

# **The interaction between business Guanxi connections and environmental dynamism in determining Chinese firms' competitive advantage abroad**

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## **Abstract**

The purpose of this research is to investigate whether business connections, referred to as Guanxi, established by Chinese firms with foreign business partners, affect the competitive advantage that these firms develop in the host country. Additionally, this study explores whether the effect of Guanxi on competitive advantage is moderated by the degree of environmental dynamism in the host country's market. From a theoretical perspective, this research integrates the resource-based view (RBV) theory and the Structure-Conduct-Performance (SCP) paradigm to provide a comprehensive explanation of this phenomenon. The study collected survey data from 312 firms operating in 39 countries across six continents. Partial Least Squares Structural Equation Modeling (PLS-SEM) was used for data analysis. The findings suggest that Chinese firms leveraging their Guanxi networks with foreign business partners are better positioned to gain a competitive edge in those markets. However, while Guanxi has a positive influence on competitive advantage, this effect diminishes in environments characterized by high dynamism. Overall, this research advances the understanding of how external environmental factors, such as environmental dynamism, can moderate the effectiveness of internal resources like Guanxi.

**Keywords:** Competitive advantage, Business connections, Guanxi, Environmental dynamism, International business, Multinational enterprises.

## Introduction

It is a long-standing practice for Chinese merchants to establish businesses at locations away from their home country (Weidenbaum and Hughes, 1996). As the Chinese saying goes, *where there is seawater, there are Chinese, and where there are Chinese, there are Chinese businessmen*. Chinese businessmen and entrepreneurs are widely distributed all over the world. Overseas Chinese entrepreneurs have made outstanding business success and made significant contributions to regional and global economies (Haley et al., 2013). However, due to diverse obstacles, starting business in foreign countries is a quite challenging undertake. They must adapt to unfamiliar and complicated external environments, dealing with differences in economic and legal systems, culture, language, social customs, lifestyles, and business practices (Azmat, 2013). For operating business successfully, Chinese entrepreneurs need to possess competencies that enable them to overcome these obstacles.

International business literature suggests that a key factor for firms to succeed in foreign markets is the development of a competitive advantage (Weerawardena and O'Cass, 2004). According to Porter (1985), competitive advantage is a kind of competitive strategy that enables firms to achieve favorable competitive positions in an industry. Grant (2021) also viewed competitive advantage as an enterprise's ability to outperform its competitors on key performance objectives. Therefore, developing competitive advantage is crucial for Chinese firms to succeed in foreign markets. Without it, these firms may struggle to differentiate themselves from local competitors and secure a favorable market position.

Developing business Guanxi is a common strategy for Chinese businesses to realize competitive advantage (Nolan and Rowley, 2020). Guanxi is a Chinese cultural concept that denotes personal networks or relationships that are established on the principles of reciprocity, mutual obligations, and trust (Luo et al., 2012). It transcends simplistic concepts such as connections or networking, as it is deeply rooted in long-term personal relationships and frequently involves emotional bonds, loyalty, and favors (Barnes et al., 2015). It is about forming interpersonal connections where both sides do favors and support each other over time (Liu and Yan, 2022). Instead of just focusing on business deals, business Guanxi aims to create personal bonds that can lead to more opportunities and success in the future (Liu, 2021). In China, this practice has proven to be a powerful practice for helping firms secure business deals and access critical resources, which enable firms to gain competitive advantage (Nolan and Rowley, 2020).

While the benefits of business Guanxi have been extensively examined in the context of Chinese firms operating within China, there is limited research investigating its advantages for Chinese firms conducting business outside of China (Dobrucali, 2020, Du and Zhou, 2019). In particular, two earlier studies have investigated aspects of Guanxi in international contexts. For instance, Schlunze *et al.* (2015) analyzed its impact on managerial performance among Chinese entrepreneurs in Japan, while Lin et al. (2018) examined its role in facilitating investment processes in Germany. The most recent contributions to this area are those by Dobrucali (2020) and Du and Zhou (2019), which highlight that Guanxi with business partners enhances the capabilities of internationalization and helps firms navigate challenges such as opportunism and the liability of foreignness. Despite these findings, existing research remains limited in scope, particularly regarding how Guanxi influences firm-level outcomes outside

China. This raises an important question whether business Guanxi helps Chinese firms develop a competitive advantage in foreign markets, where business cultures and practices are different. In addition, while the studies conducted by Dobrucalı (2020) and Du and Zhou (2019) show that Guanxi developed with business partners helps Chinese firms develop internationalization capabilities and overcome opportunism and liability of foreignness, less is known about the effect of business Guanxi on competitive advantage in foreign countries. Furthermore, little is known about whether the benefits of business Guanxi in foreign countries might be constrained by environmental factors. Understanding these constraints is crucial because it helps scholars gain more knowledge about whether Guanxi practice could lead to the same level of competitive advantage in different environments. These are the key issues to be explored in our research.

This study aims to examine whether developing business Guanxi with foreign partners can affect the firm competitive advantage in the corresponding country. Additionally, this research investigates whether the impact of business Guanxi on firm competitive advantage is moderated by the degree of environmental dynamism in the host country. Environmental dynamism refers to the unpredictable and fast-paced changes occurring in a firm's external environment (Yu et al., 2019). Because environmental dynamism involves unpredictable and fast-changing business conditions, we propose that firms that rely heavily on guanxi may find it difficult to adapt quickly, which could hinder their ability to sustain competitive advantage in such markets (Wang and Chen, 2018). From theoretical perspective, this research integrates the resource-based view theory (Barney, 2001) and the Structure-Conduct-Performance paradigm (Bain, 1954) as a comprehensive framework to explain why business Guanxi is essential for Chinese firms in developing a competitive advantage, and how environmental dynamism may diminish this benefit.

This research is expected to make additional contributions by expanding the current understanding of how business Guanxi operates in international contexts. The findings from this study are anticipated to help scholars better understand how business Guanxi enables Chinese firms to gain a competitive edge in foreign markets, where the business environment may be significantly different from that in China. Moreover, by examining the moderating effect of environmental dynamism, our study will contribute to a deeper understanding of the contextual factors that may enhance or limit the benefits of Guanxi in foreign markets. This would also contribute to understanding how Chinese firms need to modify Guanxi-based strategies in global markets.

## **Literature Review**

### **Business Guanxi**

Fundamentally, Guanxi is a key concept in Chinese management that has gained much attention from scholars in both Western and Eastern countries (Nolan and Rowley, 2020). In general, the term Guanxi refers to a dyadic interpersonal connection among people, which is bonded affectively and driven by the possibilities of prospective favors for each other (Barbalet, 2020). Specifically, business Guanxi refers to the interpersonal connections that firms create with business partners directly or indirectly involved in daily business activities (Luo et al., 2012).

Guanxi differs from the western concept of relationship or connection for there are the elements of long-term orientation, affection, implicit obligations, and mutual reciprocities implied in Guanxi (Barnes et al., 2015). In comparison, the western concept of business relationships tends to be more transactional and focused on short-term goals. It often emphasizes formal agreements, contracts, and the fulfillment of well-defined obligations. Besides, western business relationships are generally more structured and less dependent on emotional bonds. However, business Guanxi is not simply transactional; it is built on trust, mutual respect, and long-term collaboration, with an underlying expectation of reciprocal benefits (Nolan and Rowley, 2020). Building Guanxi requires ongoing interaction and mutual support from both parties. These relationships are based on personal connections and informal interactions (Liu and Yan, 2022). They are kept strong by the expectation of exchanging favors, not just formal contracts (Xu et al., 2022). Moreover, firms involved in business Guanxi not just only emphasize on the immediate exchange of goods or services, but they are motivated to cultivate a partnership that can provide enduring benefits over the long term (Wiegel and Bamford, 2015). This includes access to valuable information, business opportunities, and problem-solving resources (Guo et al., 2020). As these relationships are built over time, they create a network of trust and obligations that can be called upon in future dealings (Barbalet, 2020).

### **Effects of Business Guanxi on Competitive Advantage of Firms**

This study proposes that business Guanxi that Chinese firms develop with business partners in a foreign country can enable them to develop competitive advantage in that country. From a theoretical perspective, the benefit of business Guanxi can be understood through the resource-based view (RBV) theory. The theory asserts that firms can attain competitive advantages when they acquire or develop resources that are valuable, rare, inimitable, and not easily substituted (Barney, 2001). In this context, business Guanxi can be considered a resource for Chinese firms conducting business internationally (Wiegel and Bamford, 2015). Firstly, Guanxi itself is a valuable and intangible resource that can be embedded in operational processes to gain customers and suppliers support (Zhou et al., 2021). In addition, Guanxi is a critical means for firms to acquire other valuable resources such as market information and business opportunities (Xu et al., 2022). Scholars have argued that the process of building and maintaining Guanxi involves not only operational resources exchange, but also involves the exchange of strategic resources such as information, experience, and knowledge sharing (Lu et al., 2021).

Guanxi also corresponds to the characteristics of rare resources as well. Generally, not every firm can develop Guanxi connections with key persons because it often needs to be introduced by reliable intermediary (Barbalet, 2014). Additionally, building and maintaining Guanxi requires a sustained investment of time, money, and energy (Nolan and Rowley, 2020). Guanxi is also viewed as a non-imitable resource. Basically, Guanxi is shaped by sharing experiences and history of connections (Chen and Chen, 2004). High quality Guanxi not only takes time to cultivate, but more importantly, it requires long-lasting mutual support (Burt et al., 2018). Thus, Guanxi development is full of social complexity, which makes it very difficult for other competitors to develop in a short period of time. Guanxi is also a non-substitutable resource. Even though competitors can develop connection with some partners outside Guanxi network, its

benefits may not be as meaningful as the benefits gained from Guanxi (Shou et al., 2011).

In addition to the theoretical logic, there is also an abundance of empirical evidence supporting the benefits of business guanxi on the competitive advantage and performance of firms operating in China (Liu, 2021, Bari et al., 2021, Ding and Jie, 2021, Guo et al., 2020). Despite the limited amount of research on the benefits of business guanxi outside China, there is some evidence of its role in helping Chinese firms effectively manage their international expansion. For example, a study by Dobrucali (2020) shows that the Guanxi developed with business partners helps Chinese firms overcome opportunism and liability of foreignness when expanding to foreign countries. Moreover, Du and Zhou (2019) collected data from Chinese firms in the manufacturing sector and found that Guanxi with business partners help these firms develop internationalization capabilities. Based on theoretical logic and some supporting evidence, the following hypothesis is proposed:

**H1** Business Guanxi is positively associated with the competitive advantage of firms.

### **Moderating Effect of Environmental Dynamism**

Despite the benefits of business Guanxi in helping Chinese firms gain competitive advantage in foreign country, we additionally argue that its effect could be moderated by the level of environmental dynamism in the foreign country. Environmental dynamism refers to the degree of volatility derived from a firm's task environment or general environment, which affects top managers' decisions and organizational outcome (Yu et al., 2019). The unpredictability inherent in dynamic environments presents several challenges for foreign firms. In particular, high levels of environmental dynamism make strategic planning and decision-making to be more complicated (Rodríguez-Peña, 2021). It creates difficulty for firms to forecast changes in market demand and customer preferences (Wamba et al., 2020).

From the theoretical perspective, the Structure-Conduct-Performance (SCP) paradigm can be used to explain this moderating effect of environmental dynamism. While the RBV emphasizes internal resources and capabilities as the key drivers of competitive advantage (Barney, 2001), the SCP paradigm focuses on the roles of external market factors that affect firm behavior and performance (Bain, 1954). In particular, the SCP paradigm suggests that the degree to which firms can utilize resources to create competitive advantage could be influenced by the market environment (Charoensukmongkol and Lamsam, 2022). When the market environment is highly competitive and uncertain, it reduces the relevance of critical resources in creating competitive advantage (Morgan et al., 2004). For this reason, a resource that provides a strong competitive advantage in stable conditions may become less effective in a dynamic market where rapid change and adaptability are more important (Onngam and Charoensukmongkol, 2023, Zhang and Jedin, 2023).

Due to these negative impacts of environmental dynamism, the level of environmental dynamism in the foreign country might weaken the benefit that Chinese firms obtain from business Guanxi. Because uncertainty and volatility caused by environmental dynamism make it difficult for firms to predict market changes (Rodríguez-Peña, 2021),

Guanxi, which thrives on long-term, stable relationships, may struggle to provide value in such fast-changing contexts where quick adaptability is crucial. The privileged access to information that Guanxi provides may also lose relevance more quickly in dynamic environments, as competitors relying on more agile, data-driven strategies can respond faster to emerging opportunities (Singh et al., 2019). In such situations, the long-term relationships that are central to Guanxi can be disrupted. In fast-changing environments, innovation and agility are key to competitive advantage (Oh and Kim, 2022), but Guanxi, which is based on traditional relationships, may not provide enough support in these areas. Therefore, when firms have to shift from relationship-based strategies to more market-based approaches in response to environmental volatility, Guanxi may become less effective in sustaining competitive advantage. This argument is supported by Wang and Chen (2018), who show that although guanxi can provide a competitive advantage in building new business networks, over-reliance on guanxi could decrease innovation performance of firms. Altogether, these factors illustrate how environmental dynamism moderates and reduces the benefits of business Guanxi in competitive foreign markets. Based on this theoretical logic, the following hypothesis is proposed:

- H2** The positive effect of business Guanxi on the competitive advantage of firms will be weakened when the level of environmental dynamism in a foreign country is high.

## Methodology

### Sample and Data Collection

The target respondents of this study were overseas Chinese entrepreneurs who were members of overseas Chinese business associations worldwide. Where overseas Chinese groups reside, small to large Chinese business associations exist (Minghuan, 1998). To promote local economic and trade exchanges with foreign countries, all provinces and most cities in China have encouraged overseas Chinese communities living in other countries to form business associations in their host countries (Zhuang, 2020). These associations are meant to strengthen trade ties, foster networking, and support economic collaboration between China and the countries where these overseas Chinese reside. According to the State Council of PRC (2016), there are more than 25,000 overseas Chinese business associations and other voluntary associations in over 130 countries across the world. To set the scope for data collection, the sampling frame used in this study consisted of overseas Chinese business owners who were members of the main business associations listed by the Ministry of Commerce of PRC (2022). According to the guidelines for outbound investment in various countries and regions compiled by the Ministry of Commerce of PRC (2022), 2,036 key Chinese business associations were recommended across 168 countries.

To recruit participants for data collection, this study used a two-stage disproportional stratified sampling approach. First, the 2,036 Chinese business associations were grouped into six continents, including Africa, Asia, Europe, North America, Oceania, South America. From each continent, 10 business associations were randomly selected, giving a total of 60 associations. In the second stage, 30 entrepreneurs from each of these associations were randomly chosen to participate, resulting in 1,800 entrepreneurs

who were contacted for data collection.

We obtained approval from the Human Research Ethics Committee at the National Institute of Development Administration before conducting data collection (COA No.2023/0147; Protocol ID No. ECNIDA 2023/0138). Data was collected through an online questionnaire. Firstly, the questionnaire was uploaded to an online survey platform named Tencent Questionnaire, and the corresponding QR code and questionnaire link were generated. Secondly, invitations to participate, along with QR codes and links to the survey, were sent via email to Chinese entrepreneurs listed in business associations' contact directories. Thirdly, email reminders were sent two weeks later. The data collection process took place over a four-month period, from mid-October 2023 to mid-February 2024. By the end of the collection phase, 312 responses had been received, resulting in a response rate of 17.33 percent. These firms operated across 39 countries on six continents. Table 1 summarizes the number of firms in each country.

**Table 1: List of countries and continents**

| <b>Continents</b> | <b>Countries</b> | <b>Number of firms</b> |
|-------------------|------------------|------------------------|
| Africa            | Angola           | 4                      |
|                   | Cabo Verde       | 3                      |
|                   | Egypt            | 4                      |
|                   | Kenya            | 6                      |
|                   | Morocco          | 5                      |
|                   | Namibia          | 6                      |
|                   | Nigeria          | 4                      |
|                   | South Africa     | 7                      |
|                   | Zambia           | 8                      |
| Asia              | Indonesia        | 5                      |
|                   | Japan            | 24                     |
|                   | Malaysia         | 4                      |
|                   | Philippines      | 9                      |
|                   | Sri Lanka        | 7                      |
|                   | Thailand         | 29                     |
|                   | Vietnam          | 8                      |
| Europe            | Czech Republic   | 6                      |
|                   | France           | 10                     |
|                   | Germany          | 6                      |
|                   | Greece           | 5                      |
|                   | Iceland          | 5                      |
|                   | Italy            | 7                      |
|                   | Netherlands      | 8                      |
|                   | Russia           | 5                      |
|                   | Spain            | 11                     |
|                   | U.K              | 12                     |
| South America     | Argentina        | 5                      |
|                   | Brazil           | 11                     |

| Continents    | Countries   | Number of firms |
|---------------|-------------|-----------------|
|               | Chile       | 4               |
|               | Colombia    | 6               |
|               | Peru        | 4               |
| Oceania       | Australia   | 17              |
|               | Fiji        | 5               |
|               | New Zealand | 12              |
| North America | Canada      | 10              |
|               | Costa Rica  | 3               |
|               | Mexico      | 12              |
|               | Panama      | 2               |
|               | USA         | 13              |

Firm size was divided into three categories: micro firms (fewer than 10 employees), small firms (10–49 employees), and medium firms (50–249 employees). The majority of firms were medium-sized, representing 46.2% of the total sample. Small firms comprised 43.9%, while micro firms made up 9.9% of the sample. In terms of firm age, the largest group consisted of firms that had been in operation for 11–20 years (50.3%). Firms with less than 10 years of operation accounted for 36.2%, and those that had been operating for 21–30 years made up 13.5% of the sample. The entrepreneurs' international business experience averaged 17.41 years, with a standard deviation of 8.09, indicating a moderate variation in the experience levels among the business owners in the sample. Regarding the continent of the host country, the largest proportion of firms were based in Asia (27.6%), followed by Europe (24.0%), Africa (15.1%), Oceania (10.9%), and South America (9.6%).

## Measures

The measurement of *Business Guanxi* was conducted using the scale developed by Su et al. (2017). It contains seven items and was evaluated on a five-point Likert Scale. Sample items include “*Our firm/I keep good Guanxi connections with other business partners*” and “*Primary business partners consistently keep their commitments to our firm*”. To measure firm *competitive advantage*, this study employed a subjective scale developed by Chang (2011). The scale consisted of 6 items. Sample items include “*My firm has better managerial capabilities than the competitors*” and “*The competitors are difficult to take the place of my firm's competitive advantage*”. The scale adopted to measure *environmental dynamism* was developed by Li and Liu (2014). The scale consists of 4 items. Sample items are “*Product or service in our industry updates quickly*”, and “*To predict the change of customer needs is difficult*”. All items were scored using a Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree).

## Control Variables

Three firm characteristics were included as control variables to assess competitive advantage: age, size, and the entrepreneur's international experience. These characteristics have frequently been used as control variables in prior studies (Ratanavanich and Charoensukmongkol, 2024, Ferreira et al., 2020). Firstly, scholars have argued that firm age is an important factor that should be considered when

examining the determinants of a firm's performance (Coad et al., 2018). Secondly, firm size is a fundamental characteristic that can influence a firm's competitive advantage (Chu, 2011). Thirdly, entrepreneurs with greater international experience are often more resourceful and capable of making better decisions in challenging situations abroad, which may impact a firm's performance (Charoensukmongkol, 2015). We included these control variables to account for their potential influence on competitive advantage and to ensure that the findings reflect the true impact of the independent variables rather than being affected by firm-specific characteristics. Firm age was determined by the number of years since the company's establishment, while firm size was calculated based on the total number of full-time employees. The entrepreneur's international experience was measured by the years spent conducting business abroad.

## Data Analysis

This study employed Partial Least Squares Structural Equation Modeling (PLS-SEM) for model estimation. PLS-SEM is particularly suited for analyzing complex models, especially when sample sizes are small, or the normality assumptions are not met. It is commonly used for prediction-focused studies. In this research, we utilized PLS-SEM due to the small sample size (312 respondents) and the non-normal data distribution, as confirmed by the Jarque-Bera test. Data analysis was conducted using Warps version 8.

## Results

The scale's reliability was assessed using both Cronbach's alpha and composite reliability indices. As presented in Table 2, all values exceeded the suggested minimum of 0.7, signifying strong internal consistency (Nunnally, 1978). To evaluate convergent validity, the factor loadings of individual items were analyzed. Factor loadings greater than 0.5 were deemed acceptable. One item from the business Guanxi construct had a loading below 0.5 and was subsequently excluded from the analysis. After this adjustment, all remaining items met the necessary factor loading criteria (Hair et al., 2009). The factor loadings are reported in Table 2.

Discriminant validity was examined by comparing the square root of the average variance extracted (AVE) for each latent variable to the correlations between constructs. The results, seen in Table 3, confirmed that the square roots of the AVE for each construct were higher than their correlations with other constructs (Fornell and Larcker, 1981). Discriminant validity was further analyzed using the heterotrait-monotrait (HTMT) ratio, to assess how distinctly each construct differed from the others. HTMT values under 0.90 indicate sufficient separation between constructs (Henseler *et al.*, 2015). The HTMT values, reported in Table 4, were well below the threshold.

**Table 2: Factor loadings of all latent variables**

| Items | Business Guanxi | Competitive advantage | Environmental dynamism |
|-------|-----------------|-----------------------|------------------------|
| BGX1  | 0.800           |                       |                        |
| BGX2  | 0.523           |                       |                        |
| BGX3  | 0.837           |                       |                        |
| BGX4  | 0.599           |                       |                        |
| BGX5  | 0.872           |                       |                        |
| BGX6  | 0.790           |                       |                        |
| CA1   |                 | 0.689                 |                        |
| CA2   |                 | 0.587                 |                        |
| CA3   |                 | 0.784                 |                        |
| CA4   |                 | 0.777                 |                        |
| CA5   |                 | 0.808                 |                        |
| CA6   |                 | 0.760                 |                        |
| ED1   |                 |                       | 0.821                  |
| ED2   |                 |                       | 0.840                  |
| ED3   |                 |                       | 0.870                  |
| ED4   |                 |                       | 0.864                  |

Notes: BGX=business Guanxi, CA=competitive advantage, ED=environmental dynamism

**Table 3: Correlation matrix, reliability, and discriminant validity**

| Variables               | BGX     | CA      | ED       | SIZE    | AGE     | EXP     |
|-------------------------|---------|---------|----------|---------|---------|---------|
| BGX                     | (0.752) | 0.679** | −0.247** | 0.217** | 0.14*   | 0.099   |
| CA                      |         | (0.742) | −0.332** | 0.234** | 0.186** | 0.096   |
| ED                      |         |         | (0.850)  | 0.064   | 0.009   | −0.07   |
| SIZE                    |         |         |          | (1)     | 0.21**  | 0.261   |
| AGE                     |         |         |          |         | (1)     | 0.513** |
| EXP                     |         |         |          |         |         | (1)     |
| Mean                    | 4.43    | 4.38    | 2.14     | 2.67    | 1.93    | 18.80   |
| S.D.                    | 0.83    | 0.80    | 1.25     | 0.87    | 0.77    | 8.73    |
| Cronbach's Alpha        | 0.838   | 0.834   | 0.871    | 1       | 1       | 1       |
| Coefficients            |         |         |          |         |         |         |
| Composite Reliability   | 0.883   | 0.879   | 0.912    | 1       | 1       | 1       |
| Coefficients            |         |         |          |         |         |         |
| Full Variance Inflation | 3.270   | 3.282   | 1.376    | 1.209   | 1.459   | 1.439   |
| Factor                  |         |         |          |         |         |         |
| Average Variance        | 0.559   | 0.545   | 0.721    | 1       | 1       | 1       |
| Extracted               |         |         |          |         |         |         |

Notes: BGX=business Guanxi, CA=competitive advantage, ED=environmental dynamism, SIZE=firm size, AGE=firm age, EXP=international experience; Values in parentheses are square roots of the AVE; \*\* $p < .01$ , \* $p < .05$

**Table 4: Heterotrait–monotrait ratio of correlations**

| Latent Variables       | Business Guanxi | Competitive advantage | Environmental dynamism |
|------------------------|-----------------|-----------------------|------------------------|
| Business Guanxi        |                 |                       |                        |
| Competitive advantage  | 0.807           |                       |                        |
| Environmental dynamism | 0.274           | 0.391                 |                        |

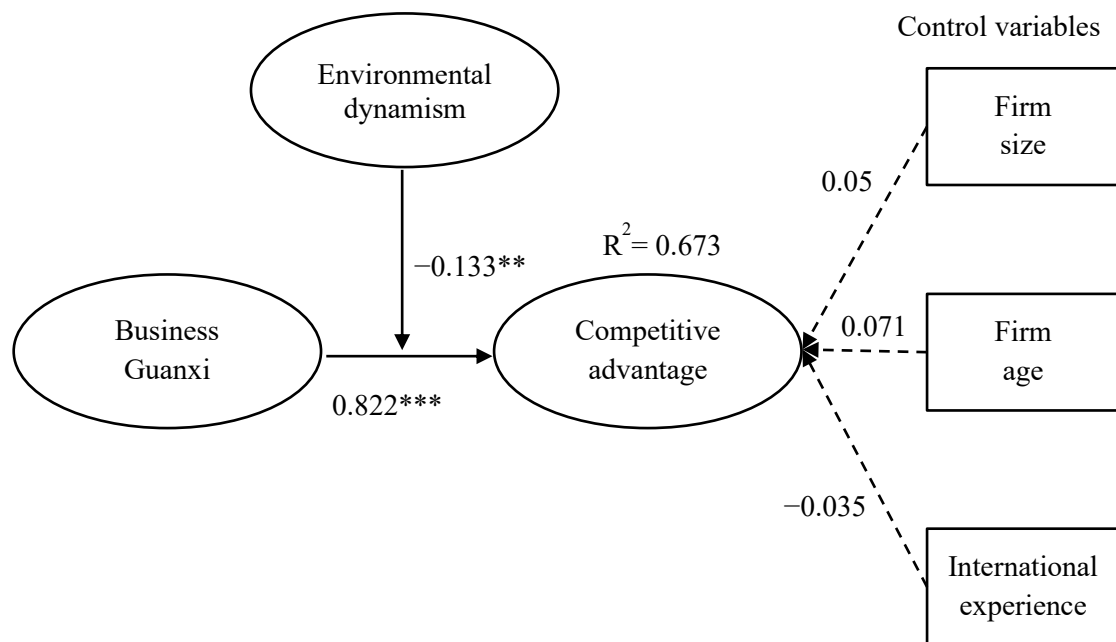
We also reviewed the data for potential issues like multicollinearity and common method bias (CMB). Multicollinearity was tested using the full variance inflation factor (VIF), following the guidelines for PLS-SEM analysis (Kock and Lynn, 2012). A full VIF value under 3.3 suggests that multicollinearity is not a concern, and in this dataset, full VIF values ranged from 1.209 to 3.282, indicating that multicollinearity was not problematic. Moreover, the full VIF is also used to assess CMB by detecting potential collinearity among variables that may arise from systematic measurement errors (Kock and Lynn, 2012). As all full VIF values in our study are below 3.3, which is the threshold suggested by Kock and Lynn (2012), it is unlikely that CMB significantly affects our findings. Lastly, to check for the presence of CMB, we applied for Harman's single-factor test using exploratory factor analysis. The results showed that the first factor explained only 31.01% of the total variance, which is far below the 50% threshold typically associated with CMB concerns (Podsakoff *et al.*, 2003). Therefore, CMB was not considered a significant issue in this study.

The results from the model estimation are presented in Figure 1. Hypothesis 1 posited that business Guanxi positively influences a firm's competitive advantage. The analysis confirmed this positive relationship with strong statistical support ( $\beta=0.822$ ;  $p<0.001$ ). Therefore, hypothesis 1 is supported.

Hypothesis 2 suggested that the positive effect of business Guanxi on firms' competitive advantage diminishes as environmental dynamism increases, particularly in foreign markets. This moderating effect was confirmed through the interaction between business Guanxi and environmental dynamism. The interaction produced a negative beta coefficient ( $\beta=-0.133$ ;  $p<0.01$ ). The negative interaction can be interpreted as indicating that environmental dynamism weakens the positive effect of business Guanxi on firms' competitive advantage.

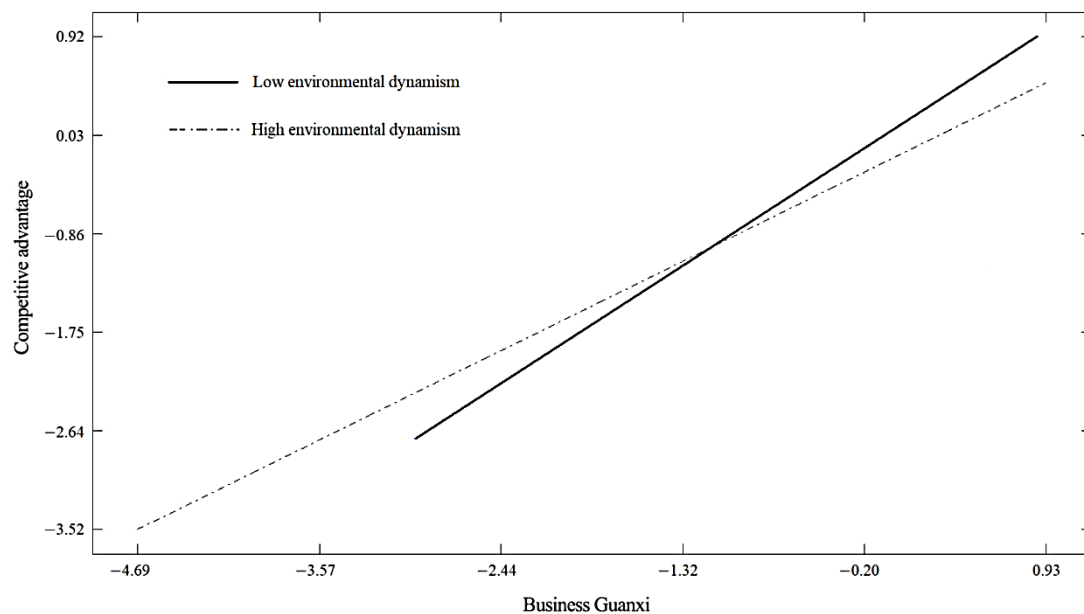
We used a moderation plot to clearly illustrate the moderating effect. The graph, shown in Figure 2, was generated using WarpPLS software. The two lines represent the relationship between business Guanxi and firm competitive advantage under low and high levels of environmental dynamism. The solid line represents low environmental dynamism. This line shows a steeper slope, indicating a stronger positive relationship between business Guanxi and firm competitive advantage when environmental dynamism is low. In this context, the firm's competitive advantage increases more significantly as business Guanxi increases. The dashed line represents high environmental dynamism. Here, the slope is less steep, suggesting that the positive relationship between business Guanxi and competitive advantage is weaker when environmental dynamism is high. This implies that in more dynamic environments, the benefits of business Guanxi on a firm's competitive advantage are reduced. All these findings support Hypothesis 2.

**Figure 1: Results from hypotheses testing**



Notes:  $**p < .01$ ,  $***p < .001$ ; Standardized coefficients are reported; Dashed line represents the beta coefficient that is not significant

**Figure 2: Moderating effect of business Guanxi and environmental dynamism on competitive advantage**



## Discussion

### General Discussion of the Results

This research examined the impact of business Guanxi on competitive advantage and

explored whether this effect could be moderated by environmental dynamism. The results from the model estimation supported all the proposed hypotheses. First, our results support the first hypothesis, which proposed that business Guanxi positively influences a firm's competitive advantage. This confirms that Chinese firms that can leverage their Guanxi networks with business partners in a foreign country are better positioned to develop a competitive advantage when operating in that country. These findings align with previous research, which also demonstrates the role of business Guanxi in enhancing the competitive advantage and performance of firms operating in China (Liu, 2021, Bari et al., 2021, Ding and Jie, 2021, Guo et al., 2020). In particular, within the context of Chinese firms conducting business abroad, our findings are consistent with Dobrucali's (2020) study, which showed that Guanxi relationships with foreign business partners help Chinese firms mitigate opportunism and the liability of foreignness. It also supports the finding from Du and Zhou (2019) who found that Guanxi with business partners helps Chinese firms develop internationalization capabilities.

Moreover, our results confirmed the second hypothesis, which proposed that environmental dynamism moderates the effect of business Guanxi. Specifically, our research demonstrates that while Guanxi has a positive effect on competitive advantage, this effect diminishes in highly dynamic environments. The result regarding the moderating effect of environmental dynamism aligns with prior research, which indicates that an unfavorable market environment may reduce the effectiveness of crucial resources in generating competitive advantage (Morgan et al., 2004). Specifically, the finding closely aligns with the studies by Rodríguez-Peña (2021) and Onngam and Charoensukmongkol (2023), which also found that high levels of environmental dynamism weaken the impact of firm resources on performance.

These findings demonstrate an important limitation of business Guanxi in international markets. While Guanxi provides access to critical business resources, its reliance on stable, long-term relationships may hinder firms' ability to respond quickly to market fluctuations. In highly dynamic environments, where consumer preferences shift rapidly, firms that rely solely on Guanxi may face delays in decision-making and resource acquisition compared to competitors that use data-driven and agile strategies (Singh et al., 2019). For example, in industries such as e-commerce or technology, where new market entrants disrupt traditional business models, firms that depend heavily on Guanxi networks may struggle to compete with firms that leverage digital analytics and adaptive marketing strategies (Oh and Kim, 2022). This suggests that while Guanxi remains an asset, it must be complemented with market-based strategies to sustain competitive advantage in volatile markets.

### **Theoretical Contributions**

There are two main contributions that our research provides, all of which broaden knowledge about the benefit of Guanxi in the international scope. First, our results regarding the positive effect of business Guanxi among Chinese firms operating across six continents provide extra evidence that Guanxi is not only effective within China but also enables Chinese firms to develop competitive advantage in foreign countries. In essence, our study emphasizes that business Guanxi acts as a significant driver of competitive advantage for Chinese firms in the international business arena. Second, our research provides new knowledge by revealing the limitations of Guanxi that may

not enable firms to maximize their competitive advantage under high environmental dynamism. In particular, our findings indicate that in dynamic settings, characterized by rapid changes in market conditions, customer demands, and technological progress, the stability of Guanxi relationships may not provide the same competitive edge as they do in more stable environments. While Guanxi remains a powerful practice for gaining competitive advantage in foreign markets, it is not a one-size-fits-all solution. In stable environments, Guanxi can provide firms with access to key resources and long-term benefits. However, in more volatile and rapidly evolving markets, relying on Guanxi may not significantly enhance competitive advantage.

Unlike prior studies that emphasize the universal benefits of Guanxi for firm performance (Nolan and Rowley, 2020; Dobrucali, 2020), our findings reveal that Guanxi's impact on competitive advantage is contingent on external market conditions. This suggests that Guanxi alone may not always be a sufficient resource for firms in international markets, especially in industries where rapid adaptation is necessary. These insights refine the traditional resource-based perspective by illustrating how environmental dynamism moderates the strategic value of Guanxi, expanding the scope of RBV applications in cross-border business research.

Our research also makes contributions to theories. First, the findings related to the role of business Guanxi in competitive advantage are consistent with the RBV, which posits that firms can secure a competitive edge when they possess resources that are valuable, rare, difficult to imitate, and non-substitutable (Barney, 2001). We have shown that Guanxi could be a network-based resource that fits these criteria and allows Chinese firms to differentiate themselves from competitors in foreign markets. As Guanxi is built on close-knit networks of trust, reciprocity, and long-term relationships, it represents a valuable and non-substitutable resource that provides competitive advantages for firms engaging in international business. Second, our research highlights the moderating effect of environmental dynamism, which weakens the influence of business Guanxi on competitive advantage. This finding aligns with the SCP framework, which underscores the importance of external environmental factors in limiting how effectively a firm's resources can be leveraged for competitive advantage (Bain, 1954). By integrating the SCP paradigm with the RBV, this study advances theoretical understanding by showing how environmental dynamism can moderate the effectiveness of internal firm resources like Guanxi. This contribution highlights the importance of considering both external market forces and internal resource capabilities when analyzing firm performance, especially in international business contexts where market environments differ significantly from those in the home country.

## **Limitations**

Despite the valuable contributions provided by this research, several limitations should be acknowledged. First, the sample used in this study was limited to Chinese business owners who are members of overseas Chinese business associations. While this group provides relevant insights, it may not fully represent the diversity of Chinese businesses operating in foreign markets. Second, the use of self-reported questionnaires may introduce bias that could happen when the respondents overestimate the capability and performance of their firms. Due to this limitation, future research that can incorporate some objective measures of competitive advantage is required to validate the findings. Third, the results from our study were derived from cross-sectional data. The limitation

of this approach is that it limits the ability to draw conclusions about causality. Lastly, our study included only a few control variables. Other factors, such as industry type, firm ownership structure, or the level of technological adoption, could also influence the relationship between Guanxi and competitive advantage. Thus, the inclusion of more control variables in future studies could provide a more comprehensive view of how different factors shape the effectiveness of Guanxi in foreign markets. In addition, we recommend future research to investigate whether some market-based approaches, such as technological adoption or aggressive marketing, could moderate the effect of business Guanxi on the competitive advantage of their firms. This would provide insights into how firms can optimize the benefits of Guanxi while adapting to increasingly competitive and dynamic markets.

### **Practical Implications for Asian Business**

The findings from this research have important practical implications for businesses in Asia, particularly for those operating internationally. One of the most significant insights is the role of Guanxi, a fundamental concept in Chinese business culture that emphasizes long-term relationships based on trust, reciprocity, and mutual obligations. For Asian business leaders, especially Chinese entrepreneurs looking to expand into foreign markets, Guanxi can provide a strong competitive advantage. It helps businesses access valuable resources, information, and opportunities that are not readily available through formal channels, giving them a strategic edge in foreign environments. To fully leverage Guanxi, business owners must invest time and effort into cultivating deep personal relationships with their partners. Building Guanxi is not a short-term effort but a long-term commitment that requires regular interactions, both formal and informal. Establishing trust and demonstrating mutual support is critical. This can involve offering favors or business opportunities, even when there are no immediate gains. Over time, these relationships can grant businesses access to important market insights, such as emerging trends, regulatory changes, or shifts in customer preferences, all of which can be crucial for maintaining a competitive advantage.

However, the study also reveals that while Guanxi provides substantial benefits, its effectiveness may be limited in highly dynamic environments. In markets characterized by rapid technological advancements, changing customer preferences, and increasing competition, the long-term stability that Guanxi offers may not be sufficient to sustain a competitive edge. In such volatile environments, businesses must be agile and able to respond quickly to external changes. The traditional, relationship-based nature of Guanxi may struggle to keep up with the fast-paced decision-making and adaptability required in these contexts. Given this, Chinese business owners, as well as other Asian entrepreneurs, should consider diversifying their strategies. While Guanxi remains valuable, it should be complemented by more flexible, market-based approaches. For example, firms could adopt data-driven decision-making processes, which can allow them to quickly respond to shifts in the market. These modern approaches provide the business agility needed to thrive in markets where change is constant and unpredictable.

In addition to embracing flexibility, diversification of business strategies is essential. Firms should not rely solely on Guanxi for their competitive advantage. Instead, they should explore forming new partnerships outside their traditional networks, entering

different market segments, or developing alternative distribution channels. By diversifying their strategic approaches, businesses can reduce their dependence on any single source of competitive advantage, making them more resilient to external shocks and uncertainties. For instance, establishing new partnerships can introduce fresh perspectives and resources that may not be available within existing Guanxi networks. Exploring new market segments, especially in emerging industries, can provide growth opportunities that go beyond traditional business practices. Developing alternative distribution channels can also reduce the risk of supply chain disruptions, providing businesses with greater operational flexibility.

In summary, while Guanxi remains a powerful tool for gaining a competitive edge in many Asian markets, businesses must adapt their strategies to thrive in today's fast-changing environments. Asian companies, especially those expanding internationally, should strike a balance between leveraging traditional relationship-based strategies and adopting modern, agile business practices. By blending Guanxi with flexible, data-driven approaches and diversifying their strategic focus, Asian firms can maintain a competitive advantage, even in the face of uncertainty and volatility. This combination of traditional and modern business practices will be key to long-term success in increasingly dynamic global markets.

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