## The determinants of inward foreign direct investment in china

Economics, Macroeconomics



Introduction With the irreversible trend of globalization, trans-national corporations (TNCs) have gain significant power in both the business and political world since the Second World War. Gillies (2005) indicate that the multinational direct investment has grown from 4.4% with respect to the world output in 1960 to 23% in 2003. As an important branch of international business activities, foreign direct investment (FDI) has also experienced a steady increase with an acceleration since 2004 (UNCTAD, 2007) Within the last few decades, China has become a successful story in the area of economics, where FDI contributes tremendously. (Fung, Iliza and Tong, 2002) Accompanying with the openness of China, FDI inflows has jumped from 0 in 1979 to more than 35 billion US dollars in 1998 (Sun, Tong et al) Moreover, the figure of FDI has increased to 69 billion US dollars in 2006, ranking as the top one in East Asia(UNCTAD, 2007). Trietak (2006) searched more recent statistics and found more rapid increase in the last decade. Source: Trietak (2006) Is China's lustre dimming? From a first glance at recent FDI statistics it might appear so, but upon closer inspection ... The inside Bureau Issue No. 5-October 2006 Various theories around the determinants of FDI inflow were established. Dunnings (1993, 2000) established an eclectic framework around the determinant of FDI. He attributed various factors into 3 broad categories, namely 'ownership advantages, location advantages and internalisation advantages', and believe FDI only occur when the determine factors are simultaneously satisfied. Navaretti and Venables (2005) examined more specific areas that are concerned more with location factors, including trade cost, size of market and tax. They concluded that these factors jointly impact the decision of FDI. Tseng and Zebregs (2003) studied

the determinants of FDI towards preferential policies influence FDI to a large extent. Sun, Tong et al(2002) and Zheng(2001) conducted empirical studies and generated results, highlighting the importance of areas such as market size and trade openness. This paper will examine the determinants of FDI inflow in China with a critical approach. It will focus on the factors related to location based on Dunnings' framework and cover the areas of market size, cost and policies. More sub-areas will be explored under the three main categories. Market Size It is believed by some analysts that China has a huge size of host market which can reduce the cost of supplying the market, encourage horizontal FDI, because of economics scales and lower fixed cost per unit of output. (Tseng and Zebreg, 2003) Although it appears to be common sense that the largest population in China has granted it as a large market, it is the increasing aggregate purchasing power that matters. During the past 20 years of reform and opening up, the national economy has been keeping a high-speed development with an average increase speed of two digits, topped the countries all over the world. The Gross Domestic Product in 1997 was RMB7, 446. 3 billion Yuan and climbed to RMB10. 2398 trillion Yuan in 2002 and become the sixth largest economic entity of the world. (GheeLim, 2003) The graph below demonstrated the continued growth of GDP clearly. (ibid) Corresponding with the steady growth of economy, the total volume of export and import amounts US\$620. 8 billion in 2002, and foreign investment deposit amounts for more than US430 billion, covering about 1/3 of the GDP of the whole year; and an annual foreign investment of about US\$50 billion has been absorbed, covering about 4% of the GDP. (ibid) The above factors indicated that China's favorable market environment

offers realistic conditions for FDI and meanwhile reveals a broad prospect for foreign investment. It is also reconfirmed in the empirical studies carried out by Sun, Tong et al (2002) and Zheng(2001) However, it is not necessary to conclude here that market size is the mere driver for the increase of FDI in China. Many other factors such as cheap labour and attractive policies may be more significant and these will be covered in the following sections. Cost Transportation Transport cost is one determinant of selecting FDI location; it is usually one factor that should be considered together with other locationspecific advantages. This section will discuss three aspects of transportation. Firstly, it is believed that better transportation infrastructure will help attracting FDI, the availability of crucial infrastructure, e. g. road, railway, airport can effectively increase productivity. Wheele and Mody(1992), Loree and Guisinger(1995), Richaud et al.(1999), Morisset(2000), Asiedu(2002), Sekkat et al.(2004) all supported this point. Seetanah (2008) considers there are three reasons why transport infrastructure has positive impact on FDI. First, start-up costs are less because the improved transportation systems reduce the costs of materials when public infrastructure is provided. Second, better transport infrastructure such as better road designs can improve the usefulness if privately owned and operated cars and trucks. Third, the improvement in quantity and quality of transportation systems can reduce the supply costs by more efficient using of existing resources. According to the research from The University of Technology, in 30 Sahara Africa countries, from 1984 to 2002, there is a positive correlation between the number of FDI and transport infrastructure. In China, the coast provinces attracted most FDI, for example, over 40% projects concentrated in Shanghai

region. However, in recent years because of the government's 'Go West' policy, the transport infrastructure in interior has been developed and thus increases the interest of FDI into interior provinces (Drewry Shipping Consultants Ltd., 2003) Secondly, in order to avoid high transport cost, multinationals may prefer to do FDI to export. For example, lots of American companies used to do FDI in Mexico, to use the competitive cheaper resources in the Mexico to produce and then export to serve the Chinese market. In recent years, those firms changed their FDI location into China in order to avoid high export transportation cost (Hansan, 2001). Thirdly, numbers of multinationals did export-oriented FDI in China i. e. produce in China and then export back to other markets. Although there are arguments that high transport cost discourages export-oriented multinationals, it can be that the integrated benefits overweigh the transport costs. What's more, it is especially beneficial to multinationals which export products back to their own countries where they have better knowledge of (UNCTAD, 2002). Resources Although the importance of recourses has been declining after the Second World War due to the dwindling ration of primary sector, the availability of natural resource still provides incentive for inward investment. Therefore, resource-rich countries seem to be more attractive to investors especially those who aim at resource-seeking. China is generally a resourcerich country. The production of energy minerals such as oil and coal is relatively high. Other resources such as land and other minerals are also economically available. (OECD, 2000) In recent years the extractive industries has become an attractive field for TNCs. The high oil price has encouraged investment in large projects in coal mining and processing in

China. (UNCTAD, 2007) In July, 2006, Royal Dutch Shell proclaimed that it would invest in a 5 billion US dollars coal-to-liquids plant in Ningxia province. (ibid.) However, as China has faced the challenge of energy shortage due to the huge consumption, it is possible that foreign firms would choose other developing countries with resource available to invest in. Additionally, the infrastructure required before exploring the resource increase the factor cost, and consequently also results in reducing interest of FDI. Labour Another essential factor is the availability of labour. Companies are more likely to choose FDI when there is comparative advantage in labour in the host country if the host has either the availability of large scale of low-cost unskilled labour, or high quality labour that is able to provide high efficiency. However, it is believed that the advantage of cheap labour is unstable and mobile. (UNCTAD, 1998: 110) The wage rate will probably increase together with the development of the host country's economy. It may have conflicted results among TNCs. The ones in the labour-intensive industries might relocate their investment to less developed countries which hold this competitive advantage. While the ones that are efficient-seeking may show interest in the improved human capital. Dictated to common sense, the world's largest population endows China with enormous labour available. In addition, the wage rate has been relatively low. It seems that China is an attractive location for labour-intensive industries. China has become the host country with the greatest number of workers in foreign affiliates. In 2004, about 24 million workers, which occupied 3% of total employment in China, were employed in foreign affiliates. (UNCTAD, 2004) However, the average salary of Chinese employees has been continually rising. According to the

statistics from the National Bureau of Statistics (NBS), the average wage increase kept around 14% from 2001 to 2006, and in 2007, average wage of urban workers was 24, 932 yuan (about \$3, 561. 3). (Xinhua News Agency, 2004) Theoretically, the rapid growth in employees' average wage means it is less attractive to those resource-seeking TNCs. However, according to the FDI data, the FDI during these years are still in a rising trend. It could partly be explained by the shift of TNCs towards more capital-intensive production. (UNCTAD, 2007) In other words, labour cost is turning to be less important factor for TNCs. Policies Trade Openness It is claimed that trade barriers turn away potential investors since it is a large start-up cost for many foreign investors (Henley, Kirkpatrick et al, 1999). Both theories and empirical studies have confirmed this opinion although some mixed effects were discovered (Sun, Tong et al, 2002) China was a closed economy before its openness reforms since 1979. After around 30 years of gradual progress marked by the establishment of several statutes and regulations, China has become the largest destination of foreign direct investment in the developing world. (Fung, Iliza et al, Sun, Tong et al, Henley, Kirkpatrick et al) The figure below demonstrated the dramatic growth of FDI inflows and this may illustrate the fact that the policies adopted by the Chinese authorities does have an significant impact on the promotion of the FDI inflow. Source: DEES (1998) Foreign Direct Investment in China: Determinants and Effects Economics of Planning 31: 175—194, 1998. Sun, Tong and Yu (2002) divided the development of Chinese FDI into 3 stages before it entered into World Trade Organizations (WTO) in 2001. The first started in 1979 noted by the law of People's Republic of China on Joint Venture and the creation of the

Special Economic Zones (SEZ). This phenomenon represents a start to allow the foreign capital inflow into the mainland China. In 1986, legal rights to wholly owned foreign enterprises were granted, which deepens the " opening-door reforms" and represents the start of the promotion of FDI inflows. The 3rd stage started with the famous " south China tour" by Deng Xiaoping and the growth of FDI has maintained a double digit growth thereafter. The study has thus implied that the growth rate of FDI inflows (showed in Figure) does have a positive correlation with the policies pursues by the Chinese government. (Tsing and Zebregs, 2002) Moreover, econometric methods were used to test the relationship between FDI inflows and the degree of trade openness (Zhang, 2001 Sun, Tong et al, 2002, Cheng, Kwan, 1999). Zhang (2001) used the Ordinary Least Squared (OLS) method to run a regression with trade openness as one of the dummy variables. The regression results proved the hypothesis that the trade openness does have a significant positive correlation with FDI inflows. It seems that the methodology used by Zhang is far from perfect since a mere dummy variable is not clearly enough to demonstrate the effect of different trade openness in different stages in the last few decades. Sun, Tong and Yu (2002) adopted a more complicated model and used import over Gross Domestic Product (GDP) to measure the openness of the country. Again, the results conforms to previous study by Zhang (2001), yielding a significant positive correlation. It is mentioned in the paper of Sun, Tong and Yu (2002) that the model may suffer from multicollinearity and thus renders the model less efficient. Also, it seems that the measure of openness is questionable and further explanation regard to the measure is necessary. In summary,

both empirical observations and econometric studies have indicated a significant positive correlation between FDI inflows and trade openness, rendering trade openness a highly probable determinant of FDI inflows in China. However, the simplification of the models has made the results less clear. More studies, especially the period after China's entering of WTO, are necessary to better evaluate the effects of openness on FDI inflows. Fiscal Incentives It is thought that fiscal incentives play a significant role in attracting FDI in China. There are two main perspectives on fiscal incentives. Supporters (e. g. Bora, 2002; Blomstrom and Kokko, 2003) believe that, under certain conditions, they increase FDI. While opponents (e.g. Halvorsen, 1995; Wilson, 1996; Osman, 2000; Wells et al, 2001) argue that fiscal incentives may not be the first-best mechanism for attracting FDI and the costs of incentives to attract FDI outweight the benefits (Cleeve, 2005). This section of the paper will examine the effects of fiscal incentives in FDI inflows in China. In a series of opening up reforms held by the government, China set a much lower national profit tax in the Special Economic Zones (SEZs), one of which at the rate of 15%, compared with 33 per cent outside the SEZs(Cheng and Kwan, 2000). This incentive policy provides an attractive environment. Consequently, the foreign capital inflow increased dramatically in late 1980s. In addition, China implements a low-lax policy for foreign investment enterprises and implements preferential tax policies in the industries and regions where investment is encouraged by the state. At present, taxes include business income tax, Personal income tax, turnover tax and tariff are favorable for foreign investment enterprises and foreign individuals (Bora, 2002). Take the Reducing-tax policy as an illustration;

Foreign investment enterprises may enjoy the treatment of which business income tax may not be collected during the first two years after their beneficial year and half collected during the next three years; for foreign investment enterprises encouraged by the state in the middle-and-western regions, after the expiration of 5 years' tax collection reduction or exemption, the government can prolong for another 3 years to collect half income tax(ibid). China's incentive policies toward FDI resulted in increasing inflow of foreign capital in the late 1980s and, in particular, early 1990s. However, the impact of tax incentives on foreign direct investment (FDI) appears ambiguous. According to Hines (1999) in a survey of empirical studies concludes that there is less sensitivity of the level of tax treatments on local choose of FDI and the elasticity of FDI is -0. 6 to taxation (inelastic). Over the past few decades, time-series econometric analysis and numerous surveys of international investors have shown that tax incentives are not the most influential factor for multinationals in selecting investment locations. Both analysis and surveys have confirmed that tax incentives are a poor instrument for compensating for negative factors in a country's investment climate (Morisset, 2001). For example, a two percent reduction in corporate tax lead to about one percent increase in inward FDI, but increase in the level of social expenditure may have even larger effect on attracting inward FDI instead of cutting taxes (GA¶rg, Molana and Montagna, 2007). Infrastructure For any civilization, the public infrastructure is essential base of development. Eisner (1991) and Easterly and Rebelo (1993) found that public investment in transportation and communication is consistently correlated with economic growth. Kumar (2001) claimed that holding other

factors constant, infrastructure availability contribute to attract FDI inflows. Since the infrastructure on transportation has been covered in the section of 'Transportation', this section will only focus on the structures of telecommunication and information. In recent years, FDI by TNCs has experienced a increase trend on the high-tech aspects such as communications and electronic equipment (Figure below). There are many reasons why high-tech industry attracts more FDI in these years. First, Availability of communication systems such as main telephone lines is necessary to facilitate communication between the home and host countries. (Loree and Guisinger, 1995) Second, the high-tech such as email is much faster than post office, so it saves time for firms. Third, there are more than 50 high-tech economic zones developed in China. These economic zones attract nearly half high-tech industries of China, so the effect of agglomeration stimulates more MNEs which want to enter Chinese market. And time is money, so high-tech lowers the costs of. As a result, between 2000 and 2006, FDI in these aspects nearly quadrupled, from \$26. 3 billion to \$102. 5 billion (Figure below). U. S. Census Bureau Overall the availability of crucial infrastructure, such as roads, highways, ports, communication networks and electricity should increase productivity, so attract higher FDI. As Wei and al. (2000) said that, a location with good infrastructure is more attractive than the others. Conclusion To conclude, many factors in the location spectrum have different degrees of impacts in the inflows of foreign direct investment in China. Large market size with respect to large population and increasing purchasing power has made China an attractive destination for a large amount of FDI. Costs consists of transportation and

production also significant influence the decisions of TNCs on the selection of location. Transportation cost seems to have different effects on different kinds of firms (market-seeking and export-oriented). Competitive advantages in resource and labour costs contribute to the attractiveness for inward FDI, but their importance has been declining. In the areas of policies, the trade openness, fiscal incentives and the improvement of infrastructures have all contributed to the increase of FDI, some of which may be critical while others may be less influencable. It seems that it is suitable to draw the conclusion hear that all the factors jointly influent the inwards of FDI in China. However, the relative importance of each is hard to judge. Thus, it is difficult to conclude which are the 'determinants'. In addition, there are some other particular factors which influence the inward of FDI in China such as culture, political stability and so on. However, the paper will not cover them fully due to the limit of length. References Bora, B. (2002) China's Attracting Foreign Investment Policy. World Trade Organisation, Working Paper, Geneva. Cheng and Kwan (1999) What are the determinants of the location of foreign direct investment? The Chinese experience Journal of International Economics 51 (2000) 379—400 Cleeve, E. (2005) How Effective are Fiscal Incentives to Attract FDI to Sub-Saharan Africa? Manchester Metropolitan University: United Kingdom. DEES (1998) Foreign Direct Investment in China: Determinants and Effects Economics of Planning 31: 175—194, 1998. Easterly and Rebelo. (1993). Fiscal Policy and Economic Growth: An Empirical Investigation, Journal of Monetary Economics 32 (3), pp. 417-58 Eisner (1991) Infrastructure and Regional Economic Performance: Comment. New England Economic Review September/October. Fung, Iizaka and Tong (2002)

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