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The determinant of foreign property investment in Island nations - The case of Taiwan

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Abstract

In recent years there has been a boom in overseas property investment with more and more people taking advantage of favorable exchange rates coupled with lower property prices abroad.

This study examines the preferences of foreign investors in Taiwan real estate market. A multi-criteria decision analysis tool (analytic hierarchy process: AHP) is used to examine how foreign real estate companies determine their localization in Taiwan. The article concludes that among the 24 chosen criteria, the level of operational risks seems to be the determining decision factor.

This paper identify the factors that could explain foreign investors' selection criteria when they decide to invest in Taiwan. The results of our research could be advantageously used by the State economic development agencies, real estate developers and central-level policy-makers. The contribution of this research is to realize the determinants on the real estate industry in Taiwan under global economy, and by this means, we can provide some suggestions to construct suitable environment for foreign investor in Taiwan and reference organization.

Keywords Foreign direct investment (FDI), determinants, AHP (analytic hierarchy process), property investment, island nations

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I. Introduction

Foreign direct investment in U.S. real estate accounts for 2.5 percent of total foreign investment in U.S. markets. The expanding globalization of the world economy has spurred greater investment across international borders. The amount of foreign investment specifically in U.S. real estate rose to \$41 billion in 2005. That represents a second consecutive year of increase, an encouraging sign after foreign investment in U.S. real estate fell successively for four years from a peak of \$50 billion in 2000 to \$37 billion in 2003. One factor helping to support the U.S. real estate market and industry is the role of foreign investment. The “globalization” of the economy extends to real estate. Foreign governments, international financial institutions, foreign companies, foreign pension and equity funds, and foreign individuals are all taking note of the performance of U.S. real estate, and see opportunities to take advantage of healthy returns on their investments.

In order to adapt to the international economic liberalization, increase the efficiency of foreign capital investment, promote better use of foreign technical know how in the exploitation of land resources, and based on the principle of reciprocity, aliens or foreign companies are permitted to acquire land in Taiwan. According to the regulations specified, foreign investors can purchase Taiwan property when they get the official permission from the department of land administration from 1997. In advance, based on the principle of reciprocity, this prohibition has been total lifted and Taiwan is opened to foreigner to invest property. Those foreign companies are permitted to acquire land in Taiwan starting 2001.

This paper investigate the foreign investors in Taiwan when they invest in the real estate sectors in 1997 to 2001. According the statistics by the land administration bureau of interior ministry in Taiwan, those firms invest in office building, factories, hotels, residential property and commercial building, who were investing from the USA, Japan, Southeast Asian countries and Latin American. Besides, the statistics revealed that there were more than fifth times foreign investment in Taiwan from 2001 to 2002, in the 2004 reached 850 thousands square meters. (see figure. 1) In Taiwan real estate market foreign direct investment accounts for 2.9 % and 2.7% respectively of total foreign direct investment in 2004 and 2005.

What is the attractiveness of foreign investors to Taiwan real estate markets and business environment? Could we be explained by the opening market and deregulation or Taiwan offer sufficient competitive advantages to attract foreign investment in Taiwan real estate? Could we find some criteria to evaluate those foreign firms decision and their activities in Taiwan?

This paper is organized as follows. Section II reviews recent studies that have focused on foreign investment. Section III presents an overview of the national competitive advantage for foreign investment and establishes he criteria typically used for making a foreign investment decision. Section IV the AHP research method while the results are presented in Section V, which is followed, by conclusion and the limitations of the study.

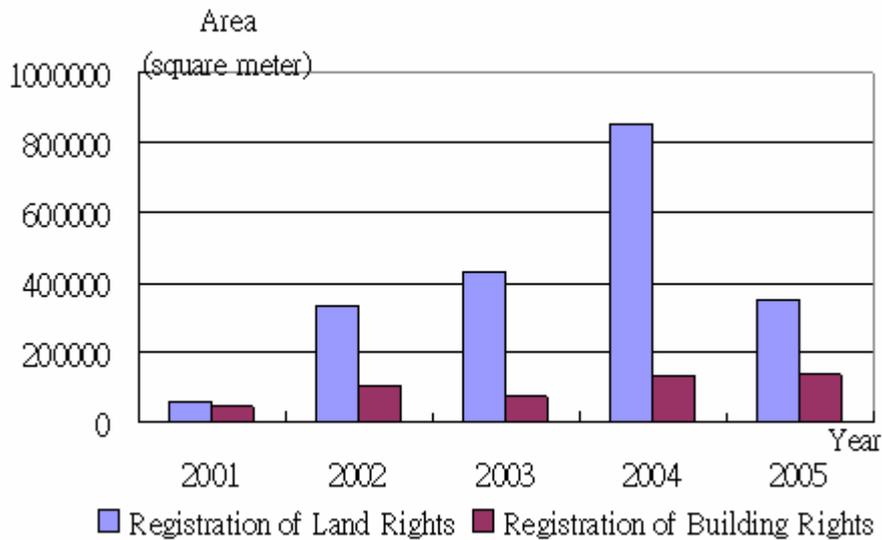


Figure 1. Registration of land and building rights obtained by foreigner in Taiwan

II. Literature Review

With the reduction of all forms of transport and communication costs, the benefits of agglomeration economies are less determinant than they were previously. Location factors for foreign investment firms have now shifted to criteria such as amenities, high level services availability, effective communication networks and rapid access to innovation and innovators.

How these transformation of location factors have affected the activity of foreign real estate investors in Taiwan? Those foreign firms will choose to invest in Taiwan or move to another countries. Unfortunately, we cannot find answers in the past, until recently, Taiwan had severely restricted the access to property by the foreign real estate firms and Taiwanese firms were not allowed to invest on Mainland China markets until 2005. Thus the track record of foreign firms in Taiwan or of Taiwanese firms in China is still very limited and, not surprisingly, has not generated much academic interest.

While the United Kingdom, Netherlands and Germany have long-established traditions in international real estate investment (Hines 1988; Zibrowski and Curcio 1991; Worzala 1994) Japanese have land and homes in U.S, Canada and Southeast Asian Countries. They also invest in Taiwan in recent years.

The major factors contributing to the investment in U.S. real estate by foreign investors include: favorable exchange rates³, lack of local real estate opportunities, interest-rate differentials, greater liquidity of U.S. real estate markets, tax incentives, fewer ownership

³ Chen et.al.(1991) report that the economic gains for international joint ventures are larger when the home currency is relatively strong.

restrictions, political diversification, economic diversification, arbitraging comparative market conditions, perceived comparative advantage, substantial growth in available investment funds, changes in foreign investment policy, investment stability, strong economy, improved global communication, improved market information, access to investment capital and greater array of investment. In the past studies (Hines 1988; Miller 1988; Zibrowski and Zibrowski 1993; Newell and Webb 1996) pointed out the influence of foreign investment factors, but they did not analyze which factors are major or minor.

Some unique characteristics of real estate might affect the international investment. For example, the immovability of real property and the large size of initial investment required in real estate markets bring more political as well as economic risks to international real estate joint ventures, compared to international joint ventures in general. (He, Myer and Webb 1997). Hence, Scholes and Wolfson (1990) point out that after 1986 U.S. tax reform foreign investors should find investment in the U.S. more attractive than before.

Existing work on foreign investment in real estate market can be grouped into three categories: studies that explain the level of foreign investment (Dunning 1988; Caves 1971); examines corporation's performance and risk(Harris and Ravenscraft 1991, Newell and Webb, 1997); studies disposition (Friedman, Gerlowski,and Silberman 1992; Khodov 2000). In fact, foreign investors are attracted to another country for various reasons, not the least of which is that foreign participation in real estate is those categories. It is by so many factors. There are few that studying a systematic fashion the factors affecting, foreign real estate investment, especially in Taiwan, a developing country. This study will examine the determinants for foreigner investment in Taiwanese real estate.

III. What determines a nation's competitive advantages?

Two major publications have been established to provide annual scores of national, competitiveness. The Global Competitive Report (GCR) published by the World Economic Forum and The World Competitiveness Yearbook (WCY) published the International Institute of Management Development (IMD) based in Lausanne, Switzerland. These publication can provide foreign investors to understand the basic information for those potential countries to be invested.

The most widely quoted IMD report has been published without interruption since 1989 (Rosselet McCauley 2004). This survey ranks and analyzes the ability of nations to create and maintain an environment in which enterprises can compete. On this scale, Taiwan was ranked 11th, China was ranked 31 and the USA was ranked 1st. The working assumption is that wealth creation takes place primarily at the enterprise level ("competitiveness of enterprises") but, since enterprises operate in a national environment which enhances or hinders their ability to compete domestically or internationally. Thus, even though a Nation does not directly generate economic added value, it provides the framework that allows firms to produce goods and services. The framework be judged along four main factors: Economic Performance , Government Efficiency, Business Efficiency, and Infrastructure.

Since most of the national wealth is generated in the largest cities the analysis of national

competitiveness rest on the understanding of urban competitiveness. Notably, Krugman (1991, 1996, 1997) following the classical lead from Regional Sciences (Isard, 1967) extends the space costs factors to broader factors that may explain the comparative advantages of cities and nations. This return to partial economics may explain the renewed interest in the measurement of urban indices as defined the UNCHS and the World Bank.

Urban indices are built from broadly defined measurements such as social and economic development indicators, infrastructure indicators, transportation indicators, environment management indicators, local government indicators, purchasing power indicators and housing supply indicators. These broad categories are then subdivided in 46 indicators of urban wealth and welfare. For its part, the urban indices program of the European Environment Agency (EEA) emphasizes environment and human health in 1995. We believe that those foreign investors will take into account these indices when they decide to invest these cities.

In the past, Taiwan determinants of urban and national competitiveness have been discussed by Yu-sheng Chiang. He chose a set of urban competitiveness indicators based on regional development, family environment, transportation, social welfare, culture and recreation and finance. A similar inspiration led Taipei City government to establish 37 indicators to benchmark Taipei against other international cities in 1999. T.J. Lin (2002) combined the Porter competitiveness categories together with secondary data of investment environment to evaluate the relative position of mainland China major cities. Finally, the technology and economic division of the National Policy Foundation published a comparison of the competitiveness of Taiwan 21 cities and counties based on their economic vigor, government efficiency and life quality in 2002.

The issue of national competitiveness is not the central theme of this paper but it is raised here in order to link investment decision criteria with national and urban competitiveness indicators. We suggest that such indicators could be better ascertained and ranked on the basis of the observation of the multi-criteria decision behavior and perception of foreign investors.

IV. Research Method

Each country has a different buying process and it is important to research the market fully before committing to a property investment abroad. When the desired overseas investment property is found, it may be needed to make sure by learning about the culture, politics, economy, local cuisine, weather, customs, and taxes etc before deciding where to start searching for overseas investment property.

This paper wants to know the widely determinants for overseas investment property. We use a widely used multi-criteria decision model the Analytic Hierarchy Process (AHP), one of the more common multi-criteria methods established by Saaty (1980), to analyze the responses provided by foreign investors in the Taiwanese property markets. AHP is a flexible instrument that allows the treatment of complex decisions based on both qualitative and quantitative criteria for making the investment decisions. This method requires the sequential weighting of a large number of pair-wise comparisons of criteria.

The procedure is applied to the choices made by 40 foreign⁴ real estate firms who have recently invested in Taiwan. The location determinants that were identified by the respondents were regrouped along the following categories: Economy(C1), Social(C2), Market(C3), Policy (C4)and Product(C5) factor. For our purpose we have identified the criteria described in figure 2.

Faced with a large number of criteria (24 in our case, see figure.2) decision makers cannot be systematically transitive in their choice of which criteria to apply to decide whether or not they will invest in Taiwan. This very typical problem of choosing among a large number of criteria has received considerable attention in the operation research literature and a variety of algorithms and computer assisted decision models have been developed.

⁴ We got these firms information from department of land administration in minisrty of interior in Tiwan in 1997-2001. These foreign firms were permitted to invest Taiwanese property. We investigated every firms by e-mail, telephone and interview depending on their willings and asked them their choices by our questionnaire.(see appendix I)

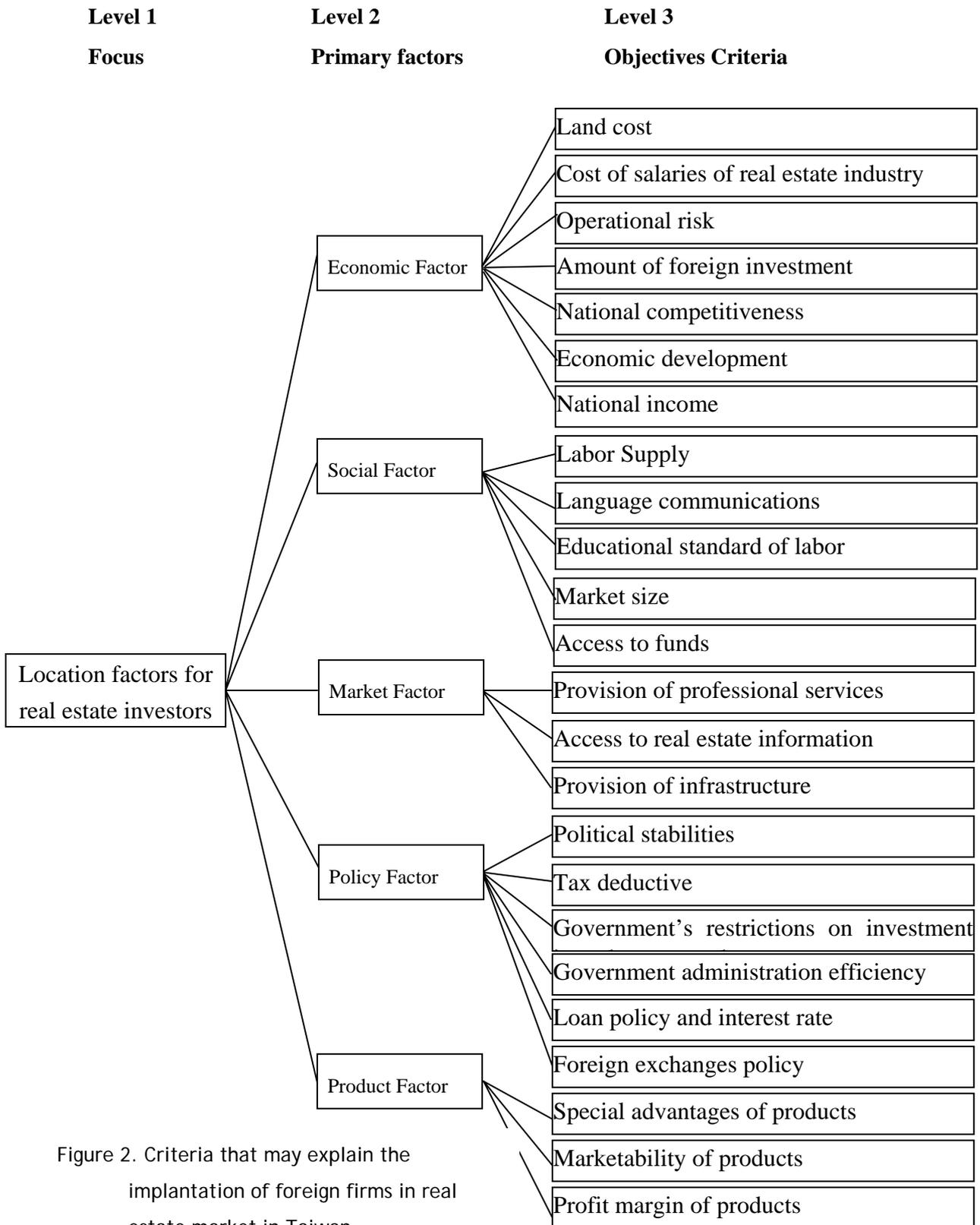


Figure 2. Criteria that may explain the implantation of foreign firms in real estate market in Taiwan

V. Empirical Results

1. Hierarchical composition of priorities for foreign firms in real estate market

The priorities of all factors are given in the Table 1. We can observe that the ranking of priorities is lead by Economy, Policy and Market concerns (respectively 36.65%, 22.32% and 21.41%).

Table 1 Priority of Primary factors

Level 2-Primary factors	Composite Weight (%)	Priority
Economy	36.65	1
Policy	22.32	2
Market	21.41	3
Society	11.49	4
Product	8.14	5

A. Economic factor

Foreign real estate investment firms give the highest weight to operational risks,⁵ (accounting for 24.93%) t followed by land cost (17.71%). Clearly, apart from the operational risk, the real estate industry accords high priority to land cost compared to other factors as could be expected. National competitiveness is ranked third with the a weight of 16.90% while economic development occupies the fourth place, standing at 15.42%. From the perspective of macro economy, no significant difference is shown among national competitiveness, economic development and land cost. Lower weight has been given to cost of salaries of real estate industry, amount of foreign investment and national income, accounting for 10.58%, 7.48% and 6.97% respectively.

B. Policy factor

Factors of policy are the second most important consideration of foreign firms for real estate as detailed in Table 2. The top three concerns for firms contemplating international investment in real estate are the political stability, government's restrictions on investment in real estate and the level of taxation (27.35%, 23.43%, 19.29% respectively). Other factors, such as government administration efficiency, loan policy and interest rate and foreign exchanges policy, are weighted 11.96%, 9.14% and 8.83% respectively. Their attached low weight is contrary to the initial expectation held by most scholars that foreign investment decisions are highly related to the host country foreign exchanges and financial policies.

C. Market factor

⁵ Operaional risk refers refer to risk taken on by a company that does noe include the cost of finance

Factors of the local real estate markets were ranked third by the foreign investment firms determination of whether or not to invest in Taiwan. That the market size was given a weight of 38.56% while a Access to funds received a weight of 23.3%. typically, direct investment in real estate will involves large amount of capital so to real estate information is weighted at 16.32%, factors provision of professional services and the provision of infrastructure, standing at 13.96% and 8.03% respectively. The findings seem to go against the to the long-held belief that firms for real estate emphasize infrastructure.

D. Social factor

In accordance with Table 2, language, accorded with the weight of 49.39%, is the most important factor when foreign firms for real estate are evaluating factors of society, which demonstrates the huge impacts of internationalization of language on the competitiveness of Taiwan's real estate industry. Labor supply weighted at 29.64% occupies the second place while educational standard of labor is given less emphasis, standing at 20.97%.

E. Products factor

Table 2 shows that profit margin accounts for 52.15% with more than half of the total weight, which shows its importance. Marketability of products is given the second greatest weight with 30.64% while special advantage of products is rendered unimportant with mere 17.21% weight.

Table 2 Criteria for the determinants of foreign investment in real estate market

Level 3 Objective	Weight (%)	Priority
Factors of economy		
Operational risk	24.93	1
Land cost	17.71	2
National competitiveness	16.90	3
Economic development	15.42	4
Cost of salaries of real estate industry	10.58	5
Amount of foreign investment	7.48	6
National income	6.97	7
Factors of policy		
Political stability	27.35	1
Government's restrictions on investment in real estate market	23.43	2
Incentives tax	19.29	3
Government administration efficiency	11.96	4
Loan policy and interest rate	9.14	5
Foreign exchanges policy	8.83	6
Factors of market		
Market size	38.56	1

Investment capital	23.23	2
Access to real estate information	16.32	3
Provision of professional service	13.96	4
Provision of infrastructure	8.03	5
Factors of social		
Language communications	49.39	1
Labor supply	29.64	2
Educational standard of labor	20.97	3
Factors of products		
Profit margin of products	52.15	1
Marketability of products	30.64	2
Special advantage of products	17.21	3

F. Priorities of all criteria regarding the competitiveness of the real estate industry

After conducting the evaluation of all criteria, we observe that operational risk is the top concern with a weight of 9.13% as shown in Table 3. The second consideration is the size of the market (8.26%) which is not very different from operational risk. This slight difference demonstrates that firms are concerned about individual firm's profit so attention should be given to firms' internal business environment rather than external environment in discussion of the competitiveness of Taiwan's real estate sector. Land cost (6.49%) is most directly related to the real estate industry evidenced by its priority in the 24 indices items, showing the competitiveness of Taiwan's real estate industry is more related to land cost. National competitiveness is ranked fourth, indicating the causal effect of Taiwan's real estate industry and national competitiveness. Real estate investment is direct investment that results in low-liquidity after investment being made so firms show certain concerns of political stabilities. The more stable the political environment is, the more attractive Taiwan is to foreign firms for real estate. Language, economic development and government's restrictions on investment in real estate market do not differ much in their priorities.

The provision of infrastructure and special advantage of products lags behind in the comprehensive priority, which demonstrates that foreign firms for real estate show little concern for infrastructure. Two reasons contribute to this phenomenon. First, Taiwan has better infrastructure compared to other Asian countries. Second, foreign firms for real estate provide their own infrastructure so this item is not the priority concern in their making of investment decisions. Moreover, the low importance given to the special advantage of products is mainly due to the investment targets given these targets are matured products, such as plants or dwellings.

Table 3 Priority of all criteria of foreign investors in real estate market

Criteria	Weight(%)	Priority
Operational risk	9.13	1

Market size	8.26	2
Land Cost	6.49	3
National competitiveness	6.19	4
Political stabilities	6.10	5
Language communications	5.67	6
Economic development	5.65	7
Government's restrictions on investment in real estate market	5.23	8
Access to funds	4.97	9
Deductive tax	4.31	10
Profit margin of products	4.25	11
Cost of salaries of real estate industry	3.88	12
Access to real estate information	3.49	13
Labor Supply	3.40	14
Provision of professional services	2.98	15
Amount of foreign investment	2.74	16
Government administration efficiency	2.67	17
National income	2.55	18
Marketability of products	2.49	19
Educational standard of labor	2.40	20
Loan policy and interest rate	2.04	21
Foreign exchanges policy	1.97	22
Provision of infrastructure	1.72	23
Special advantages of products	1.40	24

VI. Conclusions and Suggestions

In the United States, for example, many of the nation's leading real estate developers are based in Dallas, Texas. The geographic concentration of industries within nations imply in its competitive advantage. Firms enhance their competitive advantage through competing globally. This study has identified the weight and priority of factors affecting the decision of foreign firms for real estate to invest in Taiwan. The research findings provide a clearer picture to invest in Taiwan's real estate markets and guidelines for strategy formulation. This study may be categorized as follows:

1. ***The economic factor remains the major determinant for investment in Taiwan real estate markets.*** The economic factors, such as operational risk, land cost and national competitiveness are the most important criteria when investors are making an international investment into Taiwan. Results also show that foreign firms' took cost of production and profit-making ability are the major determinants in the real estate investment. This seems to be contrary to the previous understanding that firms focus on the large environment. The difference may be contributed by the firms' inability to take control of the abroad environment while they have firm

control over their production risk. Therefore, when they decide to invest in Taiwan, they will focus on the investment targets and their ability to control these targets.

2. ***Equal important to policy and market situation.*** This research concludes that the factors of policy and market situation are ranked second and third respectively in spite of the mere 2% difference in weighting. Taiwan's political stabilities have great impact on foreign investment , and as far as foreign firms are concerned political stabilities outweigh the government's efforts on the internal financial policies or external foreign exchanges policies fronts. Thus, political stabilities are key to the determinants of Taiwan's real estate market. Hence, Taiwan's government must control political environment.
3. ***The determinant of land cost still remain firms' concern.*** Land cost occupies the third place in the priority of 24 criteria, being one of the most important factors associated with real estate investment. Land cost is highly relevant to the competitiveness of Taiwan's real estate industry so how to provide adequate land and incentives for foreign firms for real estate to invest in Taiwan are areas that need to be improved in order to strengthen the competitiveness of Taiwan's real estate industry.
4. ***Operational risk and market size are the main considerations of foreign firms to invest in Taiwan.*** Many factors are difficult to control in Taiwan's ever-changing real estate market and yet every firm endeavors to reduce its operational risk as low as possible, which can be achieved by individual firm's own efforts. The operational risk tops the comprehensive priority, followed by the size of the market. These two factors are in fact inter-related since the larger the market size, the lower the firm's operational risk and the more opportunities for profit making. In spite that majority firms only concerned about their own operations, the government may assist these firms to create better operations by making reference to this concept, which may in turn attract more foreign firms for real estate to Taiwan.
5. ***Traditional marketing theory has less application in foreign direct investment in real estate.*** The traditional marketing theory emphasizes--price, promotion, place, production, particularly in the areas of product and promotion. However, this research concludes that firms do not particularly emphasize these, which warrants some further attention. When products become standardized or reach the stage of maturity, factors of products are not particularly important.

The number of entrepreneurs, managers, and members of the liberal professions, as well as manual laborers and office workers, who work permanently or for long periods abroad is increasing. The findings of this research for foreign investors considering direct investment in Taiwan are numerous. We offer the verified hierarchical decision scheme. To help firms and government , who must act choose better strategies and make more informed allocations of national resources. We believe government policy at the state and local level has an important role to play in real estate market.

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