

Foreign Direct Investment and Location Advantages: Japanese Perceptions of India Compared to China and ASEAN*

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We argue in this paper that in the WTO regime the role of efficiency seeking FDI and location advantages are likely to emerge more important. A primary survey was conducted and the Japanese MNEs were asked to assess location advantages for India in relation to China and the East Asian countries. The results support the earlier studies on the importance of infrastructure development in attracting FDI but do not back the emphasis on controls and administrative complexities.

Keywords: *Asia, India, Japanese Investment, Multinationals*

1. INTRODUCTION

Studies have argued that in the WTO regime the character of foreign direct investment (FDI) inflows is likely to undergo a significant change (Caves 1996; Kumar 1998; Siddharthan and Rajan 2002). In the pre-WTO regimes one of the important driving motives for FDI was to seek and exploit the host markets, as the option of exporting to third countries was made difficult due to high tariff and non-tariff barriers erected by the countries. Under the conditions dominated by protectionist measures, multinational enterprises (MNEs) aimed mainly at exploiting their intangible assets like new technology, knowledge base and brand name in a foreign location through FDI (Caves 1996; Dunning 1993; 1998). In the WTO regime with the drastic reduction of tariff rates and the virtual disappearance of non-tariff barriers like quotas and other quantitative restrictions, MNEs can exploit their ownership of intangible assets in third countries through exports. Therefore, efficiency-seeking investments are likely to dominate over host country market seeking investments (Dunning 1998). The determinants of efficiency-seeking investments could be different from those of market-seeking investments. For example one of the drivers of FDI was exploitation of intangible assets in a foreign location and this could change to augmentation of intangible assets. MNEs could be motivated to go where knowledge is found and partnership with knowledge intensive enterprises is formed (Belderbos 2001; Kuemmerle 1999; Florida 1997). In the current WTO regime MNEs would invest in a third country if it were more efficient to produce goods in that country. As a result, in addition to ownership advantages location advantages will play a crucial role in determining FDI inflows.

With regard to FDI inflows to less developed countries (LDCs) several location advantages are mentioned in literature. They include physical infrastructure facilities like

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ports, availability of cheap and dependable electricity, road transport, railways, etc., and legal and administrative infrastructure facilities that reduce the transaction costs and bureaucracy-related delays. Presence of controls on investments, regulations on import of goods including capital goods and components, and foreign exchange restrictions are also mentioned as factors affecting location advantages. In this context the rule of the law (or its absence) and the presence of corruption are also emphasized as factors affecting the decision of MNEs in locating their investment. In addition, some studies also suggest the presence of cheap labor and other advantages in promoting investment in a particular country.

However, the relative importance of these variables from the point of view of the perception of MNEs has not yet been studied. Most of the inferences have been drawn indirectly from secondary data collected during the pre-WTO regime. Furthermore, location advantages are comparative in nature. MNEs while deciding on location compare the advantages among comparable countries. For example, location advantages of India are not comparable with those of the US and Western Europe but are comparable with those of China and ASEAN. It is important to keep this factor in mind while discussing the location advantages.

The Indian share in the world FDI inflows has been meagre. For example, as per the World Investment Report of UNCTAD, during 2001 India received a paltry sum of \$3,403 million FDI inflows, compared to China's \$46,846 million.¹ Thus while the Chinese share in world inflows was 6.37 per cent (22.87% of LDC inflows), the Indian share was a mere 0.46 per cent (1.46 per cent of LDC inflows). During the decade 1991-2001, the share of Japanese investments in the total FDI flows in India was about 3 per cent. The US was the largest investor in India with a share of 20 per cent. However, in recent years, the share of Japanese investment has been increasing. Thus during the period 1998-2001, the Japanese share has risen to about 10 per cent. The Indian press and some circles in the government have been attributing the low FDI inflows to India to bureaucratic delays, cumbersome procedures, complicated rules and regulations, and poor infrastructure facilities. However, the relative importance of these factors in inhibiting FDI inflows has not yet been statistically tested.

This paper is based on detailed interviews with major Japanese MNEs who have been the most important investors in Asia. The Japanese MNEs were asked whether they are interested in investing in India and a "yes" answer was given a score of one and "no" answer a score of zero. In addition, they were asked to compare India with China and the ASEAN countries with regard to several variables representing location advantages on a five-point scale.

The paper is organized as follows. Section 2 presents the framework and analyzes the main determinants of the Japanese MNEs decision to invest in India. Section 3 discusses the sample and describes the variables, and Section 4 presents the Binary Logit Model results. The main conclusions are examined in Section 5.

¹ FDI inflow figures for China and India are not strictly comparable. China includes several items in their FDI inflows that India does not. Furthermore, China also includes investment by Hong Kong enterprises in their calculation of FDI inflows despite the fact that Honk Kong is a part of China. In case adjustments are made for these the FDI figures for China will decrease sharply. Nevertheless, it would still be more than that of India.

2. ANALYTICAL FRAMEWORK AND HYPOTHESIS

The objective of this study is to identify the relative importance of the variables representing location advantages from the point of view of Japanese investors. The dependent variable is a binary variable representing the willingness of a Japanese MNE to invest in India.

2.1. The Main Determinants

The main determinants are grouped under two categories — location advantages and enterprise specific variables.

2.2. Location Advantages

The location advantages seen from the point of view of investing in India are not absolute advantages but advantages of India in comparison with China and ASEAN. In the literature, labour costs are considered an important advantage for attracting FDI (Chen 1996 for China; Kumar 2000 for the US and Japanese investments in the rest of the world; Wheeler and Modi 1992 for investment by the US MNEs; Aitken et. al. 1996 for Mexico, Venezuela, and the US). In our study most respondents did not consider this variable significantly different for India compared to China — most of them opted for the score zero indicating that it was not different for India compared to China. Hence, this variable has not been included in the regression equations.

2.2.1. Infrastructure

Several studies show that FDI is attracted towards countries that invest in infrastructure facilities. Kumar (2000) found the endowment of cheap labour not important for FDI but infrastructure facilities very important. Wheeler and Mody (1992), based on their study of manufacturing investments by the US MNEs, found that tax and other short-run incentives have only a limited impact on location choice but countries with good infrastructure development and with specialized input suppliers attracted FDI. They therefore concluded that high cost tournament play like tax concessions are not necessary and that that sum could be spent on infrastructure. Belderbos *et al.* (2001) also found for Japanese MNEs' FDI vertical linkages, the size of the local component industry and infrastructure facilities important. Likewise, Loree and Guisinger (1995) for the US MNEs, Chen and Kwan (2000) for China, and Root and Ahmed (1979) for LDCs found infrastructure to be an important determinant. Kokko and Zejan (1996) for a study based on Vietnam found weak infrastructure an impediment for investment. Some of the studies have emphasized certain specific infrastructure facilities like railways (Chen 1996), transport infrastructure (Coughlin *et al.* 1991), and facility to network. (Chen and Chen 1998).

For the purpose of this study we asked the Japanese MNEs to compare the infrastructure in India with that in China and the ASEAN countries on a five-point scale. We expect the MNEs that gave a positive score for India to be willing to invest in India. We expect the coefficient of this variable to be significant and positive. An insignificant coefficient would mean that this variable does not influence investment decisions.

2.2.2. Control Systems

The control systems refer to controls on foreign currency transactions (exchange controls), import of capital goods, components, materials and finished goods, repatriation of profits, investment, and manufacturing of goods. Mody *et al.* (1999) found the inability to repatriate earnings a strong disincentive for Japanese investment. Studies show that openness and a liberalized investment regime attract FDI (Caves 1996, Lecraw 1984, Koechlin 1992). Control systems increase the transactions costs and stand in the way of FDI. Cleeve (2000) found transaction costs an important influence in FDI while the wage differences were not. We asked the sample of Japanese MNEs to rank the control systems in India compared to those in China and the ASEAN countries. A positive score would indicate that the Indian control systems were less troublesome compared to other Asian countries. We expect a positive relationship between the score and their decision to invest in India.

2.2.3. Administrative Complexities

Administrative complexities refer to lengthy procedures, delays, lack of transparency and accountability, and the prevalence of corruption. Wei (2000), based on a study of FDI from 14 sources to 45 host countries, found corruption more important than tax concessions and wage rates in influencing the location of FDI. Likewise, Hines (1996) found bribe payments important in influencing FDI location choices. Veugelers (1991) found controls and administrative complexities not important for investment in the developed countries but significant for investments in LDCs. We expect a favorable impression of India in comparison to other Asian countries to be positively related to their decision to invest in India. An insignificant coefficient would indicate that the prevalence of corruption in India is not significantly different from those of China and ASEAN countries and therefore did not influence the location decisions of the Japanese MNEs.

2.2.4. Japanese Management Techniques

Several studies show the importance and the widespread use of the Japanese management techniques by the Japanese MNEs in their foreign locations (Harris 1995, for automobiles in Indonesia; Siddharthan 1997 and D'Costa 1995, for automobiles in India; Kaplinsky 1995, for Latin America, India and Zimbabwe; Bos and Cole (1994) for Brazilian electronic sector; and Humphrey 1995). However, it is not clear whether the Japanese MNEs prefer locations where the adoption of their management style is easier. To test this we asked them to compare the introduction of Japanese management techniques in India with respect to China and ASEAN. A significant coefficient for this variable will indicate their preference to invest in locations where it would be easier to practice their management techniques.

2.3. Firm Specific Variables

Since this study is based on inter-firm cross-section data, in addition to the location specific variables, we have also introduced some firm specific variables to control for firm specific characters. These are: firm size as represented by proxy variables of sales turnover, profits and export orientation (exports to sales ratio) of the Japanese MNE. It could be argued that larger, export-oriented and profitable enterprises are more inclined to invest overseas. Nevertheless, there is also a contrary view, that small and medium sized Japanese firms are also important investors overseas and hence, size may not be an important determinant. With regard to exports and Japanese FDI Kojima (1978) has argued that the

Japanese FDI does not follow their exports and therefore it is not trade diverting and instead it is trade creating. Hence these two firm specific variables may not turn out to be important. In addition we have also introduced a dummy variable taking the value one for firms that have already invested in India and zero for the rest, namely, firms that have invested in other Asian countries and not in India.

3. DATA AND VARIABLES

Through the Economic Research Centre, Nagoya University, Chambers of Commerce of Tokyo, Hiroshima, Osaka, Yokohama and Nagoya were asked and with their help a list of MNEs that have earlier invested in India and for those that have not invested in India but have invested in ASEAN countries was prepared (for details refer to Lakhera 2001). The objectives of the study were explained to the Tokyo and other Chambers of Commerce and Industry and their cooperation was sought for obtaining data from the firms. Consequently a list of 101 Japanese MNEs was obtained for inclusion in the study and the questionnaire was sent to all 101 firms. In all, 56 firms responded to the questionnaire while 45 firms did not respond. However, the 56 firms that responded accounted for 78% of the sales turnover of the 101 firms surveyed.

3.1. Dependent Variable

DII Decision to invest in India. This is a binary variable taking the value zero or one. The MNEs were asked the following question, “Are you interested in investing in India?” Value one was given to a ‘yes’ answer and zero to a ‘no’ answer.

3.2. Independent Variables: Location Advantages

In the case of variables representing location advantages, the Japanese MNEs were asked to mark their opinion on the Indian situation compared to China and ASEAN countries on a five point scale: -2, -1, 0, +1, +2. A zero score would indicate that in the opinion of the firm, the Indian situation is not very different from that of China and ASEAN countries; a positive score would indicate that the Indian situation is better or preferred, and a negative score, the Indian situation is worse compared to other Asian countries.

INFST, Infrastructure. In the case of infrastructure the firms were asked to rate separately telecom, electricity, and transport. INFST is an overall infrastructure variable and is an average of the three scores representing the three constituents of infrastructure.

CONTROL, refers to controls and restrictions on foreign exchange conversion, repatriation of profits, dividend payments, imports and FDI.

ADCOM, Administrative complexities. It mainly deals with public administration, delays in ports and courts, prevalence of corruption, transparency of rules and accountability of decision makers.

JMT, Japanese Management Techniques.

3.3. Firm Specific Variables

The firm specific variables refer to the Japanese MNE and not to its affiliates. These variables are taken from *Japan Company Handbook* (2000). All the data relate to the year 2000.

STO, Sales Turnover in billion Japanese yen.

PR, Profit Margins, Gross profit as a ratio of sales turnover.

X, the ratio of exports to sales turnover.

Dummy Variables

D_INDIA, takes the value one if the firm had invested in India earlier and zero otherwise.

D_CHEM, Dummy for Chemical Industry.

D_ELEC, Dummy for electric and electronic goods.

D_MACH, Dummy for machinery.

D_MIS, Dummy for miscellaneous industries.

D_TRAD, Dummy for trading firms.

The next section presents the binary logit results of the following equation:

$$\begin{aligned} DII = & \alpha_0 + \alpha_1 ADCOM + \alpha_2 CONTROL + \alpha_3 INFST + \alpha_4 JMT + \alpha_5 PR \\ & + \alpha_6 LOG(STO) + \alpha_7 X + \alpha_8 D_INDIA + \alpha_9 D_CHEM + \alpha_{10} D_ELEC \\ & + \alpha_{11} D_MACH + \alpha_{12} D_MIS + \alpha_{13} D_TRAD + \mu \end{aligned}$$

Dummy for Automobiles has not been included in the equation and its effect will be captured by the constant term.

4. STATISTICAL RESULTS

Table 1 presents the mean and standard deviation of the variables. With regard to the opinion variables, except for JMT, the mean values of all the variables have a negative sign indicating an adverse grading of India by the Japanese MNEs. Thus with regard to administrative complexities dealing with public administration, delays in ports and courts, prevalence of corruption, transparency of rules and accountability of decision makers, the Japanese firms rated India negatively compared to China and ASEAN countries. Similar was the case concerning controls and restrictions on foreign exchange conversion, repatriation of profits, dividend payments, imports and FDI.

Indian infrastructure facilities were rated much more adversely compared to the other two variables. The infrastructure had a large negative mean value (-1.26) and a much smaller standard deviation. In other words, infrastructure bottlenecks could turnout to be an important reason for lower investments in India. The only area where India received a better rating was with regard to the Japanese Management Techniques.

In the regression model, since the dependent variable is a binary variable, a *logit* model was used for estimation. Table 2 presents the maximum likelihood estimates of the binary *logit* model.

Table 1. Variables

Variable	Mean	Standard Deviation
DII Decision to invest in India	0.6038	0.4938
ADCOM Administrative complexities	-0.8491	0.6621
CONTROL controls and restrictions	-0.7358	0.7882
INFST Infrastructure	-1.2642	0.6248
JMT Japanese Management Techniques	0.4151	0.5975
PR Profit Margins	4.1704	3.5885
X the ratio of exports to sales turnover.	29.3200	23.1100
STO Sales Turnover (Billion Yen)	1,564.6600	3,110.4510

Table 2. Statistical Results (Logit Model) Dependent Variable DII

Independent Variables	1	2
Constant	2.7270	2.654*
Z Statistic	1.6130	1.8400
ADCOM	0.1160	0.1570
	0.1190	0.2220
CONTROL	0.0360	0.0250
	0.0400	0.0320
INFST	2.792***	2.671***
	3.3340	3.0530
JMT	2.313**	2.554**
	2.1100	2.1520
PR	-0.1700	-0.1390
	-1.4980	-1.3350
Log STO	0.3100	0.2480
	1.4920	1.0810
X	0.0010	-0.0050
	0.0610	-0.2690
D_INDIA	0.6410	0.7610
	0.5140	0.6390
D_CHEM	0.3530	
	0.2560	

D_ELEC	-0.0520	
	-0.0230	
D_MACH	-0.0700	
	-0.8350	
D_MIS	0.1450	
	0.1020	
D_TRAD	-0.452*	-3.051**
	-1.9250	-2.1290
LR Statistic	33.673***	32.809***

Note: *significant at 10%; **at 5% and *** at 1%

Out of the four location advantages variables, two variables, infrastructure and Japanese management techniques turned out to be important determinants. Administrative complexities and the control variable were not statistically significant. It is possible that China and India had different types of administrative complexities and controls, and therefore these two variables did not turn out to be important. China is yet to create institutions related to commercial dispute settlements, monitoring patents and intellectual property rights and a judicial system as required by the WTO regime. India, on the other hand, has the institutions in place but they do not function efficiently. There are inordinate delays in settling commercial disputes in the Indian courts. Therefore, it would have been difficult for the firms to decide which one was better. The sample mean values for these two variables were negative but less in magnitude compared to infrastructure.

Trade dummy was significant and it had a negative sign indicating that trading firms do not wish to invest in India. The Japanese trading firms invest in LDCs and enter into joint ventures with local firms to ensure assured access to components and materials and also to facilitate finished goods exports from their Kiretsu members. For this purpose countries that have controls and regulations relating to foreign transactions may not be suitable. And for that reason, they seem to have clearly stated their disinclination to invest in India. Other industry dummies were not statistically significant as their objective of investment in India is more or less similar to the other manufacturing firms.

None of the firm specific variables like size, profits and export intensities emerged important in the firm's decision to invest in India. Aoki (1990) and Kaplinsky (1995) have argued that while investing in a foreign location or entering into joint ventures, large Japanese enterprises also encourage their component manufactures (that are small and medium firms) to invest in the foreign location. Successful adoptions of Japanese management techniques like 'just in time delivery' and 'total quality control' requires simultaneous transfer of technology to and equal participation in the component manufacturing enterprises. Kaplinsky (1995) refers to this practice as "simultaneous engineering." Therefore in addition to large enterprises, small and medium enterprises are also likely to invest abroad. Under these circumstances, the size variable may not emerge as being significant. Likewise, studies show (Kojima 1978) that the Japanese firms unlike western firms do not follow the pattern of exporting to a country followed by FDI. Thus location advantages emerged to be more important than firm and industry specific variables.

The results show JMT to be an important determinant in the sample 28 firms that had invested in India. We asked all 28 firms whether JMT was relevant to India. Only nine firms

(32% of the sample firms) said that JMT was not relevant for India. In the light of this evidence, it is not surprising that JMT has turned out to be very important in determining the location of FDI. We further asked the firms what difficulties they faced in the introduction of JMT in India, China and the ASEAN countries. With regard to India most of the firms complained about the lack of team spirit, the gap between the labour and management, lack of quality consciousness, and trade-based labour laws and unions that have made the introduction of job rotation and multiple skills — two important constituents of JMT — difficult. In the case of China they faced a different set of problems. Their main difficulty was the interference of the government and in particular the government's direction to produce according to its desire. The main problem with the ASEAN countries with regard to the introduction of JMT was job-hopping and the consequent difficulties in maintaining business secrets.

Infrastructure was the other location advantage variable that was important in influencing FDI. We had asked the firms that have experience in all three, India, China and ASEAN countries to comment in detail about the infrastructure facilities in these countries. Most firms did not have serious complaints regarding the Chinese and the ASEAN infrastructure but had several complaints about India. In particular they had grievances regarding the Indian electricity and transport conditions. In this context, it is important to note that the Japanese Overseas Development Assistance (ODA) program played a notable role in the development of the transport and electricity infrastructure facilities in China and the East Asian countries. In contrast, in the case of India the Japanese ODA in the past did not venture into these two infrastructure sectors. The positive coefficient for the infrastructure in the regression equation in Table 2 should be interpreted along with the large negative mean value for this variable presented in Table 1. The results presented in tables 1 and 2 indicate that an improvement in infrastructure would significantly influence the decision to invest in India.

5. CONCLUSIONS

We have argued in this paper that in the WTO regime of low tariffs and absence of quantitative restrictions, quotas and a general reduction in non-tariff barriers, the importance of host market seeking FDI would decline and efficiency seeking FDI would increase. The determinants of efficiency seeking FDI are likely to be different from those of the market seeking type. In particular, location advantages are likely to emerge as more important. In this context, this paper attempts to identify and analyze the importance of variables representing location advantages that influence the Japanese MNEs' decision to invest in India. In evaluating these variables, the Japanese MNEs were asked to assess them for India in relation to China and ASEAN countries. Most of the Japanese FDI has gone to three groups of countries, Europe, North America and Asia. We suggest that investments in Asia are not comparable to those in the developed countries. Hence in making location decisions, the Japanese MNEs are not likely to compare the Asian countries with the developed countries. Nevertheless, having taken the decision to locate in Asia the MNE would evaluate alternative locations in Asia. In doing so the MNE will not be guided by the common location advantages these Asian countries share, like the availability of skilled workforce at low wages but by other advantages/disadvantages that could differ between the countries.

Japanese MNEs were asked to evaluate the following four location advantages for India compared to China and ASEAN countries: infrastructure, controls, administrative complexities and adoption of Japanese management techniques. On an average the Japanese firms rated India poorly with regard to the first three variables. In particular, they rated India adversely regarding infrastructure. However, out of the four location advantages, only two emerged significant: infrastructure and adoption of Japanese management techniques. The Japanese MNEs appear to prefer to invest in countries where the adoption of their management techniques is easier. This was suspected by earlier studies but this study, to the best of our knowledge, is the first to provide positive evidence in its favour. This study also supports the earlier ones on the importance of infrastructure development in attracting FDI but rejects the emphasis placed on controls and administrative complexities. The insignificance of the two variables in the statistical analysis could be due to the presence of high levels of corruption in both India and China and the consequent inability of the Japanese MNEs to evaluate the Indian scene in comparison to China and other Asian countries. China scores poorly on both accounts and yet has attracted large sums of inward FDI. With regard to the presence of corruption and administrative complexities Wei (1999) gives poor ratings to both China and India. This study also suggests that FDI might not contribute to infrastructure development but a country enjoying developed infrastructure would attract FDI. The main variable affecting the Japanese FDI seems to be infrastructure and not administrative complexities and controls. The result suggests that India should substantially improve its infrastructure facilities if it wishes to attract FDI.

REFERENCES

- Aitken, Brian, Harrison, Ann and Lipsey, Robert E., 1996, "Wages and Foreign Ownership: A Comparative Study of Mexico, Venezuela, and the United States," *Journal of International Economics* 40(3-4): 345-371.
- Aoki, M., 1990, "Towards an economic Model of the Japanese firm," *The Journal of Economic Literature* 28: 1-27.
- Belderbos, Rene, 2001, "Overseas innovation by Japanese firms: an analysis of patents and subsidiary data," *Research Policy* 30: 313-332.
- Belderbos, Rene, Giovanni Capannelli and Kyoji Fukao, 2001, "Backward vertical linkages of foreign manufacturing affiliates: Evidence from Japanese multinationals," *World Development* 29(1): 189-208.
- Bos, Antonio and William E. Cole, 1994, "Management system as technology: Japanese, US and national firms in the Brazilian electronic sector," *World Development* 22(2): 225-236.
- Caves, R. E., 1996, *Multinational Enterprise and Economic Analysis*, (Second Edition), Cambridge Survey of Economic Literature, Cambridge University Press, Cambridge.
- Chen, Chien Hsun, 1996, "Regional Determinants of Foreign Direct Investment in Mainland China," *Journal of Economic Studies* 23(2): 18-30.
- Chen, Homin and Tain Jy Chen, 1998, "Network Linkages and Location Choice in Foreign Direct Investment," *Journal of International Business Studies* 29(3): 445-467.
- Cheng, Leonard K. and Yum K. Kwan, 2000, "What Are the Determinants of the Location of Foreign Direct Investment? The Chinese Experience," *Journal of International Economics* 51(2): 379-400.

- Cleeve, Emmanuel, 2000, "Why Do Japanese Firms Locate in Particular British Regions?" *Asia Pacific Journal of Economics and Business* 4(1): 112-124
- Coughlin, Cletus C., Joseph V. Terza and Vachira Arromdee, 1991, "State Characteristics and the Location of Foreign Direct Investment within the United States," *Review of Economics and Statistics* 73(4): 675-683.
- D'Costa, Anthony P., 1995, "The restructuring of the Indian automobile industry: Indian state and Japanese capital," *World Development* 23(3): 485-502.
- Dunning, John H., 1993, *Multinational Enterprises and the Global Economy*, Addison-Wesley Publishing Company, Reading, UK.
- Dunning, John H., 1998, "The changing geography of foreign direct investment explanations and implications," In Kumar, Nagesh, *Globalization, Foreign Direct Investment and Technology Transfer*, Routledge, London and New York, pp. 43-89.
- Florida, Richard, 1997, "The globalization of R&D: Results of a survey of foreign affiliated R&D laboratories in the USA," *Research Policy* 26(1): 85-103.
- Harriss, John, 1995, "'Japanization': context and culture in the Indonesian automotive industry," *World Development* 23(1): 117-128.
- Hines, James Jr., 1996, "Tax Policy and the Activities of Multinational Corporations," *National Bureau of Economic Research Working Paper* 5589, p. 43.
- Humphrey, John, 1995, "Industrial reorganization in developing countries: from models to trajectories," *World Development* 23(1): 149-162.
- Japan Company Handbook*, 2000, Volumes 1 and 2, Tokyo Keizai, Inc.
- Kaplinsky, Raphael, 1995, "Technique and system: the spread of Japanese management techniques to developing countries," *World Development* 23(1): 57-71.
- Koehlin, Timothy, 1992, "The Determinants of the Location of USA Direct Foreign Investment," *International Review of Applied Economics* 6(2): 203-216.
- Kokko, Ari and Mario Zejan, 1996, "Planned and Failed Foreign Direct Investment in Vietnam," *Asia Pacific Development Journal* 3(1): 37-54.
- Kojima, K., 1978, *Direct Foreign Investment: A Japanese Model of Multinational Business Operations*, London, Croom Helm.
- Kuemmerle, Walter, 1999, "The drivers of foreign direct investment into research and development: An empirical investigation," *Journal of International Business Studies* 30(1): 1-24.
- Kumar, Nagesh, 1998, *Globalization, Foreign Direct Investment and Technology Transfer*, Routledge, London and New York.
- Kumar, Nagesh, 2000, "Explaining the geography and depth of international production: The case of US and Japanese multinational enterprises," *Weltwirtschaftliches Archiv* 136 (3): 442-477.
- Lakhera, M. L., 2001, *Declining Share of Japanese Investments in India during the Nineties: Possible Causes and Policy Imperatives for Arresting the Decline*, Economic Research Center, Discussion Paper 132, School of Economics, Nagoya University.
- Lecraw, D. J., 1984, "Bargaining power, ownership and the profitability of transnational corporations," *Journal of International Business Studies* 15: 27-43.
- Loree, David W. and Stephen E. Guisinger, 1995, "Policy and Non-Policy Determinants of U.S. Equity Foreign Direct Investment," *Journal of International Business Studies* 26(2) Second Quarter.
- Mody, Ashoka, Susmita Dasgupta and Sarbajit Sinha, 1999, "Japanese multinationals in Asia: Drivers and attractors," *Oxford Development Studies* 27(2): 149-164.

- Root, Franklin and Ahmed, Ahmed, 1979, "Empirical Determinants of Manufacturing Direct Foreign Investment in Developing Countries," *Economic Development and Cultural Change* 27(4): 751-761.
- Siddharthan, N. S., 1997, "Differential behavior of the Japanese affiliates in the Indian automobile sector," *Japan and the World Economy* 9(4): 519-531.
- Siddharthan, N. S., and Rajan, Y. S., 2002, *Global Business, Technology and Knowledge Sharing: Lessons for Developing Country Enterprises*, Macmillan, New Delhi.
- Veugelers, Reinhilde, 1991, "Locational Determinants and Ranking of Host Countries: An Empirical Assessment," *Kyklos* 44(3): 363-382.
- Wheeler, David and Ashoka Mody, 1992, "International Investment, Location Decisions: The Case of U.S. Firms," *Journal of International Economics* 33: 57-76.
- Wei, Shang-jin, 1999, "Can China and India double their inward foreign direct investment?" A paper presented at the *NBER Conference on India*, Neemrana, (December 1999), from: <http://www.nber.org/~confer/99/indiaf99/India-China-FDI.PDF>.
- Wei, Shang-jin, 2000, "How taxing is corruption on international investors?" *The Review of Economics and Statistics* 82(1): 1-11.

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