

# Effect of foreign direct investment on employment in home countries

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Should home countries of foreign direct investment worry about job losses? To answer this question, foreign direct investment is divided into three types: natural resource-seeking, market-seeking and efficiency-seeking. In the first two types, unemployment resulting from export substitution and reimports is expected to be considerably less than employment created by additional exports of capital equipment, intermediate goods and new product lines to foreign affiliates, and the need for more management activities in home countries. Efficiency-seeking foreign direct investment, however, may cause more unemployment. Since the first two types exceed the third one, the net employment effect of foreign direct investment in home countries is expected to be positive. At the micro level, relocating foreign direct investment may nevertheless result in serious problems for the labour force concerned. These problems should be solved through labour-market measures.

## Introduction

Unemployment has been high or rising in several developed countries; at same time, their outward foreign direct investment (FDI) has been increasing as well. This coincidence has fuelled concerns that FDI outflows may be one of the causes of unemployment. In a 1993 report to the French Senate, the former Senator Jean Arthuis argued that FDI was a major factor explaining unemployment among factory workers (Arthuis, 1993). In Japan, policy makers are worried that transnational corporations (TNCs) may be "hollow-

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ing out'' the economy by relocating plants to neighbouring Asian countries, and exporting from there to third countries and to Japan (OECD, 1995). In the United States; the debate on the employment effects of FDI is older. It peaked in the 1970s, and was rekindled prior to the establishment of NAFTA; more recently, it has been fuelled by the rising wage gap between skilled and unskilled labour (Campbell and McElrath, 1990). In Germany, popular discussion focuses on 'locational competition'; according to this view, the net outflow of FDI from Germany is one of the results of high direct and indirect costs of local labour. The transformation of Central and Eastern Europe and its potential entry into the European Union has increased concern about the possible relocation of German industries.

The purpose of this article is to demonstrate that most of these concerns are unwarranted. First, the likely effects of FDI on employment in home countries are reviewed. Some of them are found to be employment-creating, while others are employment-reducing. The net balance of these two effects is analysed. This is followed by a structural analysis that distinguishes types of FDI according to its determinants: resource- or market-seeking on the one hand, and efficiency-seeking on the other. The first two types have a positive net impact on employment in home countries, while the latter may have a net negative impact. Policy implications are summarized at the end.

## **Main components of the employment effect**

Home countries of outward FDI have a multitude of firms from a variety of industries that invest at home and abroad. This implies that both positive and negative effects of FDI on employment may occur simultaneously. The net result will depend on a variety of factors, such as the type of industries, investment motives and the competitive context of the host economies, as well as labour market and macroeconomic conditions.<sup>1</sup> Before discussing the net effects, it is appropriate to understand the nature of the various positive and negative effects of FDI on employment in home countries.

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<sup>1</sup> The unemployment rate of an economy is primarily determined by its macroeconomic policies and the flexibility of its labour market in adjusting to a varying demand for labour. As a determinant of the current rate, outward FDI generally plays a minor role. It may indeed constrain the scope for macroeconomic policies in so far as domestic firms may choose to invest abroad rather than at home in a rapidly globalizing world. Here, only issues directly related to FDI and its impact on employment in home countries are discussed, and not unemployment problems in general.

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## *Job diversion*

### *Replacing exports of parent firms*

In both the theoretical and empirical literature, export substitution is one of the two main channels through which FDI may reduce employment in the home country. The product-cycle theory, very popular in the 1960s and 1970s before the introduction of the eclectic paradigm, postulated that FDI by a firm to produce a particular product in a foreign country substituted its exports of that product from the home base (Vernon, 1966 and 1979; Hirsch, 1967; Hufbauer, 1966). The standardization of the product and its technology gives rise to new producers; their competition forces the original producer to locate new plants nearer the foreign market to save transport or labour costs. Empirically, only a few studies<sup>2</sup> have found evidence for the product-cycle theory. This theory hypothesizes a market compulsion for the original producer to invest abroad. Failure to follow this market signal could result in a loss of export markets, as well as domestic markets. The choice between export and FDI, available during the early stages of a product cycle, does not exist in the final stage. However, from the point of view of the home country, FDI need not necessarily reduce domestic employment as long as its firms are manufacturing more products than only those in the final stages of the product cycle.

Several authors have argued that exports are replaced by FDI once a critical level of market share is reached in a foreign market, or when it is threatened by tariff and non-tariff barriers or host country competitors (Roch, 1973; Agarwal, 1978; Buckley and Casson, 1985). This is based on the historical experience of a sequential relation between trade and market-seeking FDI. This theory, often called optimal timing theory of FDI, does not predict that accessing foreign markets right from the start through FDI would be suboptimal. Moreover, the importance of this theory has diminished because of the declining costs of global communication and transportation. If the firm investing abroad has only one product, its FDI will lead to export substitution and unemployment in the home country. But if it has more than one product, its FDI may lead to the exports of other products because of the export-promotion effect of foreign affiliates. At the macro-economic level, this scenario is even more realistic. Moreover, FDI often requires imports of inputs from home countries. The theory of optimal timing,

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<sup>2</sup> For a survey of these studies, see Agarwal (1980).

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therefore, does not predict which of the employment effects would outweigh the other at the country level.

Export substitution includes both exports substituted in countries in which foreign affiliates have been established, and export substitution in third countries served by foreign affiliates that were formerly supplied by parent firms. This latter type of export substitution is becoming important as TNCs reorganize their production networks at global or regional levels.

### *Intra-firm imports*

Intra-firm imports cover goods and services produced abroad by foreign affiliates of parent firms and imported into the home country.<sup>3</sup> Intra-firm imports are supposed to reduce actual or potential domestic production and employment. This is the second main channel of employment reduction in home countries, and has attracted even greater attention than the export-substitution effect of FDI in the popular relocation and hollowing out discussion.

In 1971, Stanley H. Ruttenberg *et al.* prepared a study for the Industrial Union Department of the American Federation of Labor and Congress of Industrial Organizations (AFL-CIO) on the employment effect of outward FDI (Ruttenberg *et al.*, 1971). They estimated that FDI resulted in the loss of half a million jobs during 1966-1969. They compared the growth of imports with that of FDI and assumed that the demand for additional imports could have been satisfied domestically. The study appears to have assumed that all additional imports were produced by the foreign affiliates of United States TNCs. Both of these assumptions are unrealistic.

Similar assumptions permeate the relocation discussion even today. Arguments against relocation usually ignore the fact that firms at home are faced with foreign competition and invest abroad to strengthen their competitiveness. The choice is often between outsourcing and the loss of the home market, and not so much between outsourcing and domestic production.

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<sup>3</sup> It is arguable whether imports by retail stores such as Marks and Spencer under subcontracting arrangements should be regarded as reimports or whether they fall into the category of exports by national firms of the host countries. In so far as they are based on the comparative advantages of these firms, involving no FDI by the subcontractors, their treatment as reimports appears unwarranted, even if they—like other exports from developing countries—contribute to unemployment in importing countries.

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## *Capital exports*

The outflow of FDI could, *ceteris paribus*, reduce domestic capital formation and, thus employment. Timothy Koechlin and Mehrence Larudee (1992) argued that NAFTA would divert from the United States to Mexico US\$ 31 billion to US\$ 53 billion of investment by the year 2000, resulting in the loss of up to half a million jobs. However, FDI is followed by earnings; flows of earnings back to the home country have to be considered in the calculation of the net effect. In the short run, FDI outflows are likely to exceed FDI earnings, but over a longer period of time, earnings may outstrip FDI outflows.

During 1989-1995, the outward FDI of the United States amounted to US\$ 368 billion and total FDI earnings were US\$ 425 billion, yielding a surplus of US\$ 57 billion. During that period, US\$ 183 billion were reinvested abroad. If these are subtracted from FDI outflows, repatriated earnings (US\$ 242 billion) exceeded the outflows of equity capital (US\$ 185 billion) by 31 per cent. In addition, United States TNCs received US\$ 131 billion for royalties, licence fees and charges for other services from their foreign affiliates (United States Department of Commerce, 1996, p. 105).

In Germany, a country with a shorter history of outward FDI, of the total outward FDI stock in 1994, only 34 per cent had been financed through reinvested earnings. The flow data for recent years reveal, moreover, a substantially lower share (7.5 per cent) of reinvestments in FDI outflows (Deutsche Bundesbank, 1996a). Nevertheless, repatriated earnings amounted to 25 per cent during 1989-1995 and other income to 5 per cent during 1992-1995 of total FDI outflows. If reinvestments, repatriated earnings and other income are deducted from FDI outflows, 70 per cent (1992-1995) of all FDI outflows remain to be considered as potentially diverted from domestic capital formation, provided that they were not financed from foreign borrowings.

## *Job creation*

### *Associated exports of goods and services*

Greenfield (the new establishment of production units) FDI outflows are well known for stimulating exports of capital goods, spare parts, raw materials, etc. to the new foreign affiliates (Hawkins, 1972). In addition, FDI stimulates the exports of other products neither produced by a foreign

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affiliate nor exported earlier by a parent firm, as the new unit is able to offer more extensive customer services and can supply the full range of products produced by the parent company. In a survey of United States manufacturers of electronic calculators, B. A. Majumdar (1980) found that outward FDI led to increased exports mostly of costly and technically advanced goods not produced by foreign affiliates. These new exports have a positive impact on employment in the home country.

Gary C. Hufbauer and J. J. Schott (1993, pp. 16-19) estimated that United States FDI in Mexico stimulated by NAFTA would have a positive impact on United States employment thanks to increased exports of capital goods, intermediate components, spare parts and other associated goods and services. More recently, Gordon H. Hanson (1995) investigated the effects of the so-called *maquiladoras* of northern Mexico on United States employment. He found that a 10 per cent expansion of production in Mexico led to a 5.8 per cent increase in the production of durable goods and a 3.6 per cent in the manufacturing of non-durable goods in the border region of the United States. Moreover, a 10 per cent increase in *maquiladora* value-added led, in the United States border regions, to an increase of 1.7-2.8 per cent in employment in transportation, 1.4-2.4 per cent in wholesale trade and 1.3-1.6 per cent in services. To cite another country example, in a case-study on Thailand, Karel Jansen (1995, p. 206) showed that FDI inflows were strongly import-intensive.

### *Management expansion in home country*

Foreign direct investment creates jobs in the legal, administrative and managerial departments of parent companies, resulting in an expansion of white-collar employment in home countries (Bulcke and Halsberghe, 1979, p. 43). Even if the production facility is relocated, office-job functions are still maintained, or even increased, in the home country. In an investigation on the effects of United States FDI in Mexico, an electronic equipment company reported that it was able to maintain 300 administrative, marketing and warehousing jobs in the United States by investing in Mexican *maquiladoras* (United States International Trade Commission, 1991, p. 68).

The need for administrative jobs in the home country to manage foreign affiliates is likely to vary from case to case, depending on the degree of integration of the foreign affiliates with the parent corporation and the level of development of the host country. In the case of vertically integrated FDI,

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it is also possible to interpret managerial jobs as part of the skill-intensive occupations that are likely to be retained or expanded at home following FDI. Overall, the impact of FDI on managerial jobs in the home country is difficult to measure. The increase in the number of managerial personnel is an ongoing process, and often a clear-cut separation of the domestic and foreign responsibilities of employees is not possible. Most of the studies are therefore unable to give a quantitative estimate of this impact (Hawkins, 1993).

### **Net employment effect**

The net employment effect of outward FDI is the sum of the components mentioned above, namely export substitution (-), intra-firm imports (-), capital export (-/+), associated exports (+) and management expansion (+). These factors cover the overwhelming part of the quantitative effect of outward FDI on home country jobs.<sup>4</sup> The net employment effect may turn out to be positive or negative. For example, a firm producing only one item and exporting to only one country will have to reduce jobs at home if it starts production of the same item in that foreign market. The increase in the number of jobs in the firm's management group may not compensate for the contraction of jobs in production. If, however, the investing firm is a conglomerate producing and trading a larger number of products, the loss of the exports of one product may be more than compensated by the increase in exports of other products. As firms become larger and more global, the effects of FDI on home-country employment are likely to move in a positive direction. However, in industries facing stagnant markets, FDI may result in net unemployment. But if those industries are defined more broadly, jobs created through associated exports may exceed those lost through export substitution and intra-firm imports.

At the country level, the net employment effect of outward FDI depends largely on the stage of economic development and on investment policies. At early stages of economic development, outward FDI is not very common. Either domestic firms do not possess resources (e.g. ownership-specific assets) to invest abroad, or the government follows a restrictive policy justified by foreign-exchange constraints. Permission to invest abroad is given as an export-promotion measure. In such a case, the net employment effect ought to be positive. A case-study of India (Agarwal, 1985)

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<sup>4</sup> For a fuller discussion see UNCTAD, 1994, pp. 166-173.

found that FDI outflows had a positive effect on India's balance of payments. Although the study did not examine the employment consequences, more exports are usually associated with more employment. In the case of semi-industrialized countries, such as Malaysia, the Republic of Korea, Taiwan Province of China and Thailand, outward FDI policies are also export-promoting (UNCTAD, 1996a, chap. III).

In developed economies, equity capital outflows are widely liberalized, and the scope for direct trade-related outward investment promotion measures by public agencies is very limited. Nevertheless, foreign affiliates of TNCs account for a significant part of exports by parent firms. In the manufacturing sector of the United States and Japan, these ratios amounted to 42 per cent and 32 per cent in 1992, respectively, an increase compared with 1983 (table 1). This indicates that increased FDI outflows were correlated with more exports. Furthermore, the balance of intra-firm trade is in favour of home economies. In both countries, increased outward FDI is

**Table 1. Intra-firm international trade of the United States and Japan, 1983 and 1992**

*(Billions of dollars and percentage)*

Item	United States		Japan <sup>a</sup>	
	1983	1992	1983	1992
Exports by parent firms to their foreign affiliates (Billions of dollars)	47	106	31	86
Imports by parent firms from their foreign affiliates (Billions of dollars)	39	94	5	16
Balance of intra-firm trade in home country of parent firms (Billions of dollars)	8	12	26	70
Share of foreign affiliates in total exports of parent firms (Percentage)	31	42	28	32
Share of foreign affiliates in total imports	36	46	21	29

Source: UNCTAD, 1995, tables IV.1 and IV.2, pp. 194-1995.

<sup>a</sup> Excluding commerce.

accompanied by higher imports. But imports are outstripped by exports to foreign affiliates, indicating *ceteris paribus* net employment creation.

The export surplus of intra-firm trade is considerably higher in Japan than in the United States. The major reason for this is that foreign affiliates

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are still in their development and heavily dependent on the supply of components from their early stages of parent firms. Japanese firms have often been criticized for establishing transplants in the United States and western Europe to circumvent actual or potential import barriers. Transplants usually have a high ratio of imports of components from home countries (OECD, 1994). On the basis of the sectoral and geographical distribution of United States FDI and exports, Fred Bergsten *et al.* (1978, p. 97) concluded that, in industries or countries with small amounts of United States investment, an expansion of FDI was matched by an expansion of exports. At modest-to-high levels of FDI, in their view, the complementarity between FDI and exports by a parent company lessens. High initial complementarity exists because, in the beginning, FDI is concentrated in marketing and assembling the parent company's products. As foreign affiliates start producing a full product line, their imports from the parent firm decline.

Most of the empirical studies on the employment consequences of United States FDI have found a positive net employment effect (see Hawkins, 1972); United States Tariff Commission, 1973; Stobaugh *et al.*, 1973; Horst, 1974; Lipsey and Weiss, 1975, 1981, 1984). The great majority of the studies on NAFTA have estimated a positive net employment effect on the United States economy (OECD, 1995, p. 57). Among the few studies that have found a negative net employment impact are those by Robert Frank and Richard Freeman (1975) and Norman Glickman and Douglas Woodward (1989). The former assumes that the entire production of United States foreign affiliates could be substituted by exports from the United States. This is in contrast with the general experience that FDI tends to increase the global market share of the company. The latter study found that the employment effects of both inflows and outflows are negative, but it has been criticized (Baldwin, 1995) for using two different methods to estimate those effects.

For Sweden, Birgitta Swedenborg (1979, 1982) showed that an increase in foreign production had a positive net effect on the exports of parent companies because the complementarity exports to foreign affiliates were higher than the substitution of exports to the related host countries. A recent study on Swedish TNCs (Svensson, 1996) considered host as well as third countries and found the net effect to be negative. However, it was not significant as far as affiliate production for local sales was concerned. Only in the case of third countries did the exports of Swedish affiliates in the European Union have a significant negative net effect (for a related survey of the literature, see Blomström and Kokko, 1994). Most of the available

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studies on Germany (Kiera, 1976; Donges and Juhl, 1978; Bailey, 1979; Fikentscher and Moritz, 1980; Milton, 1984; Beyfuss, 1987) have come out in favour of a net employment-creating effect of outbound FDI. A recent study commissioned by the German Ministry of Economic Affairs (Härtel *et al.*, 1995, pp. 239-240) concluded that the dominant portion of German FDI was market-seeking with positive export (employment) effects. Even in the case of efficiency-seeking FDI, it did not find a negative export (employment) effect for Germany. Likewise, the net employment effect of Austrian outward FDI was estimated to be positive (Pichl, 1994, p. 55). Thus, there is overwhelming evidence in favour of a positive employment impact of outward FDI on home economies. The following section discusses the reasons why this is not surprising.

## **Why should FDI lead to net employment creation? Some theoretical considerations**

The current discussion of the employment effect of outward FDI from developed countries is flawed because it tends to generalize from a few visible cases of job *relocation*. With a view to revealing and removing this misunderstanding, this article divides FDI into three sectors—natural resources, manufactures and services—and the latter two into market- and efficiency-oriented FDI. Foreign direct investment in natural resources, market-oriented manufacturing industries, as well as services, is likely to create employment rather than unemployment in home countries. Only efficiency-oriented FDI can result in net unemployment. If FDI in natural resources as well as market-oriented activities exceeds efficiency-seeking FDI, the net employment effect is likely to be positive.<sup>5</sup>

### ***Natural resources***

Historically, natural resources (the primary sector) have been an important recipient of FDI. As of 1984, they absorbed nearly one third of the United States and United Kingdom outward stock of FDI. Since then, the share of that sector in total outward FDI has decreased considerably

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<sup>5</sup> In practice, it may not always be possible to allocate FDI exclusively to one or the other of the categories mentioned. The motivations of investors are often mixed and it is difficult to draw the line. Moreover, the consequences of FDI within each of the categories may differ among home countries, depending on the functioning of their labour markets and their macro-economic conditions.

(table 2). Foreign direct investment in natural resources is likely to create employment and not unemployment in home countries. This is why some studies arguing for a negative employment effect have not included FDI in the primary sector in their empirical investigations.

**Table 2. Sectoral distribution of the outward FDI stock of selected countries, 1984-1994**

(Percentages)

Item	Germany		France		Japan		United Kingdom		United States	
	1984	1994	1987	1994	1984	1994	1984	1994	1984	1994
	Primary sector	3.8	1.2	4.0	8.0	18.6	5.1	33.3	19.9	30.1
Manufacturing sector of which:	59.7	32.9	50.0	36.0	30.3	27.8	31.9	38.9	40.6	35.0
Textile, clothing and leather	0.6	0.9	1.1	0.6	2.7	1.3	..	1.1	0.6	0.4
Services	36.5 <sup>a</sup>	65.9 <sup>a</sup>	46.0	56.0	51.1 <sup>a</sup>	67.1 <sup>a</sup>	34.8	41.2	29.3	53.2

Source: OECD, various years.

<sup>a</sup> Including unallocated.

Foreign direct investment in natural resources, such as mining, quarrying and oil extraction, does not usually lead to export substitution, although it is possible to think of exceptions where a country such as Germany can substitute domestically produced coal with cheaper imported coal from a neighbouring country such as Poland. But in practice, such cases are rare. Moreover, FDI in natural resources usually involves the export of capital goods. Thus, the net employment effect of natural-resource-seeking FDI can be expected to be positive in the host country.

### *Manufacturing*

Foreign direct investment in manufacturing forms the core of the ongoing discussion on the relocation of industries and its adverse consequences on home-country jobs. Even if the relative importance of that sector in total outward FDI has declined since the mid-1980s, it still accounts for about one fourth (Japan) to two fifths (United Kingdom) of all investments (see table 2). However, employment is unlikely to be affected equally in

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every industry by FDI outflows. This is because investments are made to secure or expand market shares in some industries, whereas in others, they are made to lower production and distribution costs by utilizing international differences in relative factor prices and environmental resources, and by geographically reorganizing production centres to achieve scale economies. Therefore, a distinction is to be made between industries whose FDI makes a positive contribution to domestic employment or leaves it unchanged, and industries in which the outflow of FDI tends to reduce domestic jobs. The former ones are called market-seeking investments and the latter efficiency-seeking investments.

### *Market-seeking manufacturing FDI*

Market-seeking FDI is attracted by the size and growth prospects of a host country's market. These advantages are linked to a presence close to customers, or the avoidance of import barriers, discriminatory government procurement policies or high transport costs. Market size and growth have proved to be the most prominent determinants of FDI in most of the empirical studies available (Agarwal, 1980; UNCTC, 1992). Market-seeking FDI can also be a result of oligopolistic competition, whereby TNCs try to gain a foothold in each other's domestic market. Much of intra-industry FDI is associated with oligopolistic competition (Knickerbocker, 1973).

The motivation of market-seeking FDI is to increase the global turnover of the entire firm and not to relocate jobs from the home to the host country. But it is possible that some of the market-seeking investments lead to a reduction in the exports of a related product, although this reduction may be compensated by increased exports of associated inputs and other product lines.

Most of the manufacturing FDI of developed countries is located in each other's economies. In the case of the United States outward stock of manufacturing FDI, the developed countries' share amounted to 72 per cent in 1995 (United States Department of Commerce, 1996, p. 108), and in Germany, Japan and the United Kingdom to 87 per cent, 68 per cent and 80 per cent, respectively, in 1994 (OECD, various years). This FDI is overwhelmingly more market-seeking than efficiency-seeking.

Furthermore, greater than one half of the United States and German FDI is channelled through mergers and acquisitions (Mataloni, 1995; RWI,

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1996). In such cases, investors buy the existing market shares of host country firms. The subsequent restructuring of the global strategy of the buying firm may result in less or even in more exports, depending, among other things, on the investment motivation and its implementation. But, generally, mergers and acquisitions are likely to increase the exports by the acquiring firms due to close customer relations made possible through a local presence.

### *Efficiency-seeking manufacturing FDI*

Efficiency-seeking FDI is normally found in labour-intensive industries and processes. In these, TNCs from developed countries invest in developing countries to utilize relatively low-cost labour. Prominent examples of such investments are those of offshore assembly and outsourcing by United States firms in Mexican *maquiladoras*, by Japanese TNCs in the textile industry of neighbouring Asian countries, and by western European clothing TNCs in the Mediterranean and central and eastern European countries. Pollution abatement costs in industrialized countries could also encourage their TNCs to invest in less regulated developing economies. However, studies on the "pollution-haven" hypothesis fail to find support for a systematic relocation of "dirty" industries to developing countries by means of FDI (Beghin *et al.*, 1994, p. 6). Land costs in developing countries are also often lower than in developed countries. But they are likely to play a subsidiary role in motivating manufacturing investors to go to developing countries, because land costs generally constitute only a small part of total capital expenditure. Similarly, fiscal and financial incentives tend to enhance the efficiency of invested foreign capital. But like land costs, incentives may not be sufficient for investors to choose locations in developing countries in preference to sites at home. They become important in association with other efficiency-stimulating advantages such as lower wages or lower environmental costs in target economies (Agarwal, 1987; OECD, 1983; UNCTAD, 1996a). Finally, efficiency-seeking FDI may be the result of the geographical reorganization of production networks by TNCs looking for scale economies and benefiting from the worldwide liberalization of FDI and trade. Examples of such FDI are not found typically in developing countries. They are likely to be found in Europe or the NAFTA region as well, and across industries.

Efficiency-seeking outward FDI may add to the production facilities already present in the home country, or it may relocate production capacity

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from the home base to another country. In the first case, home-country employment is not reduced, although its future growth may be adversely affected since additional production capacity is created only in foreign sites. In the second case, the relocation of the plant reduces employment at home.

It is this relocation which has been the focus of attention for the analysis of the employment implications of FDI. The relevant questions are: (i) what is the importance of investments involving relocation in the total FDI of a country? and (ii) can the jobs in the home country be saved by stopping relocation investment abroad?

As to the first question, a precise answer at the aggregate level is not possible because of the lack of statistical information. The evidence on the closure and subsequent relocation of plants by the same firms in other countries is largely anecdotal. But an indirect inference can be drawn from the importance of those industries in total FDI on which relocation investments are likely to have a strong incidence. This is presumably the case with labour-intensive industries.

However, there is no clear-cut definition of labour-intensive industries according to which FDI data can be classified. Usually the textile, garment and leather industries are considered labour intensive, the first being less labour-intensive than the second. There are other industries, particularly electronics and automobile, in which some activities involving FDI are labour-intensive. However, no separate data for them are available. If only the textile, garment and leather industries are considered labour-intensive, their share in the total outward FDI stock of developed countries is around only 1 per cent (table 2). Moreover, except in the case of Germany, this share has declined rather than increased in the past few years. From the perspective of host developing countries, the share of these three industries in their inward stock of FDI is very low, often below 5 per cent (Agarwal, 1994). Since these are labour-intensive industries, their share in the total number of employees in foreign affiliates is relatively high (table 3), but insufficient to cause widespread concern about unemployment in home countries. Such concern is likely to remain unfounded even if a solution for the data problem of FDI in the labour-intensive parts or processes of other industries were to be found. The entire FDI outflows from developed countries have amounted to only about 5 per cent of their gross fixed capital formation since 1984 (UNCTAD, 1996b). This does not, of course, rule out hardships for the labour force in individual industries or locations, which should be counteracted by appropriate measures.

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The second question regarding the relocation of production is whether domestic as well as export market shares—and thus jobs in the home country—can be retained in the absence of efficiency-seeking FDI. Let us again take the example of the textile, garment and leather industries. Their production technologies are fairly standardized and accessible to producers in developing countries. Generally, they have substantial cost advantages in these industries *vis-à-vis* developed countries, and have been able to increase production and exports. Transnational corporations from developed countries are often able to continue reaping the benefits of their patents, trade marks and established marketing networks through production relocation in cost-efficient regions by means of equity and non-equity FDI. Forgoing such investments would reduce their international competitiveness and lead to a loss of market shares. This would reduce jobs in industries delivering associated exports of machinery and other inputs to foreign affiliates, and in management and distribution networks. Thus, under the existing constellation of international relative factor prices, efficiency-seeking outward FDI may be statistically related to job losses, but these losses may be smaller than they would have been in the absence of outward investment.

## *Services*

The services sector accounts now for more than half of all FDI from most of the leading investor countries; and has recorded considerable growth since the mid-1980s. In the case of Japan, the share of services in total outward FDI reached 67 per cent in 1994, rising from 51 per cent in 1984 (table 2). Until recently, FDI in services was regarded as market-seeking, involving hardly any export substitution and reimports because production and consumption of services generally took place in the same country (Kravis and Lipsey, 1988, p. 2).<sup>6</sup> This is the reason why services

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<sup>6</sup> Services as defined in trade statistics include trade-related services such as shipment and other transportation, cargo insurance and trade financing. They are not the same as services defined in FDI statistics which include investments in trade and transportation networks, construction, banking and financial institutions, real estate, etc. in host countries. The production of services rendered by these investments must take place in the country of domicile of purchasers. For a distinction between trade-related services and others services, see Deardorff (1984), who tries to explain how far the theory of comparative advantages is applicable to trade in services. He is not concerned with FDI, but the distinction made by him between different types of services is relevant for analysing the employment implications of FDI in services. For a broader categorization of services, see Sampson and Snape (1985).

**Table 3. Number of employees in foreign affiliates and their sectoral distribution: Germany, Japan and United States, 1982-1993**

*(Number of employees in thousands and percentage)*

Sector/industry	Germany		Japan		United States <sup>a</sup>	
	1983	1993	1982	1990	1982	1993
Primary sector	1	1	5	2	8	3 <sup>b</sup>
Manufacturing sector	74	68	79	80	67	60
Food, beverages and tobacco	2	2	2	2	8	8
Textiles, clothing and leather	4	4	11	6	1	1 <sup>c</sup>
Paper	2	1	3	1	3	- <sup>d</sup>
Chemicals	20	14	6	5	9	9
Coal and petroleum products	1	1	-	-	2	- <sup>d</sup>
Rubber products	1	1	-	-	2	- <sup>d</sup>
Non-metallic mineral products	2	2	-	-	3	- <sup>d</sup>
Metals	4	5	9	4	4	3
Machinery excluding electrical	7	7	0	0	8	7
Electrical machinery	13	14	29	33	10	8
Automobiles	13	13	-	0	13	11 <sup>e</sup>
Other transport equipment	0	-	11	15	1	- <sup>c</sup>
Remaining manufactures	4	3	9	14	4	13
Services	25	31	16	18	25	37
Total employment (thousands)	1 617	2 513	881	1 550	6 816	6 731

Sources: UNCTAD, 1994, table IV.6, p. 181; Deutsche Bundesbank, 1995; Mataloni, 1995, p. 49.

<sup>a</sup> Excluding banking.

<sup>b</sup> Petroleum.

<sup>c</sup> 1991.

<sup>d</sup> Included in remaining manufactures.

<sup>e</sup> Included in automobiles.

have often been ignored in the empirical studies on employment consequences of FDI for home countries (Hawkins, 1972; United States Tariff Commission, 1973; Bergsten *et al.*, 1978; Horst, 1978; Hufbauer and Schott, 1993; Enderwick, 1994). But the technological revolution in communications and data transmission has made it possible to produce some services in one country and use them in another country, regardless of geographical distance (Bhagwati, 1984). Thus, it is now possible to increase efficiency by relocating production in selected segments of services. Though the share of such efficiency-seeking FDI in total FDI in services is considered to be very small, it is appropriate to treat it here separately from the rest.

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### *Market-seeking services FDI*

Services FDI generally covers the areas of trade, construction, banking, finance, transportation, storage, communication, insurance, real estate, hotels, health and other such services. The United States publishes the most detailed classification of FDI. Foreign investment in industries such as banking, finance, transportation, communication and insurance used to be more restricted than in manufacturing industries in both industrialized and developing countries (OECD, 1992). The recent wave of liberalization has spread to services, resulting in high outflows of services FDI. But there is no evidence of export-replacing FDI, or intra-firm imports, because such services have to be produced in the proximity of consumers, and are usually not tradeable. Thus, the outflow of FDI in services is likely to create employment in home countries thanks to a greater need for personnel in management centres and in industries delivering inputs to foreign affiliates.

### *Efficiency-seeking services FDI*

The revolution in micro-electronics and its impact on information and communication technologies have made it possible to have a cross-border separation between production and location of data-processing services. For example, more than 100 of the top 500 United States corporations are said to use on- or off-site software services from India (Nicholson, 1996). Some of them have established affiliates in India to produce and export such services. United States investment in these cases is efficiency-seeking in contrast to market-oriented FDI of computer hardware TNCs or transnational banks and insurance companies selling services to local markets in host countries. The United States is the only country publishing separate data on FDI in "computer processing and data preparation services". How much of this is motivated by low costs in host countries cannot be determined. Even if it is assumed that all of it is efficiency-seeking FDI, and not market-oriented, its size is small, amounting to only 4 per cent of the outward FDI stock in all services and 0.2 per cent of the total outward FDI stock of the United States in 1995 (United States Department of Commerce, 1996, p. 127). Similar data for other countries are not available.

Some of the efficiency-seeking services FDI reduces employment in home countries, as firms shift some activities to cost-efficient locations abroad. Swissair, for example, has its accounting done in India. But the rest

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of FDI in software and data processing is likely to be an extension and not a relocation of existing production activities. Moreover, some of the loss of jobs resulting from relocation in software and data-processing sections may be compensated by jobs created through additional exports of hardware to foreign affiliates.

Regarding both market- and efficiency-seeking services FDI, the net employment effect of outward FDI in home countries is likely to be positive. In the case of the United States, the average compensation for services employees in United States affiliates abroad is not lower than in their parent corporations (Mataloni, 1995, pp. 42-43). Thus the scope for relocation through FDI is confined to minor segments of the services sector. Services accounted for more than half of FDI from Germany and the United States in 1994 (table 2), but employed only about one third of the workforce in their foreign affiliates (table 3). In the case of Japan, services accounted for two thirds of FDI, but only for 18 per cent of employees in foreign affiliates.

### **Why is there so much concern about a “job exodus”?**

If the probability is strong that outward FDI is a net employment creator as argued above, why is there so much concern about a “job exodus” in home countries? The first and foremost reason is that the outward FDI of developed countries has, since the mid-1980s, grown faster than domestic investment. As a result, the ratio of outward FDI to gross domestic fixed capital formation has increased in most countries (table 4). But it would be erroneous to conclude from this that FDI outflows expanded at the expense of domestic capital formation and employment. Firms are investing abroad primarily to penetrate, or have a greater share of, growing foreign markets. If they miss the opportunity to do so, they will not be able to serve these markets to the same extent through exports. Moreover, this increase in the ratio of outward FDI to gross domestic fixed capital formation is not confined to developed countries. Ratios of FDI outflows to domestic fixed capital formation have risen in many developing countries as well (UNCTAD, 1996b, pp. 250-259). Transnational corporations from some of the Asian countries are investing in the European Union and the United States.

The second reason for the concern about a “job exodus” is that job losses receive more publicity than job gains. When employment in labour-intensive industries, such as textiles, garments and leather, shrinks while efficiency-seeking investments are made abroad, these industries are able to

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**Table 4. Growth of FDI outflows and share in domestic capital formation, 1983-1994**

(Percentage)

Country	Annual growth rate 1983-1994	FDI outflows as percentages of gross fixed capital formation	
	1983-1994	1983	1994
Belgium-Luxembourg	7.5	2.59	2.8
Denmark	22.0	1.10	18.2
France	14.2	1.80	4.5
Germany	10.2	2.70	4.8
Italy	8.9	3.34	3.1
Japan	15.8	2.47	3.1
Netherlands	16.0	8.74	26.0
United Kingdom	16.3	7.13	18.5
United States	20.5	1.38	5.1

*Sources:* OECD, various years; IMF, 1986, 1996.

make their voices heard. But industries in which employment expands as a result of associated exports of capital and intermediate goods remain silent. A plant that is relocated abroad receives greater attention in the media than a new production plant established by a foreign firm. Home countries are also hosts to FDI (table 5). But that aspect is often ignored in the relocation discussion. It is interesting to note that, in contrast to some other developed countries, the negative balance between jobs in United States affiliates abroad and jobs in foreign affiliates in the United States has declined considerably since the early 1980s (table 5). Foreign-based TNCs have increased their FDI in the United States to take advantage of its large domestic market. There are cases in which foreign firms, such as BMW (Germany), have established production plants in the United States reportedly to take advantage of comparatively lower wage costs in that country. But these cases have probably received more publicity in their home countries than their weight in the total FDI in the United States, or in the outflows of their respective countries.

Lastly, imports are usually more striking than exports, and people tend to associate imports of labour-intensive products with the offshore platforms of domestic firms. They ignore the fact that some of these imports come from foreign producers, and their share in total imports would increase if

**Table 5. Number of employees in manufacturing affiliates in selected countries, 1980-1994**

(Thousands)

Country	Year	Foreign affiliates	Affiliates abroad
Germany	1980	1 240	1 312
	1994	1 112	1 811
Italy	1986	476	322
	1991	508	511
Japan	1980	178	611
	1990	145	1 261
Sweden	1980	56	..
	1990	128	523
United States <sup>a</sup>	1981	1 300	4 429 <sup>b</sup>
	1994	2 172	4 019 <sup>c</sup>

Sources: UNCTAD, 1994, table IV.5, p. 180; Deutsche Bundesbank, 1996a; Fahim-Nader and Zeile, 1996; Mataloni, 1993.

<sup>a</sup> Excluding banking.

<sup>b</sup> 1982.

<sup>c</sup> 1993.

domestic firms were to reduce or relinquish reimports of goods manufactured by them abroad.

In the context of the "job exodus", it is important to remember that during 1982-1993 employment in foreign affiliates located in developed countries grew much faster than in those located in developing countries, which are the main target of efficiency-seeking and relocating FDI. Among the developing host regions, employment in developed-country affiliates has increased faster in the growing domestic markets of South and South-East Asia than in other regions where wage costs are low, and which should have provided a greater incentive to invest (table 6). This supports the conclusion that it is market penetration that plays the overriding role in FDI decisions and not the relocation of industries in order to access cheap labour in low-cost countries.

## Conclusion

Most of the empirical literature on the employment effects of outward FDI looks at the United States, and the majority of the studies have found a

**Table 6. Growth of regional employment in foreign affiliates of Germany, Japan and the United States, 1982-1994**

*(Percentage per annum)*

Region	Germany	Japan <sup>a, b</sup>	United States <sup>a, c</sup>
Total	3.8	9.7	0.1
Total of developed countries	3.5	16.1	0.2
Total of developing countries	2.6	4.3	0.0
Latin America	0.5	1.7	0.5
Africa <sup>c</sup>	-3.5 <sup>d</sup>	-1.4	-7.5
South and South-East Asia	3.0	8.0	2.5

Sources: Deutsche Bundesbank, 1990, 1996a; UNCTAD, 1994; Mataloni, 1995; Whichard and Shea, 1985.

<sup>a</sup> Excluding banking, finance and insurance.

<sup>b</sup> 1982-1990.

<sup>c</sup> 1982-1993.

<sup>d</sup> Includes South Africa, Nigeria and Libyan Arab Jamahiriya.

positive FDI effect. Nevertheless, the topic has remained controversial because concerns about outsourcing investments are generalized as being the motive for all FDI, and a straightforward, well-tried instrument to assess the employment implications of outward FDI for home countries at the macroeconomic level is not available (Alter, 1994, p. 5). This article has offered some theoretical arguments why the net employment effect of FDI for home countries at the aggregate macroeconomic level can be expected to be positive.

Foreign direct investment targeted at natural resources and host markets can be expected to create net employment in home countries. In these cases, job creation results from additional exports of inputs, such as machinery and intermediate goods, to foreign affiliates and of final products that were not until then exported to the host countries in question, but began to be exported following the establishment of new affiliates and closer relations with consumers. This positive employment effect is likely to be greater than unemployment resulting from export substitution and reimports of goods produced by the foreign affiliates. In addition, some net employment creation by FDI can be expected in management-related activities in the home countries.

In contrast to natural-resource and market-seeking FDI, efficiency-oriented outsourcing investments may displace more jobs through export substitution and reimports than created through exports of inputs and final

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products that were not until then exported to the host countries in question. However, the net unemployment impact of relocating FDI at the macro-economic level is likely to remain smaller than the net employment effects of resource- and market-seeking FDI, because the former generally accounts for a minor portion of total FDI.

At the microeconomic level, relocating FDI may nevertheless result in serious problems in certain industries or locations. These problems should be solved through labour-market measures, such as compensatory adjustment assistance and retraining for alternative jobs (Siebert, 1994), rather than hindering the relocation process. Foreign direct investment reflects responses by firms to technical and economic opportunities, and a relocation of production is the result of international competition heightened by technical progress, as well as the liberalization of trade and investment. Unemployment in non-competitive industries cannot be prevented by stopping FDI because such an intervention would help foreign firms to outcompete domestic producers. Finally, attempts to discourage FDI would disturb structural adjustments towards more competitive industries, resulting in an inefficient allocation of resources. ■

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