Inward and Outward FDI in China

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I. Introduction

An important part of the economic reform process in China has been the encouragement of foreign direct investment (FDI). Over the past decade, China has established itself as the top recipient of FDI among developing countries and second in the world after the United States. In 2006, inflows to China reached an estimated $69 billion, which represented 10% of world FDI flows. Investment began to pour into China after 1992, and annual inflows have been over 40 billion dollars since 1996. Trending steadily upward, FDI inflows were at 63 billion dollars in both 2004 and 2005. These inflows are by far the largest of any developing country and have remained remarkably stable and robust despite substantial fluctuations in the Asian and global economies. China has accounted for about one-third of total developing-country FDI inflows in recent years.

China is not just a magnet for FDI but it is increasingly also a source of FDI. Although its outward investment is still small in absolute terms, especially compared to the huge inward flow, China's overseas enterprises have been quietly gaining importance as new sources of international capital. China's FDI outflows grew 32% to $16.1 billion in 2006. The recent merger of the television and DVD operations of TCL and Thomson as well as the acquisition of IBM's personal computer division by Lenovo, highlight this trend.

This essay takes a closer look at the structure, determinants and effects of Foreign Direct Investments into and from China. It traces the development of China's economic policy regarding FDI and the resulting changes in both inflows and outflows. The objective is also to discuss the determinants and impact of FDI on China's economic development.

The expansion of FDI into and from China has been accompanied by a rapid economic growth and an increasing openness to the rest of the world. It is equally important to understand why China has become one of the largest beneficiaries of FDI in the world and what drives the more recent progress of China's outward FDI.

Section II provides an overview of the trends and patterns of FDI into and from China. Section III discusses their determinants. Section IV studies the effects of FDI on the Chinese economy and on third countries. Section V provides some concluding remarks and discusses future trends.

II. Trends and patterns of FDI

A. Inward FDI

1- Inward FDI: trends and policies

FDI flows to China have increased massively in recent years, reaching an estimated $69 billion in 2006, which represented 10% of world FDI flows (UNCTAD, 2006, p. 51).
Since economic reforms launching in 1979, China has received a large part of international direct investment flows.[1] China decided to accept foreign investment in 1978 and broke sharply with socialist orthodoxy in establishing Special Economic Zones (SEZ) in 1979 and 1980. Nationwide the impact of FDI was moderate until the early 1990s. As Figure 1 shows, beginning in 1992–1993, the stream of incoming FDI turned into a flood.

China moved from restrictive to permissive policies in the early 1980s, then to policies encouraging FDI in general in the mid-1980s to policies encouraging more high-tech and more capital intensive FDI projects in the mid-1990s (Fung et al., 2004). During the permissive period, the Chinese government established four Special Economic Zones (SEZs) in Guangdong and Fujian provinces and offered special incentive policies for FDI in these SEZs. While FDI inflows were highly concentrated within these provinces, the amounts remained rather limited (Cheung and Lin, 2004). After 1984, Hainan Island and fourteen coastal cities across ten provinces were opened, and FDI levels really started to take off. The realized value of inward FDI to China reached US $3.49 billion in 1990. This kind of

[1] For an in depth presentation of FDI trends in China, refer to OECD (2000).

preferential regimes policies resulted in an overwhelming concentration of FDI in the east. The expected spillover effects from coastal to inland provinces failed to materialize. In reaction to the widening regional gap, more broadly-based economic reforms and open door policies were pushed forward in the 1990s. In the spring of 1992, Deng Xiaoping adopted a new approach which turned away from special regimes toward more nation-wide implementation of open policies for FDI inflows. New policies and regulations encouraging FDI inflows were implemented and produced remarkable results.

Since 1992 inward FDI in China has accelerated and reached the peak level of US$45.5 billion in 1998. After a drop due to the Asian crisis, FDI inflows into China surged again, so that by 2003 China received US $53 billion in FDI, surpassing the United States to become the world's largest single recipient of FDI. The peak of $72 billion recorded in 2005 is partly related to changes in the methodology underlying Chinese FDI statistics – for the first time data on Chinese inward FDI include inflows to financial industries (UNCTAD, 2006, p51). In 2005, non-financial FDI alone was $60 billion, and it registered a slight decline after five years of increase. FDI into financial services surged to $12 billion, driven by large-scale investments in China’s largest State-owned banks. However, a significant share of China’s inward FDI might be the result of round-tripping. FDI to China may be overstated by between 10% and 25%.[2] The United Nations put China’s stock of inward FDI close to $400 billion, around 16% and 43% of China’s GDP and Gross Fixed Capital Formation respectively.

2-Inward FDI: main features

Naughton (2007) emphasizes that three distinctive characteristics have marked investment in China over the past decade and that each of these characteristics reflects the dominant role played by the cross-border restructuring of export-oriented production networks that originally developed in other, neighboring East Asian economies. The first specificity stressed by Naughton (2007) is that foreign direct investment has been the predominant form in which China has accessed global capital (as opposed to portfolio capital or bank loans). Between

[2] “Round tripping” refers to domestic investment in China (Mainland) being routed through Hong Kong and back into the Mainland to take advantage of preferencial policies available only to foreign investors. After its accession to the World Trade Organization (WTO) in 2001, China has removed many of the incentives, but there are still differences in treatment between domestic and foreign investors; for example, the corporate tax is still levied at lower rates on foreign firms than on domestic firms (normally 5%-13% on the former, compared with 25% on the latter) (see UNCTAD 2006, p.12). Estimates vary from 25% (UNCTAD 2003a, p. 45) to about 50% (Xiao, 2004).

1979 and 2000, China's actual usage of foreign capital amount to more than $500 billion of which more than two third are in the form of direct investment (Fung et al., 2004). The second specificity is that an unusually large proportion of Chinese FDI inflows are in manufacturing industry, as opposed to services or resource extraction. The third specific characteristic of China's FDI inflows is the predominance of other East Asian economies, especially Hong Kong, Taiwan and Macao as sources.[3]

An additional important feature of China's FDI inflow is that they are mostly concentrated in the eastern coastal regions. Some regions of China are in fact even more open to FDI than a "typical" Southeast Asian nation. Inflows into Guangdong and Fujian, scaled to GDP, were of course well above the Chinese national average. For the 11 years from 1993–2003 the average annual incoming FDI/GDP ratio was 13% for Guangdong and 11% for Fujian. Other open coastal areas were only a step behind Guangdong: Inflows to Shanghai averaged 9% of GDP, and those to Jiangsu and Beijing averaged 7%. As noted by Naughton (2007), these inflows were sufficiently large to transform these regional economies.

The contractual forms in which FDI is embodied in China have evolved steadily toward modes that permit the foreign investor a higher level of control. In the early 1980s, FDI was dominated by contractual joint ventures (JVs) and joint development projects. After the mid–1980s, China began to strongly encourage the use of equity joint ventures (EJVs), which became the dominant mode of investment[4]. As China evolved toward a market economy, the share of FDI in the form of wholly owned subsidiaries of foreign companies has climbed steadily, and in 2005 it accounted for exactly two-thirds of total realized FDI inflows.

Foreign-invested enterprises (FIEs) play a large role in China's economy, accounting for 27% of value-added production, 4.1% of national tax revenue, more than 58% of foreign trade in 2005, and 88% of high-technology exports, nearly all under Export Processing arrangements.

[3] Hong Kong is indisputably the biggest investor in China, accounting for 42% of the cumulative total in 1985-2005. Naughton (2007) underlines that official data recorded inflows from Hong Kong and Taiwan easing off after 1998, but investment from various tax havens increased dramatically at the same time. In 2005, $12.3 billion in incoming FDI was from companies domiciled in the British Virgin Islands, Bermuda, the Cayman Islands, and other tax havens.

[4] From 1987 through 1996 more than half of incoming FDI was in the form of EJVs. Naughton (2007) explains that their predominance during this period reflected the commonly held beliefs (on the foreign side) that long-term partnerships were necessary to operate in the Chinese environment and (on the Chinese side) that such partnerships would facilitate the sharing of information and technology. However in practice, numerous problems emerged because of diverging incentives between partners. Notably foreign managers focused primarly on earning profit or establishing market share while Chinese managers were often more concerned with maintaining employment, building a larger firm, and accessing foreign technology.

Companies from 190 countries and regions have invested in China, including 450 of the world's Fortune 500 companies. By the end of 2005, FIEs in China employed more than 24 million workers.
Manufacturing accounted for 63% of registered foreign capital at the end of 2005 (see Table 1). To a large extent, this emphasis is explainable in terms of the restrictions that China has maintained on foreign entry into the most important service sectors (Naughton, 2007).

While large proportions of FDI inflows in all developing countries typically go to wholesale and retail trade, transport and telecommunications and finance, wholesale and retail trade, they are clear underperformers in China. Naughton (2007) notes that these three sectors together account for 27% of world developing-country inflows (including China) but only 4% of inflows into China itself. In China, by contrast, incoming FDI in the service sector is highly concentrated in real estate, specifically in property development. This sector accounted for 11% of total investment in 2005. The real estate industry has indeed become a hot spot for FDI. FDI in real estate could be as high as $9 billion (UNCTAD, 2007). According to SAFE estimates, FDI now accounts for 15% of China's real estate market.

The high tech sector has just begun to catch up and cross border M&A barely took form. In these areas, there is still a large gap between China and developed countries. It seems nevertheless that FDI in China’s manufacturing sector is shifting towards more advanced technologies. The number of foreign-invested R&D centers has risen to 750 in China by the end of 2005 (UNCTAD 2006, p. 56), with at least 107 set between October 2004 and September 2005 (Locomonitor, 2005). Exemples in the automotive industry are numerous and include Nissan Motor, Toyota Motor, Honda Motor, Hyundai and DaimlerChrysler.

B-Outward FDI

1-Outward FDI: trends and policies

Although its Outward Direct Investment (ODI) is still small in absolute terms, especially compared to the huge inward flow, China’s overseas enterprises have been quietly gaining importance as new sources of international capital. As China's economy continues to grow and becomes a capital-surplus economy and Chinese policies encourage the development of brands that can be considered “national champions”, FDI originating from China has been growing at a considerable rate (see figure 2). China's outbound direct investment, excluding the financial sector, reached $16.1 billion in 2006, up 32 % over 2005. China's ODI now represents the fourth largest outflow fromdeveloping and transition countries. The United Nations put China's stock of FDI held in other countries at $62 billion, around 0.6% of the world total and 3% of China's GDP. UNCTAD (2006) considers however that as many large Mergers & Acquisitions (M&A) deals undertaken by Chinese companies are financed outside, China's outward investment may be significantly underestimated.

Wong and Chan (2003) describe China's ODI has having undergone four stages of development. During the first stage (1979-85) when foreign trade was still under state monopoly and foreign investment was under state guide, only state-owned trading corporations as well as local enterprises regulated by the State Economic and Trade Commission (SETC) were allowed to invest overseas. During that period of time, the scale of the projects was small and the total investment was limited amounting around $200 million in total.

During the second stage (1986-91), the liberalization of restrictive policies and the authorization for more enterprises, including non-state firms, to apply for permission to establish subsidiaries provided they had sufficient capital and know-how and a suitable partner led to a sharp rise in ODI, reaching around $200 million annually.

The third stage (1992-98) witnessed a big surge in local and provincial enterprises investing abroad as national-level suport for ODI was mirrored at the local levels. Annual ODI reached $700 million. It appeared that part of the outflows engaged in real estate and stock market speculation in Hong Kong and many oversea branches suffered from heavy losses and were characterized by nepotistic and corrupt management. In a reaction to what Beijing saw as a serious loss of state assets and leakage of foreign currency, MOFTEC applied a stricter and more rigorous screening and monitoring process.

The fourth stage (1999-2006) corresponds to the consolidation of China's "going global" strategy. The strategy, envisaged in the mid-1990s and formally adopted in 2000, intends to promote the international operations of capable Chinese forms with a view to improving resource allocation and enhancing their international competitiveness (UNCTAD, 2006, p. 210). The Ministry of Commerce (MOFCOM) is responsible for implementing and corrdinating the strategy and encourages ODI through provision of information about foreign locations, the granting of incentives and a gradual relaxation of foreign exchange controls. It seems that the conjonction of these preferential measures with the successful penetration of Chinese manufactured exports into the world market boosted ODI.

As a result, an increasing number of Chinese firms are now among the largest multinationals corporations (MNC) from developing countries, in terms of foreign assets: while only seven Chinese enterprises were among the top 50 largest MNCs from developing economies in 1994; by 2001, twelve Chinese MNCs[5] were in the top 50 largest MNCs from developing economies, and as many as six had foreign assets of above $2 billion (UNCTAD, 2003b).

2-Outward FDI: main features

China has become a capital-surplus economy and its overseas investment has grown apace. They are now globally diversified and involved in a wide variety of sectors, including banking, manufacturing and natural resource exploitation.

The lion's share of Chinese outward FDI flows went to Hong Kong, China (Table 2). They are partly influenced by geo-cultural affinity and strategic reasons such as raising funds in the capital market there or using Hong Kong, China, as a springboard for channeling investment elsewhere. In fact Hong Kong and tax havens, such as the Cayman Islands and the British Virgin Islands, received 80 % of total Chinese outbound investment (and perhaps explaining why these destinations in turn are some of the largest sources of “foreign” investment coming back into China). Although Africa accounts for a minor share of China’s total ODI, China is now among the top 10 sources of FDI in Africa.

The top sources of outbound FDI from China were coastal and border provinces—specifically Fujian, Guangdong, Heilongjiang, Jiangsu, Shandong, Shanghai, and Zhejiang—which together accounted for 62.5 % of China's outbound FDI. In terms of sector preferences, nearly 50 % of Chinese FDI poured into the service sector, 23 percent targeted manufacturing, 22% was covered by wholesale and retail, and 17% was injected into the mining industry.

While mainland shareholding companies and private companies are stepping up their investment, large State-owned enterprises account for the bulk of investment. By the end of 2005, China's cumulative FDI abroad had reached $57.2 billion, 81% of which was from

[5] They include China Ocean Shiping (Group) Company, China National Offshore Oil Corporation, China State Construction Engineering Corporation, China National Cereal, Oils and Foodstuff Imp and Exp Corp., China National Petroleum Corporation, China National Chemicals Imp and Exp Corp., Shougang Group, China National Metals and Minerals Imp and Exp Corp., China Harbor Engineering Company, Shanghai Baosteem Group Corporation, Haier Group Corporation and ZTE Corporation.

state-owned enterprises that are directly managed by the State Assets Supervision and Administration Commission (SASAC)[6]. Beijing and the nation's coastal cities were the second major overseas investors after the large SOEs under the central government.

Chinese MNCs emerged later than their counterparts in the NIEs. The first generation of Chinese MNCs were mainly large State-owned enterprises operating in monopolized industries such as financial services, shipping, international trading and natural resources[7]. Hong Kong (China) was usually the first stop along the path of the internationalization of these first-generation Chinese MNCs. Hong Kong played an important role in giving them international experience and training their management team for further internationalization and it remains the major location for their "overseas" operations (UNCTAD, 2006, p. 130).

The second generation of major Chinese MNCs emerged after the early 1990s in competitive manufacturing industries, in particular those related to electronics and information and communication technologies (ICT) such as Haier, TCL (consumer electronics), Lenovo (Personal Computer) or Huawei Technologies and ZTE (global telecom equipment). These MNCs have diverse ownership structures, including private ownership, local government ownership and foreign participation. Selective support policy to thse frms has been adopted in the recent years. In October 2004, a circular issued by the National Development Research Council and the Export-Import Bank of China explicitely promotes M&As that coud enhance the international competitiveness of Chinese enterprises and accelerate their entry into foreugn markets through preferential credit and accelerated screening process.
About 30% of China's outbound direct investment in 2006 came from overseas acquisitions.
The main activities attracting Chinese investment are business activities, trade and mining (40, 18 and 14% respectively of total Net ODI in 2005). In recent years, FDI in manufacturing has grown especially fast.

[6] In June 2003, control of the above-scale firms directly controlled by the central government was transferred to a new organization, the State Asset Supervision and Administration Commission, which was designated as the agency responsible for exercising the central government's rights of ownership of nonfinancial firms (Naughton, 2005).
[7] Typical illustrations such as CITIC Group and COSCO started operations abroad after China adopted its open-door policy in the late 1970s.

III. Factors affecting FDI

A. Determinants of Inward FDI

Economists usually agree that FDI flow to countries with stable macroeconomic environment, commitment to market reforms, and other favorable conditions such as high productivity and low costs of labor, good infrastructure, etc… The literature on FDI determinants is very extensive and there has been a fair amount of work specifically on the determinants of FDI inflows into China. A primary source of information on the motivations behind investment by Multinational Corporations (MNCs) in China comes from studies based on interviews and questionnaires (Grub et al., 1990) or on bilateral FDI flows to uncover difference in terms of motives across source countries[8]. Analyses from the US-China Business Council and from UBS AG estimate that 75% of Western and Japanese MNCs are in China to sell to the domestic market. Export back to their national market seems to be a feature of Hong Kong, South Korean, and Taiwan firms.

Numerous studies have relied on province-level data to investigate the determinants of Inward FDI into China through the analysis of the locational choice of FDI within China. While this piece of research ignores the characteristics of home countries and foreign companies that decide to invest in China, it sheds light on the important pull factors behind FDI in China.[9]

One of the main provincial characteristic attracting FDI has been found to be its market size and growth, which have been measured by provincial GDP, GDP growth, per capital income, and population. All studies have found support for market-seeking FDI motive in China (Cheng and Kwan, 2000; Coughlin and Segev, 2000; Gong, 1995; Sun et al., 2002; Wei and Liu, 2001; Zhang, 2001).

An equally important factor in attracting FDI has been low labor costs. Cheng and Kwan (2000), Coughlin and Segev (2000), Sun et al. (2002) and Wei and Liu (2001) find that higher real average wages have a negative impact on FDI flows. At the same time labor quality has been shown to be also very important in most studies (with the exception of Cheng and Kwan

[8] While those studies globally confirm that traditional determinants of FDI (domestic market size, cost advantages…) are relevant for China, it is worth noting that the motives of investors vary accross source countries. It seems that the motivations of the East Asian Newly Industrialized Economies (NIE) refer more to the factor cost advantage and the growing demand of the Chinese market (Dees, 1998). The specificity of China's FDI from East Asia appears to relate to the role of geographical proximity, ethnic and cultural affinity in information flows between the NIEs and China (Yue, 1993).

[9] This section draws heavily on Havrylchyk and Poncet (2007).

(2000)). The proxies for labor qualities have varied throughout the studies: number of research engineers, scientists and technicians as a percent of the total employees (Sun et al., 2002; Wei and Liu, 2001), percent of population with primary, junior secondary, and senior secondary school education (Cheng and Kwan, 2000), overall labor productivity (Coughlin and Segev, 2000).

Another factor that plays an important role is infrastructure development. To measure this impact the most often used proxies are railways and highways per km2 (Sun et al., 2002; Berthélemy and Démurger, 2000; Zhang, 2001; Cheng and Kwan, 2000), but other variables, such as GDP per km2, staff and workers in airway transportation per thousand population (Coughlin and Segev, 2000), freight-handling capacity by seaport, postal and telecommunication values (Gong, 1995) were used as well. All these variables (with the exception of Coughlin and Segev, 2000) have proved to be significant determinants of provincial FDI.

Fung et al. (2005) however find empirically that soft infrastructure in the form of more transparent institutions and deeper reforms outperforms hard infrastructure in the form of more highways and railroads as a determinant of FDI into Chinese provinces.

Most recent studies control for agglomeration effects, which stem from positive spillovers from investors already producing in this area. This gives rise to economies of scale and positive externalities, including knowledge spillovers, specialized labor and intermediate inputs. Thus high FDI today implies high FDI tomorrow. Such high persistence over time is reinforced by the nature of FDI, which involve high sunk costs and is often accompanied by physical investment that is irreversible during short run (Kinoshita and Campos, 2004). The methodologies to test the hypothesis of agglomeration effect vary from one paper to another. Zhang (2001) and Sun et al. (2002) proxy agglomeration effect by a level of manufacturing output and level of foreign investment, respectively. Wei and Liu (2001) introduce the ratio of population to the land area. Coughlin and Segev (2000) incorporate spatial dependence into their regression analysis, which increases validity of the estimated coefficients when compared to ordinary least squares.

The degree of openness, measured by trade to GDP ratio, has also been taken into account. Sun et al. (2002) state that the impact of this factor is ambiguous, since a more open economy attracts FDI because foreign investors are already familiar with the host economy, but it also increases the competition. However, most papers find that the first effect is stronger (Sun et al., 2002; Zhang, 2001; Berthélemy and Démurger, 2000; Wei and Liu, 2001).

In order to control for incentives that were introduced by Chinese authorities to attract FDI, some studies included variables that control for Special Economic Zones, Open Coastal Cities, Economic and Technological Development Zones, and Open Coastal Areas (Cheng and Kwan, 2000; Gong, 1995; Zhang, 2001; Wei and Liu, 2001). Naturally, these variables have yielded significantly positive coefficients.

Huang (2003) claims that the above-mentioned factors do not correctly explain FDI flows to Chinese provinces. He formulates a “demand perspective” on FDI, which stresses that China’s lagging internal reforms contributed to the fantastic growth pf FDI in China during the 1990s. He argues that the large inflow of FDI is not only the consequence of good policies, but also results from certain distortions in the Chinese banking market and in state investment policies. Two institutional features are at work. First, Chinese private companies are often discriminated in terms of property rights protection and market opportunities in comparison to state or foreign enterprises. Despite the large size of the banking sector, many private enterprises are excluded from credit market, because lending of state banks is determined by policy reasons, rather then by commercial motives. Such uneven playing field motivates private entrepreneurs to look for a foreign investor. The second reason for high FDI in China is the participation of foreign investors in the privatization process of state-owned enterprises. Very often, public enterprises that are privatized possess good technology, human capital, extensive distribution network and access to finance. However, due to repeated interventions of state authorities into investment process and other types of mismanagement, they are unprofitable and have to be privatized. As for the choice of potential buyers, private enterprises are again discriminated and state bureaucrats favor foreign owners over Chinese private ones.

Havrylchyk and Poncet (2007) introduce, beside traditional determinants, proxies of the restricted access to external funding by private enterprises and of state interference related mismanagement of state enterprises to explain the cumulative stock of FDI across China. They find empirical support for these two mechanisms: (1) Private enterprises are forced to look for a foreign investor in order to escape constrains imposed by the state dominated banking sector; and (2) Foreign investors acquire SOEs if there are frequent intervention by state bureaucrats into the investments decisions. They conclude that further state's disengagement from credit allocation and investment decisions should diminish the demand for FDI in China and set it free for more efficient use in other regions.

B. Determinants of Outward FDI

To our knowledge no empirical analysis explores the drivers of China's outward expansion. A few studies explore push and pull factors behind China's MNCs internalization (Wong and Chan, 2003; Wu and Chen, 2001; Cai, 1999). Surveys such as the FIAS/IFC/MIGA survey conducted in 2005 provide information on the determinants of ODI that are often classified in terms of "push" (home country), "pull" (host country), and "policy" factors (in both home and host countries) (UNCTAD, 2006, p.155).

Push factors have received most of the attention in the context of China's ODI. Market-related factors come especially strongly in the surveys. The need to bypass trade barriers and the need to utilize domestic production capacity because the home market for their products is too small, are regarded as an important factor for close to 40% of the Chinese MNCs respondents[10]. Sluggish domestic demand in China and excess industrial productive capacity since the late 1990s in certain industries (especially in machinery and electronic appliances) have encouraged Chinese firms to look for growth opportunities abroad[11]. Avoiding trade quotas for exports to developed countries has certainly prompted some Chinese firms to invest abroad, especially in the textile products (typical destinations include Cambodia and Africa to take advantage of quota-free access for exporting to the United States and the European Union).
The need to secure access to market also induces Chinese firms that are exporting to service their markets also through FDI or to expand their market presence. UNCTAD (2003b) notes that in markets with which Chinese has considerable trade surpluses (e.g. the United States),

[10] A typical driver, i.e. rising costs of production in the home economy (especially labor costs), does not seem to be an issue for China certainly due to their considerable reserves of labor, both skilled and unskilled.
[11] Illustration of this move includes Chinese TV producers such as Konka Electronics, Skyworth and Changhong Electronic Groups, and household appliances manufacturers like Haier and Guangdong Midea Group. UNCTAD (2003b) notes that the recent merger of the television and DVD operations of TCL (China) and Thomson (France), with the former having a 67% stake in the joint-venture entity known as "TCL-Thomson Electronics", is an example.

FDI may increasingly become an alternative vehicle to supply those markets. As part of such a strategy, Chinese firms are also buying local distribution networks.

Competition from foreign MNCs in China’s domestic economy may further encourage the rapid expansion of FDI by Chinese MNCs. The success of China in attracting FDI flows has a dual impact. On the one hand it induces growing competition at home and encourages Chinese firms to go abroad, adopting a diversification strategy in generating revenues and transferring matured industries to low-income countries (e.g. bicycle production in Ghana and video players in South-East Asia). On the other hand, exposure to international business have played a part in encouraging Chinese firms to venture aboard through demonstration and spillover effects on domestic firms. Once abroad, Chinese MNCs begin to acquire advantages related to "transnationality" – confidence in, and knowledge of, operating in a foreign environment. As noted by UNCTAD (2003b), more Chinese firms are aspiring to become global players by investing and operating abroad. Among Chinese MNCs, 51% regard created-asset seeking as an important motive for their FDI[12], compared to 85% for market-seeking UNCTAD (2006). More generally, the greater integration of China in the world economy and the intensification of international competition through imports and inward FDI to which Chinese firms are confronted to, the more MNCs will expand outside China – to acquire a portfolio of locational assets that helps them to improve their international competitiveness.

A third key driver for Chinese investment overseas is access to knowledge and R&D for the development of new technologies. This motive is clearly behind the rise of Chinese ODI in developed countries. The motives for such investment include access to technology and other strategic assets such as brand names, as well as access to markets. UNCTAD (2003b) notes that the aspiration to go abroad to build or acquire international brand and advance product development has also become a major factor. Examples include TCL’s purchase of Schneider Electronics (Germany) in 2002 and the merger of TCL's television and DVD operations with Thomson (France). This strategy of accessing foreign technology also takes the form of establishing R&D centres in developed countries as recent establishments of R&D centers in Europe (Huawei Technologies, Haier and ZTE Corporation), US (Guangdong Glanz Group Co. and Konka) or Japan (Kelon).

[12] Its importance is highest in a relatively small number of industries (across all surveys) including electrical and electronics, chemicals and infrastructural services.

A fourth key driver is the need to access natural resources abroad according to 40% of the Chinese MNC respondents of the FIAS/IFC/MIGA survey. The need to secure access to raw materials has encouraged Chinese firms to invest in oil, gas and mining activities in resource rich countries. Most of the resource-seeking ODI are carried out by state-owned enterprises (Sinopec, Petrochina and China National Offshore Oil Corporation (CNOOC)) that acquire minority or majority stakes in foreign companies. Recent deals were made in natural resources rich countries such as Indonesia, Sudan and Nigeria.

Aside from "push" factors, Chinese ODI is also motivated by "pull" factors such as a host country's favorable investment policies, including incentives and other location-specific advantages. UNCTAD (2003b) notes to illustrate this pattern that a number of Chinese companies are reported to have chosen the United Kingdom to take advantage of investment grants.

Outward FDI decisions of Chinese MNCs seem to have been greatly influenced by their government's policies. The promotion by the Chinese authorities of projects intended to mitigate the shortage of natural resources and the conclusion of around 120 bilateral investment treaties (BITs) certainly contributed to the rapid expansion of ODI from China in the recent years.

IV. Effects of FDI on China's economy

Because of its unique nature and its importance, the economic literature and research attributes significant economic effects to FDI. A recent IMF study estimates that FDI has increased China's annual potential growth rate by about 3%- with about 80% of the benefits coming from increased productivity (Tseng and Zebregs, 2002).

1-Direct Impact of FDI

FDI has played a major role in transforming the Chinese economy[13]. Several direct effects of FDI are usually mentioned in the literature.[14] Evidently, FDI brings about capital. A

[13] This section draws heavily on Madariaga and Poncet (2007).
[14] It is clearly beyond the scope of the present paper to review the vast literature on the FDI-growth relationship and the determinants of FDI. The interested reader should refer to de Mello (1997 and 1999) for a

sufficient amount of capital has been necessary to build-up China's economy and FDI has made a substantial contribution to this. The ratio of FDI to GDP rose to 15% of domestic gross investment in 1994, stayed around 13% up to 1998 and stabilized around 11% in the late 1990s. However as stressed by OECD (2005), FDI has not been necessary to counter insufficient domestic saving. Indeed, the current account (which measures the difference between domestic saving and investment) has been in surplus for all but one year since 1991. Rather, the role of foreign companies has been to use management skills and technology, together with local labor, to increase exports and improve the overall productivity of the economy.

OECD (2000) notes that the creation of employment opportunities -either directly or indirectly- has been one of the most prominent impacts of FDI on the Chinese economy. The report evaluates that foreign firms employed around 20 million workers (3% of China's total employment) at the end of the 1990s.

FDI has been at the core of China's foreign trade expansion. It has furthermore been a decisive factor in China's involvement in the international segmentation of the production process. OECD (2000) emphasizes the role of foreign investment enterprises (FIEs) in the modification of China's industrial structure, the diversification of labor intensive products exports and the strengthening of China's competitive position in rapidly expanding markets.

An important specificity of FIEs is that while investment in Chinese firms is mostly devoted to the expansion of production capacities, FDI incorporates much more equipment and technology knowledge. This is consistent with findings of greater allocative and technical efficiency in labor utilization in production in FDI firms compared to domestic firms. FIEs have improved the overall efficiency with which resources are used. Their efficiency can be judged from the level of their overall productivity, which was over 90% greater than that of directly controlled state companies (OECD, 2005). An important difference in industrial structure between FIEs and domestic firms is that FIEs are relatively more concentrated in the newly developing and fast growing industries such as electronics and telecommunications equipment. By contrast, domestic firms are more present in the conventional basic capital intensive and large scale industries.

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comprehensive survey of the nexus between FDI and growth as well as for further evidence on the FDI-growth relationship.

In coherence with Huang (2003)'s argument exposed earlier about the contribution of some imperfections in the banking sector and state investment policies to the inflow of FDI into China, there is some evidence of an FDI contingent finance-growth relation in China.

Guariglia and Poncet (2007) investigate whether the sensitivity of economic performance to financial intermediation depends on the local stock of FDI (relative to *GDP*) in Chinese provinces. Their results indicate that provinces with higher FDI stocks relative to *GDP* benefit from faster economic growth primarily thanks to enhanced efficiency, and seem to be less sensitive to the negative impact of state intervention induced inefficiency and constraints in capital access. FDI can therefore help to alleviate the costs associated with financial distortions, and could provide an explanation for why, as discussed by Allen at al. (2005), China is a counterexample to the findings of the finance-growth literature, being characterized by malfunctioning financial institutions and phenomenal growth rates.

Héricourt and Poncet (2007) find consistent results based on firm-level data. They verify that private firms are discriminated against by the local financial system but that the abundance of FDI has helped them to alleviate the constraint to access capital necessary for investment.

As emphasized by Fung et al. (2004), there are also concerns that FDI may bring about detrimental effects. Some claim that foreign companies can crowd the access to credit of domestic firms (Harrison and McMillan, 2003). FDI can also have a negative impact on the local economy by substituting for domestic savings or leading to balance-of-payment deficits as a result of rising equity repayment obligations. To our knowledge, there is no such evidence in the context of China.

2-Spillover channels

<u>a-Theoretical channels</u>

Several channels of spillovers are identified in the literature (see Görg and Greenaway (2004) for a complete description of these channels)[15]:

[15] However, these transmission channels are constrained by the technology gap between local and foreign firms (Javorcik Smarzynska, 2002; Blömstrom, Globerman and Kokko, 1999). The scope of positive FDI spillovers is all the greater the smaller the technology gap between foreign and local firms.

The imitation of new products and process brought in by foreign firms is a classic transmission mechanism through reverse engineering. Its importance is tied to product/process complexity. Hence, imitation may improve local technology and result in a spillover enhancing productivity of local firms.

Competition may generate spillovers (Glass and Saggi, 2001). Incoming MNEs are expected to foster competition. This new competition compels them to adapt their technology and production processes. By reducing X-inefficiency, greater competition improves productivity.

Exports spillovers are an additional source of productivity gain. Domestic firms learn from multinationals to implement an exporting strategy (Görg and Greenaway, 2004; Aitken et al., 1997). Exporting involves fixed costs in the form of establishing distribution networks, creating transport infrastructure, learning about consumer tastes, etc... Collaboration and imitation generate productivity gains and may help local firms to penetrate new markets.

Spillovers may take place vertically through the acquisition of human capital from foreign firms. MNEs transfer their know-how or enhance staff training by two means. First, MNEs demand relatively skilled labor in the host country. Hence they invest in technological know-how transfer or staff training. As a result, labor turnover from MNEs to local firms can generate productivity improvement by means of complementary workers or by stealing their skilled workers. Several studies argue that this is the most important channel for spillovers (Fosfuri et al., 2001). Second, FIEs can increase demand for inputs produced by local upstream suppliers and thereby transfer technology and management practices to local firms (Rodriguez-Clare, 1996; Javorcik Smarzynska, 2004). These vertical spillovers may constrain local suppliers to improve their innovation capability in order to keep or gain new clients.

The geographic proximity is of crucial importance for the process linking know\-ledge spillovers to innovative activity (Audretsch, 1998). For instance, the closer a local firm is located to FIEs, the more likely and the more frequently their employees interact with each other, and the more frequently labor moves between these two firms. This spatial link may also be important for vertical spillovers between firms and their local suppliers, which often are located close to one another. It is furthermore well recognized that geographic proximity facilitates flows of knowledge. The probability that knowledge flows from one agent to another decreases with geographic distance. As a result, high productivity locations as well as low productivity areas tend to be geographically clustered, thus creating strong spatial links or dependence between locations (Anselin, 2001).

These spillovers, whether they are due to the mobility of goods, workers and capital or to spatial externalities, induce a particular organization of economic activity in space. As expressed in Tobler's (1979) first law of geography, "everything is related to everything else, but near things are more related than distant things" (p.236). Many studies show the importance of spatial patterns (Fingleton, 1999; Rey and Montouri, 1999). These spatial aspects are especially important to account for since ignoring them could result in serious misspecification (Abreu et al., 2005).

b-Evidence on spillovers in China

Empirical evidence is still limited on FDI spillovers in China. Labor and goods mobility constitute two straightforward channels through which spillovers from FDI would occur between localities and firms across China. The labor mobility mechanism, through the movement of skilled workers from foreign firms to domestic firms, should help transferring advanced technology and management skills.[16] Inter-city exchanges of goods provide an additional mean of embedded technology transmission. Reform advances especially in terms of output rationalization and price liberalization have prompted further integration of domestic markets and intensified already intense trade flows within China (Naughton, 2003).

Macro-level studies generally confirm that there are positive FDI spillovers (Tong and Hu, 2003; Hu and Jefferson, 2001). There is evidence of positive intra- and inter-industry productivity spillovers within regions in the Chinese manufacturing sector (Wei and Liu, 2006) as well as a positive effect of FDI on the number of domestic patent applications in China (Cheung and Lin, 2004).

Several papers use spatial econometric techniques to examine FDI activity. The focus is on FDI motivations and the geographic pattern of FDI location while correcting for third-

[16] Labor migration (intra- and inter-province) in China is becoming one of the most obvious and influential social factors which is profoundly changing the current system and the society as a whole. Between 1990 and 1995, 13 million people (out of a recorded total of 33 million of migrants) engaged in a urban-urban migration either within the same province (9.6 million) or between two separate provinces (2.2 million)(Poncet, 2005). These figures grew even further in the last decade. It is very likely that these massive migratory flows between cities fostered the exchange of skills and technology.

country effects (Blonigen et al., 2004; Egger et al., 2006). Coughlin and Segev (2000) explain US FDI across Chinese provinces while accounting for the positive spatial correlation between local FDI and that received in alternative regions. These authors argue that it accounts for agglomeration economies. Madariaga and Poncet (2007) address the joint problem of endogeneity and omitted variable bias due to spatial dependence in an analysis of FDI spillovers on economic growth covering 180 Chinese cities over the period 1990-2002. They find that Chinese cities take advantage not only of their own FDI inflows but also of FDI flows received by their neighboring cities. They further benefit from income per capita spillover effects, evidencing a spatial dependence in terms of economic development.

However, micro-level evidence of FDI spillovers on the productivity of Chinese domestic firms is at best mixed. If anything, FDI has different spillover effects on different firms. Buckley, Clegg and Wang (2002) find positive spillovers only for collectively owned firms while Hu and Jefferson (2002) evidence that, for China's textile industry, FDI presence depresses productivity of state-owned enterprises but not of domestic firms in general.

Hale and Long (2007a) argue that positive results are largely due to aggregation bias or failure to control for endogeneity of FDI. Attempting over 2500 specifications which take into account forward and backward linkages, they find no evidence of systematic positive productivity spillovers from FDI. They do, however, find robust evidence that Chinese private firms tend to invest less in innovation in the presence of FDI. Combined with their previous findings that domestic private firms tend to be more involved in providing inputs and intermediary goods for foreign firms (Hale and Long, 2007b), these results suggest a more passive role played by domestic firms in the global division of labor than envisioned by the Chinese government.

V. Conclusion

As argued by Naughton (2007), the distinctive characteristics of foreign investment in China thus far reviewed in this essay may not be a good guide to the future. The pattern of FDI into China is likely to change as China opens its service industries to FDI under its WTO accession agreement.[17] This evolution is also likely to deepen China's integration in the

[17] Most of the current inward stock of FDI in China is in manufacturing (63% in 2002). This is in sharp contrast to the FDI inward stock in the world as a whole where 60% is in services.

international segmentation of production processes and as such should reinforce the FDI attractiveness position of China. FDI into services (such as wholesale and retail trade, transport and telecom and finance) is clearly underrepresented. These are the sectors where WTO commitments will have the biggest impact. Wholesale trading rights—previously off-limits to foreign firms—were being granted during the 2003–2005 period. Transport and telecommunications sectors are being opened to minority foreign ownership during the 2005–2008 period. Financial sectors are being progressively opened to foreign participation, with an important milestone coming in 2007, when the banking market is opened to foreign participation. As emphasized by Naughton (2007), these changes will drive further expansion and significant structural change in Chinese FDI inflows. A new wave of internationalization and restructuring will begin.

As far as outward FDI is concerned, it appears that Chinese firms are facing tough challenges. Chinese overseas investors appear to have no clear strategy for the operation and development of their overseas branches. Not only do they exihibit blindness in their investment due to limited knowledge but also they lack cooperation with the overseas outlets. Moreover, the approval process for ODI appears to be uncesseraly complicated while restricons on the use of foreign exchange remain too stringent (Yao and He, 2005). It appears that progress is however underway as illustrated by the decision by the State administration of Foreign Exchange to abolish quotas on the purchase of foreign exchange for overseas investment on 1 July 2006 (UNCTAD, 2007, p. 210). Prospects for growth in China's ODI are very good. A smple indicator of the existing potential is the comparison of the country's Outward and Inward FDI Performance Indexes as computed by UNCTAD. These indicators compare an economy's share of world outward/inward FDI against its share of world GDP. According to this indicator, FDI from China was 7 times smaller while FDI toChina was 2 times bigger than would be expected, given its share of world GDP.

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Figure 1: FDI inflows to China: 1983-2006

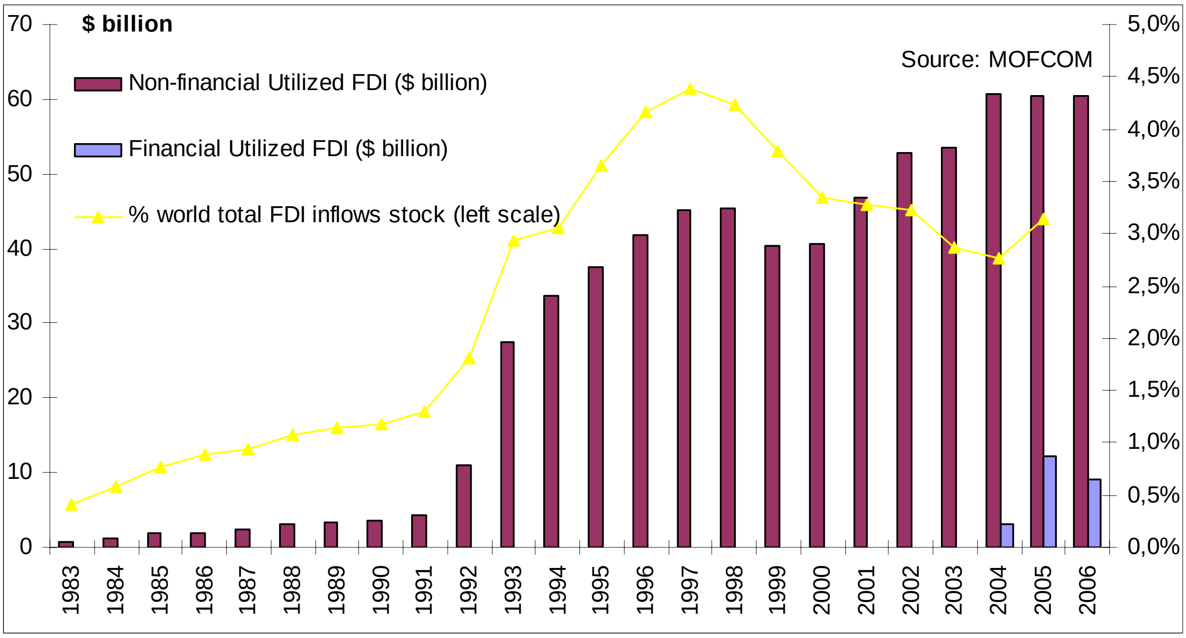
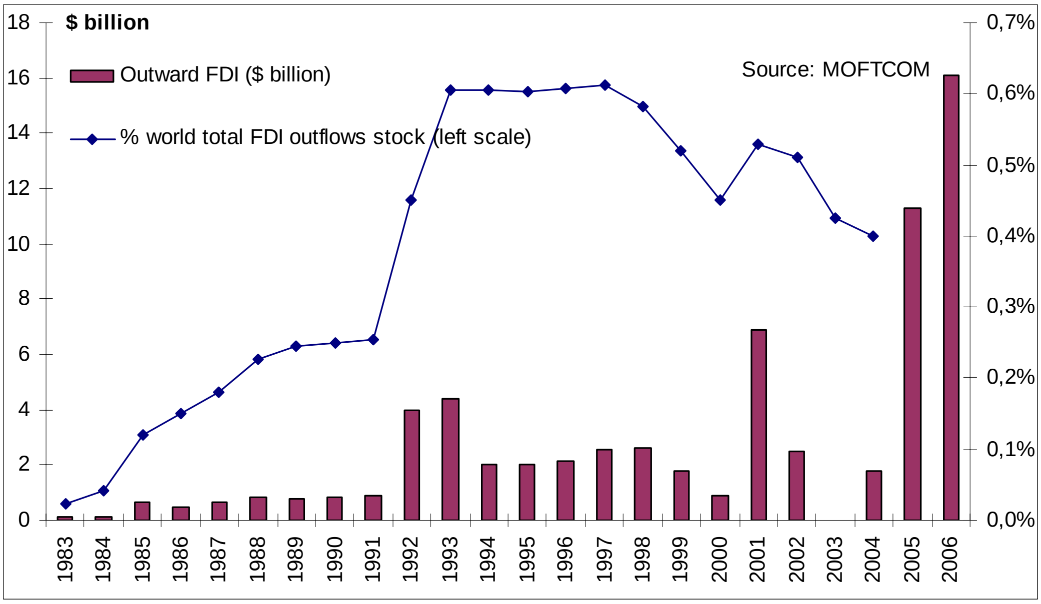


Figure 2: FDI outflows from China: 1983-2006



TABLES

Table 1: Registration Status of Foreign Funded Enterprises by Sector at the Year-end (2005)

	Number of enterprises	Total Investment ($ billions)	Share (in %)	Share of foreign capital (in %)
National Total	260 000	1 464	100	78
Manufacturing	179 949	895	63	79
Real Estate	13 265	185	11	80
Production and Supply of Electricity, Gas and Water	1 820	76	4	60
Transport, Storage and Post	4 339	46	3	60
Information Transmission, Computer Services and Software	6 183	30	2	92
Wholesale and Retail Trade	12 084	29	2	79
Construction	3 927	28	2	68
Hotels and Catering Services	6 013	28	2	72

Source: China Statistical Yearbook (2006)

Table 2. China's Net Overseas Direct Investment, by region, 2005

	Net Overseas Direct Investment ($ billion)		Share of total (%)	
	2005	Accumulated until 2005	2005	accumulated
Total	12.3	57.2		
Asia	**4.4**	**40.6**	**36**	**71**
Hong Kong	3.4	36.5	28	64
Republic of Korea	0.6	0.9	5	2
Africa	0.4	1.6	3	3
Europe	0.5	1.6	4	3
Latin America	**6.5**	**11.5**	**53**	**20**
Cayman Islands	5.2	8.9	42	16
Virgin Is.	1.2	2.0	10	3
North America	0.3	1.3	3	2
Oceania	0.2	0.7	2	1

Source: China Statistical Yearbook

Table 3. China's Net Overseas Direct Investment, by sector, 2005

	Net Overseas Direct Investment ($ billion)		Share of total (%)	
	2005	Accumulated until 2005	2005	accumulated
Total	12.3	57.2	100	100
Leasing and Business Services	4.9	16.6	40	29
Wholesale and Retail Trade	2.3	11.4	18	20
Mining	1.7	8.7	14	15
Transport, Storage and Post	0.6	7.1	5	12
Manufacturing	2.3	5.8	19	10
Real Estate	0.1	1.5	1	3
Information Transmission, Computer Services and Software	0.0	1.3	0	2
Services to Households and Other Services	0.1	1.3	1	2
Construction	0.1	1.2	1	2
Management of Water Conservancy, Environment and Public Facilities	0.0	0.9	0	2

Source: China Statistical Yearbook