Selling China

Foreign Direct Investment during the Reform Era

YASHENG HUANG

Harvard Business School

CAMBRIDGE UNIVERSITY PRESS
Contents

List of Tables and Figures ........................................ page x
List of Abbreviations ............................................... xiii
Synopsis of the Book ................................................. xv
Preface ................................................................ xvii

1 Introduction ......................................................... 1
   Appendix: Data Issues in the Third Industrial Census 63

2 An Analytical Framework ....................................... 65
   Appendix ................................................................ 99

3 Problems in China’s Corporate Sector .................... 106
   Appendix: Why TVEs Can Be Successful .................. 149

4 Constraints on Nonstate Firms and Foreign Direct Investment 151
   Appendix ................................................................ 205

5 State-Owned Enterprises and Insolvency-Induced Foreign Direct Investment 212
   Appendix: SOE Insolvency and JV Acquisition ........ 255

6 Economic Fragmentation and Foreign Direct Investment 260
   Appendix ................................................................ 303

7 Conclusion ........................................................... 308

Bibliography ............................................................. 351
Index ................................................................... 373
List of Tables and Figures

Table 1.1 Various Measures of Foreign Capital Inflows to China, 1979–2000 8
Table 1.2 Relative FDI Size, Macroeconomic Developments, and Business Environment, Various Years 12
Table 1.3 Manufacturing Industries with the Largest FDI Values from Hong Kong in Indonesia, Malaysia, Taiwan, and China 22
Table 1.4 Industry Characteristics of FIEs in Chinese Manufacturing Industries, 1995 24
Table 1.5 Export Shares of FIEs in Total Exports of Three Economies: China, Taiwan, and Indonesia 32
Table 3.1 Concentration Ratios of the Automotive Industry: A Four-Country Comparison 116
Table 3.2 Loan-to-Deposit Ratios and SOE Shares in Selected Provinces, 1988 and 1993 120
Table 3.3 Human and Physical Capital Measures in Chinese Industry Across Ownership Types, 1995 134
Table 4.1 Foreign Equity Ratios, Employment Size, Capital Intensity, and Export Propensity in the Chinese Garment Industry 169
Table 4.2 Political Hierarchy of Firms and Equity Structures of FIEs in the Garment Industry 172
List of Tables and Figures

Table 4.3 Foreign Ownership Ratios in Two Types of FIEs: Cooperative Joint Ventures (CJV) and Equity Joint Ventures (EJV) 175
Table 4.4 China’s Top Four Refrigerator Makers, 1982–1998 191
Table 4.5 Tobit Analysis of the Effect of Private Ownership on the Foreign Equity Ratios 206
Table 4.6 Tobit Analysis of the Effect of Private Ownership on the Foreign Equity Ratios in the Garment Industry 207
Table 4.7 Political Status of Firms and Foreign Equity Ratios in FIEs in the Chinese Arts and Crafts Industry 210
Table 5.1 Investment and Production Roles of SOEs in the Chinese Machinery Industry, 1995 and 1997 221
Table 5.2 Beijing Gear Factory, Selected Output and Financial Results, 1985–1996 232
Table 5.3 Financing Structure of Beijing-XYZ Gear 236
Table 5.4 PPG and NCIC Negotiations over Asset Valuation 243
Table 5.5 Average Foreign Equity Ratio (FER) in the Machinery Industry in Selected Cities in Guangdong Province, 1992–1995 252
Table 6.1 A Tale of Two Firms: SAIC and BAIC, 1990 and 1997 264
Table 6.2 Comparison of FAW and SAIC, 1997 275
Table 6.3 Four Automotive Business Groups Compared: Integration Strategy, Performance, and FIE Characteristics, Various Years 283
Table 6.4 Basic Characteristics of Central and Provincial Holding Firms in China’s Machinery Industry, 1997 293
Table 6.5 Tobit Analysis of the Foreign Equity Ratio in the Machinery Industry: Model One 298
Table 6.6 Tobit Analysis of the Foreign Equity Ratio in the Machinery Industry: Model Two 301
Table 6.7 Descriptive Statistics about the Main Variables, 1997 306
List of Tables and Figures

Figure 1.1 FDI and Interprovincial Domestic Investments, for Selected Provinces 31
Figure 2.1 Two Sources of Relative Foreign Competitiveness 76
Figure 2.2 Political Pecking Order of Domestic Firms in China 79
List of Abbreviations

AAPA  Average asset per affiliate
BAIC  Beijing Automotive Industry Corporation
BGF   Beijing Gear Factory
CHF   Central holding firm
CJV   Cooperative joint venture
CMA   Chinese Manufacturers’ Association
CSI   China Strategic Investment
ECE   Ethnically Chinese economy
EJV   Equity joint venture
FAW   First Automotive Works
FDI   Foreign direct investment
FDIPA FDI per affiliate
FER   Foreign equity ratio
FIE   Foreign-invested enterprise
FMC   Foreign marketing control
GDP   Gross domestic product
GKG   Guangdong Kelon (Rongsheng) Group
GNP   Gross national product
IFC   International Finance Corporation
IMF   International Monetary Fund
JV    Joint venture
LDC   Less developed country
M&A   Merger and acquisition
MES   Minimum efficiency scale
MNC   Multinational corporation
MTBF  Miles traveled between failures
NCIC  Nanchang Chemical Industrial Corporation
NPL   Nonperforming loan
List of Abbreviations

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>OECD</td>
<td>Organisation for Economic Co-operation and Development</td>
</tr>
<tr>
<td>OP</td>
<td>Outward processing</td>
</tr>
<tr>
<td>PBC</td>
<td>People’s Bank of China</td>
</tr>
<tr>
<td>PLA</td>
<td>Proportion of the largest affiliates</td>
</tr>
<tr>
<td>PPG</td>
<td>Pittsburgh Plate and Glass Industries</td>
</tr>
<tr>
<td>PPP</td>
<td>Purchasing power parity</td>
</tr>
<tr>
<td>R&amp;D</td>
<td>Research and development</td>
</tr>
<tr>
<td>R&amp;DE</td>
<td>Research and development expenditure</td>
</tr>
<tr>
<td>RCC</td>
<td>Rural Credit Cooperative</td>
</tr>
<tr>
<td>RMB</td>
<td>Renminbi</td>
</tr>
<tr>
<td>SAIC</td>
<td>Shanghai Automotive Industry Corporation</td>
</tr>
<tr>
<td>SER</td>
<td>State equity ratio</td>
</tr>
<tr>
<td>SLR</td>
<td>Social liability ratio</td>
</tr>
<tr>
<td>SME</td>
<td>Small and medium enterprise</td>
</tr>
<tr>
<td>SOE</td>
<td>State-owned enterprise</td>
</tr>
<tr>
<td>SPC</td>
<td>State Planning Commission</td>
</tr>
<tr>
<td>SVW</td>
<td>Shanghai Volkswagen</td>
</tr>
<tr>
<td>TFP</td>
<td>Total factor productivity</td>
</tr>
<tr>
<td>TVE</td>
<td>Township and village enterprise</td>
</tr>
<tr>
<td>UCC</td>
<td>Urban Credit Cooperative</td>
</tr>
<tr>
<td>UNCTAD</td>
<td>United Nations Conference on Trade and Development</td>
</tr>
<tr>
<td>WFIE</td>
<td>Wholly owned foreign-invested enterprise</td>
</tr>
<tr>
<td>WTO</td>
<td>World Trade Organization</td>
</tr>
</tbody>
</table>
1

Introduction

In a *New York Times* article entitled, “Funny, I Moved to Beijing and Wound Up in Pleasantville,” Elisabeth Rosenthal, *Times* reporter in China, provides a humorous account of a typical weekend outing in Beijing. She describes driving her kids to a soccer game in a sports-utility vehicle (most probably made by Beijing Jeep, a joint venture, or JV, with DaimlerChrysler), loading up on toilet paper supplies at Price Smart, stopping by one of the over forty McDonald’s in Beijing for a Big Mac, and Dairy Queen or Baskin-Robbins for a sundae. She writes, “So this is what the Communist Party means by ‘socialism with Chinese characteristics’! But isn’t this what it’s like in Des Moines?”

To elevate – or, depending on one’s view, to denigrate – Beijing all the way to Des Moines is arguably a sign of one of the hallmark events in modern times: China’s integration into the world economy. Foreign firms, either singly or as JVs with Chinese firms, have established a ubiquitous presence in China. Rosenthal could also have mentioned that on China’s congested streets, the indisputable king of the road is the Santana, a sedan with a 1970s’ look and a 1980s’ engine design. The Santana is assembled in Shanghai by a JV with Volkswagen. In 1998, for every 100 passenger cars sold in China, forty-eight were Santanas. Coca-Cola and Pepsi-Cola account for a growing share of China’s soft drink market; the top three brands of cellular phones are all foreign: Nokia, Ericsson, and Motorola. Motorola’s 100 percent subsidiary in Tianjin alone accounted for 50 percent of cellular phone sales and 70 percent of the pager market in the mid-1990s (Wang 1997).

The dominance of these large Western multinational corporations (MNCs) in technologically sophisticated and capital-intensive industries, and in consumer product markets characterized by substantial advertising expenditures,

---

1 This is from Rosenthal (1998).
2 Reported in China Automotive Technology Research Center (1999).
is relatively easy to explain. Typically, MNCs have dominant positions in these areas, not only in China but also in many other countries, because of their deep technological and capital advantages. Such “Des Moinesization” garners more press attention and, during the rounds of negotiations leading to China’s entry into the World Trade Organization (WTO), invited close political and policy scrutiny from both the Chinese and Western governments. But investments by large Western and Japanese MNCs in fact constituted only a small portion of total foreign direct investment (FDI) flows into China during much of the 1990s. A significant portion of FDI flows into China originated from investors of a very different stripe. They are small and medium enterprises (SMEs), and they operate simple and labor-intensive production and assembly processes. They are typically from China’s neighboring regions, such as Hong Kong, Macao, and Taiwan, which I refer to as ethnically Chinese economies (ECEs) in this book, but also from other countries as well. The foreign SMEs have built up huge capital positions in a number of Chinese industries and have acquired more substantial control over China’s export marketing channels to the world market compared with their presence in a number of other Asian countries.

Another issue that often gets lost in policy discussions on market access and regulatory and legal treatments of foreign firms operating in China is that China was already one of the most FDI-dependent economies in the world, even before its accession to the WTO in 2001. Beginning in the early 1990s, FDI rose rapidly, not only relative to FDI inflows into other countries but, more important, relative to investments undertaken by domestic firms, especially investments by domestic nonstate firms. The pervasive presence of FDI is sometimes found in rather surprising quarters. For example, in 1995 there were 432 foreign-invested enterprises (FIEs) engaged in ivory and jade carving and sculpturing.3 (FIEs refer to firms in China with a foreign equity stake of at least 25 percent.) In an industry in which the Chinese have had hundreds of years of practice and at which they are expected to excel, foreign firms held 88 percent of the equity ownership of these FIEs. Another little-noticed fact is that as FDI rose rapidly in the 1990s, contractual alliances with foreign firms – such as subcontracting operations run and operated by Chinese entrepreneurs on behalf of foreign firms – declined substantially in absolute terms.

This book sets out to explain these and other seemingly distinct patterns of FDI in China. In doing so, I make two claims. First, I take what can be termed a “demand perspective” on FDI. My argument is that a perspective that stresses the role of motivations and constraints of Chinese firms as driving forces behind FDI patterns yields rich insights. This contrasts with what can be termed as a

3 This refers to industry level no. 4311 in the Chinese Industry Classification Standard.
Introduction

“supply perspective” on FDI, which stresses the motivations and capabilities of foreign firms. The presumption is not that a supply perspective is unimportant; in a study on FDI, the importance of a supply perspective is assumed. However, two considerations warrant some special attention to a demand perspective. First, a demand perspective may be less obvious in certain FDI questions than a supply perspective. Second, as is evidenced later in this chapter, an important research question in this book is to explain the preponderance of an ownership arrangement — that is, FDI — over contractual arrangements in China’s labor-intensive, export-oriented, and perfectly competitive industries. From a supply perspective, this can be puzzling. A supply perspective would not predict the dominance of FDI over contractual arrangements (such as export processing and assembly operations). A demand perspective can resolve this puzzle.

My second claim follows from the first. Two institutional features of the Chinese economy shape the demand perspective on FDI: the political pecking order of Chinese firms and the fragmentation of the Chinese economy. I explain this claim more fully and explore its implications for FDI in the next chapter. Suffice it to mention here that the political pecking order favors, legally and financially, inefficient state-owned enterprises (SOEs) at the expense of efficient nonstate firms, especially truly private firms, and the economic fragmentation reduces domestic capital mobility across regions. The cumulative result is that domestic firms are less competitive than they would be otherwise. In this context, when the country opened up to FDI (but maintained restrictions on foreign debt and imports) in the early 1990s, FDI rose substantially. This is the gist of the argument in this book.

Such a line of research entails significant analytical and policy implications. Chinese officials and foreign business practitioners laud China’s large FDI inflows as one of the most celebrated achievements of the reform era. Institutions such as the World Bank have credited FDI as a main driving force behind China’s economic success.⁴ International rating agencies routinely use FDI flows as an important macroeconomic indicator to assess China’s creditworthiness. Academic researchers are equally enthusiastic about FDI flows into China. They tout the enormous benefits of FDI for China, such as technology transfer, the introduction of marketing know-how, and capital infusion.⁵ Much of the received wisdom is correct, but what has been missed is that FDI has brought about these benefits in China in a specific context: China’s financial and economic institutions have worked to reduce the ability of domestic firms, especially domestic private firms, to provide some of the same benefits brought about

---

⁴ See, e.g., World Bank (1997b).
⁵ Some of the writings are reviewed in the appendix to Chapter 2.
Selling China

by FDI. The central claim of the book is that FDI has come to play a substantial role in the Chinese economy because of systemic and pervasive discrimination against efficient and entrepreneurial domestic firms. This discrimination was not purposely instituted to benefit foreign firms; at least this was not a dominant consideration. It was instituted mainly to benefit the inefficient SOEs. As such, China’s large absorption of FDI is not necessarily a sign of the strengths of its economy; instead, it may be a sign of some rather substantial distortions.

I develop and substantiate this claim step by step in later chapters. The primary aim of this chapter is to lay out a number of empirical patterns of FDI in China. As much as possible, I place the Chinese patterns in a comparative perspective. Viewed in isolation, these patterns may not strike the analyst as unusual, but taken as a whole, they suggest that FDI in China may have been driven by different dynamics as compared with FDI developments in other countries.

The depiction of China’s FDI patterns below is fairly detailed because, simply put, the devil is in the details. In part because of the perception that the reasons for FDI inflows are obvious—such as a large and growing market, cheap labor, and so on—many of these patterns have not been presented or analyzed elsewhere in detail. Laying out these details here is the only way to convince the reader of the need for a new perspective. As will become evident, demonstrating the unusual FDI patterns in China is a central building block of my argument: If FDI patterns in China are unusual, it must be true that the underlying causes of FDI are unusual as well.

This chapter begins with a description of China’s FDI patterns. I then devote considerable space to a discussion of a number of data issues on China’s FDI, including what is known as “round-trip” FDI. This is followed by a presentation of some of the common explanations that may shed light on various aspects of China’s FDI patterns. The chapter ends with definitions of terms and an outline of the organizational structure of the remainder of the book.

FDI PATTERNS IN CHINA

Foreign investment is defined as “direct” when the investment gives rise to “foreign control” of domestic assets. Thus, according to the International Monetary Fund (IMF), FDI “is made to acquire a lasting interest in an enterprise operating in an economy, other than that of the investor, the investor’s purpose being to have an effective voice in the management of the enterprise.” In the United States, the Department of Commerce defines inward FDI when a foreign investor’s stake exceeds 10 percent. A 10 percent threshold is quite common among countries in the Organisation for Economic Co-operation and Development (OECD). Under this definition, if a foreign firm acquires more
Introduction

than 10 percent of a stake in a U.S. concern on the New York Stock Exchange, this capital inflow is credited to the FDI account in the balance of payments statistics, not to the portfolio account. In China, foreign equity capital inflows are classified as FDI only if they lead to a foreign equity stake at or above 25 percent. Thus, the Chinese set a more stringent threshold for FDI and for corporate controls.

The different statistical thresholds for FDI may impose some problems to compare the specific dollar amount of FDI between China and other countries, because the Chinese definition precludes those foreign investments that establish an equity stake of between 10 and 25 percent in a Chinese firm. Thus, the Chinese classification scheme understates China’s inward FDI. But conceptually, the higher FDI threshold in China in fact helps the analyst get to the heart of the FDI concept – that FDI is about foreign control of a domestic firm, not about the specific dollar amount of foreign capital. As Graham and Wada (2001) have noted, much of the inward FDI in the United States has financed acquisition of existing enterprises listed on the stock market, while the majority of China’s inward FDI has financed the establishment of new enterprises. Because these Chinese firms are not publicly traded corporations, foreigners need to acquire a greater equity stake to establish “an effective voice in the management of the enterprise.” In the following paragraphs, to the extent possible, I compare Chinese FDI patterns with those in other countries. Readers should bear in mind that my claim that Chinese FDI patterns appear to be distinct from those observed in other countries is based on cumulative and collective evidence on a host of dimensions, not just on one single dimension.

Five notable FDI patterns are substantially distinct from patterns observed in other countries. First, China’s reliance on FDI – relative to domestic investments, especially domestic investments made by nonstate firms – is very high. Second, the sharp rise in China’s reliance on FDI has been accompanied by a precipitous drop over time in contractual alliances, such as export processing and assembly, between foreign and domestic firms. Third, FIEs – firms funded by FDI – have achieved an important position in the Chinese economy. Their dominance in

---

6 A more detailed discussion of problems associated with the standard definition of FDI can be found in Graham and Krugman (1994).

7 Under the Chinese classification system, for example, most foreign purchases of China’s B shares are not counted as FDI because they usually amount to about 10 percent of the issuing firms’ equity. Ford purchased 20 percent of the B shares of Jiangling Motors, which would not count toward FDI by the Chinese definition (Ma 1995). (B shares are company shares on China’s two stock exchanges that are available to foreign investors.)

8 Graham and Wada (2001) equate the establishment of new enterprises in China with green-field investments. As I show in Chapter 5, many of the new enterprises in fact result from acquisitions, not green-field investments.
Selling China

China’s labor-intensive and export-oriented industries is far more substantial than their presence in a number of other Asian economies. Fourth, while FIEs are present in many industries in China, empirical evidence from other countries shows a high industry concentration. FIEs are also present in many regions of China, including interior and land-locked provinces that are far away from Hong Kong. Fifth, FDI projects in China are very small, and there is evidence that the parent firms making these investments are also very small, compared with other firms in the same home economy that did not make investments in China. Again, this is different from patterns observed in other countries, where it is the large firms that tend to invest abroad.

Taking these five patterns together suggests that FDI has played a more important role in the Chinese economy than many analysts have realized. The unique patterns indicate that the underlying dynamics of FDI in China may be different from those in other countries. In the following paragraphs I first present the empirical patterns of FDI in China and then show that some of these patterns cannot be fully accounted for by the existing explanations.

A Substantial Reliance on FDI

From 1979 to 2000, on a cumulative basis, China absorbed a total of $346.2 billion in FDI, as shown in Table 1.1.9 Most of the FDI occurred since 1992. Between 1992 and 2000, the cumulative FDI inflow amounted to $282.6 billion, or about 93 percent of the total FDI amount between 1979 and 2000. By any measure, China’s record of attracting FDI is impressive. During many years in the 1990s, China claimed to be the world’s second largest recipient of FDI, after only the United States. Between 1992 and 1999, FDI flows into China accounted for 8.2 percent of worldwide FDI and 26.3 percent of FDI going to developing countries.10

The absolute size of FDI, however, does not tell the whole story. The size of FDI flows should be gauged relative to the size of the host economy. The absolute size of FDI flows to the United States in 1996 was roughly twice as large as FDI flows to China, but the U.S. economy was seven times as large (on the basis of the official foreign exchange conversion) as that of China. In this sense, the United States was less “dependent” on FDI than China even though flows into the United States were much larger. A more useful measure is FDI

9 Unless otherwise noted, all the dollar figures in this book refer to U.S. dollar.
10 Data on global FDI flows and on FDI going to developing countries are from United Nations Conference on Trade and Development (2000).
Introduction

normalized by the economic size of the host country. This is a relative measure of FDI. By this measure, it is clear that China’s dependency on FDI is substantial.

A common measure of the relative size of FDI is the “FDI/capital formation ratio,” given by the amount of FDI inflows in one year divided by the total fixed asset investments made by foreign and domestic firms in the same year.11 (In the paragraphs below, I use the term FDI dependency to refer to this ratio.)

Column 3 of Table 1.1 presents three different measures of the relative FDI size during four periods in the 1980s and 1990s. The four periods represent different phases of continuous FDI liberalization, as briefly summarized in the table. Column 3a uses the fixed asset investments undertaken by all firms, including foreign firms, as the denominator. Column 3b includes only the fixed asset investments by nonstate firms, that is, collective firms, FIEs, and domestic private firms. Column 3c includes the fixed asset investments made by private firms and FIEs. One noticeable trend is the sharp rise in the FDI/capital formation ratio beginning in 1992. When we use the fixed asset investments undertaken by all firms, including FIEs, the ratio rose from 4.2 percent in 1991 to 7.5 percent in 1992. In 1994, the ratio reached 17.1 percent. Column 3b shows a more rapid increase in the FDI/capital formation ratio when FDI is normalized by investments made by nonstate firms.

SOEs account for a large portion of fixed asset investments. Since the investment activities of SOEs are heavily influenced by the government, it is more appropriate to compare the level of investment activities of foreign firms with that of nonstate domestic firms. Nonstate firms, including FIEs, are more market-driven and are subject to harder budget constraints compared with the SOEs. As the Hungarian economist Janos Kornai points out, SOEs are afflicted with an “investment hunger” and are prone to overinvesting regardless of the market demand for their products (Kornai 1980). Thus, it is more meaningful analytically to compare the investment behavior of FIEs with other nonstate firms. Between 1993 and 1997, FDI accounted for over 30 percent of the fixed asset investments made by nonstate firms in each year, and during the same

11 This measure, while commonly used in academic studies, is not without problems. Not all FDI goes to finance new equipment and plant investments. Some FDI flows finance the acquisition of existing assets. Thus, a portion of both the numerator and the denominator may measure different economic activities. (I thank Professor Huw Pill for pointing out this problem.) An additional problem is that this measure may systematically understate FDI dependency in some economies, while overstating FDI dependency in others. For example, the capital market is less active in Asia than it is in the United States. This may exaggerate FDI dependency in the United States where much of the FDI finances the acquisition of existing assets. For example, in the late 1990s, the FDI/capital formation ratio rose sharply in the United States. This must have been a result of the sharp rise in merger and acquisition activities, which may warrant using total stock market capitalization as the denominator.
Table 1.1 Various Measures of Foreign Capital Inflows to China, 1979–2000

<table>
<thead>
<tr>
<th>(1) Amount ($ billion)</th>
<th>(2) Shares of total foreign capital inflows (%)</th>
<th>(3) Actual FDI inflows as % shares of fixed asset investments by different types of firms, all including FIEs (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1a) Total foreign capital</td>
<td>(1b) Actual FDI inflows</td>
<td>(1c) Contractual alliances</td>
</tr>
<tr>
<td>1979–1982</td>
<td>12.5</td>
<td>1.17</td>
</tr>
<tr>
<td>1983</td>
<td>1.98</td>
<td>0.64</td>
</tr>
<tr>
<td>1984</td>
<td>2.71</td>
<td>1.26</td>
</tr>
<tr>
<td>1985</td>
<td>4.65</td>
<td>1.66</td>
</tr>
<tr>
<td>1986</td>
<td>7.26</td>
<td>1.87</td>
</tr>
<tr>
<td>1987</td>
<td>8.45</td>
<td>2.31</td>
</tr>
<tr>
<td>1988</td>
<td>10.2</td>
<td>3.19</td>
</tr>
<tr>
<td>1989</td>
<td>10.1</td>
<td>3.39</td>
</tr>
<tr>
<td>1990</td>
<td>10.3</td>
<td>3.49</td>
</tr>
<tr>
<td>1991</td>
<td>11.6</td>
<td>4.37</td>
</tr>
</tbody>
</table>

(1) FDI regime: Permitting FDI

(2) FDI regime: Selectively encouraging FDI
<table>
<thead>
<tr>
<th>Year</th>
<th>Total</th>
<th>Inflows</th>
<th>Nonstate</th>
<th>State</th>
<th>Collective</th>
<th>Private</th>
<th>Total</th>
<th>Inflows</th>
<th>Nonstate</th>
<th>State</th>
<th>Collective</th>
<th>Private</th>
<th>Total</th>
<th>Inflows</th>
<th>Nonstate</th>
<th>State</th>
<th>Collective</th>
<th>Private</th>
</tr>
</thead>
<tbody>
<tr>
<td>1992</td>
<td>19.2</td>
<td>11.0</td>
<td>0.29</td>
<td>57.3</td>
<td>1.5</td>
<td>23.5</td>
<td>–</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1993</td>
<td>38.9</td>
<td>27.5</td>
<td>0.26</td>
<td>70.6</td>
<td>0.7</td>
<td>12.1</td>
<td>30.8</td>
<td>56.0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1994</td>
<td>43.2</td>
<td>33.8</td>
<td>0.18</td>
<td>78.1</td>
<td>0.4</td>
<td>17.1</td>
<td>39.2</td>
<td>62.3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1995</td>
<td>48.1</td>
<td>37.5</td>
<td>0.29</td>
<td>78.0</td>
<td>0.6</td>
<td>15.7</td>
<td>34.4</td>
<td>53.7</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1996</td>
<td>54.8</td>
<td>41.7</td>
<td>0.41</td>
<td>76.1</td>
<td>0.7</td>
<td>15.1</td>
<td>31.8</td>
<td>47.8</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1997</td>
<td>64.4</td>
<td>45.3</td>
<td>1.47</td>
<td>70.3</td>
<td>2.3</td>
<td>15.0</td>
<td>31.7</td>
<td>46.9</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1998</td>
<td>58.6</td>
<td>45.5</td>
<td>1.47</td>
<td>77.6</td>
<td>2.5</td>
<td>13.3</td>
<td>28.9</td>
<td>42.6</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1999</td>
<td>52.7</td>
<td>40.3</td>
<td>1.52</td>
<td>76.6</td>
<td>2.9</td>
<td>11.2</td>
<td>24.0</td>
<td>34.9</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2000</td>
<td>59.4</td>
<td>40.7</td>
<td>1.71</td>
<td>68.6</td>
<td>2.9</td>
<td>10.2</td>
<td>20.5</td>
<td>29.0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*(3) FDI regime: Substantial FDI liberalization*

*(4) FDI regime: Streamlining FDI approvals and WTO agreement*

*Total includes foreign loans.*

*Actual FDI inflows refer to FDI inflows on a materialized basis.*

*Contractual alliances refer to activities such as asset leasing, compensation trade, and product processing and assembly between foreign and domestic firms. They correspond to “other investments” in Chinese statistical reporting before 1997. Since 1997 Chinese statistical authorities have included Chinese company share issues abroad in the “other investments” category. The data reported in this table exclude the company share issues abroad. Product processing and assembly account for almost all of this category of investments, 97.4 percent in 2000.*

*Fixed asset investments refer to purchases of new plants, property, and equipment by both domestic and foreign firms in a given year. All the ratios include investments by FIEs in the denominator. (3b): Nonstate fixed asset investments refer to total investments minus investments by SOEs. (3c): Private fixed asset investments refer to total investments minus investments by SOEs and collective firms.*

*– : Data not available.*

*Sources: State Statistical Bureau, Zhongguo tongji nianjian (China Statistical Yearbook), various years, and State Statistical Bureau, Zhongguo daiwai jingji tongji nianjian (China Foreign Economic Statistical Yearbook), various years.*
period, on average, FDI accounted for about 53 percent of the fixed asset investments made by domestic private firms and FIEs. There is no question that FDI is a significant source of investment financing in China.

Table 1.2 presents data on FDI/capital formation ratios in China and a number of other countries to provide a comparative perspective. The data are broken down by three periods: 1986–91, 1992–98, and 1999–2000. China’s FDI dependency varied during these three periods. Compared with other countries in the table, it was initially low in the first period; it rose to a very high level in the second period; and it began to decline to a moderately high level in the third period.

Between 1992 and 1998, on average, FDI flows into China accounted for about 13 percent of the gross capital formation of all firms annually. This ratio is one of the highest among the countries in the table, even compared with countries traditionally considered to be very FDI-dependent, such as countries in Southeast Asia. As pointed out earlier, even though the United States attracted a greater amount of FDI, the relative importance of FDI in the United States, at 6.9 percent during the 1992–98 period, was far smaller than it was in China. Compared with other Asian economies, China was less dependent on FDI in the 1980s, but its FDI dependency was among the highest in the region in the 1990s. China’s FDI/capital formation ratio during the 1992–98 period was lower than that in Singapore and Malaysia, but much higher than that in Indonesia, Thailand, and the Philippines. The standard wisdom is that China is more similar to the Southeast Asian countries than it is to Korea, Taiwan, and Japan in terms of FDI dependency. That is true, but in fact China was among the most highly FDI-dependent economies in Asia during much of the 1990s. This is also the case if one uses gross domestic product (GDP), not fixed asset investment, to normalize FDI inflows. (China’s FDI/GDP ratio is high whether one uses the

---

12 This “standard wisdom” was represented to me by one of the anonymous readers for Cambridge University Press.

13 Urata (2001) presents the FDI inflow/GDP ratios for nine Asian economies (China, Hong Kong, Korea, Taiwan, Indonesia, Malaysia, the Philippines, Singapore, and Thailand) between 1986 and 1997. From 1986 to 1991, China ranked between number four and number seven among these nine economies. From 1992 to 1997, China consistently ranked either as number two or number three most dependent on FDI, behind Singapore and, sometimes, Malaysia. Take 1995 as an example. In that year, China’s FDI/GDP ratio was 5.1 percent, compared with 2.2 percent for Indonesia, 2.0 percent for the Philippines, and 1.2 percent for Thailand. (It was 4.8 percent for Malaysia and 8.5 percent for Singapore.) The choice of 1995 was not arbitrary. Because FDI flows can fluctuate more than GDP, I chose a medium ratio for China rather than either the highest or the lowest ratio. In 1993 and 1994, China’s FDI/GDP ratio was high, at 6.4 percent and 6.2 percent, respectively, compared with 4.9 percent in 1997. The year 1997 probably should not be used either, because the Asian financial crisis might have adversely affected FDI flows into the Southeast Asian countries. The FDI/GDP ratios are from Urata (2001).
Introduction

official exchange rate or the purchasing power parity rate.\textsuperscript{14} The claim that China is highly dependent on FDI does not at all hinge on benchmarking China against traditionally small recipients of FDI, such as Japan and Korea.\textsuperscript{15}

China’s FDI dependency, in a comparative perspective, is all the more striking if one takes into account the substantial investment roles of SOEs in China. As already pointed out, SOEs – subject to softer budget constraints compared with nonstate firms – are prone to overinvest. It is reasonable to expect a country with substantial public sector investments to have a lower FDI/capital formation ratio. For this reason, China’s high FDI/capital formation ratio – inclusive of investments by SOEs – compared with other countries with a far smaller public sector is powerful evidence of the substantial role of FDI in the Chinese economy. Another way to illustrate the same point is to derive a FDI/capital formation ratio net of investments by public sector entities. This is indicated by the bracketed numbers in column 1b of Table 1.2. By this measure, China’s FDI dependency was the second highest among all the countries represented in the table. During the 1992–98 period, China’s FDI/capital formation ratio net of public sector investments was 27.9 percent, after Singapore (30.3 percent) but higher than Malaysia (24.3 percent). (That Singapore, Malaysia, and China have a very high FDI dependency ratio is not accidental. I return to this issue in Chapter 7.)

In the 1999–2000 period, shown in column (1c) of Table 1.2, China’s FDI dependency declined compared with many countries in the table. A major factor was the rapid and sudden surge in FDI dependency among the advanced

\textsuperscript{14} As is well known, purchasing power parity (PPP) exchange rates can vary from official exchange rates by a wide margin and, depending on which exchange rates are adopted, the FDI dependency ratios will differ dramatically. An additional source of complications is that extremely different purchasing power parity exchange rates exist. Even when a purchasing power parity rate on the high end is used, China is still more dependent on FDI than many other countries, albeit at a smaller magnitude of difference. The FDI/PPP-based GNP ratio in 1994 was 0.78 percent for Asia as a whole and 0.81 percent for the industrial countries. At the same time, it was 1.13 percent for China, thus making China about as dependent on FDI as Canada (1.25 percent), France (1.46 percent), Australia (1.46 percent), and Portugal (1.07 percent). It was more dependent on FDI than the United States (0.69 percent), Japan (0.03 percent), Italy (0.21 percent), and the United Kingdom (0.98 percent). These data are reported in Li and Lian (1999).

\textsuperscript{15} Other researchers have also noted China’s high FDI dependency. Françoise Lemoine (2000), in a detailed descriptive analysis of China’s FDI, makes the following remark: “FDI capital stock represented 25 percent of China’s GDP in 1998, a ratio almost comparable to that existing in smaller economies which were opened to international capital flows long before China….“ Lemoine points out that on a per capita basis, China’s FDI inflows appear to be low, compared with other Asian countries. In 1998, FDI stock per capita in China was only $160. This measure is highly questionable. On a per capita basis, China is low on many other fronts. To illustrate this point, by this measure war-torn Angola would be considered more attractive than China as an FDI host. In 1999, FDI stock per capita in that country was $537.
Table 1.2 Relative FDI Size, Macroeconomic Developments, and Business Environment, Various Years

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>China</td>
<td>2.9 (8.6)</td>
<td>13.1 (27.9)</td>
<td>10.6 (21.5)</td>
<td>41.8</td>
<td>2.7</td>
<td>41 (out of 60 countries)</td>
</tr>
<tr>
<td>Philippines</td>
<td>6.6 (8.1)</td>
<td>8.3 (10.2)</td>
<td>7.6 (9.4)</td>
<td>15.5</td>
<td>−8.5</td>
<td>40 (out of 60 countries)</td>
</tr>
<tr>
<td>Indonesia</td>
<td>2.3 (3.4)</td>
<td>5.4 (8.9)</td>
<td>−13.7 (−22.7)</td>
<td>33.5</td>
<td>0.0</td>
<td>37 (out of 52 countries)</td>
</tr>
<tr>
<td>Thailand</td>
<td>5.5 (6.5)</td>
<td>5.6 (7.2)</td>
<td>11.9 (17.6)</td>
<td>38.0</td>
<td>−6.3</td>
<td>42 (out of 52 countries)</td>
</tr>
<tr>
<td>Malaysia</td>
<td>14.7 (22.8)</td>
<td>16.9 (24.3)</td>
<td>22.1 (30.3)</td>
<td>40.0</td>
<td>−0.8</td>
<td>43 (out of 52 countries)</td>
</tr>
<tr>
<td>Taiwan</td>
<td>3.6 (4.3)</td>
<td>2.2 (2.7)</td>
<td>11.8 (14.2)</td>
<td>25.6&lt;sup&gt;a&lt;/sup&gt;</td>
<td>−2.7&lt;sup&gt;a&lt;/sup&gt;</td>
<td>39 (out of 52 countries)</td>
</tr>
<tr>
<td>Korea</td>
<td>1.3 (1.6)</td>
<td>1.2 (2.0)</td>
<td>8.1 (10.7)</td>
<td>35.7</td>
<td>−1.8</td>
<td>46 (out of 52 countries)</td>
</tr>
<tr>
<td>Singapore</td>
<td>37.6 (49.7)</td>
<td>22.9 (30.3)</td>
<td>24.2 (32)</td>
<td>50.9</td>
<td>16.4</td>
<td>30 (out of 52 countries)</td>
</tr>
<tr>
<td>Brazil</td>
<td>1.6 (2.1)</td>
<td>7.7 (9.0)</td>
<td>27.6 (33.9)</td>
<td>20.1</td>
<td>−0.8</td>
<td>29 (out of 52 countries)</td>
</tr>
<tr>
<td>Mexico</td>
<td>8.3 (10.9)</td>
<td>13.5 (17.1)</td>
<td>10.7 (15.6)</td>
<td>21.4</td>
<td>0.5</td>
<td>28 (out of 52 countries)</td>
</tr>
</tbody>
</table>