### THE INFLUENCE OF FOREIGN CAPITAL'S M&A ON THE HOST COUNTRY'S ECONOMIC SECURITY

### DONGMING ZHOU, LAN SHI, GANG WANG

Military Economics Academy, Wuhan, China

**Abstract:** In the 1990th, a wave of the fifth merger present in developed countries and gradually spread to developing countries. In this wave of merger, the quantity and proportion of foreign capital mergers and acquisitions have dramatically increased, and are becoming the main way of foreign direct investment. Experience shows that foreign capital mergers and acquisitions have become one of the most important factors which affect the economic security of the host country. Therefore, it is positive and reality to summarize the foreign capital mergers and acquisitions on the host country's economic security the influences of foreign capital mergers and acquisitions on the host country's economic security, determine whether foreign acquisitions threaten the economic security of the host country, and reasonably put forward policy recommendations.

Keywords: Foreign Capital M&A, Host Country, Economic Security

### **1. INTRODUCTION**

In the 1990th, M&A has become the main way of international direct investment and played an important role in the development of the economic globalization.

The experience of foreign capital M&A shows that M&A has a positive significance for the host country to introduce foreign capital and advanced technology.

However, M&A means that the host country industries transfer control to the foreign investors and lost the ability on the economic development regulation.

Therefore, how to correctly understand and master the foreign capital M&A is becoming an important topic for the host country.

In the aspects of M&A impact on economy to host country security, Michael Brecher & Frank P. Harvey(2002) [1] study how the economic globalization affect national economic security; Yasheng Huang(2003) [2] summarized the reason of M&A endanger national economic security; Aloke Ghosh(2006) [3] considered that foreign investment made contribution to economic growth and structure upgrading.

### 2. THE THEORETICAL MODEL OF ESTIMATION ON WHETHER M&A WILL ENDANGER THE HOST COUNTRY ECONOMIC SECURITY

In econometrics, generally use the Logit Model to estimate analysis when the dependent variable is a qualitative variable.

This paper takes the foreign capital M&A affect the host country economic security as the dependent variable, with the amount of M&A, the bilateral relations is good or bad, the status of industry in M&A, the proportion of stock rights in enterprises, whether there is interest groups involved as independent variables, to determine whether the foreign capital M&A affect the host country economic security.

When the foreign capital M&A affect the host country economic security (Y = 1), the expression of the Logit Model is:

$$P_{i} = E(Y = 1 \mid X_{i}) = \frac{e^{Z_{i}}}{1 + e^{Z_{i}}}$$
(1)

where  $Z_i = a + b_1 X_i$ .

Logit Model (1) is the cumulative distribution function, change with independent variables from  $-\infty$  to  $+\infty$ , foreign capital M&A affect the probability of the host country economic security changes from 0 to 1. Based on the Logit Model (1), foreign capital M&A does not affect the probability of the host country economic security as follows:

$$1 - P_i = \frac{1}{1 + e^{Z_i}} \tag{2}$$

Based on the Logit Model (1) and (2), foreign capital M&A affect the probability of the host country economic security as follows:

$$\frac{\mathsf{P}_{\mathsf{i}}}{1 \Box \mathsf{P}_{\mathsf{i}}} = \mathsf{e}^{\mathsf{Z}_{\mathsf{i}}} \tag{3}$$

Taking natural logarithms on Logit Model (3), we have

$$L_{i} = a + b_{i}X_{i}$$
(4)  
Analysis of the Logit Model (4) can draw

Analysis of the Logit Model (4) can draw some conclusions as follows:

Firstly, there is linear correlation between

 $L_i$  and  $X_i$ .

Secondly, when  $L_i$  is positive number, with

the increase of the independent variables  $X_i$ , the dependent variable close to 1, that means the probability of the host country economic security to be endangered is increasing.

When  $L_i$  is negative number, with the increase of the independent variables  $X_i$ , the dependent variable close to 0, that means the probability of the host country economic security to be endangered is reducing.

Thirdly, the change in  $L_i$  is decided by the

slope  $\beta_1$  of independent variable  $X_i$ .

In the estimation, rewrite Model (4) into the regression model as follows:

$$\mathbf{L}_{\mathbf{i}} = \boldsymbol{a} + \boldsymbol{b}_{\mathbf{i}} \mathbf{X}_{\mathbf{i}} + \boldsymbol{m}_{\mathbf{i}} \tag{5}$$

In the application of Model (5), the number of independent variables is extended from one to five according to the actual situation: acquiring money total (AMT), the relationship between the acquisition of states (RLT), the acquisition of the property industry (IDT), the acquisition of corporate equity ratio (SHR), interest group is involved or not (INT).

Thus, further rewritten Model (5) as follows:

$$L_{i} = \alpha + \beta_{1}(AMT_{i}) + \beta_{2}(RLT_{i}) + \beta_{3}(IDT_{i}) + \beta_{4}(SHR_{i}) + \beta_{5}(INT_{i}) + \mu_{i}$$
(6)

# 3. DATA SELECTION AND DESCRIPTION

The assumption is that there is a random sample with n observations. The probability of

 $Y_i = 1$  or  $Y_i = 0$  is indicated by  $f_i(Y_i)$ . So the joint probability of Y is that:

$$f(Y_1, Y_2, L, Y_n) = \prod_{1}^{n} P_i^{Y_i} (1 - P_i)^{1 - Y_i} .$$
(7)

Taking natural logarithms on Logit Model (7), we obtain

$$\mathbf{h} f(Y_1, Y_2, L, Y_n) =$$

$$= \sum_{i=1}^{n} \left[ Y_i \mathbf{h} \left( \frac{P_i}{1 - P_i} \right) \right] + \sum_{i=1}^{n} \mathbf{h} \left( 1 - P_i \right) =$$

$$= \sum_{i=1}^{n} Y_i \left( \alpha + \beta_1 X_i \right) - \sum_{i=1}^{n} \mathbf{h} \left( 1 + e^{\alpha + \beta_1 X_i} \right)$$
(8)

In Logit Model (8), due to the independent variable  $X_i$  is known, when  $\alpha$  and  $\beta_1$  are known, it can be estimated in Logit Model (1). The results are shown as follows:

	β	Std. Error	Z-Statistic	Prob.	
α	-9.2747	6.6161	1.4018	0.1610	
Ln(AMT)	1.4891	1.0758	-1.3843	0.1663	
RLT	1.1242	7.1877	1.5640	0.1178	
IDT	0.8743	0.7120	-1.2280	0.2195	
SHR	1.1028	7.7514	-1.4228	0.1548	
INT	5.3420	3.8103	1.4103	0.8020	
R2=0.	.7121	LR(5)=	LR(5)=29.5179		

In Logit Model, the change of probability

in an event is indicated by  $\beta_i(1 - P_i)$ . However, in the process of calculation, all the variables in the analysis are needed to be considered.

For example, When others variables remain unchanged, IDT is increasing 1 unit, the average value of Logit Model (1) is increasing 0.8743 unit.

At the same time, because the value is positive number, indicating that there is positive correlation between them.

We can also take the anti log of all slope coefficients. The results have more realistic significance. For example, the anti log of IDT is  $e^{0.8743}$ , it is about 2.3971, that means when the other conditions are fixed, the probability of the host country economic security to be endangered by M&A the key enterprise is 2.3971 times more than the general enterprise.

We can estimate the probability of the host country economic security to be endangered by M&A by using Logit Model. For example, assuming that: the number of ln(AMT) is 4.0758, the number of RLT is 1, the number of IDT is 4, the number of SHR is 1, the number of INT is 1. The estimated value of Logit Model (6) is 0.8178. Through Logit Model (1), the probability of the host country economic security is 0.6935. That means it may affect the host country economic security very likely.

### 4. THE INFLUENCE OF FOREIGN CAPITAL'S M&A ON THE HOST COUNTRY'S ECONOMIC SECURITY

### **4.1 The Positive Influence**

4.1.1. Foreign capital M&A improves the host country's economic benefit

The foreign capital M&A can be understood as the organic combination between the host country and the investors. Making the resource to be the best configuration in the global scope. All of these become the strong social economic effect. The foreign capital M&A not only brings tangible resources, such as capital, but also brings intangible resources, such as advanced R&D technology, organization and management skills, promoting the technological progress of the host country. At the same time, the foreign capital M&A emerging industrial development, invigorating the stock assets, promoting the upgrading of the industrial structure, increasing employment, stimulating the export.

## 4.1.2. Foreign capital M&A promotes the host country into international cooperation

In the process of integration into the world economic system, the host country will encounter a realistic contradiction: not only enjoys wide international economic cooperation benefits, but also pursues reasonable economic goals.

In order to solve this contradiction, we must adopt multi-level and multi-channel cooperation, make the establishment of mutual trust between countries in order to adapt to the development of international relations. Therefore, the host country economic security depends on economic cooperation between countries.

### 4.1.3. Foreign capital M&A offers to host more learning opportunities

Foreign capital M&A lets the host country has close relationship, the host country can develop the market with established brands, factories, channels, thus saving a lot of time cost. The transfer of advanced technology saves a lot of R&D funds for the host country. More importantly, the formation of new enterprise competitiveness through inter enterprise staff mobility, collision of ideas and values.

#### 4.2 The Negative Influence

4.2.1. Foreign capital M&A affects the host country's ability of innovation

Foreign capital M&A weakened the host country's control force of industry technology. For example, XCMG is China's largest construction machinery development and manufacturing enterprises, XuGong Machinery Group is R&D core division of XCMG, at the end of 2005, the U. S. Carlyle Group purchased XuGong Group Construction Machinery Co., Ltd. with nearly US \$400 million, these foreign capital M&A had shaken the foundation of China's industry.

## 4.2.2. Foreign capital M&A inhibited the national brand and private economic growth

The national industry has played a huge role in development of the national economy. The competition in the market will be in a passive position if a country does not have its own national brand. For example, previously, due to Chinese enterprises lack of brand awareness, foreign enterprises replace the brand and technology with its own, leading to a lot of Chinese national brand and private economy disappeared in the market.

## 4.2.3. Foreign capital M&A endangered the development of the host country industry

Generally Foreign capital M&A choose the leading enterprises in order to obtain high profits, it caused serious monopoly in the host country. China's Ministry of Commerce "2004 Multi-National Corporation in China reports" shows that Multi-National Corporation products have accounted for more than 1/3 of the market share in China.

At the same time, even in some industries, the scale of foreign capital M&A is not large but in control of important key development areas or departments, that limits the host country industry seriously

### 5. SUGGESTIONS OF IMPROVING THE FOREIGN CAPITAL M&A POLICY TO MAINTAIN THE HOST COUNTRY'S ECONOMIC SECURITY

The foreign capital M&A is an effective way to integrate global resources system and improve the efficiency of production, not only conducive to the development of the merging side, but also be propitious for the host country to get rid of long-term mismanagement, the lag of the development, to achieve rapid, healthy and stable development.

5.1 To establish the effective legal regulations and supervision system. Develop a specific set of laws on foreign capital M&A can prevent the emergence of monopoly and maintain the effective competition in the market system, that is the fundamental safeguard the economic security of the host country. However, up to now, there is almost no legal system in several countries to develop a specialized legislation of foreign capital M&A, there is lack of integrity or lack of implementation in legal provisions have been made, especially, the lack of a basic law in command of foreign capital M&A. Therefore, to develop the foreign capital M&A laws and regulations, to conduct a comprehensive, thorough specification on the problem of national economic security of foreign capital M&A involving as soon as possible.

**5.2 To design strict and efficient review procedures and access policy.** USA practices well in designing the country's economic security review system of foreign capital M&A program. America established special foreign capital M&A Review Committee, members from the ministry of state security, the State Administration for Industry and commerce, the SASAC, the National Defense Commission, the Ministry of Finance and other multi sector. The review procedure is divided into declaration, reporting, review, investigation and decision. When other host country design economic security, not only learn from the existed international advanced experience, but also retain their own characteristics and be combined with the actual situation, for foreign capital M&A bring win-win results for each other

**5.3 To establish the reasonable standard for review and review mechanism.** The standard of review mainly involves the two factors: the definition of national economic security and threat to the safety of national economy. In different countries and different historical period, the definitions of national economic security are various. In addition, it is difficult to accurate definition of the national economic security. If the definition is too broad, it may lead to foreign capital loss, prevent the introduction of foreign capital M&A, if the definition is too narrow, the review is easy to fall into a passive, unfavorable to the protection of national security.

**5.4 To encourage scientific research and innovation ability of health system.** Innovation is the source of economic development and ensure to achieve long-term competitive advantage. The host country should actively promote independent research and development from various aspects, to form the independent innovation system. The government should set up R&D center and promote independent innovation through cultivating the independent brand way comprehensive, revenue from the aspects such as the formulation of relevant policies. Make full use of the global opportunities to form the core technology ability has its own characteristics.

### BIBLIOGRAPHY

1. Brecher, M., Harvey F.P.. Conflict, Security, Foreign Policy, and International Political Economy: Past Paths and Future Directions in International Studies. Ann Arbor: The University of Michigan Press (2002).

2. Huang, Y. Selling China: Foreign Direct Investment during the Reform Era. New York: Cambridge University Press (2003).

3. Ghosh, A.. Does Operating Performance Really Improve Following Corporate Acquisitions. *Journal of Corporate Finance*, 2006(7).151-178.