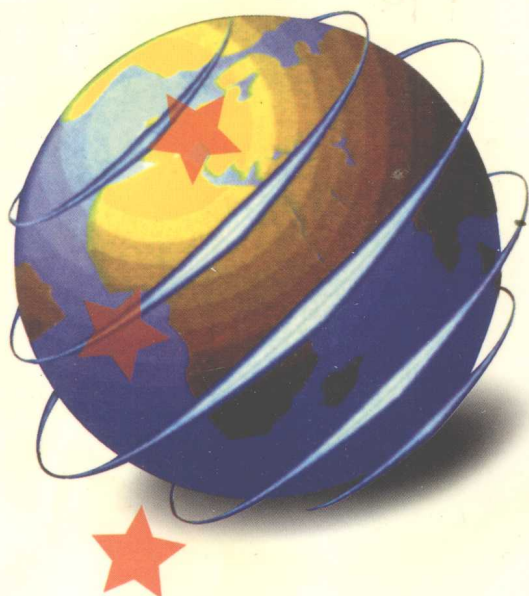


EMPIRICAL STUDIES ON CHINA'S INTEGRATION INTO THE WORLD ECONOMY

中国经济国际一体化
进程的实证研究

Ding Jianping 丁剑平 著



72945

大学出版社

University Press

Empirical Studies on China's
Integration into the World
Economy

By
Ding Jianping

Hunan University Press

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First Edition 2001

Copyright by Hunan University Press, May 2001

Changsha, Hunan, China, 410082

Edited by Chen Pengfei

ISBN 7-81053-345-2/F • 23

Printed by Printing House of Hunan University

图书在版编目(CIP)数据

中国经济国际一体化进程的实证研究/丁剑平著.

长沙:湖南大学出版社,2001.5

ISBN 7-81053-345-2

I. 中… II. 丁… III. 对外经济关系:中外关系

-经济一体化-研究-英文 IV. F125

中国版本图书馆 CIP 数据核字(2001)第 20896 号

中国经济国际一体化进程的实证研究

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☐ 审 稿 巢剑雄

☐ 责任编辑 谌鹏飞

☐ 封面设计 吴颖辉

☐ 出版发行 湖南大学出版社

社址 长沙岳麓山 邮码 410082

电话 0731-8821691 0731-8821315

☐ 经 销 湖南省新华书店

☐ 印 装 湖南大学印刷厂

☐ 开本 880×1230 32 开 ☐ 印张 4.5 ☐ 字数 128 千

☐ 版次 2001 年 5 月第 1 版 ☐ 2001 年 5 月第 1 次印刷

☐ 印数 1-1 500 册

☐ 书号 ISBN 7-81053-345-2/F·23

☐ 定价 10.00 元

(湖南大学版图书凡属印装差错,请向承印厂调换)

Acknowledgements

I am grateful to Prof. Kyoji Fukao, Juro Teranishi, Ippei Yamazawa, Makoto Ikema, Taku Yamamoto, Hidenobu Okuda, Jota Ishikawa, Ximing Yue from Histotsubashi University for many helpful instructions, and for their patience in reading my manuscripts. The instructions given by my former supervisor Prof. Biao-ru Chen from East China Normal University were very helpful.

I received useful comments from Prof. Katsuji Nakagane of Graduate School of Economics, Tokyo University when presenting my paper at academic meeting of Asian Political and Economic Society, No. 40. The editorial staffs of Institute of Developing Economics were kind enough to provide access to the new approach on China's data. I was very fortunate to receive many useful comments of anonymous referees both from Institute of Economic International, Italy, and from Prof. Kazuhiro Igawa, Research Institute for Economic and Business Administration, Kobe University, Japan.

Prof. Ligang Song from National University of Australia and Dr. Guanghua Wan from the University of Sydney invited me to attend the international conference

“China: Growth Sustainability in the 21st Century” held in Sept. 2000. This conference offers me the opportunity to discuss many problems remained unsettled in the book with the participants. After conference and with the help of Prof. Zhongdi Zhu from Shanghai University of Finance and Economics, I compiled this book with the intention to communicate and discuss the same issues with readers interested.

My biggest debt is to my family, for data—collecting, continuous encouragement, sustained moral and material support.

Ding Jianping
Feb 11th, 2001
In Shanghai, China

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Introduction

This book 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 book 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 and low price. 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 current account convertibility) and integrated itself into the world economy. The ultimate objective of the book 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. Only economic growth can alleviate the vast population of the problems of poverty; only economic growth can create job opportunities for those displaced workers; only economic growth can maintain social stability. Thus, economic growth will be the final measurement when evaluating the success and failure of the reform. What distinguishes the post-reform state from the pre-reform one is the outcome of this economic development. Both growth of GDP and trade volume are unprecedented since the reform. Manufactured export growth took off after 1984, and 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 17 percent in 1984, and to 44 percent in 1994 (see Figure 1. Share of Imports and Exports in China's GDP). In 1978, China accounted for only 0.75 percent of total world exports, however, by 1995, it amounted to 3.0 percent largely because of massive FDI related processing initiatives. These ratios indicate the speed of which China has integrated into the world economy.

The above macroeconomic performance is evaluated by Qian (1999), who attributes China's success to decentralization. Reforming the government through regional decentralization and downsizing of the government bureaucracy create incentives. He goes on to that China intends to build a rule-based market system incorporating international best practices but proceed in its own way. The World Bank (1997) compiles many authors's papers and 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. Rapid growth in trade has accelerated economic growth. And foreign investment, attracted by the large pool of low-wage labor and a large and growing market, has encouraged faster specialization in labor-intensive manufacturing and in turn increased employment.

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). It is 2.3 times the size of Europe, 4.5 times that of the United States, 9.3 times that of Japan and more than half that of other Asian countries all together^①. 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

^① It is adapted from "Table 1.1 Population, area and density, 1991" in *Statistical Yearbook*, 1993 compiled by UNESCO, printed in France.

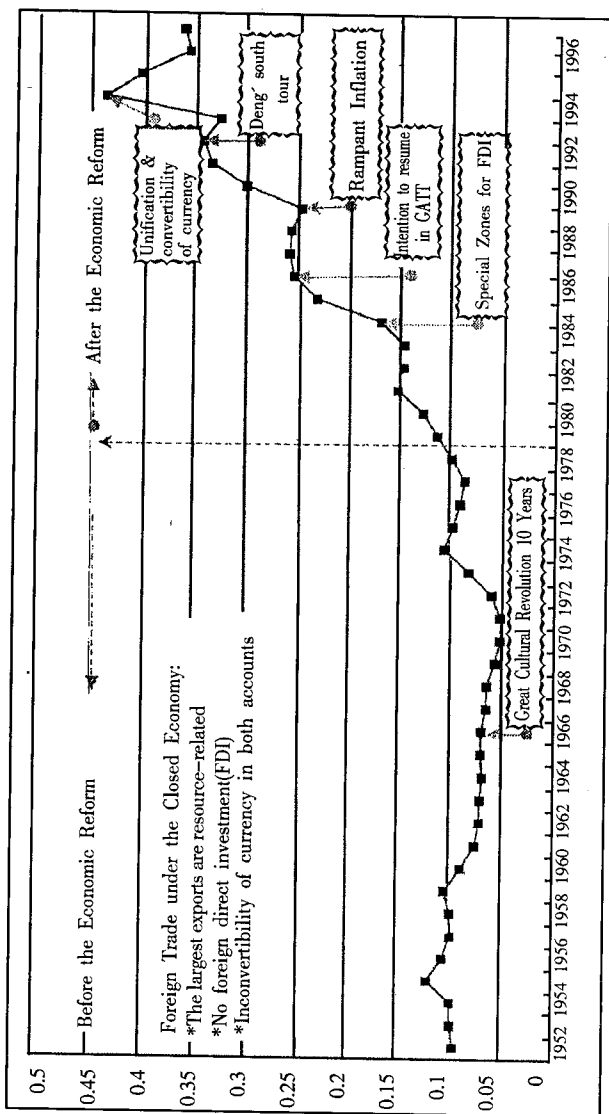


Figure 1 Share of Imports and Exports in China's GDP

Source: State Statistical Bureau, P. R. China *China Statistical Yearbook* 1988, NO. 17

(various issues).

the long run. This coincides with the World Bank argument that there is room for 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. Naughton (1996) has a comprehensive study in his paper "China's emergence and prospects as a trading nation." He estimates the effects of large labor-intensive manufacturing from China and its rival ASEAN countries, and concludes that China would seem to have a better endowment of human capital than most of the ASEAN countries. Branstetter (1999) directly puts China and ASEAN populous countries in rival camps and analyzes the "crowding-out" effects of each other. Similar estimations are conducted by the World Bank (1997) concerning how many losses in U. S. manufacturing jobs occurred before Chinese exports penetrated the U.S. market. McKibbin *et al.*, (1996) analyze the anxieties caused by strong growth of China's economy towards the rest of the world. By using the G-CUBED model, they project the consequences taken by changes in population growth, sectoral productivity growth, energy efficiency and technology in China.

In addition to "crowding-out" effects, the detailed industrial sectors and their relation with trade are among the discussed issues. Hu and Ma (1999) make an empirical study on international intra-industry trade with China, and find that in the vertical intra-industry trade, it is the human-capital intensity which creates the quality difference that determines the level of such trade. However, it is the product differentiation and economies of scale that determine the level and scope of the horizontal intra-industry trade. Yang and Zhong (1998) 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 trade theorem. This is the glaring "blank" left in previous studies which I will directly focus on.

Chapter One 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? The empirical results indicate that China is not rich in all of its low-skill-ratio labor and poor in its entire high-skill-ratio one due to many constraints. 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 consumption preference is taken into consideration. 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's 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. Accurate measurement is of significance not only as China is a populous country but also 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 the economic reform and "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. (see Figure 2. Value of Exports by Category of Commodities)

Labor as factor input is also undergoing a structural change. The nonagricultural labor force grew at over 5 percent annually from 1987 through 1995. Until 1991, the working age population was growing rapidly, and the agricultural labor force was growing in absolute terms, even though it was declining in relative importance. The "baby-boom" during the 1950s and 1960s followed by a draconian policy of "curtailing-birth-rates" in the late 1970s produced a special demographic structure in China, i. e. , both the young and the old are relatively few in number. In 1995, 67.4 percent of the population were between the ages of fifteen and sixty-four. This population structure has both advantages (a relatively low dependency ratio) and disadvantages (posing a serious threat to employment). The Asian financial crises swept through the neighboring countries in late 1997, and greatly reduced the demand for China's exports to these areas. By good fortune, China was able to avoid the crises. However, the strains on the labor market in China are likely to be unusually acute in the next two or three years until the compounding urban overhang has been absorbed. Estimates of excess workers in the urban enterprises range from 15 to 35 percent of the their workforces. The surplus of rural workers is estimated at 100~130 million, only part of which is being absorbed through permanent and temporary

migration. There is no ready model for China to follow. Facing the reality and taking full advantage of this factor of abundance has become crucial in China's trade practices.

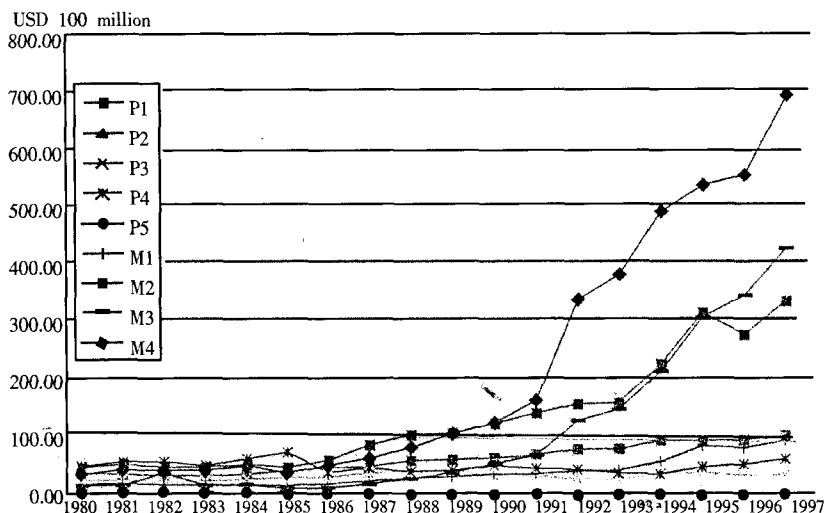


Figure 2 Value of Exports by Category of Commodities
(Customs Statistics)

Notes: P1: Food and live animals used chiefly for food.

P2: Beverages and tobacco.

P3: Non-edible raw materials.

P4: Mineral fuels, lubricants and related materials.

P5: Animal and vegetable oils, fats and wax.

M1: Chemicals and related products.

M2: Light and textile industrial products, rubber products, minerals metallurgical products.

M3: Machinery and transport equipment.

M4: Miscellaneous products (including clothing, footwear, and toys).

Source: State Statistical Bureau, P. R. China, *China Statistical Yearbook* 1998, No. 17.

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. China has deeply involved itself in the world community. 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. (It is said that FDI generates 890,000 jobs annually. ①)

However long before economic reform, the proposition of FDI was regarded as taboo and China had no foreign debt and virtually no FDI. Inflows of FDI to China, virtually nonexistent before 1979, rose to 3.5 percent of GDP by 1994. During the period of 1979~1983, China was still not successful in attracting FDI. The amount of actual FDI only reached US \$ 636 million in 1983. The boom came in 1984, when the inflow of realized FDI doubled the figure of 1983, amounting to US \$ 1,258 million. What was regarded as a "campaign" for soliciting FDI was the establishment of "four special export processing zones" (later renamed as "Special Economic Zones") in the southern provinces. In succession, 14 "Coastal Open Cities" in 1984, 3 "Coastal Open Areas" in 1985, "Hainan Island Special Economic Zone" in 1988, and "Pudong Development Zone in Shanghai" in 1989 were created along China's coastal areas. In these zones preferential treatment and tax exemption were given to FDI. These foreign investments accounted for 45 percent of China's exports. (see Figure 3.) After a short suspension due to the

① Barry Naughton (1996) China's Emergence and Prospects as a Trading Nation, *Brookings Papers on Economic Activity*, 2 : 1996, pp. 237~344.