employees who could be easily dismissed, managers were clearly reluctant to shift into their new roles as 'employed staff' and preferred to remain as 'cadres of government/party'. Based on this identity, managers in the studied firms tended to privilege scale over profit and following procedure over efficiency. These divergent values and priorities were seemingly embedded in the fact that government officials protect state-owned firms from going bankrupt. Paradoxically, during their firms' transition towards to 'independent market entities', managers retained the perception that they are obligated to follow government and Party policies. This perception is reinforced by the configuration of their party organisations and emphasis on the 'party's absolute leadership'. As a result, it has been argued that under China's current system, 'total autonomy for state-owned contracting firms' can never be achieved.

In managers' daily organisational lives, the government plays multiple roles, including project client, policy maker, market supervisor and owner. As the primary clients for infrastructure projects, common funding shortfalls of local governments have shaped the way that managers operate in contracting firms, as the promotion of financing models such as BT and PPP inherently require firms to finance construction projects in advance. Moreover, the government serves as a policy maker that often changes its regulations and thus largely fails to provide stability in the construction sector, which seemingly increases managers' reliance on personalized interactions rather than impersonal business practices. Perhaps most significantly, the Chinese government habitually promotes changes through bureaucratic procedures rather than empowering the market. As such, the central government seemingly retains its supremacy over the rules of market competition, which has been argued as a fundamental difference from its counterparts in the West.

Managers commonly accepted the new PPP scheme as the central government's preferred financing model. However, it seems that most 'private' investors in China are state-owned firms, including contracting firms, while privately-owned firms tend to be squeezed out of the market. As a result, multiple subcontracting tiers are emerging in Chongqing construction sector as the result of practitioners' enactments. Moreover, public clients are seemingly becoming 'less willing to take the responsibility of land preparation, particularly building demolition' and tend to shift this responsibility to contracting firms. In other words, actors' tend to consistently update their institutionalized roles and responsibilities during the PPP process.

Managers also tended to mobilise the concept of 'competitiveness' to make sense of their experiences instead of mechanistically following any predetermined competitiveness prescription. Moreover, their emphasis on '*guanxi*' seems to be embedded in a mixture of business principles and personalized *guanxi*-related practices. Managers' common storylines of 'financing capability' are embedded in the popularity of project financing models such as BT and PPP, which require firms to fund projects in advance. Here, the argument is that these managers continuously construct various meanings of 'competitiveness' to make sense of their day-to-day organising life. As a result, the legitimacy of managers' storylines lies in their resonance with broader sensemaking narratives.

## 9. Conclusion

### 9.1 Introduction

This chapter summarizes the key research findings that relate to the five research objectives stated in Chapter One. First, the research aim and objectives are re-stated for ease of reference. Thereafter, the extent to which the research objectives have been achieved is addressed together with a summary of the key supporting arguments. This will be followed by a summary of the overall contribution to current knowledge. Finally, the research limitations are discussed and recommendations are offered for future research.

### 9.2 Research objectives

The thesis has described how the Chinese construction sector has experienced (and is still experiencing) the complex transition towards 'marketization'. The adopted research focus reflects a particular interest in the way Chinese contracting firms organise themselves as part of the ongoing processes of marketization. It has been argued that this is an issue that has to date been underemphasized. The existing literature on Chinese contracting firms is characterised by an underpinning static 'being ontology' which serves continuously to under-emphasise the importance of change. To address this widespread shortcoming, the current study offers an alternative perspective informed by sensemaking. The adoption of a sensemaking approach has served to accentuate important aspects of reality that have been consistently neglected in the construction management literature. The research objectives as reproduced below are directly informed by the adopted sensemaking perspective. The emphasis lies on processes of continuous change rather than stark transitions between supposedly stable and fixed end-points. The sensemaking approach notably affords managers within construction firms with a degree of agency in shaping the environment within which they operate. It is important to emphasize that sensemaking approaches are not seen solely in terms of abstract cognitive processes, but rather as comprising a continuously unfolding combination of material and discursive practices. Sensemaking practices therefore become synonymous with the very act of organising. This perspective has shaped this thesis from the outset, and is embedded within the research objectives as initially stated in Chapter One:

- 1) To establish how managers within contracting firms interpret the environment within which they operate;

- 2) To explore the lexicon of terms mobilised by managers within Chinese contracting firms in describing the challenges which they face;
- 3) To understand the diverse range of organisational responses by Chinese contracting firms to the unfolding processes of marketization;
- 4) To investigate the roles which managers ascribe to themselves in the continuous process of organising;
- 5) To ascertain the extent to which policy initiatives shape the day-to-day practices of practising managers in Chinese contracting firms.

The methodology adopted to achieve these objectives was irrevocably shaped by the aforementioned sensemaking perspective. A case study approach was adopted in this research as a means of accessing 'reality in flight' in accordance with Tsoukas and Chia's (2002) concept of a 'becoming ontology'. It was this perspective that provided the underpinning logic for Chapter Two. Furthermore, it is this same emphasis which distinguishes the current research from the previous studies reviewed in Chapter Three. The other distinguishing feature is the degree of agency which is accorded to individual managers. Policy announcements have clearly been important in shaping the context in which Chinese construction firms operate, but they have by no means been deterministic. The case study analysis results have presented new evidence regarding the way that Chinese construction firms continuously re-organise themselves in response to an ever-changing policy environment. However, the results also demonstrate how managers ascribe themselves with roles which directly impact on the operating environment experienced by themselves and others. Thus, managers operate in a process of continuous mutual adjustment in which they seek to adapt to the policy landscape within which they operate and to ascribe themselves with positive roles and self-identities. The described research has used multiple data collection methods in order gain unique access to the three selected firms. Caution of course is necessary in generalising too much from the selected sample, but there is little reason to think that the issues highlighted in this study are limited to the firms in question. Of particular note are the insights gained into the limited degree of autonomy enjoyed by state-owned firms and the mechanisms through which they are obliged to adhere to policy directives. In summarising the contribution of this study to knowledge, it is initially appropriate to address each research objective in turn.

### **9.3 Summary of the main conclusions in respect of the stated research objectives**

The previous section rehearsed the previously stated aim and objectives of the current research. This section summarizes the main arguments of this thesis in accordance with each of the above-mentioned research objectives in turn.

#### **9.3.1 Research Objective One: To establish how managers within contracting firms interpret the environment within which they operate.**

The described research has assembled extensive empirical evidence relating to the above research objective. This has been presented at length in chapters five, six and seven. The interpretations of the interviewed managers have been seen to hinge on recalled memories of key events derived from their past experience which thereafter become key anchor points in their articulated storylines. This finding directly supports the contention that organisational members produce narrative interpretations of the sequence of experienced events in order to interpret the present (cf. Langley, 2013; Weick, 1995). Furthermore, managers from the three studied firms have been seen to extract different events from their previous experience with direct consequences for subsequent actions. This concurs with the theoretical argument that managers navigate the changing environment based on derived mental maps (cf. Weick et al, 2005). It is however important to emphasise that such a contention could never be categorically proved empirically. Nevertheless, the findings do concur strongly with Tsoukas's (1994) argument that the external 'reality' is not given, but subject to continuous individual interpretation. Hence the operating environment is never fully describable in any objective sense, and as such can never be meaningfully represented on the basis of 'factors'.

The above described process also aligns with the theoretical contention that individuals derive strategic resources by drawing from their past experiences. However, it is important again to be clear regarding the role of theory. It cannot be meaningfully argued that this 'theory' has been found to be true in practice. But, it is reasonable to argue that this particular aspect of sensemaking theory draws attention to the way managers interpret the present by continuously drawing from their previous experiences. There is certainly plenty of empirical evidence to suggest that even managers from the same firms produce diverse, even contradictory, interpretations of past events. This concurs with the theoretical argument that organisational members continuously produce interpretations that are plausible to themselves and the audiences with which they interact. Plausibility is hence routinely privileged over accuracy.



Of equal importance are the empirical insights into the way in which managers continuously produce interpretations of key events as an essential part of the organising process. On the basis of the evidence presented in the three case study firms, there is much to commend the theoretical argument that organisations are in a state of continuous becoming (cf. Chia, 1995). In other words, the day-to-day practices of organising can by argument to comprise a complex interplay between the discursive and material practices of sensemaking. This concurs with Langley and Tsoukas's (2010) argument that managers continuously produce temporal accounts by engaging in ongoing interactions with other actors. In other words, managers continuously adapt to 'reality in flight'. This concurs with the theoretical contention that the organising process is synonymous with the sensemaking practices of practising managers (cf. Weick, et al, 2005).

### **9.3.2 Research objective Two: To explore the lexicon of terms mobilised by managers within Chinese contracting firms in describing the challenges which they face**

The case studies further provide extensive evidence concerning the lexicon of terms that are routinely mobilised by practicing managers for the purposes of sensemaking. Managers from all three studied state-owned contracting firms have been seen to mobilise a range of market terminologies derived from policy discourses. The mobilised lexicon of terms can be seen in no small way as a means of connecting with the policy discourses as a means of achieving legitimacy. Examples include basic terms derived from the lexicon of market-based competition such as 'profit', 'competition' and 'loss'. Mobilizing these market terminologies is considered to be hugely significant in itself, as managers initiate actions on the basis of the ways in which they interpretation of these terms. As argued by Weick et al. (2005, p.409): *'sense making involves turning circumstances into a situation that is comprehended explicitly in words and that serves as a springboard into action'*. Hence, discursive terminologies can be seen as resources that individuals use for the purposes of gaining legitimacy. It follows that the lexicon of terms mobilised by practising managers is complicit in their ongoing practices of sensemaking.

It has also been observed that managers from East Construction and North Construction retain elements of military terminology derived from 'Soviet-style Construction' policy discourse. Examples include but not limited to terms such as 'cadres', 'troops' and 'manning quota'. Such terminology seemingly coexists with supposedly modern management concepts such as 'honesty and legality', 'safety management' and 'quality management'. The continuing use of quasi-military terminologies could be viewed as indicative of the need to derive legitimacy from those who still privilege the values of the era of centralised state planning. This therefore again accords with the contention that managers selectively mobilise macro-

level discursive resources for the purposes of legitimizing their actions to different audiences (cf. Abolafia, 2012).

The three case studies further demonstrate that the socially constructed meanings of different terms are very different in different contexts. Examples include, but are not limited to, 'bid and tender', 'project management', 'firm', 'government', 'PPP' and 'competitiveness'. The socially constructed meanings of such terminologies are seemingly continuously re-negotiated. This concurs with the argument that meanings of management ideas are social constructed on the basis of continuous enactment (cf. Bresnen and Marshall, 2001; Green et al, 2008b). Such insights strongly support the critique of the widespread tendency in the literature to assume that terminologies in the Chinese construction context have the same meanings as they do in the West. In summary, the research has provided unique insights into the way Chinese managers mobilise a lexicon of terms derived from macro-level discourses for the purposes of sensemaking.

### **9.3.3 Research objective Three: To understand the diverse range of organisational responses by Chinese contracting firms to the unfolding processes of marketization**

Evidence presented in chapters five six and seven illustrates a diverse range of possible organizational responses to the unfolding processes of marketization. Particularly, it is evident from the three studied cases that the operating environment is continuously shaped and reshaped by successive policy initiatives. Equally evident is that different contracting firms respond differently to the same policy initiatives. For example, the case studies have illustrated very different responses to centralised initiatives in support of 'project management', 'modern enterprise system' and 'PPP'. In the case of 'project management', East and North Construction have developed structures which privilege centralized control over the appointment of material suppliers and subcontractors. s Absorbing the essential ideas of bidding and tendering, dedicated 'bid and tender' centres have been established within these two firms for the purposes of selecting suppliers and subcontractors. However, in South Construction, the selection of suppliers and subcontractors remain within I the project managers' domain of responsibility. Moreover, North Construction has also established a dedicated Safety Monitor Department for the purposes of coordinating their response to the latest policy emphasis on 'project safety management'. No such response is apparent within the other two studied firms. Moreover, in terms of responding to the notion of a 'modern enterprise system', East and North Construction have set up a governance structure comprising boards of directors, boards of supervisors and boards of

managers. In contrast, South Construction has seemingly only established the single position of general manager.

Of particular note is the strong evidence of party organisation within East and North Construction, while relatively was found in South Construction beyond a newly appointed party secretary. In terms of responding to PPP, both East and North Construction set up dedicated Project Financing departments. In contrast, little change was evident within South Construction other than general managers trying to take advantage of their new chairman's guanxi. The evidence of diverse accumulated organisational responses to the same policy initiatives discredits any tendency towards determinism. In other words, the situated nature of sensemaking results in the emergence of differing practices which over time accumulate into specific organisational adjustments. Different firms can be seen to have made different adjustments. The existence of different organisational structures does not of course represent any sort of fixed end point. These in themselves will initiate and condition further patterns of sensemaking. Any such organisational responses are essentially temporal. Formal organisational responses result in different roles within different firms, which in turn reshape the identity work of those involved. In summary, there is strong evidence to counter the common assumption that contracting firms respond to policy initiatives in similar ways.

Extensive evidence has been also presented to demonstrate that contracting firms' responses to the changing environment are shaped by their 'lived' organisational context. The studied firms' responses to the PPP policy initiative provides but one such example. The responses of all three firms were shaped and constrained by their current organisational structures which in no small way represent an accumulation of past organising activities. Such a perspective concurs with the argument of organisational path dependency (cf. Pettigrew, 1985). Shaping the argument slightly differently, the future opportunities firms enjoy depend on their present situation, which is shaped by the path they have travelled. This further accords with the theoretical argument that organisation is an ongoing process comprising a sequence of interdependent events (cf. Langley, 2013). Organisational responses to the unfolding processes of marketization can therefore only be understood by exploring the past sequence of events. The empirical evidence strongly supports the critique of the recurring assumption that organizations are characterised by discrete periods of change between relatively fixed points of stability.

More importantly, it is evident in the three studied cases that managers operate at the nexus between contracting firms and the broader operating environment. It has been demonstrated that managers

produce different interpretations of the external landscape which continuously compete for legitimacy. This concurs with Pettigrew's (1985) argument that organization is in essence a political process whereby managers selectively mobilise their environment for the purposes of legitimising their actions. It further accords with the theoretical argument that organizations emerge from managers' sensemaking practices (cf. Nicolini, 2012). Therefore, the responses of contracting firms to ongoing processes of marketization are inseparable from managers' sensemaking practices.

#### **9.3.4 Research objective Four: To investigate the roles which managers ascribe to themselves in the continuous process of organising**

The three case studies provide rich evidence that managers construct multiple roles for themselves during the process of responding to their changing operating environment. More specifically, it has been argued that managers have somewhat reluctantly absorbed their role as managers who are employed within quasi-independent firm which are obliged to actively compete to win projects. The role of 'employee' has been notably introduced together with a range of changing expectations around employment practices. Perhaps the starkest point about the progressive introduction of notions of employment is the recognition that employees can now find themselves surplus to requirements such that they become unemployed. This is a direct consequence of the shift towards market-based modes of operating and stands in harsh contrast to the traditional Chinese concept of the 'iron rice bowl'. Low-grade operational staff now routinely perceive themselves as employees that can be dismissed. In contrast, senior managers continue to perceive themselves as part of the manning quota with the accompanying assumption that they cannot be easily dismissed.

It is equally evident that most managers within East and North Construction retain the ascribed role as 'cadres of government/party'. Notably, the interviewed managers did not draw any distinction between the 'government' and the 'party'. It is further evident that managers retain the perception that they have an obligation to follow government and Party policies. Among managers there remains a very strong sense of trust in the 'party's absolute leadership'. It is on the basis of this role identity that managers in state-owned contracting firms continue to value scale over profit, and to prioritise procedure over efficiency. Furthermore, managers share a widespread consensus that government officials will routinely intervene to save state-owned firms from going out of business. Such is the nature of the social market. As a result, it has been argued that under the current system in China the 'total autonomy rights for state-owned contracting firms' can never be achieved. The multiple roles that managers create for themselves during marketization concurs with the theoretical arguments that

practitioners develop their role identities as an inherent part of the organising process (cf. Gioia et al., 1994). It is on the basis of their developing role identities of 'who they are' and 'what they should do' that managers continuously interpret events and initiate actions accordingly.

#### **9.3.5 Research objective Five: To ascertain the extent to which policy initiatives shape the day-to-day practices of practising managers in Chinese contracting firms.**

On the basis of the empirical findings from the three studied firms, it has been demonstrated that the influence of policy initiatives on practitioners' practices is by no means deterministic. Indeed, the extent to which policy initiatives influence on practising managers' day-to-day practices has been demonstrated to be anything but straightforward. Practising managers have been seen to make sense of policy announcements according to the demands and constraints of their own situated context. For example, the introduction of 'project way management' and other such initiatives have caused Chinese practising managers to adapt their day-to-day practices through which they interact with others. Practitioners seemingly implicitly accept that construction process has been subject to projectification. The various parties involved in construction projects now routinely interact with each other as contracting parties rather than as cadres of the engineering army. During this process, practising managers in contracting firms have also developed the perception that they should interact with the labour force on a contractual basis. The systemic effect has been a rapid reduction in the number of directly employed workers and increased widespread reliance on subcontractors. As a result, interactions that previously took place between fellow practising cadres have morphed into contractual interactions between the general contractor and subcontractors.

It is further evident that practising managers in the head offices of Chinese contracting firms increasingly adopt a more centralized approach to decision making. As previously described, the discretion previously enjoyed by site-based project managers has been eroded by formalised systems and procedures. In other words, they are now obliged to follow instructions from the head office. Such changing patterns of interaction between different actors in the construction process have developed as a direct consequence of continuous ongoing sensemaking practices. This concurs with Nicolini's (2012) theoretical argument that individuals interact with the world around them through their continuous sensemaking activities.

As an important part of with the projectification of construction process, the introduction of market mechanisms such as 'bidding and tendering' have routinely caused practitioners to adapt their day-to-

day practices. Some practitioners seemingly feel diminished by the apparent necessity to relinquish control to the mechanisms of the marketplace. However, as a counter-balance bidding and tendering are consistently distorted by deeply embedded practices of *guanxi*. Practising managers consistently manipulate procedures such as bidding and tendering in order to retain a degree of control. In many cases, bidding and tendering are less about a reliance on market mechanisms and more about being seen to 'go through the motions'. It is important to recognise that these informal practices involve not only managers from the contracting firm, but also those from with the organisation with which the contractor interacts – including the clients for whom they work. The reluctance to rely on impersonal rules of interaction has been contended resulted by a lack of stable rules for the purposes of ensuring the effective operation of market. It is evident that the day-to-day practices of managers within Chinese construction firms are changing continuously in accordance with shifting expectations.

The marketization of the Chinese construction sector can be understood as a continuously unfolding process which combines aspects of change and continuity as the result of practitioners' sensemaking practices. The past experience of interactions with other actors cannot easily be overcome by any sort of radical shift between supposed modes of working. This concurs with the theoretical argument that institutionalized rules of interactions between actors are continuously made and remade through practitioners' day-to-day social practices (cf. Chan, 2018; Nicolini, 2012). Chia (1995) argues that the operating environment is in the process of becoming thereby necessitating a continuous process of adjustment on the part of practicing managers. This process of adjustment can only be meaningfully understood in terms of the material and discursive practices which comprise sensemaking. The adopted interpretation of sensemaking hence fits comfortably within the broad spectrum of practice-based research (Nicolini, 2012). The overriding emphasis of research informed by the adopted perspective lies on seeking to understand large-scale phenomena on the basis of practice-based sensitivity (cf. Nicolini, 2016).

#### **9.4 Contribution to knowledge**

This thesis has provided important new empirical insights into how Chinese contracting firms organise themselves in response to marketization. Such insights follow directly from the adoption of a sensemaking perspective. This stands in contrast to the instrumentalist assumptions that support much of the existing literature on Chinese contracting firms. At best, this literature focuses on transitions between supposed fixed points and fails to acknowledge the fluid and ongoing processes of continuous

transition. Thus, the contribution of this study is to provide an essential corrective to the longstanding reliance on formistic knowledge based upon supposed objective representations of reality. Rather than advocate instrumental recommendations of what should contracting firms do, the research has offered new insights into the ways in which contracting firms respond to their continuously changing environment.

The research has also emphasised the active role that senior managers play in mediating the interplay between organisations and their environments. This perspective has been neglected for too long, particularly in the construction literature which relates to China. To date, the overriding assumption has been that managers in Chinese contracting firms are passive recipients of top-down change initiatives. However, the case study findings of this research have demonstrated convincingly that managers produce their own interpretations of the changing environments in which they operate and initiate action accordingly. Of particular note is the way in which managers produce diverse, even contradictory narrative explanations of previous events, which provide them with plausible bases for initiating action. The adopted perspective differs significantly from the mainstream literature on construction firms in China, which continues to view managers as rational economic agents. In addition, the adopted focus on 'reality in flight' remains entirely unexplored in the existing literature. Moreover, the research method applied in this study has provided direct access to practising managers' interpretations of their experiences thereby providing insight into the daily realities of organising. The case studies have hence provided a richness of contextualist knowledge of the processes through which contracting firms seek to organise themselves in the rapidly changing context of the Chinese construction sector.

The described research has also provided unique insights into the lexicon currently mobilised by managers in Chinese contracting firms. This is again a topic which remains almost entirely unexplored in the existing literature. The sensemaking perspective adopted in this study has served to highlight the use of managerial terminology as a means of sensemaking. But crucially, the analysis of the three cases shows that managers frequently mix the lexicon of competitiveness with aspects of the quasi-military terminology that dates from the previous era. Their continued reliance on this mixture of lexicons is argued to be an important part of their sensemaking practice.

The study also provided insights into the socially constructed meanings of discursive resources such as 'bid and tender', 'project management', 'firm', 'government' and 'PPP'. Too often such terms are accepted at face value in that they are assumed to have the same meanings as those in western contexts. However, it has been argued that the meanings of these introduced discursive resources are

socially constructed through a continuous process of enactment. The research has further questioned the commonly assumed dichotomy of 'implement' vs. 'not implement' with respect of policy initiatives. Emphasis instead has been given to a more nuanced interpretation of the way roles and responsibilities are continuously renegotiated in practice. Moreover, the research has highlighted the roles which continue to be performed by the party's representatives and external government organisations. This is again a topic that remains underexplored in existing literature.

Fundamentally, the primary difference between the described study and the existing literature is the adoption of a strong process perspective. This perspective suggests that organisations should be viewed as organising processes that are composed by events and experiences (Langley et al., 2013). Moreover, the sensemaking perspective emphasises that organisational members' sensemaking practices are synonymous with the micro-processes of organising. Hence, the very essence of organising emerges from the sensemaking activities of practitioners (cf. Weick et al., 2005, Nicolini, 2013). Furthermore, the research has highlighted the important role that practitioners' sensemaking practices play in the process of sectoral change. It has been argued that sensemaking is inseparable from the roles and responsibilities that practitioners ascribe to themselves and their interactions with others (Weick, 2005).

## **9.5 Research limitations**

It is important to recognise the limitations of any given research project. The interpretivist research approach adopted in this study could be criticized as relying too heavily on subjective interpretations. However, it has been argued that the validity of any interpretivist study lies in the coherence of its research design and the extent to which its findings are plausible. The plausibility of the case study findings gleaned in this research has been demonstrated through co-production and by cross-checking against known facts found in secondary documentation. With respect to the researcher's own subjectivity, care has been taken to document all processes involved in the collection and interpretation of its data. Nevertheless, the study remains subject to criticism on the basis that it may have overemphasised the importance of discursive practices over material approaches.

The case study analysis presented is also open to criticism on the basis of the extent to which its findings are generalizable. However, the aim of providing a rich description of the complex processes of organising pragmatically limited the number of case studies that could feasibly be included. The hope is that the three presented case studies of managers' sensemaking practice will serve as a reference for future researchers who are welcome to interpret the findings differently. There is however little reason



to assume that the described features of managers' sensemaking practices in the three studied firms are unique. Ultimately, it is important to recognise that the validity of the reported empirical findings is entirely dependent upon the adopted theoretical perspective. Those who are unconvinced by the theoretical axioms of sensemaking are likely to remain unconvinced in respect of the validity of the findings.

## **9.6 Direction for future research**

There is an urgent need to recognize the validity and importance of interpretive research in the Chinese construction management research community. This does not mean that the current positivist research paradigm should be fully replaced by interpretative research. It is argued that both research paradigms offer important perspectives on the notion of 'reality'. However, there is a need to move beyond the dichotomisation of different paradigms to focus on the discursive and material practices of practitioners. The longstanding dominance of the positivist research paradigm in the Chinese construction literature could be usefully counter-balanced by the adopted sensemaking perspective. Such a perspective explicitly recognizes the complex processes of change and the role that practitioners play in its enactment. In particular, much more research should be conducted into investigating the voices and experiences of practitioners.

In addition, more research is required into practitioners' sensemaking practices with respect to the organisation of contracting firms which focus on different types of projects. As evident in the results of the current research, different types of projects have different clients, which inevitably impose different requirements on the construction process. Managers from firms that focus on different types of project are likely to extract different cues from their experience. Future research on organisational members' sensemaking practices in contracting firms that focus on different types of projects could provide more understandings of recursive interplay between practitioners' sensemaking and their situated context. Such research could provide more contextual knowledge of the complexities of the unfolding processes of marketization in the Chinese construction sector.

More specifically, more research on practitioners' sensemaking practices with respect to the organisation of privately-owned Chinese contracting firms. As is evident in the results of the current research, privately-owned firms potentially have different responses to changing environment. Informed by these various organisational trajectories, practitioners from privately-owned firms are likely to experience different ways of sensemaking, not least in their categories of situation and habits of action.

Further research could provide opportunities for comparison and thus greater understanding of managers' sensemaking processes.

More broadly, research on the sensemaking practices of practitioners in Western construction contexts is also needed. As the methodology chapter discussed, while some attempts have been made to mobilise sensemaking perspectives in Western firms, they have yielded only limited empirical insights. Such research could provide opportunities for comparisons with Chinese managers' sensemaking practices, which could be used to explore the influence of context on practitioners' sensemaking practices.

More generally, a further rich research avenue lies in the analysis of sensemaking practices in other construction contexts, such as policy implementation and the adoption of new technologies. After all, any process of change embedded in the construction sector cannot be understood independently from the meanings constructed by its practitioners.

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## Appendix A: Table of Interviewees

**Table of Interviewees' name, current role and career experience**

No	Current role	Career experience
<b>East Construction</b>		
1	General manager	It was not very clear how interviewee 1 began his career. He mentioned that he used to be the vice general manager in charge of marketing and is now the general manager in charge of marketing.
2	Deputy general manager in charge of project management and contract management	Interviewee 2 began his career on construction sites. He then worked as a project manager, and a vice general manager in charge of large steel factory projects. He is currently the vice general manager of East Construction in charge of project management, bid and tender and accounting.
3	Deputy general manager in charge of human resource management	Interviewee 3 began his career in on construction sites in 1985. He then worked as a technical staff member, a party secretary, a project manager, the vice director of the Engineering Bureau, vice director of the Human Resource Bureau, vice director of General Office, director of General Office, and Secretary of the board of directors. He now works as the vice general manager of East Construction in charge of human resources.
4	Secretary of the Board of Directors	Interviewee 4 began his career in the general office. He was then promoted as the director of enterprise management division, deputy director of the general office. He now serves as the Secretary of the Board Committee.
5	Director of the Market Bureau	Interviewee 5 was allocated to this firm in 1991. His original job was technical staffer, and he was then promoted to project manager, vice general manager of a subsidiary and general manager. In 2016 he became the director of the Market Bureau.
6	Director of the Engineering Bureau	Interviewee 6 began his career on construction sites. He was promoted to project manager and then Chief Engineer in a subsidiary. He is now the director of the Engineering Bureau.
7	Deputy Director of the Personnel Management Bureau	Interviewee 7 began his career in the Personnel Management Bureau. She was promoted to director of the bureau in 2010.
8	Deputy Director of the Human Resource Management Bureau	Interviewee 8 graduated from a local university in Chongqing in 2011 and joined the firm upon graduation. He began his career in the Human Resource Management Bureau and was promoted to deputy director in 2016.
9	Director of the enterprise management division	Interviewee 9 began her career in the general office. She was then promoted to director of the enterprise division.

10	Director of the Bid Centre	Interviewee 10 used to be deputy general manager in charge of construction. He then became the director of the bid and tender centre.
11	Director of the Technology and Innovation Centre	Interviewee 11 began his career as a staffer in the Technology and Innovation Centre. He was promoted to deputy director and now director.
12	Deputy Director of the Planning Finance Bureau	Interviewee 12 used to work on a project management team. He was then promoted to the Finance Bureau and is now the deputy director of the Finance Bureau.
13	Party secretary of the First Civil Engineering Subsidiary	Interviewee 13 began her career in general office in 1990s. She was then appointed to be the party secretary of the First Civil Engineering Subsidiary in 2010.
14	Party secretary of the Third Business Department	Interviewee 14 began his career on construction sites in the Tianjin subsidiary. He then work in Party and People Bureau and was recently promoted to become the Secretary of the Party Organisation in the oversea subsidiary.
15	Party secretary of the First Business Department	Interviewee 15 began her career as a marketing staffer. She then became deputy director of the Marketing Department and was recently appointed to be the Party Secretary of the First Division.
16	Party secretary of the Sixth Civil Engineering Subsidiary	Interviewee 16 began his career on construction sites. He was promoted to project manager and then general manager of secondary units. Then, he was appointed the director of Marketing Bureau. He is now the secretary of the party committee of the Sixth Civil Engineering Subsidiary.
17	General engineer of the Second Civil Engineering Subsidiary	Interviewee 17 began his career on construction sites. He was promoted as the Deputy Director of the Work Area and then was allocated to work in the Design Bureau and project management Bureau. He is now working as the general engineer of the Second subsidiary.
18	Deputy general manager in charge of human resource of the Transportation Subsidiary	Interviewee 18 began his career by as general office staffer. He was then promoted to director of general office. He is now the vice general manager of the Transportation Subsidiary company.
19	Marketing manager for the Steel Structure Subsidiary	Interviewee 19 is in charge the marketing. He was previously the vice general manager in charge of marketing.
20	Project manager for the Steel Structure Subsidiary	Interviewee 20 began his career on construction sites. He was promoted to project manager two years ago.
21	Director of the general office of the Steel Structure Subsidiary	Interviewee 21 began her career as a project accountant. She then switched to the general office and is now the director of the general office.

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**South Construction**

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22	Deputy general manager of, South-Sun Construction	Interviewee 22 graduated from the Chongqing Engineering College in the 1980s. He began his career as a technician and then worked as project manager in the Chongqing Construction Group. He was promoted as a staffer in the Chongqing Construction Committee. Later, he was appointed as special secretary for the general manager in its parent company. He was appointed as chairman of South Construction in 2014 and deputy general manager of South Sun Construction in 2017.
23	General manager	Interviewee 23 obtained his BSc from the Chongqing Building and Engineering College. He began his career as project management staff in the Chongqing Construction Group. He then was promoted to project manager and manager of the Project Management Department. In 2017 he was appointed general manager of the South Construction by its parent company.
24	Deputy general manager	Interviewee 24 began her career as a staffer in the Department of Enterprise for South Construction in 2007. He was promoted to manager of the Department of Enterprise and then deputy general manager and deputy party secretary of South Construction.
25	Former general manager	Interviewee 25 obtained his BSc in the Chongqing Building and Engineering College. He began his career as project management staff in the Chongqing Construction Group. He was promoted to project manager and then deputy general manager of the Third Subsidiary. He was appointed to general manager of the South Construction in 2009. He left South Construction in 2016.
26	General engineer	Interviewee 26 began his career as technician in the Third Subsidiary of the Chongqing Construction Group. He was promoted to manager of the Department of Project Management. He joined South Construction in 2012.
27	Deputy general manager in charge of project acquisition	Interviewee 27 began his career as the general manager's secretary in the Third Subsidiary of the Chongqing Construction Group. Interviewee 27 joined South Construction around 2011 and was appointed deputy general manager in charge of project acquisition.
28	Deputy general manager in charge of finance	Interviewee 28 used to work as a financing manager for South Sun Construction and was appointed deputy general manager in charge of finance for South Construction in 2017.
29	Accounting manager	Interviewee 29 began her career as an accountant for South Construction. She was then promoted accounting manager for South Construction.
30	Project manager	Interviewee 30 began his career as project management staff for South Construction. He was then promoted to project manager.
31	Manager of the Project Management Department	Interviewee 31 began his career as technician in the Project Management Department and was promoted to manager of the Project Management Department.

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32	Manager of the Department of Enterprise	Interviewee 32 began her career as a staffer in the Department of Enterprise and was then promoted to manager of the Department of Enterprise.
33	Manager of the Department of Marketing	Interviewee 33 began his career as project management staff and was promoted to project manager. He was then appointed as manager of the Department of Marketing.
34	Manager of the Department of Contract Management	Interviewee 34 began his career as contract management staff for a real estate developer backed by a Hong Kong investor. He was invited by the general manager to work as the manager of the Department of Contract Management for South Construction.
<b>North Construction</b>		
35	Deputy general manager in charge of marketing	Interviewee 35 joined the firm in 2006 as a marketing manager. He continued his career in project acquisition and was promoted to deputy general manager in charge of marketing.
36	Deputy general manager in charge of finance and investment	Interviewee 36 got his master's degree in financing from Wuhan University. He joined the Financing Department of parent company North-Sun Construction in 2012. In 2016, became deputy general manager in charge of financing and investment, specifically for PPP project acquisition.
37	Deputy general manager in charge of Project management	Interviewee 37 got his bachelor's degree from Hunan City College. He began his career as project management staff on construction sites for the firm's parent company. He then worked for North-Moon Construction for seven years. He joined North Sun Construction in 2005 as a project manager, and in 2007 he began to work as deputy general manager in charge of project management.
38	Deputy general manager in charge of technology and innovation	Interviewee 38 got his bachelor's degree from Chongqing Transportation College in 1996. He then began his career as technology staff on construction sites in one of the largest Chinese railway construction groups. In March 2014, he joined North Construction and began to work as deputy general manager in charge of technology and innovation.
39	Deputy general manager in charge of contract management	Interviewee 39 got his bachelor's degree from Nanjing Building and Engineering College in 1992. He was allocated to North Sun Construction after graduation and began to work on construction sites. He was then allocated to Anhui subsidiary in 2005. In 2016, he was appointed to work as the deputy general manager in charge of contract management for North Construction.
40	Manager of the Department of Human Resource Management	Interviewee 40 got his bachelor's degree of computer science in 1996. He then was appointed to North-Sun Construction and began to work in its general office. Since 2013, he began to work as the Department of Human Resource Management manager for North Construction.
41	Manager of the Department of Enterprise Strategy	Interviewee 41 got his master's degree in human resource management from Chongqing University in 2014. He began his career in the Department of Human Resource Management at North Sun Construction. In June 2017,



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		he joined North Construction as the manager of its Department of Enterprise Strategy.
42	Manager of the Department of Safety Monitoring	Interviewee 42 got his bachelor's degree in 1998 and joined North Sun Construction. He began his career on construction sites. In 2010, he began to work in the headquarters of the Sichuan subsidiary of North-Sun Construction as head of project management. He joined North Construction as project manager in May 2013. Since 2017, he has worked as manager of the Department of Safety Monitoring.

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## Appendix B: Interview Questions and Rationale

Interview questions and rationales are as follows.

1. Would you briefly introduce yourself? Please state your educational background, work experience and your role in the organisation.

Prompts:

- 1) When did you begin working in this firm?
- 2) What's your role in the firm?

Rationale: This question is designed to elicit interviewees' past experiences and current organisational identities. As Weick et al. (2005) argued, sensemaking is grounded in identity and is constructed socially. How interviewees perceive their own roles in organisations affects the way they make sense of that organisation's processes.

2. Could you describe your firm's process of transition to marketization? As we know, the Chinese construction sector has undergone a transition to a social market system. What I am interested in is your firm's transition towards marketization, particularly how contracting firms such as yours have undergone this transition and its implications on your work.

Prompts:

- 1) When was your firm founded? What was the situation in which it was founded?
- 2) What sort of projects did the firm begin with? Why? How?
- 3) How many staff did you employ at the time the firm was founded? What sorts of jobs did they do? How did you manage your labour force? Why?
- 4) Did you eventually branch out to other project types in other regions? How? Why?
- 5) How did the firm restructure itself during the transition to marketization? Why? Where did the firm's new staff members come from?
- 6) How did the staff structure change? When? How? Why?
- 7) Did you cooperate with any labour-only subcontractors? If so, when did this practice begin? Why? Who were they? How did you select and evaluate these staff?

- 8) How did the restructuring and labour changes affect your work? Did you encounter any problems and/or benefits?
- 9) What other changes affected your firm? Responses could include 'soldier/contracting firm', 'enlivening the firm', 'project way management', 'modern enterprise system', 'safety management' and 'quality management'.

Rationale: This question was designed to introduce the interviewees to the research focus and to encourage them to relate their stories about their firm's transition to marketization. The prompts were designed to guide the interviewees to discuss and justify their firm's restructuring process. The first two prompts were designed to encourage interviewees to make sense of how the firm began. The third question was designed to encourage interviewees to recall the original situation in which the firm was founded and its employment relationships. The fourth question was designed to encourage the interviewees to relate how their firm developed. In pilot studies, the researcher found that projects were the practitioners' primary concern. Therefore, the fourth question addressed projects in different regions to encourage the interviewees to recall their firm's transition process. The fifth, sixth and seventh questions were designed to guide interviewees to relate how the firms restructured themselves in terms of project acquisition, including departments and staff relations. In pilot studies, the researcher found that the firms had engaged in labour subcontracting practices, which changed the dynamics of their previous employment relations. Thus, the seventh question was designed to investigate this change, and the eighth to encourage the interviewees to make sense of the restructuring process. According to Weick et al. (2005), practitioners begin to make sense of environmental changes if and when they affect their own work. The ninth question was designed to explore if reforms had implications for firms' restructuring processes.

3. What is your firm's plan for the next five years? Why?

Prompts:

- 1) What are the firm's goals for next five years? Why?
- 2) What kind of projects or regions does your firm intend to explore? Why?
- 3) How will this change your work? Why?

Rationale: This question is designed to explore how the interviewees made sense of their firm's future plans. As argued Chapter Three argued, how people make sense of current situations affects how they make sense of past experiences and the future events (Weick, 1995).