



The Impact of the Relationships between Buyers and Suppliers Based on Their Financial, Social and Structural Bonds

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This study examined a sample of Taiwanese companies and investigated the impacts of the relationships between buyers and suppliers with regard to financial, social, and structural bonds. The results show that firms share the knowledge with regard to supplier selection and supplier management based on *guanxi* (relationships), and that this can reduce transaction costs and increase investment, trust, and performance. Firms carry out the supplier selection and management based on *guanxi*, which can reduce transaction costs, while increasing investment, trust, and performance. Taiwanese firms use *guanxi* from their relatives, friends, and neighbors to their business. The key point is that buyer's and supplier's *guanxi* comes from both sides and is very important for Taiwanese firms, especially in their buyer and supplier collaboration.

Keywords: *guanxi*, supplier relationships, supplier management, knowledge sharing

Introduction

Chinese business culture emphasizes the concept of '*guanxi*,' which can be loosely translated as relationships or connections (Leung, Chang, Lai, & Ngai, 2011). Such relationships can be seen as a kind of knowledge transfer within Chinese communities; as noted by Lohikoski and Haapasalo (2013): 'Communication and knowledge transfer are closely linked; effective communication enhances knowledge transfer and vice versa.' In its research, this study uses a sample of Taiwanese companies as case studies. This sample is chosen based on the following reasoning from Barnes, Yen, and Zhou (2011): 'Taiwan is chosen as the research context namely because of its economic strength, Chinese cultural background, and its strategic position for western firms, as a significant market in its own right

and as springboard for China.’ However, while many academics and practitioners consider the economic situation in China, much less attention is paid to Taiwan. Moreover, as stated by Barnes et al. (2011): ‘In particular, when resources are limited, *guanxi* can become a rescue strategy and a survival practice that offers firms an extra protective mechanism.’

Chiu, Hsieh, Li, & Lee (2005) noted that ‘As existing literature suggests, business can build customer relationships by initiating one or several types of bonds, including financial, social and structural bonds.’ With regard to the relationships with suppliers, this study will discuss the following three types of bonds: financial, social, and structural. Barnes et al. (2011) pointed out that structural and social bonds are divided in western contexts. They stated that structural bonds are based on contracts related to investments in products, property, and technology. In contrast, the social bonds between buyers and suppliers are similar to those seen in a friendship, and thus to those associated with *guanxi*. Yang and Wang (2011) thus stated that: ‘First, social networking theory can be employed to illustrate the development and the key functions of a *Guanxi* network.’ For example, firms can share knowledge with regard to supplier selection and supplier management based on *guanxi* and this can then reduce transaction costs while increasing investment, trust, and performance. Chinese firms use *guanxi* from their employees’ relatives, friends and neighbors when doing business, such as negotiating, outsourcing and selecting suppliers.

Literature Review

Social Bonds

Taiwanese firms use *guanxi* in order to build relationships with suppliers and customers (Chiu et al., 2005). Wang (2007) pointed out that such relationships can serve to increase trust and commitment between firms and other players, as well as enable companies to better realize their customers’ wants and needs. In the wider Chinese culture, people like to give gifts to family and friends on special days, such as Chinese New Year. Such social exchanges help to build *guanxi*, the strength of which can sometimes determine the value of the gifts given.

Guanxi is related to the following concepts: *renqing* (favor) and *mianzi* (honor). In this case, *renqing* refers to the favors one receives from others, and vice versa. The concept of *mianzi* (honor) is related to the idea of giving ‘face’ to the other party in a *guanxi* relationship (Zhuang, Xi, & Tsang, 2010). The use of *renqing*, *mianzi*, and *guanxi* allows firms to focus on the cooperation with their customers or suppliers, and can help them in their negotiation in case of a disagreement (Cai, Jun, & Yang, 2010).

Gao (2010) stated that *guanxi*, which exists within a business network, enables firms to share their resources, such as technology and informa-

tion. Chinese managers trust the information that comes from their guanxi networks, because they know who they are dealing with. Consequently, the guanxi networks can work to finance and develop markets together.

Chinese firms usually give gifts on special days, such as Chinese New Year, to their important customers, suppliers, and others, as these can help to develop guanxi, honor, and respect (Leung et al., 2011).

Financial Bonds

Guanxi means that transaction costs can be more flexible in a Chinese business context. When firms face problems, they may be helped by their business partners, due to having good guanxi (Parnell, 2005). As noted above, guanxi enables the business partners, such as suppliers and their buyers, to trust each other.

Walter et al. (2001) pointed out that the collaboration, which exists within guanxi networks, requires all the partners, from suppliers to customers, to recognize the value that is created from these relationships. For example, customers can obtain profits from their suppliers, while suppliers gain opportunities for long-term collaboration, thus creating a win-win situation.

When a buyer and a supplier have good guanxi, this can consequently reduce their transaction costs (Dyer, 2000), which includes the costs related to searching for information, sales phone calls, transportation, and anything else involving communication fees. Yang and Wang (2011) stated that 'In contrast to Guanxi-based governance, market-based governance is another feasible option according to transaction cost economics.' They pointed out three main points of transaction cost economics (TCE), namely market uncertainty, transaction frequency, and investments. Furthermore, firms tend to make investments based on guanxi, with businessmen and women working more often with people they know, such as friends, relatives, classmates, and colleagues. Since they know each other well, this can lead to better collaboration (Parnell, 2005).

All in all, in addition to the exchange of the benefits and reduction of the transaction costs, the guanxi is important in the negotiation, namely with the business firms who have guanxi. Nevertheless, the guanxi partners work to create new products and markets together.

Structural Bonds

Chinese firms pay considerable attention to building and maintaining guanxi with their partners (Qiu, 2007; Pressey and Qiu, 2007). They also like to share information within their guanxi networks using various technologies, such as electronic data interchange (EDI), database information exchange (data warehouse and data mining), and websites (Min et al., 2005).

Firms in which the buyers and suppliers collaborate, need to be able to predict future demands in order to satisfy them (Sahay, 2003). In addition, collaborative partners need to solve any supply chain problems that arise together (Min, 2005). Kaewchur, Anussornnitisarn, and Pastuszak (2013) also noted: 'Moreover, to improve products, services, or organizational performance, multiple knowledge sources are required. The integration of knowledge can be accrued based on the sharing of individual knowledge.' Knowledge sharing is a process that can enable greater innovation and can have significant effects on the supply chain collaboration. The value of any collaboration is based on trust, commitment, the achievement of goals and satisfaction (Jonsson and Zineldin 2003).

The key point here is that co-ordination is needed within the supply chains in order to create value (Chandra and Kumar, 2000). Additionally, the relationships that exist among the suppliers are very important within the supply chain channels (Choi, Wu, Ellram, & Koka 2002), as relationships between the suppliers can help in the development of new materials and products. This is a win-win situation that can create more value from the supply chain collaboration (Bititci, Martinex, Albores, & Parung, 2004).

Methodology

Taiwanese companies are known for their good technological skills, high level of innovation, and high added value. Many Taiwanese firms are global enterprises and more of their revenue comes from overseas than local business, thus enabling them to share the risk coming from economic fluctuations in one part of the world.

How can businesses be first-class suppliers all over the world? What kind of second-class suppliers do they work for? How can their collaborative relationships be sustained? These issues are related to *guanxi* within Chinese firms. Based on a literature review, this study examines the social, financial, and structural bonds, as displayed in Table 1. The *guanxi* that exists with suppliers is based on activities, such as giving favors or gifts, taking people out to dinner or other entertainment. In addition to this, the partnerships between buyers and suppliers can build up trust and commitment, thus increasing social density. Financial bonds refer to the suppliers' financial links with their partners based on *guanxi*; consequently, these can make transactions more convenient and valuable. Business transactions are actions such as negotiating good prices, flexible delivery and payment dates or methods, as well as firms making investments in their suppliers. Information systems can reduce the transaction costs in order to maintain *guanxi*, while supply chain collaboration can integrate firms with their powerful suppliers. The value of financial bonds arises from the coordination with suppliers, which can lead to promotional offers for customers or creating

Table 1 Suppliers' Connections Based on Guanxi

Suppliers' connections based on guanxi		The elements related to guanxi
Social bonds	Activities	Chinese business model, 'mianxi' (favor)
	Social density	Trust and commitment
Financial bonds	Business transactions are convenient	Negotiating a good price, flexible delivery and payment dates or methods, and making investments
	Making things more convenient	Reduce the transaction costs
	Values	Coordination to build and maintain guanxi
Structural bonds	Supplier support structure	Suppliers' satisfaction, technological support, and information sharing.

new markets. This helps suppliers' to build and maintain guanxi with their partners within the supply chain. The third bond are the suppliers' structural links, and in this case guanxi focuses on the support structure that exists among the suppliers. Structural bounds are related to supplier satisfaction, technological support, and information sharing.

This study developed a questionnaire to examine whether Taiwanese companies are satisfied with their suppliers. The fieldwork was completed in the middle and south of Taiwan with the students of the National Chung Hsing University and the Southern Taiwan University of Science and Technology's EMBA (Executive Master of Business Administration). These students are all working and have many years of professional experience in their firms. They answered the questionnaire and also sent it to their suppliers in 2012. Over a period of six months, 192 samples were collected.

Findings

The questionnaires were completed by the EMBA students with many years of work experience in Taiwan. The EMBA students must have more than five years of work experience and must be at least executive managers, and thus they were good respondents for the current study.

The questionnaire asked the respondents about the foreign and local suppliers who collaborate with them. The results show that the respondents were more satisfied with their Taiwanese suppliers than their foreign ones. Of the 192 responses that were received, only four were not usable or 2.1 percent, leaving 188 effective questionnaires. Most of the respondents came from the purchasing and marketing departments of their firms (Table 2).

The reason for the high response rate from the purchasing and marketing department managers is that they frequently contact their suppliers and

Table 2 The Respondents' Departments

Department	(1)	(2)	(3)	(4)
Purchasing department	49	25.5	27.8	27.8
Sales and marketing department	45	23.4	25.6	53.4
Manufacturing department	9	4.7	5.1	58.5
Quality control department	4	2.1	2.3	60.8
Accounting department	17	8.9	9.7	70.5
Management department	26	13.5	14.8	85.2
Research development department	10	5.2	5.7	90.9
Others	16	8.3	9.1	100.0
Total	176	91.7	100.0	
Missing data	16	8.3		
Total	192	100.0		

Notes Column headings are as follows: (1) the number of respondents, (2) percentage, (3) effective percentage, (4) accumulated percentage.

thus collaborate with their suppliers more than the respondents from other departments. A total of 83.6 percent of the respondents were basic and middle level employees who work with their suppliers.

In the case of a total of 24.5 percent of the respondents, their companies are more than 25 years old, while 17.7 percent of the companies are between 5–10 years old, and 17.6 percent are 15–20 years old. In addition, more than 50 percent of the respondents stated that their firms had been in buyer and supplier relationships that had lasted for more than 15 years. A total of 35.9 percent of the respondents' companies have more than 150 employees; therefore, most of them are small and medium-sized enterprises. Around 39.6 percent of the companies have more than NT\$60,000,000 in capital, with 25.5 percent having between NT\$1,000,000 and NT\$10,000,000. One can see that most of the respondent companies have steady financial attributes and have been in business for around 15 years. In other words, one can say most of the respondent companies have good relationships with their suppliers, because they have worked with them for a long time.

Around 58.9 percent of the respondent companies are business-to-business (B2B) firms, with most being wholesale and retailers. The majority of respondent companies focus on Original Brand Manufacturing (OBM) and exports. We can thus conclude that Taiwanese businesses do global marketing and know how to raise their benchmarks to compete internationally, consequently, this has helped them to grow their markets all over the world.

Social Bonds

Social bonds can enable companies to have a very high degree of trust in their suppliers, making it easier to commit to collaborative relationships

based on renqing (favor). The results of the standard deviation analysis show that the item with the highest value is that a company offers preferential treatment to people who are friends or family members. The social activities include suppliers inviting their buyers to dine together, as well as giving gifts. In general, the suppliers engage in recreational activities to help build good social bonds.

Joseph, William, Barry, and Rolph (2010) stated that 'Factor loadings: Correlation between the original variables and the factors, and the key to understanding the nature of a particular factor. Squared factor loadings indicate what percentage of the variance in an original variable is explained by a factor.' Kaiser (1958) noted that the criteria for factor analysis are as follows: the factor loadings should be over 0.5 and the eigenvalues above 1. Furthermore, the social bond link guanxi's (relationship) factor analysis divided as follows: build up and maintaining of the Chinese business model, partnerships, trust, and mianzi (honor). This result can be seen from the Chinese business model where approximately 0.875 of the suppliers engage in recreational activities to build guanxi. The second and third scores are just below this, at 0.766 and 0.761. The suppliers invite the buyers to dinner, and also give gifts. On the other hand, the buyer offers preferential treatment to suppliers who are relatives and friends.

Joseph et al. (2010) stated that eigenvalues are the 'column sum of squared loadings for a factor; also referred to as the latent root. It represents the amount of variance accounted for by a factor.' The Chinese business model's highest eigenvalue is 3.942, and the key factors are normal Chinese social activities, such as dining and enjoying recreational activities. This is seen in the way that staff at Chinese companies often provides special treatment to suppliers, who are relatives and friends, thus developing guanxi. However, the cumulative explained variance of these factors is the lowest; therefore, they are stable. This is because the traditional Chinese business model has a long-term orientation due to the effects of the Chinese culture.

Reliability Analysis

Nunnally (1978) states that a reliability value of above 0.7 means the data are dependable. The suppliers' social links guanxi has two elements, which aim to build up and maintain the Chinese business model and partnerships, and the Cronbach's α of these are 0.827 and 0.761, both above 0.7, which means they have high dependability. The other two elements are trust and mianzi, which have Cronbach's α of 0.666 and 0.599, respectively.

In addition, the service strategy of customisation is an important method of enterprise management. The two factors of trust and mianzi are used by firms to assess their suppliers' strategic collaboration. Based on the results, companies have different strategies from their suppliers, and their

suppliers have different ways of strategic collaboration. This is the reason why the two factors of trust and mianzi have such low Cronbach's α values. However, these two factors are very important for the Chinese businesses.

According to Cuieford (1965), a Cronbach's α over 0.7 indicates high reliability, a score between 0.7 and 0.35 is acceptable, and items with scores of less than 0.35 should be rejected. The item-to-total correlations show that the suppliers engaging in recreational activities have the highest score. This means the buyer company would like their suppliers to do activities with them in order to establish and maintain the Chinese business model. The second most important item is that their supplier companies solve customer problems in a spirit of friendship, which has an item-to-total correlation of around 0.665. This means the buyer companies would like their suppliers to work to solve their problem together and then to have a better partnership. On the other hand, the buyer companies performing renqing (favor) for the supplier has an item-to-total correlation of around 0.49. Furthermore, the same scores were reached for the company that gives mianzi to the supplier in order to maintain cooperation and the company that gives mianzi to the supplier in order to provide extra value, with both having item-to-total correlations of 0.427. This shows that mianzi is a kind of guanxi that helps the suppliers' social relationships.

Financial Bonds

The respondent companies hope to maintain smooth business transactions over the long term, while they would also like their suppliers to provide preferential pricing and flexible delivery dates. The financial bonds focus on getting a good price and negotiating delivery times in a simple manner. Furthermore, the firms examined in this work hope their suppliers can operate in coordination with new promotional projects based on the customer requirements. The companies also want their suppliers to work on new products based on customer wants. For example, suppliers can provide ideas or new materials for their buyers in order to manufacture new products for their customers. For this reason, the companies would like to integrate collaboration with suppliers into their normal processes. However, a collaborative supply chain be established with suppliers of many dissimilar materials. This can lead to collaboration based on friendship links between buyers and suppliers. In addition, the companies stated that their suppliers provide flexible payment methods and that a powerful supplier affects supply chain collaboration. This shows that the stronger and more renowned suppliers can handle the entire supply chain collaboration process.

The results of the standard deviation analysis show that the companies invest in their suppliers, and also that suppliers provide price discounts.

Table 3 Factor Analysis (Aspect: Social Bonds)

Factor	Item	(1)	(2)	(3)
Build up and maintain the Chinese business model	Our suppliers engage in recreational activities.	0.875	3.942	30.326
	Our suppliers invite us to dine together.	0.766		
	Our suppliers give us gifts.	0.761		
	Our company offers preferential treatment to suppliers who are relatives.	0.597		
	Our company offers preferential treatment to suppliers who are friends.	0.573		
Partnership	Our suppliers solve customer problems in a spirit of friendship.	0.821	2.442	49.109
	Our suppliers solve customer problems in a business-like manner, rather than a friendly one.	0.782		
	Our suppliers wish to build friendships with us.	0.745		
Trust	Our company trusts this supplier.	0.732	1.241	58.659
	Our company is committed to this supplier.	0.720		
	Our company performs renqing for the supplier.	0.705		
Mianzi (honor)	Our company gives mianzi to the supplier to provide extra value.	0.681	1.003	66.373
	Our company gives mianzi to the supplier to maintain the cooperation.	0.659		

Notes Column headings are as follows: (1) factor loading, (2) eigenvalue, (3) cumulative explained variance.

The findings also show that the suppliers can operate in the coordination of new promotional projects based on the market.

The highest factor loading is for ‘the suppliers provide preferential pricing’ option, which reached a score of 0.891. The price is the key point in the buyer and suppliers’ guanxi. A second finding is that the suppliers can operate in coordination with new promotional projects based on the requirements of their customers. This is due to the buyer and supplier’s guanxi, which develops from their collaboration. The third highest score is related to the expectation of the buyer companies that their suppliers can operate in coordination with new promotional projects based on the market.

The suppliers’ financial bonds include negotiation and compromises, transaction costs, exchange of power, maintaining and building up guanxi. The highest eigenvalue is for negotiation and compromises, with a score of 4.87. This shows that the buyer and supplier’s collaboration focuses on negotiation and compromises. The second highest eigenvalue of 1.586 reached the item ‘buyer companies collaborate with suppliers, which can reduce transaction costs.’ This shows that the buyer companies expect such collaborations can reduce transaction costs.

The maximum value for the cumulative explained variance reached the

Table 4 Reliability Analysis (Aspect: Social Bonds)

Factor	Item	(1)	(2)
Build up and maintain the Chinese business model	Our suppliers engage in recreational activities.	0.652	0.827
	Our suppliers invite us to dine together.	0.595	
	Our suppliers give us gifts.	0.590	
	Our company offers preferential treatment to suppliers who are relatives.	0.644	
	Our company offers preferential treatment to suppliers who are friends.	0.629	
Partnership	Our suppliers solve customer problems in a spirit of friendship.	0.665	0.761
	Our suppliers solve customer problems in a business-like manner, rather than a friendly one.	0.568	
	Our suppliers wish to build friendships with us.	0.549	
Trust	Our company trusts this supplier.	0.482	0.666
	Our company is committed to this supplier.	0.463	
	Our company performs renqing for the supplier.	0.490	
Mianzi (honor)	Our company gives mianzi to the supplier to provide extra value.	0.427	0.599
	Our company gives mianzi to the supplier to maintain the cooperation.	0.427	

Notes Column headings are as follows: (1) item-to-total correlations, (2) Cronbach's α .

item related to the supplier providing price discounts and the buyer company investing in the supplier to build up their guanxi. The second highest score reached the item related to the suppliers providing preferential prices and flexible delivery dates in order to maintain guanxi. That links the guanxi from the suppliers' financial bonds to the development of guanxi.

Reliability Analysis

The Cronbach's α is 0.84 for negotiation and compromises, and 0.814 for the transaction costs. According to Cuieford (1965), only the Cronbach's α of build up guanxi, at 0.354, is close to the standard for rejection. The highest score for the item-to-total correlation is when the suppliers can operate in coordination with new promotional projects based on the market. The second highest reached is related to the suppliers that can operate in coordination with new promotional projects based on the requirements of the customers. This shows that the buyer companies would like their suppliers to work with them based on the requirements of their customers in order to develop new products or markets. On the other hand, the lowest item-to-total correlation of 0.215 is for building up the guanxi from financial bonds, which can probably be removed from the analysis, as this factor does not affect the whole financial bond measure. The reason for this result is that

Table 5 Factor Analysis (Aspect: Financial Bonds)

Factor	Item	(1)	(2)	(3)
Negotiation and compromises	The supplier provides convenient delivery dates.	0.854	4.870	34.786
	The supplier provides flexible payment methods.	0.839		
	The supplier provides convenient payment methods.	0.778		
Transaction costs	Our suppliers can operate in coordination with new promotional projects based on the requirements of the customers.	0.875		
	Our supplier can operate in coordination with new promotional projects based on the market	0.857		
	Collaboration between suppliers can reduce the transaction costs.	0.630	1.586	46.118
Exchange of power	Our company thinks that a powerful supplier affects the supply chain collaboration.	0.781	1.198	54.675
	Our company uses information systems to reduce the transaction costs with the supplier.	0.695		
	Our company integrates collaboration among suppliers.	0.666		
Maintain guanxi	The supplier provides preferential pricing.	0.891	1.048	62.160
	The supplier provides flexible delivery dates.	0.760		
Building up the guanxi	Our company invests in the supplier.	0.734	1.004	69.329
	The supplier provides price discounts.	0.641		

Notes Column headings are as follows: (1) factor loading, (2) eigenvalue, (3) cumulative explained variance.

'our company invests in suppliers' determines the companies' behaviour,' and 'the supplier provides prices discounts' explains the suppliers' way of doing things. Besides, 'our company invests in the suppliers' explains how the company invests in its suppliers, with a deep collaborative relationship that may be considered as part of a structural bond in future research. Additionally, 'the supplier provides price discounts' is about the discounts from the suppliers, and it is the result of maintaining guanxi.

Structural Bonds

From the suppliers' structural bond links, the highest scores are for the items 'the suppliers deal with the company's questions immediately' and 'they deal with complaints immediately.' That means that the suppliers respect their buyer companies very much and would like to solve their problems directly. The third highest score is for 'the company communicates with the suppliers based on the customer comments.' Consequently, the buyer company and their suppliers thus obtain more knowledge about their customers in order to create new products or markets together. In addition, the buyer company also wants their suppliers to carry out good pre-sales

Table 6 Reliability Analysis (Aspect: Financial Bonds)

Factor	Item	(1)	(2)
Negotiation and compromises	The supplier provides convenient delivery dates.	0.683	0.840
	The supplier provides flexible payment methods.	0.739	
	The supplier provides convenient payment methods.	0.686	
Transaction costs	Our suppliers can operate in coordination with new promotional projects based on the requirements of the customers.	0.721	0.814
	Our supplier can operate in coordination with new promotional projects based on the market	0.781	
	Collaboration between suppliers can reduce the transaction costs.	0.523	
Exchange of power	Our company thinks that a powerful supplier affects the supply chain collaboration.	0.510	0.643
	Our company uses information systems to reduce the transaction costs with the supplier.	0.401	
	Our company integrates collaboration among the suppliers.	0.445	
Maintain guanxi	The supplier provides preferential pricing.	0.629	0.772
	The supplier provides flexible delivery dates.	0.629	
Building up the guanxi	Our company invests in the supplier.	0.215	0.354
	The supplier provides price discounts.	0.215	

Notes Column headings are as follows: (1) item-to-total correlations, (2) Cronbach's α .

services for them. The buyer companies think their suppliers should collaborate in order to obtain more benefits and thus increase competitiveness. One can say that the suppliers' collaboration can be an advantage for their buyer companies.

The highest standard deviation for the suppliers' structural bond link item 'the company uses an ERP (Enterprise Resource Planning) system to contact suppliers' is 1.029. The second highest is 1.004, for 'the company provides customer information to the supplier.' One can see that information sharing is very important in the relationship between buyers and suppliers; therefore, the companies depend on the technology of the supplier. This is because the companies expect their suppliers to provide more information, so that they can generate more ideas and this can increase their guanxi due to the sharing of information and staying in close contact with each other.

The suppliers' structural bond link of guanxi's factor loading for 'the company depends on the skills of the supplier' has the highest score of 0.87. The second highest score, at 0.865, is for 'the company depends on the technology of the supplier.' The next two items have the same score of 0.823, namely 'the supplier deals with their buyers' questions immediately'

and ‘the company can collaborate with suppliers to obtain more benefits, and thus increase competitiveness.’

The suppliers’ structural bonds have three crucial parts, which are: supplier satisfaction, technology, and information sharing. Customer satisfaction has the top eigenvalue, technology the second, and information sharing has the lowest eigenvalue. However, the maximum cumulative explained variance is for information sharing, followed by technology and then customer satisfaction with the lowest cumulative explained variance. One can thus see that supplier satisfaction is the key factor in the suppliers’ structural bond links.

Reliability Analysis

The highest Cronbach’s α of 0.905 is for customer satisfaction; consequently, it is very important. Furthermore, since this result is over 0.7, it has high reliability. In addition, technology’s Cronbach’s α is 0.773 and information sharing’s 0.512, which is below the threshold, but still acceptable.

The highest item-to-total correlation is for ‘the suppliers deal with their buyer companies’ questions immediately,’ with a score of 0.811. The second is for ‘the suppliers deal with their buyer companies’ complaints immediately.’ The third is for ‘the company can collaborate with suppliers to obtain more benefits, thus increasing competitiveness.’ These items all relate to customer satisfaction. Supplier satisfaction is thus very important if there is to be good guanxi between buyers and suppliers.

Conclusions

Many previous studies examine social, financial, and structural bonds and their effects on the customer relationships, while this work employs them to discuss the guanxi between the buyers and suppliers. The main finding is that the buyer and supplier’s guanxi comes from both sides, and this allows the suppliers to become acquainted with their buyers.

The social bond links focus on how the buyers and suppliers participate in mutual activities, such as dining and exchanging gifts. In addition, buyer companies usually offer preferential treatment to suppliers who are relatives and friends. This means the buyer company would like their suppliers to do activities with them in order to establish and maintain the Chinese business model, which is based on guanxi.

The results of this study show that the transaction costs are the key point in financial bonds, and this is because companies on average hope to maintain stable business transactions. The financial bonds focus on good prices and negotiations about delivery times. Finally, the ability to deal with complaints immediately is important with regard to the structural bonds, as

Table 7 Factor Analysis (Aspect: Structural Bonds)

Factor	Item	(1)	(2)	(3)
Supplier satisfaction	Our company can collaborate with suppliers to obtain more benefits, thus increasing competitiveness.	0.823	5.505	42.349
	Our suppliers deal with our questions immediately.	0.823		
	Our suppliers deal with our complaints immediately.	0.795		
	Our supplier provides good pre-sales service.	0.778		
	Our supplier helps coordinate smooth supply chain operations.	0.741		
	Our company can increase its business relationships following collaboration with suppliers.	0.736		
	Our company communicates with suppliers based on customer comments.	0.696		
	Suppliers need to collaborate.	0.695		
Technology	Our company depends on the skills of its suppliers.	0.870	1.837	56.480
	Our company depends on the technology of its suppliers.	0.865		
Information sharing	Our company can easily obtain customer information.	0.703	1.060	64.635
	Our company provides customer information to its suppliers.	0.680		
	Our suppliers stay in touch.	0.537		

Notes Column headings are as follows: (1) factor loading, (2) eigenvalue, (3) cumulative explained variance.

this means that suppliers respect their buyers, and would like to solve their problems directly.

Guanxi is very important for Chinese firms, and especially for the buyer and supplier collaboration. Guanxi is a factor in social bonds in this research, and is used to give mianzi (honour) to each party in a relationship, making it easier to negotiate prices, date of delivery, and payment methods. Guanxi relates to the financial and structural bonds and can be used to perform good relationship marketing and enable firms and their suppliers to collaborate, as well as add to their competitive abilities. Chinese businesses thus make use of guanxi to carry out global marketing in order to increase sales, reputation, competitive advantage, and profits.

The research focuses on the Chinese business firms that operate in Taiwan and China. We suggest future research to use financial, social, and structural bonds to examine the buyer and supplier relationships in other

Table 8 Reliability Analysis (Aspect: Structural Bonds)

Factor	Item	(1)	(2)
Supplier satisfaction	Our company can collaborate with suppliers to obtain more benefits, thus increasing competitiveness.	0.727	0.905
	Our suppliers deal with our questions immediately.	0.811	
	Our suppliers deal with our complaints immediately.	0.782	
	Our supplier provides good pre-sales service.	0.586	
	Our supplier helps coordinate smooth supply chain operations.	0.568	
	Our company can increase its business relationships following collaboration with suppliers.	0.615	
	Our company communicates with suppliers based on customer comments.	0.529	
	Suppliers need to collaborate.	0.578	
Technology	Our company depends on the skills of its suppliers.	0.630	0.773
	Our company depends on the technology of its suppliers.	0.630	
Information sharing	Our company can easily obtain customer information.	0.392	0.512
	Our company provides customer information to its suppliers.	0.277	
	Our suppliers stay in touch.	0.303	

Notes Column headings are as follows: (1) item-to-total correlations, (2) Cronbach's α .

countries. In addition, the business model is different in Western and Asian firms. For example, Western firms establish relationships following the performance of some transactions, while Asian firms seek guanxi before they do business, namely they can always can collaborate with each other after they have guanxi. We hope that future research will examine these issues in other countries, so that more is learned about the development of the buyer and supplier relationships.

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