

Supply Relational Risk: What Role Does Guanxi Play?

ABSTRACT

The topics of supply chain risk and global sourcing have garnered significant attention in recent years. Although there is ample circumstantial evidence of global sourcing risk, especially from the western-firm perspective of sourcing from China, few published studies have investigated the root causes of this risk. In this paper we argue that much of the risk associated with sourcing from China stems from the differences associated with institutional norms and philosophical orientation between western and Chinese thought and culture. Based on an in-depth literature review and case analysis, we compare western forms of supply chain relationship management with Guanxi, the Chinese form of relationship management and propose a framework of how western firms are exposed to supply relational risk when sourcing from Chinese suppliers. The framework proposed in this paper sheds light for supply chain managers with regard to the potential pitfalls facing firms when working with Chinese suppliers, and provides the groundwork for future research regarding supply chain practices and Guanxi networks.

Key Words: Guanxi, buyer-supplier relationships, relational risk, theory-building

INTRODUCTION

With the rapid development of supply chain management, business risk management has increasingly shifted from the organizational level to the supply chain level (Harland et al., 2003). The study and practice of supply chain risk management (SCRM) has been garnering greater attention in academe, as well as the board room of major corporations (Cavinato, 2004; Manuj and Mentzer, 2008b; Rao and Goldsby, 2009; Christopher et al., 2011). Among these studies, Juttner, Peck and Christopher (2003) propose a comprehensive process of SCRM consisting of four constructs: (1) assessing risk sources for the supply chain; (2) defining adverse risk consequences; (3) identifying risk drivers in the supply chain strategy; and (4) mitigating risk for the supply chain. In this process, the first and most important step is to assess the risk sources, without which a firm simply cannot mitigate risks (Manuj and Mentzer, 2008a). While the literature on managing risk continues to develop, research associated with risk identification is still in an early stage (Zsidisin et al., 2004; Rao and Goldsby, 2009). In this forward-looking paper, we focus on the emerging field of global sourcing risk and in particular the supply relational risk that may exist when western firms (specifically European and North American firms) source from China, one of the fastest-growing production centers in the world (Salmi, 2006; Nassimbeni and Sartor, 2007; Biggemann and Fam, 2011; Kang et al., 2012). Despite the slowdown in manufacturing activity in China in recent years, sourcing activity in China will remain substantial and important for years to come--not just for export back to Western economies but also to support sales of Chinese subsidiaries of Western multinational corporations to the Chinese market (Fang et al., 2010; KPMG, 2012).

As sourcing from low cost countries (LCCs) expands (Fredriksson and Jonsson, 2009; Ruamsook et al., 2009), there is a growing concern of supply risk. Numerous factors can contribute to the failure of a supply relationship, such as product quality or supplier reliability. However, when western firms source from China and attempt to build partnerships with Chinese suppliers, it is highly likely that they will encounter relational difficulties rooted in institutional, philosophical, and cultural differences (Jia and Rutherford, 2010). They define Supply Chain Relational Risk (SCRR) as “*The risk to the supply chain of either party in a buyer-supplier relationship not fully committing to joint efforts due to either problems associated with cooperation or problems associated with opportunistic behavior*” (Jia and Rutherford, 2010, p. 253).

Max Weber (1951) argues that although there are certain elements which could be regarded as preconditions for the development of rational capitalism in China, the legal and societal foundations for capitalist enterprise are absent in the Chinese economy: “Not only formal jurisprudence fail[ed] to develop, but a systematic substantive and thorough rationalization of law was never attempted” (Weber, 1951: p. 150). Weber’s work explains one of the fundamental reasons behind the differences between Chinese and western cultural and economic systems. This dimension is also echoed by the two mechanisms regulating collective action proposed by Hui and Lin (1996), who claim that Chinese culture regulates collective action using relational mechanisms such as “face” and “familial sanction,” while American culture relies more on formal agreements. These relational mechanisms are part of a social system known as Guanxi, which bonds exchange partners through reciprocal exchange of favors and mutual obligations (Luo, 1997).

The Guanxi network or extended family network is a major institution in China—probably the major informal institution in the Chinese-speaking world as a whole (Parnell, 2005). Xin and Pearce (1996) claim that Guanxi is a substitute for formal institutional support. Redding (1990) also argues that networks in China are useful in “the regulation of transactions in the absence of state institutions for that purpose (p. 56).” Family rules are pervasive and other rules are weak in comparison because family rules have been developed into and substituted for societal rules in China (Ge, 2006).

Guanxi is a fully developed body of literature in organisational theory research (Hwang, 1987; Luo, 2000; Wong and Tam, 2000; Chen and Chen, 2004). In a supply chain context, it can be considered a Chinese form of relationship management as compared with western forms of relationship building such as networking (e.g., Cheng et al., 2012). For example, Barnes et al. (2011) found that *ganqing*, *renqing* and *xinren* (affection, favor and personal trust—three components of Guanxi) are crucial for fostering the development of such Sino-Anglo Business-to-Business relationships. Supply chain researchers have realized the importance of national culture in the buyer-supplier relationship (Metters et al., 2010). Zhao et al. (2006) call for research on the Guanxi’s effects on buyer-supplier relationships in China. Zhao et al. (2008) propose more cross-cultural investigation of the moderating effects of culture on the impacts of power on relationship commitment and supply chain integration. However, to date, the studies on the effects of Guanxi on the buyer-supplier relationship are in the initial stages, simply highlighting its importance (Millington et al., 2006; Salmi, 2006; Nassimbeni and Sartor, 2007; Giannakis et al., 2012) or reporting positive effects on performance (Lee and Humphrey, 2007; Cai et al., 2010; Cheng et al., 2012). Building on Jia

and Rutherford (2010), Kam et al. (2012) stress that the role of Guanxi in terms of risk management deserves further exploration. However, to the best of our knowledge, there is little empirical research devoted to this. This paper opens a new avenue of research by identifying risk sources associated with Guanxi as an example of supply risk caused by cultural differences associated with western firms sourcing from China.

CASE METHOD

Context and sample

A case study of Bombardier's (BA) procurement in China will be presented in order to inductively generate the supply relational risks caused by the differences between Chinese and western cultures (Eisenhardt, 1989; Miles and Huberman, 1994; Ellram, 1996). The case was chosen because it exemplifies an under-explored area of research and posed a daunting task for managers. In addition, the case highlights a major transfer of production from the west to China in a fairly short period of time, requiring the involvement of Shenyang Aerospace Corporation (SAC), the Chinese supplier, at the start of a new product development project. Both facts complicated the task, putting additional strain on the relationship between the two firms. The process suggested itself as an extreme case of shifting the development and production of strategic components—as opposed to the dominant practice of sourcing low value added items from China (see Yin, 2009). Finally, an all-western team of expatriates was stationed at SAC, the Chinese supplier. This made the task of understanding and adapting to the Chinese culture more difficult. This case, with its unique set of circumstances, provides an opportunity to witness cultural clashes and hence, offers an extreme illustration of western companies sourcing from China (See Voss et al., 2002). It reveals the supply relational risk sources rooted in cultural differences between China and the West.

Bombardier (BA) is a Canadian Aerospace Corporation and a world leader in the design and manufacture of medium sized commercial aircraft. BA's production sites are situated in North America, Europe and Asia and it has transferred 80% of the production of its Q-Series aircraft to SAC from its UK subsidiary and a Japanese supplier. This included supporting the transfer as if it were an internal transfer, with the UK subsidiary (BA Belfast, known as Short Brothers) taking full responsibility to develop SAC's capabilities. An Interface Team selected from the UK subsidiary had been stationed in China since 2005. The entire team, with more than 20 participants, came from Western Europe and North America.

The interface team was based at SAC, with several team members staying for one to two years, while others rotated more frequently.

SAC is a subsidiary of the large, state-owned Aviation Industry Corporation of China (AVIC). It designs and manufactures aviation products and provides aircraft maintenance services. Its mission is to be a world leading supplier in commercial aviation products. Since 1985, SAC has expanded into the overseas aviation market, cooperating with other firms in the industry such as Boeing and Airbus. It has become a strategic supplier to these major players as well as BA.

Data collection

The data were collected through 16 semi-structured interviews, each lasting from 45 minutes to 1.5 hours, 12 at BA and 4 at SAC (see Table 1). All interviews were recorded, transcribed and coded using NVivo 11 software. During the interviews, we asked the interviewees to assess if the particular element of Guanxi caused tension or risk to the BA-SAC buyer-supplier relationship and to provide real life examples illustrating the differences between Guanxi elements and western forms of relationship management identified from the literature. Extensive archival data (e.g., news coverage and company websites) were used to triangulate and complement the interview data. The unit of analysis is the relationship evolution and interactions between both parties.

Data analysis

In the first round of analysis we coded the transcripts identifying potential risk sources caused by the differences between elements of Guanxi and western forms of relationship management based on examples provided by the interviewees. In the second round of data analysis, we attempted to identify and examine the two higher level constructs of institutional norms and philosophical orientation.

---Insert Table 1 About Here---

GUANXI RELATED SUPPLY RELATIONAL RISK

Both BA and SAC's parent companies signed a memorandum of understanding (MOU) in 2008 to formalize the strategic relationship and subsequently made significant financial investments (BA US\$100M; SAC US\$400M) several days after the formal announcement of BA's C-Series development project. BA was the first Original Equipment Manufacturer

(OEM) to grant design authority on major supplied parts to China's aviation industry, and SAC is now a major risk-sharing supplier on the new BA C-Series aircrafts (Anonymous, 2012).

However, in 2011, BA contacted suppliers such as Aernnova about stepping in temporarily to build some components in reaction to unexpected problems in airframe manufacturing in China. Aernnova delivered the first center wing box to Bombardier in January 2012 (Flottau, 2012). According to an aerospace executive, the problem was in Bombardier's supply chain management in China. Specifically, SAC was unable to handle the manufacturer's design tools, which were already challenging using western data systems, even without a language barrier. According to the most recent news, BA is delaying delivery of its new C-Series plane until the second half of 2015, a costly setback that raises the risk that Airbus's competing jet will arrive in airline hangars first (Keenan and Marotte, 2014). Bombardier subsequently took steps to reduce the risk that a Chinese supplier would delay the first test flight of the C-Series (Flottau, 2012).

Guanxi can be a source of supply relational risk because there are several distinct differences in its approach as compared with western forms of supply relationship management. Further, Guanxi prevails because this is the relationship marketing approach used by Chinese suppliers, rather than adapting to western relationship norms (Gummesson, 2002). From a thorough literature review and analysis of the case we identify and propose that differences in institutional norms and philosophical perspectives are two higher-order constructs or themes that form the basis for supply risk caused by cultural differences, and that each of these two constructs consist of various risk sources for western firms sourcing in China. Each of these are discussed below and summarized in Table 2. Table 3 provides representative quotes for each risk source identified. All of the supply relational risk sources resulted in significant schedule delays.

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Institutional norms

Scott (2001) defines institutionalization as the process by which actions are repeated and given similar meaning by self and others. According to Scott, the aspects of the environment through which institutional influences operate include three pillars:

- Regulative pillar includes regulatory structures, government agencies, laws and courts, professions, interest groups and mobilized public opinion;

- Normative pillar consists of values, norms and rules promulgated by trade and professional associations.
- Cultural-cognitive conception of institution stresses the central role played by the socially-mediated construction of a common framework of meaning.

Orthogonal to the three pillars, Scott (2001) proposes four types of carriers: symbolic systems, relational systems, routines and artifacts and the six levels of analysis: world system, society, organizational field (Industry), organizational population, organization and organizational subsystem. These carriers and levels of analysis imply that there are different sources of institution: world, society, industry and organization. Western rules and regulations have been applied at the societal level and even international levels. Relating to the network governance perspective, these institutions regulate firms by applying network governance mechanisms.

Based on the BA case data and prior literature, we propose that there are three risk sources associated with institutional norms. They include risk associated with 1) hierarchical structure, 2) network governance, and 3) relationship building process.

Risk associated with hierarchical structure

The BA interface team used the western approach of interacting with the supplier to solve issues and problems at SAC. For example, western managers and engineers tend to solve problems interacting with their equivalent at the Chinese supplier. This was seen by Chinese managers as disrespectful because bypassing senior management is perceived as a lack of respect. The Chinese way is to obtain permission from top management and then decisions cascade down through the hierarchy of management. Many delays occurred before the interface team members realized this problem.

Risk associated with network governance

BA paid a great deal of attention to quality and its interface team consisted of more people from the quality department than any other functional department. However they were frustrated by the slow improvement at SAC in attaining BA's quality standards. The process was hindered by SAC's bureaucratic organizational culture commonly found in Chinese state-owned enterprises, in which SAC employees pay attention to Guanxi more than they

follow BA's rules and procedures. The Quality Manager of BA's interface team stated that they pushed SAC to follow the rules and procedures instead of actively self-improving.

Further, the interface team leader lost his temper several times during the formal and informal meetings with SAC personnel. From a Guanxi perspective of business relationships, this approach makes SAC lose face. The absence of reciprocity of *renqing* (or favor) was also a problem¹. As a result, BA was not able to secure key SAC individuals' trust (*xinren*) in the business relationship.

The interplay between face, *renqing*/favor and *xinren*/trust forms the essence of Guanxi network governance (Hwang, 1987). Guanxi dynamics emphasize the enjoyment of prestige without the loss of face and the saving of others' face. *Renqing* may contain not only such substantive materials as money, goods or services but prioritizes reciprocity more than many other cultures (Hwang, 1987). In essence, reciprocity of favor is an implicit obligation within the Guanxi network. If one fulfils the implicit obligations, it is said that she or he owns *xinren* or personal trust from others within the Guanxi network. When one disregards this reciprocal obligation, he/she loses face and *xinren*, hurts related parties' (i.e., friends and families) feelings, and eventually jeopardizes the Guanxi network (Park and Luo, 2001).

Chinese buyers and suppliers emphasize trust at a personal level rather than at an organizational level to generate partnerships. On the contrary, in the West, organizational trust is more credible than personal trust (Leung et al., 2005). In a similar vein, Parnell (2005) points out that exchange partners in Guanxi have affective and personal involvement in the relationship, resulting in effective commitment. This is also echoed by other researchers (Liang, 1949; Yang, 1992; Yang, 1994). In contrast, relational exchange partners in the West tend to have economic and impersonal involvement which leads to calculative commitment (Luo, 1997).

Risk associated with the relationship-building process

The BA interface team's intention was to build the relationship with SAC at an organizational level following western customs and did not realize that Guanxi relationship building is flexible. However, without understanding and adapting to the flexible nature of the Guanxi relationship-building process, BA had significant difficulties securing trust in their relationship with SAC.

¹ Hwang (1987) explains that *renqing* (favor) is first a set of social norms by which one has to abide in order to get along well with others in Chinese society; and second a resource that an individual can present to another as a gift in the course of social exchange.

Models that describe relationship building in a western context are similar in that they define the sequential stages of an evolutionary process from awareness through commitment/dissolution (Dwyer et al., 1987; Graen and Wakabayashi, 1994; Wilson, 1995; Iyer, 2002, Graen, 2003). Easton (1992) argues that progression through the stages of the relationship-building process, as first described by Dwyer et al. (1987), is based on the interplay of competition and cooperation (i.e., coopetition). Networking in the West is frequently associated with commercial corporate-to-corporate relations and is essentially formal (Luo, 2000). By contrast, Wong and Tam (2000) offer a Guanxi-building model that consists of three optional routing strategies through four psychological states, rather than sequential stages. For example, some western firms recruit the relatives of powerful Chinese government officials, who could help them obtain inside information of government contracts, and therefore are better positioned to win such contracts. We might argue that this model reflects the fact that Guanxi is essentially personal and informal (Luo, 1997; Parnell, 2005) and the process of Guanxi building is featured by the interplay of *face* and *renqing*.

Philosophical orientation

Philosophy in this context refers to "Cultural Philosophy," which is a branch of philosophy that comes from a region's culture. The consensus is that the West originated in ancient Greece and Rome. The concept of western culture is generally linked to the classical definition of the "Western World," which is the set of literary, scientific, political, artistic and philosophical principles which set it apart from other civilizations (Duran, 1995).

Confucianism, on the other hand, is the foundation of Chinese cultural values or put another way, Chinese culture is rooted in Confucian philosophy (Chen, 1911; Yau, 1994; Ge, 2006).

Based on the BA case and prior research, we propose that there are three sources of supply relational risk associated with the philosophical differences between western culture and Guanxi. They include risk associated with 1) family orientation, 2) the Yin-yang principle and harmony, and 3) time orientation.

Risk associated with family orientation

SAC's procurement director stated that "*western people are not like us. They don't normally devote their full efforts to the company. We Chinese, especially people in aerospace industry, have the spirit of devotion. We devote ourselves to the company and the country.*" The Interface Team Leader and the Quality Manager from BA did not agree with SAC's working style, such as a lack of planning from SAC who often count holidays as working days in the

work plan, leaving no room for contingencies. BA also implied that SAC should differentiate work from personal life. This difference caused a mismatch in work schedules and eventual frustration to both parties. The mismatch between SAC's and BA's work schedules can be explained by the difference between collectivist and individualistic cultures.

One of Hofstede's (1991) five dimensions of national culture is Collectivism vs. Individualism, which measures the degree of individualism in society. Individualism pertains to societies in which the ties between individuals are loose: everyone is expected to look after himself or herself and his or her immediate family. Its opposite, Collectivism, pertains to societies in which people from birth onward are integrated into a strong, cohesive group, which protects a person for life in exchange for unquestioning loyalty.

Collectivist societies, such as China, place group goals and collective action ahead of self-interest, thus gaining satisfaction and feelings of accomplishment from group outcomes. Meanwhile western cultures are individualistic and place self-interest ahead of group goals (Hofstede, 1991; Earley, 1989; 1993; 1994; Triandis, 1989). In Chinese society, it is specifically the interests of the family that are put before individual interests (Liang, 1949; Lin, 2001). Family orientation is considered a form of in-group society rather than universal collectivism, and is known as 'familistic collectivism' (Yang, 1992).

Risk associated with the Yin-yang principle and harmony

The "Yes means no" syndrome is one application of the Yin-yang principle. When the interface team leader lost his temper and pushed, SAC management tended not to push them back, but pulled by saying "yes," essentially agreeing. However this does not mean they accepted BA's view and instead they continued doing what they previously did. This caused further frustration from the interface team.

Strutton and Pelton (1997) explore the dynamics of relational conflict and attempt to link *war strategies* with the *Yin-yang principle*. The interpretation of the Yin-yang principle is that when relationships conflict, only two movements are available to either partner, to push or pull. The Chinese would take a strategy called yielding, whereby when the other party tries to attack or "push," the Chinese would instead defend or "pull" and try not to confront the other party, and vice versa. This is called a complementary response. Western managers are often warned that the Chinese are heavily influenced by the military thoughts in Sun Tzu's "The Art of War." The essence of successful warfare is deception, and one of the key weapons of deception is the yielding strategy. These war strategies have been widely applied in business in Asian countries including China, Japan and Korea (Ambler, 1994).

Yin and Yang represent the contrasting qualities within reality and experience. For example light contrasts with darkness, providing them both with context and therefore meaning. The Yin-yang principle, a Chinese form of dualism, argues that two states (Yin and Yang) co-exist in *harmony* and can be in transition from Yin to Yang and vice versa all the time (Strutton and Pelton, 1997). Achieving balance and harmony is essential for defense. Too much Yang makes one too aggressive and too much Yin results in failure to accomplish goals.

In contrast, it has been argued that many westerners adopt a dualistic thinking in “black and white,” which means they normally consider that things must be one way or the other (Strutton and Pelton, 1997). In the West, Plato first proposes the dualistic concepts: heaven and earth, body and soul. Hammell (2006) claims that dualistic thinking is specific to western philosophy and tends to categorize anything into “either/or,” which contrasts with the Yin-yang principle and harmony. Without appreciating and adapting to the dynamic transition between Yin and Yang (i.e., war strategies), westerners may feel deceived, which leads to distrust.

Risk source associated with time orientation

The interface team of BA intended to achieve objectives (e.g., transfer of production to SAC) in a comparatively short period of time and do everything efficiently whereas SAC, taking a long-term perspective, intended to build the relationship first before committing to work with BA. This misalignment caused tension between the two parties.

Hofstede (1991) provides the fifth dimension of national culture which is *long-term orientation*. China scores high in the long-term orientation dimension whereas western countries often score low. This dimension refers to working in a positive, dynamic and future-oriented culture linked with such Confucian values as persistence and thrift. Short-term orientation represents a negative, static, traditional and past-orientated culture. Styles and Amber (2003) argue that the building of Guanxi is associated with longer-term considerations. These relationships take time to develop, but once formed, are difficult to break and the obligations one has are difficult to avoid.

CONCLUSIONS AND FUTURE RESEARCH DIRECTIONS

There has been a surge of research on the topic of supply chain risk and many of its sub-topics during the past fifteen years. Although many sources of supply chain risk have been proposed (e.g., Manuj and Mentzer, 2008a; Zsidisin, 2003), there has been little investigation

on the risk associated with supply chain relationships. Further, with a significant shift towards western firms relying more on suppliers located in China, there is limited insight on the theoretical underpinnings of risk when sourcing from Chinese suppliers. Although anecdotal evidence has been emerging of risk and the detrimental effects associated with sourcing from China (see Tang, 2008), we are not aware of a comprehensive examination investigating its underlying causes.

This paper provides a framework of how Guanxi might cause supply relational risk for western firms sourcing from China and aims to open a new avenue for future research. We propose that western firms sourcing in China are exposed to the six supply relational risk sources that originate from cultural differences associated with institutional norms and philosophical orientation. This is by no means a comprehensive list. Rather, our aim is to provide an initial platform to understand supply relational risk when managing global supply chains. Cultural differences/distance between China and the West are simply identified as barriers to buyer-supplier relationships, but no one has explicitly spelled out what exactly they are. We hope that this research will ultimately increase western managers' awareness of Guanxi-related problems when sourcing in China, and provide a foundation for understanding the cultural differences between China and the West. In managing relationships with Chinese suppliers it is vital that western companies at the very least understand the concept of Guanxi.

Further, we realize that there are other factors contributing to the transfer in the BA case. For example, BA is not SAC's only customer. It is understandable that SAC needed to invest significant resources to projects with their other customers. However based on the analysis, cultural differences contributed directly to the delay of the first test flight of the C-Series and this is one of the key reasons why BA finally decided to pull some production from SAC.

The theoretical constructs proposed in this paper are based on a single extreme case and the integration of various literature streams. Therefore, at this current stage of research, there is a lack of theory testing. Future research could empirically examine western purchasing manager perceptions of these supply relational risk sources with in-depth case studies and surveys. Such research can contrast the various management relationship styles employed by firms that have successful business relationships with Chinese suppliers with those western organizations that have encountered significant problems when sourcing in China.

Second, the paper focuses on the identification of risk sources based on prior theoretical frameworks, but did not discuss mitigating strategies that can be employed to

address supply relational risk when sourcing in China. With a view to mitigating Guanxi-related supply relational risk we propose that another future research direction should explore how both western firms and Chinese suppliers manage such risks with the aim of answering the question: *“How can firms mitigate against the relational risks associated with cultural differences?”*

We believe that the extent of global trade and interconnectivity of supply chains will only grow in the future. With greater reliance on suppliers throughout the world, the prevalence and severity of supply chain risk is heightened. By better understanding and assessing risk in the supply chain, to include supply relational risk associated with Guanxi networks in China (as well as other cultures when sourcing from foreign countries or cultures), firms can learn to proactively adapt and mitigate potential problems in their supply chains.

REFERENCES

- Ambler, T. 1994. "Marketing's third paradigm: Guanxi." *Business Strategy Review* 5(4): 69
- Anonymous. 2012. "Bombardier and China: the relationship strengthens." *Commercial Aircraft update* November 23 (5): 1-10
- Biggemann, S. and Fam, K.S., 2011. "Business marketing in BRIC countries." *Industrial Marketing Management* 40 (1), 5–7.
- Cai, S., Minjoon, J. and Yang, Z., 2010. "Implementing supply chain information integration in China: the role of institutional forces and trust." *Journal of Operations Management* 28: 257–268.
- Cavinato, J. L. 2004. "Supply chain logistics risks: From the back room to the board room." *International Journal of Physical Distribution & Logistics Management* 34 (5): 383-387
- Chen, H. 1911. *The Economic principles of Confucius and his School (Volume 1)*. USA: University Press of the Pacific
- Chen, X.P. and Chen, C.C. 2004. "On the intricacies of the Chinese Guanxi: A process model of Guanxi development." *Asia Pacific Journal of Management* 21(3): 305.
- Cheng T.C.E., Yip, F.K. and Yeung, A.C.L. 2012. "Supply risk management via guanxi in the Chinese business context: The buyer's perspective." *International Journal of Production Economics* 139: 3–13
- Christopher, M., Mena, C., Khan, O. and Yurt, O. 2011. "Approaches to managing global sourcing risk." *Supply Chain Management: An International Journal* 16 (2): 67-81
- Duran, E. 1995. *Native American Postcolonial Psychology*. New York: State University of New York Press
- Dwyer, F.R., Schurr, P.H. and Oh, S. 1987. "Developing buyer-seller relationships." *Journal of Marketing* 51: 11.
- Earley, P.C. 1989. "Social loafing and collectivism: a comparison of the united." *Administrative Science Quarterly* 34 (4): 565.
- Earley, P.C. 1993. "East meets west meets mideast: further explorations of collectivistic and individualistic work groups." *Academy of Management Journal* 36 (2): 319.
- Earley, P.C. 1994. "Self or group? Cultural effects of training on self-efficacy and performance." *Administrative Science Quarterly* 39 (1): 89.
- Easton, G. 1992. "Industrial networks: A review." In *Industrial networks: a new view of reality*, edited by Axelsson, B. and Easton, G., 3-27. London: Routledge.
- Fang, T., Gunterberg, C. and Larsson, E. 2010. "Sourcing in an Increasingly Expensive China: Four Swedish Cases." *Journal of Business Ethics* 97:119–138

Flottau, J. 2012. "Bombardier Temporarily Reassigns Key CSeries Fuselage Work." *Aviation Daily*. July 6th, 2012

Fredriksson, A. and Jonsson, P. 2009. "Assessing consequences of low-cost sourcing in China." *International Journal of Physical Distribution & Logistics Management* 39 (3): 227-249

Ge, Z.G. 2006. *Lecture notes on ancient Chinese culture (in Chinese)*, Shanghai: Fudan University Press.

Giannakis, M., Doran, D. and Chen, S. 2012. "The Chinese paradigm of global supplier relationships: Social control, formal interactions and the mediating role of culture." *Industrial Marketing Management* 41: 831-840

Graen, G.B. 2003. "Role making onto the starting work team using LMX leadership: diversity as an asset", in *Dealing with Diversity, LMX Leadership: The Series, Vol. 1*, edited by Graen, G.B. (Ed.), 1-28. Greenwich, CT: Information Age

Graen, G.B. and Wakabayashi, M. 1994. "Cross-cultural leadership-making: bridging American & Japanese diversity for team advantage", in *Handbook of Industrial and Organizational Psychology*, edited by Triandis, H.C., Dunnette, M.D. and Hough, L.M., 415-46. New York, NY: Consulting Psychologist Press

Gummesson, E. 2002. *Total Relationship Marketing: Rethinking Marketing Management*. 2nd ed., UK: Butterworth-Heinemann

Hammell, K. 2006. *Perspectives on disability and rehabilitation*. UK: Elsevier

Harland, C., Brenchley, R. and Walker, H. 2003. "Risk in supply networks." *Journal of Purchasing & Supply Management* 9: 51-62

Hofstede, G. 1991. *Culture and organizations: software of the mind*. London: McGraw-Hill.

Hui, C. and Lin, Z. 1996. "Regulating collective actions: a case of two cultural systems." paper presented at the Research Workshop on Global Organization, HKST, Hong Kong.

Hwang, K. 1987. "Face and favor: The Chinese power game." *American Journal of Sociology* 92: 944-974.

Iyer, K. 2002. "Learning in strategic alliances: an evolutionary perspective." *Academy of Marketing Science Review* 10: 1.

Jia, F. and Rutherford, C. 2010. "Mitigation of supply chain relational risk caused by cultural differences between China and the West." *International Journal of Logistics Management* 21 (2): 251-270

Juttner, U., Peck, H. and Christopher, M. 2003. "Supply chain risk management: Outlining an agenda for future research." *International Journal of Logistics: Research and Application* 6.

- Kam, B.H., Chen, L. and Wilding, R. 2012. "Managing production outsourcing risks in China's apparel industry: a case study of two apparel retailers." *Supply Chain Management: An International Journal* 16 (6): 428–445
- Kang, M., Wu, X., Hong, P. and Park, Y., 2012. "Aligning organisational control practices with competitive outsourcing performance." *Journal of Business Research* 65 (8): 1195–1201.
- Keenan, G. and Marotte, B. 2014. "Latest delays risky for Bombardier's C Series." *The Globe and Mail*, Thursday, Jan. 16th, 2014
- KPMG, 2012. The Future for MNCs in China. Available at: <http://www.kpmg.com/ru/en/services/nationaldesk/china-practice/documents/future-for-mnc-in-china.pdf> Retrieved on 01.03.2014.
- Lee, P.K.C. and Humphreys, P.K. 2007. "The role of *Guanxi* in supply management practices." *International Journal of Production Economics* 106 (2): 450-467
- Leung, T.K.P., Lai, K., Chan, R.Y.K. and Wong, Y.H. 2005. "The roles of xinyong and *Guanxi* in Chinese relationship marketing." *European Journal of Marketing* 39 (5): 528.
- Liang, S. 1949. *The Essential Meanings of Chinese Culture*. Hong Kong: Zheng Zhong Press.
- Lin, N. 2001. "Guanxi: A Conceptual Analysis." In *The Chinese Triangle of Mainland China, Taiwan and Hong Kong: Comparative Institutional Analysis*, edited by So, A.Y., Lin, N. and Poston, D. Westport, CT: Greenwood.
- Luo, Y. 1997. "Guanxi: Principles, philosophies, and implications." *Human Systems Management* 16: 43.
- Luo, Y. 2000. "Economic perspective of Guanxi." In *Guanxi and business*, edited by Luo, Y. Singapore: World Scientific Publishing.
- Manuj, I. and Mentzer, J.T. 2008a. "Global supply chain risk management." *Journal of Business Logistics* 29 (1): 133-155
- Manuj, I. and Mentzer, J.T. 2008b. "Global supply chain risk management strategies." *International Journal of Physical Distribution and Logistics Management* 38 (3): 192-233
- Metters, R., Zhao, X., Bendoly, E., Jiang, B. and Young, S. "The way that can be told of is not an unvarying way": Cultural impacts on Operations Management in Asia." *Journal of Operations Management* 28 (3): 177-185
- Miles, M.B. and Huberman, A.M. 1994. *Qualitative Data Analysis*, 2nd ed., London: Sage
- Millington, A., Eberhardt, M. and Wilkinson, B. 2006. "Guanxi and supplier search mechanisms in China." *Human Relations* 59 (4): 505–531.
- Nassimbeni, G. and Sartor, M. 2007. "Sourcing in China: a typology." *International Journal*

of Production Economics 107 (2): 333-349

Park, S.H. and Luo, Y. 2001. "Guanxi and organizational dynamics: Organizational networking in Chinese firms." *Strategic Management Journal* 22: 455.

Parnell, M.F. 2005. "Chinese business guanxi: an organization or non-organization?" *Organisational Transformation and Social Change* 2: 29.

Rao, S. and Goldsby, T.J. 2009. "Supply chain risks: a review and typology." *International Journal of Logistics Management* 20 (1): 97-123

Redding, S.G. 1990. *The Spirit of Chinese Capitalism*. New York: Walter de Gruyter.

Ruamsook, K., Russell, D. M. and Thomchick, E. A. 2009. "Sourcing from low-cost countries." *International Journal of Logistics Management* 20 (1):79-96

Salmi, A. 2006. "Organizing international supplier relations: An exploratory study of Western purchasing in China." *Journal of Purchasing and Supply Management* 12 (26): 197-208

Scott, W. R. 2001. *Institutions and organizations*. USA: Sage.

Strutton, D. and Pelton, L. 1997. "Scaling the Great Wall: The yin and yang of resolving business conflicts in China." *Business Horizons* 40: 22.

Styles, C. and Ambler, T. 2003. "The coexistence of transaction and relational marketing: Insights from the Chinese business context." *Industrial Marketing Management* 32: 633.

Tang, C.S. 2008. "Making products safe: Process and challenges." *International Commerce Review* 8(1): 48-55.

Triandis, H.C. 1989. "The self and social behaviour in differing cultural contexts." *Psychological Review* 96: 506-20.

Voss, C., Tsikriktsis, N. and Frohlich, M. 2002. "Case research in operations management." *International Journal of Operations & Production Management* 22: 195.

Weber, M. 1951. *The Religion of China: Confucianism and Taoism*. Glencoe, Illinois: The Free Press.

Wilson, D.T. 1995. "An integrated model of buyer-seller relationships." *Academy of Marketing Science Journal* 23 (4): 335.

Wong, Y.H. and Tam, J.L.M. 2000. "Mapping relationships in China: guanxi dynamic approach." *The Journal of Business & Industrial Marketing* 15: 57.

Xin, K.R. and Pearce, J.L. 1996. "Guanxi: Connections as substitutes for formal institutional support." *Academy of Management Journal* 39:1641.

Yang, K.S. 1992. "Chinese social orientation: an integrative analysis." in *Chinese Societies and Mental Health: The Chinese Experience*, edited by Lin, T.Y., Tseng, W.S. and Yeh, E.K.,

122-7. Hong Kong: Oxford University Press

Yau, O.H.M. 1994. *Consumer behaviour in China: customer satisfaction and cultural values*. London and New York: Routledge

Yin, R. 2008. *Case study research: design and methods*. 4th Ed., London: Sage

Zhao, X., Flynn, B.B. and Roth, A.V. 2006, "Decision sciences research in China: a critical review and research agenda - foundations and overview." *Decision Sciences* 37 (4): 451-496

Zhao, X., Huo, B., Flynn, B., and Yeung, J. 2008. "The impact of power and relationship commitment on integration between manufacturers and customers in a supply chain." *Journal of Operations Management* 26 (3): 368–388.

Zsidisin, G.A. 2003. "Managerial perceptions of supply risk." *Journal of Supply Chain Management* 39(1): 14-25.

Zsidisin, G.A., Ellram, L.M., Carter, J. and Cavinato, J.L. 2004. "An analysis of supply risk assessment techniques." *International Journal of Physical Distribution & Logistics Management* 34 (5): 397-413.

Companies		Interviewee's Job Title		Interview Sites		No. of interviews
1.	BA Belfast	1.	Program Manager, Q Series	1.	Belfast, North Ireland	2
2.	BA Belfast	2.	Sourcing Manager	2.	Belfast, North Ireland	1
3.	BA Belfast	3.	Supply chain quality manager	3.	Belfast, North Ireland	1
4.	BA Belfast	4.	Head of logistics	4.	Belfast, North Ireland	2
5.	BA Belfast	5.	Specialist buyer	5.	Belfast, North Ireland	1
6.	BA Interface team	6.	Interface team leader	6.	SAC office/site	1
7.	BA interface team	7.	Chief buyer	7.	SAC office/site	2
8.	BA interface team	8.	Quality manager	8.	SAC office/site	1
9.	BA interface team	9.	Quality inspector	9.	SAC office/site	1
10.	SAC	10.	Project director	10.	SAC office/site	1
11.	SAC	11.	Procurement director	11.	SAC office/site	2
12.	SAC	12.	Quality director	12.	SAC office/site	1

Table 1. List of interviewees, their titles and site visits

Construct/Theme	Risk Source	Perception of Western managers	Perception of Chinese managers	Risk representation in case
Institutional Norms	Hierarchical Structure	Low power distance	High power distance	Misunderstanding of inter-organizational communication channels
	Network Governance	Based on collective sanction	Dynamic interplay between face, renqing and xinren	Having difficulty obtaining xinren (personal trust) and subsequent lack of project commitment
	Relationship Building Process	Step by step at organisational level	Flexible, informal and personal relationships	Experiencing difficulty in building xinren (personal trust) due to different approaches
Philosophical orientation	Family Orientation	Individual goals prioritized	Family or group goals prioritized	Opposing views of work and personal life
	Dualism (ying-yang)/Harmony	Either or; black or white	Dynamic transition from yin to yang and from yang to yin	Differing approaches for address interorganizational and personal conflict
	Time orientation	Short term	Long-term	Misaligning relationship building steps and timeframe

Table 2. Supply Relational Risk Sources of Western Firms Sourcing in China

Supply relational risk sources	
Risk sources	Representative Proof Quotes
Hierarchical Structure	<ul style="list-style-type: none"> • We kind of struggle at the beginning because the organizational structure we used to. Almost everything has to go through hierarchy and different functional departments at SAC. We asked a lot of stuff and got no answers from them. (Program Manager, Q Series) • I tried to address any problem arising at the peer level but I found I had to go to the higher level every time. Sometimes I have to go to the Deputy General Manager. Sometimes I have to go to his boss, the General Manager. That is very frustrating because the SAC project team seems not to be able to sort out the problems and just do what their senior management told them. (BA Interface team leader)
Network Governance	<ul style="list-style-type: none"> • Our normal behaviour wasn't succeeding. I lost my temper several times because I can't get things done. It was so frustrating. (BA Interface team leader) • During the relationship building process, we had some arguments. If this happened between China, it is difficult to keep the relationship going. But we understand that Westerners are straightforward. We are not. Sometimes we don't express our opinions directly because that way, somebody may lose face. We don't want to offend anyone. This is related to the fact that Chinese emphasize harmony and saving face. (Quality director, SAC)
Relationship Building Process	<ul style="list-style-type: none"> • One of the things SAC is very keen to do is they often invite us for dinner, which is part of the process. We spent a lot of time on this. We really need to do something else. The problem is this kind of things is too often. Actually I see attending the dinner is part of our job. (BA Interface team leader) • In the west, systematic management method is implemented while in China we rely heavily on Guanxi. Our company has gradually adapted to the systematic management method. We can't manage this fast growing company without a system and procedures. (Quality director, SAC)
Family Orientation	<ul style="list-style-type: none"> • I can see from SAC's point of view, they put group interest ahead of their self-interest. They tend to say they work for the company and the company is everything. They work for their motherland and for the (communist) party. In the west, they work for themselves. (Chief buyer, BA interface team) • Western people don't normally devote their full efforts to the company. We Chinese especially people in Aerospace industry have the spirit of devotion. We devote ourselves to the company and the country. For example, we could work day in and day out continuously for months to finish a project. During that period, we don't normally go home at all and we stay at the temporary factory dormitory overnights. (Procurement director, SAC)
Dualism (ying-yang)/Harmony	<ul style="list-style-type: none"> • Here when you ask "can you do this, can you do that?" They answer "ok" but you don't know if they do finish it because in a lot of occasions, they just don't do it. (Quality inspector). • Nobody at SAC bangs the desk and demand. That happens in western company quite a lot... There are more pushes from BA's perspective now. It is different philosophy. (Chief buyer, BA interface team)
Time orientation	<ul style="list-style-type: none"> • The Chinese way is different. We were frustrated when they did not do things quickly enough. They were also frustrated because we asked them to do it too quickly. This is the major friction between us. We tend not to push too hard at the individual level but we pushed hard at the organizational level. (Quality Manager, BA's interface team) • We understand that Western people are more straightforward than us and want us to work at their pace but we really would like to build trust with them in the first place. (Project director, SAC)

Table 3. Representatives quotes to the supply relational risk sources