

# 1. Introduction

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## 1.1 BACKGROUND AND MOTIVATION

Globalization has become a significant economic phenomenon since the late nineteenth century and FDI has been an important driving force of globalization. FDI has become an important competitive strategy for enterprises to invest all over the world to access markets, technology, resources and talent. On the other hand, host governments consider FDI as crucial to the development of their economies, exports, employment opportunities, and competitiveness. China, in this increasingly competitive world economy, has absorbed enormous amounts of FDI inflows since the economic reforms introduced in 1978.

Table 1.1 presents the FDI inflows to China, total FDI inflows to Asia, and the share of China's FDI in total Asian FDI inflows, total FDI inflows to developing countries and the share of China's FDI in total FDI inflows to developing countries in selected years. Figure 1.1 shows China's FDI inflows during the period 1978 to 2005.<sup>1</sup> As can be seen, China's FDI inflows were low during the period 1978 to 1991 but since 1992 China's FDI inflows have surged dramatically at a growth rate of 150 per cent in 1993. This placed China as the largest FDI host country in the developing world in 1993 and since then, in 2002, FDI inflows to China surpassed the United States making China the largest FDI recipient country in the world.

Figures 1.2 and 1.3 show the share of China's FDI inflows in the total FDI inflows to Asian and to developing countries in 2002. As can be seen, China's FDI shares of total FDI inflows to Asia and the developing economies were 57 per cent and 34 per cent, respectively. During the period 1978 to 2005, FDI inflows to China totalled US\$621 billion, the annual average growth rate of FDI was about 33 per cent, and there were about 242 799 multinational enterprises (MNEs) operating in China covering almost every single sector of the economy.

The impact of FDI in China has become prominent. Table 1.2 shows the various forms of FDI contributions in the Chinese economy during the period 2000 to 2004. As can be seen, the highest share of FDI in GDP and domestic investment was 4.2 per cent (2002) and 10.7 per cent (2000 and 2001), respectively. MNEs' contributions to industrial output reached US\$711 billion in 2004, accounting for 34.1 per cent of China's total industrial

output, whereas MNEs' contributions to exports were US\$339 billion in 2004, accounting for 5.7 per cent of China's total exports. FDI has also generated employment opportunities in China: MNEs employed 6.42 million locals in 2000 which accounted for 0.9 per cent of China's total employment. In 2004, the number of locals employed by MNEs increased to 10.33 million, which accounted for 1.4 per cent of China's total employment.

*Table 1.1 FDI inflows to China and its share in total inflows to Asia and to developing economies*

Country/Region	1987-92	1993	1994	1998	2002	2003	2004	2005
1. China (\$) <sup>a</sup>	4.65	27.52	33.79	45.46	52.74	53.51	60.63	60.33
2. Asia (\$)	19.61	54.84	63.84	84.88	92.01	101.28	147.55	155.50
3. Share A <sup>b</sup> (%)	23.71	50.18	52.93	53.56	57.32	52.83	41.09	38.80
4. Developing economies (\$)	35.33	78.81	101.20	165.94	155.53	166.34	233.23	344.00
5. Share B <sup>c</sup> (%)	13.16	34.92	33.39	27.40	33.91	32.17	26.00	18.06

Notes:

<sup>a</sup> US\$ billion.

<sup>b</sup> The share of China's FDI in total Asia FDI.

<sup>c</sup> The share of China's FDI in total developing economies' FDI.

Source: *World Investment Report* (1999 and 2005).

*Table 1.2 Various forms of FDI contributions in China*

	2000	2001	2002	2003	2004
FDI (US\$ billion)	41	47	53	54	61
FDI/GDP (%)	3.8	4.0	4.2	3.8	3.7
FDI/DI* (%)	10.7	10.7	10.2	7.9	7.0
MNEs output (US\$ billion)	283	329	392	536	711
MNEs output/total output (%)	27.4	28.5	29.3	31.2	34.1
MNEs export (US\$ billion)	119	133	170	240	339
MNEs export/total export (%)	4.8	5.0	5.2	5.5	5.7
MNEs employment (million persons)	6.42	6.71	7.58	8.63	10.33
MNEs employment/ total employment (%)	0.9	0.9	1.0	1.2	1.4

Note: \* DI = domestic investment.

Source: *China Statistical Yearbook* (various issues).

During the period 1978 to 2005, China emerged as the largest FDI host country in the developing world, and at the same time it experienced the highest economic growth in the world, an average rate of about 10 per cent.<sup>2</sup>

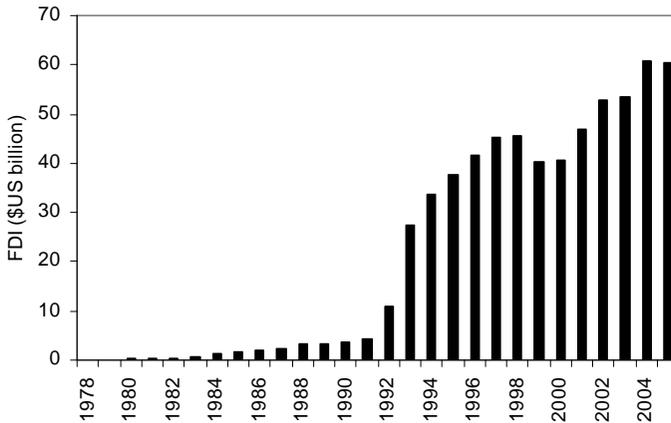
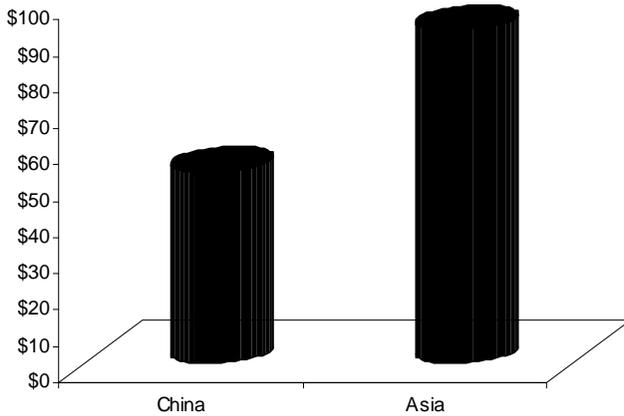
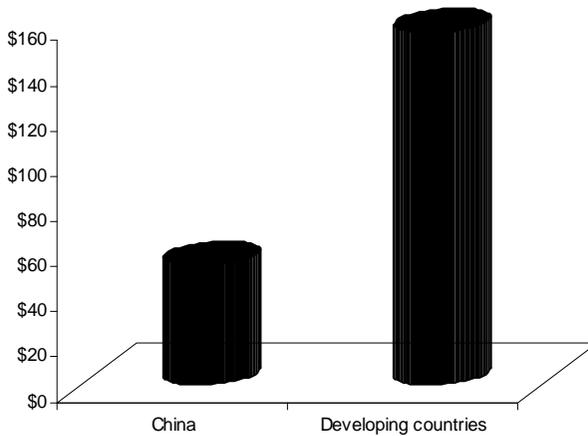


Figure 1.1 China's FDI inflows, 1978–2005

Meanwhile, the international tourist arrivals and receipts reached 109 million and US\$26 billion, respectively, in 2004. This ranked China as fourth and sixth in terms of international tourist arrivals and international tourism receipts in the world. The annual average growth rates of international tourist arrivals and receipts in China over the period 1978 to 2005 were 18.9 per cent and 20.4 per cent, respectively, and measured the highest growth rates in the world. During the same period, while per capita income in China increased rapidly, the choices of available goods and services also expanded. With increasing income, the majority of the urban middle classes not only sought maximum consumer's utility, but also tried to transform the Western positional values into 'positional consumption'. It seems that new consumption patterns have emerged and a consumption propensity shift has occurred towards international brand products and time saving items in China. As FDI increased, and more and more MNEs commenced operation in China, the number of State-Owned Enterprises (SOEs) declined sharply from 102 300 in 1989 to 23 228 in 2003, resulting in millions of SOE employees being laid off. Simultaneously, an increasing income inequality has been pronounced. In urban areas, a large percentage of the population makes, on average, as little as US\$550 to US\$810 per head a year. In rural areas, many farmers make, on average, as little as US\$300 per head a year.<sup>3</sup> The income arrangements can barely support a minimal standard of living. Consequently, consumer confidence and consumption in China have continuously declined and plunged to an extremely low level since China introduced economic reforms in 1978.



*Figure 1.2 China's FDI share in Asia, 2002*



*Figure 1.3 China's FDI share in developing countries, 2002*

Many economic phenomena in China in recent decades are puzzling and can hardly be explained fully by existing economic theories. Empirical research publications in these areas are also limited. Many questions relating to the economic phenomena in China have emerged attracting attention. The questions include: How has China attracted enormous amounts of FDI since the economic reforms introduced in 1978? Does FDI crowd out domestic investment? Has FDI caused China's income inequality? With remarkable economic performance in the last three decades, China's per capita income

has increased rapidly: how could consumer confidence and consumption in China continuously decline? Is there any causal relationship between FDI and international tourism? Does FDI cause tourism growth? Has tourism-led growth held in China? Overall, the fundamental interest lies in exploring the impact of FDI on the Chinese economy.

Obviously, an economic framework is required to provide explanations for the economic phenomena in China. Correspondingly, an integrated modelling framework is also required for conducting empirical studies in the relevant areas to test and support the economic framework. In this regard, an exploration of FDI theories is urged, which may provide some solutions to the puzzles in China. In order to gain insights into FDI and how FDI affects the Chinese economy, an integrated study on the FDI characteristics and factors that determine FDI in China are necessary. Following the studies of FDI determinants, an exploration towards a better understanding of the macroeconomic effects on host country economies would be important. Given the complexity of the possible causal links between FDI and domestic investment, income inequality and tourism, a disaggregated framework and empirical analysis would be essential to provide a clear insight of FDI and its impact on the Chinese economy.

## 1.2 AIMS AND OBJECTIVES OF THE STUDY

The broad objective of the study is to develop a theoretical framework with the use of recent developments in time series analysis and econometric models, in particular, to explore and analyse FDI and its impact in China. Specifically, the principal aims of the study are to:

1. Extend the existing theoretical FDI studies to develop a theoretical framework on the impact of FDI on the economic development of a host country;
2. Investigate and analyse the location-specific determinants of FDI in China;
3. Examine the causal relationships between FDI and the macroeconomic variables, domestic investment and economic growth to assess the impact of FDI on these macroeconomic variables;
4. Explore and analyse the impact of FDI on income inequality, as well as the impact of other factors on China's income distribution;
5. Examine international spill-over effects on Chinese household consumption behaviour on the basis of the life-cycle and permanent-income hypotheses;

6. Investigate the causal relationship between FDI and tourism, and hence assess the impact of FDI on tourism;
7. Test tourism-led growth theory in the case of China, and accordingly, use an econometric framework to estimate the relationships between tourism, the foreign exchange rate and economic growth.

The main focus of this study is, based on the developed theoretical framework, to address the issues raised above, which have not been studied or which have had only limited research done previously but are important for the Chinese economy.

### 1.3 OVERVIEW OF THE METHODS

This book mostly focuses on a time series analysis of FDI and related variables. The data used are annual as well as quarterly. The econometric models used in this study include the multiple regression models, the Vector Auto Regression (VAR) framework, and the Error Correction Models (ECM). Statistical techniques such as the unit root tests for stationarity (for example, the augmented Dickey–Fuller (ADF), the Phillips–Perron (PP), Perron and HEGY tests), the structural break test (Perron test), cointegration methodology (for example, the Engle–Granger and the Johansen methodologies), test for Granger causality, and the innovation accounting techniques (the impulse response function analysis and the variance decomposition method) are also frequently used in the book.

Using the VAR model, we investigate and analyse the location-specific determinants of FDI, and the causal relationship between FDI and tourism. The causal relationships between FDI, domestic investment and economic growth, and the impact of FDI on domestic investment and economic growth are modelled by the ECM. The ECM is also used to examine international spill-over effects on Chinese household consumption behaviour, and test tourism-led growth theory in the case of China. A multiple regression model is developed to analyse the impact of FDI on income inequality, as well as the impact of other factors on China's income inequality.

### 1.4 STRUCTURE OF THE BOOK

This book contains ten chapters. Chapter 1 is an introductory chapter, and literature reviews of previous research in FDI studies and its extensions are given in Chapters 2 and 3, respectively. Chapters 4 to 9 constitute the main

analyses of the book. These chapters cover the topics: location determinants of FDI (Chapter 4); the relationship between FDI, domestic investment and economic growth (Chapter 5), FDI and tourism (Chapter 6), tourism and economic growth (Chapter 7), and FDI and income inequality (Chapter 8); and international spill-over effects on consumption (Chapter 9). The final chapter, Chapter 10, presents the overall conclusion.

This chapter discusses background and motivation, aims and objectives and major findings of the study, overview of the methods, structure of the book and significant contributions of the study. A comprehensive study on FDI theories is reviewed, and correspondingly, empirical studies on FDI are given in Chapter 2. Chapter 3 presents further extension on the development of a theoretical framework to analyse the effects of FDI, and accordingly, empirical studies on the effects of FDI are reviewed.

Chapter 4 provides details about China's FDI policies, the development of FDI during the period 1978 to 2005, and the characteristics of China's FDI such as FDI source countries, geographic and sector distributions, and type of FDI. Using China's time series data to develop an appropriate VAR model, the long-run relationships between FDI, infrastructure, openness, labour costs, the exchange rates, market demand and labour quality are investigated. Further, the location-specific determinants of FDI in China are analysed. Chapter 5 examines whether FDI has complementary or substitute effects on domestic investment in China, given the fact that China has attracted a huge amount of FDI inflows during the period 1978 to 2005. For this purpose, an ECM framework is used. Further, the relationship between FDI, domestic investment and economic growth is also analysed in this chapter.

Chapters 6 and 7 are about China's tourism industry. Employing the Granger causality test under a VAR framework, Chapter 6 investigates the causal link between FDI and tourism in China. Further, the impact of FDI on tourism is assessed. Chapter 7 tests the hypothesis of tourism-led growth in the case of China by using an ECM. In Chapter 7, the role of the foreign exchange rate in China's economic development is also investigated.

Using time series and cross-coastal and inland regional Chinese data for the period 1978 to 2002, Chapter 8 explores the impact of FDI on rising income inequality between the coastal and the inland regions in China. This chapter also investigates the role of other factors which may have an impact on China's income inequality. Adopting the cointegration approach and on the basis of the life-cycle and permanent-income hypotheses, Chapter 9 examines international spill-over effects on Chinese household consumption behaviour. The role of other factors such as rapid income growth and accumulated wealth in Chinese consumption function are also investigated in this chapter.

The final chapter, Chapter 10, presents the conclusions by reporting the principal findings on FDI and its overall impact in China and discussing their policy implications, the limitations of the study and directions for future research.

## 1.5 SIGNIFICANT CONTRIBUTIONS AND MAJOR FINDINGS OF THE BOOK

This section briefly describes the significant contributions of the book to the existing knowledge in the area of FDI and presents a summary of major findings of the book.

### 1.5.1 Significant Contributions of the Book

This book makes significant contributions to knowledge in the two areas of theory and applications of FDI.

First, the book extends the existing theoretical framework to analyse the impact of FDI on the economic development of a host country. Such a theoretical framework is a major contribution as it is the first rigorous and systematic research step towards a better understanding of the important confluence of controversies on the roles of FDI in the economic development of a host country, and provides a foundation for future research. Most existing theoretical FDI studies stem from MNEs' perspectives and analyse the determinants of FDI or the motives of MNEs investing abroad, while the theoretical framework developed in this book stems from a macroeconomic perspective and analyses the impact of FDI on the economic development of a host country. It provides clear information about FDI externalities and shows how and when FDI generates good/adverse externalities on a host economy, in which the broad effects of FDI on growth are evaluated.

Second, the book uses the extended theoretical framework to empirically analyse FDI and its impact on the economic development of China. The empirical study on FDI and its impact on China presented in the book make further significant contributions in a number of ways. These contributions include:

1. explicit analysis of FDI and its impact on specific areas such as economic growth, aggregate level of domestic investment, income inequality and tourism etc. by offering insights into the extensively disputed FDI-growth nexus;

2. the use of the cointegration technique based on a multivariate VAR system and model with time series data to analyse the determinants of FDI and its impact on China (it is well known that the use of such a technique generates more reliable estimates in an endogenous context); and
3. the policy recommendations, which are based on more reliable results derived from the study, are valuable and important to the Chinese government and potential local and foreign investors.

### 1.5.2 Major Findings of the Book

The findings presented in the book can be grouped into two major categories. One is from the theoretical point of view and institutional discussions; and the other is based on empirical analysis. A summary of findings in both categories follows.

The findings from the theoretical view and institutional discussions include:

- FDI generates both positive and adverse externalities on the economic development of a host country;
- location-specific advantages led China to become one of the world's highest value-added manufacturing production locations; and
- China has entered into the more advanced development stage of FDI and should promote select types of FDI.

The empirical findings show that:

- the labour cost is a primary and significant factor attracting FDI to China;
- FDI has played an important role in China's economic growth and development;
- FDI has impacted significantly on income inequality in China;
- FDI has had spill-over effects on Chinese consumption patterns;
- FDI significantly influences the tourism sector of China; and
- the tourism-led growth hypothesis is supported by the Chinese economy.

## NOTES

1. FDI inflows to China for 2005 have been revised up by \$12.08 billion (20.03 per cent) in 2008. The annual FDI statistics in this book were collected from various issues (2006 is the latest issue) of *China Statistical Yearbook*.

2. All statistics in this chapter are collected or calculated from the various issues (1980–2005) of *China Statistical Yearbook* and the *World Investment Report* (1999–2005) except where otherwise referenced in the chapter.
3. *China Daily online* 25 April 2005 and estimated from *China Statistical Yearbook* (2002).