The impact of third-country effects and economic integration on China's outward FDI

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ABSTRACT

The study employs a spatial econometric model to explore the impact of third-country effects and economic integration on China's outward FDI (OFDI). The results show that the pattern of China's OFDI tends toward a complex FDI without third-country effects. The degree of economic integration and host country's political risk both have a negative influence on China's OFDI. Furthermore, greater cultural proximity between China and the host country, as well as greater per capita income (market size), both have significant benefits to China's OFDI. The host country's market opportunity has a significant negative effect on China's OFDI.

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1. Introduction

After China's economic reforms began in 1978, economic activities of all kinds started to take off. The Chinese government actively developed foreign trade to obtain foreign technology. By the late 1980s, not only had the Chinese government continued the process of institutional transformation, welcoming foreign capital, technology and management experience, but it was also encouraging the expansion of overseas investment by Chinese enterprises (Wu and Chen, 2001). Immediately following were 15 years of WTO accession negotiations. China launched a "Go Global" (*zou chu qu*) strategy in 2000, strongly supporting and encouraging Chinese firms with competitive advantages to "Go Global". This strategy was to create a comparative advantage for Chinese firms by promoting multinational operations and actively develop and utilize overseas resources.

Recently, the world has seen dramatic economic and political changes. After weathering the 1997 Asian financial crisis, China joined the WTO in 2001. This followed the tide of globalization, and China gradually grew in the international arena, ahead of many developing countries. After the U.S. subprime crisis triggered a global financial crisis in 2008, which slowed global economic growth, but China maintained 9.1% economic growth in 2009. It has become an economic power that has led in the global economic recovery. In 2001, China's outward foreign direct investment (OFDI) totaled US\$ 6.9 billion. By the end of 2008, its OFDI exceeded US\$ 50 billion; total overseas investments reached US\$ 183.97 billion; and 35 Chinese companies were ranked among the world's 500 largest companies (Ministry of Commerce of China, 2010). China was once an insignificant OFDI country and is now becoming an important source of global investment.

Based on the evolution of FDI, OFDI on the home or host country's economy will have a profound effect, even if it has (like China) become a major exporter of FDI in recent years, but the location choice and OFDI pattern are still the main determining factors of OFDI decision. As shown in Table 1, the share of China's OFDI is far higher in Asia than in other regions during the period 2003 to 2008. Although the share is lower than in Latin America as of 2005 and 2006, the share in the Asian region has risen to 78% in 2008. By the end of 2008, more than 12,000 of China's overseas enterprises existed in 174 countries and regions, with investment coverage the highest in the Asia and Africa regions at 90% and 81%, respectively. The regional distribution of overseas enterprises was centered in Asia and Europe. This accounted for 51.2% and 16.3% of the total number of firms, respectively. The African region accounted for 12.9%, North America accounted for 11.3%, Latin America only accounted for 4.8%, and Oceania accounted for 3.5%. It should be noted that state-owned enterprises still composed the majority of China's OFDI. By the end of 2008, state-owned enterprises accounted for 69.6% of the total

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OFDI stock and limited liability companies accounted for 20.1%, while private enterprises and foreign-invested enterprises only accounted for 1.0% and 0.8%, respectively (Ministry of Commerce of China, 2010).

The establishment of the ASEAN (Association of Southeast Asian Nations) Plus One (China) agreement went into effect in 2010. This is the largest trade area outside of Europe and the United States, which are the two largest economies. ASEAN Plus One's growth is creating interest for countries in the Asia–Pacific region such as Japan, South Korea, India, Australia and others. By the end of 2009, China had signed or was negotiating 12 free trade agreements (FTAs) involving 29 countries or regions, accounting for 25% of China's total foreign trade. Countries that signed the agreements included the ASEAN members, Chile, Pakistan, New Zealand, and Singapore. However, Hong Kong and Macao established closer economic partnership arrangements (CEPAs) with China in 2003. Those countries that are in the midst of negotiations with China include Australia, Iceland, Peru, and those in the South African Customs Union, among others. These include countries rich in natural resources, and also developed and developing countries. Even though global and regional economic integration is an important trend, the forces driving world economic integration have gradually changed from international trade to FDI. The existing studies (e.g., Büthe and Milner, 2008; Guerin and Manzocchi, 2009; Levy Yeyati, et al., 2003) pointed out that the economic integration (such as the signing of a bilateral FTA) has a positive or negative effect on FDI among the Member States.[3] For China, other considerations of economic integration may include not only economic factors, but also political considerations. Therefore, the impact of these economic integrations on China's OFDI should be significant.

From the perspective of trade costs, geographical proximity or economic integration could reduce trade costs, but China also invested in distant regions such as the Americas and Africa. The third country's potential markets could also be the focal point of attracting China's OFDI. Fujita et al. (1999) suggested that when there is an agglomeration effect issue, one cannot assume that the spatial distribution of other host countries is inevitably homogenous. Taking FDI into new economic geography frameworks, the studies by Ekholm and Forslid (2001), Baldwin and Okubo (2006), Hoffmann and Markusen (2008), and Brakman et al. (2009) demonstrated how the agglomeration effect and FDI policy decisions influence each other.[4] Nevertheless, the aforementioned studies always neglected the realities of geographical and spatial

interdependence. Therefore, an in-depth analysis of spatial interdependence should be taken into account to examine the factors affecting China's OFDI, with a view to filling a gap in the literature. From an empirical perspective, further investigation should consider the influence of third-party countries. In recent years, there were a large number of multinational companies (MNCs) investing in China. China has already become the factory of the world, and serves as a low-cost production base for multinational companies, which then sell the goods to third countries. Although China's overseas enterprises are spread globally, with most located in Asia, China's low-cost advantages could be replaced by other countries with even greater advantages in terms of cost (such as Vietnam). It's also possible that China's MNCs will follow the lead of those in other developed countries by exporting their own technological advantages, and those MNCs will bring domestic funds to nearby or distant countries to establish factories, then export products to a third country, so third-country effects may become an important factor attracting China's OFDI.

The existing studies using spatial econometrics to empirically investigate the OFDI's behaviors influenced by third countries have found an issue of spatial interdependence. Combined with investment behavior and motivations of multinational firms, FDI patterns are grouped into four types, namely, horizontal FDI, vertical FDI, export platform FDI, and complex (or fragmentation) FDI (Blonigen et al., 2007). As can be seen in Table 2, the spatial lag and market potential

Table 1
Geographical pattern of China's OFDI (flow), 2003–2008 (percent).
Source: Ministry of Commerce of China, 2010.

	2003	2004	2005	2006	2007	2008
Asia	52.72	54.82	36.57	43.46	62.60	77.89
Hong Kong	40.25	47.81	27.89	39.30	51.81	69.12
Indonesia	0.94	1.13	0.10	0.32	0.37	0.31
Japan	0.26	0.28	0.14	0.22	0.15	0.10
Macau	1.11	0.48	0.07	−0.24	0.18	1.15
Singapore	−0.11	0.87	0.17	0.75	1.50	2.77
Republic of Korea	5.39	0.73	4.80	0.15	0.21	0.17
Thailand	2.01	0.43	0.04	0.09	0.29	0.08
Vietnam	0.45	0.31	0.17	0.25	0.42	0.21
Africa	2.62	5.77	3.19	2.95	5.94	9.82
Algeria	0.09	0.20	0.69	0.56	0.55	0.08
Sudan	0.00	2.67	0.74	0.29	0.25	−0.11
Nigeria	0.85	0.83	0.43	0.38	1.47	0.29
South Africa	0.31	0.32	0.39	0.23	1.71	8.60
Europe	5.08	2.86	3.23	3.39	5.81	1.57
UK	0.07	0.53	0.20	0.20	2.14	0.03
Germany	0.88	0.50	1.05	0.44	0.90	0.33
France	0.02	0.19	0.05	0.03	0.04	0.06
Russia	1.07	1.41	1.66	2.56	1.80	0.71
Latin America	36.37	32.06	52.74	48.03	18.50	6.58
Brazil	0.23	0.12	0.12	0.06	0.19	0.04
Chile	0.01	0.01	0.01	0.04	0.01	0.00
Peru	0.00	0.00	0.00	0.03	0.03	0.04
Mexico	0.00	0.49	0.03	0.02	0.06	0.01
Venezuela	0.22	0.08	0.06	0.10	0.26	0.02
Cayman Islands	28.26	23.39	42.11	44.42	9.82	2.73
Br.Virgin Islands	7.35	7.01	10.00	3.05	7.08	3.76
North America	2.02	2.30	2.62	1.46	4.25	0.65
Canada	−0.26	0.09	0.26	0.20	3.90	0.01
USA	2.28	2.18	1.89	1.12	0.74	0.83
Oceania	1.19	2.19	1.65	0.72	2.91	3.49
Australia	1.06	2.27	1.57	0.50	2.01	3.38
New Zealand	0.11	−0.09	0.03	0.02	−0.01	0.01

Table 2
FDI types and expected sign for the spatial lag and market potential.
Sources: Blonigen et al. (2007); Garretsen and Peeters (2009).

Model type of FDI	Spatial lag	Market potential
Horizontal or market seeking FDI	0	0
Vertical FDI	−	0
Export platform	−	+
Complex FDI	+	0/+

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[3] Levy Yeyati et al. (2003) suggested that two of these are positive, and one is negative. The two positive effects are: (1) when considering international vertical division of labor strategy, different stages of intermediate goods are produced in different countries. Firms obtain profits through relatively low local prices. In the vertical integration strategy of international firms, trade barriers will increase the transaction costs of vertical FDI. After an FTA is signed, tariff reduction and reduction of trade barriers allows firms to reduce transaction costs, which will lead firms to increase FDI. (2) FTA provisions that would likely be involved in investment-related laws and regulations; members of FTA will commit to the liberalization of capital flows, harmonization of national investment laws and regulations, and the establishment of institutions dealing with cross-border trade and investment. In addition, the signing of the FTA integrates each country's divergent investment regulations and will also promote increased FDI. A negative effect is, (1) when vertical FDI and merchandise trade share a mutual substitution relationship, then after the FTA is signed, inter-regional tariffs decrease and trade barriers are reduced, leading to a reduction in FDI. Büthe and Milner (2008) showed that countries that joined the WTO and other similar economic integration organizations had more opportunities to receive foreign investors' attention in comparison to countries that did not participate in such economic integration. These results came from data on 122 developing nations from 1970 to 2000. Therefore, the amount of FDI into these countries significantly increased. Guerin and Manzocchi (2009) used data on FDI from developed countries into developing emerging countries from 1992 to 2004, and discovered that economic integration had a positive influence on FDI.

[4] Krugman (1992) constructed a micro-foundation of agglomeration economies under the hypothesis of the "preferred firm location." This follows Harris (1954), who defined the accessible market index, namely, the product of the weighted sum of the purchasing powers at all locations and the inverse-distance weighted sum of incomes. This was the first introduction of factors that affect agglomeration economies; it now has been widely used to analyze trade opportunities and to study FDI determinants (Cieślik and Ryan, 2004; Head and Mayer, 2004).