博士学位請求論文要旨

# Empirical Studies on China's Integration into the World Economy

**Ding Jianping**

## Introduction

This paper only serves as "***a drop in the ocean***" reflecting the historical evolution of economic reform, especially with regard to China's position in the world arena. There has been much work done on this subject before my endeavor, leaving limited but crucial areas as yet. I have extended field of research to cover these areas neglected and left unnoticed by previous studies.

China embarked on economic reform in 1979, the experience of these two decades will reveal many facets of this liberalization process. By reviewing China's integration into the world economy, this paper focuses its attention on China's international trade and the related issues. It is widely acknowledged that China's foreign trade bears these characteristics, i.e., its trade volume is boosted by the foreign direct investment (FDI); its competitiveness lies in its labor-intensive products. During the process from the centrally-planned economy to the market-oriented one, China has made great progress in liberalization of its trade regime (realization of convertibility in current account) and integrated itself into the world economy. The ultimate objective of the paper is to measure the tempo of such progress as well as the remaining distortion of China's external policies. Both success and failure deserve much analysis. China's experiences may shed light on the experience of other developing countries.

Nothing is new about the practices adopted in China since economic reform, such as the introduction of foreign direct investment (FDI), setting-up of the special economic zones to encourage export-led processing industries, and devaluation of its currency to make exports more competitive. These were repeated by many developing countries three decades ago. However, China distinguishes itself by its success in economic growth, its comparative advantages in an "infinite" supply of cheap labor, and a pragmatic policy formation both internally and externally. In addition to this, participation by foreign investors is also an integral part of its success. As proposed by the late leader Deng Xiaoping: "No matter if it (the cat) is black or white, so long as it can catch a mouse it is a good cat," the Chinese have been following this philosophy throughout their economic reforms. Therefore, economic growth will be the

final measurement when evaluating the success and failure of the reform. The growth of manufacturing exports took off after 1984, and the growth of GDP accelerated as well. Between 1984 and 1995, real GDP grew by 10.2 percent annually. The ratio of foreign trade (exports plus imports) to GDP jumped from 10 percent in 1978 to 44 percent in 1994. In 1978, China accounted for only 0.75 percent of total world exports, however, by 1995, it amounted to 3.0 percent. These ratios indicate the speed of which China has integrated into the world economy. The World Bank (1997) publishes China 2020 series entitled *China Engaged Integration with the Global Economy*. According to its projected scenario, China's share in world trade could more than triple to 10 percent, making it a major engine of growth of world trade. China would become the second largest trading nation in the world. China's faster and more efficient economic growth in the post-reform period is clearly associated with increased openness.

## Chapter One

As an integral part of the economic reform, trade liberalization has been gaining momentum. What makes China different from other developing countries is its population (one fifth of the world population). Labor seems to be an "inexhaustible" resource that China can export. Therefore, development of labor-intensive products for exports, despite low profits, has been and will be an indispensable strategy for China in the long run. This coincides with the World Bank argument that there is room for the further expansion of labor-intensive exports from China.

Most researchers have already shifted their attention to the would-be "crowding out" effects of China's cheap labor on the world market. Some estimate the effects of large labor-intensive manufacturing from China and its rival ASEAN countries. Others concern how many losses in U.S. manufacturing jobs occurred before Chinese exports penetrated the U.S. market. In addition to "crowding-out" effects, the detailed industrial sectors and their relation with trade are among the much-discussed issues. The previous studies also focus on the most labor-intensive textile and clothing sector since China is the world's largest clothing exporter and second largest textile exporter. They worry about whether the world market can continue to accommodate the further expansion of textile and clothing exports from China, or should China upgrade its exports to other labor-intensive commodities. *So far no one has ever attempted to explain the relationship between the China's labor content and its trade, especially based on HOV theorem. This is the glaring "blank" left in previous studies, which I will directly focus on.*

This chapter intends to measure the labor content embodied in China's net exports by using Heckscher-Ohlin-Vanek (HOV) theorem. As advocated by the HOV

theory of trade, countries tend to export goods that are intensive in the factor with which they are abundantly supplied. Does China really export its abundant factor, as suggested by the ratio of its population? Are there any departures from the assumption of HOV? The empirical results indicate that China is not rich in all of its low-educated labor and poor in its entire high-educated one due to many constraints, such as physical capital, land, and natural resources. It is China's "manufacturing manual workers," not "farmers", that are the most abundant factor. Thus, absolute large numbers are not an "abundant factor" if the consumption share is taken as a denominator. It is undeniable that the Chinese strong preference for food consumption departs from the assumption of HOV. Large hidden unemployment in the rural areas and absolute growth in population (size) prevent the proper measurement of Chinese farmers' contribution to net exports. It obviously violates the "full employment" proposition of HOV. The historical distortions, i.e., the "resident registration" which pegs the Chinese farmers to the land and the "dumping place" of urban jobless during the "Cultural Revolution", swell the real numbers. It goes in agreement with the conventional wisdom that China is lacking in high-educated labor. However, the difference can be seen between the natural and social sciences, i.e., fewer manufacturing technicians and more administrative personnel. Accurate measurement of labor content is of significance not only because China is a populous country but also because it indicates the extent to which China can rely on exports to relieve its unemployment.

Similar to other developing countries, China has experienced the natural-resource exporting stage for a long period. Only after economic reform and the "open-door" policy did China begin to leap the ladder of "labor-intensive-exports," up which many other developing countries are still struggling. As late as 1985, petroleum was China's largest export, accounting for 20 percent of export earnings. By 1995, however, all of China's top export commodities were labor-intensive manufactured goods.

## Chapter Two

In addition to its huge population, China is the biggest developing country in square kilometers, making it geographically attractive to foreign investors. The country's size is undeniably an advantage. Labor, land, and preferential policies facilitate the accumulation and agglomeration of FDI, and China becomes the largest FDI recipient among the developing countries in the world. The influx of FDI together with technology strengthens the ties between host country and source countries. The effect is remarkable, i.e., "it kills two birds with one stone." FDI fills the gap of capital shortage while releasing the tension of unemployment.

However long before economic reform, the proposition of FDI was regarded as taboo and China had no foreign debt and virtually no FDI. The inflows of FDI to China, virtually nonexistent before 1979, rose to 3.5 percent of GDP by 1994. The boom came in 1984, when the inflow of realized FDI amounted to U.S.$1,258 million. What was regarded as a "campaign" for soliciting FDI was the initial establishment of "four special export processing zones" (later renamed as "Special Economic Zones") in the southern provinces. In succession, many similar zones were created along China's coastal areas. In these zones preferential treatment and tax exemption were given to FDI. The exports by these foreign investments accounted for 45 percent of China's exports. The total accumulated amount of FDI at current prices rose from U.S.$0.109 billion in 1979 to U.S.$95.67 billion in 1994 at an annual growth rate of 57.12 percent. Since 1993, China has become the second largest FDI recipient in the world (following the United States) and the single largest host country among the developing countries. In order to adjust the uneven distribution of FDI inflows by regions and by sectors, China issued the "Provisional Regulations on Guiding Foreign Investment" in June 1995, encouraging wider geographic coverage and more inflows into targeted economic sectors, such as agriculture, resource-exploration sectors.

A study on FDI is an indispensable part of China's foreign trade since it accounts for 45 percent of China's exports (peak period). Generally speaking, the literature on FDI in China is divided into two categories, one is technical spillover, and the other is incentive policy and location. In addition to technical spillover that the Chinese government regards as essential, location patterns of FDI has drawn an ever-increasing amount of attention. These studies search the FDI location pattern by using different data across different areas. The common problem is that they hold all FDI together without classification of country of origin in their calculations. Since the overseas Chinese investments hold a lion share of total FDI and their inclination to invest in their hometowns is strong, this leads to an extremely uneven distribution of FDI location. One question arises whether this uneven distribution is caused by various provincial incentive policies or other factors. Does FDI enlarge the disparity and inequality across the regions? *What are the determinants in their choice of location?*

This chapter studies agglomeration effects in manufacturing location (FDI) across 30 provinces in China by focusing on the behavior of source countries – U.S. and Japan during the period 1981 ~ 1996. Although this paper focuses on agglomeration effects, like the previous studies, it distinguishes itself by testing a developing host country, like China, and source countries, such as Japan and the United States, in FDI location choices. The conclusions are thus arrived at by adopting the Conditional Logit model (CLM) used in other studies, but have some further implications.

First, source countries will follow host country's industrial framework in their configuration of agglomeration. During transition from planned-economy to market economy, township and village enterprises (TVE) are playing a more and more important role in the external-oriented economy in China. They are best compatible with FDI in nature. The regions where TVEs agglomerate will also find FDI's agglomeration.

Second, historical accidents and language familiarity still have some weights in agglomeration of FDI. This can be verified by the existence of relatively more Japanese establishments in Liaoning, and more American firms in Guangdong province. Language bonds facilitate the process of FDI location.

Third, the Japanese, in general, demonstrate stronger agglomeration effects than Americans do, although in some industrial sectors they varied to a certain degree. Japanese agglomeration prevails in "Textile and Apparel Sectors." In "Electronic and Electrical Sectors" and "Foodstuff and Beverage Sectors," fierce competitions can be identified as the rival's presence in the region is a prerequisite for the entrance of the other.

Fourth, cost reduction is one of preponderances in site selection for Japanese firms. Precision in location planning enables Japanese firms to make full use of cheap labor and infrastructure to tide over yen appreciation. In contrast, the Americans pay more attention to the stretch of investments, aiming at potential Chinese market.

Finally, both Japanese and American are sensitive to the special policies launched by Chinese government. Their FDI have a high ratio of imports and exports. The presence of FDI matches China's export-oriented and market-oriented strategies.

## Chapter Three

In addition to the aforementioned, trade liberalization greatly facilitates this trade growth. China's trade policy instruments also became the subjects of much research. The trade policy instruments generally fall into two categories, tariff policy and exchange rate policy. The former is comprehensively dealt with by Zhang *et al.*, (1998). They review the evolution of China's trade regime, and estimate the protection on commodity base. Both cost and benefit of trade liberalization is evaluated. Bach *et al.* (1996) compare the distance between China's tariff exemption and further trade liberalization requested by WTO and conclude that tariff reduction will benefit the welfare not only of China but of its trading partners. The later issue has been also heavily studied by many scholars. Brada *et al.*, (1993) discern the relation between

official exchange devaluations and its impact on balance of trade. However most papers center exclusively on the official exchange rate. The distortion of exchange policy (deviation of official rate from the black market exchange rate) has not been fully studied. In order to uncover this distortion and illegal trade (exchange flight), *this chapter directly links black market exchange rate to the liberalization process of China's foreign trade regime (with currency convertibility as a center)*.

The trade liberalization started with decentralization of the foreign trade authorities. The driving force was originated both domestically and internationally. The inconvertibility of currency seriously hampered the further growth of trade and was reprimanded by the world society (GATT, and later WTO). The year 1994 witnessed the unification of multiple exchange rates in China. At the same time, the foreign exchange retention system was abolished. The unification of exchange rate (by dramatic devaluation of the official rate) in January 1994 greatly improved China's current account position and its convertibility in the current account was thus realized.

This chapter undertakes a comparison of China's official and black market exchange rates and concludes that the Chinese authorities still take the black market exchange rate into consideration when formulating exchange policy. In fact, the black market exchange rate serves as a barometer to measure the deviation of the official rate from market equilibrium. It also helps the exchange control authorities determine the point and timing of each devaluation and unification. Nevertheless, the official rate has not always been sensitive to the black market rate, depending upon the policy of the authorities. There was a trade-off between export promotion and stability of the economy. The best approach to identify the "stability" preponderance in exchange manipulation is to set it against the unregulated black market exchange rate. A once-for-all devaluation of the official rate (unification) has a negative effect on the black market premium in the short term, but none in the long run, so long as the market-mechanism has not fully been established in the China (i.e., capital account is still under strict control). There remains a long way to go before China fully integrates itself into the world economy.

Although this paper is "a drop in the ocean," it reflects many crucial issues need to be evaluated to see accurately the whole process of the reform and foreign trade liberalization.