SCCIE WORKING PAPER #05-6
Santa Cruz Center for International Economics
http://sccie.ucsc.edu/

Santa Cruz Center for International Economics

(University of California, Santa Cruz)

Year 2005 *Paper* 05'06

Hard or Soft? Institutional Reforms and Infrastructure Spending as Determinants of Foreign Direct Investment in China

K. C. Fung [*] Alicia Garcia-Herrero [†]
Hitomi Iizaka [‡] Alan Siu [**]

[*]University of California Santa Cruz
[†]The Bank of Spain
[‡]University of California, Santa Cruz and Hong Kong Institute of Economics and Business Strategy
[**]University of Hong Kong

Hard or Soft? Institutional Reforms and Infrastructure Spending as Determinants of Foreign Direct Investment in China

Abstract

In this paper, we examine whether hard infrastructure in the form of more highways and railroads or soft infrastructure in the form of more transparent institutions and deeper reforms lead to more foreign direct investment (FDI). We use data of FDI from the United States, Japan, Hong Kong, Taiwan and Korea to various regions of China from 1990 to 2002. We control for the standard determinants of FDI–regional market sizes, wage rates, human capital and tax policies. Then we add indices of hard and soft infrastructures. We found that empirically soft infrastructure consistently outperforms hard infrastructure as a determinant of FDI.

Hard or Soft? Institutional Reforms and Infrastructure Spending as Determinants of Foreign Direct Investment in China

K.C. Fung, University of California, Santa Cruz

Alicia Garcia-Herrero, The Bank of Spain

Hitomi Iizaka, University of California, Santa Cruz and Hong Kong Institute of Economics and Business Strategy

And
Alan Siu, University of Hong Kong

This Version: March 12, 2005

Revised: April 4, 2005

We would like to thank an anonymous referee and the editor for very useful suggestions. An earlier version of the paper was presented at the Claremont Conference on Asian Regional Integration, February 2005. We received very constructive comments from Ken Reinart, Barry Eichengreen, Joshua Aizenman and other workshop participants. All errors are ours.

Corresponding author: K.C. Fung, Department of Economics, University of California, Santa Cruz, CA 95064; Tel: 831-459-3273; Fax: 831-459-5900; Email: kcfung@ucsc.edu

Abstract

In this paper, we examine whether hard infrastructure in the form of more highways and railroads or soft infrastructure in the form of more transparent institutions and deeper reforms lead to more foreign direct investment (FDI). We use data of FDI from the United States, Japan, Hong Kong, Taiwan and Korea to various regions of China from 1990 to 2002. We control for the standard determinants of FDI--regional market sizes, wage rates, human capital and tax policies. Then we add indices of hard and soft infrastructures. We found that empirically soft infrastructure consistently outperforms hard infrastructure as a determinant of FDI.

JEL classification numbers: F21, F23

1. Introduction

One of the most important elements of China's economic reform has been the promotion of foreign direct investment (FDI) inflow. When China initiated its 'open-door' policy in 1978, only a very small amount of FDI flowed into China. Both the central and the local governments since then have provided a complex set of preferential treatments to foreign investors to attract FDI. After more than two decades of China's economic reform, China became the world's most attractive destination for FDI in 2002, overtaking the United States.

China has also achieved economic growth at an unprecedented rate. It has been shown by previous studies by Tseng and Zebregs (2002), Graham and Wada (2001), and Dayal-Gulati, Anuradha and Aasim M. Husain (2000) that FDI in China play an important role in stimulating growth in income. However, the surge of FDI inflow to the coastal regions has contributed to increased inter-regional economic disparity within China. Such inequalities can create social and political instability and ultimately can cause damage to the economy.

The Chinese government now faces severe challenges to lure foreign investors to the interior and the western parts of the country. China launched the Western Development Strategy in 2000 in an attempt to close the economic gap between the coastal and the western regions[1]. The 10th Five-Year-Plan formally announced the framework of the strategy to develop the western regions. The strategy aims to elevate the economy of the region through *improving infrastructures* and attracting foreign

investments. The plan contains a massive plan for constructing infrastructures such as roads, airports, west-to-east natural gas pipelines, electricity transmissions and railroads. In addition to the Chinese government's financial commitments, foreign capitals as well as foreign loans are sought after to achieve the projects.

There has been a fair amount of recent work done in the area of FDI in China[2]. Important properties of FDI in China have been shown by Zhang and Song (2001), Liu, Wang and Wei (2001) and Zhang and Felmingham (2001). In addition, Cheng and Kwan (2000), and Bao, Chang, Sachs and Woo (2002) used a locational determinant approach in examining FDI in China.

This paper, together with the paper by Wakasugi (2005), are among the earliest in focusing on the important geographical determinants of different *sources* of FDI in China. Our paper examines whether *hard* infrastructure in the form of more highways and railroads or *soft* infrastructure in the form of more transparent institutions and deeper reforms lead to attract multinational corporations to the various parts of China. The analysis sheds light on what FDI strategy the Chinese government implement in order to narrow the economic gap between the coastal regions and the vast inland.

Specifically, we will examine the locational determinants of U.S., Japanese, Hong Kong, Taiwan and Korean direct investment in different regions of China. By far Hong Kong has consistently been the biggest investor in China. Between 1983 and 2002, the contracted amount and the realized amount of FDI from Hong Kong accounted for about 45.4% of the total inflow from the world. Taiwan has also been an

---

[1] The western regions on the development list consist of six provinces (Sichuan, Yunnan, Guizhou, Shaanxi, Qinghai and Gansu), five autonomous regions (Ningxia, Xinjiang, Inner Mongolia, Tibet and Guangxi), and one municipality (Chongqin).

important source of foreign funds for China. In recent years, the United States, Japan and Korea have also been heavily investing in China. From 1983 to 2002, the shares of U.S. and Japanese investment in the cumulative value of contracted FDI accounted for 8.9% and 8.1%, respectively of the total FDI inflow in China.

In the next section, we will present our panel estimation and the estimation results. Section 3 concludes.

2. Hard or Soft Infrastructures as Determinants of U.S., Japan, Hong Kong, Taiwan and Korea Direct Investment in China

2.1 Model specification

In this section, we assess econometrically the relative importance of factors in determining the flow of direct investment into China from the U.S., Japan, Hong Kong, and Korea for the period from 1990 to 2002.

We start with a basic model derived from a reduced form specification for demand for inward direct investment. Let FDI_i be the foreign direct investment from source economy (U.S., Japan, Hong Kong, Taiwan and Korea) to region i in China. Then, the relationship between FDI and its determinants can be written as $FDI_i = f(X_i,)$, where X_i is a vector of variables that captures the overall attractiveness of region i to FDIs. The variables included in this vector are dependent only on the regional characteristics of China.

The basic regression model can be written as a linear specification in the following form:

---

[2] Recent work on FDI in China include Garcia-Herrero (2004), Fung, Iizaka and Siu (2003), Fung, Iizaka and Parker (2002),Chantasasawat, Fung, Iizaka and Siu (2003,2004a, b),Eichengreeen and Tong (2005). etc

$$\ln(FDI_{i,t}) = \alpha_i + \beta_1 \ln(GDP_{i,t}) + \beta_2 \ln(LAGWAGE_{i,(t-1)}) + \beta_3 \ln(HE_{i,t}) +$$

$$\beta_4 \ln(RAIL_{i,t}) + \beta_5 \ln(HIGHROAD_{i,t}) + \beta_6 \ln(POLICY_{i,t}) + \beta_7 \ln(REFORM_{i,t})$$

where the subscripts i and t stands for China's region i and period t and the variables used in this analysis are given below.

$FDI_{i,t}$: FDI from the U.S., Japan, Hong Kong, Taiwan, and Korea to region i at time t,

$GDP_{i,t}$: GDP of region i at time t,

$LAGWAGE_{i,(t-1)}$: average wage of region i at time t-1,

$HE_{i,t}$: the ratio of the number of students enrolled in higher education in region i to its population at time t,

$RAIL_{i,t}$: kilometers of railway in region i per square kilometer of land mass at time t,

$HIGHROAD_{i,t}$: kilometers of high quality roads in region i per square kilometer of land mass at time t,

$POLICY_{i,t}$: the number of Special Economic Zones in region i, the number of Open Coastal Cities in region i and the number of the Economic and Technological Development Zone in region i at time t,

$REFORM_{j,t}$: The proportion of manufacturing output produced by SOEs in region i at time t.

The focus here is to compare the effects of hard infrastructures (as proxied by RAIL and HIGHROAD) and soft infrastructure (as proxied by REFORM), after controlling for other standard determinants.

The hypothesis that well-developed regions with better hard infrastructures such as superior transportation facilities are more attractive to foreign firms is examined by including the proxy, density of railway and high quality roadway. We use the variable

"REFORM" to represent soft infrastructure. 'REFORM' is included to test the degree of internal reforms. It is constructed by calculating the share of the State Owned Enterprises (SOEs) in manufacturing output in each region in each year. China's economic reform has transformed the economy from a centrally planned economy dominated by the state sector to an increasingly market-oriented economy. A larger proportion of state-owned output should indicate a less transparent legal system, more corruption and less market-oriented institutions. Although the relative importance of SOEs in manufacturing output has been decreasing over time as economic liberalization in China proceeds, the degree of liberalization varies from one region to another. All things being equal, foreign firms may prefer the region with a higher degree of internal reforms, which creates better investment environment for their business. In our panel regressions, we shall pay particular attention to the magnitude and significance of these two set of infrastructure variables.

A large number of papers have investigated the determinants of the locational choice of FDI.[3] To control for the standard determinants of foreign direct investment, we include three sets of explanatory variables: regional market sizes, regional labor market conditions such as the regional wage rates and an indicator of regional human capital and lastly, regional tax and other preferential policies. These variables have been identified as important factors in much of the existing literature.

To examine the importance of the size of the local market, gross domestic product (GDP) of each region is used. The importance of the market size has been confirmed in many previous empirical studies. For foreign investors, the size of the

[3]Examples of such work are Culem (1998), Wheeler and Mody (1991), Coughlin, Terza, and Arromdee (1991), Friedman, Gerlowski, and Silberman (1992), Woodward (1992), Smith and Florida (1993) and

host market, which represents the host country's economic conditions and the potential demand for their output, should be an important element in their FDI decision-makings. Since this variable is used as an indicator of the market potential for the products of foreign investors, the expected sign is positive. Furthermore, the more that foreign investors target the local market, instead of exporting the produced goods, the larger should be the magnitude of the positive coefficient.

Since labor cost is a major component of total production cost, wage variables are frequently considered in the literature. A higher wage, other things being equal, deters inward FDI, particularly for firms that engage in labor-intensive production activities. Therefore, the expected sign for this variable is negative. However, regional wages may be high because of high local inflows of FDI. To avoid the potential simultaneity bias between investment and wages, we elect to use the nominal wage lagged one period.

The variable HE is included in the equation to capture the average level of human capital in each region. Although the expected sign of the variable is positive, the importance of this variable should be higher for technology- and capital-intensive industries than for labor- intensive industries. Furthermore, the coefficient may be large for Japanese firms, which practice job rotation and demand their workers to make decisions at the shop floors (Aoki 1988, Fung 1991).

The effects of policy incentives are examined by including a number of the SEZs (Special Economic Zones), OCCs (Open Coastal Cities), and the ETDZs (Economic and Technological Development Zones). ETDZs (Economic and

---

Hines (1996). For the case of China, the studies include Head and Ries (1996), and Cheng and Kwan (2000).

Technological Development Zones). These areas provide preferential tax and other policies and can deal flexibly with foreign businesses. The expected signs for both variables are positive.

The data sources are explained in Appendix A.

2.2 Panel Estimation

The panel regression is run separately for each FDI source. Each estimation can be specified as follows:

$$y_{it} = \alpha + \beta' x_{it} + \varepsilon_{it} + u_i ,$$

where y_{it} is the dependent variable, which is foreign direct investment inflow from a source country into region i at time t. x_{it} is the set of characteristics in each region i at time t. The disturbance term, ε_{it} is associated with both time and cross-sectional units, which are the regions in this analysis, and u_i is the random disturbance that is associated with the ith region and assumed to be constant over time. In another words, the region-specific constant terms are assumed to be randomly distributed over cross-sectional units. Further assumptions on the error terms are: $E[\varepsilon_{it}] = E[u_i] = 0$, $Var[\varepsilon_{it}] = \sigma^2_{\varepsilon}$, $Var[u_i] = \sigma^2_u$, $Cov[\varepsilon_{it} , u_j] = 0$ for all i, t, and j, $Cov[\varepsilon_{it} , \varepsilon_{js}] = 0$ if t ≠ s or i ≠ j, and $Cov[u_i , u_j] = 0$ if i ≠ j.

The regression disturbance, w_{it}, can be written as; $w_{it} = \varepsilon_{it} + u_i$. The variance and covariance of all disturbances are: $Var[w_{it}] = \sigma^2 = \sigma^2_{\varepsilon} + \sigma^2_u$, and $Cov[w_{it} , w_{is}] = \sigma^2_u$. Therefore, the disturbances in different periods are correlated for a given i, because of their common component, u_i. Hence, the efficient estimator is generalized least squares (GLS). The two-step estimators are computed by first running ordinary least squares (OLS) on the entire sample for each country. Then, the variance components are

estimated by using the residuals from the OLS. Finally, these estimated variances are used in the second step to compute the parameters of the model.

Estimation results of the model are presented in Table 1 for all source economies. The panel regression shows strong evidence that the quality of infrastructure, proxied by the density of high quality roadways has a significantly positive influence on direct investment inflow in China from all FDI sources. The importance of the density of the railroad, however, is only found for Korea and Japan, although the evidence is slightly weaker for Japan. On the other hand, the evidence is absent on FDI from the U.S., Hong Kong, and Taiwan.

More interestingly, the table reports that the higher degree of domination by SOEs in the industrial sector impedes the inflow of direct investment from all five countries. The coefficient is found to be negatively significant at the 1% level for all countries except Korea, whose level of significance is 5%. A large share of output by SOEs signal to the foreign investors that economic reforms are still far from complete and foreign investors should expect to face difficult political and economic challenges in that region.

Furthermore, in attracting FDI from the U.S., Japan, Hong Kong, and Taiwan, soft infrastructure is more important than hard infrastructure. Korea is the only exception in the analysis. Among five countries, there is a wide variation in the size of the influence of soft infrastructure on the decision-makings of the multinationals. For the U.S. and Japan, soft infrastructure is the most important determinant. The coefficient of "REFORM" is -0.89 and -0.97 for the U.S. and Japan regressions, respectively, which is larger than any other variables examined in the analysis for both countries. On the other hand, the negative influence of the variable on Hong Kong and

Taiwan FDI is much smaller at -0.73 and -0.61, respectively. Korea positioned between the two groups. One potential explanation may be that the Hong Kong and the Taiwanese firms have an advantage of being familiar with the investment conditions due to the longer association with China than the U.S., Japan, or Korea. Geographic as well as linguistic affinity may strengthen the network effect among Hong Kong and Taiwanese investors on one hand and mainland Chinese businessmen on the other. In general, our empirical studies show that *soft infrastructure is more important than hard infrastructure in attracting FDI.*

China has launched a comprehensive effort to reform SOEs since the latter half of the 1990s. The Chinese government has acknowledged that support of SOEs has put a heavy drain on the economy and cannot be maintained indefinitely. As a result, reform of SOEs has been made a top priority. Some unprofitable SOEs have been closed, while other would be merged with more profitable enterprises. Many firms were allowed to issue stock in order to raise funds. Based on our findings, reducing the state-owned sector seems to have the effect of encouraging more foreign participation in China. Furthermore, the structural change is expected to proceed further because of China's accession of the WTO. This suggests a great potential for further growth of inward FDI from all five economies.

{Insert Table 1 here}

We next turn to a discussion of the standard explanatory variables. As previous studies confirmed, the size of market appears to be another important factor in determining FDI from the U.S., Japan, Hong Kong, and Taiwan. The coefficients for the variable are positive and statistically significant at the 1% level, confirming the hypothesis that the amount of FDI inflow is positively related to the host region's

market size. Table 1 indicates that a one-percent increase in regional GDP is associated with a 0.61 percentage increase in U.S. direct investment and a 0.74 percentage increase in Japanese direct investment. The importance of the variable is magnified for both Hong Kong and Taiwan. The size of the impact of the host region's market size is 0.83 and 0.99 for Hong Kong and Taiwan, respectively, which are the largest among all variables examined. The size and the significance of the provincial GDP variable highlights one somewhat neglected aspect of the Chinese economy, i.e. foreign firms are attracted to China not only to use China as an export platform, but foreign multinationals invest in China also because of the size of its domestic market (Fung, Lau and Lee 2004).

The coefficient of the lagged wage is found to be positive for U.S., Japanese, and Korean direct investment, although insignificant for Japan and Korea, indicating that the higher wage levels in the regions of China induce their FDI. In contrast, the lagged wage has the negative influence on FDI from Hong Kong and Taiwan. For the foreign firms that engage in relatively labor-intensive activities, one of the motives to move their production to China is to take an advantage of cheap labor. However, the wage level may also reflect the quality of labor force. The higher wage levels may imply the highly skilled, well-trained labor force, which in high-technology sector for example, may work as an incentive to inward FDI. The positive coefficient for the U.S., Japan, and Korea may indicate the need for those highly skilled workers.

We find some evidence of a positive effect of labor quality only for the U.S., Japan, and Taiwan regressions. Although the finding of a significant impact of labor quality/education attainment on Japanese direct investment in the U.S. manufacturing sector are reported in previous studies by Woodward (1992), and Smith and Florida

(1993), the same strong influence of the variable is not found for Japan in the regions of China.

Finally, it has been argued that various preferential FDI policies employed in the SEZs, the Open Coastal Cities, and the ETDZ might be one of the importance factors that led to the surge of FDI inflow into the coastal regions. Our results also confirm the importance of these policies for FDI from all sources..

3. Conclusion

In this paper, we focus on the question of whether increased spending in hard infrastructure or improvement in institutional and market reforms are stronger elements in attracting foreign direct investment. To focus on this issue, we collect data for U.S., Japanese, Hong Kong, Taiwan and Korean FDI in various Chinese provinces for the period 1990-2002. We control for the standard determinants of FDI inflows. Three sets of factors are included: provincial market sizes, provincial labor market indicators including wage rates and the extent of human capital and provincial preferential tax and other policies towards foreign investors. We then add in our indicators of provincial hard infrastructure and provincial soft infrastructure. Hard infrastructure is proxied by the density of railways as well as density of highways. To proxy for soft infrastructure, we construct a variable which is the share of output accounted for by state-owned enterprises in each province in each year. A larger amount of this share should indicate a worse climate for foreign investment, more corruption, less transparency and in general less market-friendly institutions.

In general, our panel regressions indicate that for almost all our cases, soft infrastructure is a much more important determinant of foreign capital inflows than hard infrastructure. In fact for the important cases of U.S. and Japanese FDI, soft

infrastructure is the most important element in attracting foreign direct investment. For inland China as well as other developing economies which are interested in attracting more foreign capital, it seems that proceeding with market reforms as quickly as possible is more important than building more roads and railways, even though both sets of infrastructure have positive effects on inflows of capital. Lastly, we can also conclude that a better soft infrastructure generates *double dividends*: economic reforms by themselves generate growth (even without inducing FDI). In addition to this, a more market-friendly soft infrastructure also lures more FDI from the United States, Japan Hong Kong, Taiwan and Korea, which also adds to enhancement of productivity and growth.

Appendix A: Data Sources

The following data are taken from the *Almanac of China Foreign Relations and Trade* (various issues):

Contracted Japanese direct investment (DI) for 1990 and 1993 to 20021

Contracted U.S. DI for 1990 and 1993 to 2002

Contracted Hong Kong DI for 1990 to 2002.

The following data are taken from *China Foreign Economic Statistical Yearbook* 1994:

Contracted Japanese DI for 1991 and 1992

Contracted U.S. DI for 1991 and 1992

The Korean DI data are taken from the Koran Ex-IM Bank, various years. The following regional data for 1996 to 2002 are taken from the *China Statistical Yearbook* (various issues); for 1991 to 1995, they are taken from *China Regional Economy*: *A Profile of 17 years of Reform and Opening-Up* 1996:

GDP

Number of students enrolled in higher education

Distance of roadway

Distance of railway

Average lagged nominal wage

Table 1
Determinants of U.S., Japan, Hong Kong, Taiwan, and Korean Direct investment in China, 1990-2002

variable Names	USA		Japan		Hong Kong		Taiwan		Korea	
CONSTANT	-1.6357		0.0547		1.5905		3.1136		-2.5061	
	(-0.604)		(0.019)		(0.580)		(1.112)		(-0.503)	
GDP	0.6146	***	0.7397	***	0.8310	***	0.9944	***	0.2238	
	(4.066)		(4.396)		(4.847)		(5.524)		(0.575)	
LAGWAGE	0.3799	*	0.1184		-0.1199		-0.5460	**	0.6964	
	(1.431)		(0.411)		(-0.438)		(-1.946)		(1.282)	
HE	0.3253	*	0.3547	*	0.2240		0.3551	*	0.0394	
	(1.402)		(1.419)		(0.925)		(1.427)		(0.087)	
RAIL	0.1473		0.3714	**	-0.0507		-0.0697		1.0584	***
	(0.896)		(2.098)		(-0.282)		(-0.376)		(2.624)	
HIGHROAD	0.1099	***	0.2087	***	0.2177	***	0.2445	***	0.1904	***
	(2.413)		(4.021)		(4.860)		(5.518)		(2.542)	
POLICY	0.6430	***	0.9060	***	0.6656	***	0.6557	***	1.1764	***
	(3.454)		(4.486)		(3.291)		(3.150)		(3.152)	
REFORM_	-0.8901	***	-0.9657	***	-0.7341	***	-0.6091	***	-0.7860	**
	(-3.927)		(-3.819)		(-3.233)		(-2.742)		(-2.289)	
d.f.	304		276		318		301		205	
ad. R2	0.66		0.72		0.62		0.63		0.46	

Note: t-statistics are reported in parentheses. *, **, *** represent the level of significance at 10%, 5%, and 1% level, respectively.

REFERENCES

Aoki, Masahiko (1988) *Information, Incentives, and Bargaining in the Japanese Economy*. Cambridge, NY: Cambridge University Press.

Bao, Shuming, Gene Hsing Chang, Jeffrey D. Sachs and Wing Thye Woo (2002), "Geographic Factors and China's Regional Development Under Market Reforms, 1978-1998," *China Economic Review,* Vol.13, No.1, pp.89-111.

Cheng, Leonard K. and Kwan, Yum (2000) "What Are the Determinants of the Location of Foreign Direct Investment? The Chinese Experience", *Journal of International Economics*, Vol.51, No.2, pp.379-400.

Chantasasawat, Busakorn, Fung, K.C., Iizaka, Hitomi, and Siu, Alan (2003) "The Giant Sucking Sound: Is China Diverting Foreign Direct Investment Away from Other Asian Economies?" *Asian Economic Papers*, forthcoming.

Chantasasawat, Busakorn, Fung, K.C., Iizaka, Hitomi, and Siu, Alan (2004a) "Foreign Direct Investment in East Asia and China" *Stanford Center for International Development Discussion Paper* #223.

Chantasasawat, Busakorn, Fung, K.C., Iizaka, Hitomi, and Siu, Alan (2004b), "Foreign Direct Investment in East Asia and Latin America: Is There a PRC Effect?" *Asian Development Bank Institute Discussion Paper* #17.

Coughlin, Cletis C., Terza, Joseph V., and Arromdee, Vachira (1991) "State Characteristics and the Location of Foreign Direct Investment Within the United States", *Review of Economics and Statistics,* Vol.73, No.4, pp.675-683.

Culem, Claudy G. (1998) "The Locational Determinants of Direct Investments among Industrialized Countries", *European Economic Review*, Vol.32, No.4, pp.885-904.

Dayal-Gulati, Anuradha. And Aasim M. Husain (2000) " Centripetal Forces in China's Economic Take-off," *International Monetary Fund Working Paper* WP/00/86 2000.

Eichengreen, Barry and Tong, Hui (2005) "Is China's FDI Coming at the Expense of Other Countries?" University of California, Berkeley and Bank of England.

Friedman, Joseph, Gerlowski, Daniel A., and Silberman Johnathan (1992) "What Attracts Foreign Multinational Corporations? Evidence from Branch Plant Location in the United States", *Journal of Regional Science,* Vol.32, No.4, pp.403-418.

Fung, K.C. (1991) "Characteristics of Japanese Industrial Groups and Their Potential Impact on U.S.-Japanese Trade', in Robert Baldwin ed., *Empirical Studies in Commercial Policy*, University of Chicago Press.

Fung, K.C., Hitomi Iizaka and Stephen Parker (2002), "Determinants of U.S. and Japanese Direct Investment in China", *Journal of Comparative Economics*, Vol.30, pp.567-578.

Fung, K.C., Hitomi Iizaka and Alan Siu (2003) "Japanese Direct Investment in China", *China Economic Review*, Vol.14, pp.304-315.

Fung, K.C., Lawrence J. Lau and Joseph Lee (2004) *U.S. Direct Investment in China*, Washington, D.C.: AEI Press.

Garcia-Herrero, Alicia (2004) "FDI in China: Implications for Latin America," paper presented at 2004 LAEBO Conference on *The Emergence of China: Challenges and Opportunities for Latin America and Asia*, Beijing, China, 3-4 December 2004.

Graham, Edward M. and Erika Wada (2001) "Foreign Direct Investment in China: Effects on Growth and Economic Performance," *Institute for International Economics Working Paper* No. 01-03.

Head, Keith, and Ries, John (1996) "Inter-City Competition for Foreign Investment: Static and Dynamic effects of China's Incentive Areas", *Journal of Urban Economics*, Vol. 40, No.1, pp.38-60.

Hines Jr., James R. (1996) "Altered States: Taxes and the Location of Foreign Direct Investment in America", *American Economic Review*, Vol.86, No.5, pp.1076-1094.

Liu, Xizming, Chengang Wang and Yingqi Wei, (2001) "Causal Links between Foreign Direct Investment and Trade in China," *China Economic Review,* Vol.12, No.2-3, pp.190-202.

Ministry of Foreign Economic Relations and Trade of the People's Republic of China, *Almanac of China's Foreign Economic Relations and Trade*. Beijing: Ministry of Foreign Economic Relations and Trade, various issues.

Smith, Donald F, and Florida, Richard, D. (1994) "Agglomeration and Industrial Location: An Econometric Analysis of Japanese Affiliated Manufacturing Establishments in Automotive-Related Industries', *Journal of Urban Economics*, Vol. 36, No.1, pp.23-41.

State Statistical Bureau of the People's Republic of China, *China Statistical Yearbook*, Beijing: State Statistical Bureau, various issues.

State Statistical Bureau of the People's Republic of China (1994) *China Foreign Economic Statistical Yearbook,* Beijing: State Statistical Bureau.

State Statistical Bureau of the People's Republic of China (1996) *China Regional Economy: A Profile of 17 years of Reforms and Opening-Up,* Beijing: China Statistical Bureau.

Tseng, Wanda S. and Harm H. Zebregs (2002) "Foreign Direct Investment in China: Some Lessons for Other Countries." *International Monetary Fund Policy Discussion Paper*: PDP/02/03.

Wakasugi, Ryuhei (2005) "The Effects of Chinese Regional Conditions on the Location Choice of Japanese Affiliates," *Japanese Economic Review*, This Issue.

Wheeler, David and Mody, Ashoka (1992) "International Investment Location Decisions: The Case of U.S. Firms", *Journal of International Economics* Vol.33, No.12, pp.57-76.

Woodward, Douglas P. (1992) "Locational Determinants of Japanese Manufacturing Startups in the United Stated," *Southern Economic Journal*, Vol.58, No.1, pp.690-708.

Zhang, Kevin Honglin and Shunfeng Song (2001) "Promoting Exports: The Role of Inward FDI in China," *China Economic Review*, Vol.11, No.4, pp.385-396.

Zhang, Qing and Bruce Felmingham (2001) "The Relationship Between Inward Direct Foreign Investment and China's Provincial Export Trade," *China Economic Review*, Vol. 12, No.1, pp. 82-99.