

FORMS OF COLLABORATION FOR FOREIGN CONTRACTORS IN CHINA

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According to a pilot study on foreign contractors' opportunities in China, foreign contractors are not likely to sustain business without collaboration from Chinese design institutes or construction enterprises. Based on the pilot study and the current Chinese construction related regulations, the paper identifies the possible Sino-foreign contractor collaboration forms, namely merger and acquisition, joint-venture, project-based collaboration, and strategic alliances. The paper then analyses the feasibility and stability of the various forms of collaboration and recommends the strategic alliance as the most appropriate collaboration form for foreign contractors. Changes among forms of collaboration are discussed.

Keywords: collaboration, design institute, enterprise, foreign contractor, strategic alliance.

INTRODUCTION

More foreign contractors have been venturing in the Chinese construction market due to its World Trade Organization (WTO) entry in 2001. However, foreign contractors might not be able to sustain their positions without collaboration from Chinese design institutes or construction enterprises (Xu *et al.* 2002).

The desire and search for complementarity to achieve synergistic competitiveness is the prime motive for companies to collaborate. In this paper, the possible forms of collaboration between foreign contractors and local partners are identified. Each of the forms, be it merger and acquisition, international joint venture (IJV), project-based collaboration or strategic alliance, has its advantages and disadvantages for international collaboration in China. All of them have room for innovation in enhancing the effectiveness and efficiency of the collaboration. Analysis of opportunities and risks for foreign contractors and their local partners has been incorporated in to the sections of this paper. The strategic alliance is proposed as the most appropriate collaboration form.

RESEARCH METHOD

This research is based on extensive critical literature review on theories of the international entry mode, existing research reports of foreign contractors in China, relevant construction regulations in China, and a pilot study in year 2001-2002. The pilot study is part of the on-going research entitled "Collaboration Opportunities of Foreign Design-and-Build Contractors in China" which is based on multiple case study. The data sources of the research are a pilot study, e-survey, and multiple case studies. Each data source is independent of each other. The research meets the

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requirement of triangulation concept, i.e. information about a single phenomenon should be collected from at least three sources (Hammersley and Atkinson 1983). The purpose of the pilot study is to capture data as one of the sources of the information and to narrow down the scope for the proposed e-survey and multiple case studies.

Case studies are the preferred strategy when "how" or "why" questions are being posed, when the investigator has little control over events, and when the focus is on a contemporary phenomenon within some real-life context (Yin 1983). However, Wright *et al.* (2002) review difficulties of data collection in China. They cite that little data are likely to be gathered without connections because strangers will unlikely respond to academic enquiry. Further, the reticence of Chinese professionals and managers towards providing information is reported by Wright *et al.* (2002). To tackle the problem, one of the authors has used contacts with foreign contractors, design institutes, and construction enterprises who have collaborative experience with foreign contractors, and clients. Some of them have agreed to provide non-filtered information for the authors' academic study. Therefore, multiple case studies are practical for this contemporary research.

The methods of the pilot study employed were fact-to-face interviewing, email interviewing, and international telephone interviewing. The inquiry was quite broad, which covers Sino-foreign construction collaboration in China, design-and-build, and the Chinese construction market. Some of examples of email and telephone inquiries are 'Many foreign contractors are interested in the Chinese construction market. What strategies do you think are significant for foreign contractors to sustain in China?' and 'What are the forms of collaboration between foreign contractors and their local partners? Which one is the appropriate form for foreign contractors?'. Inquires to Chinese interviewees are in Chinese. Interviewees are managers and professionals of foreign contractors in China, design institutes, and construction enterprises, covering areas of Beijing, Shanghai, and Xi'an.

The respondents of the pilot study knew one of the authors in person. This enables the information to be easily accessed and the participants have been directly involved with foreign contractors' collaboration works in China. The data provided considerable insight view into to the basic issues of foreign contractors' collaboration efforts in China.

FORMS OF COLLABORATION

There are many forms of collaboration that a company can adopt when looking for new opportunities. In the context of international business, extensive researches on collaboration have been reported (e.g. Krippaehne *et al.* 1992; Parkhe 1993; Junnonen 1998; Simonin 1999; Drexler Jr. and Larson 2000; Scott 2001). However, their divergent definitions of strategic alliances or international joint ventures have been found inconsistent with the concept understood by international construction practitioners, according to the pilot study and reviewing of the current Chinese regulations.

It is practical to categorize the possible collaboration between foreign contractors and design institutes or construction enterprises into four forms, namely merger and acquisition, international joint venture, project-based collaboration, and strategic alliance. As shown in Figure 1, some forms of collaboration may be changed to other forms over time. Each form of collaboration has its advantages and disadvantages for

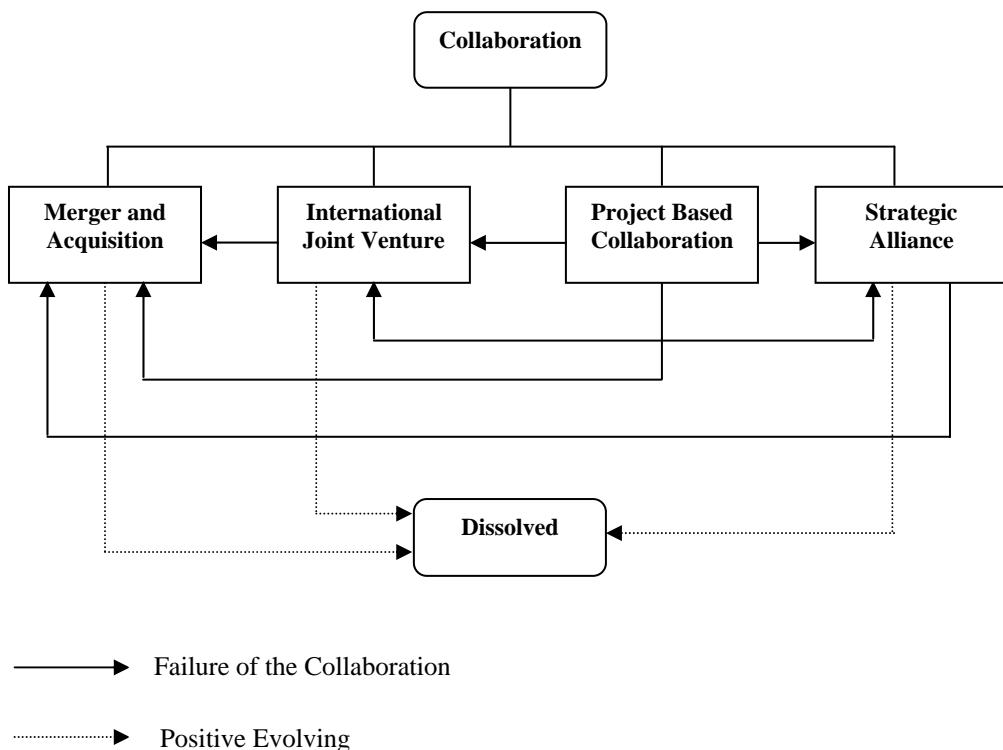


Figure 1 Changes Of Forms Of Collaboration (Source: Developed by the authors for this research)

foreign contractors. Decision for selecting the forms of collaboration is critical for foreign contractors' sustainable growth in China.

ACQUISITION

Acquisition strategy is often used by international contractors for their external growth (Carrillo and Heavey 2001). Currently the Chinese construction industry is in a transition period due to its WTO commitments and economic reform. As some parts of the administrative reforming of State-Owned-Enterprises (SOEs) appear to be ineffective, merger and acquisition within domestic companies are introduced by the government as economic leverage to enhance competitiveness. As a result, there are some mergers and acquisitions among design institutes and construction enterprises. For example, the first merger among design institutes in China, involving the Second Mechanical Industry Design and Research Institute (Hangzhou), the Third Mechanical Industry Design and Research Institutes (Chongqing), the Fifth Mechanical Industry Design and Research Institutes (Tianjin), and the Eleventh Mechanical Industry Design and Research Institutes (Xi'an), has been completed in January 2002. The new entity is named as China Union Engineering Corporation (China Business Newspaper 2002).

While no detailed guidance and procedures were suggested, the Provisional Regulation of Foreign Companies Acquiring State Owned Enterprises enacted by the Ministry of Foreign Trade and Economic Cooperation (MOFTEC) in 1999 confirms that foreign companies are allowed to acquire SOEs. Public listed construction enterprises can be acquired from the stock market by foreign contractors. However, foreign contractors could only acquire design institutes through negotiation rather than

from the stock market, because no design institute has been publicly listed in either A or B of Chinese stock market in Shenzhen and Shanghai up to May 2003.

Many Chinese companies are acquired by foreign companies in other industrial sectors (Norton and Chao 2001), even though acquisitions are often awkward transactions to manage for foreign companies. Foreign contractors might face problems such as regulatory restrictions, assets valuations, human resources management (e.g. how to handle possible problems caused by staff who were laid off?), third party interference, ownership ambiguity, if they attempt to acquire construction enterprises or design institutes. In the pilot study, interviewees have responded that they are not sure about the latest regulations on merger and acquisition in the Chinese construction industry.

INTERNATIONAL JOINT VENTURES

There are different definitions for international joint ventures (IJVs) in various contexts and purposes. Kouvelis *et al.* (2001) defines IJV as: the equity-shared cooperative venture, where the foreign company entering the host-country market shares the ownership and the required investment of service facilities with a local partner. While studying strategic motives for IJV formation, Glaister and Buckley (1996) confirm Killing's (1988) definition and categorize joint ventures as equity joint ventures (EJVs) and non-equity joint ventures (NEJVs). However, they define NEJVs as "agreements between partners to cooperate in some way, but they do not involve the creation of new firms." This definition may not be compatible with current regulations concerning foreign nationalities involving in JV operations in China. Under current rules, foreign contractors are allowed to form design and construction JVs with Chinese construction enterprises or design institutes by recent regulations (MOC 2002a,b). There are two types of IJVs, based on the degree of equity involvement, in China: equity-based IJV and IJV with minimum equity involvement.

Equity-based Construction IJVs in China

Foreign contractors are legally allowed to establish international construction joint ventures with one or more Chinese partners in China. Equity-based IJVs shall be subject to enterprises income tax at a reduced rate of 15% if they founded in the special economic zones or their businesses fall under the categories of energy, communications, harbour, and docks, according to the Law of the People's Republic of China on Income Tax of Enterprises with Foreign Investment and Foreign Enterprises 1991. Sino-foreign JV contractors might not be eligible for this incentive as they are in a service sector unless they invest on the State encouraged projects such as energy. Among the few literature studies on JV contractors in China, Luo (2001) reports that Sino-foreign construction joint ventures performed well. However, Shen *et al.* (2001) reveal that many risks exist in construction IJVs in China due to the difference in management systems, technological practice, and cultural background between partners. Other studies suggested that IJVs are unstable organizations that are hard to achieve performance targets set by foreign parent companies and local partners (Beamish and Delios 1997; Reuter and Leiblein 2000). Vanhonacker (1997) highlights some unhappiness of equity joint ventures in non-construction sectors and concludes that joint ventures in China are difficult to sustain even in a stable environment. The top five risk factors in IJVs in East Asian countries has been identified as the client's cash flow problems, financial problems in partner's parent

company, inconsistency in government policies, laws, and regulations, economic fluctuation, and poor relationships (incompetence of subcontractors/suppliers) (Li *et al.* 1999). The emergence of build-operate-transfer (BOTs) in China has been discussed extensively (e.g. Wang *et al.* 1998; Ye and Tiong 2000). The consortium or sponsor company of BOT projects is an IJV if one or more parties' parent company is based overseas. Since BOT projects are incorporated with complex features in terms of participants (e.g. more than one financier, local government, design institute, project purchaser, local contractors, etc) and a long time-frame (i.e. 10-30 years), foreign participation on BOT project companies could be considered as a complex version of IJVs.

IJVs with Minimum Equity Involvement

International joint ventures offer the parent companies options to commit a small amount of technologies and resources in the initial stage to enter a foreign market (Kogut 1991). These tactics could be adopted by foreign contractors who set up IJVs with local partners with minimum equity involvement. The requirements of minimum amount of registered equity for IJVs would vary from city to city in China. Such an arrangement provides parties with flexibility to extend their collaboration in the future, taking into consideration the changing market and performance of the IJV. In the pilot study, none of interviewed companies has an IJV. Interviewees of foreign contractors regard IJV as problematic, while interviewees of the design institutes and construction enterprises are willing to have IJVs with name-branded foreign contractors if there was the opportunity.

PROJECT-BASED COLLABORATION

Project-based collaboration is different from equity-based IJVs in that there is no new firm registered. Whenever foreign contractors or Chinese construction enterprises or design institutes pursue or secure a construction project, one party might need the other party's collaboration to facilitate the project. Foreign contractors might undertake conceptual design and then pass over to a design institute for detailed design.

All interviewed foreign contractors and design institutes have had project based collaboration experience. Foreign contractors need the support from design institutes or construction enterprises for two main reasons, namely licensing and local design code requirements. In China, construction regulatory restrictions on foreign companies have not been removed. Foreign contractors could only perform joint tendering for domestic funded projects. Further, foreign professionals may find it difficult to produce detailed design that can comply with local design codes (Xu and Wang 2003).

However, such project-based collaboration can be mistaken as a short-term solution that is used more for the purpose of convenience than synergy. Notwithstanding this, project-based collaboration has been observed in numerous projects involving sophisticated conceptual design and some master planning. According to the Xing Hua News Agency's (or China Government news agency) report on July 14, 2002, the first prize design for the master planning for Beijing Olympic Green was jointly submitted by Sasaki Associates, Inc. of the USA and Tianjin Huahui Engineering Construction Design Co. Ltd of China, while the second prize design was jointly proposed by Beijing City Planning and Research Institutes and DEM ASUT Pte from Australia.

STRATEGIC ALLIANCES

Strategic alliances have been largely discussed in the context of international business over the past two decades (Büchel *et al.* 1998). However, there are underlying ambiguities regarding the definitions of strategic alliances, collaboration, and joint ventures in the research domains, partly because of some theoretical concepts (i.e. inter-firm cooperative, mutual-trust, synergistic strengths and complementarity) transcending these arrangements.

In the context of foreign contractors' collaboration with local partners in China, the authors contend that strategic alliances (SAs) should be distinguished from mergers and acquisitions (M & As), international joint ventures (IJVs), and project-based collaborations (PBs), such that foreign contractors have a concrete basis to approach different forms of collaborations. In this research, strategic alliance is defined as voluntary long-term inter-firm cooperative arrangements with flexibility for participating parties.

A foreign contractor could form a strategic alliance with a local partner in one or more cities in China from business development, tendering, design, and construction to handing over of the project to the client. The strategic alliance agreement incorporates reciprocal commitments on the basis of mutual organizational goals. Under the framework of strategic alliance agreements, separate contracts between the foreign contractor and the local partner can be incorporated for different stages of an individual project, taking into account the unique legal conditions in China.

Rationale for Foreign Contractors to form SAs with Local Partners

Being able to provide complementary competency, foreign contractors look to local partners to advance their interests in China. A foreign contractor is unlikely to sustain growth without support from local partners. Badger and Mulligan (1995) theorize that U.S. companies who tried to penetrate global marketplaces without the benefit of an alliance relationship would find achieving success extremely difficult in this highly competitive environment. Although PBs and IJVs offer the benefit of the complementarity, SAs possess long-term and flexible advantages to foreign contractors. Since the flexibility is one of the characteristics of strategic alliances, the foreign contractor will not have any liability arising from the partnered local firm. If there is any major disagreement with each other during decisionmaking, the foreign contractor could simply withdraw from the arrangement, do it alone or find an alternative solution. In addition, successful SAs might facilitate effective preparation effort for M & As if foreign contractors had decided to expand aggressively in the market place. SA would be of benefit to the foreign contractors because its local partner would offer the opportunity for them to utilize the resources of the local partner at a reasonable price and overcome the problem of not having licenses. The costs of these activities for foreign contractors in SA s are lower than that in IJVs and PBs. On the other hand, local partners may benefit from the SA, e.g. penetrating the FDI construction market, financial back up from foreign contractors, adaptation of international practice (e.g. FIDICs, ICE), obtaining advanced management skills, and state-of-the-art technologies. The independence that the SA arrangement provides to local partners enables them to avoid risks inherent with IJV, such as the salary and culture differences between local employees and expatriates. Although local contractors could be the party that foreign contractors could collaborate with, the design institutes have more qualified professionals and better financial standing (Xu and Wang 2001). As discussed previously, the acquisitions may be difficult to realize

at present and joint ventures are risky for the foreign contractors. Project-based collaborations may create vulnerability for behavioural uncertainty (i.e. one party taking advantages of the other) since the arrangements are short-term in nature. Strategic alliances are therefore likely to be the most appropriate collaboration form, even as the selection of the local partner, the arrangement structure, and opportunity and risk have to be carefully ascertained by the foreign contractors. This is consistent with the results of the authors' pilot study during 2001-2002.

CHANGES OF FORMS OF COLLABORATION

The degree of collaborating may change along with the business environment and partners' goals, which is reflected in altering of collaboration forms. Figure 1 shows the theoretic relationship of different types of collaboration between foreign contractors and the local partners. If the registration of a new firm is needed, SAs could be turned into IJVs for closer collaboration. This ensures more control to the party committing more asset (if any) or resources. If one party has been found to further dominate the collaboration, then SAs might turn into M & As by having the dominant party buying the weaker one. On the contrary, if SAs have failed to meet the initial goals because of a problematic collaboration, they could be dissolved.

PBs could be an initial stage of other forms of collaboration. If there is a need for longer and closer collaboration, PBs might enter to the stage of SAs, IJVs, or M & As.

IJVs could end up as one dominating party takes over the other one, i.e. M & As. IJVs could also be redefined as SAs whenever it is necessary. In the pilot study, it was found that a USA based contractor had spun out its local IJV partner in Beijing with remaining strategic alliance relationship between the parties.

Porter (1990:612) recommends alliance or coalitions as a final mechanism by which a firm can seek to tap national advantage in other nations, but he argues the alliances are rarely a solution. This is because they always involve significant costs in terms of coordination, reconciling goals with an independent entity, creating a competitor, and giving up profits. These costs make many alliances temporary and destined to fail.

Unexpected terminations of strategic alliances may be regarded as instabilities of alliances. Instabilities are often related to SA objectives and SA performance criteria of individual parties. As time passes by, SA partners may find that they do not complement each other as predicted due to constraints in each capability. Under such circumstances, dissolution could be proposed.

If instabilities are caused by unforeseeable changes of external environment such as political instability or fluctuating market condition, terminations of strategic alliances may be the positive reaction. However, if such changes, caused by either internal or external problems, are controllable, the instability of alliances should be considered as a failure of the alliance management. Although it might cause less damage to a partnered foreign contractor and a local partner than dissolving a joint venture, instability of SAs should be prevented by both parties.

CONCLUSIONS

In this paper, possible forms of collaboration between foreign contractors and local partners (i.e. construction enterprises or design institutes) are identified and compared. Although they are preferred by some foreign contractors, merger and acquisition proposals might encounter problems such as ambiguity of local partners' ownership.

Collaboration by international joint venture (IJV) had been largely adopted by foreign contractors to overcome entry barriers; nevertheless conflicts for both parties might result in failures to realize initial goals of the IJV. The strict legality and substantial capital commitment allow little room for negotiation or rearrangements when disputes occur. Project-based collaborations provide much flexibility for foreign contractors and their local partners, but they suffer the disadvantage of uncertainties and speculations. Given the unique nature of business environment in the Chinese construction industry, the collaborative form of strategic alliances between foreign contractors and local partners promotes long-term commitment and offers opportunity of sustainable growth for both parties. Strategic alliances are then recommended as the most appropriate collaboration form between foreign contractors and local partners.

REFERENCES

- Badger, W. W. and Mulligan, D. E. (1995). "Rational and benefits associated with international alliances", *Journal of Construction Engineering and Management*, ASCE, 121(1), 100-111.
- Beamish, P.W. and Delios, A. (1997) "Improving joint venture performance through congruent measures of success". In P. W. Beamish and J.P. King (Eds), Cooperative strategies European perspectives: 103-127. San Francisco: New Lexington Press.
- Büchel, B., Prange, C. , Probst, G., and Ruling, C.(1998) *International Joint Venture Management: Learning to Cooperate and Cooperating to Learn*, John Wiley & Sons (Asia) Pte Ltd, Singapore.
- Carrillo, P. and Heavey, I. (2000) "UK contractors' acquisitions strategy for Central and Eastern Europe", *Journal of Engineering Construction & Architectural Management*, 7(3), 322-328.
- China Business Newspaper (2002) "Cross region merger of Design Institutes, China Union Engineering Corporation established", 1397, January 24, 2002.
- DeVilbiss, C. E. and Leonard, P.(2000) "Partnering is the foundation of a learning organization." *Journal of Management in Engineering*, 16(4), 47-57.
- Drexler Jr, J. A. and Larson, E. W.(2000) "Partnering: why project owner-contractor relationships change", *Journal of Construction Engineering and Management*, 126(4), 293-297.
- Glaister, K. W. and Buckley, P. J.(1996) "Strategic motives for international alliance formation", *Journal of Management Studies*, 33(3),0022-2380, 301-332.
- Hammersley, M. Atkinson, P.(1983) *Ethnography principles in practice*, Routledge, London.
- Junnonen, J. M(1998) " Strategy formation in construction firms." *Engineering, Construction, and Architectural Management*. 5(2), 107-114.
- Killing, J. P. (1988) "Understanding alliances: the role of task and organizational complexity", In Contractor, F.J. and Loragne, P. (Eds), *Co-operative Strategies in International Business*. Lexington, MA: Lexington Books.
- Kogut, B.(1991) "Joint ventures and the option of expand and acquire", *Management Science*, 37, 19-33.
- Kouvelies, P., Axarloglou, K. and Sinha, V.(2001) "Exchange rates and the Choice of ownership structure of production facilities", *Management Science*, 47(8), 1063-1080.
- Krippaehne, R. C., McCullouch, B. G., and Vanegas, J. A.(1992) "Vertical business integration strategies for construction." *Journal of Management in Engineering*, ASCE, 8(2), 153-166.

- Li, B. Tiong, R. L. K, Wong, W. F. and Chew, D. A(1999) "Risk management in international construction joint ventures", *Journal of Construction Engineering and Management*, 125(4), 227-291.
- Luo, J (2001) Assessing management and performance of Sino-foreign construction joint ventures, *Construction Management and Economics*, 19(1), 109-117.
- Ministry of Construction(MOC) (2002a) *The Regulation of Foreign Invested Construction Enterprises*, the 113th Joint Ordinance of the Ministry of Construction and the Ministry of Foreign Trade and Economics Cooperation(MOFTEC), 29 Sep 2002.
- Ministry of Construction (MOC) (2002b) *The Regulation of Foreign Invested Construction Engineering Design Enterprises*, Joint Ordinance of the Ministry of Construction and the Ministry of Foreign Trade and Economics Cooperation (MOFTEC), Dec 2002.
- Norton, P. M. and Chao H. (2001) "Mergers and Acquisitions in China", *China Business Review*, September-October 2001 issue.
- Parkhe, A.(1993) "Strategic alliance structuring: a game theoretic and transaction cost examination of interfirm cooperation", *Academy of Management Journal*, 36(4), 794-829.
- Porter, M. E.(1990) *The Competitive Advantage of Nations*, The Macmillan Press LTD, London and Basingstoke.
- Reuter, J.J. and Leiblein, M. J. (2000) "Downside risk implications of multinationality an international joint ventures", *Academy of Management Journal*, 43(2), 203-214.
- Scott, B(2001) *Partnering in Europe: Incentive Based Alliancing for Projects*, European Construction Institute, Thomas Telford, Ltd.
- Shen, L. Y., Wu, G. W. C. and Ng, C. S. K.(2001) "Risk assessment for construction joint ventures in China", *Journal of Construction Engineering and Management*, ASCE, 127(1), 76-81.
- Simonin, B. L. (1999) "Transfer of marketing know-how in international strategic alliances: an empirical investigation of the role and antecedents of knowledge", *Journal of International Business Studies*, 30(3), 463-490
- Vanhonacker, W(1997) "Entering China: An unconventional approach", *Harvard Business Review*. 75, March-April 1997, 130-140.
- Wang, S. Q., Tiong, R. L. K., Ting, S. K., Chew, D., Ashley, D. (1998) "Evaluation and competitive tendering of BOT power plant project in China." *Journal of Construction Engineering and Management*, 124(4), 333-341.
- Wright, P, Szeto, W.F, and Cheng, L. T.W. (2002) "Guanxi and professional conduct in China: a management development perspective", *International Journal of Human Resource Management*, 13(1), 156-182.
- Xu, T., Smith, N. J, and Bower, D. A. (2002) "Improving the Integration of international contractors in China". In *Proceedings of the Eighteenth Annual Conference of ARCOM*, Association of Researchers in Construction Management, Northumbria University, Vol. 1. 287-294.
- Xu, T. and Wang, Y. Q. (2001), "The International Linking-Up of China's Construction Industry after its WTO Entrance", *Journal of Xi'an Jiaotong University (Social Science)*, 2001, 21(1), 22-29.
- Xu, T. and Wang, Y. Q. (2003), "The Analysis to Selecting the Most Appropriate Procurement System in Construction Project", *Journal of Xi'an Jiaotong University (Social Sciences)* , 2003, 23(1), 32-39.

Ye, S. and Tiong, R. K. L. (2000) "Government support and risk-return trade-off in China's BOT power projects." *Journal of Engineering, Construction and Architectural Management*, 7(4), 412-422.

Yin, R. K. (1984) *Case Study Research Design and Methods*, Sage Publications, Inc, California.