# The Influence of Legitimacy and Multi-level Environments: A Case Study of Taiwanese Subsidiary's Entry Mode Choice in Mainland China

Shaodong Hu Shantou University

Hongxin Yao Shantou University

Zongling Xu Shantou University

This research studies Taiwanese subsidiaries' entry-mode choice from the angle of institutional theory. The findings show that Taiwanese subsidiaries in Mainland China imitate each other to gain legitimacy when choosing an entry mode at different levels of institutional environments. Taiwanese subsidiaries prefer to imitate the entry mode of their own group, rather than institutional environments at other levels, and prefer to imitate the entry mode of local industry institutional environment, rather than national industry institutional environment and region institutional environment, which indicates that Taiwanese subsidiaries tend to seek legitimacy in a narrow institutional environment among a multi-level institutional environments in Mainland China.

#### INTRODUCTION

When investing directly in foreign countries, the choice of foreign entry mode is a key decision, and a key issue that international companies face. The choice of entry mode has an important impact on the corporation's future performance and survival. Previous research on the entry modes of foreign subsidiary is mainly from an economic perspective with a focus on cost minimization and efficiency maximization to analyze the major factors that affect entry mode of foreign subsidiary. However, it ignores the impact of the institutional environment on the foreign subsidiary. The institutional condition is of vital importance for emerging economies like Mainland China (Peng Weigang, 2009), and is an important factor affects foreign businesses (Meyer, 2001, Contractor, 1990). Therefore, to decide the entry mode a foreign subsidiary should consider not only the economical goals, but also the issue of legitimacy. According to institutional theory, when in a institutional environment, the more foreign subsidiaries that adopt a certain entry mode, the more legitimacy that entry mode is, since new foreign subsidiaries tend to adopt a more legitimacy entry mode (Chan & Makino, 2007; Lu, 2002). This means new foreign subsidiaries imitate the entry modes of established foreign subsidiaries. For a Taiwanese subsidiary investing in Mainland China, it faces constraints in both the external institutional environment, and the internal institutional environment from its parent company. [2] Therefore, this research takes an example of Taiwanese subsidiaries in Mainland China, and attempts to study from the angle of institutional theory,

and from different levels of institutional environments, to find out whether the later entrants have imitated the entry modes of the earlier entrants in Mainland China.

#### LITERATURE REVIEW

Theories in relevant literature on foreign entry modes are mainly transaction cost theory, eclectic theory of international production, and the theory of organization ability etc. According to transaction cost theory (Williamson, 1975), the purpose of choosing an entry mode is to reduce transaction cost. It analyzes the organizational boundaries of enterprises from the angle of minimizing transaction costs. According to this theory, asset specificity, the uncertainty of the trade and the frequency of transactions all affect the optimal trading mechanism. According to eclectic theory of international production (Dunning, 1980), the choice of entry modes is due to the advantage of a company's ownership, advantage of the region and the advantage of internalization. According to theory of organization ability (Kogut & Zander, 1993), the choice of entry modes reflects the most effective way to use previous experience, and explore new ideas. The above theories are mainly from an economic perspective, and based on comparisons between cost, and the benefits of different ownership structures, to take into account economic factors such as minimizing investment venture and trading cost, increasing access to resources, and ensuring the control of assets and operation of subsidiaries. It emphasizes that the cost minimization and efficiency maximization is the major decisive factor in the choice of an entry mode.

Nevertheless, the maximization of efficiency cannot offer a full explanation for the motivation of adopting a foreign entry mode. Foreign subsidiaries investing in a host country should consider both the economic goals and the issue of legitimacy (Dimaggio and Powell, 1983). Especially when investing in developing countries, the foreign capital policy of the host country is regarded as an important factor affecting the equity stake structure (Contractor, 1990). Legitimacy is a generalized perception or assumption that the actions of an entity are desirable, proper, or appropriate within some socially constructed system of norms, values, beliefs, and definitions (Suchman, 1995). Legitimacy reflects the uniformity of common beliefs between legitimate companies and legitimate actors (includes government, vendor, consumer, professional organization, scientific institute and other relevant persons). Legitimate actors are the observers and constitutors of the companies operating environment. They determine whether the organizational activities are legitimate or not. They offer the resources to enable legitimate companies to operate continuously in a competitive environment, and to incarnate social acceptance for the companies (Suchman, 1995). Based on these rules, legitimate actors have developed their institutional environment, and place the company under the pressure of isomorphism, forcing them to adopt an orthodox organizational form and practice (Dimaggio and Powell, 1983). In the case of more and more organizations adopting a single form or practices, the possibility of imitation by other organization is highly increased (Dimaggio and Powell, 1983). According to institutional theory, because the decision and behavior is adopted by other organizations, it raises the legitimacy of similar decisions or behavior, especially when facing high uncertainty, the imitation is of greater importance since imitation can reduce the uncertainty (Dimaggio and Powell, 1983). Thus, there is imitation between companies. Some recent researchers have emphasized the motive of legitimacy and tested the contribution of imitation in the choice of foreign entry mode (Henisz, 2001; Chan & Makino, 2007; Lu, 2002; Guillen, 2002; 2003). Lu (2002) believes that there is an imitation between organizations, and within the organization on the choice of Japanese subsidiaries' entry mode. Later entrants tended to follow the entry mode patterns established by earlier entrants, which supports the institutional isomorphism. Chan and Makino (2007) argue that when entering the international market, Japanese subsidiaries have faced different institutional pressure from different levels of institutional environment (host country, local industry, parent companies). In order to gain legitimacy, Japanese subsidiary imitates the entry modes of other Japanese subsidiaries. The research by Henisz (2001) about 2705 investment location choices shows that when a foreign subsidiary enters a new market, it will be at risk because of its little experience. At the same time, the decisions and behaviors of other foreign subsidiaries which have entered the market earlier can be referenced to them. Guillen (2002) believes that the experience of investment in Mainland China by Korean business groups

and imitation among the same industry have promoted expansion of Korean business groups in Mainland China. Guillen (2003) studies the entry mode process of Korean investment in Mainland China, from joint ventures to wholly owned subsidiaries, and concludes that the evolution is the outcome of imitating other subsidiaries in the same business group or same industry.

The main industries that Taiwanese business groups invest in Mainland China are the electronic information industry and traditional manufacturing etc. Since these industries have no strict limitation of entry mode for foreign subsidiary, Taiwanese subsidiary can choose their entry mode freely. This research looks at examples of Taiwanese subsidiaries in Mainland China to test whether the later entrants have imitated the entry mode of the earlier entrants in different levels of institutional environments.

The innovative contributions are reflected in two points: firstly, no evidence has been found on empirical research for entry modes of Taiwanese subsidiaries in Mainland China. The study about entry modes of foreign subsidiaries focused on economic theory, but ignored legitimacy. This research confirms the imitation of entry modes choice for Taiwanese subsidiaries in Mainland China, microscopically from the perspective of institutional theory; it gives a new explanation for the choice of entry modes for Taiwanese subsidiaries, and compensates for the weakness of the research in this aspect. Secondly, Current literature which studies the impact of different levels of institutional environment (such as host country, industry etc.) is set in the frame of transnational study. There is a limited literature looks at the impact on entry mode for foreign subsidiary entering a country with different institutional environment among regions or industries. This research pays attention to the choice of entry mode for Taiwanese subsidiaries in different levels of institutional environments, the differentiation of institutional pressure Taiwanese subsidiaries face in different regions and industries. Meanwhile, different parent company put different pressures on its subsidiaries. This paper puts emphasis on the impacts of different levels of institutional environments on the choice of entry mode for Taiwanese subsidiaries, as well as supplying a relatively comprehensive explanation for the choice of entry mode for Taiwanese subsidiaries in Mainland China.

#### INSTITUTIONAL ENVIRONMENT AND RESEARCH HYPOTHESIS

This paper divides the institutional environment that Taiwanese subsidiaries in Mainland China are facing into an external institutional environment and internal institutional environment. External institutional environment is divided into institutional environment at a national industry level, regional level, and local industry level. Internal institutional environment refers to the internal institutional environment of Taiwanese business group.

# **External Institutional Environment and Research Hypothesis**

National Industry Institutional Environment

In order to develop the economy and optimize the industrial structure, Mainland China has made relevant industrial policies and arrangements for different industries. The foreign funded industrial policy is the major policy tool for guiding the flow of foreign direct investment, and stimulates industrial structure optimization (Pei, 2006; Zhao, 2002). According to the previous industrial policy and investment directory, Mainland China has adopted a lenient policy to electronic, chemical, and metallurgical as well as other technology-intensive industries and capital-intensive industries. It has adopted a stringent policy for clothing, food manufacturing and other labor-intensive industries, except for the industrial policy; the industrial structure is also a very important part of the industrial institutional environment at national level, such as industry concentration ratio, intensity of competition and infrastructure. Industrial structures affect the barrier of entry and profitability of an enterprise, and generate constraints to enterprises. Industrial policy and industrial structure constitute the institutional environment of certain industries, which may have a vital impact on the choice of entry mode for foreign subsidiary. Foreign subsidiary prefer to adopt sole proprietorship mode in industries, which has policy support and the barriers to entry is low, such as in the electronics industry. While, foreign subsidiary

prefers to adopt joint venture in industries that are restricted and the barriers to entry are higher, such as the automotive industry.

## Region Institutional Environment

Regions in Mainland China are in different development stages. There are significant regional differences in the institutional environment. The main reasons are various. Firstly, the marketization process is different in the gradual reform process, and the economic development is uneven. The marketization and economic level of the southeastern coast is obviously higher than other regions (Fan et al., 2007). Secondly, as an entity with independent interests, the local governments are inconsistent in execution of central laws and policies, which means that where there is a policy, there is also a countermeasure to the different institutional environments in different regions (Yin et al., 2007).

At present, Mainland China is not a unified "big market", but is made up of lot of "small markets" (Meyer, 2008). Under the influence of economic globalization, the local protectionism and market segmentation of Mainland China has been restrained and improved. However, the market of Mainland China still has characteristics of federalism (Meyer, 2008). A research conducted by Taiwan Electrical and Electronic Manufacturer's Association on the investment environment of Mainland China shows that there is a significant differentiation between legal environments, social environment, economic environment, and operating environment among different regions. For example, the investment environment of cities in Yangtze River Delta region is much better than in the Perl River Delta region. When investing in Mainland China, Taiwanese subsidiaries should not only take into consideration the overall investment environment, but also the local investment environment, especially the local institutional environment. In regions with higher institutional development level, especially in higher marketing regions, foreign subsidiaries tend to adopt sole proprietorship (Pan and Lu, 2006).

### Local Industry Institutional Environment

There is a unified policy for foreign funded industries; however, there is still differentiation among industrial policies of different regions. We identify two reasons for the variation of the local industry institutional environment. First, the goals of the central government and local government do not match. While the central government focuses on the optimization of industrial structure, the local government pays more attention to the amount of foreign investment, employment promotion and economic growth. Therefore, local government adopts different strategies to execute the policies for foreign funded industries (Yin et al., 2007). Second, the industrial structures differ in regions cross the country, as such, the industrial plans and industrial development strategies are not the same in different regions. For example, Shanghai pays more attention to the development of the modern service industry, especially the financial services; but the western areas tend to develop labor-intensive industries to undertake the shift of industries from developed areas.

The variation of local industry institutional environment indicates that the legitimate requirement for an industry in different regions is not the same, and therefore, even in the same industry, the restraints of local industry institutional environment for Taiwanese subsidiaries vary from region to region.

#### Research Hypothesis

Multinational corporations from the same country or same region share the same cognitive domain (Tversky and Kahneman, 1974), therefore they would like to imitate each other's behavior to make a choice, and react to others with similar methods (White, 1981; Haveman, 1993). Previous research shows that foreign companies tend to concern the behaviors of companies which are from the same country or region (Chan and Makino, 2007; Lu, 2002; Guillen, 2002; 2003). Accordingly, when a Taiwanese subsidiary enters into Mainland China, it will like to imitate the entry mode of subsidiaries of other Taiwanese business groups.

In a certain level of institutional environment, if there are more subsidiaries of other Taiwanese business groups who adopt a certain entry mode in Mainland China, the entry mode is more legitimacy; therefore, new entrants are more likely to adopt this entry mode. While, if there are few subsidiaries from other Taiwanese business groups choose this entry mode, then this entry mode is less legitimacy, therefore, new entrants is less likely to adopt this entry mode. Therefore we formulate the following hypotheses:

H1: In national industry institutional environment, the later entrants would imitate the entry mode of the earlier entrants of other business group.

H2: In regional institutional environment, the later entrants would imitate the entry mode of the earlier entrants of other business group.

H3: In local industry institutional environment, the later entrants would imitate the entry mode of the earlier entrants of other business group.

# **Internal Institutional Environment and Hypothesis**

Business groups have provided its subsidiaries with an internal institutional environment, and defined the suitable ways to operate (Kostova and Zaheer, 1999). Subsidiaries must abide the internal institutional demands to gain the internal legitimacy. Some researchers indicate that if the overseas subsidiary is closely bounded up with the parent firm, the parent firm would put lots of pressure on its subsidiary to make its norms and practice consistent with itself. On the contrary, if the overseas subsidiary is relatively independent in operating and management, the parent company would put less pressure on the subsidiary to achieve the internal unity (Davis et al., 2000).

The subsidiaries of the same parent company are restrained by each other in transaction, proprietorship, and controlling aspects. They can share information and experiences, and believe that it is reasonable to adopt similar practice or strategies (Dimaggio and Powell, 1983). Business group can provide subsidiaries with operating experience of other subsidiaries overseas, for example, the earlier entered subsidiaries can provide information to the later entered subsidiaries, and let the latter know which entry mode is best. Organizational theory believes that the practice would be institutionalized with the increase of times adopted. Research by Chan and Makino (2007), Lu(2002) supports this viewpoint, and stresses that isomorphism makes international companies tend to adopt precious entry mode.

According to this logic, we believe that if one entry mode has been adopted more times in the same business group, the higher legitimacy the entry mode is, therefore, the later entrants would tend to adopt the entry mode to keep the internal consistency. Therefore, we make a hypothesis as follow:

H4: When investing in Mainland China, the later entrants would imitate the entry mode of the earlier entrants of the same business group.

#### METHODOLOGY

#### Sample

The data of the research is from the survey report of Study on Business Groups in Taiwan (2006) version) published by China Credit Information Service Cor. Ltd (Taiwan), which includes business group profile, organizational structure chart, historical evolution, subsidiaries profile and performance information. The historical evolution has included the established time, place, and industries engaged in and establishing background. Subsidiaries profiles provide information that includes the shareholding ratio of the subsidiary when it was established and so on. In this survey report, we choose manufacturing subsidiaries in Mainland China as samples and excluded:

- (1) Subsidiaries which lack important information such as shareholding ratio.
- (2) Business group with only a subsidiary in Mainland China, because a single subsidiary would confuse the parent companies effects (Bowman and Helfat, 2001), and is hard to measure its internal imitation.

The final sample is made up of 478 subsidiaries in 10 industries (According to two-digit SIC) and 17 provinces. Among which, the number of wholly owned subsidiary is 382, joint ventures 96, the average shareholding ratio of business group in the subsidiaries is 93.6%.

## Dependent Variable

Dependent Variable refers to the ownership entry mode of the subsidiary. This variable is measured by the shareholding ratio of the Taiwanese business group. We obtained the data of dependent variable from *Study on Business Groups in Taiwan* (2006 version).

### **Independent Variables**

Independent Variables are the institutional variables of different levels, which include national industry entry mode, regional entry mode, local industry entry mode, and business group entry mode. The measurement of entry modes for different levels refers to Lu's (2002) method. When a Taiwanese business group sets up a subsidiary in Mainland China, the percentage that the wholly-owned subsidiaries account for of the total subsidiaries in nationally industrial, regional and locally industrial levels, measures the national industry entry mode, regional entry mode and local industry entry mode respectively. The entry modes of business group is measured by the percentage which the wholly-owned subsidiaries account for the group total subsidiaries in the Mainland China. We obtained the data of independent variables from *Study on Business Groups in Taiwan* (2006 version).

#### **Controlled Variables**

We use three local-specific control variables. First is gross domestic product (GDP) per capita in each region to represent the level of economic development of each region. The current studies show that the uncertainty is higher in less developed region, and the transnational enterprises are more likely to adopt joint venture (Shan, 1991). Second is the degree of local marketization. Because the foreign-funded companies grow up in a market economy, they prefer a market economy environment. Therefore, in regions that are highly marketed, they tend to adopt sole proprietorship (Pan and Lu, 2006). Third is the local economic growth rate. Regions have higher economic growth rates are more attractive to foreign-funded enterprises. Foreign-funded enterprises tend to adopt high control level entry modes. We obtained the data of GDP per capita and the local economic growth rate from China Economic Information Web, the local marketization from NERI INDEX of Marketization of China's Province 2009 Report (Fan et al., 2009).

We control for two types of business group resource: the investment experience in Mainland China and business group size. The experience in investing in Mainland China is measured by the years of operating in Mainland China for the business group. The current studies show that experienced transnational companies prefer high control level entry modes (Delios and Beamish, 1999). Business group size which is measured by the total assets, represents the size of the available pool of resources or capabilities that can be exploited in a new market. We control for its positive effect on the subsidiary's structure of ownership. We also use a relative size of subsidiary as a control variable, measuring by a ratio of the subsidiary's assets to the business group's total assets. We obtained the data on the three variables from *Study on Business Groups in Taiwan* (2006 version).

The descriptive statistics and correlations of variables are provided in table 1 and table 2 respectively.

TABLE 1 THE DESCRIPTIVE STATISTICS OF ALL OF THE VARIABLES

Variables	Observed Value	Mean	Standard Deviation	M inimum Value	M aximum Value
Ownership Entry Mode	478	0.936	14.875	0.21	1
National Industry Entry Mode	478	0.806	0.122	0.57	0.90
Regional Entry Mode	478	0.797	0.086	0.54	1
Local Industry Entry Mode	478	0.807	0.219	0	1
Business group Entry Mode	478	0.811	0.283	0	1
Business group's size <sup>a</sup>	478	5.223	1.086	3.45	7.68
Subsidiary Relative size	478	0.016	0.044	4.92e-06	0.63
Investment Experience in Mainland China	478	5.469	3.946	0	14
Regional Economic Level <sup>b</sup>	478	9.847	0.425	8.69	10.75
Regional Marketization level	478	8.257	0.987	4.11	9.35
Reginal Economic Growth Rate	478	0.170	0.020	0.10	0.23

<sup>&</sup>lt;sup>a</sup> Logarithm;in 1000 millions of New Taiwan Currency. <sup>b</sup> Logarithm;in yuan.

TABLE 2 **CORRELATION MATRIX** 

	Variables	1	2	3	4	5	6	7	8	9	10
1	Ownership Entry Mode										
2	National Industry Entry Mode	0.26**									
3	Regional Entry Mode	0.24**	0.22**								
4	Local Industry Entry Mode	0.50**	0.55**	0.38**							
5	Business group Entry Mode	0.68**	0.38**	0.30**	0.69**						
6	Business group's size <sup>a</sup>	$0.08^{+}$	-0.06	-0.06	-0.03	0.03					
7	Subsidiary Relative size	-0.16**	0.07	-0.07	-0.05	-0.12**	-0.28**				
8	Investment Experience in Mainland China	0.04	0.01	-0.06	0.07	0.06	0.24**	-0.19**			
9	Regional Economic Level <sup>b</sup>	0.05	0.06	0.29**	$0.10^{*}$	0.05	0.01	0.02	-0.06		
10	Regional Marketization level	$0.08^{*}$	0.20**	0.41**	0.17**	$0.10^{*}$	-0.01	0.04	-0.06	0.67**	
11	Reginal Economic Growth Rate	$0.09^{*}$	0.14**	0.35**	0.18**	0.14**	0.03	-0.10*	0.05	0.20**	0.32**

Note: \*\* p < 0.01,\* p < 0.05,+ p < 0.1

# ANALYSIS AND RESULTS

# **OLS Estimated Results**

We adopt OLS to estimate the models, and test the relationship between entry modes and institutional variables by Stata 10. The results of the analyses are provided in Table 3.

TABLE 3
OLS ESTIMATED RESULTS

Variables	Model 1	Model 2	Model 3	M odel 4	Model 5
National Industry Entry Mode		0.328***			
National modeling Entry Wiode		(5.97)			
Regional Entry Mode			$0.408^{***}$		
Regional Entry Wode			(4.67)		
Local Industry Entry Mode				0.338***	
Local maustry Entry Wroac				(12.32)	
Business group Entry Mode					0.350***
Business group Entry Wode					(19.36)
Business group's size	0.005	0.007	0.008***	$0.010^{**}$	0.006
Business group's size	(0.83)	(1.13)	(1.22)	(1.70)	(1.31)
Subsidiary Relative size	-0.490***	-0.554***	-0.423	-0.416***	-0.239**
Substitutive size	(-3.05)	(-3.56)	(-2.67)	(-2.96)	(-1.98)
Investment Experience in	0.0003	-0.0001	0.001	-0.001	-0.001
Mainland China	(0.19)	(-0.05)	(0.46)	(-0.78)	(-0.46)
Regional Economic Level	-0.005	0.006	-0.008	-0.003	0.001
Regional Economic Level	(-0.25)	(0.28)	(-0.41)	(-0.14)	(0.05)
Regional Marketization level	0.012	0.002	0.001	0.002	0.004
Regional Warketization level	(1.29)	(0.24)	(0.13)	(0.18)	(0.51)
Paginal Faanamia Growth Pata	0.387	0.207	-0.044	-0.088	-0.129
Reginal Economic Growth Rate	(1.06)	(0.58)	(-0.12)	(-0.27)	(-0.47)
Constant	$0.799^{***}$	0.533***	0.653***	0.655***	0.611***
Constant	(4.50)	(3.01)	(3.69)	(4.22)	(4.59)
Adj $R^2$	0.025	0.092	0.067	0.262	0.457
F	3.06	7.91	5.86	25.16	58.23
	(0.006)	(0.000)	(0.000)	(0.000)	(0.000)
N The state of the	478	478	478	478	478

Note: (1) The value in the regression coefficient's bracket is t, in F value's bracket is the probability value; (2)\* p < 0.10, \*\* p < 0.05, \*\*\* p < 0.01

Table 3 shows model 1 is the basic model that includes all control variables; model 2-5 iterate successively institutional variables of different levels. According to the regression results, the regression models are very significant as a whole. In model 2-5, the institutional variables from different levels are all positive, which is very significant (p<0.01). It shows that in different levels of the institutional environment, the higher ratio of the wholly-owned, the higher the ratio of its shareholding. According to the regression results, in different levels of institutional environment, the ratio of shareholding of new entrant has direct correlation to entry modes of different levels of the institutional environment, which means the new entrants has imitated the entry mode of different levels of institutional environments. Therefore, it has analyzed and confirmed hypothesis 1-4. In addition, according to the coefficient of determination, model 2-5 has significant improvement compared with model 1, which indicates that any accession of new institutional variable would improve the degree of fitting. Meanwhile, the improvement is ranked as model 5, model 4, model 2, model 3, which indicates that the constructional forces sequence of different levels of institutional environment are the internal institutional environment of business group, local industry institutional environment, national industry institutional environment and regional institutional environment.

#### Instrumental Variables and Two Stage Least Squares (2SLS) Estimated Results

Since there may be internal problems among national industry entry mode, regional entry mode, local industry entry mode, business group entry mode and ownership entry mode, we test the four institutional variables one by one. To solve the estimated error caused by internal problems, we adopt instrumental variables and 2SLS to estimate the models. The instrumental variables should meet the following two requirements: first, the instrumental variables must be exogenous variables, and second, the instrumental

variables must be related with endogenous variables. For the explanation of the instrumental variables of four institutional variables, please refer to table 4.

TABLE 4 INSTRUMENTAL VARIABLES EXPLANATION

Instrumented Variables	Instrumental Variables	Instrumental Variables Explanation			
National Industry Entry	Local Wage Level <sup>a</sup>	To measure the local labor cost.			
Mode	Industrial variables	Dummy Variables which include 10 industries.			
	Local Wage Level	To measure the local labor cost.			
Regional Entry Mode	Regional Variables	Dummy variables which are divided into four areas as Pearl River Delta, Yangtze River Delta, Bohai Rim and other area according to the location change of Taiwanese subsidiaries.			
	The proportion which foreign invest accounts for of local GDP	Represent the ability to attract foreign investment.			
Local Industry Entry	Local Wage Level	To measure the local labor cost.			
Mode	Business group entry mode	Business group entry mode in Mainland China.			
Business group entry mode	Local Wage Level	To measure the local labor cost.			
	Local Industry Entry Mode	The Entry modes of Taiwanese subsidiaries in local industry.			

<sup>&</sup>lt;sup>a</sup> Logarithm;in yuan.

The reasons for choosing these variables as instrumental variables are below: on one hand, from a visual point of view, there is not a direct relation between these variables and the dependent variable ownership entry mode; while on the other hand, a major motive of Taiwanese groups to invest in Mainland China is to use the cheap workforce (Gao and Chen, 1998). Therefore, the local wage level will affect the entry modes of the institutional environment at different levels. Different industries prefer to use different entry modes (Chan and Makino, 2007, Pan Zhen, Lu Minghong, 2006; Guillen, 2003), accordingly, we believe that industrial variables are the main factor to affect the entry modes. The proportion of foreign capital in GDP represents the attractiveness of the region to foreign capital, and it is an important factor affecting the entry modes of foreign-funded enterprises (Delios and Henisz, 2000). The regional property would affect the choice of entry modes (Pan and Lu, 2006), as such, we believe that the regional variable is an important factor affecting the regional entry modes. Since there is a correlation between the local industry entry mode and the business group entry mode, we set them as each other's instrumental variables. Table 5 provides the instrumental variables and 2SLS estimated results.

The occurrence of endogeneity and instrumental variables needs stringent tests. For this reason, we adopt Hausman test and Sargan test to check the endogeneity of the model and the availability of the instrumental variables respectively. Models 1-3 in table 5 have passed the test of Hausman and Sargan, which means that models 1-3 have an endogenetic problem, and their instrumental variables are effective. Model 4 has not passed the Hausman test, which means that model 4 has no endogenetic problem.

According to instrumental variables and 2SLS estimated results, the institutional variables coefficients in models 1-4 are obviously positive, and are in accordance with theoretical expectations and OLS estimated results. Therefore, according to empirical analysis, we tested impacts of four institutional variables on new entrants of subsidiaries, and find out that in the institutional environment of different levels, there is a imitation of the new entrants of subsidiaries in their choice of entry modes.

TABLE 5
INSTRUMENTAL VARIABLES 2SLS ESTIMATED RESULTS

Variables	Model 1	Model 2	Model 3	Model 4
National Industry Entry Mode	0.336***			
National industry Entry Wode	(6.11)			
Regional Entry Mode		0.280**		
riegional Entry in oue		(2.45)		
Local Industry Entry Mode			0.664***	
			(14.58)	0.27(***
Business group Entry Mode				0.376***
	0.007	0.007	0.014**	(14.31)
Business group's size	(1.14)	0.007	0.014**	0.007
	-0.556***	(1.09)	(2.12)	(1.33)
Subsidiary Relative size		-0.444***	-0.344**	-0.220*
	(-3.57)	(-2.79)	(-2.15)	(-1.80)
Investment Experience in	-0.0001	0.001	-0.003	-0.001
Mainland China	(-0.06)	(0.38)	(-1.53)	(-0.52)
Regional Economic Level	0.006	-0.007	-0.0001	0.001
regional Economic Ecver	(0.29)	(-0.36)	(-0.00)	(0.07)
Regional Marketization level	0.002	0.005	-0.009	0.003
Regional Warketization level	(0.21)	(0.48)	(-0.93)	(0.41)
Reginal Economic Growth Rate	0.203	0.091	-0.545	-0.168
Regiliai Economic Growth Rate	(0.57)	(0.24)	(-1.48)	(-0.61)
Constant	0.527***	0.699***	0.515***	0.597***
Constant	(2.97)	(3.90)	(2.90)	(4.46)
$Adj R^2$	0.092	0.062	0.040	0.454
F	8.14	3.59	33.02	33.94
Г	(0.000)	(0.001)	(0.000)	(0.000)
N	478	478	478	478
Sargan N*R-sq test	2.761	3.400	0.010	0.565
Sai gaii IV IX-sq test	(0.973)	(0.493)	(0.919)	(0.452)
Wu-Hausman F test	39.38	3.075	171.50	1.981
Wu-Haushian Lest	(0.000)	(0.080)	(0.000)	(0.160)

Note:(1) The value in brackets of regression coefficients are t and f; the value in brackets of Sargan and Hausman are probability value; (2) )\* p < 0.10, \*\*\* p < 0.05, \*\*\* p < 0.01

#### **Robustness Test**

In this sample, the subsidiaries whose shareholder ratio is 100% account for 79.9% and the subsidiaries whose shareholder ratio is less than 100% account for 20.1%. This data distribution might affect the regression result; therefore, we have a robustness test for the regressive models.

On the one hand, we defined the dependent variable as a dummy variable, which represents Taiwanese subsidiary's entry mode, coded 1 for a wholly owned subsidiary and 0 for a joint venture. Logistic regression analyses were conducted to examine. Table 6 provides the logistic regression results. The result shows that the mode 1-5 are significant, the sign and significant of the institutional variables are consisted with the OLS regression.

On the other hand, we use the bootstrap to test the robustness of the estimated results of OLS and instrumental variables and 2SLS. Bootstrap produced new samples from the original samples, which can reduce the statistic deductive variation and provide a more accurate and reliable test, depending on the marginal value produced by the data itself. The results of bootstrap test are in accordance with the estimated results of OLS and instrumental variables and 2SLS. The models that include institutional variables are all significant. Appendix 1 and appendix 2 provide the results. Although in the bootstrap test the standard error of institutional variable increased, it does not affect the significance of the institutional variables, which means that the research results under OLS are robust.

TABLE 6 ROBUSTNESS TEST: LOGISTIC REGRESSION RESULTS

Variables	Model 1	Model 2	Model 3	M odel 4	Model 5
		5.497***			
National Industry Entry Mode		(5.78)			
			6.179***		
Regional Entry Mode			(4.06)		
Local Industry Entry Mode				5.76***	
Local mustry Littly Wode				(8.17)	( 077***
Business group Entry Mode					6.977*** (10.08)
	0.021	0.025	0.061	0.102	-0.050
Business group's size	(0.18)	(0.21)	(0.52)	(0.75)	(-0.28)
	-2.365	-3.734	-1.570	-2.833	3.210
Subsidiary Relative size	(-0.96)	(-1.47)	(-0.58)	(-0.82)	(0.81)
Investment Experience in Mainland	0.074**	0.068**	0.084***	0.055	0.081*
China	(2.36)	(2.08)	(2.61)	(1.51)	(1.78)
D : 1D : 1	-0.294	-0.066	-0.387	-0.274	0.069
Regional Economic Level	(-0.80)	(-0.17)	(-1.03)	(-0.61)	(0.12)
Design 1Med at attended 1	0.343**	0.164	0.173	0.195	0.154
Regional Marketization level	(2.15)	(0.96)	(1.04)	(1.01)	(0.65)
Reginal Economic Growth Rate	9.027	5.141	-1.060	-0.129	0.382
Regiliai Economic Growth Rate	(1.48)	(0.83)	(-0.17)	(-0.02)	(0.04)
Constant term	-0.501	-4.887	-1.610	-2.652	-5.879
	(-0.17)	(-1.53)	(-0.53)	(-0.73)	(-1.21)
pseudo $R^2$	0.040	0.111	0.076	0.263	0.474
11_0	-239.7	-239.7	-239.7	-239.7	-239.7
11	-230.3	-213.2	-221.5	-176.6	-126.2
chi2	19.0	53.0	36.5	126.3	227.1
△chi2	-	34***	17.5**	107.3***	208.1***
N	478	478	478	478	478

Note: (1)The dependent variable is dummy variable, wholly owned subsidiary = 1, joint venture = 0; (2) The bracket in coefficient is z; (3) Δchi2 equals to chi2 of model 2-5 minus chi2 of mode 1; (4) \* p < 0.10, \*\* p < 0.05, \*\*\* p < 0.01.

#### CONCLUSION AND DISCUSSION

The traditional theories explanation for entry modes focused on economical factors, but ignored the impact of the institutional environment. This research has taken Taiwanese subsidiary ownership entry modes as a social identity and has divided the institutional environment into four levels (national industry, regional, local industry and business group). This research has studied Taiwanese subsidiary choice of entry mode from the perspective of seeking legitimacy. It is a major supplementary explanation for the traditional theory. Study shows that there is imitation among Taiwanese subsidiaries in the choice of entry modes in different levels of the institutional environments in Mainland China. As an important legal mechanism, imitation is a vital approach for Taiwanese subsidiaries to reduce uncertainty and to gain legitimacy in different levels of the institutional environment in Mainland China.

The later entrants of subsidiaries will imitate the entry mode of the earlier entrants in the same business group, which means that the previous entry mode is a "legitimate mode", and the later entrants take it for granted. It also indicates that there is a strong inertia in the business group in the decision of entry mode for investment in Mainland China. Compared with other levels of the institutional environment, the internal institutional environment of the business group has more reasonable interpretation power for entry modes of its subsidiaries. One possible explanation is that the subsidiary is a member of the group, and its greatest pressure is from the parent company's internal institutional

environment, to keep the unity within the whole group, the subsidiary has a strong demand to keep internal legitimacy, thus, the subsidiaries prefer to imitate the entry mode of its own group.

The recent studies about imitation in entry modes (Chan & Makino, 2007; Lu, 2002; Guillen, 2002, 2003; Liu & Makino, 2002) are under the transnational environment, scholars address that the industrial institutional environment of the host country has an important impact on the entry mode. However, it assumes that the institutional environment in different region of the same country is the same and does not consider the impact of the regional institutional environment on the entry mode. In fact, the regional institutional environments are different such as in Mainland China or America (Krugman, 1991, Chan CM, Makino S and Isobe T, 2010). Therefore, the impact on the entry mode of the regional institutional environment should be considered. Our research shows that the institutional environments which Taiwanese subsidiary in Mainland China face are different because of the differentiation of industries and regions. When Taiwanese subsidiary enter Mainland China, they take into consideration the pressure of the industry institutional environment and regional institutional environment, imitating the entry modes of the previously entered Taiwan subsidiaries to gain legitimacy.

The local industry entry mode as the interaction terms between regional entry mode and national industry entry mode, has positive effects on the dependent variables, which indicates that the legitimate requirement of industries in different areas are different. Compared with the regional institutional environment and the nationally industrial environment, the local industry institutional environment has a stronger explanation for entry mode. One possible explanation is that Taiwanese subsidiaries are more likely to pursue legitimacy in a narrow institutional environment. In other words, Taiwanese subsidiaries prefer to seek for legitimacy in local industry institutional environment. This is in accordance with the existing point of view, for example, transnational companies tend to seek legitimacy in a narrow institutional environment (such as a local industry) but not in a wider institutional environment (such as a host country). In research of global and local imitation caused by strategic alliances, companies are more likely to imitate the behavior of the companies who are in the same strategic position (Niche), but not to imitate other companies behavior in the same industry in the world (Garcia-Pont and Nohria, 2002). It indicates that the restrain of the local industry institutional environment to Taiwan subsidiary is more important and direct than that by the national industry institutional environment and regional institutional environment.

Our study has two limitations that suggest some intriguing avenues for future theoretical and empirical refinement. Firstly, the result of research indicates that there is a imitation among Taiwan subsidiaries to pursue legitimacy, however, in addition to the imitative mechanism, there are still regulative and normative mechanisms to pursue legitimacy (Dimaggio and Powell, 1983). Therefore, for future research, the direction is to combine the regulative, normative and imitative mechanism to study entry modes of Taiwanese subsidiaries. Secondly, the samples in this research are limited to Taiwanese subsidiaries. It needs further studies to confirm whether these research results are applicable to other foreign-funded companies.

#### **ENDNOTES**

Author: Shaodong Hu is the corresponding author and can be contacted at :sdhu@stu.edu.cn [2] Taiwan is part of China, however, the economic system between Mainland China and Taiwan is different, as such, the scholars treat Taiwan direct investment in Mainland China as part of FDI.

#### **ACKNOWLEDGMENTS**

This paper is supported by "Guangdong Province Social Sciences Foundation (08E-15)", "Major Project of the Key Research Base of Humanities and Social Sciences in Guangdong Province (11JDXM63005)" and "Academic Innovation Team Construction Foundation of Shantou University (ITC10004)". We are grateful for comments and discussions to Robert Guang Tian.

#### REFERENCES

Agarwal, S., Ramaswami, S.N. (1992). Choice of Foreign Market Entry Mode: Impact of Ownership, Location and Internalization Factors. *Journal of International Business Studies*, 23, (1), 1–28.

Bowman, E.H., Helfat, C.E. (2001). Does Corporate Strategy Matter? Strategic Management Journal, 22, (1), 1-23.

Chan, C.M., Makino, S. (2007). Legitimacy and Multi-level Institutional Environments: Implications for Foreign Subsidiary Ownership Structure. Journal of International Business Studies, 38, 621-638.

Chan, C.M., Makino, S. & Isobe, T. (2010). Does Subnational Region Matter? Foreign Affiliate Performance in the United States and China. Strategic Management Journal, 31, 1226-1243.

Contractor, F.J. (1990). Ownership Patterns of U.S. Joint Ventures Abroad and the Liberalization Of Foreign Government Regulations in the 1980s: Evidence from the Benchmark Surveys. Journal of *International Business Studies*, 21, (1), 55-73.

Davis, P.S., Desai, A.B., Francis, J.D. (2000). Mode of International Entry: An Isomorphism Perspective. Journal of International Business Studies, 31, (2), 239–258.

Delios, A., Beamish, P.W. (1999). Ownership Strategy of Japanese Firms: Transactional, Institutional, and Experience Influences. Strategic Management Journal, 20, (10), 915–933.

Delios, A., Henisz, W.J. (2000). Japanese Firms' Investment Strategies in Emerging Economies. Academy of Management Journal, 43, (3), 305-323.

Dimaggio, P.J., Powell, W.W. (1983). The Iron Cage Revisited: Institutional Isomorphism and Collective Rationality in Organizational Fields. American Sociological Review, 48, April, 147–160.

Dunning, J.H. (1980). Toward an Eclectic Theory Of International Production: Some Empirical Tests. Journal of International Business Studies, 11, Spring/Summer, 9-31.

Fan, G., Wang, X.L. & Zhun, H.P. (2007). NERI INDEX Of Marketization of China's Province 2009 Report. Peking: Economic Science Press.

Gao, C., Chen, W.R. (1998). An Empirical Study on Ownership Entry Mode of Taiwanese Enterprises in Mainland China. Journal Of Management (In Chinese), 15, (3), 393-418.

Garcia-Pont C, Nohria N (2002). Local Versus Global Mimetism: The Dynamics of Alliance Formation in the Automobile Industry. Strategic Management Journal, 23, (4), 307-321.

Guillen, M.F. (2002). Structural Inertia, Imitation, and Foreign Expansion: South Korean Firms and Business Groups in China, 1987-95. Academy of Management Journal, 45, (3), 509-525.

Guillen, M.F. (2003). Experience, Imitation, and the Sequence of Foreign Entry: Wholly Owned and Joint-Venture Manufacturing by South Korean Firms and Business Groups in China, 1987-1995. Journal of International Business Studies, 34, 185-198.

Haveman, H.A. (1993). Follow the Leader: Mimetic Isomorphism and Entry into New Markets. Administrative Science Quarterly, 38, (4), 593-627.

Henisz, W.J., Delios, A. (2001). Uncertainty, Imitation, and Plant Location: Japanese Multinational Corporations, 1990-1996. Administrative Science Quarterly, 46, (3), 443-475.

Kogut, B., Zander, U. (1993). Knowledge of the Firm and the Evolutionary Theory of the Multinational Corporation. Journal of International Business Studies, 19, (3), 411-432.

Kostova, T., Zaheer, S. (1999). Organizational Legitimacy under Conditions of Complexity: The Case of the Multinational Enterprise. Academy of Management Review, 24, (1), 64–81.

Krugman, P. (1991). Geography and Trade. MIT Press: Cambidge, MA.

Lu, J.W. (2002). Intra- and Inter-Organizational Imitative Behavior: Institutional Influences on Japanese Firms' Entry Mode Choice. Journal of International Business Studies, 33, (1), 19–37.

Meyer, M.W. (2008). China's Second Economic Transition: Building National Markets. Management and Organization Review, (4), 13–15.

Meyer, K.E. (2001). Institutions, Transaction Costs and Entry Mode Choice in Eastern Europe. *Journal of* International Business Studies, 32, (2), 357-367.

Pan, Z., Lu, M.H. (2006). The Cultural Interpretation to the Entry-Mode Choice of Foreign Direct Investment in China. The Journal of World Economy (In Chinese), (2), 51-61.

Peng, M.W. (2009). Perspectives—from China Strategy to Global Strategy, Journal of Strategic *Management (In Chinese)*, 1, (1), 1-13.

Pei, C.H. (2006). Absorbing Foreign Direct Investment and Upgrading Industrial Structure--Pondering over the Target of Utilization of Foreign Capital Policy. China Industrial Economy(In Chinese), (1), 33-39.

Shan, W. (1991). Environmental Risks and Joint Venture Sharing Arrangements. Journal of International Business Studies, 22, (4), 555-578.

Suchman, M.C. (1995). Managing Legitimacy: Strategic and Institutional Approaches. Academy of Management Review, 20, (3), 571–610.

Tversky, A., Kahneman, D. (1974). Judgment under Uncertainty: Heuristics and Biases. Science, 185, (4157), 1124–1131.

White, H.C. (1981). Where Do Markets Come From?. American Journal of Sociology, 87, (3), 517-547.

Williams on, O.E. (1975). Markets and Hierarchies: Analysis and Antitrust Implications. NY: Free Press.

Yin, H.F., Pan, Z. & Lu, M.H. (2007). Central - Local Government Relations and Policy Execution: The Example of Foreign Investment Industrial Policies. Management World(In Chinese), (7), 22-36.

Yiu, D., Makino, S. (2002). The Choice between Joint Venture and Wholly Owned Subsidiary: An Institutional Perspective, Organization Science, 13, (6), 667-683.

Zhao, J.P. (2002). The Study of the Industrial Policy for Foreign Investment in China. Management *World(In Chinese)*, (9), 47-52.

## APPENDIX

**APPENDIX 1** ROBUSTNESS TEST: BOOTSTRAP OF OLS

Variables	Model 1	Model 2	M odel 3	M odel 4	Model 5
National Industry Entry Mode		0.328***			
National modeling Entry Wode		(4.73)			
Regional Entry Mode			$0.408^{***}$		
Regional Littly Wode			(4.00)		
Local Industry Entry Mode				0.338***	
Local madstry Entry Wrode				(9.84)	
Business group Entry Mode					0.350***
Business group Entry Wrote					(14.36)
Business group's size	0.005	0.007	0.008	$0.010^{*}$	$0.006^{*}$
Business group's size	(0.78)	(1.07)	(1.17)	(1.83)	(1.62)
Subsidiary Relative size	-0.490	-0.554	-0.423	-0.416*	-0.239
Subsidiary Relative size	(-1.41)	(-1.59)	(-1.38)	(-1.70)	(-0.97)
Investment Experience in	0.0003	-0.0001	0.001	-0.001	-0.001
Mainland China	(0.22)	(-0.05)	(0.58)	(-0.84)	(-0.46)
Dagianal Faanamia Laval	-0.005	0.006	-0.008	-0.003	0.001
Regional Economic Level	(-0.24)	(0.32)	(-0.41)	(-0.15)	(0.05)
Pagianal Markatization laval	0.012	0.002	0.001	0.002	0.004
Regional Marketization level	(1.32)	(0.27)	(0.12)	(0.18)	(0.47)
Desiral Formania Consulta Data	0.387	0.207	-0.044	-0.088	-0.129
Reginal Economic Growth Rate	(0.82)	(0.56)	(-0.10)	(-0.26)	(-0.41)
Constant term	$0.799^{***}$	0.533***	0.653***	0.655***	0.611***
Constant term	(4.13)	(3.23)	(3.44)	(3.95)	(4.57)
$Adj R^2$	0.025	0.092	0.067	0.262	0.457
Wald chi2	8.92	32.41	25.19	109.22	236.04
	(0.178)	(0.000)	(0.001)	(0.000)	(0.000)
Replications	150	150	150	150	150
N	478	478	478	478	478

Note: (1)The value in the regression coefficient's bracket is z,the value in brackets of Wald chi2 is pobability value. (2)\* p < 0.10, \*\* p < 0.05, \*\*\* p < 0.01.

APPENDIX 2
ROBUSTNESS TEST: BOOTSTRAP OF INSTRUMENTAL VARIABLES AND 2SLS

Variables	Model 1	Model 2	Model 3	Model 4
National Industry Entry Mode	0.336***			
Tutional madsity Entry Wode	(4.41)	0.20044		
Regional Entry Mode		0.280**		
-8		(2.13)	o cctdatata	
Local Industry Entry Mode			0.664***	
, ,			(8.61)	0.376***
Business group Entry Mode				(9.49)
	0.007	0.007	0.014**	0.007
Business group's size	(1.21)	(1.06)	(2.05)	(1.47)
	-0.556*	-0.444	-0.344*	-0.220
Subsidiary Relative size	(-1.65)	(-1.46)	(-1.75)	(-0.83)
Investment Experience in Mainland	-0.0001	0.001	-0.003	-0.001
China	(-0.06)	(0.41)	(-1.59)	(-0.56)
	0.006	-0.007	-0.0001	0.001
Regional Economic Level	(0.32)	(-0.39)	(-0.00)	(0.08)
	0.002	0.005	-0.009	0.003
Regional Marketization level	(0.20)	(0.48)	(-0.92)	(0.41)
D 1 1 D 1 D 1 D 1	0.203	0.091	-0.545	-0.168
Reginal Economic Growth Rate	(0.50)	(0.21)	(-1.15)	(-0.55)
	0.527***	0.699***	0.515***	0.597***
Constant term	(2.88)	(3.70)	(2.86)	(4.58)
$Adj R^2$	0.092	0.062	0.040	0.454
Wald chi2	26.83	13.62	89.95	101.89
waid CH12	(0.000)	(0.058)	(0.000)	(0.000)
Replications	200	300	200	200
N (1) The state of	478	478	478	478

Note: (1) The value in the regression coefficient's bracket is z, the value in brackets of Wald chi2 is pobability value. (2)\* p < 0.10, \*\* p < 0.05, \*\*\* p < 0.01