Why More May Be Actually Less: Financial Biases and Labor-Intensive FDI in China

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Abstract

The fact that China is the second largest recipient of FDI in the world has been heralded by economists and government officials alike as one of the crowning achievements of Chinese economy. This paper questions this perspective. The paper focuses on FDI from ethnically Chinese economies (ECEs), which has financed China’s labor-intensive industries and its export growth. First, the paper shows that the conventional wisdom about why China attracts so much labor-intensive FDI is flawed. Second, the paper offers what might be called an institutional foundation argument to explain the phenomenon of China’s labor-intensive FDI. Labor-intensive FDI, according to this argument, is fundamentally driven by a political pecking order of firms in China that systematically disadvantages indigenous private firms both financially and legally. Labor-intensive FDI rises to alleviate the credit constraints afflicting Chinese private firms as efficient private entrepreneurs have no choice but to cede their claims on future cashflows to raise financing for their businesses.
Why More May Be Actually Less: Financial Bias and Labor-Intensive FDI in China

According to a study by the Organisation of Economic Cooperation and Development (OECD), during the twenty years from 1979 to 1999, China absorbed a total of $306 billion in foreign direct investment (FDI). This is second only to the United States. During this period, FDI flows into China accounted for 10 percent of worldwide FDI and 30 percent of FDI going to developing countries. Of the huge FDI inflows into China, it is estimated that about 50 percent of the inflows have financed production of labor-intensive and export-oriented products (Tseng and Zebregs 2002). Another indication of the importance of labor-intensive FDI in China’s FDI story is the heavy composition of firms based in three ethnically Chinese economies (ECEs)—Hong Kong, Macao and Taiwan. These firms typically invest in low-tech and labor-intensive industries. In 1992, Hong Kong investments alone accounted for 68 percent of China's total FDI inflows. Although this share has declined since, Hong Kong is still the single most important investor in China. In 1998, Hong Kong’s investment was about 40 percent of China’s total FDI flows and the three ECEs together supplied just under 50 percent of Chinese FDI.

Chinese government, international organizations, credit risk agencies and academic analysts take this huge FDI absorption as a badge of honor. The same OECD report cited above attributes the strong FDI flows into China to the fact that China “has had exceptional market potential and its economy has been growing rapidly.” World Bank credited labor-intensive FDI as a main driver of China’s economic success and export growth. Credit rating agencies routinely use FDI flows as an important indicator to assess China’s macroeconomic health. Standard & Poor’s, for example, in its most recent report on China’s credit rating, cited “strong inflows of foreign direct investments” as one of the factors to justify a triple-B long-term and A-3 short-term foreign currency sovereign and senior unsecured credit ratings on the PRC. Scholars also hail labor-intensive FDI as bringing the much needed know-how for China to produce products that satisfy the exacting fashion and quality requirements of international markets.¹

The argument in this chapter is that this perspective on China’s FDI inflows is only partially correct at best and at worst is missing some of the more important institutional drivers of FDI inflows. The institutional drivers are particularly important in explaining the FDI inflows that have financed

¹ For example, Richard Pomfret, when arguing for the benefits of low-tech FDI from Hong Kong and Taiwan, comments (Pomfret 1991, p. 135): “What was missing in PRC, rather than capital, was the knowledge of how to make bags or teddy bears or wind-up pandas or cigarette lighters in attractive designs to reasonable quality standards and of how to market them overseas.”
China’s production of labor-intensive and often export-oriented products. I have examined a whole range of institutional drivers of China’s FDI inflows elsewhere; here let me focus on the institutional factor that is closely linked to the theme of this volume—the operation of China’s financial system.

The basic argument runs as follows. First, labor-intensive FDI is in fact more of an anomaly than a normal business practice in many conceptual and empirical settings. Second, one of the important reasons why labor-intensive FDI materializes on a scale one witnesses in China is that labor-intensive FDI is one of the few vehicles for private entrepreneurs to raise financing for their businesses. Until quite recently, Chinese private entrepreneurs’ access to the vast pool of savings assets in the banking system was extremely restricted. This financing bias renders a normal business practice in labor-intensive industries—contract production carried out on behalf of foreign buyers—infeasible and has created a huge demand for an equity financing mechanism, which was FDI.

There are two important implications of this way of analyzing China’s labor-intensive FDI. The first is that labor-intensive FDI is really a substitute for contract production. The second claim is that contract production, while perfectly feasible on technical grounds in labor-intensive industries, is less feasible when there is a financial bias against local private producers. Viewed this way, labor-intensive FDI should be properly cast as an outcome of the poor efficiencies of China’s financial system, rather than as a result of low labor costs, a commonly cited driver of this type of FDI.

This chapter begins with a description of the financial bias against private firms in China. Many of the facts here are well-known and are discussed in great detail elsewhere in this book. The purpose here is to stress the important institutional context in which labor-intensive FDI inflows have occurred in China—that labor-intensive FDI has materialized amidst a severe financial repression of local private firms. I will also contrast this argument with a number of alternative hypotheses—drawn mainly from literature on business studies—and argue that these hypotheses are less well suited to explaining labor-intensive FDI than the financial bias argument. The third section presents data to illustrate the effect of financial bias on labor-intensive FDI. The final section concludes with some broad policy implications.

Financial bias in China and labor-intensive FDI

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2 See (Huang 2003).
Ownership vis-à-vis contractual arrangements

When discussing FDI, it is worth emphasizing that FDI is an ownership arrangement. Foreign investment is most commonly defined as “direct” when the investment gives rise to “foreign control” of domestic assets. According to 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. In China, the legal and definitional hurdle is set at a higher level—25 percent. As such, FDI is simply one of many forms of cross-border relationships between a foreign firm and a domestic firm. Other relationships—or commonly called alliances in business studies—include subcontracting (such as export processing), licensing, and asset leasing, etc., which are fundamentally contractual in nature. Analyzing FDI is thus equivalent to analyzing reasons why contract production is unviable.

Another relevant point is that contract production is entirely feasible as a form of cross-border transactions in labor-intensive industries and that there is no technical reason why foreign buyers are naturally inclined to substitute contract production with direct management control that comes with FDI. Labor-intensive industries are perfectly competitive and foreign buyers incur little or no switching costs when changing their sources of supplies. Contracts are easily to write and easy to break in this business and contracting parties seldom rely on an outside party such as a court to settle legal disputes. The institutional requirements on contractual enforcements in labor-intensive industries are not exacting. Indeed, contract production has flourished in poor legal settings, such as Korea and Taiwan in the 1960s and 1970s.3

Yet, for some reason, labor-intensive FDI completely dominates the cross-border transactions in China. One indicator is the substantial control by foreign firms of China’s export channels. As of 1995, FIEs controlled 51 percent of China’s manufactured exports, which far exceeded the exports by FIEs in Taiwan. (In Taiwan in 1980, the comparable figure was 21 percent). Another indicator is the substitution

3 Beginning in the late 1970s, scholars began to analyze what is known as third-world FDI, much of which materialized in labor-intensive industries. There is a wealth of empirical studies that challenges the validity of one of the main ideas in the established literature on third-world FDI—that labor-intensive FDI is a more effective know-how transfer mechanism compared to contract production. These detailed studies show that contract production serves as an effective mechanism to transfer know-how, impose quality control, and provide marketing access, etc. See, for example, (Chu 1997), (Deardorff and Djankov 2000), (Hsing 1993), (Rabellotti 1995), and (Schmitz 1995).
of exports by the Chinese-owned processing operations with exports by FIEs. In 1992, export-processing firms still accounted for a larger share of Chinese exports than FIEs; in 1996, within only four years, their share declined to 16 percent while the share of FIE exports rose to 34 percent. The substitution of market transaction mechanisms such as export processing with non-market transactions through intra-affiliate cross-border sales was even more substantial in some provinces. In Fujian province, in 1988, FIE exports to export processing ratio was 3.64; it rose sharply to 22.45 in 1990 and then to 45.47 in 1992. In Guangdong province, the FIE exports rose less dramatically but still far faster than export processing. In the early 1990s, FIE exports were about seven times the value of export processing.

**Financial biases and labor-intensive FDI**

For contract production to work, a local producer needs to have access to capital, for example, working capital to pay workers and to purchase production materials. A product contract is a promise of revenue, but it is not revenue itself. Many expenses have to be incurred before the product is produced and delivered in exchange for payment. The ability of a domestic entrepreneur to obtain financing is a key factor in making a contractual arrangement feasible. According to a study on Taiwan’s footwear industry by Brian Levy, a World Bank economist, many of the Taiwanese producers in the industry were doing contract work for Japanese trading corporations, which controlled access to Western markets in the 1960s and 1970s (in the same way Hong Kong and Taiwanese firms do today). Japanese firms did not provide any capital, as Levy explains, (Levy 1991, p. 156, fn10)

There was little need for the Japanese to provide technical or financial support: the technology of footwear production is simple; the initial investment requirements are small; and, ..., *working capital was made available automatically in both Taiwan and Korea to exporters.* (Italic added by the author.)

The linkage between financial bias and labor-intensive FDI is thus twofold. On the one hand, the financial bias against domestic private firms creates difficulties for them to structure and execute product contracts with foreign buyers, creating a situation in which foreign firms are motivated to supply the financing instead. When foreign firms choose extend equity financing, rather than debt financing, to the

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4 (Huang 2003) reports detailed data on export shares of FIEs for China and a number of other Asian economies.

5 *Statistical Yearbooks* for Fujian and Guangdong, various issues.
domestic private firms, then this type of financing becomes FDI. The other linkage is that domestic firms may be too financially constrained to grow and expand their production because of their lack of easy access to capital. In this situation, domestic private firms, even those endowed with skills, may be to uncompetitive with better-financed FIEs. Over a period of time, less competitive domestic private firms lose out to more competitive FIEs, thus increasing the share of exports by FIEs in the process.

There is a substantial body of evidence that domestic private firms in China are severely financially constrained. First, there is the lending bias against private firms in favor of SOEs, as a number of researchers have pointed out. The lending bias in favor of SOEs is in part a policy choice the authorities have made to commit massive financial resources to the state sector and in part it is rooted in the way the Chinese financial institutions operate. Until 1998, the four big state-owned commercial banks, which control most of the banking assets, were specifically instructed to lend to SOEs only (as well as to FIEs). As an indication, the lending to the non-state firms by the four commercial banks remained a miniscule portion of their loan portfolio. In 1996, of the new loans extended, 3 percent went to urban collective firms and only 0.1 percent went to the purely private enterprises. As a comparison, FIEs accounted for about 3 percent of the new lending from the commercial banks in the same year. Although the lending bias against private firms has declined over the years, it is still a substantial constraint on the operation and expansion of domestic private firms.

Like bank credits, foreign exchange is a financial resource a firm needs in its production. The special nature of foreign exchange, however, warrants some emphasis here because labor-intensive FDI plays a major role of alleviating the foreign exchange constraints of the private firms. Even more than bank credits, the allocation of foreign exchange has been historically implemented on the basis of the political pecking order in favor of SOEs. Survey data suggest that SOEs have been the overwhelming beneficiaries of an administrative allocation of foreign exchange. According to a study based on 1,966 firms in Jiangsu province, between 1984 and 1988 of 1,890 turnkey projects, SOEs accounted for 934 of them; collective enterprises, 735, and rest by FIEs and private firms. This comparison of absolute numbers of the turnkey projects between SOEs and non-state firms is a bit misleading because SOEs were fewer in number than non-state firms. When measured against the ratio of the SOEs with turnkey

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6 There are complicated reasons why foreign firms may choose to extend equity rather than debt financing. The main reason is that the domestic private firms are not secure in their legal status, which creates difficulties for debt financing.

7 The phenomenon of a lending bias on the part of the Chinese banking system in favor of SOEs has been widely documented. See (McKinnon 1994 ) and (Lardy 1998).
importation programs to the entire SOE population, SOEs stood out even more as the beneficiaries. The ratio of firms with turnkey projects to their entire population was 19 percent for the SOEs and only 1.73 percent for the collective firms [He Baoshan, 1995 #1854, pp. 225-227]. This policy bias in favor of SOEs persisted well into the 1990s. According to a 1995 survey, 25 percent of sampled SOEs imported technology from abroad; as did 18.4 percent of collective firms. However, only 12.5 percent of private firms reported having imported technology from abroad.

Along with the lending bias, there has also been a severe legal bias against domestic private firms. This legal bias reinforces the financial bias in that it makes it harder for private firms to collateralize their assets to obtain loans or it makes lending institutions more wary of extending loans to a firm with an insecure legal status. Until 1988, there was no Constitutional recognition of the property rights of private firms. The Article 11 of the 1982 Constitution only acknowledged the property rights of individual businesses—defined as self-employed family businesses. The conspicuous silence on the property rights of private firms stemmed from an ideological consideration. Since private firms were defined as those with more than eight hired employees, their operations raised the specter of exploitation by private capital owners. In 1988, Article 11 was amended to include a clause that the state permitted private firms and that the state was to protect their “lawful rights and interests.” However, the amended article reserved the right of the state to exercise “guidance, supervision and control over the private sector of the economy.” As if the vested power of the state to supervise the private sector was not sufficient, the amendment also carefully subordinated the private sector to “a supplement to the socialist public economy.”8 This phrase justified the political pecking order firmly on constitutional grounds. Only in March 1999, did the Chinese Constitution acknowledge the private sector to be an integral part of the Chinese economy and confer an equal status on private firms as on other firms. Private economy is now a “component” of rather than a supplement to Chinese economy.9

To put this shoddy legal treatment in perspective, one can compare the legal treatment of private firms with that of FIEs. China’s current Constitution, adopted in 1982, only six years after the Cultural Revolution, clarified and offered protection to the legal status of foreign enterprises operating in China (Article 18). Foreign enterprises were permitted “to invest in China and to enter into various forms of economic cooperation with Chinese enterprises and other Chinese economic organizations ….” Article 18 also swore to protect their “lawful rights and interests.” Thus from the very beginning of economic

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8 The text of 1982 Constitution and the 1988 amendment is found in (1994).

9 See [Anonymous, 1999 #2024].
reforms, FIEs were accorded a superior legal status as compared with the private firms despite the fact that FIEs, theoretically at least, could be 99 percent owned by foreign—and private—investors.

The overall impact of the legal and financial biases is that truly private firms in China have not developed and matured to an extent that one might have expected in an economy that has experienced a double-digit growth rate for almost twenty years. A truly private firm is one whose control rights are private. In the Chinese official classification such a firm is referred to as an “individually-owned” or a “privately-operated” firm.\(^\text{10}\) Although the size of indigenous private sector—defined as the sum of individually-owned, private and jointly-owned, and privately-controlled shareholding enterprises—has grown rapidly between 1994 (15.5 percent) and 1998 (25.1 percent), the most ideologically suspect private firms are extremely small. In 1998, they only accounted for 0.22 percent of total GIVO, compared to 14.9 percent by the FIEs.\(^\text{11}\)

**Statistical evidence: Garment industry**

A good place to empirically demonstrate the argument that credit and other constraints have motivated Chinese private firms to seek out FDI is garment industry. A number of attributes of garment industry make the industry an appropriate test of our institutional foundation argument. First, the garment firms employ simple technology and production processes. Typically a couple of sewing and knitting machines would be sufficient to start a business. Proprietary assets such as patents and sophisticated organizational and managerial know-how are not defining characteristics of this industry and the rationale for FDI associated with transferring proprietary or firm-specific know-how does not readily apply here. To be sure, there are situations in which brand names are involved but it is important to point out that

\(^{10}\) The distinction between an individually-owned enterprise and a privately-owned enterprise is that the former does have hired labor while the latter does. Technically speaking, an individually-owned enterprise is defined as self-employed business with no more than eight hired employees. A privately-operated firm has more than eight employees and as such is considered more ideologically suspect. That the Chinese state chose the number eight to distinguish between an ideologically acceptable private firm and an ideologically suspect private firm is a testimony of the degree to which the Chinese regime is still committed to communism as an ideology. The number came from a hypothetical example which Karl Marx used in *Das Kapital* to illustrate how capital owners could extract surplus value from hired labor. For a detailed illustration of ideological commitment by the Chinese state, see (Huang 2000).

\(^{11}\) In 1994, private firms accounted for 1.15 percent but the decline is most likely due to legal re-registration by private firms into shareholding enterprises.
even in those facilities which involve premium brand names cross-border contract production is both theoretically feasible and is observed empirically.

Second, there is no a priori reason why firms would naturally prefer an ownership arrangement to a contractual arrangement. Garment industry is perfectly competitive and those factors that theoretically give rise to hold-up problems and opportunism are absent here. Cross-border contractual arrangements—such as export processing—are widely adopted and have proven successful in raising the export capabilities of host nations. Third, in this industry, as in every other industry in the Chinese economy, the political pecking order in favor of SOEs is present. In particular, firms high on the political pecking order have an advantageous access to a critical resource for successfully engaging in export production—foreign exchange, compared to the lower-tiered firms. If the institutional foundation argument is correct, then one should see a greater appetite for FDI among those lowered-tiered firms on the political pecking order, all else being equal.

**FDI in China’s garment industry**

By 1995, FIEs had already established a formidable position in this industry. FIEs producing garments and fiber products accounted for 61 percent of China’s exports and 51 percent of the sales. Foreign firms were the majority shareholders of these FIEs. In 1995, foreign equity share of these FIEs was 63.3 percent on average. FIEs in an affiliated industry, leather and related products, were similarly dominant. In 1995, they accounted for 73.2 percent of the exports and 54.1 percent of the sales. Foreign equity share of these firms was 63.9 percent.  

To put these numbers in perspective, in 1995, FIEs exported 49.1 billion yuan of garment products, compared to 28.5 billion yuan by collective firms and 28.6 billion yuan by village enterprises in the same year. (SOEs, in contrast, exported 3.2 billion yuan.) Not only do FIEs export more than indigenously-owned firms, they have a far more significant control over exporting channels than did FIEs in the Taiwanese economy in the 1970s, when Taiwan also heavily courted labor-intensive FDI. In 1976, FIEs accounted for 22.1 percent of Taiwanese garment exports, about one-third of export share by the Chinese FIEs (1985).

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12 From (State Statistical Bureau 1996).
13 The 1995 data come from (Office of Third Industrial Census 1997).
14 It should be noted that the fact that Chinese FIEs account for a greater share of garment exports than Taiwanese FIEs is not because of their greater export orientation. In fact, Taiwanese garment FIEs were more export-oriented than Chinese FIEs. On average, export/sale ratio for the Taiwanese garment FIEs was 83.7 percent, compared to 71.7 percent for the Chinese FIEs.
Viability of contract production

In garment industry, contract production is eminently viable on theoretical grounds and is widely adopted in actual business practices. Many developing countries relied on contract production to successfully develop their production capabilities and to acquire access to international markets. Referring to cross-border contract production as outward processing (OP), two German economists, Petra Naujoks and Klaus-Dieter Schmidt, studied OP practices in the garment industry and drew the following conclusion: “a subcontractor firm gets the opportunity to climb on a running tandem. The success story of labour-intensive industries in many developing countries cannot be written without OP.”15

In a labor-intensive and technologically-simple industry, subcontracting yields many of the same benefits as equity investments and it is not afflicted with those problems that give rise to hold-up problems and opportunistic behavior, scenarios economists theorize to warrant ownership arrangements. Access to overseas markets and access to technical and managerial know-how accompany this form of cross-border alliances. In some situations, from the point of view of a foreign firm, the benefits of subcontracting can exceed those associated with an equity investment. In an equity investment arrangement, the investor is stuck with one group of managers and workers and this might be undesirable given the fast-changing nature of the garment business. In a contractual arrangement, a contractor often plays off one sub-contractor against another to extract the most favorable conditions.16 The built-in flexibility associated with a contractual arrangement holds a special appeal, especially considering the fact that many of the foreign investing firms in the garment line of business are fairly small. According to Kitty G. Dickson, an expert on garment industry, although contracting entails some loss of control as compared with direct manufacturing, in recent decades, contracting has become more popular and has grown relative to the use of direct manufacturing.17

Several factors mitigate against hold-up problems and opportunistic behavior in this industry. One is when a supplier does breach a contract, the contractor can turn to another supplier relatively quickly. One prominent characteristic of garment industry is clustering. Small producers tend to congregate. This is true everywhere. In the United States, for example, in the 1970s, 46.7 percent of textile and garment plants were located in Southeast and another 32.4 percent were located in the Mid-Atlantic states.18 Most of the Indian garment makers producing for export are located in a region called

15 From (Naujoks and Schmidt 1994).
16 See (Naujoks and Schmidt 1994).
17 From (Dickerson 1999).
18 Exhibit 10 from [Yoffie, 1990 #2168].
In China, three southern provinces, Guangdong, Jiangsu and Zhejiang accounted for about half of garment output as of the early 1990s. In Guangdong province alone, there were over 4,000 garment township and village enterprises (TVEs) located only miles away from Hong Kong.

Everywhere outside China, the industry consists of numerous indigenous mom-and-pop operations. In India, most of the garment makers ranged from 5 to 500 workers, competing fiercely with each other. It is a situation as close as one can get to the textbook version of perfect competition. Whereas garment design, especially involving high-fashion garment goods, requires sophisticated know-how and utilizes computer-aided devices, the manufacturing end is low-tech. It uses mature, standard and general-purpose manufacturing technology and capital equipment. Skill requirements are quite low and of a general type. Barring government-imposed restrictions, labor substitution is easy and swift. These characteristics—geographic clustering, the numeracy of firms, and general nature of requisite physical and human capital—have important implications for the nature of firm alliances in this industry. Switching suppliers is costless and no individual reneging garment maker can present much of a “hold-up problem.” There is no economically compelling reason why a garment retailer, or a retailer’s agent or a designer or a downstream manufacturer has to vertically integrate backward. According to Pankaj Ghemawat and Murali Patibandla, the geographic cluster “improved the flow of information about export markets and how to serve them, reduced fears about buyer/supplier holdup that might prevail in smaller number situations, and facilitated organized cooperative efforts in areas such as lobbying the government for infrastructure.” (Ghemawat and Patibandla 1999)

The organization of the industry is one mitigating factor against the theoretically derived “contract problems”; another factor is that contracting parties in this business have developed a set of long-standing practices to carefully manage relationships with suppliers and to minimize the effects of voluntary or involuntary contractual breach. A buyer typically does not book 100 percent capacity of a supplier; instead he distributes the order among a number of suppliers. In that case, if one supplier does not deliver, the supply disruption will be minimized. Furthermore, a buyer goes to a stable network of suppliers on a long-term basis. Reputational effects and repeated interactions would deter attempts to seek gains from engaging in short-term opportunism. The buyer/supplier practices in this business offer comfort not only to buyers but also to suppliers. Because fashions change quickly and often unpredictably, to minimize risks to suppliers, a buyer offers a mixture of fashion goods—say 30

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19 See (Ghemawat and Patibandla 1999).
percent—and staple goods (70 percent). That way, if fashion style changes suddenly, the financial costs to each supplier would be less as the costs would be shared among a group of suppliers.20

For all these reasons, garment buyers have no compelling reasons to shun contract production systematically in favor of ownership production. The choice between direct manufacturing and contractual sourcing will depend on conditions specific to a firm making such a decision. One indication of the prevalence of contract production is that it is even widespread in structuring buyer/supplier relations involving highly branded products as well. Levi is one of the best known brands in the garment industry in the world.21 Even for a firm with such a premium brand, in 1993 contractor sourcing accounted for more than 50 percent of its global output that bears its name (Katz 1997).22

Cross-border subcontracting in the garment industry not only serves the interests of contracting foreign firms but also producers in the host countries. A number of countries have gained capabilities and market access on the basis of subcontracting with foreign buyers, proving that equity arrangement is not the only viable method to develop export capabilities. Two countries, Turkey and India, have successfully developed competitive garment exports mainly on the basis of subcontracting with foreign buyers. In 1995, Turkey dislodged China as the number one garment exporter to European Union. As typical in other developing countries, several thousands of small firms dot the Turkish garment industry. Most of them are family-owned and are small. They do not perform design work but they bid on designs on an extremely competitive basis. These designs are usually accompanied by detailed specifications and

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20 For a fascinating insight into how sourcing operations in garment business work in practice, see a HBS case study and an interview with Victor Fung in Harvard Business Review. Fung is the CEO of Li & Fung, Hong Kong’s largest export trading company. In this interview, Fung describes the operation of a “virtual supply chain” across the globe and some of the specific practices the firm uses to ensure on-time delivery of quality products. For details, see (Magretta 1998).

21 Levi, according to the vice president for corporate marketing, epitomized “freedom, originality, youthfulness and the spirit of America.” Levi jeans are included in the permanent collection of the Smithsonian Institute. One study valued Levi brand at $4.8 billion, the top apparel brand in the world. Levi jeans are market leaders everywhere they are sold.

22 Other brand-name firms also rely heavily on outsourcing. OshKosh, a specialist in children clothes, sourced from between 30 and 50 “captive contractors” worldwide. Haggar Clothing Co, another high-brand producer, also sources heavily from facilities worldwide in addition to its directly-owned facilities in Dominican Republic and Mexico. See (Mona 1998) and (Winger 1998).
standards provided by the large retailers in Europe and the United States.\textsuperscript{23} Between the late 1980s and the mid-1990s, in rupee terms, Indian garment exports grew at an annual average rate of 26 percent. Seventy percent of India’s exports of cotton knitwear are accounted for by hundreds of indigenous firms, which range considerably in size, from five workers to 500. A typical exporter operates through a network of 10 to 20 subcontractors, each with an average size varying from 20 to 50 machines. The advantages of this arrangement are the built-in flexibility in handling large and small orders, low overhead costs and sharing of capital costs among numerous producers.\textsuperscript{24}

**Political pecking order in garment industry**

In China, garment industry is one of the few industries private entrepreneurs can enter into relatively freely. The important success factors in this industry are attentions to details, flexibility in production organization and operation, on-time delivery so as to suit different fashion trends or to seasonal needs. These are the kind of attributes best suited to small private firms but even in this industry in which private firms possess a clear competitive edge over SOEs, the political pecking order works against them. The most systematic form of discrimination has to do with allocation of foreign exchange. Research on Taiwanese garment exports shows that imported inputs constituted 70 percent of the production costs (Scott 1979, p. 358). For a firm to successfully engage in export production, it needs to have access to foreign exchange to purchase the exact types of fibers and cloth to meet the design and textural specifications of the foreign buyer at a low cost. The firm may also need to import machinery and equipment from abroad to fulfill an export contract.

Until recently, most of the non-state firms were not allowed to export directly and they had to go through the state-owned trading corporations. (FIEs, on the other hand, are granted automatic trading licenses within their own lines of business.) This is one of the most persistent complaints voiced by Chinese garment producers, as a report by the Office of International Trade Administration of the US

\textsuperscript{23} Amidst this group of firms, a few have become very large and they are now able to do their own design work. They have invested heavily in automation and they reduce the average age of their capital stock from twelve years in the early 1990s to five years in 1995. They are active participants in the major European trade shows. One firm, IPAS, directly contracts with Marks and Spencer and Tom Hilfiger. These large firms have begun to outsource labor-intensive components of their production in East Europe by entering subcontracting arrangements with producers there. For information on Turkish garment industry, see (Ghemawat and Baird 1998).

\textsuperscript{24} A study of Indian garment industry can be found in (Ghemawat and Patibandla 1999).
Department of Commerce noted.\textsuperscript{25} The requirement to export through state-owned foreign trade intermediaries is highly unfavorable to the small garment producers. First, the indirect trading system deprives them of access to market, fashion and production process information that is critical to a garment producer. Fashions and market conditions change quickly in this business and just-in-time access to information is vital. Second, the garment producers were paid in RMB, not in foreign exchange. Since during much of the reform era, foreign exchange was rationed by government bureaucracy to support import-substituting SOEs, private garment producers could not access foreign exchange even though they generated much of the foreign exchange earnings. Third, under the Chinese foreign exchange regulations, only those firms authorized to engage in foreign trade can open foreign exchange accounts at banks. This means that even if non-state garment producers can get hold of foreign exchange somehow, it would be very difficult for them to keep it. This was costly. During much of the 1980s and 1990s, the Chinese currency was over-valued. Thus non-state firms took a loss each time when they converted foreign exchange into RMB, rather than retaining it in a bank account.

The extent of distortions in China’s foreign exchange allocation in the garment industry can be demonstrated by comparing the share of non-state firms in export production with the number of non-state firms formally authorized to market their products directly to foreign buyers. In 1991, TVEs accounted for 77.45 percent of garment exports. But in 1992, out of tens of thousands of TVE garment makers, only 20 of them were allowed to trade directly with foreign firms. In 1993, the number was increased to 156. But in Guangdong province alone, there were 4,214 TVEs producing garments engaged in export production to varying degrees. In comparison, over 300 SOEs were permitted to trade directly with foreign firms despite the fact that they accounted for a tiny share of garment exports. In 1995, SOEs exported 3 billion yuan of their output whereas TVEs exported ten times as much, 26.27 billion yuan.\textsuperscript{26} Note that TVEs occupied a higher position on China’s political pecking order than private enterprises and

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\item As the report says, “Garment producers frequently complained that China’s indirect trading system, which forces garment sales to pass through authorized trading companies, distanced producers form their buyers and their markets. While a number of structural reforms have expanded the number of trading corporations authorized to conduct the garment trade, this limitation continues to inhibit the rapid transmission of market information to China’s producers. See (International Trade Administration 1993).
\item Data are reported in (Office of Third Industrial Census 1997).
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in all likelihood, purely private firms fared even worse than TVEs. Until 1999, private firms were categorically banned from exporting directly.  

**Statistical evidence**

In this section, we attempt to demonstrate the effect of the political pecking order of firms on FDI preferences. We rely on a database compiled by All China Marketing Research Corporation, a consulting arm of the Chinese Statistical Bureau (hitherto referred to as FIE database). The State Statistical Bureau compiled the FIE database as part of the nationwide third industrial census in 1995 but, unlike Third Industrial Census, the data in this database are at the firm level. The FIE database contains a number of performance and balance sheet indicators of all industrial FIEs operating in China as of December 31, 1995. As such, this database presents the most detailed and most disaggregated depiction of FIEs to date. To the best of my knowledge, it has never been analyzed either in China or in the West. The drawback, however, is that more recent data are not available in the same detail. This hampers an analysis of more recent trends.

A direct demonstration of our institutional foundation hypothesis would be to illustrate credit and regulatory constraints as parameters influencing choices between a joint venture arrangement and a subcontracting arrangement, both with a foreign firm. However, subcontracting data are simply not available at a sufficiently disaggregated level to perform such a test. Instead, we have firm-level data on foreign ownership of FIEs. Our statistical analysis uses foreign ownership as a measure of Chinese FDI preferences. The research strategy is to control those factors hypothesized to lead to stronger equity controls on the part of foreign firms and then to attribute the extent of foreign equity shares as an indicator of Chinese FDI preferences. All else being equal, the larger the foreign equity share in an FIE, the stronger the Chinese preference for FDI is said to be. Greater foreign equity ownership shares may arise, for example, from stronger bargaining positions on the part of the foreign firms on account of superior technology and marketing prowess, etc. Equivalently, greater foreign equity ownership can also

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27 Jean Oi, a political scientist at Stanford, documented instances in which township and village officials derisively referred to private firms as “underground snakes.” See (Oi 1999).

28 According to the brochure of the company, the company has the most up-to-date commercial information and a nation-wide data collection and analysis network. The FIE database was purchased from this consulting arm. There is no discernible bias in the data despite the commercial nature of this information source. The data are unprocessed and I have aggregated some of the data to an industry level to see if they are consistent with the data in Third Industrial Census. The two sources are consistent with each other.
arise because of weaker bargaining power of indigenous firms. A Chinese entrepreneur or firm can be in a weak bargaining position because it lacks alternative sources of financing, for example.  

Because foreign and domestic firms jointly make each FDI decision, it is necessary to control for those factors affecting FDI supply in order to demonstrate the demand-side dynamics. To accurately attribute observed foreign equity ownership to Chinese FDI preferences requires controlling for those factors that give rise to equity preferences on the part of foreign firms. The standard perspective among scholars of international business studies is that technological and organizational know-how, proprietary assets, and control of market channels lead to greater foreign ownership controls. Here the selection of the garment industry helps control for a number of these factors. Because the garment industry does not involve sophisticated technology and proprietary assets, any variance in foreign ownership controls is independent of these factors. Probably the most important factor that increases foreign bargaining power in the case of garment FDI is foreign controls of marketing. Fortunately, our database contains how much each firm exports. We can use the ratio of export to sales revenue as a measure of foreign marketing power. One can also argue that organizational know-how may also bear on the extent of foreign ownership controls. We use two variables as proxies of foreign organizational know-how. One is the capital intensity of the FIEs and the other is the size of the FIE employment. The underlying idea here is that when a joint venture is larger and more capital intensive and thus, presumably, more complex to manage, foreign investing firm has a bargaining advantage.

The other factor that needs to be controlled for has to do with any differences that may arise from the different technological endowments of firms and product variations. Fortunately, our research design helps impose controls on these differences. I deliberately choose a very narrow scope of the industry to ensure that both the human and physical capital deployed is as homogenous as possible. This is to control for the possible influences of different types of capital equipment and production processes on the equity structures of our firms. The data are disaggregated at a four-digit Chinese Standard of Industry Classification level (1810) and are confined to garment makers using fiber and cotton-based materials. Leather, fur, and feather-based clothing are excluded, as are footwear and headgear products. The making

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Equity ownership is often used as a measure of the bargaining dynamics between foreign and domestic firms. Scholars in international business studies have cautioned that it is an imperfect measure. The advantage of this variable is its relatively easy availability and uniformity across different firms. Ideally, one should collect information on all terms of arrangement, not just ownership splits. For a number of applications of using foreign equity ownership, see (Krobin 1987) and (Gomes-Casseres 1990).
of fiber and yarn is also excluded. This is a far more disaggregated treatment than many of the studies that use industry characteristics to estimate foreign bargaining power.

The empirical analysis imposes an additional set of controls. All the FIEs included in the analysis are joint ventures. This is to ensure that the equity structure of these firms is a function of joint negotiations and decisions between foreign and domestic firms. In business studies literature, the assumption is that the equity preferences of MNCs vary cross-nationally. American MNCs often demand more equity controls than, say, Japanese MNCs. To control for the country variations in equity preferences, I have limited the FIEs to those with investors from Hong Kong, Taiwan, and Macao, with the idea that ethnically Chinese investors may have similar equity preferences. Another factor that has been hypothesized to influence foreign ownership controls is the policy environment of the host country. A more liberal policy environment is associated with greater foreign ownership controls, while a more controlling one is associated with less foreign ownership controls. To control for any effects arising from changes in China’s FDI regulatory and policy environment, I have limited the FIEs to only those established between 1992 and 1995. During this period, the policy environment was more liberal than in the 1980s; this has the additional benefit of ensuring that the outcome we observe is driven by firm-level dynamics, rather than by policy and regulatory constraints. (For the garment industry, FDI controls are not a binding constraint as compared with those in, say, the automobile industry because the garment industry has never been a priority sector for the central government.) For the regression analysis, I have limited FIEs to those funded by either TVEs or private firms on the Chinese side, as the FIE database only provides clear ownership classifications for these two types of firms. Because of these controls and excluding those FIEs for which foreign equity data are unavailable, the maximum number of firms is reduced to 587 firms compared to a total of 5,373 garment FIEs contained in the FIE database. For this group of firms, the average employment size is 166 persons, the export/sale ratio is 55.6 percent, and foreign equity share is 52.4 percent.

Table 1 presents data on the possible influences on foreign ownership arising from firm size, capital intensity, and export propensity (as a proxy for foreign marketing controls)—standard variables in business studies literature. The FIEs are divided along three dimensions: employment size, fixed asset size per employee, and export propensity. The foreign equity ratios are ranked by these three categories. The hypothesis is that larger employment size, greater capital intensity, and greater export propensity tend to be associated with greater foreign ownership controls. Large firms and more capital-intensive firms

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30 It would be ideal to further divide this group of investors but data of further disaggregation are unavailable.
may require more sophisticated managerial and organizational know-how and foreign firms may be in a
stronger bargaining position when this type of FIEs is involved. For example, large firms may be more
vertically integrated and they may operate fabric weaving and finishing as well as garment fabrication
operations. Smaller firms may be just “cut-and-sew” operations, which do not require sophisticated
organizational management.

Table 1 here.

Empirical evidence does not bear out this hypothesis. Reading down the table, there is no positive
correlation between the size of employment and capital intensity on the one hand and foreign equity
shares on the other. If anything, the correlation is slightly negative. The foreign equity share is lower if
the average employment size of an FIE is between 108 and 197 persons than if the firm employs between
50 to 108 persons. Only when the firms are extremely large—those with more than 750 persons—does
foreign ownership increase substantially, to 74 percent, as compared to 52 percent at the next lower level
(between 197 and 750 employees). The lack of a clear correlation holds when the export propensity of
FIEs and when regional effects—of being in Guangdong—are controlled for, either in a descriptive or
statistical analysis of the data.\footnote{These results are reported elsewhere. See (Huang 2001).}

Capital intensity is even a poorer predictor of foreign equity holdings. On average FIEs that are
more capital-intensive seem to exhibit less foreign equity controls, as indicated by the nearly monotonic
decrease in foreign ownership shares as the fixed assets per employee increase in size. The highest
foreign equity share is found among the least capital-intensive firms, whereas the smallest foreign equity
share is found among the FIEs with the highest fixed assets per employee ratio. On export propensity,
there is strong support for the standard bargaining perspective that foreign marketing controls increase
foreign bargaining power. When all the FIEs are divided into four categories, those exporting less than 25
percent of their output, those exporting between 25 to 50 percent, those exporting between 50 to 75
percent and those exporting above 75 percent, foreign equity holdings increase monotonically. When an
FIE exports less than 25 percent of its output, the average foreign ownership is about 44.2 percent
compared to 50.5 percent and 52.8 percent at the next two export levels, respectively. The high exporters,
those exporting more than 75 percent, have an average foreign equity holding of 58.8 percent. Clearly,
foreign marketing controls have a substantial and positive effect on foreign ownership controls, just as
scholars of international business have shown for other countries as well.\footnote{One can argue that this correlation is spurious. For example, it is possible that a greater export propensity and high foreign ownership reflect the fact that these firms are merely more internationally oriented. I am unable to}
Now let us turn to Chinese preferences for FDI. Ideally the credit and regulatory constraints on Chinese shareholding firms ought to be measured directly and used to correlate with foreign ownership controls after the foreign bargaining power is controlled for. If these constraints are positively correlated with foreign ownership controls, then there is evidence that the credit and regulatory constraints have increased Chinese FDI preferences. However, detailed data on both flow and stock measures of debt and firm-level regulatory treatments are unavailable. Furthermore, a correlation here may not establish a causal relationship. One may argue that the causation runs from foreign ownership control to credit and regulatory constraints. Many in the foreign business community hold the view that foreign-owned firms face discrimination in China. Proponents of this view may very well interpret any positive correlation as a confirmation of their belief.

One proxy measure of credit and regulatory constraints is the political hierarchy of Chinese investing firms in the FIEs. All Chinese firms, regardless of ownership, are assigned to different levels of the government, from the central government down to township governments, the lowest administrative level.\textsuperscript{33} The supervisory agencies had the power to allocate resources of value to firms, including production inputs during the centrally planned era. Now these agencies provide credit guarantees, regulatory relief, legal and political protection. The government system consists of five administrative levels: central government, provincial government, prefecture, county, and township. Below the township, there is another layer of administration that performs some quasi-governmental functions but is not itself a part of the governmental apparatus. It is called the neighborhood committee in the urban areas and the village committee in the countryside. They operate more or less as self-appointed community councils rather than as being a formal part of the bureaucracy. Functionaries on these committees are not paid out of the government budget and therefore they are not formally classified as government officials.

The FIE database classifies all firms as belonging to one of five categories in the political hierarchy—provincial governments, prefectures, counties, townships, and neighborhood committees and villages. (The central government does not control any garment firms.) There is a sixth category called “others” in the FIE database. Firms in that category are not formally affiliated with any government

resolve the causal ambiguity, but to illustrate the institutional foundation argument it is not necessary to resolve this issue definitively. All that is needed is to control for the export propensity of FIEs when one assesses the effect of the political pecking order so that one does not attribute an export effect to the ownership treatments of firms.

\textsuperscript{33} In the FIE database, the administrative levels refer to those of FIEs and strictly speaking not to those of Chinese partnering firms. But the classifications of FIEs and of Chinese FIE partners are consistent with each because FIEs are classified according to the administrative levels of their Chinese partners.
agency and an official from the State Statistical Bureau confirmed that these firms are small private firms operating completely outside of the government bureaucracy.\textsuperscript{34} These are private firms in our analysis.

Not being affiliated with bureaucracy entails both advantages and disadvantages. Such firms enjoy greater operating autonomy and less managerial interferences from the government but, on the other hand, they miss out on the valuable functions that government agencies may provide to firms. Chinese banks often demand credit guarantees or sizable collateral assets. Most importantly, a bureaucratic affiliation confers legitimacy on private firms that operate in a murky legal and political environment. The value of bureaucratic affiliation is demonstrated by the fact that private entrepreneurs are often willing to pay a hefty price in the form of ceding a substantial equity stake of their firms to acquire such an affiliation.\textsuperscript{35} It is safe to say that private firms without any bureaucratic affiliation are at the bottom of the political hierarchy of firms.

Table 2 here.

Table 2 provides some suggestive evidence that the political pecking order of firms has an effect on Chinese preferences for FDI. To cleanly demonstrate such an effect, it is necessary to control for the foreign bargaining power. In the table, the export propensity of firms is included. All the FIEs are divided into two categories, high and low exporters. The rank ordering from Table 2 reveals that the political pecking order seems to matter only when high exporters are involved (i.e., those firms exporting more than 75 percent of their output). Given the import-intensity of garment exports, this pattern suggests that foreign exchange constraint is binding on private firms more than RMB loans. This is so probably because foreign exchange control is a more stringent constraint and because of the existence of informal credit markets in many regions in China, which supply small short-term RMB loans to private entrepreneurs. By and large, however, for high exporters, FIEs at the bottom of the political hierarchy—those at or below the township level—show the largest foreign ownership, whereas firms at the top of the political hierarchy are the least foreign-owned. However, the rank ordering is not strictly monotonic. Township FIEs exhibit a lower foreign equity ratio than higher-tiered county FIEs. It is possible that many of the county-level firms are in fact red-hat firms, i.e., private firms registered as collective firms.\textsuperscript{36}

\textsuperscript{34} I thank Ms. Mei Jin from the State Statistical Bureau for an explanation of firm categories in the Chinese statistical reporting system.

\textsuperscript{35} The IFC study on Chinese private sector documents many of the benefits to private enterprises provided through a bureaucratic affiliation. See (International Finance Corporation 2000).

\textsuperscript{36} In the table, firms belonging to neighborhood committees and villages are grouped together because they are equally ranked in the Chinese political system.
Conclusion

Although the effect is efficient, at its core, what labor-intensive FDI has done is to offset some of the massive inefficiencies in the Chinese system. By this logic, we must assess the contribution of labor-intensive FDI in more realistic terms. Its contribution to the Chinese economy is fundamentally ameliorative, not additive. The econometric findings that FDI has promoted Chinese exports must be interpreted appropriately by recognizing that FDI’s contributions to export growth are predicated on a systematic suppression of the potentials of the indigenous private firms to make the same contribution.\cite{Wei1996} FIEs have created exports but they have also diverted exports from indigenous Chinese firms, which have succumbed to controls of ECE firms because of an ideologically-induced credit constraint. In the 1990s, export growth has not risen nearly as fast as rising control by FIEs of Chinese export production. Between 1990 and 1997, export/GDP ratio rose from from 15 to 20 percent, a rise of 5 percent. During the same period of time, FIEs’ shares of Chinese exports rose from 15 percent to 40 percent, an increase of 25 percent. That FIEs’ share of China’s exports has risen much faster than China’s overall export levels is \textit{prima facie} evidence that FIEs have both created exports and diverted exports from Chinese-owned firms at the same time.

One of the broad implications of this study is that the contributions of labor-intensive FDI have less to do with know-how transfer or access to overseas markets, as commonly assumed in the literature. The more important contributions may have to do with provision of resources to otherwise credit-constrained private firms. In all likelihood, this is a bigger benefit to the Chinese economy than the more narrowly-construed benefits at the firm level.

\footnote{\citet{Wei1996} has shown positive contributions of FDI to China’s export growth.}
Table 1: Foreign Equity Ratios, Employment Size, Capital Intensity, and Export Propensity in the Chinese Garment Industry, 1992-1995

<table>
<thead>
<tr>
<th>Ranked by employment size</th>
<th>Ranked by fixed assets per employee</th>
<th>Ranked by export/sale ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unit: Employee</td>
<td>Foreign equity ratios (%)</td>
<td>Unit: 10,000 yuan Foreign equity ratios (%)</td>
</tr>
<tr>
<td>Less than or equal to 50</td>
<td>50.4</td>
<td>Less than 1,034</td>
</tr>
<tr>
<td>Between 50 and up to 108</td>
<td>53.8</td>
<td>Between 1,034 and 1,809</td>
</tr>
<tr>
<td>Between 108 and up to 197</td>
<td>52.1</td>
<td>Between 1,809 and 3,328</td>
</tr>
<tr>
<td>Between 197 and up to 750</td>
<td>52.2</td>
<td>Between 3,328 and 20.14</td>
</tr>
<tr>
<td>More than 750</td>
<td>74.0</td>
<td>More than 20.14</td>
</tr>
</tbody>
</table>

Note:
All the FIEs are joint ventures, established between 1992 and 1995. Foreign investors are firms based in Hong Kong, Macao, and Taiwan. The Chinese investors are either TVEs or private firms.

Source: Based on data in (All China Marketing Research Co. Ltd. 1999).
Table 2 Political Hierarchy of Firms and Equity Structures of FIEs in Garment Industry, 1992-1995, percentage (Number of firms)

<table>
<thead>
<tr>
<th>Political hierarchy</th>
<th>All FIEs</th>
<th>High exporters</th>
<th>Low exporters</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Foreign equity ratios</td>
<td>Foreign equity ratios</td>
<td></td>
</tr>
<tr>
<td>Central level</td>
<td>50.0 (4)</td>
<td>N/A</td>
<td>50.0 (4)</td>
</tr>
<tr>
<td>Provincial level</td>
<td>42.5 (62)</td>
<td>41.3 (12)</td>
<td>41.8 (40)</td>
</tr>
<tr>
<td>Prefectural level</td>
<td>48.4 (218)</td>
<td>58.0 (63)</td>
<td>42.6 (133)</td>
</tr>
<tr>
<td>County level</td>
<td>52.5 (277)</td>
<td>62.3 (131)</td>
<td>43.8 (119)</td>
</tr>
<tr>
<td>Township level</td>
<td>66.5 (82)</td>
<td>56.6 (36)</td>
<td>45.2 (37)</td>
</tr>
<tr>
<td>Neighborhood and village level</td>
<td>51.6 (444)</td>
<td>67.1 (231)</td>
<td>60.1 (164)</td>
</tr>
<tr>
<td>Private firms</td>
<td>55.0 (143)</td>
<td>68.6 (68)</td>
<td>41.7 (64)</td>
</tr>
</tbody>
</table>

Note:
Numbers in brackets refer to the number of firms in a given category. FIEs are limited to joint ventures and established since 1991 with foreign investors from Hong Kong, Macao, and Taiwan.
Low exporters: FIEs with an export/sale ratio less than 25 percent.
High exporters: FIEs with an export/sale ratio above 75 percent.
Source: Data are based on (All China Marketing Research Co. Ltd. 1999)
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