# The role of foreign direct investment in market-oriented reforms and economic development: the case of China

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**The success of China in attracting foreign direct investment is reflected in the rapid growth and impressive volume of inflows. At the same time, this investment has played an important role as a source of external financing, technological upgrading, employment, human resource development, exports, output and income growth. It has also contributed to the establishment of a regulatory and institutional framework for a market economy, the promotion of competition, the diversification of the ownership structure and the reform of public enterprises. The experience of China shows that the impact of foreign direct investment in these areas can be considerable. However, there are still impediments to the full realization of the potential benefits often attributed to foreign direct investment, calling for new policy measures to enhance its contribution to the domestic economy.**

## Market-oriented reforms and economic growth in China

Since 1979, China has carried out massive economic reforms in both rural and urban areas aiming at the establishment of an open market economy. In these reforms, China did not follow a single comprehensive blueprint. More often than not, the dynamics of the initial reforms generated forces that led to further reforms, a process that is continuing to the present day (UNCTAD, 1993).

The principal aspects of China's drive towards a market economy are:

- Diversifying the ownership structure and promoting the private sector.
- Deregulating the economy according to the principles of a market system.
- Reforming the systems of supplying inputs and distributing final products.

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- Relaxing State controls on prices and encouraging competition by breaking up State monopolies and inducing enterprises to function according to market principles.

- Reforming enterprises by introducing new management techniques, including a system of responsibility (in the place of a system of incentives to individual enterprises); introducing private ownership of State-owned enterprises; and reducing Government interference in micro-management of enterprises.

- Reforming the financial sector and the fiscal system, establishing a capital market, restructuring the banking industry and introducing a new tax system.

- Integrating China into the world economy through the gradual liberalization of the trade regime and the promotion of foreign direct investment (FDI).

Although the process of reform is still incomplete, China's market-oriented economic reforms have been viewed as successful (UNCTAD, 1993; McMillan and Naughton, 1992; Perkins, 1992). This can be demonstrated by the rapid growth of private firms, including foreign affiliates; a dramatic increase in competition, both among State firms, as well as between State and private firms; and improvements in the performance of State-owned firms resulting from market-based incentives. The reform process also has led to a realignment of prices and a shift of economic power from the State towards private economic entities. By the late 1980s, the market mechanism had become quite important as a determinant of resource allocation, and international prices were increasingly reflected in production and consumption.

As a result of those reforms, the past 15 years have seen rapid growth and prosperity. During the period 1978-1992, real GNP grew at an average annual rate of 9.7 per cent, while the annual growth rate of industrial output was 15.1 per cent. Over the same period, exports increased from $9.7 billion to $85 billion, a rate of growth of 16 per cent annually.[1] Underlying the rapid growth of production and exports was an increase in productivity. In the second half of the 1980s, real value-added in agriculture grew by 7 per cent a year. Similarly, total factor productivity of industrial output is estimated to have grown by 2.5 per cent annually for State firms and 5 per cent for all other firms (UNCTAD, 1993).

[1] Unless specifically indicated, the data used hereafter are from various issues of the *Chinese Statistical Yearbook, Chinese Foreign Economic Relations and Trade Yearbook, Chinese Economic Yearbook, Bulletin of the Ministry of Foreign Economic Relations and Trade of the People's Republic of China* and *China Economic News*.

Economic reforms and rapid economic growth have led to conditions that are favorable to private investment and have contributed to the rapid growth of FDI. China is now the single most important recipient of FDI among developing countries. A large number of transnational corporations (TNCs) have invested in China,[2] and some have even relocated their production from South-East Asia there. Foreign direct investment, in turn, has helped to advance market-oriented economic reforms, which have contributed to China's rapid economic growth.

## Foreign direct investment in China

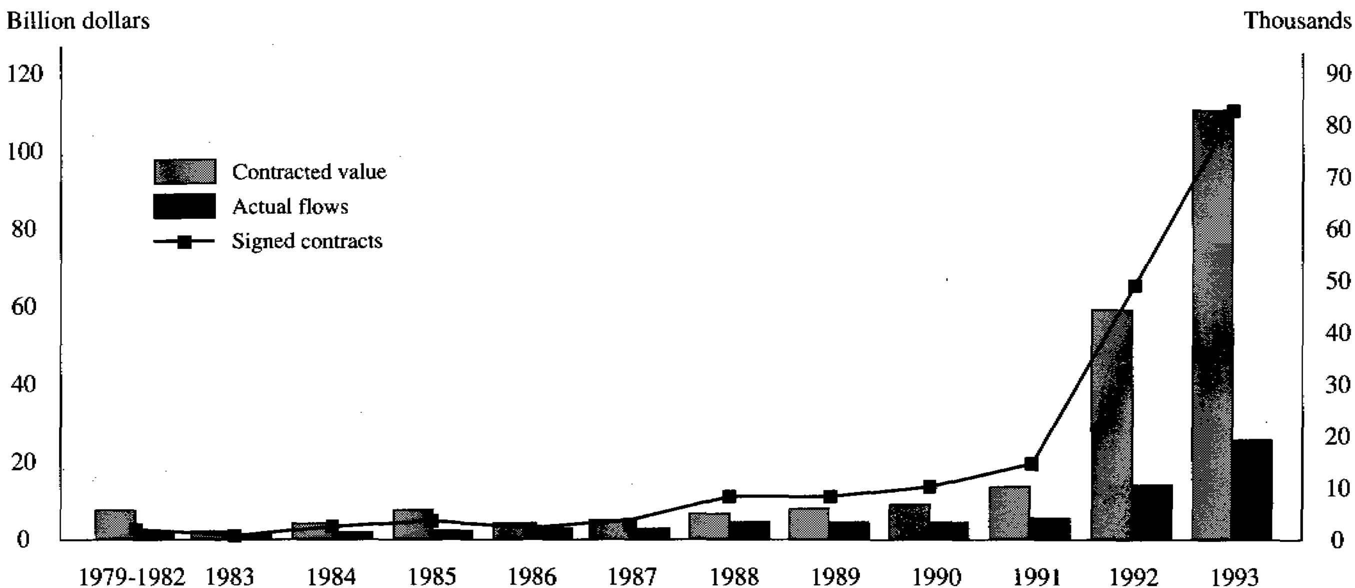
For historical and ideological reasons, FDI in China was highly restricted prior to the economic reforms of 1979. In order to achieve the objectives of industrialization and economic development, China launched an ambitious programme for foreign economic co-operation at the end of 1978. That programme called for a high level of investment, and FDI was encouraged to accelerate the transfer of technology, as well as to provide foreign exchange.

Since 1979, the FDI regime has been liberalized gradually, and an institutional framework has been developed to facilitate such investments. The liberalization of the FDI regime was well received by potential investors. However, the overall trend of FDI commitments has been irregular, reflecting changes in the economic environment, adjustments in macroeconomic policies, occasional changes in priorities and other events. As a result, the volume of contracted FDI has fluctuated from year to year, although the amount actually utilized has increased steadily (figure 1). Furthermore, the austerity measures imposed by the Government in 1985 and 1988 had a negative impact on FDI inflows. For instance, FDI commitments in 1986 were only half of those in 1985, reflecting the central authorities' tightening of credit and foreign-exchange controls in the mid-1980s and China's increasingly selective policy of screening out many nonproductive projects. Similarly, the austerity programme introduced in late 1988 led to a significant decrease in the growth of FDI. In 1989, commitments grew by only 6 per cent, compared to 31 per cent and 43 per cent in the preceding years.

Following the brief slowdown, inflows picked up again in 1991 and 1992. The year 1992 saw an unprecedented boom in FDI, with inflows totalling over $11 billion, an increase of over 160 per cent compared with 1991. The boom continued during 1993, when actual flows reached $25.7 billion (figure 1). The dramatic increase in FDI flows during those two years can be attributed, among other things, to the rapid growth of the domestic economy and the relatively low costs of labour (UNCTAD Programme on Transnational Corporations, 1993).

[2] For example, of the world's 500 largest TNCs, over 120 have investments in Shanghai.

**Figure 1. Flows of foreign direct investment into China, 1979-1993**
**(Billions of dollars and thousands of projects)**




*Sources:* China Foreign Economic Statistics: 1979-1991; People's Republic of China, Ministry of Foreign Trade and Economic Cooperation.

The further liberalization of the investment regime, including the reduction of restrictions on FDI in services, such as transportation, banking, accounting, real estate and retail, and the opening of additional geographical regions[3] to foreign investors also encouraged capital inflows.

Thus, in the course of a decade, and in spite of uneven growth, FDI became well-established in China's economy, and TNC activities have come to assume critical importance in many respects. As of the end of 1993, China had approved a total of over 174,000 FDI projects, with a contract value of $217.2 billion. Firms from more than 110 economies have invested in China. Hong Kong ranks first, followed by Japan, the United States, Taiwan Province of China, Germany, Singapore, the United Kingdom, Thailand, France and Canada (figure 2).[4] There were over 50,000 foreign affiliates[5] operating in China towards the end of 1993, with actual investments of over $60 billion (MOFTEC, 1994).

In the early 1980s, FDI was concentrated in the tourism industry and in the processing and assembling of industrial products in the South-East coastal regions. Since the late 1980s, however, significant diversification has taken place in terms of both industrial and geographical distribution. Foreign direct investment now flows into several high-technology and capital-intensive industries, as well as services and infrastructure,[6] whereas agriculture accounts for a modest share of inflows (figure 3). Furthermore, inland areas are now receiving an increasing share of FDI flows into China.

Looking ahead, it is likely that the growth of FDI in China will be, at least in the short run, sustained by continuous rapid economic growth;[7] additional economic reforms, including the further liberalization of the FDI regime;[8] locational advantages in labour-and resource-intensive industries, particularly in the

[3] 28 cities along the Yangtze River, 13 border cities in the North-East, South-West and North-West regions and 11 tourist locations.

[4] Although investments from Hong Kong account for a large share of total FDI inflows, some of them actually originate from other countries. Moreover, a number of Hong Kong parent firms are themselves joint ventures between foreign and local companies (Zhan, 1989 and 1993).

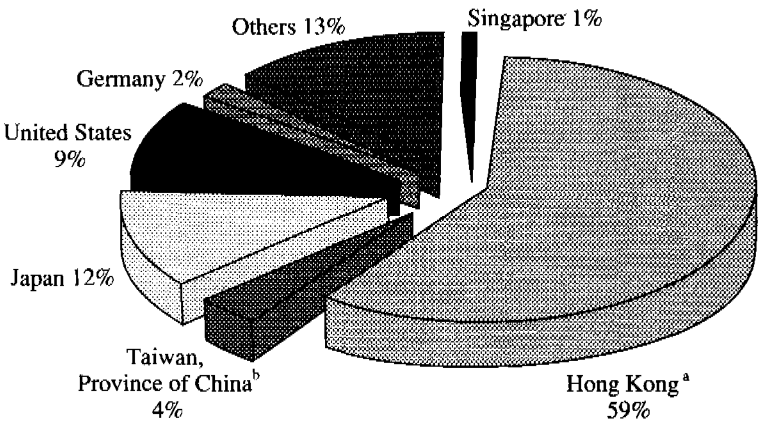
[5] Foreign affiliates refer to equity joint ventures, contractual joint ventures and wholly foreign-owned firms.

[6] There was a pronounced shift from services to industry between 1985-1991, but the flow into the services sector has regained its momentum since 1992.

[7] The World Bank has predicted that the average annual GDP growth rate will be between 8 and 9 per cent during the rest of the decade (Harrold and Lall, 1993).

[8] The Government is now formulating new policies and measures to further promote FDI. These include a further relaxation of foreign-exchange controls, more incentives for TNCs investing in high-technology industries and infrastructure, and the creation of conditions for granting national treatment to FDI.

**Figure 2. Actual foreign-direct-investment flows into China, by economy of origin, 1979-1992 (Percentage)**




*Source:* China Foreign Economic Statistics: 1979-1991, China Economic News, 9, 1993.

[a] Excludes Macao.

[b] Available only for 1990-1992.

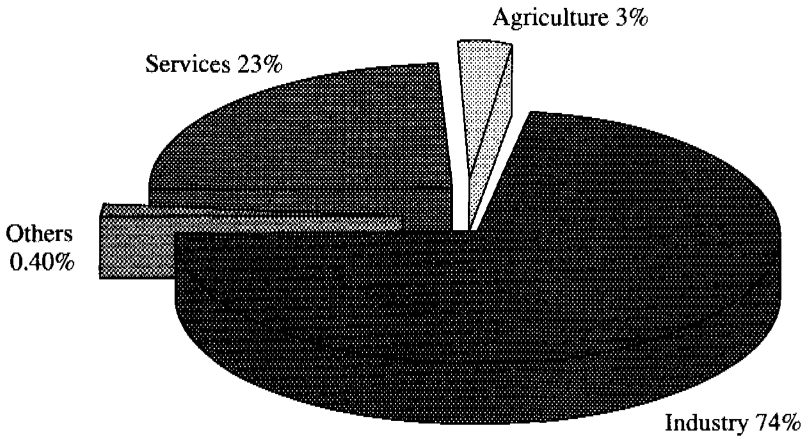
inland regions; and the high demand for FDI in newly opened industries, especially in the services sector and infrastructure. However, whether the current momentum can be sustained in the long run depends largely on China's political and economic stability and the consistency of its macro-economic policy.

## Assessing the role of foreign direct investment in China

Foreign direct investment in China has, on the one hand, facilitated the introduction of market-oriented reforms and, on the other, contributed to China's economic growth and development. At the same time, market-oriented reforms and rapid economic growth have provided a favourable environment for FDI.

A full evaluation of the overall impact of FDI on China's economy is difficult to make at this stage, partly because the bulk of these investments is relatively recent (most FDI has been received only since 1992), and many of the long-term effects have not yet materialized. Nevertheless, a preliminary assessment of the role of FDI in China's economic growth and reforms will be attempted here.

**Figure 3. The sectoral distribution of foreign-direct-investment flows into China, 1979-1991 (Percentage)**




*Source:* Based on data from China Foreign Economic Statistics, 1979-1991.

## *Accelerating the formulation and adoption of market-oriented policies*

Within the broad context of market-oriented reforms, the role of FDI can be seen as:

- Stimulating and, in some cases, leading the move towards economic reform by promoting a market-oriented institutional framework.
- Contributing to a change in the ownership structure towards a more desirable mix between public and private ownership.
- Promoting competition and, thus, improving economic efficiency.
- Facilitating enterprise reform, either by providing direct inputs (in terms of capital, technology, management know-how, business culture etc.) to public enterprises in joint ventures with foreign affiliates, or by providing lessons to domestic enterprises through operational demonstration.
- Facilitating the integration of China into the world economy.

## *Establishing a market-oriented institutional framework*

Foreign direct investment in China has stimulated and, in some areas, led the move towards market-oriented reforms by promoting a market-oriented institutional framework. The endeavour to attract FDI has had implications for the reorganization of the domestic economy and has contributed to the introduction of market-oriented reforms in general.

An example is the liberalization of the regulatory regime for FDI. To be maximally effective, a liberal FDI regime needs to be embedded in an overall institutional framework conducive to foreign and domestic investment (McMillan, 1993). The liberalization of the country's FDI framework has therefore exerted constant pressure in the direction of introducing other market mechanisms. Numerous laws and regulations governing both international business and domestic economic activities were prompted—in some cases to a large extent—by the legal framework specifically pertaining to FDI. This is apparent in the establishment of a regulatory framework for the protection of intellectual property rights, the relaxation of foreign exchange restrictions and the reform of the accounting system. Although there are still many imperfections and inconsistencies, China already has in place a considerable portion of a market oriented regulatory framework. This is remarkable given that almost all commercial laws had been eliminated during the Cultural Revolution and that the legal framework had to be redesigned from the beginning.

Foreign direct investment has played a catalytic role in the process of relaxing foreign-exchange controls. Transnational corporations have always considered controls on the repatriation of earnings and capital to be a serious — if not the most serious — limitation on their operations in China. Accordingly, on many occasions and in numerous ways, TNCs had expressed their desire for a liberalized foreign-exchange regime. During the mid-1980s, a number of foreign affiliates had faced difficulties in continuing their operations as a result of foreign-exchange restrictions. The Government had to subsidize these enterprises with large amounts of foreign exchange as an immediate remedy, and the pressure increased to move towards currency convertibility to accommodate the requirements of foreign affiliates. To solve this problem, the Government established foreign exchange adjustment centres (or swap markets), which made foreign exchange available initially only to foreign affiliates. As the Government became more aware of the importance of avoiding an overvalued exchange rate, domestic firms were also allowed gradually to use these swap markets. This was an important step forward in relaxing foreign-exchange controls. At the beginning of 1994, another important step was taken, namely, the change from a dual exchange-rate system (that is, an official fixed rate and a swap-market rate) to a single managed floating rate.[9] The Government, furthermore, has expressed its intentions to move towards full convertibility of the currency.

The reform of the accounting system is another example of policy changes induced by TNCs. In the past, China had followed its own accounting system, which was incompatible with that of a market-based economy. That system caused a certain confusion in the operation of foreign affiliates (particularly joint ventures) in the early 1980s. Some foreign investors complained that they could not understand the Chinese accounting practices and claimed that they would rather have an internationally accepted accounting system in place than one which is not easily comprehensible, even if it gives them preferential treatment.[10] In March 1985, China promulgated an accounting system for joint ventures that closely emulated international standards. The successful experience with international accounting standards for joint ventures has prompted China to abandon its traditional accounting system completely and to adopt a new accounting system consistent with those standards. Similarly, a procedure for certifying public accountants was established in the mid-1980s reflecting the new accounting system for joint ventures. These certified public accountants were requested to apply their experience with the new accounting system for joint ventures to domestic enterprises as well. As a result, the traditional supervisory function of accountants in domestic enterprises became obsolete. Thus, FDI played a catalytic and demonstrational role in advancing accounting reform in China.

## *Diversifying the ownership structure*

China has not yet embarked on a comprehensive privatization programme[11] to the same extent as other countries in transition have done. However, China has promoted private sector development, aimed at changing the economy's ownership structure from predominantly State ownership towards a more desirable mix, characterized by the coexistence of public, collective and private ownership.

Foreign direct investment has contributed to the achievement of that objective. A recent survey has shown that, among the top 500 manufacturers in China in 1992, over 30 were foreign affiliates.[12] Those large foreign affiliates, as well as

[9] See, *China Economic News,* 2 (1994), pp. 1-2.

[10] See, "Reform in China's accounting administration", *China Economic News,* 4 (1993), pp. 3-4.

[11] So far, only some small State-owned enterprises have been sold or leased to individuals, and the shareholding system is still being evaluated.

[12] The survey was conducted in 1993 by the Development and Research Centre of the State Council and the State Statistical Bureau.

small and medium-size firms and joint ventures (which are legally autonomous), have served to initiate the process of ownership diversification. Overall, however, the impact of FDI on the ownership pattern of the economy has not been significant. Nevertheless, there are a number of manufacturing and services industries in which the contribution of FDI to changing the pattern of ownership has been important. In tourism, there are about 500 hotels with foreign investments, accounting for 29 per cent of China's total capacity and 49 per cent of the total foreign-exchange revenues generated by hotels (MOFTEC, 1993). Out of 3,000 toy manufacturers in the country, over 10 per cent are foreign affiliates, and a number of them rank among the top 500 toy manufacturers in China. The majority of the top automobile manufacturers in China are joint ventures with foreign investors.

Although State ownership is still a dominant characteristic of the economy, foreign affiliates and privately owned enterprises are contributing increasingly to the growth of domestic output. Public enterprises accounted for 48 per cent of the total domestic output in 1992, collective enterprises for 38 per cent and private enterprises (including foreign affiliates), rising from negligible shares in earlier years, for 13 per cent. In retail trade, 41 per cent of domestic output was accounted for by public enterprises, 28 per cent by collective enterprises and 31 per cent by private enterprises.[13] In addition, foreign affiliates have a higher productivity than their State-owned counterparts. According to a recent survey of enterprises in three Provinces and one city (China Enterprises Association and UNDP, 1993), the productivity of foreign affiliates is over 100 per cent higher than that of domestic firms. The average annual rate of growth of output in those areas during the period 1986-1990 was 7 per cent for State enterprises, 18 per cent for collective enterprises and 74 per cent for foreign affiliates.

### *Promoting competition*

To enable markets to function efficiently, the oligopolistic structure of China's economy needed to be reformed fundamentally. To this end, the entry of foreign affiliates was regarded as an effective means of breaking existing monopolies and stimulating competition. The potential role of FDI in this respect is considerable, especially given the strength of State monopolies in China.

The entry of foreign affiliates into China has reduced industrial concentration by diminishing the role of large-scale State enterprises. At the same time, it has significantly stimulated competition in a number of key industries. State

[13] Statement of Ma Kai, Deputy Director-General of the State System Reform Commission, at the UNCTAD/MOFTEC-sponsored International Conference on Transnational Corporations and China, Beijing, China, 9-11 September 1993.

enterprises have had to respond to the presence of the new market entrants by improving their own efficiency. Greater competition through FDI has been stimulated in domestically, as well as in export-oriented industries, including textiles and clothing, electrical appliances, food processing, footwear and travel goods. The competitive pressures exerted by foreign affiliates have encouraged domestic exporters and trading firms to improve the efficiency of their own operations. Joint ventures between foreign affiliates and State enterprises have been particularly susceptible to these pressures.

Given that the Chinese market can sustain a large number of domestic and foreign enterprises, there is room for competition not only between domestic firms and foreign affiliates, but also between foreign affiliates themselves. This is, in fact, the case in the automobile industry: Volkswagen (Germany), Chrysler (United States), Peugeot (France), Toyota (Japan), General Motors (United States), Isuzu (Japan), Ford (United States), Fiat (Italy), Renault (France) and Citroen (France) are competing with each other, as well as with over 100 small domestic automobile manufacturers. In the hotel industry, around 500 hotels with foreign investment are competing not only with over 2,000 domestic hotels, but also among themselves. As a result of the entry of TNCs and other non-State enterprises, China's State owned firms now face active competition. This is accentuated by the fact that State-owned firms have themselves begun to sell their output in open markets.

### *Reforming public enterprises*

Foreign direct investment in China has played a unique role in rejuvenating and reforming public enterprises. This has been accomplished either directly through joint ventures with public enterprises or indirectly through a demonstration effect from the operations of foreign affiliates.

One of the Government's policies concerning enterprise reform has been to encourage foreign investors to establish joint ventures with Chinese public enterprises, either by allowing mixed ownership or through mutual cooperation. As an example of the latter, Chinese public enterprises may provide land, buildings, equipment and personnel, while foreign partners may provide capital and technology. What is equally important is that foreign investors also contribute to the introduction of new management techniques, such as incentive schemes, production organization systems, accounting methods and risk management, which are in line with those practiced in market-based economies. Chinese enterprises have typically adopted, either partly or entirely, the management systems used by their foreign partners.

Since the majority of the 50,000 foreign affiliates in China are joint ventures between foreign investors and Chinese State enterprises, the potential impact of FDI in public enterprise reform is considerable. The experience of one Province provides an illustration of the impact of the FDI in this respect. Liaoning Province is one of China's oldest major industrial bases, with 1,062 large and medium-sized industrial enterprises (about one tenth of the national total), close to 70 per cent of which were set up in the 1950s and 1960s. By June 1993, 1,023 public enterprises in the Province had entered into joint ventures with foreign firms, with the total amount of FDI exceeding $3.5 billion. Of these enterprises, 244 (or one fourth of the total number of enterprises in the Province) were large and medium-sized public enterprises.[14]

The lessons learned from foreign affiliates with respect to ownership structure, management, organization, policies and procedures are reflected in the ongoing domestic enterprise reform in China. Practices of foreign affiliates that have been shown to be effective are being adopted to help accelerate the reform of State enterprises. These include, among other things, mixed ownership of State enterprises, the separation of ownership from management, greater freedom to hire and fire labour, the establishment of profit centres within enterprises and incentive systems for managers and workers. The presence of foreign firms has also helped to build a new business culture and standards, which are being disseminated through forward and backward linkages to domestic firms.

## *Integrating China into the world economy*

The activities of foreign affiliates from more than 110 countries around the world have contributed to the integration of China into the world economy by strengthening linkages between its domestic economy and international markets. Apart from linkages at the production level, FDI also facilitates trade linkages. Foreign investors have brought technology to produce goods of export quality, skills and attitudes to ensure their prompt delivery, the dependability required for export marketing, and their knowledge of export markets. At the same time, they have helped to promote exports through ties with their home and other foreign markets and well-established marketing networks. China's outstanding performance in international trade over the past decade (with an annual growth of more than 16 per cent) has been, to a considerable extent, made possible by foreign affiliates.

At the same time, FDI creates opportunities for the growth of domestic

[14] See, *China Economic News*, 40 (1993), p. 15.

firms in upstream and downstream industries through forward and backward linkages. But the contribution of FDI in this respect has been modest. The low quality of domestic inputs and the shortage of production materials have made it difficult for many foreign affiliates to expand their domestic sourcing. In addition, foreign-exchange shortages and export requirements have limited foreign affiliates' downstream linkages with domestic firms.[15]

To facilitate the growth of international linkages through FDI, the Government of China has signed about 50 bilateral agreements on encouraging and protecting investment and 30 agreements on the avoidance of double taxation. It is also a participant to the Convention Establishing the Multilateral Investment Guarantee Agency and a signatory to the Convention on the Settlement of Investment Disputes. Integrating China into the world economy has also meant encouraging the transnationalization of domestic enterprises and the growth of outward investment.

## The role of foreign direct investment in China's economic development

In general, FDI can bring in financial resources for development, transfer technology and management know-how, generate employment, upgrade workforce skills, promote exports and, ultimately, contribute to the growth of output and incomes of host countries (UNTCMD, 1992a). The contribution that FDI has made in this respect has contributed to economic growth which, in turn, has facilitated the reform of the economy.

### *Contribution to capital formation*

Capital requirements for China's economic restructuring and modernization have been too large to be met by domestic savings. The absorption of over $60 billion in FDI has provided an important supplement to the domestic supply of capital, especially in some key industries. In the case of joint ventures, FDI has also resulted in the mobilization of domestic savings for productive purposes.

Two factors, however, need to be borne in mind: first, around 70 per cent of FDI is in kind (equipment and technology), as opposed to equity, and some of it

[15] In the early and mid-1980s, China had been pursuing a FDI strategy which has been termed "placing two heads outside", that is, relying on the outside world for both input supplies and market outlets. Although that strategy has been successful in promoting exports and reducing foreign-exchange requirements, it has limited the role of FDI in promoting backward and forward linkages.

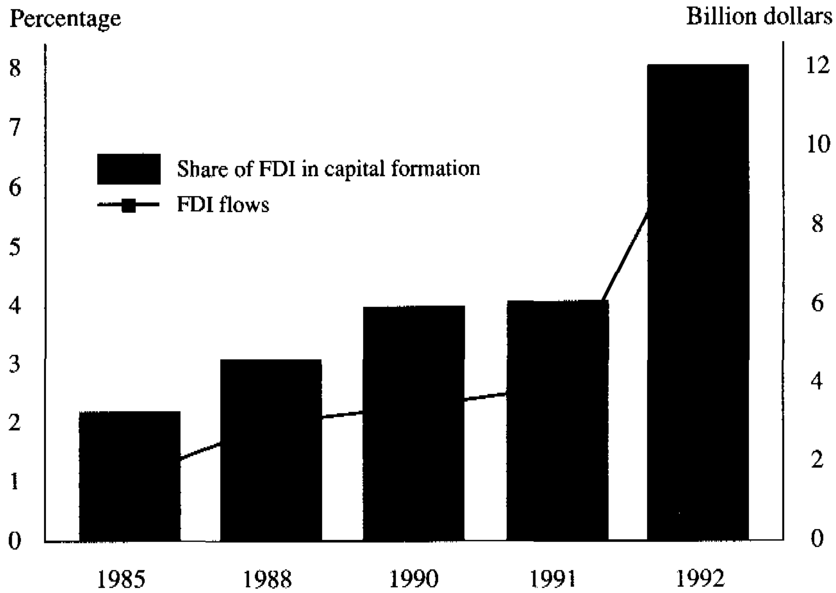
is overvalued; second, there are some "disguised investments", that is, some domestic investments have been re-routed through Chinese affiliates in Hong Kong back into the mainland (Harrold and Lall, 1993). An inspection of about 1,000 projects with foreign participation conducted during 1991 and the first half of 1993 by the Chinese Inspection Administration has revealed that the foreign inputs of equipment and technology had been overvalued by 23 per cent.[16] These two factors taken together could reduce the total inflow of FDI by at least several billion dollars.

Overall, the actual inflow of FDI has constituted only about 3 per cent of total gross domestic investment during the latter half of the 1980s, and 8 per cent in 1992 (figure 4). In addition, FDI has contributed to domestic capital formation by mobilizing domestic investment, especially in infrastructure (e.g., the supply of electricity, transportation and telecommunications). It has been estimated that the average domestic contribution for each dollar of FDI has been three Chinese yuan (Kueh, 1992). The impact of FDI in the coastal regions and special economic zones, which together have received over 40 per cent of total inflows (figure 5), has been greater than in the rest of the country. The impact of FDI has also been sizeable in energy, textiles and clothing, footwear, food processing, electric appliances, electronics, automobiles and tourism and, more recently, in raw materials, telecommunications and transportation.

Foreign direct investment has facilitated structural transformation and the upgrading of some domestic industries by easing capital constraints. The contribution of FDI as a supplement to domestic financial resources has been all the more important because part of it has been in hard currency. In contrast, the major contribution of Chinese partners in joint ventures has been the provision existing plants and production facilities. Additional financial resources through FDI have not only diminished the need for cash inputs on the part of the Chinese firms, but have also helped them to upgrade old plants that would otherwise have required the mobilization of a substantial amount of domestic capital investment. The automobile industry is such an example. Over the past years, China has attracted substantial amounts of FDI in the form of joint ventures in automobile manufacturing. Those investments have played a prominent role in restructuring and upgrading China's automobile industry, transforming it from an infant industry into one of its key industries.

[16] See, People's Republic of China, Ministry of Foreign Trade and Economic Cooperation, "Assessing the foreign inputs to FDI projects to ensure their healthy development", *International Business*, 22 July 1993 and "China Inspection Administration in action", *International Business*, 17 October 1993. These inspections, however, have only covered about 2 per cent of the total actual FDI in China.

**Figure 4. The share of foreign-direct-investment flows in total gross domestic investment in China, 1985-1992 (Billions of dollars and percentage)**



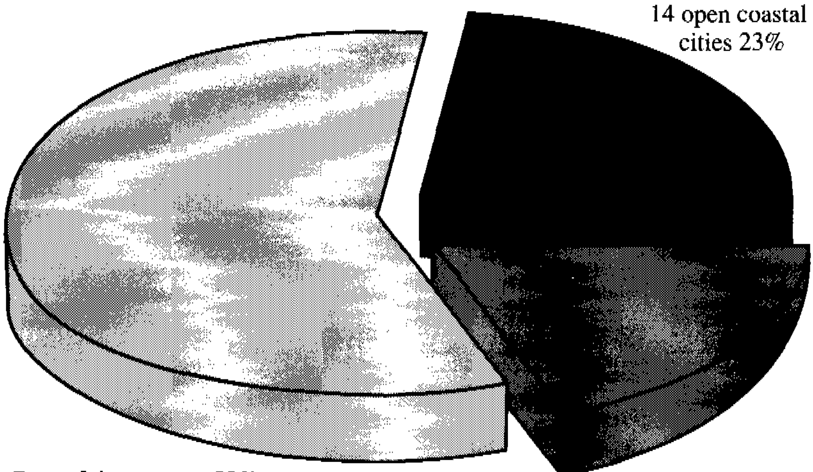

*Source:* China Foreign Economic Statistics: 1979-1991, Ministry of Foreign Trade and Economic Cooperation, People's Republic of China.

## *Transfer of technology*

Given the importance of the role of technology in economic growth, a central objective of China has been to obtain advanced technology through FDI. As far as labour-intensive technologies are concerned, small and medium-sized enterprises have adopted such technologies with reasonable success. In particular, export-oriented foreign affiliates manufacture well-known labour intensive products embodying internationally recognized technological standards.

China provides special preferences and incentives to TNCs for the transfer of advanced technology in areas such as transportation, communications, energy, metals, construction materials, machinery, chemicals, electronics, pharmaceuticals and medical equipment. Before the mid-1980s, however, technology transfer in these industries was very limited. It was only after China realized that it had to allow technologically advanced investments to target the domestic market,

**Figure 5. The distribution of actual foreign-direct-investment flows in China, 1984-1992 (Percentage)**




*Sources:* China Foreign Economic Statistics: 1979-1991, China Economic News, no. 9, 1993; China Statistical Yearbook 1992.

rather than export, that the Government changed its investment policies (Zhan, 1989). Consequently, a number of large-scale projects using advanced technology were established in automobile manufacturing, air transportation, coal-mining, mineral extraction, satellite telecommunications, computers and electronics. For instance, such large TNCs as AT&T (United States), Motorola (United States), Nokia (Finland), Siemens (Germany) and Belgian Bell (Belgium) have invested in telecommunications in recent years. Motorola, which has already invested $120 million in numerous telecommunications projects in China, is now in the process of investing about $400 million in a technologically advanced plant. AT&T's multi-faceted operations in China include the manufacturing of programme-controlled switching systems and large-scale integrated circuits, a joint research-and-development centre, the transfer of micro-electronics manufacturing technology and the development of telecommunications networks.

In spite of such examples, however, the overall results of efforts to promote the transfer of advanced technology through FDI have been somewhat unsatisfactory. Improvements in infrastructure, as well as a further strengthening of the protection of intellectual property rights could facilitate the transfer of advanced technology.

### *Employment and training*

The impact of FDI on local employment is complex. Foreign direct investment can reduce employment in over-staffed domestic enterprises, while creating additional jobs in others. In general, as the activities of foreign affiliates expand, the number of jobs to be filled locally also rises. In China, the majority of FDI is in labour-intensive industries. According to official estimates, there were over 6 million Chinese employees working in more than 45,000 foreign affiliates in 1992 (table 1).[17] Foreign affiliates in industry are the largest employers (table 2).

**Table 1. Employment in registered foreign affiliates, 1987-1992**
**(Number of projects and millions of employees)**

| | 1987 | 1988 | 1989 | 1990 | 1991 | 1992 |
|---|---|---|---|---|---|---|
| Registered foreign affiliates | 8550 | 13750 | 18970 | 25390 | 37220 | 45000 |
| Employees in foreign affiliates (Millions) | 0.86 | 1.69 | 2.35 | 3.26 | 4.83 | 6.00 |
| Employees in urban areas (Millions) | 132.14 | 136.08 | 137.42 | 140.59 | 145.08 | 148.00 |
| The share of foreign affiliates in total employment of urban areas (Percentage) | 1 | 1 | 2 | 2 | 3 | 4 |

*Sources:* China Foreign Economic Statistics: 1979-1991, Ministry of Foreign Trade and Economic Cooperation, People's Republic of China.

[17] Statement by Sufen Jiao, Director-General of Foreign Investment Administration of MOFTEC, at the UNCTAD/MOFTEC sponsored International Conference on Transnational Corporations and China, Beijing, China, 9-11 September 1993.

## Table 2. Foreign direct investment and employment in foreign affiliates, by sector, 1991 (Millions of dollars and number)

| Sector[a] | Number of foreign affiliates | Number of employees | Registered capital (Million dollars): Actual inflow of FDI | Registered capital (Million dollars): Investment by the Chinese partners |
|---|---|---|---|---|
| Agriculture | 1,194 | 79,900 | 696 | 366 |
| Industry | 31,866 | 4,362,600 | 19,137 | 25,248 |
| Services | 1,978 | 118,600 | 1,573 | 689 |
| Real estate, public utilities and hotels | 2,038 | 261,400 | 4,271 | 2,310 |
| Others | 139 | 8,500 | 95 | 171 |

*Sources:* Based on China Foreign Economic Statistics: 1979-1991.

[a] The standard Chinese classification of branch distribution of FDI includes: (1) agriculture, forestry, animal husbandry and fishery; (2) industry; (3) construction industry; (4) transport and telecommunication; (5) commerce and catering services; (6) real estate (including hotels) and public utilities; (7) health, sport and social welfare; (8) education, culture and arts; (9) scientific research and integrated technical services; (10) financial and insurance business; and (11) others. The summarized categories are: "agriculture" covers branch (1); "industry" (2) and (3); "services" covers (4), (5), (7), (8), (9) and (10); "real estate" sector refers to branch (6); and "others" refers to (11).

Foreign direct investment has contributed to the implementation of China's full employment policy. In 1992, the unemployment rate in urban areas was 2.3 per cent. The total number of employees in urban areas was 148 million, of which over 4 per cent were directly employed by foreign affiliates (table 1). What is more significant, however, are the indirect linkages, that is, the number of jobs created by FDI through forward and backward linkages and local-support services.

The upgrading of the work force in foreign affiliates through training is another benefit to China. Despite the fact that China provides substantial and diversified vocational training and technical education, demand is still not being met. The existing education system has not been able to satisfy the demand for managers. Most foreign affiliates have organized their own training programmes. Some, particularly those in tourism, electronics and chemical industries, have even established their own staff training centres. Motorola, for example, has set up two training centres in China for its Chinese employees. On-the-job training for Chinese managers and employees is also widely practised.

### *Exports*

Export promotion through FDI is one of the key reasons for the Government's desire to attract FDI. Foreign direct investment can help to channel capital into industries that have the potential to compete internationally, and the global linkages of TNCs can facilitate their access to foreign markets. The share of foreign affiliates' exports in total Chinese exports increased from negligible in 1978 to 5 per cent in 1988 and 20 per cent in 1992 (figure 6).[18] In 1993, that share reached 27.5 per cent,[19] with even higher shares in electronics, machinery, footwear, toys, travel goods, textiles and clothing. Given that the absolute volume of China's total exports has also been increasing substantially, this is a remarkable achievement.[20] In addition to exports that are generated directly by foreign affiliates, FDI ban also promote exports through the teaching of proper marketing strategies, methods, procedures and channels of distribution. That impact is difficult to assess in quantifiable terms, but it is potentially considerable.

### *Output and income growth*

According to the State Planning Commission, the output of foreign affiliates in 1990 was valued at around 70 billion Chinese yuan, accounting for 3.6 per cent of total industrial output. In 1991, that output doubled to 137 billion Chinese yuan, accounting for 5 per cent of total industrial output, in 1992, it reached 6 per cent of total industrial output.

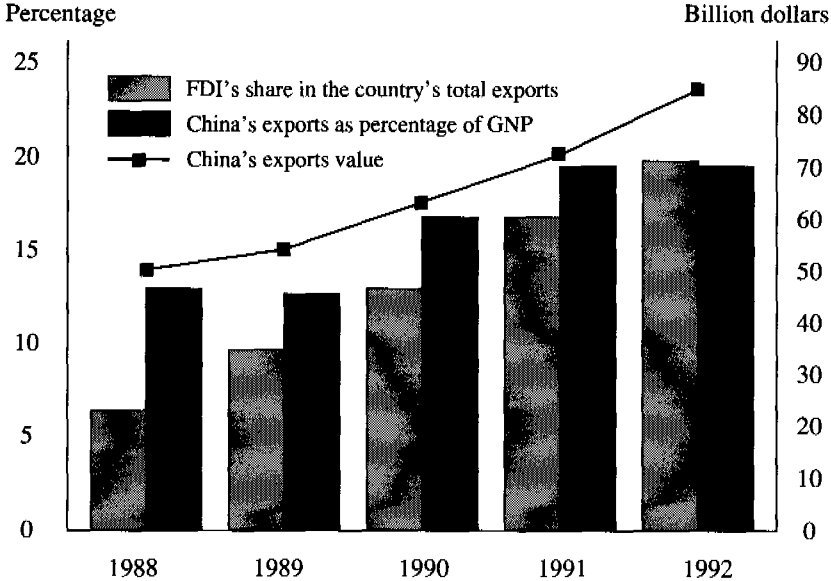
The contribution of FDI to domestic output is particularly important in certain geographical regions and industries. The industrial output of foreign affili-

[18] Exports have, of course, an import content, the amount of which, however, is not excluded from the figure.

[19] People's Republic of China, Ministry of Foreign Trade and Economic Cooperation, International Business, 16 January 1994. In 1993, total exports of foreign affiliates in China were $25.2 billion.

[20] During the period 1978-1992, China's exports increased from $9.7 billion to $85 billion, or by 16 per cent annually; in 1993, they reached $91.7 billion.

**Figure 6. The share of exports of foreign affiliates in total exports of China, 1988-1992 (Billions of dollars and percentage)**




*Sources:* China Foreign Economic Statistics: 1979-1991, Ministry of Foreign Trade and Economic Cooperation, People's Republic of China.

ates in the four special economic zones and 15 coastal cities accounted for over 16 per cent of the total value of industrial output in those regions (table 3).

Another major beneficiary of FDI has been the energy industry. In China, the development of offshore oil fields can be attributed primarily to the heavy involvement of foreign investors and technology. During the past 14 years, China has signed 92 joint exploration and exploitation contracts, attracting $3.6 billion of foreign capital. This has helped China discover offshore oil fields with total reserves of 1.1 billion tonnes of crude oil and 170 billion cubic meters of natural gas with an annual production of 4.6 million tonnes.[21]

The tax contribution of foreign affiliates to fiscal revenues is also considerable. In 1992, the total tax contribution of foreign affiliates was 10.7 billion

[21] See, China Economic News, 11 (1993), pp. 4-5.

Chinese yuan;[22] in the first half of 1993, it was 8.8 billion Chinese yuan (Lin, 1993). In Shanghai, the largest industrial city and the single most important contributor to China's budgetary revenues, the tax contribution of foreign affiliates accounted for over 10 per cent of its entire tax takings in 1993.

It should be noted that a large number of foreign affiliates have engaged in various tactics to extract rents. A common one is through transfer pricing of their imports of inputs and exports of manufactured products. According to a survey of 1,500 products imported and/or exported by foreign affiliates in 1990, 124 import products were priced higher and 428 export products were priced lower than China's average import/export prices. The total value of these differences amounted to nearly $2.8 billion, equivalent to 27 per cent of the total imports and exports of the foreign affiliates in that year (Xia, 1994).

## Policy implications

China's strong economic performance, the large supply of relatively low-cost labour, the growing domestic market and the liberalization of the investment regime have contributed to a favorable investment environment. However, impediments to the growth of FDI and the full realization of its potential role in China's development still exist. These relate mostly to China's overall macro-economic policy, infrastructure and support facilities and the regulatory framework for FDI.

### *Macro-economic policies*

There is a consensus that investment, foreign and domestic alike, prospers best in a macro-economic framework that is both stable and predictable. This requires, among other things, an azppropriate institutional framework for a well-functioning market economy, a convertible currency, an efficient financial system, and competitive market conditions. It also requires policy approaches and administrative arrangements that fully recognize the interdependence of various economic activities both domestically and internationally.[23]

The economic reforms currently under way in China have made significant progress towards establishing these conditions. Nevertheless, further efforts need to be made to extend the scope of market-oriented reforms. Those that have a direct impact on FDI include: streamlining the financial system to direct funds to economic entities; eliminating remaining price distortions; establishing well-func-

[22] See, China Economic News, 20 (1993), p. 1.

[23] See, "Conclusions" of the UNCTAD/MOFTEC-sponsored International Conference on Transnational Corporations and China, Beijing, China, 9-11 September 1993.

## Table 3. The contribution of foreign direct investment to the output of coastal cities and special economic zones, 1992 (Millions of Chinese yuan and dollars and percentage)

| City | Gross value of industrial output (Million Chinese yuan) | Output value of foreign affiliates (Million Chinese yuan) | Share of foreign affiliates in total gross value of industrial output (Per cent) | Sales of foreign affiliates (Million Chinese yuan) | Tax contribution of foreign affiliates (Million Chinese yuan) | Total investment in fixed assets (Million Chinese yuan) | Total investment in public enterprises (Million dollars) | Actual inflow of FDI (Million dollars) | Ratio of FDI inflow in total investment of public enterprises (Per cent) |
|---|---|---|---|---|---|---|---|---|---|
| **Open coastal cities** | 591585 | .. | .. | .. | .. | .. | 14838 | 2721 | 18 |
| Tianjin | 70270 | 7115 | 10 | 7131 | 334 | 13820 | 2425 | 116 | 5 |
| Qinhuangdao | 5136 | 817 | 16 | 71 | 19 | 2027 | 356 | 77 | 22 |
| Dalian | 31382 | 2542 | 8 | 5611 | 120 | 6609 | 1159 | 312 | 27 |
| Shanghai | 215474 | .. | .. | .. | .. | 26243 | 4604 | 790 | 17 |
| Lianyungang | 6338 | 277 | 4 | 274 | 8 | 1023 | 179 | 30 | 17 |
| Nantong | 30727 | .. | .. | 2162 | 157 | 1597 | 280 | 60 | 21 |
| Ningbo | 35674 | 2800 | 8 | 2720 | 99 | 3578 | 628 | 115 | 18 |
| Wenzhou | 12348 | .. | .. | 529 | 28 | 968 | 170 | 25 | 15 |
| Fuzhou | 17625 | 7215 | 42 | .. | .. | 3037 | 533 | 1 | 0 |
| Qingdao | 33402 | 1423 | 4 | 2044 | 109 | 5201 | 912 | 203 | 22 |
| Yantai | 41900 | 720 | 2 | 1963 | 83 | 3316 | 582 | 244 | 42 |
| Weihai | 17012 | 427 | 3 | 845 | 28 | 1815 | 318 | 57 | 18 |
| Guangzhou | 62419 | 16107 | 26 | 19882 | 475 | 12571 | 2205 | 554 | 25 |
| Zhanjiang | 10269 | 661 | 6 | 1007 | .. | 2305 | 404 | 66 | 16 |
| Beihai | 1969 | 157 | 8 | 168 | 6 | 466 | 82 | 71 | 87 |

(Table 3, cont'd)

| City | Gross value of industrial output (Million Chinese yuan) | Output value of foreign affiliates (Million Chinese yuan) | Share of foreign affiliates in total gross value of industrial output (Per cent) | Sales of foreign affiliates (Million Chinese yuan) | Tax contribution of foreign affiliates (Million Chinese yuan) | Total investment in fixed assets (Million Chinese yuan) | Total investment in public enterprises (Million dollars) | Actual inflow of FDI (Million dollars) | Ratio of FDI inflow in total investment of public enterprises (Per cent) |
|---|---|---|---|---|---|---|---|---|---|
| **Special economic zones** | .. | **45143** | .. | .. | .. | .. | **5006** | **1884** | **38** |
| Shenzhen | 35342 | 25367 | 72 | .. | .. | 11302 | 1983 | 449 | 23 |
| Zhuhai | .. | 7490 | .. | .. | .. | 4945 | 868 | 199 | 23 |
| Shantou | 11265 | 4084 | 36 | .. | .. | 2668 | 468 | 220 | 47 |
| Xiamen | 12679 | 7242 | 57 | 10337 | .. | 1854 | 325 | 564 | 173 |
| Hainan | 6520 | 960 | 15 | .. | .. | 7768 | 1363 | 452 | 33 |

*Sources:* Based on China Economic News No. 19, 1993.

[a] The gross value of industrial output of the city and the output value of foreign affiliates (at 1990 prices). The official exchange rate of dollars and Chinese yuan in 1992 was 1:5.7.

tioning labour markets; relaxing further foreign-exchange restrictions; and continuing to build the institutional and regulatory framework for a market economy.

Foreign-exchange controls and the inconvertibility of the local currency remain among the most important obstacles to FDI, affecting the transfer of profits and the repatriation of capital. The long-term solution to this problem is a move to full currency convertibility, relaxing foreign-exchange controls and allowing market forces to play a greater role in the determination of the exchange rate.

Inadequate intellectual property protection has been a major impediment to FDI in technology-intensive industries in China. Improvements in this respect have been made recently to facilitate the transfer of technology to China and to stimulate local research. But such efforts need to be coupled with the enhancement of abilities to implement these provisions, particularly in counteracting effectively trademark violations and counterfeit products.

### *Infrastructure and support facilities*

A well-functioning physical infrastructure, including transportation, telecommunications, public utilities and other facilities, can greatly increase a host country's attractiveness to FDI. The physical infrastructure in China is not of a high standard in comParison with some of its developing neighbours (e.g., Singapore). Furthermore, it is unevenly distributed among the different regions of China. Transport and telecommunication services still experience serious operational bottlenecks. Financial and other support facilities are far from sufficient to meet the demands of foreign affiliates. These are important impediments to the growth of FDI. Recently, the Government of China has given priority to infrastructure development. Incentives could also be provided to attract FDI in infrastructure, and new types of FDI (such as build-operate turnover schemes) could also be encouraged.

The weak domestic support industries in China pose another problem for FDI. On the one hand, the Government has attempted to induce foreign investors to source supplies locally and to reduce imports of raw materials and intermediate products through a wide variety of promotional measures, including fiscal incentives. On the other hand, the low quality of domestic inputs and the acute shortage of production materials resulting from the overheated economy have made it difficult for many foreign investors to expand domestic sourcing. As a result, the contribution of FDI through forward and backward linkages has not been fully realized.

Many TNCs also face an inadequate supply of middle-level technical and management staff, as well as semi-skilled workers. The absence of a well-functioning labour market and the lack of mobility of labour further contribute to this shortage. To solve the problem, educational and vocational training policies could be re-evaluated, in collaboration with local and foreign firms, with a view to designing adequate training programmes to meet current and future labour requirements of both foreign and domestic investors.

### *The regulatory framework for foreign direct investment*

Although the regulatory framework for FDI has very much improved over the years, there still exist a number of problems:

- *Incentives for FDI.* The approval mechanism and regulation of FDI are decentralized and local authorities compete fiercely for such investments through various tax concessions and other benefits, such as concessions on land rentals, labour charges and other local levies. Regional competition to attract FDI through tax incentives is costly to China. Such competition should be encouraged, but on the basis of infrastructural facilities and labour availability, among other things, rather than fiscal incentives.

- *Bureaucracy and transparency.* The Government has been frequently criticized for the heavy bureaucracy of approval procedures and excessive administrative intervention in the operations of foreign affiliates. Problems are created through administrative inefficiencies and the lack of coordination among various Government departments, as well as between central and local Government. In addition, foreign investors have been continuously faced with problems arising from unclear or contradictory laws and regulations, as well as unpublished internal regulations and circulars. All this has created a certain atmosphere of uncertainty and unpredictability for investors, calling for further efforts to improve the regulatory framework.

- *Post-approval monitoring and evaluation mechanisms.* Foreign direct investment has sometimes been criticized for the use of obsolete equipment, tax evasion and transfer pricing. The complex effects of FDI on a host country's economy provide a rationale for the monitoring of FDI. The existing mechanism for the monitoring and evaluating the operations of foreign affiliates in China is weak. The reduction of bureaucratic red tape and the improvement of screening, monitoring and evaluation mechanisms are, by no means, mutually exclusive. A sound and appropriate regulatory framework needs to strike a balance between the interests of foreign investors and those of host countries so as to enable the latter to maximize the contribution of FDI to their economic development.

- *National treatment.* While a number of tax incentives are granted to foreign affiliates, domestic enterprises enjoy preferential treatment, such as easy access to loans and low-priced raw materials (Zhan and Tang, 1990). This causes unfair competition and market distortions. A level playing field should be created for domestic and foreign firms. According foreign affiliates national treatment, while granting domestic enterprises more autonomy in management and applying equal tax rates, can ensure fair competition and reduce distortions.

## Regional strategies for attracting foreign direct investment

Efficiency-seeking FDI often shifts from first-generation host developing countries, in which costs have increased, to second-generation countries, in which TNCs to produce at low costs. Consequently, first-generation countries need to upgrade their technological capacity in order to attract FDI with a higher technological content. This sequential pattern of development has been observed particularly in the Asia-Pacific region and has been described as "a wild-geese flying formation" (Ozawa, 1992). China has concentrated its resources and efforts on creating a favorable environment in coastal regions and special economic zones that have acted as windows for absorbing FDI. As a result, these regions are experiencing rising labour and land costs that are inhibiting efficiency-seeking FDI. China could, therefore, adopt measures to attract technology- and capital-intensive investments to these coastal regions. At the same time, it could try to attract FDI in labour- and resource intensive industries to inland areas, where its locational advantages for these types of industries are considerable. ■

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