

## FDI AND PERFORMANCE OF TAIWANESE FAMILY FIRMS IN CHINA: A RESOURCE-BASED PERSPECTIVE

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### ABSTRACT

*Data from 276 family-owned Taiwanese manufacturing firms that invest in China were utilized to assess the effect of firm resources in Taiwanese firms on FDI performance in China. Firm-specific advantages like firm size, R&D intensity, international experience, and managerial capabilities were found to be positively related to a firm's FDI involvement. In contrast, only R&D intensity and international experience were related to a firm's performance in Mainland China. We suggest that to do business in China, non-Chinese should consider having a Taiwanese partner to help bridge the potential cultural gap.*

### INTRODUCTION

With nearly one-quarter of the world's population and one of the fastest rates of economic growth, China has become an attractive target for business expansion by many foreign businesses (Hsiao & Hsiao, 2004). The record \$143 billion of inflows in Asia in 2000—a 44% increase over 1999—was due primarily to an unprecedented boom in foreign direct investment (FDI) in Hong Kong and China. FDI flows to China of \$41 billion remained fairly stable (Hatemi & Roca, 2004).

There is evidence to suggest that a firm's level of FDI may be a function of its ability to amass and develop strategically relevant resources (Child & Tse, 2001). The role of resources is encapsulated in the resource-based view (RBV) of the firm, which asserts that the differences in a firm's ability to accumulate and deploy unique resources may result in a sustained competitive advantage and superior firm performance (Yang, Lee, Lin, & Chung, 2004). The present study examines the effect of firm resources in Taiwanese firms on FDI performance in China.

### REVIEW OF LITERATURE

Within the industrial organization framework, firm profitability is viewed as a function of industry structure. Early strategy researchers challenged the I/O perspective, noting its inability to explain large performance variances within a single industry (Rugman, 2002). As a result, the strategic group level of analysis was proposed as a compromise between the deterministic industry level of analysis proposed and developed by industrial organizational economics and the firm or business level of analysis studied by strategic management researchers (Porter, 1981).

Dissatisfaction with the I/O overtones inherent in strategic group analysis may have been the primary impetus for a renewed interest in firm resources, not strategic group membership, as

the foundation for firm strategy (Conner, 1991). The resulting paradigm, the resource-based view (RBV), emphasized unique firm competencies and resources in strategy formulation, implementation, and performance (Barney, 1986; Das; 2000, Rugman, 2002). Resource-based proponents have studied such firm-level issues as transaction costs, economies of scope, and organizational culture (Fiol, 1991). Key business-level issues include the analysis of competitive imitation (Rumelt, 1984), informational asymmetries (Barney, 1986), causal ambiguities (Reed & DeFillippi, 1990), and the process of resource accumulation (Dierickx & Cool, 1989).

A firm's resources may include physical capital resources (technology, plant, equipment, geographic location, and access to raw materials), human capital resources (training, experience, judgment, intelligence, relationships, insights, and overall quality of managers and employees), and organizational capital resources (planning, controlling, and organizing systems). To the resource-based theorist, ignoring firm-specific resources believed to be transitory substantially reduces the precision of the analysis and is therefore unjustified. However, accepting the transitory nature of resources that lead to competitive advantage further complicates the research process for the resource-based theorist (Huilin & Yeh, 2004; Robins & Wiersema, 1995).

Recent research highlights the importance of relationship-based resources on relational assets or social capital (Dyer & Singh, 1998), such as the bases of relationships in a firm's network of relationships with other organizations including firms, governments, and joint venture partners (Choi & Beamish, 2004). Dyer and Singh (1998) noted that a firm's key resources may "span firm boundaries and may be embedded in inter-firm resources and routines" (p. 660). In other words, the relationships that a firm develops and maintains with others are a significant source of competitive advantage. Following this logic, Chen and Chen (1998) indicate that key resources for Taiwanese firms diversifying internationally are strategic network linkages developed with other domestic and foreign firms.

In a multinational firm, resources with performance implications include product diversification, processes, and markets, as well as firm-specific knowledge. These factors, like managerial, technological, and reputational factors, are prominent not only in exploiting superior economic rents but also in erecting entry barriers for potential competitors in the international arena. Collis (1991) applied the resource-based study in providing a better understanding of global competition and found that performance was related to the internal assets acquired through the operation of complex social phenomena, and that well-developed core competencies allowed firms to enter less attractive markets. In a similar vein, Brush and Chaganti (1998) showed that human and organizational resources are more strongly associated with certain performance outcomes than strategy in small service and retail firms.

### TAIWANESE FDI IN CHINA

The level of FDI has been increasing rapidly in a number of countries, while the United States continues to be the single largest host country. Global flows of FDI reached \$1.3 trillion in 2000, \$143 billion of which was in developing Asian countries. The world's top 30 host countries account for about 95% of total world FDI inflows and the top 30 home countries account for about 99% of outward FDI flows (UNCTAD, 2001). Between 2000 and 2001, however, FDI inflows declined worldwide by 51% to \$735 billion, with the greatest decline in emerging economies (UNCTAD, 2002). FDI grew in a majority of countries in the developing world.

The FDI paradigm posits that a firm is likely to engage in FDI when it possesses resources that can be effectively employed within a particular host country. Although support for this premise is generally found in developed nations, its application to emerging economies remains unclear. Most published literature supports the notion that international firms tend to focus their investment in neighboring countries at earlier stages of development, due to the lack of international experience and location advantages (Gaba, Pan, & Ungson, 2002).

The average size of Taiwanese investment in Mainland China has been much smaller than in Southeast Asia and the United States, which appears to be due to political uncertainty and restrictions in the size of individual investment projects (Zhang, Xu, & Zhang, 2003). Compared with Taiwanese investments in other parts of the world, Taiwanese total investment in Mainland China is high. Investments are widely disbursed across industries, but geographically concentrated in a few coastal areas.

Taiwanese investors' ethnic networks and cultural bonds serve as a key advantage when compared to investors in Japan and the West (Chang, 2002). Although their economic systems have differed over the past five decades, Mainland Chinese and Taiwanese share a common language, culture, and values, as well as strong family and village ties (Lau, Tse & Zhou, 2002). Taiwanese cultural and linguistic affinities with the Mainland facilitate contacts and help them find appropriate low-profile investment opportunities in local industries in the Mainland. The success of Taiwanese food, beverage, and restaurant investments in China suggests ethnic and cultural advantages for Taiwanese firms in China (Rauch & Trindade, 1999). As a result, China has become a favorite relocation destination for Taiwanese investors not only because of cost considerations, but also because of geographical, cultural, and language proximity (Gaba, Pan, & Ungson, 2002).

In the past decade, in an attempt to attract increased investment from Taiwanese companies, as well as other large multinational companies in developed countries, China has substantially improved its investment environment and has invited foreign investors to enter its financial and service sectors. While China's market and rapid economic growth rate are very attractive to multinational corporations, the present economic retrenchment and other constraints inherent in its legal framework create many uncertainties for foreign investors. Language and cultural barriers, as well as the omnipresent and burdensome Chinese bureaucracy, present additional difficulties to foreign investors, especially those from the West (Lau, Tse, & Zhou, 2002).

Recently, Taiwanese investments in China have become more diversified (Gaba et al., 2002). China has become a manufacturing base for both finished and semi-finished Taiwanese goods. Some firms have moved into high-tech manufacturing industries such as electronics and electronic appliances. The complementary economic structures in Taiwan and China have increased both trade and investment flows between these two countries. Chinese firms have exchanged natural resources and raw materials for Taiwan's processed intermediate inputs, while Taiwan's factor endowments in technology and capital have complemented China's labor advantages.

## HYPOTHESES

Following the RBV, foreign firms need superior assets and/or skills to successfully compete with indigenous firms so as to generate sufficient economic rents to cover the high cost of servicing the new national markets. A firm's asset power is reflected by its size, international experience, and ability to develop differentiated products (Agarwal & Ramaswami, 1992). This study hypothesizes that the manufacturing firms from Taiwan must possess some degree of firm specific advantages (i.e., resources) to overcome the unfamiliarity of the Mainland China market and the special investment situation (the lack of diplomatic ties to protect their economic interests because of the tension in the Taiwan Straits). On the other hand, firm-specific resources and skills should result in stronger competitive advantages, which in turn may affect firm performance. Several specific resources are examined, including firm size, technology, global experience, and managerial capabilities.

### *Firm Size*

Larger firms may have specialized managerial resources, utilize economies of scale, have the ability to collect market intelligence easier, determine profitable opportunities more quickly, have a greater ability to expand resources overseas, bear the costs and risks associated with international operation (Kumar, 1984), have greater bargaining power (Erramilli & Rao, 1993), and achieve a better performance (Cohen, 1996). Similarly, Lecraw (1984) proposed overall size (as measured by total assets) as a source of bargaining power for multinational corporations (MNCs) because larger MNCs would be more likely to have the managerial and financial resources to invest and undertake long, time-consuming negotiations with host governments.

Extant research emphasizes the importance of firm size in explaining overseas operations, confirming a positive relationship between the size and FDI in manufacturing (Kimura, 1989) and service industries (Li & Guisinger, 1992). However, this relationship is unclear, as Blomstrom and Lipsey (1991) found no significant relationship between FDI propensities and parent firm size. Agarwal and Ramaswami (1992) noted that larger firms show a greater tendency to enter foreign markets, whereas Erramilli and Rao (1993) suggested that firm size may not have any significant independent impact on selection of foreign markets. Given the preponderance of the evidence, firm size is expected to have a positive relationship with FDI.

**H<sub>1</sub>:** *Firm size is positively related to an organization's FDI.*

Firm size has long been found to be an important factor affecting firm survival and performance (Porter, 1980). Size and age may strongly impact an organization's resources and performance (Venkataraman & Low, 1994). Caves and Mehra (1986) and Kogut and Singh (1988) have demonstrated that size of FDI influences the entry mode and subsequent market performance of the venture. Within this perspective, firm size is expected to be positively related to firm performance.

**H<sub>2</sub>:** *Firm size is positively related to organizational performance.*

## *Technological Skills*

Intangible resources like technological skills (e.g., the ability to innovate) are an important source for sustainable competitive advantages (Kogut & Zander, 1992). Firms possessing such resources are able to compete and adapt to changing market dynamics more effectively through the development of new products and processes. Past studies have found a positive influence of technological competence of firms on their ability to undertake FDI (Grubaugh, 1987), although significant relationships have not been found in all studies (Yu & Ito, 1988).

**H<sub>3</sub>:** *A firm's technological skills are positively related to its FDI.*

R&D intensity is a major contributor of product differentiation and firm competence and therefore is positively related to firm performance. A firm's innovation can lower its manufacturing costs and improve product quality relative to competitors, thereby enabling a firm to achieve efficiency in operations and improve its performance (Kotabe, 1990).

Kogut and Singh (1988) demonstrated that ownership structure and subsequent performance of foreign-invested enterprises (FIEs) are influenced by the expected strategic importance of the foreign firm's R&D intensity. Several additional studies (e.g., Morrison & Roth, 1992; Zahra, 1996) also found a positive relationship between R&D intensity and firm performance. Collectively, a firm can enjoy superior financial performance when it expands into international markets since it can either charge premium prices for its innovative products or lower production costs through economies of scale (Porter, 1980). Thus, it is expected that a firm possessing greater technology resources, as reflected in R&D intensity, will exhibit higher performance.

**H<sub>4</sub>:** *Sustainable technological skills are positively related to organizational performance.*

## *Global Experience*

Costs associated with global activities constitute a major determinant of global expansion performance. Both the costs and the uncertainty of operating abroad—particularly specific knowledge about task and institutional environments—can be progressively reduced over time as accumulated learning takes effect in a host country and enhances the effectiveness and efficiency of local operations (Johanson & Vahlne, 1990). Thus, global experience increases the likelihood of firms committing a large amount of resources to foreign markets (Medcof, 2001). Through their international operations, firms gain important knowledge about customers, markets, cultures, and governments that facilitates future international expansion (Hitt, Hoskisson, & Kim, 1997). The more experience a firm has in a region, the more it tends to invest.

Firms with greater global experience have had the time to develop more familiarity with host country markets and face fewer barriers in investing in foreign markets. Numerous studies have suggested that a firm's internationalization experiences play a vital role in decisions about entry modes (e.g., Terpstra & Yu, 1988). These studies have argued that direct investment modes, as the last stage of a firm's internationalization, require accumulated knowledge and experience in internationalization processes and the local environment. In other words,

international experience reduces a firm's liability of foreignness as it gains familiarity with the local environment.

Investors in China participate in a continuing process of intensive learning and interaction with the local market and business environments. A recent survey of foreign-invested enterprises (FIEs) in China demonstrated that time-based experience has a significant effect on overall dimensions of performance of FIEs (Luo, 1999). A long presence in China often results in higher credibility among customers, suppliers, competitors, and governments; an ability to reduce operational and financial risks; a well-established marketing network; and interpersonal connections (Luo & Chen, 1996). In general, firms tend to augment their scale of operations as their duration of experience accumulates in business areas or in geographic regions with which they are more familiar, giving them a better chance for superior firm performance.

**H<sub>5</sub>:** *An organization's international experience is positively related to its FDI.*

**H<sub>6</sub>:** *An organization's international experience is positively related to its performance.*

### *Managerial Capabilities*

Ansoff and McDonnell (1990) defined general management capability as the ability to engage in behavior that will optimize attainment of a firm's near and long-term objectives. Firms may miss business opportunities due to their insufficient levels of managerial capabilities and experience. Managers charged with internationalizing should have managerial experience, be tolerant of ambiguity and capable of identifying key success factors in an unfamiliar opportunity, be prepared and flexible in response to changing foreign circumstances, and be willing to take calculated risks. Finally, managers should be experienced and skilled in dealing with cultural, social, and political factors that may affect profit making in foreign countries (Gates, 1999). Firms with managerial capabilities are likely to better exploit transnational market opportunities. It has been argued that management experience can provide the cost advantages and strategic strengths that stimulate FDI (Wright, 2001). In this sense, a firm with superior managerial capabilities is willing to mobilize firm resources to initiate or expand the firm's involvement in foreign markets (Chang, 2002).

Managerial capabilities are essential for building organizational competence. Because they are often hard to imitate or transfer due to scarcity, specialization, and tacit knowledge embedded within the firm, they bestow considerable competitive advantages on a firm. It becomes critical for firms to recognize that success in multinational business requires a range of management capabilities that the exporting firms may not possess (Gates, 1999). Therefore, it can be expected that managerial skills and knowledge are key factors to successful foreign investment and performance.

**H<sub>7</sub>:** *A firm's managerial capabilities are positively related to its FDI.*

**H<sub>8</sub>:** *A firm's sustainable managerial capabilities are positively related to its performance.*

## METHOD

Taiwanese family-owned manufacturing firms that have operations in China were drawn from the database of *Directory of Taiwanese Manufacturing Firms Investing in China*. Four directories in Guangdong, Fujian, Kiangsu and Shanghai Special Economic Zones (SEZs)—the most popular destinations for Taiwanese firms investing in China—have been published and used as the basis for regional sub-grouping of the sample. Firms with no physical presence in Taiwan were eliminated.

In a pilot study, surveys were mailed to the president or general manager of 20 firms with operations in China. The survey instrument was translated into Chinese and translated back to English to ensure accuracy of translation. These surveys were accompanied by a cover letter requesting participation and identifying the importance of the study. Suggestions for improvement of the survey were also sought. The survey was revised based on this feedback before the primary data collection was initiated.

In the data collection, simple random sampling within each stratum was performed in order to include firms of different sizes, ages and industries. Surveys were sent to top executives who would likely be knowledgeable about operations in the Chinese market and the personal connections between China and Taiwan entities. Table 1 summarizes the operationalization of the variables utilized in the present study.

**Table 1. Operationalization of Performance Measures**

Model Component	Variable and Measure	Example Sources
FDI Scale	1. Total capital investment in China till the end of last year (1 to 7 scale in \$)	Kimura (1989); Ursacki & Vertinsky (1992)
	2. Total sales for the lasting accounting year in China (1 to 7 scale in \$)	
	3. Total number of employees in China (1 to 5 scale in #)	Ursacki & Vertinsky (1992)
Performance	1. Sales Growth (1 to 7 scale in %)	
	2. Profitability (1 to 7 scale in %)	
	3. ROI (1 to 7 scale in %)	

Based on previous research, FDI level was measured by capital investment, number of employees, and total revenues (Ursacki & Vertinsky, 1992). To overcome shortcomings associated with a single measure of performance and in order to capture different strategic objectives of foreign investors, the present study measured firm performance along three dimensions: ROI (return on investment = net income after tax/total investment), SGR (sales growth rate) and PROF (profitability; Conant, Mokwa, & Varadarajan, 1990).

Firm size (SIZE), R&D intensity (RND), international experience (INTLEXP) and managerial capabilities (MGLCAP) were used to represent firm specific factors. Firm size can be measured in various ways, such as total assets (Yu & Ito, 1988), domestic sales or total revenue (Li & Guisinger, 1992), and the number of employees (Erramilli & Rao, 1993). Yu (1990) suggests two types of experience relevant for firms engaged in international business: country-specific experience and general international operations experience. Yu also supports the notion that country-specific experience exerts influence on the location of FDI. R&D intensity was

measured by the R&D expenditures as a percentage of a firm's annual sales (Yu & Ito, 1988). The degree of managerial experience and the firm's managerial capabilities to handle international expansion were used to measure managerial capabilities.

### *Control Variables*

Three control variables were employed, the first of which is home country membership. Firms of a given nationality reflect their country's government, policies, culture, and industry and these cultural differences may affect managers' decisions. A firm's unique resources and capabilities may be derived from its home country membership. Collis (1991) found relationships between the unique resources of some multinational firms and home country conditions. In this study, the sample was limited to firms from a single home country—Taiwan—and thus the potential effect of home country membership has been controlled.

Second, the participation in a Taiwanese association in China serves as a control variable to affect firms' FDI activities and performance. In the face of cross-strait political tension as well as the local ambiguity in the Chinese market, Taiwanese managers have several business associations to join across China. These associations help managers negotiate with government officials at the local, provincial, and central levels. Investments made by the members in an association also seek to enhance connections beyond the association's boundaries.

Finally, foreign investors can opt for either a joint venture (equity or contractual) or a wholly owned subsidiary as an entry mode. Since different modes are associated with different level of resource commitment, ownership control, and cost and risks, they will have different impacts on the firm's performance. Previous studies have found that joint ventures generally outperform the wholly owned subsidiary (Pan, Li, & Tse, 1999). When a foreign firm enters a host country, especially when the cultural, political, and economic systems differ greatly from its own, it is more likely to cooperate with a local partner that has developed unique, specific skills.

### *Characteristics of the Research Sample*

Data were collected through mail surveys from family-owned Taiwanese manufacturing firms. In order to secure a sufficient number of responses, surveys were sent to 1,900 companies. To increase the response rate, a reminder letter was sent out two weeks after the first mailing. Two and a half months later, the initial mail-out with follow-up efforts produced 324 responses, of which 18 were incomplete, and 30 were returned due to the wrong address or the withdrawal of investments by the firm. Two separate mailings yielded 276 usable observations, for a 14.5% response rate. No statistically significant differences were observed between respondents and nonrespondents based upon firm size.

It should be noted that Taiwanese investors often keep a very low profile regarding their investment in China because of political tension and might have chosen not to respond (Yang & Tu, 2004). In light of these circumstances, the 14.5% response rate is respectable. In order to estimate the ability to yield consistent results, the reliability of scales was assessed with Cronbach's alpha coefficient. Alphas were calculated for each of the constructs measured by multiple indicators. All but three exceeded the minimum benchmark of .70, and factor scores were calculated to serve as a measure for each factor.



A confirmatory factor analysis was performed to ascertain the validity of the scales utilized in this study (available from the authors). Descriptive statistics and correlations of the variables are provided in Table 2.

**Table 2. Descriptive Statistics and Correlations of the Firm Specific Independent Variable Measurements**

**Table 2a. Descriptive Statistics**

Items	Mean	S.D
1. China Sales	3.62	1.736
2. Firm Size	.00	1.000
3. International Experience	.00	1.000
4. RND Expenditure	.00	1.000
5. Performance	.00	1.000
6. FDI	.00	1.000
7. Taiwan Sales	4.12	1.909
8. Technology Skills	3.29	0.826
9. Management Capability	2.96	0.927
10. China Market Experience	2.97	0.916

**Table 2b. Correlations**

Items	1	2	3	4	5	6	7	8	9
1. China Sales	1.000								
2. Firm Size	0.426**	1.000							
3. International Experience	0.317**	0.000	1.000						
4. RND Expenditure	0.091	0.000	0.000	1.000					
5. Performance	0.217**	0.051	0.218**	0.186**	1.000				
6. FDI	0.863**	0.423**	0.330**	0.043	0.000	1.000			
7. Taiwan Sales	0.472**	0.901**	0.186**	-0.007	0.106	0.439**	1.000		
8. Technology Skills	0.173**	0.003	0.110	0.856**	0.240**	0.129**	0.034	1.000	
9. Management Capability	0.136*	0.000	0.000	0.000	0.090	0.165**	-0.019	0.128*	1.000
10. China Market Experience	0.340**	-0.059	0.632**	-0.058	0.157**	0.401**	0.084	0.132*	0.580**

Standard Deviation: \* $p < 0.05$ , \*\* $p < 0.01$

## FINDINGS

Firm-specific advantages like firm size, R&D intensity, international experience, and managerial capabilities have a positive relationship with the degree of a firm's FDI involvement, while all of these except managerial capabilities have a positive relationship with a firm's performance in Mainland China. Although the majority of previous literature suggests that firms engaged in FDI must possess firm-specific advantages to outperform the local competitors in the host markets, these results are not fully consistent with the literature. For the Taiwanese firms investing in China, previous business experience seems to be most important in their decision to invest and their performance in China. All but two of the hypotheses (H2 and H8) were supported. Firm size and managerial capabilities were *not* found to be associated positively with performance.

### *Firm Size*

Concerning the relationship between firm size and FDI, the size of the investing firm, which is measured based on total assets, total sales, and number of employees, has shown a significant positive relationship with the magnitude of FDI in China by Taiwanese firms. This finding confirms that for Taiwanese firms, firm size is a critical factor in undertaking FDI and expanding resources overseas. Large firms, as previous studies suggest, tend to possess higher R&D capabilities, which may allow firms to achieve higher efficiency and better performance. However, size does not seem to be related to Taiwanese firms' performance in China. This is contrary to the findings of previous empirical studies (Cohen, 1996). An alternative explanation is that the employment of extensive FDI activities by relatively larger firms might escalate coordination costs and reduce the latent value associated with such investment.

### *Research and Development*

The amount of FDI by Taiwanese firms in China is not significantly related to R&D intensity and just moderately related to technology skills ( $r = .129$ ). In general, previous FDI research focused on firms in developed countries and found strong support for positive relationships between technological resources and FDI. The results suggest that firms in developing countries like Taiwan are not similar to the ones in developed countries. Firms from developing countries generally possess disadvantages relative to firms from developed countries with respect to technological resources. In addition, Taiwanese FDI may be induced by defensive motives to maintain the established export market rather than by offensive motives to exploit the technology-based advantages overseas. If this were true, little or no influence of R&D intensity on FDI intensity would be expected.

However, R&D expenditures show a statistically significant relationship with Taiwanese firms' performance in China. This result is consistent with Tallman (1991), who noted that R&D is crucial to the ongoing creation of valuable rent yielding and know-how for developing new products. Technological capabilities may allow firms to achieve efficiency in operation, to achieve more competitive parity with rivals, and finally, to improve their performance (Zahra, 1996). Overall, Taiwanese firms that have developed higher levels of technological resources are likely to perform better than others.

It was anticipated that a firm's global experience would be positively related to the extent of Taiwanese FDI and firm performance in China. Strong support was found for H5 and H6, suggesting that Taiwanese manufacturing firms with more experience in overseas markets tend to invest more heavily in China than do their counterparts with less experience.

Because doing business in China is still complicated and difficult, investors can be frustrated and disappointed by the practices they encounter in China. With the hope that uncertainty can be progressively reduced over time as accumulated learning takes effect in a country (e.g., Benito & Gripsrud, 1995), Taiwanese firms with more international experience are more confident in facing the challenges of even the relatively familiar markets of China (Huang & Carraher, 2004; Chang, 2002). Many studies empirically confirm that a firm's multinational experience is positively related to the extent of its FDI in a country (Yu, 1990). The fact that international experience is statistically significantly related to both the first entry and subsequent firm performance suggests that experience acquisition may spawn more Taiwanese investments in the Chinese market in the future. In sum, firm size was positively related to FDI but not to performance; technical skill was positively related to both FDI and performance; previous international organizational experience was positively related to both FDI and performance; and managerial capability was positively related to FDI but not to performance.

### LIMITATIONS AND FUTURE RESEARCH

Based on company-level data, this study provides empirical support concerning roles played by key firm resources—size, technology, global experience, and managerial capability—on the level of Taiwanese FDI and firm performance in China. Several limitations should be noted, however. First, this study looks at the investment behavior of manufacturing firms only. As Chinese economic reforms continue, more service industries such as banking, investment, trading, and retail will be open to outside investors. It would be interesting to explore the investment behavior of service firms, and to compare the findings with the investment behavior of manufacturing firms reported in this study.

Second, most FDI studies are based on secondary data (Terpstra & Yu, 1988; Yu, 1990; Yu & Ito, 1988). Only Agarwal and Ramaswami (1992) used primary data to test the interactions between the factors of FDI. This study primarily relies on managerial perceptions to investigate the determinants of Taiwanese FDI activity and their firm performance in the Chinese market.

Third, the sample is limited to the Taiwanese firms operating in only four regions in China. As such, the representativeness of the sample cannot be determined. In order to truly appreciate the generalizability of the empirical results reported here, future research is needed to investigate the applicability of the models to other regions in China. In contrast, a comparative study of the overseas Chinese investment experience with that of other non-Chinese investors in China would provide a meaningful contrast.

Fourth, since it is a single-country study, this research does not capture the relationship between home country characteristics and firms' decisions to invest in a particular country. The underlying assumption is that foreign investment is determined by host country characteristics (pull factors), and the investing country's (Taiwan's) influences on FDI flow (push factors) are regarded as the constant rationale because of the overall domestic location and investment disadvantages. Future research might include examining domestic push factors in order to

empirically test their relationship with FDI activities. Due to cultural concerns, however, non-Chinese businesspeople seeking to do business in China may be advised to identify a Taiwanese partner to assist them rather than dealing directly with Chinese firms.

A number of challenges remain. First, the application of Western scales to non-Western samples remains a difficult process (Carraher, Franklin, Parnell, & Sullivan, in press; Carraher, Scott, & Carraher, 2004; Parnell & Carraher, 2005; Scandura & Dorfman, 2004), and the present study was no exception. Even when scales are translated to account for language and cultural differences for the sake of generalizability, scale reliabilities can suffer. When scales are translated and/or modified to address cultural differences, direct comparisons between distinct cultural groups are tenuous at best. Solving this dilemma is not easy. Nonetheless, future research should embrace multiple approaches to develop a comprehensive understanding of this phenomenon.

Second, Western models and instruments typically do not measure the constraints under which Chinese employers function (Adler, Campbell, & Laurent, 1989; Carraher, Hart, & Carraher, 2003). As a result, Chinese applications of Western survey instruments such as the scales utilized in the present study have limitations. Alternatively, researchers may choose to develop instruments from indigenous Chinese values (e.g., Fahr, Tsui, Xin, & Cheng, 1998) to maximize measurement precision. Unfortunately, doing so is expensive and typically produces results that are inconsistent with Western literature (Fahr et al., 1998). Additional research that integrates both approaches in hypothesis testing may lend more robust and reliable conclusions. Further, Farh, Earley, and Lin's (1997) development of the Chinese organizational citizenship behavior (OCB) scale considered cultural variability *within* the Chinese culture, not between or among cultures. Hence, additional research that moves beyond pitting one culture against another would also be helpful.

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