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*Transnational Corporations*
**Volume 13, Number 3, December 2004**

## Contents

*Page*

**ARTICLES**

| | | |
|---|---|---|
| **Alan Rugman and Alain Verbeke** | Regional transnationals and Triad strategy | 1 |
| **Kevin Ibeh, Stephen Young and Hui Chu Lin** | Information technology and electronics firms from Taiwan Province of China in the United Kingdom: emerging trends and implications | 21 |
| **Peter Nunnenkamp** | FDI and economic growth in developing economies: how relevant are host-economy and industry characteristics? | 53 |

**RESEARCH NOTE**

| | | |
|---|---|---|
| **UNCTAD** | *World Investment Report 2004: The Shift Towards Services: An Overview* | 87 |

**BOOK REVIEWS** 125

**JUST PUBLISHED** 157

**Press materials on FDI issued in April to October 2004** 167

**Books received** 169

# Regional transnationals and Triad strategy

Alan M. Rugman and Alain Verbeke*

This article addresses the geographical distribution of sales of some of the world's largest transnational corporations, with a focus on the three legs of the "Triad" (North America, European Union, Asia). A firm has achieved global corporate success only if it is able to earn a balanced regional distribution of sales. Only high sales across the globe, especially in the wealthy and technologically advanced regions, demonstrate both strong firm-level capabilities on the supply side to market products and services worldwide, and a high willingness of sophisticated consumers on the demand side, to pay for that firm's output. For the analysis of the supply side, the conceptual framework of this article distinguishes among the global, regional and national loci of decision-making and levels of product standardization. The regional dimension is important for many firms, because it is a location in which many important decisions are made. This article identifies the 20 transnational corporations with the highest foreign-to-total sales ratios from UNCTAD's list of the world's largest TNCs that are also *Fortune Global 500* firms. For these firms, the distribution of sales across Triad regions is measured. Only three of these firms actually have a substantial part of their sales across the three legs of the Triad. The others are bi-regional, host-region oriented or home-Triad region oriented. This empirical finding is further elaborated by investigating whether a regional component can be identified in the specific cases of transnational strategy, building upon the framework presented in this article.

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**Key words:** globalization; regionalization; Triad; transnational corporations; Triad home base; regional; global; bi-regional.

## Introduction

The theme of this article is that, even today, many of the most transnationalized corporations of the world have a limited geographic scope of their sales – the ultimate proxy for global competitive success – requiring both supply-side efficiency and effective market penetration. Following the analysis of previous studies by Alan M. Rugman (2000) and Rugman and Alain Verbeke (2004), this article explores the extent to which the sales of transnational corporations (TNCs) are "home-region" based. The majority of even the most transnationalized corporations in reality have a limited geographical distribution of their sales. Of the world's 20 largest TNCs ranked by foreign-to-total sales ratios, selected from UNCTAD's list of the world's top 100 TNCs (UNCTAD, 2003, pp. 187-188), only 3 could be candidates for the status of a global firm. The remainder have a more narrow scope of their sales, and are therefore uni-regional or bi-regional, when measured by the regional distribution of their sales.

## A framework for Triad and regional business activity

### *A framework for analyzing "globalization"*

A framework that distinguishes among the global, regional and national components of TNC strategy should consider the (*ex ante*) concentration or dispersion of strategic decision-making across regions or countries (the horizontal axis of figure 1), and the actual (*ex post*) characteristics of products at these three levels (the vertical axis on figure 1).

The horizontal axis is more a reflection of "stated preferences", i.e. the extent to which TNC managers view strategic decision making as a process concentrated in one home base or dispersed across regions or countries. In contrast, the extent to which products are standardized at the global, regional

or national levels represents the "revealed preferences" of TNCs to institutionalize a particular approach on a world scale or to adapt to the requirements of national/regional markets.

**Figure 1. A framework for analyzing "globalization"**

| | | Locus of decision making power on corporate, business and functional strategy issues (*ex ante*) | | |
|---|---|---|---|---|
| | | Corporate headquarters | Regional centres | National units |
| | World product | 1 Global strategy | 4 | 7 |
| Actual product characteristics (*ex post*) | Region-based or -adapted product | 2 | 5 Regional strategy | 8 |
| | Nation-based or -adapted product | 3 | 6 | 9 National strategy |

*Source:* the authors, adapted from Rugman and Verbeke, 1993.

More specifically, the horizontal axis represents the location of decision-making power (*ex ante*) for corporate, business or functional strategy issues. Here, the question to be answered is whether all of the TNC's key strategic decisions (e.g. choice of product/market niches, choice of strategic management tools to outperform rivals, key decisions made in each functional area, including R&D, production, marketing, distribution, human resources management), are taken in a single location, or whether at least a substantial portion of these decisions is taken in several "home bases" at the national or regional levels.

This graphical presentation (figure 1) of the variety of strategic options available to TNCs helps to identify the foundations of corporate success. Few cases, if any, exist of firms solely positioned in cell 1, where all decisions are taken centrally, and products are not adapted to host countries and regions. In practice, a substantial portion of decision-making

may be concentrated in the left column of figure 1, as is the case with most key financial decisions in TNCs, which are taken by the chief executive officer and top management committee at that level. However, even if most major corporate strategy decisions are taken centrally, typically in the home country (left column of figure 1), as is the case for many companies in, e.g. the computer business (both hardware and software), cells 2 and 3 reflect the existence of substantial regional and national responsiveness regarding the product offering (including its service component) that actually is provided to the market.

In other words, TNCs that tailor their product offering to regional and national circumstances do not pursue a simple global strategy as suggested by cell 1. Considerable resources must be allocated to allow for the required level of sub-global responsiveness in terms of what is being delivered to the market. In addition, even if a TNC's product offerings were largely global (top row of figure 1), this does not necessarily imply that all important decisions on market penetration, distribution, advertising etc. can be taken centrally. Bounded rationality constraints are likely to force corporate management to delegate important decisions to the regional and national levels, thereby positioning the firm closer to cells 4 and 7.

This point is vitally important from a policy-perspective, as many anti-globalization critics suffer from an important misperception: they view TNCs as centrally directed, profit-maximizing entities, eager to sell standardized products around the globe. Anti-globalization critics state that TNCs are insensitive to host-country and host-region demands, especially those of host-country governments. In fact, the presence of intense transnational rivalry and the unfortunate reality that every TNC from one region does face an important liability of foreignness in the other regions of the world, forces TNCs to be particularly sensitive to the requirements of host-country governments and other salient stakeholders (Rugman and Verbeke, 1998).

This does not imply that TNCs can or should adopt an approach in cell 9, and be fully polycentric, with products

carefully tailored to each national market and most strategy decisions left to host-country affiliate managers. Much conceptual and empirical evidence suggests that a "multi-national" approach leads to overlapping efforts and duplication in innovation, inconsistent national strategies, opportunistic behaviour by managers of affiliates and, more generally, a waste of resources and lack of clear strategic direction (Bartlett and Ghoshal, 2000).

The strength of TNCs is in their capability to overcome market imperfections characterizing national markets, and to develop systemic, network-related, rather than asset-based, firm-specific advantages (Dunning and Rugman, 1985). Even for TNCs with a polycentric administrative heritage, cells 6 and 8 are likely much more relevant than cell 9.

In cell 6, attempts are made to achieve decision-making synergies across markets, e.g. by developing pan-European or pan-American strategies in particular functional areas (Rugman and Verbeke, 1992). In cell 8, economies of scale and scope are pursued by the national managers of affiliates themselves, through standardizing at the regional level their product offering across those national markets that have strong similarities in demand. In that case, the initiative of affiliates is critical (Birkinshaw, 2000; Rugman and Verbeke, 2001).

This framework is an adaptation and further development of Rugman's and Verbeke's (1993) analysis of "global" strategies. They argued that the truly important decisions to be taken by TNCs are related to two parameters. *First*, the number of home bases with which they function, i.e. the number of locations in which important strategic decisions are taken (equivalent to the horizontal axis of figure 1, in which the number of home bases determines strategic decision making). *Second*, the use of non-location-bound versus location-bound firm-specific advantages (equivalent to the vertical axis of figure 1, whereby the nature of a TNC's firm-specific advantages determines its product offer).

The non-location bound firm-specific advantages allow various approaches to standardize a TNC's product offer across borders and to earn benefits of integration (related to scale, scope and benefits of exploiting national differences); this outcome is represented by the top of the vertical axis. The location-bound firm-specific advantages provide the potential to gain benefits of national responsiveness; this outcome is represented by the bottom of the vertical axis. In addition, the regional component, in the middle of the vertical axis, represents either the limited geographical deployability and exploitation potential of non-location-bound firm-specific advantages, or the fine-tuning of location bound firm-specific advantages, in order to achieve benefits of more region-based, rather than merely nation-based responsiveness.

The difference with Rugman's and Verbeke's (1993) resource-based perspective on the integration-national responsiveness model is thus that this article introduces explicitly a regional dimension into the analysis. This is now needed due to the emerging empirical work (Rugman, 2000; Rugman and Verbeke, 2004) that suggests that normative messages, advocating simple global strategies, are not appropriate for most TNCs, which actually operate on a Triad/ regional basis.

More specifically, on the horizontal axis, this regional dimension implies that a number of strategic decisions are left to region-based headquarters, rather than nation-based ones (Enright, 2004a, b). The vertical axis implies the development of firm-specific advantages useful at the level of the set of nations that form a region. These are region-bound company strengths: they can contribute to survival, profitability and growth beyond the geographic scope of a single nation, but such strengths are still location bound, in the sense that they cannot be deployed globally (Morrison, Ricks and Roth, 1991; Morrison and Roth, 1992; Delios and Beamish, 2004; Grosse, 2004; Li, 2004; Yin and Choi, 2004).

In this context, George Yip's view that a global company "has the capability to go anywhere, deploy any assets, and access

any resources, and it maximizes profits on a global basis" (Yip, 2003, p. 7) may be an appealing normative message, but one that applies to very few, if any, TNCs in practice. Indeed, most TNCs rely largely on sets of location-bound (in the sense of nation-bound) and region-bound firm-specific advantages as the basis for their competitiveness.

The strategy and international management literature has done a good job of distinguishing between cells 1 and 9, but it has usually not addressed explicitly most of the other cells. For example, the stylized matrix of integration (cell 1) and national responsiveness (cell 9) popularized by Christopher Bartlett and Sumantra Ghoshal (1989), distinguished between a pure global cell 1 strategy and the "act local" national responsiveness strategy of cell 9. In addition, the key contribution of their "transnational solution" framework was the prescription that TNCs should usefully combine strategies in cells 1 and 9. They should attempt to develop appropriate strategies for each separate business, for each function within that business, and for each task within that function, the capability to implement either a national or a global approach.

The framework of Bartlett and Ghoshal (1989) thus can usefully explain cell 3 (centralized, global strategic decision making combined with local product offering), i.e. the think global, act local approach. It also allows the analysis of less common cases in cell 7, whereby rather powerful local affiliates are responsible for delivering global products, but choose themselves which products have the most potential in their national markets and largely take responsibility for the delivery, an approach found in many global professional services companies. Yet, their framework cannot handle cell 5, Triad-based strategies very well, or the intermediate cases of cells 2, 4, 6, and 8, i.e. all cases for which the regional level is important.

***Regional business strategy***

The present article reports data suggesting that an increasing number of TNCs operate largely at the regional level.

Therefore regional elements are becoming increasingly important in many TNCs, either in terms of strategic decision-making, or actual product offering. If, as the empirical evidence provided in the next sections suggests, many TNCs are at least partially operating in cell 5 on a Triad basis, then any strategy-related analysis of the TNCs' functioning first needs to take into account the requirement to decompose its strategic decision-making processes and product offering along global, regional and national lines, building upon a more complex analytical tool than a conventional integration-national responsiveness matrix. Only then can a correct analysis be performed of the actual extent of Triad-based decision-making power and the rationale for region-based and/or adapted products and services from these TNCs be properly investigated. If the theoretical construct of a "regional solution" (cell 5 in figure 1) is neglected, little can be expected from empirical research on strategy and structure in TNCs to portray accurately the present importance and future potential of the regional approach.

In the literature, such a regional approach has sometimes been described as the mere outcome of a global strategy. Yip articulates this perspective the following way: "Before deciding whether and how to do business in a region of the world, a company needs to have a clear global strategy [which includes] the core business strategy, the competitive objectives for the business, and the extent to which the business will be operated as one integrated business or a looser collection of geographically independent units. Next, a company needs to decide on the overall role of the region within the global strategy" (Yip, 2003, p. 222). This view assumes a particular sequence and hierarchy in TNC strategic decision making. In practice, however, the global-regional sequence is unlikely to occur.

The regional solution of cell 5 should be viewed as an efficient corporate response to several factors:

- Internal information processing requirements are critical. If the "rules of engagement" are different in each region (different

industry structure, different regulatory system, different competitive position of the firm, different optimal expansion pattern, different product scope, different strategy tools required to outperform rivals etc.), intra-regional information processing must be sufficiently dense so as to permit affiliates to cope optimally with shared external circumstances and to develop regionally consistent strategies.

- Customer requirements may vastly differ across regions depending upon the level of economic development, culturally determined preferences, etc.
- Region-based cluster requirements may impose specific types of behaviour on firms in order for these firms to be perceived as legitimate within the context of regional clusters, especially suppliers, related and supporting industries, and the non-business infrastructure. Here, region-based isomorphic flexibility may be critical for firms to function effectively as true insiders in the region.
- Political and related institutional requirements at the regional level are increasingly important. Regional cooperation agreements such as the North American Free Trade Agreement (NAFTA) and the European Union (EU) single market mainly represent the elimination of trade and investment barriers, and therefore allow reduced attention devoted by TNCs to government policy; in fact, regional agreements usually imply not merely the elimination of national regulation, but a shift of regulatory authority to the regional level, and thereby the need to allocate firm resources to monitor and manage relationships at that level.

The rigidity of the Triad (Rugman, 2000) is further confirmed by the new trade regime of the World Trade Organization, which has to devote enormous managerial resources to arbitrate Triad-based trade disputes and trade-remedy law type protectionism (as in the bananas, beef hormones, export subsidies and steel cases). The new protectionism of health, safety and environmental regulations is preventing an open world market and reinforcing Triad markets. The NAFTA is being expanded into the Free Trade Agreement of the Americas and the EU has been enlarged by

ten new members. These political developments reinforce the Triad and the need for regional government policies and Triad-based firm strategies.

## Empirical evidence on Triad activity

### *Transnationalization of sales*

As a test of the limits to globalization, this article considers the most likely instance in which a globally balanced distribution of sales, as a proxy for global corporate success, can be expected. One could classify as "global" all TNCs with a foreign-to-total sales ratio above, say, 50% and/or with some significant activity in each part of the Triad. In an earlier study, one such test, building upon data from the *Fortune Global 500* companies, i.e. the largest corporations of the world in terms of market size, was already performed (Rugman and Verbeke, 2004). In that article, it was found that 320 of the 380 firms for which data were available were home-region oriented, with over 50% of their sales in their home region. Twenty-five firms were found to be bi-regional, with less than 50% of sales intra-regionally and over 20% of sales in two regions, including their own home regions. Another 11 firms were uni-regional in a host region, deriving over 50% of their sales in foreign regions. Only 9 firms in the set were global, with less than 50% of sales in their home region and over 20% of sales in each region of the Triad. There was insufficient information to classify 15 firms.

In this article, a different, but perhaps even more relevant data set is used. The annual *World Investment Reports* of UNCTAD report the foreign-to-total ratios for assets, sales and employment for the world's largest 100 TNCs, ranked by foreign assets. In other words, these are the firms that are the most transnationalized, in terms of foreign activities, and they are also the ones most likely, from a supply-side perspective, to have the necessary knowledge base and managerial capabilities to penetrate successfully foreign markets. In this article, the foreign-to-total sales ratios are calculated for those top 100 firms reported in the *World Investment Report 2003* (UNCTAD, 2003,

pp. 187-188) that are also included in the *Fortune Global 500*. This procedure has excluded from the further analysis those corporations whose total sales remain under $10 billion. Foreign sales, as calculated by UNCTAD, include both sales by affiliates and exports by the parent TNC.

The 20 most transnationalized corporations, ranked by foreign-to-total sales, are mostly from small, open economies such as Canada, Australia and Switzerland, or are members of the EU such as Finland, France, the United Kingdom, Germany and Sweden (table 1). There are no United States TNCs in this set of firms. This is not all that surprising given the huge size of the United States home market.

Yet, a list of the most transnationalized corporations, ranked by foreign-to-total sales, may disguise a very important point. While these TNCs (table 1) have the majority of their sales outside of their home country, many are very regional. Most of their foreign sales are still in their home-Triad regional market. If the same TNCs are ranked according to the share of intra-regional sales (table 2), a different picture emerges. By intra-regional is meant sales within Europe (and usually within the 15 "old" EU members) for European TNCs, and within NAFTA for Canadian and United States TNCs. In the case of Asian-Pacific TNCs, intra-regional refers to Asia and the Pacific including Australia.

Nine of the world's 20 most "global" TNCs are, in fact, operating mainly in their home-Triad region market (table 2). For example the EU-based TNCs, such as Suez (74% intra-regional sales); Vodafone (93.1%); and Stora Enso (69.2%) are clearly "European" TNCs in their sales, as over two thirds of their business is within their own continent. The same is true for several other TNCs that are allegedly global; in fact these TNCs are operating in their home-base Triad region for the majority of their sales: ABB (53.9%); Nortel Networks (54.4%); Volvo (51.6%); BHP Billiton (66.1%); TotalFinaElf (74.0%) and Danone Groupe (60.3%). This leaves only 11 of the top 20 as TNCs that might achieve global competitive success.

**Table 1. The world's most transnationalized corporations, ranked by foreign-to-total sales, 2001**
(Percentage)

| Rank | Corporation | Home country | Foreign-to-total sales |
|---|---|---|---|
| 1 | Nokia | Finland | 98.5 |
| 2 | Roche | Switzerland | 98.2 |
| 3 | ABB | Switzerland | 97.4 |
| 4 | Philips Electronics | The Netherlands | 95.2 |
| 5 | Nortel Networks | Canada | 94.6 |
| 6 | Stora Enso | Finland | 94.3 |
| 7 | AstraZeneca | United Kingdom | 94.1 |
| 8 | Volvo | Sweden | 92.8 |
| 9 | GlaxoSmithKline | United Kingdom | 92.0 |
| 10 | News Corp. | Australia | 92.0 |
| 11 | Diageo | United Kingdom | 85.8 |
| 12 | Lafarge | France | 85.8 |
| 13 | BHP Billiton | Australia | 83.4 |
| 14 | LVMH | France | 81.2 |
| 15 | BP | United Kingdom | 80.5 |
| 16 | TotalFinaElf | France | 79.1 |
| 17 | Suez | France | 78.8 |
| 18 | Ericsson | Sweden | 77.8 |
| 19 | Danone Groupe | France | 76.7 |
| 20 | Vodafone | United Kingdom | 75.1 |

*Source:* Authors' calculations based on UNCTAD, 2003, pp. 187-188.
*Note*: This table is constructed from the list of the world's largest 100 TNCs, ranked by foreign assets in 2001. The foreign and total sales of these 100 TNCs are also reported in that list. The top 20 TNCs ranked by foreign-to-total sales are the ones that are also listed as a top 500 firm by Fortune, the *Fortune Global 500* (2002 edition). Five firms with high foreign-to-total sales ratios on the UNCTAD list were not sufficiently large in terms of revenues to be included in the *Fortune Global 500*: NTL Inc., Thomson, WPP Group (whose revenues were confirmed to be below 10 billion in its *Annual Report)*.

**Table 2. Regional distribution of the sales of the world's most transnationalized corporations, 2001**
(Percentage)

| *Fortune 500* Rank | rank | Corporation | Home country | Intra-regional sales | North America | Europe | Asia-Pacific | Concen-tration |
|---|---|---|---|---|---|---|---|---|
| 1 | 147 | Nokia | Finland | 49.0 | 25.0 [c] | 49.0 | 26.0 | G |
| 2 | 288 | Roche | Switzerland | 36.8 | 38.6 | 36.8 | 11.7 | B |
| 3 | 194 | ABB | Switzerland | 53.9 | 25.1 | 53.9 | 11.3 | D |
| 4 | 143 | Philips Electronics | The Netherlands | 43.0 | 28.7 [a] | 43.0 | 21.5 | G |
| 5 | 263 | Nortel Networks | Canada | 54.4 | 54.4 [a] | ... | ... | D |
| 6 | 423 | Stora Enso | Finland | 69.2 | 19.5 | 69.2 | 7.1 | D |
| 7 | 301 | AstraZeneca | United Kingdom | 32.0 | 52.8 [b] | 32.0 | 5.2 [f] | S |
| 8 | 267 | Volvo | Sweden | 51.6 | 30.2 | 51.6 | 6.0 | D |
| 9 | 140 | GlaxoSmith Kline | United Kingdom | 28.6 | 49.2 [b] | 28.6 | … | B |
| 10 | 364 | News Corp. | Australia | 9.0 | 75.0 [b] | 16.0 [d] | 9.0 | S |
| 11 | 262 | Diageo | United Kingdom | 31.8 | 49.9 | 31.8 | 7.7 | B |
| 12 | 416 | Lafarge | France | 40.0 | 32.0 | 40.0 | 8.0 | B |
| 13 | 281 | BHP Billiton | Australia | 66.1 | 12.6 | 13.0 | 66.1 | D |
| 14 | 459 | LVMH | France | 36.0 | 26.0 [b] | 36.0 | 32.0 | G |
| 15 | 4 | BP | United Kingdom | 36.3 | 48.1 | 36.3 | ... | B |
| 16 | 15 | TotalFinaElf | France | 55.6 | 8.4 | 55.6 | ... | D |
| 17 | 99 | Suez | France | 74.0 | 11.0 | 74.0 | 5.0 | D |
| 18 | 210 | Ericsson | Sweden | 46.0 | 13.2 | 46.0 [e] | 25.9 | B |
| 19 | 394 | Danone Groupe | France | 60.3 | … | 60.3 | … | D |
| 20 | 123 | Vodafone | United Kingdom | 93.1 | 0.1 [b] | 93.1 | 4.8 | D |

*Source:* Authors' calculations, based on firm annual reports.
G: Global.
B: Bi-regional.
D: Home-region oriented.
S: Host-region oriented.
[a] Canada and the United States.
[b] United States only
[c] The Americas
[d] United Kingdom only.
[e] Europe, the Middle East and Africa
[f] Japan.

Of these, two are highly focused in one part of the Triad, but not their home Triad region. These include non-United States TNCs with high sales in the United States, such as:

- News corp (9% sales in Australasia, 75.0% in the United States and 16.0% in the United Kingdom); and
- AstraZeneca (32% in Europe; 52.8% in the United States and 5.2% in Japan and 10% in the rest of the world).

Six firms are bi-regional TNCs with a significant portion (more than 20%) of their sales in two parts of the Triad, but less than 50% in any one region. These are:

- Roche (38.6% in North America; 36.8% in Europe, only 11.7% in Asia Pacific and 12.9% in other regions);
- GlaxoSmithKline (49.2% in the United States; 28.6% in Europe and 22.2% in the rest of the world);
- Diageo (31.8% in Europe; 49.9% in North America, only 7.7% in Asia-Pacific and 11.6% in the rest of the world);
- Lafarge (40% in Europe; 32% in North America, only 8% in Asia-Pacific and the remaining 20% in other parts of the world);
- British Petroleum (BP) (48.1% in North America; 36.3% in Europe and 15.6% in the rest of the world); and
- L.M. Ericsson (46.0% in Europe, the Middle East and Africa; 25.9% in Asia Pacific, only 13.2% in North America and 15.9% in the rest of the world.

There are only 3 (out of 20) TNCs with a truly balanced distribution of sales, i.e. across all three regions of the Triad (or even wider):

- Nokia (25.0% in the Americas, 49.0% in Europe, 26.0% in Asia-Pacific);
- Philips Electronics (28.7% in the United States and Canada, 43% in Europe, 21.5% in Asia-Pacific and 6.8% in the rest of the world); and
- LVMH (26% in the United States, 36% in Europe, 32% in Asia-Pacific and 6% in the rest of the world.

Yet, in spite of having achieved some demonstrated level of global corporate success, it should be recognized that these three companies are not in cell 1 of figure 1, as they exhibit some regional features in corporate strategy and structure. The

other companies in the top 20 are either strongly home region based or are from small countries peripheral to the Triad and focused on one of the other Triad markets. Most of the other 80 of the top 100 TNCs of the *World Investment Report 2003* (UNCTAD, 2003, pp. 187-188) are even less global and are either domestic or home-region based TNCs.

The message of these findings on the limits to globalization is that, for most TNCs, the strategy may need to be adjusted by strategic business units. Unfortunately, it is difficult to find data on strategic-business-unit sales by Triad region for the world's 100 largest TNCs presented in the *World Investment Reports*.

***Services are regional***

Large retail corporations tend to be even more home-region based than the manufacturing TNCs. The large United States retailers like Wal-Mart, Sears and K-Mart are all North American based. The latter two have no stores outside the United States, and Wal-Mart only has 10% of its stores and 6% of its revenues outside of the NAFTA region. Wal-Mart has 4,414 stores of which 3,244 are in the United States, 196 are in Canada and 551 are in Mexico. Only 423 are in international markets, i.e. 9.6% of the total stores. Nonetheless, Wal-Mart is the most transnational large-scale retailer from the United States. In 2001, foreign sales as a percentage of total sales were 16.3% ($35 billion of a total of $218 billion). However, 94% of its 2001 sales were in NAFTA.

Carrefour of France has about 9,200 stores in 30 countries. Yet, only 19% of Carrefour's revenues originate from outside of Europe. Clearly Carrefour needs to be analyzed on a European, regional level; it is not an organization that has achieved global corporate success.

In financial services, the world's largest TNC, Citigroup is also very regional. Citigroup's consumer banking group has 72.7% of total revenues in North America. Accounts are 77.1%

in North America where credit cards are part of the Accounts in Citigroup's consumer banking group and over 76% of accounts in the United States are credit card accounts. While over 70% of Citigroup's revenue and accounts are in the United States, only 45% of average consumer deposits are there. This regionalization is common across all the major business groups of Citigroup, except in commercial loans, which is only 27% United States based. While Citigroup has large commercial loans to foreign companies it is not as active in foreign consumer loans, as 65.6% of consumer loans are in the United States. Overall, these data reveal a strongly home-based, North American business. Indeed, Citibank became less global after the merger with Travellers in 1999, as the latter's insurance business was very localized, and this offset much of Citibank's banking diversification in South America and Asia.

## Examples of TNC positioning in the regional matrix

In this section, high-profile TNCs often described as global firms by the media are positioned into the matrix of figure 1, on the basis of the prime locus of decision-making power and the main geographic adaptation level of products. More specifically, six sets of two firms are discussed sequentially, with their main business in one particular industry (pharmaceuticals, food, cosmetics, cigarettes, cars, retail). This positioning, which is performed for illustrative purposes to describe the heterogeneity in so-called global TNC strategies, is based on surveying publicly available information, as well as ongoing research on these companies by the authors of this article. The positioning of complex institutions such as these highly transnationalized corporations in a single cell of a 3X3 matrix obviously constitutes a dramatic simplification of economic reality, but it does reflect "at the margin" the differences among the firms discussed, and thereby the variety in so-called global strategies.

In pharmaceuticals, AstraZeneca can be placed in cell 5, as it has mainly regional corporate governance and distribution systems (the United States market is so important that it is now

run separately from Europe). On the other hand, Merck is in cell 2 with strong corporate headquarters despite needing to operate regionally in Europe as well as in the United States home market as far as strategy implementation is concerned. Merck is experiencing some tension in this structure and does not perform as well in Europe as AstraZeneca does in the United States.

In the food industry, Nestlé manufactures products that are nationally regulated and supervised by country health and safety codes. Thus, it needs to be aligned to local markets. Nestlé's decision-making is largely in the hands of national units (cell 9), whereas Kraft functions mainly through regional centres (cell 6). Kraft's product delivery and marketing are operated locally but "back office" functions such as human resources management, accounting, auditing, legal and treasury services are performed in a more centralized and co-coordinated fashion. Some production is also co-coordinated globally. Kraft has key decision making concentrated at regional centres in North America and International (largely Europe) through co-chief executive officers.

In the cosmetics industry, L'Oréal is in cell 5, as its United States operations are administered by a regional office, to match its home European one. It has adapted its product lines for North America, e.g. Maybelline, which is controlled from New York, and is more mass marketing oriented than a number of its high-end French based cosmetics. L'Oreal's products can be assessed as culturally diverse, regional brands. Estée Lauder is more centralized, and positioned in cell 1, with both dominant corporate headquarters, and global products, which are not adapted to local preferences.

In the cigarettes industry, Philip Morris is also positioned in cell 1, with strong corporate headquarters, and building upon global brands, Marlboro in particular, which are not adapted locally. It does not need to be particularly concerned with regulations in other countries as its main problem is class action litigation in its United States home market. United Kingdom-

owned BAT can be positioned in cell 5, as it runs its United States operations with a large degree of autonomy through B&W, as a regional centre. It also has regional brands rather than the global ones of Philip Morris.

In the automobile industry, Toyota has a strongly centralized, hierarchical organizational structure. This is based on Kiichriro Toyoda's "the Toyota way" of consensus decision-making and discipline. Yet Toyota's product characteristics are much more region based, especially with adaptation in the vital United States host market, thereby positioning the firm largely in cell 2. In contrast, Hyundai, which has equally centralized decision-making, does not to the same extent adapt products to regional markets, i.e. it is closer to cell 1.

Finally, in the retail industry, Wal-Mart and Carrefour can both be positioned in cell 3 of figure 1. Both have centralized decision-making, and both sell mainly in their home markets. Carrefour may be moving toward cell 2, but there is, as yet, little evidence to support such regional adaptation of its production and services.

The examples above are consistent with similar analyses performed for many of the *Fortune Global 500* companies (Rugman, forthcoming). Of the 380 firms with data on geographic sales, as many as 320 have an average of 80% of their sales in their home region of the Triad. Here, the regional level, as introduced by figure 1, both on the horizontal axis and the vertical axis, appears important to many of them. The figure can also be used to position the handful of truly "global" TNCs and the "bi-regional" TNCs. The 12 examples discussed above illustrate the alignment of the new analytical framework with the basic data on regionalization of TNC activities.

## Conclusions

There is abundant empirical support for the proposition that many large, and highly transnationalized corporations have regional components in their strategy formation, both as regards

the locus of decision-making, and the geographic adaptation level of their products. The world's largest 100 TNCs are mainly Triad-based regional players, not global ones. They operate on a strongly segmented Triad/regional basis, and a relevant framework to analyze TNC strategy needs to recognize this. In short, management strategy as taught in business schools today should focus increasingly on the empirical reality that many firms lack a balanced distribution of sales around the globe, but are often focused on their home region. In addition, even firms with widely dispersed sales often have regional components in their strategy. Public policy towards TNCs also needs to reflect the reality of the Triad, rather than the myth of globalization.■

## References


Bartlett, Christopher and Sumantra Ghoshal (1989). *Managing Across Borders: The Transnational Solution* (Boston: Harvard Business School Press).

_____ (2000). *Transnational Management: Text and Readings*, 3rd Edition (New York: McGraw-Hill/Irwin).

Birkinshaw, Julian (2000). *Entrepreneurship in the Global Firm* (London: Sage).

Delios, Andrew and Paul Beamish (2004). "Regional and global strategies of Japanese firms", *Management International Review*, Special Issue, 45 (1), forthcoming.

Dunning, John and Alan Rugman (1985). "The influence of Hymer's dissertation on the theory of foreign direct investment", *American Economic Review*, 75(2), pp. 228-232.

Enright, Michael (2004a). "Regional management centers in the Asia-Pacific", *Management International Review*, Special Issue, 45 (1), forthcoming.

Enright, Michael (2004b). "The roles of regional management centers", *Management International Review*, Special Issue, 45 (1), forthcoming.

Grosse, Robert (2004). "Are the largest financial institutions really 'global'?", *Management International Review*, Special Issue, 45 (1), forthcoming.

Li, Lei (2004). "Is regional strategy more effective than global strategy in the U.S. Service Industries?", *Management International Review*, Special Issue, 45 (1), forthcoming.

Morrison, Alan, David Ricks and Kendall Roth (1991). "Globalization versus regionalization: which way for the multinational?", *Organizational Dynamics*, 19(3), pp. 17-29.

_____ and Kendall Roth (1992). "The regional solution: an alternative to globalization", *Transnational Corporations*, 1(2), pp. 37-55.

Rugman, Alan (2000). *The End of Globalization* (London: Random House and New York: Amacom).

_____ (forthcoming). *The Regional Multinationals* (Cambridge: Cambridge University Press).

_____ and Alain Verbeke (1992). "Europe 1992 and competitive strategies for North American firms", *Business Horizons*, 34(6), pp. 76-81.

_____ (1993). "Generic strategies in global competition", in Alan M. Rugman and Alain Verbeke, eds., *Research in Global Strategic Management, Volume 4: Global Competition: Beyond the Three Generics* (Greenwich, Conn.: JAI Press), pp. 3-15.

_____ (1998). "Multinational enterprises and public policy", *Journal of International Business Studies*, 29(1), pp. 115-136.

_____ (2001). "Subsidiary-specific advantages in multinational enterprises", *Strategic Management Journal*, 22(5), pp. 237-250.

_____ (2004). "A perspective on regional and global strategies of multinational enterprises", *Journal of International Business Studies*, 35(1), pp. 3-18.

United Nations Conference on Trade and Development (UNCTAD) (2003). *World Investment Report 2003. FDI Policies for Development: National and International Perspectives* (New York and Geneva: United Nations), United Nations publication, Sales No.E.03.II.D.8.

Yin, Eden and Chong Choi (2004). "The globalization myth: the case of China", *Management International Review*, Special Issue, 45 (1), forthcoming.

Yip, George (2003). *Total Global Strategy II* (Engelwood Cliffs: Prentice Hall).

# Information technology and electronics firms from Taiwan Province of China in the United Kingdom: emerging trends and implications

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This article examines the modal choices, key activities and motivations of non-dominant information technology and electronics firms from Taiwan Province of China in the United Kingdom, against the backdrop of recent trends in the global economy. Its main findings include the limited prospects of the sample firms' evolution into manufacturing activity in the United Kingdom and the increasing importance of inter-firm logistics collaboration. Among the key policy implications discussed in the article are: the need for appropriate measures to support the United Kingdom's positioning as a gateway to, and a preferred base for intelligence gathering on, other European markets; the need for "high-wage" advanced economies to capitalize upon their not-easily-replicable location-specific advantages (e.g. reputable research-and-development clusters; substantial domestic market) in targeting foreign direct investment in the research and development, design and sales-related areas; and the importance of a more balanced investment attraction strategy that actively targets major global players (and their capacity to attract secondary inward investment) without compromising support for indigenous growth companies. Future research should pay greater attention to the intra-regional, rather than intra-country, context of firms' evolution in international markets.

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**JEL codes**: Microeconomics (D), International Economics (F), and Economic Development, Technological Change and Growth (O).

## Introduction

Previous research into the transnational business activities of East Asian companies, including "Third World" transnational corporations (TNCs), State-owned enterprises, and general trading companies, has generated a number of key conclusions. Among these are the widely acknowledged importance of the above-mentioned players in global business and foreign-direct-investment (FDI) flows; the active role of the State, through its support for "national champions", in the emergence and growth of East Asian TNCs; the observed importance of inter-firm linkages (e.g. *sogo shosha*, *chaebol*), personal, ethnic and network relationships (or social organization) in influencing the international market development patterns of East Asian enterprises; and the limited relevance of incremental, stepwise approaches.[1]

Several accounts exist in the literature regarding East Asian TNCs, notably general trading companies and State-owned enterprises, financing significant acquisitions and joint venture investments in developed-country markets as a way of gaining instant access to strategically-relevant markets,[2]

[1] See Johanson and Vahlne, 1977, 1990. For a summary on the transnationalization of East Asian firms, see also Brecher and Pucik, 1980; Monkiewicz, 1983; Krueger, 1985; Burton and Saelens, 1986; Chernotsky, 1987; Buckley and Mirza, 1988; Aggarwal and Agmon, 1990; Smart and Smart, 1991; Lecraw, 1993; Leung, 1993; Tolentino, 1993; Ulgado, Yu and Negandhi, 1994; Yeung, 1994, 1998, 1999; UNCTAD, 1996; Zhang and Van Den Bulcke, 1996; Young, Huang and McDermott, 1996; Young, Hood and Lu, 1998; Mirza, 1999.

[2] Donald Lecraw has described this type of East Asian investments as "export enhancing", whilst applying the term "operations-extending" to resource-seeking investments made in less developed country markets (Lecraw, 1993).

technology or process knowledge.[3] It could be argued, however, that the international market entry and development pattern described above is more typical of the larger East Asian enterprises[4] than their smaller, non-State-owned counterparts, which may lack the requisite resources (financial and political) to support significant levels of FDI (Gynawaii and Fogel, 1994).

Unlike in other East Asian tiger economies, Taiwan Province of China's outward FDI has been led, not by its large, vertically integrated enterprises, such as Chinese Petroleum, Formosa Plastics Group, Tatung, and Acer, but by the country's preponderant small and medium-sized enterprises (SMEs).[5] Whilst this SME dominance does not detract from Taiwan Province of China's importance as a source of FDI (ranked the 7th largest in the world, with around $2 billion annual FDI since the early 1990s; Guiheux, 1998), it appears to have contributed to a limited investigation of the FDI activities of smaller Taiwanese firms (Guiheux, 1998). Fresh insights into these non-dominant firms' behaviour within foreign markets have become particularly important in view of the recent relevant developments in the global economy. Among these are the increasing level of inter-firm collaborations in supply chain and global logistics management (Bagchi and Virum, 1998; Bowersox and Calantone, 1998) – partly fuelled by the continuing advancement in information technology; greater access to key global markets, occasioned by the World Trade Organization (WTO) regime; the increasing tendency on the part of TNCs to view their FDI configuration in regional, rather than national, terms (Mirza, 1999); and the weakening competitiveness of the more advanced economies as locations for manufacturing-based FDI (Brown, 2002). These points, taken together, raise major questions regarding the prospects for FDI attraction and retention in the more advanced economies.

[3] See Lall, 1983; Burton and Saelens, 1986; Tolentino, 1993; Young et al., 1996, Young et al., 1998; Yeung, 1999; Mirza, 1999.

[4] See Brecher and Pucik, 1980; Burton and Saelens, 1986; Lecraw, 1993.

[5] See Chang and Grub, 1992; Guiheux, 1998; Mirza, 1999; Britain in Asia Pacific, 2002.

The aim in this article, therefore, is to explore possible changes in the nature of FDI in advanced economies, by examining the entry and development mode decisions, future intentions, key activities and motivations of non-dominant Taiwanese information technology (IT) and electronics firms operating in the United Kingdom. It is envisaged that this will improve understanding regarding the effects of deepening globalization and regionalization on TNCs' development within particular foreign markets, and provide further useful insights into the impact of global logistics collaboration on the transnationalization behaviour of smaller firms. The focus on the United Kingdom is particularly germane because the country has traditionally received a significant percentage of Taiwanese Europe-bound investment: about half of all FDI from Taiwan Province of China to Europe during the 1952-1998 period (Ministry of Economic Affairs, 1998), and over 70% of all Taiwanese manufacturing investment in Europe (Britain in Asia Pacific, 2002).

The remainder of this article is organized as follows. The next section discusses the key themes of the present study based on relevant insights from the literature. It also outlines a number of assessable propositions. This is followed by an explanation of the study's methodology. In the subsequent section, the results of the analysis are presented, complete with appropriate discussion of the findings and references to the study propositions. The penultimate section discusses some managerial and public policy issues, while the final part considers a number of limitations and future research directions.

## Conceptualizations and propositions

### *The transnationalization of the firm and emerging trends*

Most of the work on the transnationalization of the firm has concerned its evolution in manufacturing – arguably reflecting the dominance of the transnationalization process model. This model, which grew out of Nordic research,[6] posits

[6] Johanson and Widersheim-Paul, 1975; Johanson and Vahlne, 1977; Luostarinen, 1980.

that firms develop in an incremental, evolutionary manner in specific foreign markets, gradually deepening their commitment and investment (that is, no regular export activities; export via agents; export via sales affiliates; production via foreign affiliates) as they gain in market knowledge and experience (Johanson and Vahlne, 1977). Firms are also said to target initially neighbouring, psychically close countries, and subsequently enter foreign markets with successively larger psychic distance.

Probably owing to the intuitive appeal of the above propositions (Sullivan and Bauerschmidt, 1990), attention has also been paid to the pre-manufacturing stages in firm transnationalization research. The classic pattern is thought to mirror the historical evolution of Japanese enterprises in major foreign markets, i.e. building up a finance and sales presence through heavy investment to support exports initially, and later evolving into manufacturing activity (Chernotsky, 1987; Mason, 1992; Park, 2003). Arguably, however, the evolution within specific national markets may be less important in the future (Clark and Mallory, 1995). A number of reasons may account for this.

The first is that global markets have become more accessible than they used to be (the evolution of Japanese enterprises into manufacturing was at least in part due to tariff and non-tariff barriers in European and American markets – Chernotsky, 1987; Lecraw, 1993). For example, better access to global markets occasioned by the WTO regime has significantly neutralized the fears of a "Fortress Europe", which had accounted for much Japanese inward FDI into Europe during the late 1980s and early 1990s (Mirza, 1999). Secondly, there appears to be an increasing trend towards considering regional (rather than national) market factors in making firms' FDI decisions. Hafiz Mirza, for example, observed that many TNCs increasingly utilize "a regional division of labour for international production" (Mirza, 1999, p. 206). An example is Matushita, which selectively appropriates the variable factor endowments, competencies and markets of countries such as

Indonesia, Malaysia, the Philippines, Singapore and Viet Nam (Mirza, 1999, p. 210).

The third factor in the declining importance of manufacturing-bound evolution within particular country markets could be that hardware is becoming more commodity-like (Fawcett and Clinton, 1997; Brown, 2002), and manufacturing less significant in terms of marketing to the customer. As was noted: "product technologies have advanced to the point that everyone can imitate everyone else except in the most complex products" (Bowersox and Calantone, 1998, p. 85). This suggests that there will increasingly be greater value added from sales and service, with more substantial investment in the latter. There is, indeed, some evidence that companies that emphasize these softer dimensions of value – that is, the world class marketers, the excellent brand builders, the expert aggregators and augmentators – are increasingly emerging as the leading players in most industries; world class manufacturing remains important, but apparently less so than achieving "world class logistic practice" (Fawcett and Clinton, 1997, p. 20).

Developments in information technology (IT) and inter-firm collaboration (Parker, 1994), particularly in global supply chains and logistics management (or "globalisatics" according to Tyndall Gopal, Partech, and Kamauff, 1998), appear to be fuelling this trend. Increasingly, it has become a competitive standard for larger, global companies to outsource, collaborate with and depend on capable third party providers for several aspects of their non-core, value-adding activities (Bagchi and Virum, 1998) in order to assure logistical continuity (Bowersox and Calantone, 1998).

Among the industries most affected by this trend is the IT and electronics industry. The observation made earlier regarding the increasingly commodity-like nature of hardware applies particularly to this industry - see Fawcett and Clinton, 1997; Brown, 2002. In their pursuit of global competitiveness, major players within this industry, and indeed many other industries, have generally required their key value chain partners – original equipment manufacturer and original design

manufacturer (OEM/ODM) subcontractors, component suppliers, logistics partners, service firms – to follow them into new, foreign markets (Brown, 2002); this is to facilitate the implementation of efficiency-seeking practices such as the build-to-order (BTO) manufacturing mode, and related strategic initiatives, including "just-in-time, just-in-time II, quick response, continuous replenishment, and collaborative planning, forecasting and replenishment" (Bowersox and Calantone, 1998, p. 84).

The literature is replete with evidence of firms that commenced transnational operations mainly to maintain their position in the supply chain of major customers that had expanded to particular foreign markets. Though initial accounts of customer-driven transnationalization came from service firms, including financial services,[7] other scholars, notably Jim Bell (1995) and Nicole Coviello and Hugh Munro (1995, 1997), have found similar evidence of client-followership among high-technology, manufacturing (computer and electronics) firms. The overall conclusion from this literature is that firms that are "bounced" into transnational operations (that is, those that follow their key customers into foreign markets) are less likely to exert control over their entry mode choice or market selection pattern. They are also less likely to prioritize market-specific knowledge/experiential learning, take a long term view of, or evolve within particular country markets in the manner suggested by the conventional wisdom or the incremental transnationalization model (Sullivan and Bauerschmidt, 1990).

Taiwanese manufacturing enterprises arguably provide good case examples. Based on their well-earned reputation for productive efficiency, resourcefulness and technological adeptness, many firms from this East Asian economy became OEM/ODM subcontractors and/or component suppliers to major transnational players.[8] The relationships, which initially focused on labour-intensive industries (Levy, 1988), have in later years

[7] E.g. Burton and Saelens, 1986; Hellman, 1996; O'Farrell, Wood and Zheng, 1996.

[8] See Buckley and Mirza, 1988; McDermott, 1991; Chang and Grub, 1992; Guiheux, 1998; Mirza, 1999.

shifted to technology-intensive industries, particularly electronics and information technology. It is likely that this long established involvement of Taiwanese manufacturing enterprises in global supply chains and logistics, and the recent trends in these relationships, might affect the nature and pattern of their transnational expansion. It is thus proposed that:

Proposition 1: *Taiwanese IT and electronics firms operating in the United Kingdom are likely to undertake activities associated with the effective provision of their major customers' logistics needs.*

***Motivations for outward FDI***

A number of major motivations have been identified in the transnational business literature as underpinning firms' transnational expansion. Among the most commonly mentioned are resource-seeking factors; market-seeking factors; efficiency-seeking factors; and strategic asset-seeking (including knowledge- and relationship-seeking) factors (Dunning, 1993; Bell and Young, 1998; Mirza, 1999).

A close examination of Taiwan Province of China's FDI history, dating back to the mid 1960s, suggests that these key motivations have had varying levels of importance at different stages of the country's economic history. Resource-related motivations (e.g. to take advantage of lower costs of labour and land) largely accounted for the earlier waves of Taiwanese FDI to South East Asia, Latin America and China.[9] Indeed, between 1952 and 1998, the members of the Association of South-East Asian Nations (ASEAN) and Latin American countries respectively received 33% and 32% of Taiwanese FDI, which, excluding that to China, totalled $18.6 billion (Taiwan Province of China, Economic Affairs, 1998).

The next waves of Taiwanese outward FDI were dominantly market and knowledge seeking. During the 1970s

[9] See Chen, 1986; Chen, 1992; Guiheux, 1998; Park, 2003.

and 1980s, they were largely driven by the need to circumvent trade barriers, improve access to the lucrative United States and Japanese markets (including the cutting edge technological and process knowledge embedded therein) and acquire brand names and sales networks (Guiheux, 1998). These drivers also underpinned the significant increase in Europe-bound FDI during the mid-1980s, to mitigate the potential impact of a "Fortress Europe" (McDermott, 1991), reduce market dependence on the United States and diversify technological acquisition and transfer links beyond the United States and Japan (Guiheux, 1998). Some of these investments resulted from the concerted effort of East Asian and European Union governments, under the Asia Europe Meeting (ASEM) initiative, to increase FDI activity between the two regions (Mirza, 1999).

It would seem that the recent trends towards greater inter-firm collaboration in global supply chains and logistics have increased the importance of relationship-based (customer-following) motivations in the outward investment activity of Taiwanese IT and electronic companies. Indeed, a recent survey of Taiwanese enterprises by the Taipei Representative Office highlighted these drivers (in addition to market- and knowledge-seeking factors) as having consistently risen in importance since 1987 (Taipei Representative Office, 1997). Resource-seeking factors have, on the other hand, declined in importance. This reflects the conclusion reached by Stephen Young et al. (1996) on East Asian TNCs. It is thus proposed that:

Proposition 2: *Relationship-based (customer-following) motivations are likely to be of major importance in Taiwanese IT and electronics direct investment in the United Kingdom.*

Proposition 3: *Market- and strategic asset seeking factors are likely to be of major importance in Taiwanese IT and electronics direct investment in the United Kingdom.*

These propositions are assessed subsequently based on empirical evidence from the sample firms.

## Methodology

The primary data for this article came from a wider investigation into the international market development behaviour of Taiwanese foreign affiliates operating in the United Kingdom. The study population was defined as including IT and electronics sales operations listed by the Taiwan Trade Centre, London, and the development agency, Scottish Enterprise. The focus on IT and electronics companies reflects the industry's particular susceptibility to the earlier discussed global trends (including inter-firm global logistics collaboration - Fawcett and Clinton, 1997; Brown 2002) and its preponderance amongst the Taiwanese firm population in the United Kingdom (Britain in Asia Pacific, 2002). The decision to focus on sales operations is also important as it provides a good vantage point for examining the issue of modal evolution from two ends, i.e. (a) whether Taiwanese sales affiliates showed lesser commitment, "toe-in-the-water", approaches (e.g. export agents, export distributors) before setting up sales operations in the United Kingdom; and (b) whether they have progressed or are planning to progress towards manufacturing operations in the United Kingdom. It should be noted, in addition, that previous studies (e.g. Wheeler, Jones and Young, 1996), successfully employed comparable sales-based samples in researching aspects of firm transnationalization and mode evolution.

Data collection was undertaken in three phases. At the first stage, a semi-structured questionnaire was designed and pilot-tested on some five Scottish-based Taiwanese sales operations listed by the local development agency. Based on the insights obtained from the pilot-test, the semi-structured questionnaire was revised and structured. In the second phase, all the 95 Taiwanese companies in the United Kingdom listed in the earlier indicated sample frame were contacted by telephone. These contacts had two main objectives: establishing the eligibility of the companies for the study (they must be sales, and not manufacturing, operations) and requesting the cooperation of an appropriate "key informant" (Philip, 1981). Some 51 Taiwanese sales operations in the United Kingdom were

identified, through the above telephone-based screening process, as meeting the criteria for the study, and were subsequently mailed structured questionnaires. An effort was made to minimize the shortcomings associated with the key informant technique (Philips, 1981), by targeting only those officials who were considered most likely to possess the appropriate level of knowledge regarding the issues of interest in the present study; these included the Chief Operating Officer, the General Manager, the Branch Manager, and the Sales/Marketing Manager, in that order.

Although the total number of questionnaires received by the cut-off date was 31 (a 60% response rate), subsequent screening reduced the number of useable questionnaires to 21; this represents an effective response rate of 40%, which is relatively good for studies amongst organizational populations (Baruch, 1999; Ibeh, Brock and Zhou, 2004). Furthermore, though the study's sample size might seem low in absolute terms, it is arguably quite representative, particularly when viewed in relation to the relevant population as a whole.

The third phase of data collection involved follow-up telephone interviews, of 45-60 minutes duration, with the key informants of the responding sales affiliates. Telephone interviews were considered more appropriate in this case because of the disparate locations of Taiwanese sales operations in the United Kingdom, and the target respondents' preference for telephone interviews over face-to-face interactions. The background preparation for each follow-up interview consisted of an examination of the completed questionnaire returned by a particular company (Calder, 1977). The actual interview sessions were made as unstructured as possible, with the topic guide merely serving to prompt and/or steer discussions as deemed necessary. Sufficient care was also taken to ensure that the interview procedures reflect recommended best practice, including the use of open-ended questions to stimulate free ranging conversation, whilst steering the discussion in a semi-structured fashion (Calder, 1977; Churchill, 1995). The fairly high standard of spoken English among the interviewees

obviated any real difficulties, either in terms of communication or the quality of data obtained. In addition, the fact that the interviewer was Taiwanese meant that any linguistic misunderstandings were easily dealt with. Appropriate notes[10] were taken during the interviews, and were expanded upon immediately after each session.

## Analysis and findings

### *Sample profile and modal behaviour*

The analysis presented below is based on completed questionnaires and follow-up interviews conducted with 21 Taiwanese IT and electronics sales operations in the United Kingdom. All of these sales operations are privately owned, and 20 have manufacturing parent companies in Taiwan Province of China. (Only one sales operation has a trading company parent). The average number of employees is 15 (see table 1).

As table 1, below, shows, the study firms dominantly commenced their United Kingdom operations with high-to-full control entry modes, including wholly-owned affiliates (directly established or acquired) and joint ventures (Young, Hamill, Wheeler, and Davies, 1989; Driscoll and Paliwoda, 1997); two sales affiliates were formed as joint ventures with local companies, while the remaining Taiwanese operations are wholly owned affiliates, directly established or acquired by the parent companies in Taiwan Province of China. A majority of the Taiwanese IT and electronics sales operations in the United Kingdom were, indeed, not preceded by lesser commitment modes of transnationalization such as agent/distributor relationships.

Survey and depth interview data further suggest little intention on the part of the sample firms to evolve or progress towards manufacturing investment in the United Kingdom. On

[10] These interviews were not tape-recorded because of the well known reluctance of most developing country managers with regard to tape-recorded interviews (see, for example, Crick and Chaudhry, 1995).

**Table 1. Profile of Taiwanese IT and electronics sales operations in the United Kingdom**

| Company code | Number employed (Taiwanese/local) | Main product | United Kingdom location | Initial entry mode/ year established | Current mode/ year established |
|---|---|---|---|---|---|
| A | 3 (1/2) | Computers/ peripherals, networking card | Watford/ Herts | … | Wholly-owned sales affiliate/1989 |
| B | 54 (1/53) | Computers, laptop, notebooks | Basingstoke / Hampshire | … | Directly established sales branch/NA |
| C | 9 (1/8) | PC cases, power supply | Tottenham / London | … | Directly established sales branch /1990 |
| D | 13(0/13) | Cables, connectors | Bracknell / Berks | Distributor / 1988 | Joint venture representative office/ 1990 (40% Taiwan Province of China) |
| E | 20(1/19) | Computer peripherals, | Wallington / Surrey | Distributor /pre-1991 | Joint venture sales affiliate / 1990 (97% Taiwan Province of China) |
| F | 48(3/45) | Monitors | Watford/ Herts | … | Wholly-owned sales affiliate / 1992 |
| G | 14(2/12) | Computer components | Stevenage / Herts | Distributor / 1983 | Wholly-owned sales affiliate / 1992 |
| H | 4(2/2) | Key pads | Witney / Oxfordshire | Distributor / 1982 | Directly established sales branch /1992 |
| I | 48(3/45) | Computer network | Stanmore/ Middlesex | Distributor / 1986 | Directly established sales affiliate/1992 |
| J | 4(1/3) | Computer cases, accessories | Park Royal / London | Distributor / 1991 | Directly established sales branch /1993 |
| K | 40(2/38) | Computer components | Kingston / Milton Keynes | Direct selling /pre-1994 | Wholly-owned sales affiliate / 1994 |
| L | 4(2/2) | PC cases | Reading / Berkshire | … | Wholly-owned sales affiliate / 1996 |
| M | 5(2/3) | PC accessories | Brownhill / Milton Keynes | … | Wholly-owned sales affiliate / 1996 |
| N | 8(3/5) | PC notebooks | Clydebank / Glasgow | … | Directly established sales branch /1997 |
| O | 6(1/5) | Computer work station | Luton / Bedfordshire | Agent / 1990 | Wholly-owned sales affiliate / 1997 |
| P | NA | Computer accessories | Beeston / Nottingham | … | Directly established sales branch /1997 |
| Q | 7(1/6) | Computer accessories | Uxbridge / Middlesex | Distributor / 1989 | Directly established sales branch /1997 |
| R[a] | 10(1/9) | Computer accessories | Park Royal / London | … | Acquired sales affiliate / 1997 |
| S | 3(1/2) | PC/Mac & multimedia | Tongwell /Milton Keynes | Distributor / 1993 | Directly established sales branch /1998 |
| T | 1(1/0) | PC accessories | Glasgow | … | Wholly-owned sales affiliate / 1998 |
| U | 5(1/4) | Keyboards | Clydebank / Glasgow | … | Directly established sales branch /1998 |

*Source:* Research data.

[a] All but one sales operation (R, a trading company) have private Taiwanese manufacturing parents.

the contrary, there was an observed case of a sales affiliate reverting into a representative office (with the removal of warehousing operations) (see also Rosson, 1987; Turnbull, 1987; Wheeler et al., 1996). The only significant evolution that seemed to have occurred pertains to the enlarged portfolio of functions undertaken by the surveyed Taiwanese sales operations, i.e. expanding from sales offices with conventional functions (including exploring new local customers, marketing, providing repair and after sales service, collecting market intelligence, and warehousing/distribution facilities) to sales offices, which also have responsibilities for simple/final processing or assembling.

The observed non-likelihood of manufacturing-bound evolution seems to deviate from the historical pattern associated with Japanese and East Asian TNCs in major foreign markets, i.e. building up a sales presence through heavy investment to support exports initially, and later evolving into manufacturing activity (Krueger, 1985; Chernotsky, 1987; Mason, 1992; Park, 2003). It also suggests little support for the Uppsala-popularized establishment chain model (Johanson and Widersheim-Paul, 1975; Johanson and Vahlne, 1977). This conclusion should be taken with caution, however, in view of the present study's reliance on expressed intentions rather than actual behaviour, and the limitation of its dataset to mainly customer-following sales affiliates, to which market specific knowledge and long term growth might be less relevant.

***Key activities of the sample firms and impact of major global trends***

In order to generate relevant data on proposition 1, the respondents were asked to indicate and rank-order (from a list of variables developed from previous relevant literature) the major activities they undertake in the United Kingdom market. They were also asked to indicate the relative distribution of these activities among the following customer groups: transnational customers in the United Kingdom; Taiwanese customers in the United Kingdom; local United Kingdom customers; and other European customers. Based on an aggregate analysis and insights

from the interviews, three generic forms of activities can be associated with the study firms; these include OEM/ODM, original brand manufacturing (OBM), and selling products/ brands of other companies (table 2 below).

OEM/ODM activities, involving the supply of components (including motherboards, VGA/Power supply or connectors) to transnational clients and other Taiwanese customers operating in the United Kingdom, were found to be particularly important among Taiwanese IT and electronics sales operations. These Taiwanese operations generally provide their transnational customers (including Compaq, IBM, HP) with varying levels of processing, and flexible, quick product adjustments to meet the specifications of various European markets. Company U, for example, supports Compaq by altering keyboards' letters to meet the language requirements of the different European markets served by the latter. As one interviewed manager observed: "there is an increasing and inevitable trend towards setting up sales branches or affiliates with the function of simple/final processing or assembling work for Europe". This trend seems likely to continue, given its consistency with the emphasis, among world class companies, on achieving enhanced logistics effectiveness and efficiencies – not merely by customizing products to better satisfy country-specific demand and local customs, but also "postponing such customization until orders are received and then finishing the product in local distribution facilities" (Bowersox and Calantone, 1998, pp. 86-87).

It further emerged from in-depth interview evidence that these United Kingdom-based Taiwanese operations do not take OEM/ODM orders directly from their major transnational customers in the United Kingdom. Such orders are normally forwarded to the headquarters in Taiwan Province of China, with the United Kingdom operations merely functioning as contact or service centres. On the other hand, they focus more on exploring new local business, taking orders from smaller United Kingdom and European customers. With time, however, these sales operations generally diversify into marketing of own

**Table 2. Key activities, products and target markets of Taiwanese sales operations in the United Kingdom**

| Key activities | Key products | Key target markets |
|---|---|---|
| **OBM/ODM-related** | | |
| Providing warehousing and storage facilities, to maintain adequate inventory of products, replacement parts and maintenance supplies | Components including: | Transnational customers in the United Kingdom |
| Serving as technical/customer support and after-sales service centre | Mother boards | Existing Taiwanese customers in the |
| Handling orders and distribution for EU markets | VGA Power supply or Connector | United Kingdom |
| Exploring new local customers and taking orders from smaller United Kingdom and European customers | | Local customers |
| | | Other European customers |
| Simple processing and assembling (new trend) | | |
| **OBM-related** | | |
| Exploring new local customers and taking ordersPromotion and marketing | Final Products including: | Local customers |
| | | Other European |
| Monitoring market trend and gathering information | Notebooks | customers |
| | Monitors | |
| | Scanner | |
| Managing local agents and distributors | Mouse | |
| | PC | |
| **Trading-related** | | |
| Exploring new local customers and taking orders | Final Products including: | Local customers |
| | Notebooks | |
| Promotion and marketing | Monitors | |
| | Scanner | |
| | Mouse | |
| | PC | |

*Source:* Research data.

brands (OBM activities, table 2 above). Taiwanese firms engaged in OBM activities mainly market final products such as notebooks, monitors, scanner, mouse, and personal computers (PCs) to United Kingdom and European customers. Marketing of own-brand products, with its capacity for higher profit margins, grew in importance during the early 1990s, when IT products enjoyed favourable market conditions. However, following the stiff competition in global markets, including the price war led by a key industry player, many Taiwanese IT and electronics companies that could not match the major players reverted to operating on complementary OEM/ODM basis in order to secure sales and diversify risk.

Overall, it can be concluded that, whilst a majority of the study firms operate on both an OEM/ODM and OBM basis, the significant focus on OEM/ODM functions suggests support for proposition 1, regarding the increased importance of activities aimed at meeting major customers' logistics requirements. This highlights the heightened significance of inter-firm collaboration in supply chain and logistics management in driving the transnationalization of smaller subcontractors and component suppliers, operating in highly competitive and increasingly commoditized industries. The rising prominence of these logistics-focused (OEM/ODM) forms of transnationalization strengthens the case for the broadening of the transnationalization process model to recognize more explicitly critical network and relationship influences,[11] alongside such other traditionally highlighted factors as firm resources, market-specific learning/experiential knowledge, and psychic distance (Johanson and Vahlne, 1977). Furthermore, the observed tendency of the study firms to look beyond the United Kingdom market, towards the wider European (regional) market, particularly in their OBM activities reflects recent research evidence that firms are increasingly taking a regional, rather than national, view of their transnational operations (Mirza, 1999). The coordinating challenges raised by such a regional

[11] See Johanson and Mattsson, 1988; Johanson and Vahlne, 1992; Bell, 1995; Coviello and Munro, 1995, 1997.

strategy might explain the reported continuing involvement of the study firms' parent organizations in the handling of their transnational clients' OEM/ODM orders.

### *Motivations for Taiwanese FDI in the United Kingdom*

To obtain relevant data for assessing propositions 2 and 3 (relating to the importance of a range of motivations on the study firms' entry into the United Kingdom), the respondents were asked to indicate, and rank order (from a list of variables developed from previous relevant literature), the major motivating factors for their entry into the United Kingdom. Based on the analysis of questionnaire and interview data, three dominant motivations would appear to be important (table 3 below).

**Table 3. Major motivations for Taiwanese IT and electronics sales operations in the United Kingdom**

| |
|---|
| **Relationship-based factors** |
| To get closer and provide better support to customers |
| To provide repair and after-sales service and warehousing and storage facilities |
| To respond to the demand of existing transnational customers who have set up operations in the United Kingdom |
| To meet the demand of existing Taiwanese customers who have set up operations in the United Kingdom |
| **Market-seeking factors** |
| To exploit United Kingdom's high market potential |
| To increase market share/penetration in the United Kingdom |
| To increase control over marketing and distribution |
| To explore new local customers |
| To react more quickly to business opportunities |
| To build direct relationships with local customers |
| **Knowledge-seeking factors** |
| To gain in-depth knowledge of United Kingdom market trends and obtain information / feedback from customers |
| To collect marketing intelligence on European markets and transfer back to the parent company |
| To meet parent company's strategic objectives |

*Source:* Research data.

*Relationship-based motivations*

"Customer-followership" seems to a major motivation for several Taiwanese IT and electronics operations within the study sample. This reflects the presence of major global players in the IT and electronics industries in the United Kingdom and the strategic need by the study firms to maintain their OEM/ODM links with these key account customers (McDermott, 1991). It also highlights the increasing importance of physical proximity to major customers as a driving force in firm transnationalization (Bell, 1995; Coviello and Munro, 1997). This is because proximate location is a sine qua non for tapping into the efficiency gains accruable from such leading-edge manufacturing practices as build to order (BTO) manufacturing mode and just-in-time (JIT) inventory management system.

The BTO mode (that is, the activation of production processes based on received orders) is increasingly becoming standard practice among efficiency-seeking IT and electronics companies, as it enables them to supply appropriately tailored global market requirements, with little risk of high buffer stocks or technological obsolescence. Given the importance of the JIT inventory system to effective BTO manufacturing, many Taiwanese OEM/ODM suppliers have had to set up operations in the United Kingdom in order to assist their partners' United Kingdom-based plants to deliver European orders promptly and accurately. These Taiwanese sales operations generally provide warehousing functions, technical service and simple/final processing and assembling to support the manufacturing operations of their major customers, which supply European markets. Their establishment generally reflects a strategic move on the part of their Taiwanese-based parent firm to enhance relationships with these key account customers and to establish mutual dependence (Fawcett and Clinton, 1997). The operations are positioned as intermediaries to deliver "value-adding" services to their key account customers, by providing technical support, after sales service, quick component replacements and replenishment (Fawcett and Clinton, 1997; Bowersox and Calantone, 1998).

Overall, Taiwanese IT and electronics sales operations have gradually positioned themselves at the heart of the supply network for major industry players, thus supporting this article's second proposition, that relationship-based (customer following) motivations are likely to be important in Taiwanese IT and electronics direct investment in the United Kingdom.

*Market- and knowledge-seeking motivations*

Taiwanese IT and electronics investments in the United Kingdom appear to be driven also by market- and knowledge-seeking factors (table 3 above). Among the most important market-seeking factors are to explore the United Kingdom's high market potential (the third largest domestic market in Europe, with the highest per capita expenditure on electronics products); to increase market share and achieve further penetration of the United Kingdom market; to increase control over marketing and distribution channels; to provide more expeditious response to market opportunities; and to build relationships with local customers through direct interactions.

Also highlighted in table 3 are knowledge-seeking factors, including collecting and transferring marketing intelligence on United Kingdom and European markets to the parent companies. Given the relative recency of Taiwanese FDI activity in Europe, and the likely difficulties of transplanting experiences from their traditional American and ASEAN markets into Europe, useful market intelligence seems particularly necessary in assisting the parent companies of the study firms to learn and develop strategies for European markets. Overall, these major drivers reflect the long term, regionally focused, strategic objective of the parent companies. Taken together, the foregoing suggests some support for proposition 3, that market- and knowledge-seeking factors are likely to be important motivations for Taiwanese IT and electronics direct investment in the United Kingdom.

## Conclusions and implications

This article has examined the entry and development mode choices, future intentions, key activities and motivations of non-dominant Taiwanese IT and electronics firms operating in the United Kingdom, against the backdrop of recent relevant trends in the global economy. Its main findings include the limited prospects of the sample firms' evolution into manufacturing activity in the United Kingdom and the increasing importance of inter-firm logistics collaboration (or customer-followership), market- and knowledge-seeking factors in motivating Taiwanese IT and electronics investments in the United Kingdom. Further discussion of these findings is undertaken below, including key managerial and public policy implications.

The first point to be made concerns the observed importance of relationship-based motivations in influencing the nature and pattern of Taiwanese IT and electronics investments in the United Kingdom. In addition to reinforcing the conclusions reached in previous relevant research (e.g. Bell, 1995; Coviello and Munro, 1995, 1997), this present study provides fresh insights that suggest the rising importance of inter-firm logistical collaboration in underpinning the transnationalization of smaller OEM/ODM or component suppliers (Fawcett and Clinton, 1997). This observed trend has at least two key implications. One is the need for smaller firms seeking to secure their positions within strategically-important and increasingly competitive supply chains to follow their key account customers into foreign markets and, more importantly, to strive to augment their partners' business through efficiency-seeking, value-adding practices such as speed of delivery, design quality, resource and management support, and research and development (R&D) and IT use (Chang and Grub, 1992). The second challenge raised by the observed importance of inter-firm logistics collaboration in the transnationalization process is the need for policy makers and other relevant actors to strive continually to improve their country's attractiveness to major global players (Morgan, Kelly, Sharpe and Whitley, 2003; Floyd, 2003), in view of the latter's

potential to attracting secondary inward investments from logistics and other network partners.

Another important discussion point relates to the sample firms' apparent lack of interest in commencing manufacturing operations in the United Kingdom. This seems to suggest an emerging pattern, different from the previously observed transnationalization behaviour of Japanese and East Asian TNCs in major foreign markets (Krueger, 1985; Chernotsky, 1987; Mason, 1992; Park, 2003). This lack of manufacturing prospects could be explained, in part, by the limited relevance of intra-market learning and growth to the mainly customer-following, OEM/ODM-based, study firms (smaller, less resourced, Taiwanese sales affiliates); and the greater suitability of sales-based structures (with their customer skills and cost advantages) for cross-border logistics collaboration. The present article views the trend as reflecting a much wider issue of decreasing FDI inflows into Europe;[12] this, arguably, derives from the significant reduction in the protectionist fears that had fuelled much of the pre-1992 FDI flows into Europe, the general downturn in global FDI flows, and the weakening attractiveness of the more advanced economies (including the United Kingdom) for foreign manufacturing/assembly investments (UNCTAD, 2004).

The increasing evidence that foreign direct investors are taking advantage of the integrated European market by choosing alternative, lower-cost regional locations (e.g. Central and Eastern Europe – Brown, 2002; UNCTAD, 2003; Morgan et al., 2003) for their manufacturing operations seems to reinforce the last point, above. It also reflects Mirza's (1999) previously noted observation regarding the increasing tendency of TNCs to make market commitment decisions on a regional rather than national basis. Furthermore, it highlights the need for policy makers and key managers of inward investment promotion agencies to update continually their knowledge regarding their countries' location-specific advantages, with a view to focusing their promotional efforts in the most effective manner.

[12] See *The Economist*, 2001; Brown, 2002; UNCTAD, 2003; OECD, 2004, *The Wall Street Journal*, 2004.

Given that the loss of inward manufacturing investment to lower cost countries, especially China but also Central and Eastern Europe is a long-term process, policy makers and investment promotion managers in high wage countries such as the United Kingdom need to do more to identify, develop and promote their more advanced, not-easily-replicated, country-specific resources, e.g. internationally-reputable R&D clusters and their associated knowledge spillovers.[13] This will assist advanced economies to remain attractive for certain kinds of inward investment, particularly in the design and R&D areas (Brown, 2002; Morgan et al., 2003). Indeed, the latter are now a major focus for promotional targeting efforts.

Another kind of inward investment that could, perhaps, be more actively sought by United Kingdom agencies is sales-based FDI, including sales affiliates and branch offices. Given the observed effect of the United Kingdom's market size and strategic position (for Europe-wide intelligence gathering) in motivating Taiwanese IT and electronics investments, relevant United Kingdom agencies should seek to position and promote the country as a "must-be" location, which requires, at the very least, an appropriate structure for facilitating sales and intelligence gathering.

It is interesting that, in the past, targeting sales affiliates was regarded as significant for inward investment agencies, because of the influence such affiliates had on subsequent manufacturing investment decisions made by the foreign parent corporation. In today's environment, sales affiliates may evolve subsequently into design and R&D operations, and hence targeting these operations through promotional programmes may again be valuable, albeit for different reasons.

This, to be sure, raises the challenge of minimizing possible hindrances to the United Kingdom being seen as a gateway to other European Union (EU) markets, and as a preferred location for effective intelligence gathering for the

[13] See Keeble et al. 1998; Fahy, 2002; Cantwell and Piscetello, 2002; Morgan et al., 2003.

European market. Among the key steps that could be taken towards improving the quality and munificence of the United Kingdom's operating environment are making sustained improvements/investments in United Kingdom transportation/ distribution infrastructure and holding the Euro referendum at the earliest time feasible. These have become particularly urgent for a number of reasons. One, anecdotal evidence suggests that such concerns are contributing to the recent high profile closures/ re-locations by foreign manufacturing/assembling plants operating in the United Kingdom (Brown, 2002; Morgan et al., 2003; EIU ViewsWire, 2003),[14] particularly within the IT and electronics industries. Two, the continued "exodus" of major global players from the United Kingdom will severely weaken several of the country's key industry clusters, and this, added to the present study's finding on the importance of "customer-followership", could lead to corresponding closure, re-location or avoidance of the United Kingdom by smaller foreign investors.

Overall, there is little doubt that the reduced inflow of foreign manufacturing investment into the United Kingdom and other advanced economies requires a policy agenda focusing upon a twin-pronged, inward-outward, approach to FDI. This coincides with the renewed debate in policy and research circles over the economic justification and long term sustainability of bidding in inward FDI auctions and reflects the mounting calls for greater policy focus and support for more locally-grown TNCs.[15] The present article's position is to support a complementary, mutually-reinforcing, inward-outward investment strategy, which would ensure the continuing viability of the United Kingdom's current key industry/regional clusters (e.g. Silicon Glen; Oxford, Cambridgeshire – Keeble et al., 1998; Brown, 2002), as well as stimulate the emergence of new international clusters.

[14] According to this source, the United Kingdom's share of total FDI inflows in the EU in 1998, just before the single currency's launch, stood at 29%. In 2002, three years after the euro's launch, this share had fallen to just 8%.

[15] See Bellak, 2004; Hood et al, 2002; Ibeh et al, 2004.

## Limitations and future research directions

It remains to highlight a number of limitations in the context of which the present study's conclusions should be viewed. The first is that the IT and electronics industries from which the study sample was drawn has been experiencing a serious global recession that might have influenced some of the behaviour observed. On the other hand, however, the single industry focus of the study is useful as it enables more solid conclusions, by obviating the shortcomings of previous studies with unknown industry effects (Zou and Stan, 1998).

The second limitation relates to the reliance on the study firms' expressed intentions, rather than observed behaviour, in assessing the issue of manufacturing evolution within the United Kingdom. Previous research, not only in social psychology and consumer behaviour research (e.g. Ajzen and Fishbein, 1980), but also in exporting (Eshghi, 1992), has noted that intentions may not always be a good indicator of actual behaviour. This consideration, coupled with the relatively low average age of Taiwanese operations in the United Kingdom, suggests the need for future longitudinal research, to capture the actual development patterns of Taiwanese IT and electronics firms in the United Kingdom. A related challenge facing future researchers is that of mobilizing necessary resources to enable the inclusion of the studied affiliates' Taiwan Province of China-based parent firms in the data collection effort. This is important because these parent firms are often the most authoritative source of reliable insights regarding the future intentions of their foreign-based affiliates.

Another future research issue concerns the continued wisdom of studying firms' foreign market evolution in national terms, in the face of the deepening regionalization of the markets and investments (Mirza, 1999; Brown, 2002; Buckley, Clegg, Forsans and Reilly, 2003). Given the potential usefulness of adopting a regional perspective, researchers are urged to pay greater attention to firms' intra-regional evolution, whilst also exploring the within-country dimension. They are also

encouraged to go beyond the single country design of the present study, and investigate the behaviour of non-dominant firms from other developing countries/regions operating in more economically advanced regions.

## References


Ajzen, I. and M. Fishbein (1980). *Understanding Attitudes and Predicting Social Behaviour* (Englewood Cliffs, N.J.: Prentice-Hall).

Bagchi, P.K. and H. Virum (1998). "Logistical alliances: trends and prospects in integrated Europe", *Journal of Business Logistics*, 19(1), pp. 191-213.

Baruch, Y. (1999). "Response rate in academic studies; a comparative analysis", *Human Relations*, 52(4), pp. 421-438.

Bell, J. (1995). "The internationalisation of small computer software firms: a further challenge to 'stage' theories", *European Journal of Marketing*, 29(8), pp. 60-75.

Bell, J. and Young, S. (1998). "Towards an integrative framework of the internationalization of the firm", in G. R. Hooley,. Loveridge and D. Wilson (eds.), *Internationalization: Process, Context and Markets* (London: Macmillan), pp. 5-28.

Bellak, Christian (2004). "How performance gaps between foreign and domestic firms matter for policy", *Transnational Corporations*, 13 (2), pp. 29-55.

Bowersox, D.J. and R.J. Calantone (1998). "Executive insights: global logistics", *Journal of International Marketing*, 6(4), pp. 83-93.

Brecher, C. and V. Pucik (1980). "Foreign banks in the US economy: the Japanese example", *Columbia Journal of World Business* (Spring), pp. 5-13.

Britain in Asia Pacific (2002). "Taiwan and the United Kingdom are closely tied through mutual trade and investment", www.stroudgate.net (accessed 13 December).

Brown, Ross (2002). "The future of ICT industries in Scotland: trends in post-branch plant economy", in Neil Hood, Jeremy Peat, Ewen Peters, and Stephen Young, eds., *Scotland in a Global Economy: The 2020 Vision* (London: Macmillan), pp. 130-145.

Buckley, Peter and Hafiz Mirza (1988). "The strategy of Pacific Asian multinationals", *Pacific Review"*, 1(1), pp. 50-62.

Buckley, Peter, Jeremy Clegg, Nicolas Forsans, Kevin T. Reilly (2003). "Evolution of FDI in the United States in the context of trade liberalisation and regionalisation", *Journal of Business Research,* 56(10), pp. 853-857.

Burton, Fred N. and F.H. Saelens (1986). "The European investments of Japanese financial institutions", *Columbia Journal of World Business*, (Winter), pp. 27-33.

Calder, B. (1977). "Focus groups and the nature of qualitative marketing research", *Journal of Marketing Research,* 24 (August), pp. 353-364.

Cantwell, John and L. Piscitello (2002). "Agglomeration and location of foreign R&D activities in the European regions", *Proceedings of the 28th Annual Conference of the European International Business Academy*, Athens (December).

Chang, T. and P. D. Grub (1992). "Competitive strategies of Taiwanese PC firms in their internationalisation process", *Journal of Global Marketing,* 6(3), pp. 5-27.

Chen, C-H., (1986). "Taiwan's foreign direct investments", *Journal of World Trade Law*, 20(6), pp. 639-664.

Chen, T-J. (1992). "Determinants of Taiwan's direct foreign investment: the case of a newly industrialising country", *Journal of Development Economics*, 39, pp. 397-407.

Chen, X. (1996). "Taiwan investment in China and Southeast Asia: go west, but also go south", *Asian Survey*, XXXVI/5, pp. 447-467.

Chernotsky, H.L. (1987). "The American connection: motives for Japanese foreign direct investment", *Columbia Journal of World Business,* (Winter), pp. 47-54.

Churchill, G.A. (1995). *Marketing Research: Methodological Foundations* (London: Dryden Press).

Clark, Timothy and Geoff Mallory, (1995). "The impact of strategic choice on the internationalisation of the firm", in G. Chryssoichoidis, C. Millar and J. Clegg (eds.), *Internationalisation Strategies* (London: Macmillan), pp. 193-206.

Coviello, Nicole and H. Munro (1995). "Growing the entrepreneurial firm: networking for international marketing development", *European Journal of Marketing*, 29(7), pp. 49-61.

Coviello, Nicole and H. Munro (1997). "Network relationships and the internationalisation process of small software firms", *International Business Review*, 6(4), pp. 361-86.

Crick, David and Shiv Chaudhry (1995). "Export practices of Asian SMEs: some preliminary findings', *Marketing Intelligence and Planning*, 13(11), pp. 13-21.

Driscoll, A.M., and Stanley Paliwoda (1997). "Dimensionalising international market entry mode choice", *Journal of Marketing Management*, 13(1-3), pp. 57-87.

Dunning, John H. (1993). *Multinational Enterprise and the Global Economy* (Reading: Mass, Addison Wesley).

Economist Intelligence Unit (2003). "UK Economy: life on the outside – FDI and the euro", *EIU ViewsWire*, 16 May.

Eshghi, A. (1992). "Attitude-behaviour inconsistency in exporting", *International Marketing Review*, 9(3), pp. 40-61.

Fahy, John (2002). "A resource-based analysis of sustainable competitive advantage in a global environment", *International Business Review*, 11, pp. 57-78.

O'Farrell, P. N., P. Wood and J. Zheng (1996). "Internationalisation of business services: an inter-regional analysis", *Regional Studies*, 30(2), pp. 101-118.

Fawcett, S.E. and S.R. Clinton (1997). "Enhancing logistics to improve the competitiveness of manufacturing organisations", *Transportation Journal*, 37(1), pp. 18-28.

Floyd, David (2003). "How a flexible labour market influence the amount of foreign direct investment attracted by a host nation! The case of the UK", *European Business Review*, 15(5), p. 334.

Guiheux, Gilles (1998). "The internationalisation of Taiwanese firms". Presented at a Conference on The Development of Contemporary Taiwan and its implications for Cross-Strait Relations, the Asia-Pacific and Europe, jointly organized by the Centre d'Etudes Français sur la Chine Contemporaine (CEFC, Hong Kong (China)) and the Institute for National Policy Research (Taipei, Taiwan Province of China).

Hellman, P. (1996). "The internationalisation of Finnish financial service companies", *International Business Review*, 3(2), pp. 191-207.

Hood, Neil, Ewen Peters, Jeremy Peat, and Stephen Young (2002). "Conclusions", in Neil Hood, Ewen Peters, Jeremy Peat, and Stephen Young (eds.), *Scotland in a Global Economy: The 2020 vision* (Hampshire/New York: Palgrave Macmillan), pp. 343-353.

Ibeh, Kevin I.N., Jurgen Brock and Josephine Zhou (2004). "The drop and collect survey among industrial populations: theory and empirical evidence", *Industrial Marketing Management*, 33(2), pp. 155-165.

Ibeh, Kevin I.N., Jeffrey Johnson, Pavlos Dimitratos, and Jonathan Slow (2004). "Micromultinationals: some preliminary evidence on an emergent star of the international entrepreneurship field", *Journal of International Entrepreneurship* (forthcoming).

Johanson, J. and F. Wiedersheim-Paul (1975). "The internationalisation of the firm: four Swedish cases", *Journal of Management Studies*, 12, pp. 305-322.

Johanson, J. and J.E. Vahlne (1977). "The internationalisation process of the firm: a model of knowledge development and increasing foreign market commitments", *Journal of International Business Studies*, 8(1), pp. 23-32.

Johanson, J. and J.E. Vahlne, J.E. (1990). "The mechanism of internationalisation", *International Marketing Review*, 7(4), pp. 11-24.

Keeble, David, C. Lawson, H. Lawton Smith, B. Moore, and F. Wilkinson (1998). "Internationalisation processes, networking and local embeddedness in technology-intensive small firms", *Small Business Economics*, 11, pp. 327-342.

Krueger, Anne (1985). "The experiences and lessons of Asia's super exporters in export-oriented development strategies", in V. Corbo, A. Krueger and F. Ossa, eds., *Export-oriented Development Strategies* (Boulder and London: Westview Press), pp. 187-212.

Lall, S. (1983). "The rise of the multinationals: developing-country firms in international markets". *Futures*, 12(4), pp. 303-316.

Lecraw, D.J. (1993). "Outward direct investment by Indonesian firms: motivation and effects", *Journal of International Business Studies* (Third Quarter), pp. 589-600.

Leung, C.K. (1993). "Personal contacts, subcontracting linkages, and development in the Hong Kong-Zhujiang delta region", *Annals of the Association of American Geographers*, 83(2), pp. 272-302.

Levy, B. (1988). "Korean and Taiwanese firms as international competitors: the challenges ahead", *Columbia Journal of World Business*, 23(1), pp. 43-51.

Luostarinen, Reijo (1980). *The Internationalisation of the Firm*, (Helsinki: Acta Academiae Oeconomicae Helsigiensis).

Mason, Mark (1992). "The origins and evolution of Japanese direct investment in Europe", *Business History Review*, 66(3), pp. 435-474.

McDermott, Michael (1991). "Taiwan's electronic companies are targeting Europe", *European Management Journal*, 9(4), pp. 466-474.

Mirza, H. (2000). "The globalisation of business and East Asian developing-country multinationals", in Neil Hood and Stephen Young, eds., *The Globalization of Multinational Enterprise Activity and Economic Development* (London: Macmillan), pp. 202-229.

Monkiewicz, J. (1986). "Multinational enterprises of developing countries: some emerging characteristics", *Management International Review*, 26(3), pp. 67-79.

Morgan, Glenn, Bill Kelly, Diana Sharpe and Richard Whitley (2003). "The future of Japanese manufacturing in the UK", *Management Research News*, 23(9-11), pp. 118-119.

Park, Kang, H. (2003). "Patterns and strategies of foreign direct investment: the case of Japanese firms", *Applied Economics*, 35 (16), p. 1739.

Parker, D.W. (1994). "Logistics management: cornerstone to sustainable competitive advantage", *Management Services*, 38(1), pp. 10-20.

Philips, L.W. (1981). "Assessing measurement error in key informant reports: a methodological note on organizational analysis", *Journal of Marketing Research*, 18 (November), pp. 395-415

Rosson, P.J. (1987). "The overseas distributor method: performance and change in a harsh environment", in P.J. Rosson and S.D. Reid (eds.), *Managing Export Entry and Expansion* (New York: Praeger), pp. 296-315.

Smart, J., and A. Smart (1991). "Personal relations and divergent economies: a case study of Hong Kong investments in South China", *International Journal of Urban and Regional Research*, 15(2), pp. 216-233.

Sullivan, D. and A. Bauerschmidt. (1990). "Incremental internationalisation: a test of Johanson and Vahlne's thesis", *Management International Review*, 30(1), pp. 19-30.

Taipei Representative Office in the UK (1997). "Taiwanese investment in the UK", www.tro-taiwan.roc.org.uk.

Taiwan Province of China, Economic Affairs (1997). *Survey Report on the Outward Investments of Taiwanese Manufacturers* (Taipei: Economic Affairs).

Taiwan Province of China, Economic Affairs (1998). "Taiwan Trade Statistics 1952-1998", www.moeabboft.gov.tw

*The Economist* (2001). "Britain: where have all the foreigners gone? Inward investment", *The Economist*, 361(Oct 13), p. 30.

*The Wall Street Journal* (2004). "China overtakes U.S. as magnet for foreign direct investment; survey finds corporations are increasingly attracted to emerging economies", *Wall Street Journal*, 28 June, p. A.2

Tolentino, P.E.E. (1993).*Technological Innovation and Third World Multinationals* (London and New York: Routledge).

Turnbull, Peter (1987). "A challenge to the stages theory of the internationalisation process", in P.J. Rosson and S.D. Reid (eds.), *Managing Export Entry and Expansion* (New York: Praeger), pp. 21-40.

Tyndall, G., C. Gopal, W. Partech and J. Kamauff (1998). *Supercharging Supply Chains* (New York: John Wiley & Sons).

United Nations Conference on Trade and Development (UNCTAD) (1996). *World Investment Report 1996: Trade and International Policy Arrangements* (New York and Geneva: United Nations).

United Nations Conference on Trade and Development (UNCTAD) (2004). *World Investment Report 2004: The Shift Towards Services* (New York and Geneva: United Nations).

Ulgado, F.M., C. Yu, and A.R. Negandhi (1994). "Multinational enterprises from Asian developing countries: management and organisational characteristics", *International Business Review*, 3(2), pp. 123-133.

Wheeler, C., M. Jones, and S. Young (1996). "Market entry modes and channels of distribution in the machine tool industry in the U.K", *European Journal of Marketing*, 30(4), pp. 40-57.

Yeung, H.W. (1994). "Transnational corporations from Asian developing countries: management and organisational characteristics", *Journal of Asian Business*, 10(4), pp. 17-58.

Yeung, H.W. (1998). "The political economy of transnational corporations: a study of the regionalisation of Singaporean firms, *Political Geography*, 17(4), pp. 389-416.

Yeung, H.W. (1999). "Competing in the global economy: the globalisation of business firms from emerging economies", in H.W. Yeung, ed., *The Globalisation of Business Firms from Emerging Economies* (Cheltenham and MA: Elgar), pp. xiii-xlvi.

Young, Stephen, J. Hamill, C. Wheeler, C., & J.R. Davis (1989). *International Market Entry and Development* (Hertfordshire: Harvester Wheatsheaf).

Young, Stephen, H-C Huang and M. McDermott (1996). "Internationalisation and competitive catch-up processes: case study evidence on Chinese multinational enterprises", *Management International Review*, 36(4), pp. 295-314.

Young, Stephen, Neil Hood and Tong Lu (1998). "International development by Chinese enterprises: key issues for the future", *Long Range Planning*, 31(6), pp. 886-893.

Zhang, H., and D. Van Den Bulcke (1996). "International management strategies of Chinese multinational firms", in J. Childs and Y. Lu, eds. *Management Issues in China: Volume II International Enterprises* (London and New York: Routledge), pp. 141-164.

Zou, S. and S. Stan (1998). "The Determinants of export performance: a review of the empirical literature between 1987 and 1997", *International Marketing Review*, 15,(5), pp. 333-353.

# FDI and economic growth in developing economies: how relevant are host-economy and industry characteristics?

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It is surprisingly hard to come by conclusive evidence supporting the widely held view that developing countries should draw on foreign direct investment to spur economic development. Virtually all empirical studies on the subject have found the impact of foreign direct investment on growth to be ambiguous because of the highly aggregated data they have used. These aggregations have blurred the differences between resource-seeking, market-seeking and efficiency-seeking foreign direct investment, and have ignored the compatibility of the different types of foreign direct investment with economic conditions prevailing in individual host economies. Analyzing foreign-direct-investment stocks in major sectors and specific manufacturing industries in a large number of developing economies originating from the United States, this article concludes that the positive growth effects of foreign direct investment are not guaranteed automatically. Host-economy and industry characteristics, as well as the interaction between such characteristics affect largely the growth impact of foreign direct investment in developing economies.

**Keywords:** foreign direct investment, resource-seeking, market-seeking and efficiency-seeking FDI, host-economy characteristics, industry characteristics, economic growth effects

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## Introduction

Various international organizations and foreign advisors recommend developing countries to rely primarily on foreign direct investment (FDI) as a source of external finance. They argue that, for several reasons, FDI stimulates economic growth more than other types of capital inflows. In particular, FDI is supposed to be less volatile, and to offer not just capital but also access to modern technology and know-how.

However, it is surprisingly hard to come by empirical evidence supporting this policy advice. Some studies find a positive relationship between FDI inflows and economic growth in host economies. Yet, the link between FDI inflows and growth is far from being firmly established once endogeneity problems and the heterogeneity of host economies are taken into account. Moreover, if FDI stocks are considered instead of FDI inflows, previous studies typically fail to establish positive growth effects. Accordingly, Richard Caves reckons that "the relationship between a LDC's stock of foreign investment and its subsequent economic growth is a matter on which we totally lack trustworthy conclusions" (Caves, 1996, p. 237).

This article focuses on the question whether results on the growth impact of FDI are ambiguous because previous studies did not differentiate between different types of FDI and their suitability under different host-economy conditions. Typically, the sectoral composition of FDI is ignored in the empirical literature, even though the growth impact of FDI is likely to depend on industry characteristics.

This article first surveys the relevant literature and discusses why host-economy and industry characteristics may matter for the growth impact of FDI. Subsequently, the empirical approach adopted, and the data used, in this article are described. The empirical analysis is based on FDI stocks in a large number of developing host economies originating from the United States. After discussing the relevance of host-economy and industry characteristics, these two sets of characteristics are combined in order to assess their interaction in shaping the growth impact

of FDI. The last section summarizes the main findings and offers some conclusions.

## Where do we stand?

The standard procedure to test the impact of FDI on economic growth in developing economies is to perform cross-country analyses in which the lagged growth rate of gross domestic product (GDP) per capita is related to the FDI-to-GDP ratio. The results of such empirical studies are mixed and depend on the explanatory FDI variable used. The estimated coefficients for the impact of FDI on economic growth range from significantly positive in the case of FDI flows (Ram and Zhang, 2002), over insignificant if only the exogenous component of FDI flows is used (Carkovic and Levine, 2002), to significantly negative in the case of FDI stocks (Dutt, 1997).

A growing strand of the literature attributes the lack of robust results to the fact that the growth impact of FDI depends on the characteristics of the developing economy in which FDI takes place. It is argued that the host countries' capacity to absorb FDI productively is linked to their GDP per capita. Host economies with a better endowment of human capital are supposed to benefit more from FDI-induced technology transfers, as spillovers from foreign affiliates to local enterprises are more likely. Openness to trade is considered important as transnational corporations (TNCs) are said to pursue increasingly complex integration strategies that require the unrestricted imports of intermediate goods at all stages of the production process (UNCTAD, 1998, pp. 111–116). The extent to which TNCs transfer modern technology and know-how to their foreign affiliates may depend on host countries' institutional development, which captures factors such as the rule of law, the degree of corruption, the quality of public management, the protection against property rights infringements and discretionary government interference.

The empirical picture seems to become clearer once host-economy characteristics are taken into account. Magnus Blomstöm, Robert Lipsey and Mario Zejan (1994) found that

the positive impact of FDI on economic growth is confined to higher-income developing countries. According to Luiz De Mello (1997), the larger the technological gap between the host and the home country of FDI, the smaller the impact of FDI on economic growth. Eduardo Borensztein, José De Gregorio and Jong-Wha Lee (1998) have found that FDI enhances growth only in economies with a sufficiently qualified labour force.[1] V.N. Balasubramanyam, Mohammed Salisu and David Sapsford (1996) stressed that openness to trade is essential for reaping positive growth effects of FDI. Regression analysis by Laura Alfaro *et al.* (2001) has suggested that FDI is associated with faster growth only in host economies with comparatively well developed financial markets.

In one way or another, these studies corroborate the hypothesis that developing economies must offer a supportive business environment and must have reached a minimum level of economic development before they can capture the growth-enhancing effects of FDI (OECD, 2002, p. 28). However, as these results are based on FDI flows which are not corrected for potential endogeneity biases (i.e. higher economic growth causing higher FDI flows), the finding that host-economy characteristics matter for the growth effects of FDI may also be sensitive to the choice of the explanatory FDI variable. As a matter of fact, Maria Carkovic and Ross Levine (2002) found that the exogenous component of FDI flows does not exert a significant independent influence on the growth rate of GDP per capita even if non-linearities caused by host-economy characteristics are considered. To our knowledge, comparable empirical studies using FDI stocks as an explanatory variable do not exist. Amitava Dutt (1997) has used FDI stocks, as this article does in the following sections, and assesses their impact on lagged GDP growth, but host-country conditions have not been taken into account by that author.

Against this backdrop, it seems that the favourable perception of FDI among policymakers in developing countries

[1] This evidence is contested by a recent study by Ram and Zhang (2002).

and foreign advisors may easily be exaggerated. However, before coming to such a verdict, one should address another important shortcoming of almost all previous cross-country studies, namely the use of overall inward FDI positions as an explanatory variable. As it will be argued in the following, such highly aggregated data cannot capture important aspects of the relationship between FDI and economic growth. This is why a differentiation is made between sectors as well as between specific manufacturing industries in which FDI takes place.

Industry characteristics such as technology intensity, factor requirements, linkages to local and foreign markets, and the degree of vertical integration of foreign affiliates are likely to shape the growth impact of FDI in various ways. Industry characteristics may influence (a) the extent to which FDI supplements ("crowds in") or displaces ("crowds out") local investment, (b) the amount of technology and know-how transferred from parent companies to foreign affiliates, (c) the compatibility of technology transfers to the host countries' factor endowment and, hence, the degree to which local suppliers, competitors and buyers can benefit through spillovers, (d) the amount of foreign exchange earnings generated through FDI-induced exports or lost through the repatriation of funds, (e) the extent to which foreign affiliates foster competition in host economies by breaking up oligopolistic market structures, or stifle competition through their market power, and (f) the degree to which the locational competition for FDI increases or decreases distortions in host countries' economic policies.

These factors are closely linked to the different motives for FDI in developing economies. For instance, resource-seeking FDI in the primary sector tends to involve a large up-front transfer of capital, technology and know-how, and to generate high foreign exchange earnings. On the other hand, resource-seeking FDI is often concentrated in enclaves dominated by foreign affiliates with few linkages to the local product and labour markets. Furthermore, its macroeconomic benefits can easily be embezzled or squandered by corrupt local elites. Rather than enhancing economic growth, resource-seeking FDI in the

primary sector might lead the country into some kind of "Dutch Disease".

By contrast, efficiency-seeking FDI in some parts of manufacturing draws on the relative factor endowment and the local assets of host economies (UNCTAD, 1998, chapter IV). This type of FDI is more likely to bring in technology and know-how that is compatible to the host countries' level of development, and to enable local suppliers and competitors to benefit from spillovers through adaptation and imitation. Additionally, the world market orientation of efficiency-seeking FDI should generate foreign-exchange earnings for host economies. As a result, one would expect a relatively strong growth impact of FDI in industries that attract efficiency-seeking FDI.

Market-seeking FDI in services and other parts of manufacturing can benefit host countries' consumers by introducing new products and services, by modernizing local production and marketing and by increasing the level of competition in the host economies. However, fiercer competition may also lead to the crowding out of local competitors, especially if foreign affiliates command superior market power. Moreover, in the long run, the host countries' balance of payments is likely to deteriorate through the repatriation of funds since market-seeking FDI often does not generate export revenues, especially if the protection of local markets discriminates against exports. Hence, the growth impact of this type of FDI should be weaker than the growth impact of efficiency-seeking FDI.

Finally, it has been argued that the growth effects of FDI depend on the interaction between industry and host-economy characteristics. Two opposing hypotheses are advanced in the literature. Building upon a standard Heckscher-Ohlin model structure and augmenting it by international technology flows, Kiyoshi Kojima (1973) reckoned that FDI in developing countries will be more growth-enhancing if it is undertaken in more labour-intensive and less technology-intensive industries. In these industries, the technological differences between foreign

affiliates and local enterprises are considered relatively small. Therefore, technological spillovers to local enterprises should be more likely.[2] By contrast, Dutt (1997) developed a Keynesian model with international transfers of capital and technology (but without local technological spillovers), from which he concluded that the impact of FDI on economic growth in developing countries should be greater if the inflow of FDI goes into technologically advanced industries. The rationale behind this proposition is that an increase in the capital stock in technologically less advanced industries lowers the export prices of developing host economies and, thus, leads to a deterioration of their terms of trade.

A first attempt to discriminate empirically between the two hypotheses was undertaken by Dutt (1997). In contrast to the theoretical models, he found no difference in the growth impact of FDI between high-technology and low-technology industries. However, Dutt's empirical analysis is flawed in three respects. First, Dutt does not distinguish between resource-seeking FDI in the primary sector and FDI in manufacturing. In addition to six manufacturing industries, his high-technology group includes "coal and petroleum products". Second, Dutt's industry classification ignores that, irrespective of the technology intensity, the growth impact of FDI in manufacturing should differ depending on whether FDI is efficiency-seeking or market-seeking. Third, the classification of "metals" as a high-technology industry is in conflict with the industry characteristics portrayed below.

## Data and approach

A cross-country analysis of the role of industry characteristics and their interaction with host-country characteristics in shaping the growth impact of FDI requires sectorally disaggregated FDI data for a large number of host economies. For the foreign affiliates of United States TNCs,

[2] This proposition is consistent with the above cited empirical evidence by De Mello (1997).

such data are provided in the online data base of the Bureau of Economic Analysis (BEA, 2003). Comparable data are not available for other home countries. Hence, the United States outward FDI position in a host economy is used as a proxy for its total inward FDI position.

It is for several reasons that this article follows Dutt (1997) and prefers FDI stocks to FDI flows. First, stock data are available for a large number of developing host economies. Second, industry-specific flows are frequently not disclosed for confidentiality reasons; this applies especially to relatively small host economies in which FDI inflows in a particular industry are often confined to one single project. Third, it is mainly FDI flows that suffer from potential endogeneity biases.[3] This is evident from the literature on the determinants of FDI, which typically considers economic growth of host countries to be a major driving force of FDI inflows. Short lags for growth rates do not help much to remove endogeneity biases, as TNCs tend to base their decisions on anticipated growth in coming periods.[4] While it cannot be ruled out that FDI stocks are affected in this way, too, the problem of endogeneity is reduced considerably since FDI stocks comprise engagements undertaken long before the period for which economic growth rates are calculated here (i.e. 1991–2000). Finally, growth enhancing spillovers should not only emerge from recent FDI inflows but also from FDI established much earlier.

FDI stocks are considered in relative terms in the following, in order to control for the size of host economies. *Ceteris paribus*, larger economies host typically higher FDI stocks. However, the growth effects of FDI should depend on its relative importance in the host economy, rather than its

[3] Dutt stresses that "the likelihood that FDI flows and growth during the relevant period are interdependent" (Dutt, 1997, p. 1932) as the major reason to analyze the growth effects of FDI with stock data.

[4] Note that econometric methods to detect endogeneity problems, e.g. Granger causality tests, are not applicable to the type of analysis described below. Furthermore, the time-series dimension of BEA (2003) data is not sufficient for Granger causality tests.

absolute size. The relative importance may be assessed by relating FDI to either the host country's GDP or its population. This article follows the mainstream of the relevant literature in that it applies the FDI-to-GDP ratio in the subsequent analysis.

By using FDI stock data for 1990, the initial year of the observation period, this analysis does not capture the significant increase of United States FDI during the 1990s.[5] This is the "price" paid for minimizing the afore-mentioned problem of endogeneity. If FDI stocks in more recent years, or changes in stocks during the 1990s were considered, the risk of reverse causation, i.e. a favourable growth performance resulting in more FDI, would increase substantially. At the same time, the loss of relevant information seems to be less than one might suspect. Part of the boom of United States FDI is reflected in the 1990 data already.[6] Moreover, the structure of United States FDI stocks in 2000 reveals fairly strong similarities to the structure prevailing ten years before:

- United States FDI stocks in the services sector, as defined above, increased by a factor of 2.6, but FDI stocks more than doubled in the manufacturing sector, too. Likewise, FDI growth varied somewhat within the manufacturing sector, but the ranking of industries in the outward FDI stocks of the United States was little affected.

- All developing regions participated in the boom of United States FDI during the 1990s. The ranking of the sample economies in this article with regard to the FDI-to-GDP ratio in 1990 was highly correlated with the corresponding ranking in 2000.[7]

[5] As pointed out by an anonymous referee, worldwide United States FDI stocks tripled from $431 billion in 1990 to $1,293 billion in 2000 (BEA 2003).

[6] The rise of worldwide United States FDI stocks in 1985-1990 (by a factor of 1.8) was even higher than in 1990-1995 (factor of 1.6), and only slightly lower than in 1995-2000 (factor of 1.85).

[7] The Spearman rank correlation coefficient is 0.73 and is significant at the 1% level.

Since this article focuses on the composition of FDI by sectors and industries as well as the distribution across developing host economies, rather than aggregated volumes, the use of 1990-data does not appear to pose serious limits to the analysis presented here.

The BEA (2003) online data base also offers information on FDI-related economic activities of the foreign affiliates of United States TNCs, which can be used to characterize the latter according to their technology intensity, factor requirements, linkages to local and foreign markets, and their degree of vertical integration with the parent company. Additionally, World Bank (2002) data on gross fixed capital formation, secondary school enrolment and GDP per capita are used, as well as the index on institutional development established by Daniel Kaufmann, Aart Kraay and Pablo Zoido-Lobatón (2002) and the index on openness to trade developed by Jeffrey Sachs and Andrew Warner (1995).[8]

The empirical analysis is carried out in several steps. It is started by evaluating the role of host-economy characteristics in shaping the growth impact of FDI. To this end, the host economies of United States outward FDI are classified into two groups (with favourable and unfavourable characteristics[9]) according to four alternative indicators: GDP per capita in 1990, secondary school enrolment in 1990, the Kaufmann *et al.* (2002) index on institutional development, and the Sachs and Warner (1995) index on openness to trade in 1990. Within each group, a further differentiation is made between host economies with zero or low, and higher, FDI stocks originating from the United States. Based on this classification, the median lagged growth rates of GDP per capita for each subgroup are calculated, and the links between the FDI-to-GDP ratio in 1990 and economic growth in 1991–2000 are explored. In order to get first hints on whether the results differ between resource-seeking, efficiency-

[8] The definitions and data sources of the variables are given in the annex.

[9] The analysis is restricted to two subgroups to maintain a sufficiently large number of observations in each subgroup.

seeking and market-seeking FDI, the analysis for United States FDI stocks in petroleum, manufacturing, and services is redone separately.[10]

The article proceeds by disaggregating the manufacturing sector into seven industries: food, chemicals, metals, machinery, electrical equipment, transport equipment, and others, for which the BEA (2003) online data base reports separate data. The manufacturing industries are characterized according to six indicators: (a) labour intensity, as given by the number of employees of United States affiliates per million dollars of value added, (b) human capital intensity, measured by the compensation in 1,000 dollars per person employed by the foreign affiliates of United States TNCs, (c) research-and-development (R&D) intensity, which indicates the R&D expenditures of United States foreign affiliates as a percentage of value added, (d) amount of technology transfers, as given by the royalties and license fees paid by United States foreign affiliates to their parent companies as a percentage of value added, (e) export orientation, measured by total exports of United States affiliates as a percentage of total sales, and (f) the degree of vertical integration, which reflects the sum of exports of United States affiliates to, and imports of United States affiliates from, their parent companies as a percentage of sales of the affiliates. For each manufacturing industry, the observations are classified into groups with zero or low, and higher, FDI-to-GDP ratios. The group-specific median growth rates of GDP per capita are then used to analyze whether the growth impact of FDI differs between manufacturing industries and how these

[10] Petroleum is used as a proxy for all primary-sector industries that receive resource-seeking FDI. This is because other primary-sector industries cannot be singled out from the BEA (2003) data base. Similar to the primary sector, BEA (2003) data do not allow for full coverage of the services sector. Some items (e.g. transportation and communication) are included in "other industries". Moreover, real estate and holding companies are subsumed under "finance". Hence, the sum of the following three items is considered to represent the services sector: "wholesale trade", "depository institutions" and "services". The latter include, *inter alia*, business services, hotels, health services, motion pictures, and engineering, architectural and surveying services.

differences are related to the above mentioned industry characteristics.

Finally, the interaction between industry and host-country characteristics is assessed. To this end, the analysis of the role of host-economy characteristics in shaping the growth impact of FDI for food, chemicals, metals, machinery and electrical equipment is repeated, and the results are linked to the characteristics of these manufacturing industries.

## Empirical evidence

### *The relevance of host-economy characteristics*

The sample economies of this analysis differ considerably with regard to all four host-country characteristics mentioned above.[11] For example, GDP per capita ranges from less than $1,000 in various African host economies to more than $15,000 in Hong Kong (China) and the United Arab Emirates. Secondary school enrolment, which proxies educational attainment, is below 10% in the United Republic of Tanzania and Niger and above 80% in several Asian and Latin American economies. Institutional development is rated extremely poor in the Democratic Republic of Congo, Algeria and Haiti, and exceptionally strong in Hong Kong (China) and Singapore. Moreover, for all characteristics, the two subgroups, with favourable and unfavourable characteristics, differ in two respects (table 1): first, the subgroups with favourable characteristics recorded substantially higher GDP per capita growth in 1991–2000. Second, these subgroups hosted substantially higher United States FDI stocks in 1990. The p-values given in table 1 reveal that most of the differences between the subgroups with favourable and unfavourable characteristics are statistically significant at least at the 10% level. Yet, the relevance of host-economy characteristics for individual countries' attractiveness for FDI varies considerably between sectors:

[11] See the annex for the list of sample economies.

- The host-economy characteristics considered here are irrelevant for FDI in the primary sector, which is proxied by United States FDI in the petroleum industry. Unsurprisingly, the availability of natural resources such as oil appears to be the dominant motive for undertaking resource-seeking FDI.
- Economies with unfavourable characteristics hardly received market-seeking FDI in the services sector. The difference in the FDI-to-GDP ratio to economies with favourable characteristics is most significant when locational attractiveness is measured by per-capita GDP.
- For FDI in the manufacturing sector, the difference in locational attractiveness between host economies with favourable and unfavourable characteristics ranges from 0.8% in the case of schooling to 1.2% in the case of

**Table 1. Host economy characteristics, FDI stocks and economic growth,[a] 1990-2000**

| Host-economy characteristics | | Economic growth[b] 1991-2000 | FDI stock in 1990 (Per cent of GDP)[c] Total | Petro-leum | Manu-facturing | Services |
|---|---|---|---|---|---|---|
| Per-capita GDP (PPP) in 1990 | below median | 0.8 | 0.97 | 0.41 | 0.19 | 0.04 |
| | above median | 2.0 | 2.67 | 0.45 | 1.22 | 0.44 |
| | p-value | 0.021 | 0.008 | 0.877 | 0.013 | 0.036 |
| Schooling (1990) | below median | 0.5 | 1.20 | 0.24 | 0.34 | 0.07 |
| | above median | 2.1 | 2.54 | 0.44 | 1.15 | 0.38 |
| | p-value | 0.002 | 0.055 | 0.364 | 0.063 | 0.116 |
| Institutional development (1997/1998) | below median | 0.6 | 1.28 | 0.53 | 0.32 | 0.04 |
| | above median | 2.1 | 2.67 | 0.39 | 1.30 | 0.41 |
| | p-value | 0.005 | 0.046 | 0.655 | 0.039 | 0.068 |
| Openness (1990) | closed | 0.6 | 1.68 | 0.50 | 0.45 | 0.06 |
| | open | 2.4 | 3.05 | 0.59 | 1.60 | 0.49 |
| | p-value | 0.001 | 0.018 | 0.773 | 0.088 | 0.108 |

*Sources:* BEA (2003); World Bank (2002); Kaufmann *et al*. (2002); Sachs and Warner (1995).

[a] For definitions and data sources of variables, see Appendix.

[b] Average of the annual growth rate of per-capita GDP for the respective subgroup of host economies.

[c] Average for the respective subgroup of host economies.

openness, with all differences being statistically significant. The wide margin in the case of openness may indicate that, as suggested by UNCTAD (1996, p. 97), efficiency-seeking FDI plays an increasingly important role in manufacturing, and openness is crucial for host economies to attract this type of FDI.

The relevant question, of course, is whether higher FDI stocks contributed to higher growth in developing host economies. In contrast to table 1, the subsequent comparisons between country subgroups refer to *median* economic growth rates. In this way, the impact of outliers is reduced in the calculations.[12] It turns out that higher total FDI stocks tend to be associated with lower subsequent growth in economies with unfavourable characteristics (table 2). This negative relation may be because FDI crowded out domestic investment, a phenomenon that Manuel Agosín and Ricardo Mayer (2000) observed in Latin America, in particular. Furthermore, FDI may have deteriorated the terms of trade (Dutt, 1997) and the balance of payments in host economies with unfavourable characteristics,[13] or the benefits of FDI may have been embezzled or squandered by corrupt local elites.

The picture is brighter for host economies with favourable characteristics. It is not surprising that the differences in median growth rates between host economies with higher total FDI stocks and those with lower total FDI stocks *within* the subset of attractive host economies are small compared to the differences in mean growth rates *between* attractive and less attractive host economies reported in table 1. Nevertheless, table

[12] Notable outliers include: China with an average annual growth of 9% in 1991–2000, and the Democratic Republic of Congo with –8% (see annex). The preference for median growth rates implies that p-values, as reported in table 1, are not applicable to subsequent growth comparisons.

[13] By drawing on the theoretical and empirical literature, Dutt argues that "because of high levels of profit repatriation (especially if one takes into account practices such as transfer pricing) new direct foreign [investment] inflows is in most periods less than capital outflows due to profit repatriation" (Dutt, 1998, pp. 165–166).

2 reveals a pronounced growth difference between high-FDI and low-FDI host economies if locational attractiveness is measured by schooling. This is consistent with the findings of Borensztein *et al.* (1998), suggesting that the availability of complementary human capital in the host economies is important for FDI to stimulate economic growth. Though smaller than in the case of schooling, the growth difference of 0.7% within the subgroup of host economies with a favourable institutional development is still considerable. It would take on average 41 years to double per-capita income for low-FDI host economies, but only 29 years for high-FDI host economies.

As concerns the relationship between economic growth and FDI stocks in particular sectors, the results for the petroleum industry support the previous finding that positive growth effects

**Table 2. GDP growth rates for country subgroups (median), according to host-economy characteristics and FDI stocks in different sectors,[a] 1990-2000**

| Host-economy characteristics | | Total | | Petroleum | | Manufacturing | | Services | |
|---|---|---|---|---|---|---|---|---|---|
| | | FDI low | FDI high | FDI low | FDI high | FDI low (*or 0*) | FDI high (*or >0*) | FDI low (*or 0*) | FDI high (*or >0*) |
| Per-capita GDP (PPP) | Below median | 1.8 | –0.3 | 1.7 | 1.4 | *1.2* | *0.4* | *0.1* | *1.6* |
| | Above median | 2.1 | 2.4 | 1.6 | 2.7 | 2.3 | 2.5 | 2.4 | 2.8 |
| Schooling | Below median | 1.4 | 1.3 | 1.3 | 1.4 | *1.2* | *0.4* | *-0.1* | *1.4* |
| | Above median | 0.5 | 2.3 | 2.4 | 2.4 | 2.4 | 2.2 | 2.5 | 2.5 |
| Institutional development | Below median | 1.4 | –0.3 | 2.2 | –0.2 | *-0.2* | *0.1* | *-0.2* | *1.4* |
| | Above median | 1.7 | 2.4 | 1.8 | 2.6 | 1.5 | 2.9 | 1.8 | 2.5 |
| Openness | Closed | 0.9 | 0.4 | 1.3 | –0.3 | –0.2 | 0.6 | *–0.2* | *1.5* |
| | Open | 2.4 | 2.7 | 2.1 | 3.1 | 2.7 | 2.4 | 2.4 | 2.6 |

*Sources:* BEA (2003); World Bank (2002); Kaufmann *et al.* (2002); Sachs and Warner (1995).

[a] For definitions and sources of variables, see the annex. Each country subgroup according to host-economy characteristics is further divided into two FDI groups. Depending on the number of zero observations with regard to FDI stocks, the separation is between FDI = 0 and FDI > 0 (figures in italics) or between FDI = low and FDI = high. In the latter case, FDI = low includes FDI = 0.

of higher FDI stocks are restricted to the subgroup with favourable host-economy characteristics. The problem of resource-seeking FDI resulting in enclaves dominated by foreign affiliates with few growth-enhancing spillovers seems to be concentrated in closed host economies with a deficient institutional environment.

By contrast, host economies with unfavourable characteristics appear to have benefited from higher FDI in the services sector, and even more so than host economies with favourable characteristics. This can be attributed to two factors. In many host economies with unfavourable characteristics, FDI stocks in the services sector are of a recent vintage since they are the outcome of the move to privatize public enterprises. While this type of FDI often takes place in the form of mergers and acquisitions, which may crowd out local investment, it typically leads to follow-up FDI, as well as transfers of technology and know-how in order to modernize undercapitalized operations. Negative balance-of-payments effects are, thus, unlikely. Additionally, the potential of intensifying competition and dismantling distortions in the economic policy framework should be greater in host economies with unfavourable characteristics.

Yet, the results for the services sector in table 2 have to be qualified since they are not fully comparable between the subgroups with favourable and unfavourable characteristics. For the latter subgroup, the distinction had to be made between host economies with FDI=0 and those with FDI>0; for the former subgroup which included considerably fewer zero observations, the distinction had to be made between host economies with low and high FDI. If three FDI groups (FDI = 0, low, and high) are considered instead of two, the link between FDI and economic growth turns out to be highly ambiguous for economies with favourable characteristics as well as those with unfavourable characteristics.[14] Independently of host-economy characteristics, the evidence is in conflict with the proposition

[14] The results for three FDI groups are not shown here for the sake of brevity; for details, see Nunnenkamp and Spatz (2003).

of a strictly positive relation between zero, low and high FDI on the one hand and median growth rates on the other hand. The latter finding largely applies to the manufacturing sector, too.

The results for the manufacturing sector in table 2 are similar to the results for all sectors taken together in that the growth impact of FDI tends to be more benign for host economies with favourable characteristics. The contrast between the two subgroups of host economies is greatest if locational attractiveness is measured by institutional development. The difference in the median growth rate of per-capita GDP between economies with low and high FDI is 1.4% in the subgroup with better institutional development, but only 0.3% in the subgroup with poorer institutional development. For per-capita GDP and schooling, negative growth effects in host economies with poor characteristics are found, and basically no growth effects in host economies with favourable characteristics. Most surprisingly, however, the finding that the growth impact of FDI is more benign in host economies with favourable characteristics does not hold if locational attractiveness is measured by the Sachs and Warner (1995) index on openness to trade. This result, which is in conflict with the above reasoning on the virtues of efficiency-seeking FDI, could be due to the fact that United States FDI in manufacturing was still dominantly market seeking in 1990.[15] Neither can it be ruled out, however, that the growth effects of efficiency-seeking FDI do not differ from the growth effects of market-seeking FDI. In any case, it appears easier to attract FDI by opening up to international trade (see table 1 above) than to derive positive growth effects of FDI in this way.

Another finding in table 2 casts doubts on the widely perceived rise and superiority of efficiency-seeking FDI. The relevance of openness is very much the same for the growth effects of FDI in manufacturing and the growth effects of FDI in services, in which, due to the prevalence of non-tradability, FDI is market-seeking almost by definition. In order to shed

[15] According to Dunning (2002), traditional market-seeking FDI, together with resource-seeking FDI, still accounts for the majority of FDI undertaken in developing countries.

more light on the difference between market-seeking and efficiency-seeking FDI with respect to their growth impact, the manufacturing sector has been disaggregated into seven industries in the subsequent section.

***The relevance of industry characteristics***

The seven manufacturing industries for which the Bureau of Economic Analysis reports separate FDI stock data reveal pronouncedly different characteristics in various respects (table 3). For instance, labour intensity differs by a factor of three between electrical equipment and chemicals. Chemicals represent the most human capital intensive industry with an average compensation of about $20,000 per employee, compared to about $8,000 in electrical equipment. Chemicals, together with machinery, also rank high with respect to R&D expenditures of United States affiliates in developing host economies and technology transfers from parent companies.

Most interestingly, table 3 offers some hints on the type of FDI undertaken in manufacturing industries. It can reasonably be assumed that efficiency-seeking FDI should result in a closer vertical integration between United States parent companies and their affiliates in developing economies and a stronger export orientation of the latter. Considering both indicators together, United States FDI in machinery, electrical equipment, and transport equipment tends to be efficiency-seeking, whereas United States FDI in the food, chemicals, and metals industry tends to be market-seeking.[16] Taking into account that chemicals and electrical equipment represent the most important industries for United States TNCs in developing economies, in terms of

[16] It may be surprising that FDI in transport equipment is classified as efficiency seeking (mainly because vertical integration is clearly above the average of total manufacturing). United States automobile companies were engaged in countries such as Brazil predominantly to serve local markets. However, the characteristics of transport equipment are shaped significantly by United States FDI in Mexico, which accounted for more than 40% of United States FDI stocks in this industry in all developing economies in 1990. In Mexico, United States automobile companies pursued integration strategies much earlier than in other host countries.

FDI stocks in 1990, these two industries can be regarded as the prototypes of market-seeking and efficiency-seeking FDI in the rest of the analysis.[17]

**Table 3. Characteristics of manufacturing industries: selected indicators,[a] 1995**

| Industry | Labour intensity[b] | Human capital intensity[c] | R&D intensity[d] | Technology transfers[e] | Export orientation[f] | Vertical integration[g] (1) | (2) |
|---|---|---|---|---|---|---|---|
| Food | 27.9 | 12.5 | 1.51 | 2.39 | 20.8 | 3.6 | 5.4 |
| Chemicals | 19.9 | 19.7 | 6.51 | 5.77 | 18.8 | 11.3 | 12.1 |
| Metals | 25.1 | 16.5 | 0.96 | 1.54 | 30.8 | 10.6 | 9.2 |
| Machinery | 28.2 | 12.8 | 5.56 | 12.43 | 75.7 | 43.3 | 59.1 |
| Electr. equip. | 61.0 | 8.1 | 2.70 | 2.91 | 53.0 | 64.9 | 120.2 |
| Transp. equip. | 22.2 | 15.1 | 6.35 | 1.13 | 40.6 | 65.1 | 76.4 |
| Other manuf. | 25.8 | 14.2 | 1.29 | 3.18 | 24.8 | 17.1 | 22.3 |
| Total manuf. | 30.1 | 12.8 | 3.70 | 4.64 | 40.5 | 35.0 | 43.9 |

*Source:* BEA (2003).

[a] Data refer to majority-owned non-bank United States affiliates, except technology transfers (all affiliates). Data are for 1995, if not mentioned otherwise, since many observations are missing for earlier years. Industry characteristics are calculated for all developing host economies, by adding up Africa, Asia (excluding Australia and Japan), Middle East and Latin America, if not mentioned otherwise.

[b] Number of employees of United States affiliates per million $ of value added.

[c] Compensation of employees ($1,000) per person employed by United States affiliates.

[d] R&D expenditures of United States affiliates as a percentage of value added.

[e] Royalties and license fees paid by United States affiliates to their parent companies as a percentage of value added. Data refer to 1999 because of missing data for earlier years.

[f] Total exports of United States affiliates as a percentage of total sales. Data refer to 1996. All developing host economies proxied by subtracting Canada, Europe and Japan from all host economies (because of missing observations for developing economies).

[g] Sum of exports of United States affiliates to, and imports of United States affiliates from their parent companies as a percentage of total sales of affiliates. Data refer to 1996. Column (1): all developing host economies proxied by subtracting Australia, Canada and Europe from all host economies (Japan not excluded because of missing observations); column (2): only Latin American host economies (missing observations for other developing country regions).

[17] The chemical industry accounted for about 21% of United States FDI stocks in the manufacturing sector of developing economies; the share of electrical equipment was about 17%. Machinery ranked third, with 14%.

The host-economy characteristics introduced in the previous section matter for developing countries' attractiveness for both market-seeking FDI in chemicals and efficiency-seeking FDI in electrical equipment. All p-values reported in table 4 point to significantly higher FDI stocks in these two industries in the economy subgroup with favourable characteristics. Yet, the relevance of host-economy characteristics for average FDI stocks differs between chemicals and electrical equipment in one remarkable respect. In chemicals, it is for all four characteristics that the ratio of FDI stocks to GDP was 0.2% higher in more attractive host economies than in less attractive host economies. In electrical equipment, however, openness to international trade turns out to be a more important stimulus to FDI than the other three host-economy characteristics, as was to be expected for an export-oriented industry.

**Table 4. Host economy characteristics[a] and FDI stocks in manufacturing industries,[b] 1990**

| Host-economy characteristics | | FDI stocks in 1990 (Per cent of GDP) | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | Food | Chemi-cals | Metals | Machi-nery | Electr. equip. | Transp. equip. | Other |
| Per-capita GDP (PPP) | below median | 0.02 | 0.02 | 0.01 | 0.00 | 0.00 | 0.00 | 0.02 |
| | above median | 0.10 | 0.23 | 0.02 | 0.08 | 0.19 | 0.03 | 0.14 |
| | p-value | 0.008 | 0.016 | 0.541 | 0.143 | 0.031 | 0.091 | 0.009 |
| Schooling | below median | 0.03 | 0.04 | 0.01 | 0.01 | 0.02 | 0.01 | 0.06 |
| | above median | 0.10 | 0.22 | 0.01 | 0.07 | 0.19 | 0.02 | 0.10 |
| | p-value | 0.035 | 0.054 | 0.103 | 0.301 | 0.058 | 0.625 | 0.291 |
| Institutional development | below median | 0.05 | 0.05 | 0.01 | 0.00 | 0.01 | 0.01 | 0.04 |
| | above median | 0.08 | 0.23 | 0.01 | 0.09 | 0.21 | 0.03 | 0.13 |
| | p-value | 0.276 | 0.065 | 0.869 | 0.138 | 0.033 | 0.223 | 0.040 |
| Openness | closed in 1990 | 0.04 | 0.07 | 0.02 | 0.02 | 0.01 | 0.02 | 0.07 |
| | open in 1990 | 0.11 | 0.27 | 0.01 | 0.10 | 0.28 | 0.03 | 0.14 |
| | p-value | 0.092 | 0.101 | 0.792 | 0.306 | 0.039 | 0.611 | 0.215 |

*Sources:* BEA (2003); World Bank (2002); Kaufmann *et al.* (2002); Sachs and Warner (1995).

[a] For definitions and data sources of variables, see the annex.

[b] Average for the respective subgroup of host economies.

Turning to the relationship between median growth rates and FDI stocks in individual manufacturing industries, one might argue that industry-specific FDI-to-GDP ratios are too low to have an impact. However, it appears to be premature to draw such a conclusion from the ratios reported in table 4. Low averages sometimes conceal considerable variation in FDI-to-GDP ratios.[18] More importantly, low FDI-to-GDP ratios do not necessarily imply that the growth impact of FDI remains insignificant. The example of China is telling in this regard. In 1993, i.e. 15 years after the process of opening up to FDI had started, the ratio of *total* United States FDI stocks in China to its GDP (0.21%) was still below the average ratio recorded in table 4 for FDI in the chemical industry of host economies with favourable characteristics. Nevertheless, FDI in China is widely believed to have stimulated economic growth. More significant growth effects than low FDI-to-GDP ratios tend to suggest may be due to spillovers from FDI, at least where the conditions for spillovers are favourable.

It seems that FDI may have an impact on growth even if average FDI-to-GDP ratios are small (table 5). Moreover, the growth effects of FDI appear to be related to industry characteristics. Most interestingly, the difference in median growth rates between economies with and without FDI stocks is highest in electrical equipment (1.3%) and machinery (1.1%).[19] In all other industries, this difference is below one

[18] For example, United States FDI stocks in electrical equipment exceeded 1% of GDP in several Asian host economies. The same is true for United States FDI in the chemical industry of several Latin American countries.

[19] In addition, the median growth rates for three FDI groups with zero, low and high FDI stocks in 1990 have been calculated. The results (not reported here) corroborate the absence of a strictly positive relationship between FDI stocks and median growth rates. Varying industry characteristics notwithstanding, metals, machinery and transport equipment have in common that the median growth rate is even lower in the high FDI group than in the group without any FDI stocks. This may be attributed to FDI-related capital outflows in countries where the engagement of United States TNCs had reached an optimal size through an earlier accumulation of FDI stocks. However, the proposition of negative balance of payments effects when high FDI stocks comprise a larger share of long-standing engagements cannot be tested with the data at hand (Nunnenkamp and Spatz, 2003).

percentage point (e.g. 0.7% in chemicals). A similar result is observed when industry-specific FDI stocks in 1990 and average annual growth rates in 1991-2000 are correlated across all sample economies. It is only for electrical equipment and machinery that the correlation is significantly positive.[20]

The growth effects of FDI appear to be particularly strong in electrical equipment and machinery, even though these two industries differ in several respects. The labour intensity is much higher in electrical equipment; R&D expenditures and technology transfers are clearly above the manufacturing average in machinery, but below average in electrical equipment (table 3). Yet, both industries share important characteristics. First, FDI in machinery and electrical equipment is less demanding in terms of complementary human capital in the host economies than FDI in other industries. Second, the export orientation of FDI is strongest in machinery and electrical equipment. Third, the integration of United States affiliates into corporate networks via intra-firm trade is fairly strong in both industries. These factors seem to have helped positive growth effects of FDI.

**Table 5. GDP growth rates of sample economies (median), according to FDI stocks in manufacturing industries,[a] 1991-2000**

| Industry | FDI = 0 | | FDI >0 | |
|---|---|---|---|---|
| Food | 1.4 | (52) | 2.3 | (29) |
| Chemicals | 1.2 | (52) | 1.9 | (29) |
| Metals | 1.4 | (62) | 2.1 | (20) |
| Machinery | 1.2 | (72) | 2.3 | (16) |
| Electrical equipment | 1.1 | (64) | 2.4 | (20) |
| Transport equipment | 1.4 | (78) | 2.0 | (10) |
| Other | 1.4 | (57) | 1.3 | (23) |

*Sources*: BEA (2003); World Bank (2002); Kaufmann *et al.* (2002); Sachs and Warner (1995).

[a] Number of observations in parentheses.

[20] The correlation coefficient of 0.24 for electrical equipment is significant at the 3% level; the correlation coefficient of 0.18 for machinery is significant at the 10% level.

Furthermore, industry characteristics suggest that a positive growth impact of FDI is less likely in Latin American host countries than in Asian host economies.[21] The industry structure of United States FDI stocks in manufacturing is strikingly different in these two regions. Market-seeking FDI in the food, chemicals and metals industries accounted for 41% of United States FDI in total manufacturing in Latin America, but for only 26% in Asia. By contrast, the share of machinery and electrical equipment in FDI in total manufacturing in Asia (58%) was almost three times the corresponding share in Latin America (20%). Hence, the industry structure of FDI offers an explanation that is complementary to the reasoning on crowding out by Agosín and Mayer (2000) for relatively weak growth effects of FDI in Latin America.

***Host economy characteristics and different types of FDI***

In the final step of the analysis, it is checked whether, and in which way, the growth impact of FDI is shaped by the interaction of host-economy characteristics and industry characteristics. From that analysis, a clear picture emerges for the interaction between the institutional development of host economies and the growth impact of FDI in manufacturing industries (table 6).[22] Institutional development has a similar influence on the link between FDI and economic growth for all manufacturing industries. On the one hand, sample economies in which institutional development was above the median reported a higher growth rate when they had attracted FDI by 1990; the difference in median growth rates is about one percentage point in all industries. This indicates that a favourable institutional environment helped positive growth effects of FDI, independently of whether FDI was undertaken in technologically

[21] Asia and Latin America together accounted for 95% of United States FDI stocks in all developing economies in 1990 (BEA 2003).

[22] The results for transport equipment and other manufacturing are not reported in table 6. This is because United States FDI in transport equipment is extremely concentrated in few developing host economies, while other manufacturing comprises a too heterogeneous set of industries to allow for a meaningful interpretation.

advanced or less advanced industries, and for market-seeking or efficiency-seeking reasons. On the other hand, poor institutions have two effects: (a) few economies receive FDI in manufacturing under such conditions, especially so in industries in which FDI tends to be efficiency-seeking (machinery, electrical equipment);[23] (b) for all industries except chemicals, FDI lacks positive growth effects under such conditions. In other words, a threshold of institutional development is required to attract FDI *and* to benefit from higher subsequent growth.

Yet, the findings presented here underscore that the link between FDI and economic growth varies between different types of FDI and that host-economy characteristics have an important say in this respect. For all host-economy

**Table 6. GDP growth rates for country subgroups (median), according to host-economy characteristics and FDI stocks in manufacturing industries,[a] 1991-2000**

| | | Industry/FDI | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Food | | Chemicals | | Metals | | Machinery | | Electrical equipment | |
| Host economy characteristics | | FDI *=0* | FDI *>0* | FDI *=0* | FDI *>0* | FDI *=0* | FDI *>0* | FDI *=0* | FDI *>0* | FDI *=0* | FDI *>0* |
| Per-capita GDP (PPP) | below median | 1.2 | 1.4 | 0.6 | 1.4 | 1.1 | 0.4 | 0.4 | 1.6 | 0.6 | 2.4 |
| | above median | 2.3 | 2.3 | 2.4 | 2.3 | 2.3 | 2.4 | 2.2 | 2.4 | 2.2 | 2.5 |
| Schooling | below median | 0.9 | 1.0 | 0.1 | 1.0 | 0.6 | 0.9 | 0.4 | 0.7 | 0.4 | 2.1 |
| | above median | 1.9 | 2.4 | 2.3 | 2.6 | 2.2 | 2.5 | 1.4 | 2.9 | 1.6 | 2.5 |
| Institutional development | below median | 0.8 | 0.0 | –0.0 | 0.6 | 0.2 | 0.2 | –0.0 | –0.5 | –0.0 | –0.1 |
| | above median | 1.4 | 2.4 | 1.7 | 2.5 | 1.7 | 2.7 | 1.7 | 2.6 | 1.4 | 2.5 |
| Openness | closed | –0.2 | 1.3 | –0.2 | 1.0 | –0.1 | 0.2 | –0.2 | 1.0 | –0.2 | 2.3 |
| | open | 1.6 | 2.5 | 1.7 | 2.7 | 1.6 | 2.8 | 1.6 | 3.1 | 1.4 | 2.6 |

*Sources:* BEA (2003); World Bank (2002); Kaufmann *et al.* (2002); Sachs and Warner (1995).

[a] For definitions and data sources of variables, see the annex.

[23] In machinery, only three economies out of 37 economies with poor institutional development had received FDI in 1990; in electrical equipment, it was five out of 35 economies.

characteristics except institutional development, the difference in median growth rates between economies with and without FDI, typically, turns out to be smaller in industries in which FDI is market-seeking (food, chemicals, metals) than in industries where FDI is efficiency-seeking (machinery, electrical equipment).[24] This applies to economies with favourable characteristics and those with unfavourable characteristics alike.

The results for the subgroup with unfavourable characteristics must be interpreted with a considerable degree of caution. In various instances, very few economies with unfavourable characteristics hosted United States FDI, especially when it comes to efficiency-seeking FDI in machinery and electrical equipment. Nonetheless, two results for the subgroup with unfavourable characteristics should be noted. First, on average, the link between FDI and economic growth is more pronounced in industries in which FDI is considered efficiency seeking. Second, the difference in median growth rates is considerably higher in electrical equipment than in machinery, notably in the case of schooling as indicator for locational attractiveness. The latter result suggests that it is more difficult for host economies with relatively low secondary school enrolment ratios to reap positive growth effects of FDI in machinery, which, according to table 3, is more demanding than electrical equipment in terms of requiring complementary human capital in the host economies. At the same time, the higher labour intensity and the lower technology intensity of electrical equipment renders it easier for less advanced developing economies to benefit from FDI in this industry.

In contrast to economies with unfavourable characteristics, open host economies with relatively high secondary school enrolment ratios reveal a particularly strong

[24] On average, the growth rate of economies with FDI>0 exceeded the growth rate of economies with FDI=0 by half a percentage point in the food, chemicals and metals industries when per-capita GDP, schooling and openness are used as indicators for locational attractiveness. The corresponding difference in growth rates amounted to 1.2% in machinery and electrical equipment.

link between FDI and economic growth in the case of machinery. The industry characteristics reported for machinery provided a better fit with the host-economy characteristics in this subgroup of economies. Taken together, these results for economies with favourable and unfavourable characteristics support the hypothesis that higher growth effects of FDI are more likely when the gap between the operations of TNCs and host-economy conditions in terms of technology and factor intensities is relatively small. The opposite hypothesis, according to which a larger gap fosters FDI-induced catching up processes, has to be rejected.

Among the host-economy characteristics considered, it is mainly with regard to schooling that efficiency-seeking FDI turns out to be superior to market-seeking FDI in stimulating higher growth in host economies with favourable characteristics. In particular, schooling appears to be much more important than the general level of economic development, measured by per-capita GDP.[25] More surprisingly, it is for essentially all manufacturing industries that the difference in median growth rates between host economies with and without FDI tends to be particularly large when openness is taken as indicator for locational attractiveness. Yet, open host economies benefit most from FDI in machinery, which was to be expected given the outstandingly high export orientation of FDI in this industry reported in table 3.[26]

The observation that even market-seeking FDI in the food, chemicals and metals industries is associated with an about one percentage point higher growth rate in open host economies may be because openness tends to contain the allocative distortions arising from FDI in import-substituting industries.

[25] The difference in median growth rates between higher-income economies with and without FDI ranges only from 0.3% in electrical equipment to –0.1% in chemicals.

[26] Moreover, the difference in growth rates related to FDI in electrical equipment, which ranks second with regard to export orientation, is still larger than the difference in growth rates related to FDI in chemicals, which represent the most important target of market-seeking FDI.

Nevertheless, openness does not seem to be required for reaping positive growth effects of market-seeking FDI. The difference in median growth rates is roughly the same for closed economies, notably for FDI in chemicals. This finding points to two limitations of the classification of industry and host-economy characteristics used in this article:

- The classification of FDI in food, chemicals and metals as market-seeking in table 3 is based on the operations of United States affiliates in all developing host economies.[27] It cannot be ruled out that the export orientation of FDI in chemicals, for example, is considerably higher in open host economies than in closed host economies.
- For classifying host economies as open or closed, the assessment of Sachs and Warner (1995) for the year 1990 has been used. However, several economies have opened up to international trade in subsequent years. Possibly, these liberalizers account for the considerable difference in median growth rates between closed economies with and without FDI in several industries, including chemicals.

These possibilities have been checked tentatively by referring to United States FDI in the chemical industry. Eliminating 12 developing economies which opened up to international trade in 1991–1994 (Sachs and Warner 1995) from the subgroup considered closed in table 6 had little effect on the difference in median growth rates between economies with and without FDI (not shown). However, just 5 of the 25 sample economies that remained closed in 1994 hosted United States FDI stocks in chemicals, while United States FDI was absent in just 3 of the 12 economies that opened up in 1991–1994. What can safely be concluded from this pattern is that opening up to international trade matters for becoming attractive for FDI in chemicals. At the same time, there are indications that the nature of FDI in industries such as chemicals may change when host countries

[27] This is because country-specific data on operational characteristics of United States affiliates are extremely patchy. Note also that the data do not allow for a finer disaggregation of FDI in fairly heterogeneous industries such as chemicals.

open up. For instance, the export orientation of United States FDI in chemicals is extremely low in the Brazilian economy (5%), which Sachs and Warner (1995) considered closed in 1990. It is four times as high in Mexico, which opened up much earlier than Brazil, and still considerably higher in Malaysia (32%), in which openness has a longer history. The different nature of FDI in particular industries and the relation to host-economy characteristics should be an issue for further research. However, serious data constraints render this task fairly difficult.

## Summary and conclusions

Positive growth effects of FDI in developing economies cannot be taken for granted. Our analysis based on United States FDI stocks in a large number of developing economies clearly suggests that the currently prevailing euphoria about FDI among policymakers and external advisers rests on weak empirical foundations. This is for several reasons:

- The link between FDI and subsequent growth varies considerably when host economies are classified according to locational characteristics such as GDP per capita, schooling, institutional development and openness to trade. In host economies with unfavourable characteristics, higher total FDI stocks tend to be associated with lower subsequent growth. Even though the picture is brighter for economies with favourable characteristics, generally it seems to be much easier to attract FDI than to derive macroeconomic benefits from FDI.
- The comparison of median growth rates between subgroups of host economies reveals that the link between FDI and economic growth is stronger in the services sector than in the manufacturing sector.
- The growth effects of FDI also differ between manufacturing industries. These differences are related to industry characteristics such as factor requirements, export orientation and the integration of foreign affiliates into corporate networks via intra-firm trade. Drawing on these characteristics for separating efficiency-seeking FDI from

market-seeking FDI in manufacturing, it is mainly for the former type of FDI that positive growth effects are found.

- Finally the hypothesis that a large technological gap between the host and home economy of FDI fosters FDI-induced catching-up processes in developing economies has been rejected. Rather, the interaction of host-economy and industry characteristics suggests that positive growth effects of FDI are more likely when the technological gap is relatively small.

This analysis had to be based on FDI stocks in 1990, in order to minimize the risk of reverse causation, i.e. higher growth feeding back into more FDI. Future research will show whether the presumption, according to which the recent boom of FDI in developing economies is unlikely to have fundamentally changed the links between FDI and growth, is still valid. The evidence available so far invites the conclusion that policymakers in developing countries and external advisors (see, e.g., United Nations, 2002) are focusing on the wrong question: the central challenge is not to attract FDI! Succeeding in this respect would only solve the minor part of the problem, which is to derive macroeconomic benefits from FDI. For developing economies with unfavourable locational characteristics, in particular, it makes little sense to offer fiscal incentives and outright subsidies, in order to attract TNCs into technologically advanced industries. Scarce public resources could be used more productively.

Apart from improving the local availability of a sufficiently qualified labour force, host economies are well advised to focus on developing sound institutions, which appear to be a prerequisite for attracting, and benefiting from both market-seeking and efficiency-seeking FDI. Finally, openness to trade is required to successfully participate in the widely perceived trend towards efficiency-seeking FDI. As it seems, opening up to international trade may even turn market-seeking FDI into efficiency-seeking FDI in manufacturing industries such as chemicals and, thus, improve the growth impact of FDI. This issue deserves more attention in future research on the link between FDI and economic growth in developing countries.■

## References


Agosín, Manuel R. and Ricardo Mayer (2000). "Foreign investment in developing countries: does it crowd in domestic investment?", UNCTAD Discussion Paper No. 146 (Geneva: UNCTAD), United Nations document, UNCTAD/OSG/DP/146.

Alfaro, Laura, Areendam Chanda, Sebnem Kalemli-Ozcan and Selin Sayek (2001). "FDI and economic growth: the role of financial markets", *Harvard Business School Working Paper* No. 01-083 (Boston: Harvard University), mimeo.

Balasubramanyam, V.N., Mohammed A. Salisu and David Sapsford (1996). "Foreign direct investment and growth in EP and IS countries", *Economic Journal*, 106, pp. 92–105.

Bureau of Economic Analysis (BEA) (2003). "Online data base on U.S. direct investment abroad", (Washington: Bureau of Economic Analysis), http://www.bea.doc.gov/bea/di/di1usdbal.htm.

Blomström, Magnus, Robert E. Lipsey and Mario Zejan (1994). "What explains the growth of developing countries", in William J. Baumol, Richard R. Nelson and Edward N. Wolff (eds.), *Convergence of Productivity: Cross-National Studies and Historical Evidence* (New York: Oxford University Press), pp. 243–259.

Borensztein, Eduardo R., José De Gregorio and Jong-Wha Lee (1998). "How does foreign direct investment affect economic growth?", *Journal of International Economics*, 45, pp. 115–135.

Carkovic, Maria and Ross Levine (2002). "Does foreign direct investment accelerate economic growth?" (Minneapolis: University of Minnesota), mimeo.

Caves, Richard E. (1996). *Multinational Enterprise and Economic Analysis* (Cambridge and New York: Cambridge University Press).

De Mello, Luiz R. Jr. (1997). "Foreign direct investment in developing countries and growth: a selective survey", *Journal of Development Studies*, 34 (1), pp. 1–34.

Dunning, John H. (2002). "Determinants of foreign direct investment: globalization induced changes and the role of FDI policies". Paper presented at the Annual Bank Conference on Development Economics in Europe, Oslo, mimeo.

Dutt, Amitava Krishna (1997). "The pattern of direct foreign investment and economic growth", *World Development*, 25 (11), pp. 1925–1936.

_____ (1998). “Direct foreign investment, transnational corporations and growth: some empirical evidence and a North-South model”, in Richard Kozul-Wright and Robert Rowthorn (eds.), *Transnational Corporations and the Global Economy* (Basingstoke: Macmillan Press), pp. 164-191.

Kaufmann, Daniel, Aart Kraay and Pablo Zoido-Lobatón (2002). “Governance matters, II: updated indicators for 2001-02” (Washington, D.C.: World Bank), mimeo, (http://www.worldbank.org/wbi/governance/govdata2002).

Kojima, Kiyoshi (1973). “A macroeconomic approach to foreign direct investment”, *Hitotsubashi Journal of Economics*, 14, pp. 1–21.

Nunnenkamp, Peter and Julius Spatz (2003). “Foreign direct investment and economic growth in developing countries: how relevant are host-country and industry characteristics?” Kiel Working Papers No. 1176 (Kiel: Institute for World Economics), mimeo.

Organisation for Economic Co-operation and Development (OECD) (2002). *Foreign Direct Investment for Development – Maximising Benefits, Minimising Costs: Main Report* (Paris : OECD).

Ram, Rati and Honglin Zhang (2002). “Foreign direct investment and economic growth: evidence from cross-country data for the 1990s”, *Economic Development and Cultural Change*, 51 (1), pp. 205–215.

Sachs, Jeffrey D. and Andrew Warner (1995). “Economic reform and the process of global integration”, *Brookings Papers on Economic Activity*, 1, pp. 1–95.

United Nations Conference on Trade and Development (UNCTAD) (1996). *World Investment Report 1996: Investment, Trade and International Policy Arrangements* (New York and Geneva: United Nations), United Nations publication, Sales No. E.96.II.A.14.

_____ (1998). *World Investment Report 1998: Trends and Determinants* (New York and Geneva: United Nations), United Nations publication, Sales No. E.98.II.D.5.

United Nations (2002). “International Conference on Financing for Development: Facilitator’s Working Paper” (New York: United Nations) (http://www.un.org/esa/ffd/0501PC-facilitator.htm).

World Bank (2002). World Development Indicators. CD-ROM (Washington, D.C.: World Bank).

## Annex: Definition of variables and data sources

The following data have been derived from the BEA (2003) online database:

- Total number of employees of majority-owned non-bank United States affiliates, 1995.
- United States direct investment position abroad on a historical-cost basis, 1990.
- Royalties and license fees paid by United States affiliates to parent company, 1999.
- Total imports of majority-owned non-bank United States affiliates from parent companies, 1996.
- Expenditure for R&D of majority-owned non-bank United States affiliates, 1995.
- Total sales of majority-owned non-bank United States affiliates, 1996.
- Total value added of majority-owned non-bank United States affiliates, 1995.
- Total employee compensation of majority-owned non-bank United States affiliates, 1995.
- Total exports of majority-owned non-bank United States affiliates, 1996.
- Total exports of majority-owned non-bank United States affiliates to parent companies, 1996.

The following data have been derived from other sources:

- Gross domestic product per capita in PPP terms, 1990: World Bank (2002).
- Annual average growth rate of gross domestic product per capita, 1991–2000: World Bank (2002).
- Index of institutional development, 1997/1998: Kaufmann *et al.* (2002).
- Index on openness to trade (0 = closed, 1 = open), 1990: Sachs and Warner (1995).
- Secondary school enrolment (as a percentage of population of official school age), 1990: World Bank (2002).

## Annex table 1. GDP growth and FDI stocks in 78 sample economies[a], 1990-2000

| Economy | Economic growth,[b] 1991-2000 | United States FDI stocks in % of GDP, 1990 | Economy | Economic growth,[b] 1991-2000 | United States FDI stocks in % of GDP, 1990 | Economy | Economic growth,[b] 1991-2000 | United States FDI stocks in % of GDP, 1990 |
|---|---|---|---|---|---|---|---|---|
| **South America** | | | **Africa** | | | **North Africa and West Asia** | | |
| Argentina | 3.4 | 1.8 | Algeria | -0.2 | 0.0 | Bahrain | 2.4 | -3.3 |
| Bolivia | 1.4 | 4.0 | Burkina Faso | 2.6 | 0.1 | Israel | 2.2 | 1.4 |
| Brazil | 1.3 | 3.1 | Congo | -2.6 | 0.8 | Jordan | 0.7 | 0.2 |
| Chile | 5.1 | 6.3 | Egypt | 2.4 | 2.9 | Oman | 0.3 | 0.8 |
| Colombia | 0.8 | 4.2 | Ethiopia | 1.7 | 0.0 | Saudi Arabia | -0.5 | 1.8 |
| Ecuador | -0.3 | 2.6 | Gabon | -0.3 | 6.0 | United Arab Emirates | -2.7 | 1.2 |
| Guyana | 4.6 | 1.8 | Ghana | 1.8 | 2.0 | | | |
| Paraguay | -0.7 | 0.8 | Côte d'Ivoire | -0.4 | 0.5 | | | |
| Peru | 2.3 | 2.3 | Kenya | -0.9 | 1.2 | **Asia** | | |
| Suriname | 2.0 | 42.3 | Lesotho | 2.0 | 0.2 | Bangladesh | 3.0 | 0.0 |
| Uruguay | 2.4 | 1.0 | Malawi | 1.8 | 0.2 | Brunei Darussalam | -0.7 | 0.7 |
| Venezuela | -0.1 | 2.2 | Mali | 1.4 | 0.1 | | | |
| | | | Mauritania | 1.1 | -0.3 | China | 9.0 | 0.1 |
| **Central America** | | | Mauritius | 4.1 | 0.1 | Fiji | 0.3 | 0.1 |
| Costa Rica | 2.9 | 4.4 | Morocco | 0.6 | 0.2 | Hong Kong (China) | 2.6 | 8.1 |
| El Salvador | 2.5 | 1.9 | Niger | -1.4 | 0.1 | | | |
| Guatemala | 1.4 | 1.7 | Nigeria | -0.2 | -1.4 | India | 3.6 | 0.1 |
| Honduras | 0.4 | 8.6 | Rwanda | -0.2 | 0.0 | Indonesia | 2.7 | 2.8 |
| Mexico | 1.9 | 3.9 | Senegal | 0.8 | 0.3 | Korea, Rep. of | 5.2 | 1.1 |
| Panama | 2.7 | 174.8 | South Africa | -0.3 | 0.7 | Malaysia | 4.6 | 3.3 |
| | | | Sudan | 5.4 | 0.1 | Pakistan | 1.4 | 0.5 |
| **Caribbean** | | | Swaziland | 0.1 | 0.5 | Papua New Guinea | 2.2 | 1.3 |
| Antigua and Barbuda | 2.8 | 0.8 | Togo | -1.1 | 0.2 | | | |
| | | | Tunisia | 3.1 | 0.3 | Philippines | 0.7 | 3.1 |
| Dominican Republic | 4.1 | 7.5 | Uganda | 3.3 | 0.1 | Singapore | 4.8 | 10.8 |
| | | | Democratic Republic of Congo | -8.0 | 0.4 | Sri Lanka | 3.9 | 0.1 |
| Grenada | 3.2 | 0.5 | | | | Thailand | 3.6 | 2.1 |
| Haiti | -2.5 | 1.1 | Zambia | -1.8 | 0.9 | Tonga | 2.7 | 3.5 |
| Jamaica | 0.1 | 14.7 | Zimbabwe | -0.4 | 1.0 | Vanuatu | -0.4 | 0.7 |
| St. Kitts and Nevis | 4.2 | 0.6 | | | | Samoa | 2.0 | 0.5 |
| St. Vincent | 2.5 | 0.5 | | | | | | |
| Trinidad and Tobago | 2.3 | 9.6 | | | | | | |

*Sources:* BEA (2003); World Bank (2002).

[a] Note that the number of observations varies between the different steps of the empirical analysis. This is because of missing data for some sample economies, notably with regard to industry-specific FDI stocks.

[b] Average annual growth rate of per-capita GDP in percent.

# RESEARCH NOTE

## *World Investment Report 2004 The Shift Towards Services Overview*

United Nations Conference on Trade and Development*

### *Still declining in 2003, FDI flows show signs of recovery,...*

Global inflows of foreign direct investment (FDI) declined in 2003 for the third year in a row, to $560 billion (table 1). This was prompted again by a fall in FDI flows to developed countries: at $367 billion, they were 25% lower than in 2002 (table 2). Worldwide, 111 countries saw a rise in flows, and 82 a decline. The fall in flows to the United States by 53%, to $30 billion – the lowest level in the past 12 years – was particularly dramatic. FDI flows to Central and Eastern Europe (CEE) also slumped, from $31 billion to $21 billion. It was only developing countries as a group that experienced a recovery, with FDI inflows rising by 9%, to $172 billion overall. But in this group, the picture was mixed: Africa and Asia and the Pacific saw an increase, while Latin America and the Caribbean experienced a continuing decline. The group of 50 least developed countries (LDCs) continued to receive little FDI ($7 billion).

Prospects for 2004, however, are promising. Cross-border mergers and acquisitions (M&As) – still low at $297 billion in 2003 – began to pick up. They rose by 3% in the first six months of 2004

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* The *World Investment Report 2004 (WIR04)* was prepared – under the overall direction of Karl P. Sauvant – by a team comprising Persephone Economou, Kumi Endo, Torbjörn Fredriksson, Masataka Fujita, Kálmán Kalotay, Michael Lim, Padma Mallampally, Anne Miroux, Abraham Negash, Hilary Nwokeabia, Shin Ohinata, Jean François Outreville, Kee Hwee Wee, James Xiaoning Zhan and Zbigniew Zimny. Specific inputs were prepared by Diana Barrowclough, Sirn Byung Kim, Nicole Moussa, Ludger Odenthal, Satwinder Singh, Elisabeth Tuerk and Katja Weigl. This is a reprint of pages 1-38 of the *World Investment Report 2004: The Shift Towards Services. Overview* (New York and Geneva: United Nations), UNCTAD/WIR/2003(Overview).

**Table I. Selected indicators of FDI and international production, 1982-2003**
(Billions of dollars and per cent)

| Item | Value at current prices ($ billion) | | | Annual growth rate (per cent) | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1982 | 1990 | 2003 | 1986-1990 | 1991-1995 | 1996-2000 | 2000 | 2001 | 2002 | 2003 |
| FDI inflows | 59 | 209 | 560 | 22.9 | 21.5 | 39.7 | 27.7 | -41.1 | -17.0 | -17.6 |
| FDI outflows | 28 | 242 | 612 | 25.6 | 16.6 | 35.1 | 8.7 | -39.2 | -17.3 | 2.6 |
| FDI inward stock | 796 | 1 950 | 8 245 | 14.7 | 9.3 | 16.9 | 19.1 | 7.4 | 12.7 | 11.8 |
| FDI outward stock | 590 | 1 758 | 8 197 | 18.1 | 10.7 | 17.1 | 18.5 | 5.9 | 13.8 | 13.7 |
| Cross-border M&As | .. | 151 | 297 | 25.9[a] | 24.0 | 51.5 | 49.3 | -48.1 | -37.7 | -19.7 |
| Sales of foreign affiliates | 2 717 | 5 660 | 17 580 | 16.0 | 10.2 | 9.7 | 16.7 | -3.8 | 23.7 | 10.7 |
| Gross product of foreign affiliates | 636 | 1 454 | 3 706 | 17.4 | 6.8 | 8.2 | 15.1 | -4.7 | 25.8 | 10.1 |
| Total assets of foreign affiliates | 2 076 | 5 883 | 30 362 | 18.2 | 13.9 | 20.0 | 28.4 | -5.4 | 19.6 | 12.5 |
| Exports of foreign affiliates | 717 | 1 194 | 3 077 | 13.5 | 7.6 | 9.9 | 11.4 | -3.3 | 4.7 | 16.6 |
| Employment of foreign affiliates (thousands) | 19 232 | 24 197 | 54 170 | 5.6 | 3.9 | 10.8 | 13.3 | -3.2 | 12.3 | 8.3 |
| GDP (in current prices) | 11 737 | 22 588 | 36 163 | 10.1 | 5.1 | 1.3 | 2.7 | -0.9 | 3.7 | 12.1 |
| Gross fixed capital formation | 2 285 | 4 815 | 7 294 | 13.4 | 4.2 | 2.4 | 3.8 | -3.6 | -0.6 | 9.9 |
| Royalties and licence fee receipts | 9 | 30 | 77[b] | 21.3 | 14.3 | 7.7 | 9.5 | -2.5 | 6.7 | .. |
| Exports of goods and non-factor services | 2 246 | 4 260 | 9 228 | 12.7 | 8.7 | 3.6 | 11.4 | -3.3 | 4.7 | 16.6 |

*Source*: UNCTAD, *World Investment Report 2004: The Shift Towards Services*, table I.3.

[a] 1987-1990 only.
[b] 2002.

## Table 2. Regional distribution of FDI inflows and outflows, 1992-2003

(Billions of dollars)

| Region/country | FDI inflows | | | | | | | FDI outflows | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1992-1997 (Annual average) | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 1992-1997 (Annual average) | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 |
| Developed countries | 180.8 | 472.5 | 828.4 | 1 108.0 | 571.5 | 489.9 | 366.6 | 275.7 | 631.5 | 1 014.3 | 1 083.9 | 658.1 | 547.6 | 569.6 |
| Western Europe | 100.8 | 263.0 | 500.0 | 697.4 | 368.8 | 380.2 | 310.2 | 161.7 | 436.5 | 763.9 | 859.4 | 447.0 | 364.5 | 350.3 |
| European Union | 95.8 | 249.9 | 479.4 | 671.4 | 357.4 | 374.0 | 295.2 | 146.9 | 415.4 | 724.3 | 806.2 | 429.2 | 351.2 | 337.0 |
| Other Western Europe | 5.0 | 13.1 | 20.7 | 26.0 | 11.4 | 6.2 | 15.1 | 14.8 | 21.2 | 39.6 | 53.3 | 17.9 | 13.3 | 13.3 |
| Japan | 1.2 | 3.2 | 12.7 | 8.3 | 6.2 | 9.2 | 6.3 | 20.2 | 24.2 | 22.7 | 31.6 | 38.3 | 32.3 | 28.8 |
| United States | 60.3 | 174.4 | 283.4 | 314.0 | 159.5 | 62.9 | 29.8 | 77.6 | 131.0 | 209.4 | 142.6 | 124.9 | 115.3 | 151.9 |
| Developing economies | 118.6 | 194.1 | 231.9 | 252.5 | 219.7 | 157.6 | 172.0 | 51.4 | 53.4 | 75.5 | 98.9 | 59.9 | 44.0 | 35.6 |
| Africa | 5.9 | 9.1 | 11.6 | 8.7 | 19.6 | 11.8 | 15.0 | 2.2 | 2.0 | 2.6 | 1.3 | -2.5 | 0.1 | 1.3 |
| Latin America and the Caribbean | 38.2 | 82.5 | 107.4 | 97.5 | 88.1 | 51.4 | 49.7 | 9.5 | 19.9 | 31.3 | 13.7 | 12.0 | 6.0 | 10.7 |
| Asia and the Pacific | 74.5 | 102.4 | 112.9 | 146.2 | 112.0 | 94.5 | 107.3 | 39.6 | 31.6 | 41.6 | 83.9 | 50.4 | 37.9 | 23.6 |
| Asia | 74.1 | 102.2 | 112.6 | 146.1 | 111.9 | 94.4 | 107.1 | 39.6 | 31.6 | 41.7 | 83.8 | 50.3 | 37.9 | 23.6 |
| West Asia | 2.9 | 7.1 | 1.0 | 1.5 | 6.1 | 3.6 | 4.1 | 0.5 | -1.0 | 2.1 | 3.8 | 5.1 | 2.5 | -0.7 |
| Central Asia | 1.6 | 3.0 | 2.5 | 1.9 | 3.5 | 4.5 | 6.1 | - | 0.2 | 0.4 | - | 0.1 | 0.8 | 0.8 |
| South, East and South-East Asia | 69.6 | 92.1 | 109.1 | 142.7 | 102.2 | 86.3 | 96.9 | 39.0 | 32.5 | 39.2 | 80.0 | 45.1 | 34.7 | 23.5 |
| South Asia | 2.5 | 3.5 | 3.1 | 3.1 | 4.0 | 4.5 | 6.1 | 0.1 | 0.1 | 0.1 | 0.5 | 1.4 | 1.2 | 0.9 |
| The Pacific | 0.4 | 0.2 | 0.3 | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 | -0.1 | - | 0.1 | 0.1 | - | - |
| Central and Eastern Europe | 11.5 | 24.3 | 26.5 | 27.5 | 26.4 | 31.2 | 21.0 | 1.2 | 2.3 | 2.5 | 4.0 | 3.5 | 4.9 | 7.0 |
| World | 310.9 | 690.9 | 1 086.8 | 1 388.0 | 817.6 | 678.8 | 559.6 | 328.2 | 687.2 | 1 092.3 | 1 186.8 | 721.5 | 596.5 | 612.2 |

*Source*: UNCTAD, *World Investment Report 2004: The Shift Towards Services*, annex tables B.1 and B.2.

over the same period in 2003. This, combined with other factors – higher economic growth in the main home and host countries, improved corporate profitability, higher stock valuations – points to a recovery of FDI flows in 2004. Reflecting higher profits, reinvested earnings – one of the three components of FDI flows – had already resumed growth in 2003, reaching a record high. Other components of FDI (equity and intra-company loans) are also expected to pick up in 2004.

The continuing liberalization of FDI regimes may help the recovery. There were 244 changes in laws and regulations affecting FDI in 2003, 220 of which were in the direction of more liberalization (table 3). In that year, 86 bilateral investment treaties (BITs) and 60 double taxation treaties (DTTs) were concluded, bringing the totals to 2,265 and 2,316, respectively. However, the annual number of new treaties concluded has been declining, since 2002 in the case of BITs and since 2000 in the case of DTTs.

Surveys, conducted by UNCTAD during the first quarter of 2004, of 335 of the world's largest transnational corporations (TNCs) (from developed, developing and transition economies) and 87 international site-selection experts corroborate the optimistic outlook for FDI flows. Flows are expected to pick up, particularly in Asia and the Pacific and CEE. China and India in Asia and Poland in CEE are considered to be especially well positioned for an upswing. Prospects are particularly bright for some services and for electrical and electronic equipment, motor vehicles and machinery, according to these experts. The relocation of a wide range of corporate functions

**Table 3. Changes in national regulations on FDI, 1995-2003**

| Item | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 |
|---|---|---|---|---|---|---|---|---|---|
| Number of countries that introduced changes in their investment regimes | 64 | 65 | 76 | 60 | 63 | 69 | 71 | 70 | 82 |
| Number of regulatory changes | 112 | 114 | 151 | 145 | 140 | 150 | 208 | 248 | 244 |
| of which: | | | | | | | | | |
| More favourable to FDI [a] | 106 | 98 | 135 | 136 | 131 | 147 | 194 | 236 | 220 |
| Less favourable to FDI [b] | 6 | 16 | 16 | 9 | 9 | 3 | 14 | 12 | 24 |

*Source*: UNCTAD, *World Investment Report 2004: The Shift Towards Services,* table I.2.

[a] Including liberalizing changes or changes aimed at strengthening market functioning, as well as increased incentives.

[b] Including changes aimed at increasing control as well as reducing incentives.

is set to continue. Greenfield investment is predicted to dominate FDI in developing countries, and cross-border M&As in the developed world. Investment promotion agencies (IPAs) (also surveyed by UNCTAD in early 2004) anticipate sustained competition for FDI, with incentives and targeting viewed as key tools for investment promotion.

A recovery in FDI will further boost international production, presently carried out by at least 61,000 TNCs with over 900,000 foreign affiliates, representing an FDI stock of about $7 trillion. International production remains fairly concentrated: in 2002, the world's 100 largest TNCs, representing less than 0.2% of the global universe of TNCs, accounted for 14% of sales by foreign affiliates worldwide, 12% of their assets and 13% of their employment. Following a period of stagnation, these TNCs resumed growth in terms of their assets, sales and employment in 2002 (see table 4 for the top 25 of these firms).

A recovery does not mean that all countries will realize their FDI potential. Indeed, UNCTAD's Inward FDI Performance Index, a measure of the attractiveness of a country to FDI, shows that economies such as the Czech Republic, Hong Kong (China) and Ireland continued to attract significant investment even during the FDI recession. In contrast, countries such as Japan, South Africa and Thailand have yet to realize their full potential to attract FDI, according to their ranking on UNCTAD's Inward FDI Potential Index as compared with that on the Inward FDI Performance Index.

### *...driven by TNCs from developed countries, but with increasing participation by developing-country firms.*

As in the past, TNCs from developed countries will drive the renewed growth of world FDI flows.

But, increasingly, TNCs from developing countries are contributing too. Their share in the global FDI flows rose from less than 6% in the mid-1980s to some 11% during the latter half of the 1990s, before falling to 7% during 2001-2003 (for an annual average of $46 billion). They now account for about one-tenth of global outward FDI stock, which stood at $859 billion after rising by 8% in 2003. Measured as a share of gross fixed capital formation, some developing countries invest more abroad than some developed ones: e.g. Singapore (36%, during 2001-2003), Chile (7%) and Malaysia

## Table 4. The world's top 25 non-financial TNCs, ranked by foreign assets, 2002

(Millions of dollars and number of employees)

| Ranking in 2002: Foreign assets | Ranking in 2002: TNI[a] | Ranking in 2001: Foreign assets | Ranking in 2001: TNI[a] | Corporation | Home economy | Industry | Assets Foreign | Assets Total | Sales Foreign | Sales Total | Employment Foreign | Employment Total | TNI[a] (Percent) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 84 | 2 | 83 | General Electric | United States | Electrical & electronic equipment | 229 001 | 575 244 | 45 403 | 131 698 | 150 000 | 315 000 | 40.6 |
| 2 | 12 | 1 | 13 | Vodafone Group Plc | United Kingdom | Telecommunications | 207 622 | 232 870 | 33 631 | 42 312 | 56 667 | 66 667 | 84.5 |
| 3 | 67 | 7 | 85 | Ford Motor Company | United States | Motor vehicles | 165 024 | 295 222 | 54 472 | 163 420 | 188 453 | 350 321 | 47.7 |
| 4 | 16 | 3 | 15 | British Petroleum Co. Plc | United Kingdom | Petroleum expl./ref./distr. | 126 109 | 159 125 | 145 982 | 180 186 | 97 400 | 116 300 | 81.3 |
| 5 | 95 | 8 | 87 | General Motors | United States | Motor vehicles | 107 926 | 370 782 | 48 071 | 186 763 | 101 000 | 350 000 | 27.9 |
| 6 | 45 | 9 | 48 | Royal Dutch/Shell Group | United Kingdom/ Netherlands | Petroleum expl./ref./distr. | 94 402 | 145 392 | 114 294 | 179 431 | 65 000 | 111 000 | 62.4 |
| 7 | 73 | 12 | 47 | Toyota Motor Corporation | Japan | Motor vehicles | 79 433 | 167 270 | 72 820 | 127 113 | 85 057 | 264 096 | 45.7 |
| 8 | 22 | 10 | 21 | Total Fina Elf | France | Petroleum expl./ref./distr. | 79 032 | 89 450 | 77 461 | 96 993 | 68 554 | 121 469 | 74.9 |
| 9 | 65 | - | - | France Telecom | France | Telecommunications | 73 454 | 111 735 | 18 187 | 44 107 | 102 016 | 243 573 | 49.6 |
| 10 | 41 | 6 | 39 | ExxonMobil Corporation | United States | Petroleum expl./ref./distr. | 60 802 | 94 940 | 141 274 | 200 949 | 56 000 | 92 000 | 65.1 |
| 11 | 53 | 15 | 51 | Volkswagen Group | Germany | Motor vehicles | 57 133 | 114 156 | 59 662 | 82 244 | 157 887 | 324 892 | 57.1 |
| 12 | 86 | 20 | 86 | E.On | Germany | Electricity, gas and water | 52 294 | 118 526 | 13 104 | 35 054 | 42 063 | 107 856 | 40.2 |
| 13 | 78 | 22 | 81 | RWE Group | Germany | Electricity, gas and water | 50 699 | 105 116 | 17 622 | 44 110 | 55 563 | 131 765 | 43.4 |
| 14 | 40 | 4 | 36 | Vivendi Universal | France | Media | 49 667 | 72 682 | 30 041 | 55 004 | 45 772 | 61 815 | 65.7 |
| 15 | 50 | 16 | 57 | ChevronTexaco Corp. | United States | Petroleum expl./ref./distr. | 48 489 | 77 359 | 55 087 | 98 691 | 37 038 | 66 038 | 58.2 |
| 16 | 29 | 17 | 38 | Hutchison Whampoa Ltd | Hong Kong, China | Diversified | 48 014 | 63 284 | 8 088 | 14 247 | 124 942 | 154 813 | 71.1 |
| 17 | 46 | - | - | Siemens AG | Germany | Electrical & electronic equipment | 47 511 | 76 474 | 50 724 | 77 244 | 251 340 | 426 000 | 62.3 |
| 18 | 94 | 30 | 91 | Electricité de France | France | Electricity, gas and water | 47 385 | 151 835 | 12 552 | 45 743 | 50 437 | 171 995 | 29.3 |
| 19 | 66 | 13 | 63 | Fiat Spa | Italy | Motor vehicles | 46 150 | 96 990 | 24 560 | 52 638 | 98 703 | 186 492 | 49.1 |
| 20 | 31 | 19 | 44 | Honda Motor Co Ltd | Japan | Motor vehicles | 43 641 | 63 755 | 49 167 | 65 366 | 42 885 | 63 310 | 70.5 |
| 21 | 9 | 18 | 11 | News Corporation | Australia | Media | 40 331 | 45 214 | 16 028 | 17 421 | 31 220 | 35 000 | 90.1 |
| 22 | 6 | 39 | 5 | Roche Group | Switzerland | Pharmaceuticals | 40 152 | 46 160 | 18 829 | 19 173 | 61 090 | 69 659 | 91.0 |
| 23 | 19 | 11 | 18 | Suez | France | Electricity, gas and water | 38 739 | 44 805 | 34 165 | 43 596 | 138 200 | 198 750 | 78.1 |
| 24 | 58 | 27 | 60 | BMW AG | Germany | Motor vehicles | 37 604 | 58 192 | 30 211 | 39 995 | 20 120 | 96 263 | 53.7 |
| 25 | 64 | 26 | 75 | Eni Group | Italy | Petroleum expl./ref./distr. | 36 991 | 68 987 | 22 820 | 45 329 | 36 973 | 80 655 | 49.9 |

*Source*: UNCTAD, *World Investment Report 2004: The Shift Towards Services*, annex table A.I.3.

[a] The Transnationality Index (TNI) is calculated as the average of the following three ratios: foreign assets to total assets, foreign sales to total sales and foreign employment to total employment.

**Table 5. FDI outflows as a percentage of gross fixed capital formation in selected developing economies, 2001-2003[a]**
(Per cent)

| Economy | Value |
|---|---|
| Singapore | 36.3 |
| Hong Kong, China | 28.2 |
| Taiwan Province of China | 10.5 |
| Chile | 7.4 |
| Malaysia | 5.3 |
| India | 1.0 |
| China | 0.8 |
| Brazil | 0.2 |
| *Memorandum:* | |
| Sweden | 27.4 |
| France | 22.0 |
| United Kingdom | 19.0 |
| United States | 6.6 |
| Germany | 4.1 |
| Japan | 3.2 |
| Greece | 1.8 |

*Source:* UNCTAD, *World Investment Report 2004: The Shift Towards Services,* table I.10.

[a] Annual average.

(5%), compared to the United States (7%), Germany (4%) and Japan (3%) (table 5). As the economic recovery takes hold, FDI from these and other developing countries can be expected to resume growth. Is a new geography of FDI flows in the making, complementing the new geography of trade?

It may well be: the top 50 developing-country TNCs are becoming transnationalized (as measured by UNCTAD's Transnationality Index) at a faster rate than their developed-country counterparts (see table 6 for the top 25 of these firms). They are led by firms from developing Asia. FDI outflows from that region have averaged $37 billion per year over the past three years (almost comparable to average annual world FDI flows in the first half of the 1980s), or four-fifths of all outflows of developing countries. Latin America and the Caribbean accounts for another $10 billion, while outflows from Africa are much smaller and come mainly from South Africa. A good part of investment flows from developing countries goes to other developing countries. In developing Asia, for example, they account for some two-fifths of total inflows. And flows between developing countries are growing faster than flows between developed and developing countries.

Notwithstanding rising FDI from the developing world, developed countries continue to account for over 90% of total outward FDI. In fact, the ownership advantages of TNCs based in countries with significant outward FDI, such as the Netherlands, Sweden, Switzerland and the United Kingdom, appear to be getting stronger. UNCTAD's Outward FDI Performance Index, presented for the first time in *WIR04*, reveals how countries vary in this regard. Ranked according to this Index – measured as the ratio of a country's share in world outward FDI flows to its share in world GDP – the leaders are Belgium and Luxembourg (because of transshipped FDI), Panama

## Table 6. The top 25 non-financial TNCs from developing economies, ranked by foreign assets, 2002

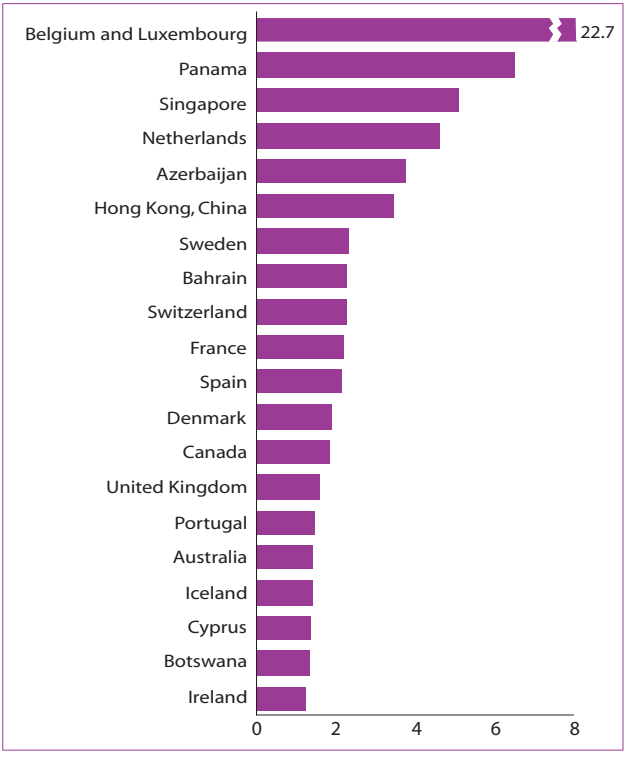
(Millions of dollars and number of employees)

| Ranking by Foreign assets | Ranking by TNI[a] | Corporation | Home economy | Industry | Assets Foreign | Assets Total | Sales Foreign | Sales Total | Employment Foreign | Employment Total | TNI[a] (Per cent) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 10 | Hutchison Whampoa Limited | Hong Kong, China | Diversified | 48 014 | 63 284 | 8 088 | 14 247 | 124 942 | 154 813 | 71.1 |
| 2 | 14 | Singtel Ltd. | Singapore | Telecommunications | 15 775 | 19 071 | 3 247 | 5 801 | 9 877 | 21 716 | 61.4 |
| 3 | 44 | Petronas - Petroliam Nasional Berhad | Malaysia | Petroleum expl./ref./distr. | 13 200 | 46 851 | 6 600 | 21 433 | 4 979 | 25 940 | 26.0 |
| 4 | 11 | Cemex S.A. | Mexico | Construction Materials | 12 193 | 16 044 | 4 366 | 7 036 | 17 568 | 26 752 | 67.9 |
| 5 | 33 | Samsung Electronics Co., Ltd. | Republic of Korea | Electrical & electronic equipment | 11 388 | 51 964 | 28 298 | 47 655 | 28 300 | 82 400 | 38.5 |
| 6 | 26 | LG Electronics Inc. | Republic of Korea | Electrical & electronic equipment | 5 845 | 16 214 | 11 387 | 23 553 | 30 029 | 55 053 | 46.3 |
| 7 | 15 | Jardine Matheson Holdings Ltd | Hong Kong, China | Diversified | 5 729 | 8 255 | 4 449 | 7 398 | 60 000 | 114 000 | 60.7 |
| 8 | 2 | Neptune Orient Lines Ltd. | Singapore | Transport and storage | 4 580 | 4 771 | 4 501 | 4 642 | 11 187 | 12 218 | 94.8 |
| 9 | 17 | Citic Pacific Ltd. | Hong Kong, China | Construction | 4 170 | 7 328 | 1 567 | 2 861 | 7 388 | 11 643 | 58.4 |
| 10 | 9 | Sappi Limited | South Africa | Paper | 3 733 | 4 641 | 2 941 | 3 729 | 9 807 | 17 572 | 71.7 |
| 11 | 6 | Shangri-La Asia Limited | Hong Kong, China | Hotels and motels | 3 663 | 4 593 | 463 | 601 | 13 000 | 16 300 | 78.9 |
| 12 | 34 | Sasol Limited | South Africa | Industrial chemicals | 3 623 | 8 960 | 3 687 | 7 114 | 7 107 | 31 150 | 38.4 |
| 13 | 3 | Guangdong Investment Limited | Hong Kong, China | Diversified | 3 601 | 3 924 | 815 | 876 | 5 994 | 6 580 | 92.0 |
| 14 | 5 | Flextronics International Ltd. | Singapore | Electrical & electronic equipment | 3 488 | 4 897 | 5 903 | 7 812 | 76 187 | 78 000 | 81.5 |
| 15 | 25 | Capitaland Limited | Singapore | Real estate | 3 165 | 9 403 | 1 114 | 1 823 | 5 111 | 10 333 | 48.1 |
| 16 | 13 | City Developments Limitedm | Singapore | Hotels | 2 954 | 6 490 | 806 | 1 278 | 11 001 | 13 940 | 62.5 |
| 17 | 50 | Petroleo Brasileiro S.A. - Petrobras | Brazil | Petroleum expl./ref./distr. | 2 863 | 32 018 | 1 085 | 22 612 | 2 200 | 46 723 | 6.1 |
| 18 | 22 | MTN Group Limited | South Africa | Telecommunications | 2 582 | 3 556 | 729 | 1 991 | 1 970 | 4 192 | 52.1 |
| 19 | 21 | Anglogold Limited | South Africa | Gold ores | 2 301 | 3 964 | 831 | 1 761 | 30 821 | 53 097 | 54.4 |
| 20 | 12 | First Pacific Company Limited | Hong Kong, China | Electrical & electronic equipment | 2 276 | 2 313 | 1 892 | 1 892 | 25 | 46 422 | 66.1 |
| 21 | 35 | Companhia Vale do Rio Doce | Brazil | Mining & quarrying | 2 265 | 7 955 | 2 928 | 4 268 | 1 493 | 13 973 | 35.9 |
| 22 | 31 | Metalurgica Gerdau S.A. | Brazil | Metal and metal products | 2 089 | 4 093 | 1 340 | 3 136 | 5 977 | 18 995 | 41.7 |
| 23 | 27 | Perez Companc | Argentina | Petroleum expl./ref./distr. | 2 052 | 4 090 | 567 | 1 484 | 1 633 | 3 255 | 46.2 |
| 24 | 39 | América Móvil | Mexico | Telecommunications | 2 002 | 10 966 | 1 664 | 5 953 | 6 629 | 14 572 | 30.6 |
| 25 | 42 | Singapore Airlines Limited | Singapore | Transport and storage | 1 969 | 10 866 | 2 472 | 5 260 | 2 613 | 14 418 | 27.7 |

*Source*: UNCTAD, *World Investment Report 2004: The Shift Towards Services*, box table I.3.1.

[a] The Transnationality Index (TNI) is calculated as the average of the following three ratios: foreign assets to total assets, foreign sales to total sales and foreign employment to total employment.

**Figure 1. Outward FDI Performance Index of the top 20 economies, 2001-2003[a]**




*Source*: UNCTAD, *World Investment Report 2004: The Shift Towards Services,* table I.9.

*Note*: Figures were calculated based on outward flows.

[a] Three-year moving average.

and Singapore. But the four countries mentioned earlier as well as other developed countries also figure among those at the top of the list (figure 1).

## *Trends and prospects vary by region, with turnarounds in Africa and Asia and the Pacific,...*

FDI inflows to *Africa* rose by 28%, to $15 billion, in 2003, but fell short of their 2001 peak of $20 billion (table 2). Thirty-six countries saw a rise in inflows, and 17 a decline. The recovery was led by investment in natural resources and a revival of cross-border M&As, including through privatizations. Morocco was the

largest recipient of inflows. Overall, natural-resource-rich countries (Angola, Chad, Equatorial Guinea, Nigeria, South Africa) continued to be the principal destinations, but a large number of smaller countries shared in the recovery. FDI in services is increasing, particularly in telecommunications, electricity and retail trade. In South Africa, for instance, FDI in telecommunications and information technology has overtaken that in mining and extraction.

Africa's outlook for FDI in 2004 and beyond is promising, given the region's natural-resource potential, buoyant global commodity markets and improving investor perceptions of the region. Leading TNCs surveyed by UNCTAD in 2004 viewed the region's prospects less favourably than those for other regions: only one out of five respondents expected higher inflows over the next two years, and two-thirds believed flows would remain unchanged.

Continuing improvements in regulatory frameworks should facilitate FDI inflows into African countries. In 2003, a number of them further liberalized their FDI regimes, and some resumed privatization programmes. Several countries concluded or made progress in negotiations on free trade agreements (FTAs). The extension of the African Growth and Opportunity Act (AGOA) of the United States to 2015, through the AGOA Acceleration Act of 2004, should facilitate the expansion of international production in Africa.

The rebound of inflows to the *Asia-Pacific* region, up by 14%, to $107 billion in 2003 (table 2), was driven by strong domestic economic growth in key economies, improvements in the investment environment, and regional integration that encourages intraregional investment and facilitates the expansion of production networks by TNCs. The outbreak of the Severe Acute Respiratory Syndrome (SARS) had only a marginal effect on FDI flows to the region. Overall, 34 economies received higher inflows, and 21 lower ones.

Within the region, there was considerable unevenness of FDI flows to different subregions and countries, as well as industries. Overall, inflows were concentrated in North-East Asia ($72 billion in 2003) and in services. Setting aside the special case of Luxembourg (owing to transshipping), China became the world's largest FDI recipient in 2003, overtaking the United States, traditionally the largest recipient (figure 2). Flows to South-East Asia rose by 27% to $19 billion. South Asia received only $6 billion, in spite of a 34% increase. Flows to resource-rich Central Asia rose from $4.5

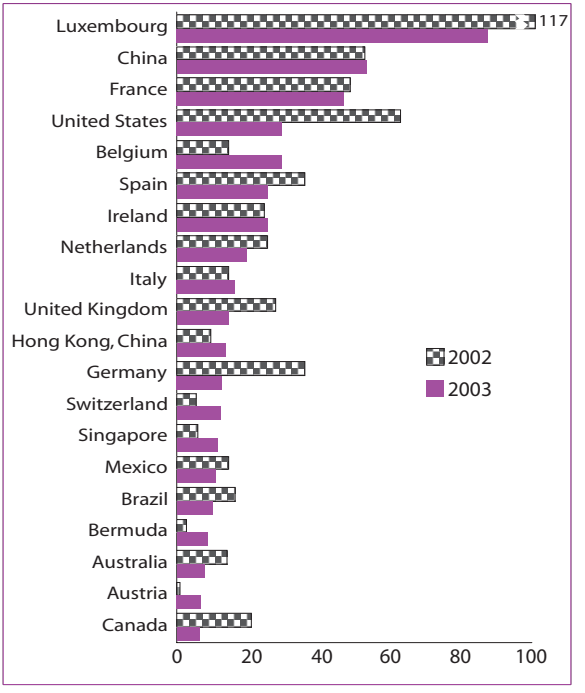
billion in 2002 to $6.1 billion, and to West Asia from $3.6 billion to $4.1 billion. Flows to the Pacific islands remained low (at $0.2 billion), despite a noticeable increase in FDI to Papua New Guinea.

The FDI stock in services climbed from 43% of the region's total inward stock in 1995 to 50% in 2002, while that of manufacturing fell to 44%. In the primary sector, oil and gas, in particular, were magnets. While manufacturing attracted the most FDI in China, the share of services in FDI inflows to other economies rose in absolute and relative terms. This is especially true for the newly industrializing economies and the ASEAN subregion. Regional cooperation agreements, such as the ASEAN Framework Agreement on Services, helped.

On the national policy front, Asia-Pacific countries continued to liberalize their FDI policies and improve their investment climate. Most countries have already concluded BITs and DTTs with their

**Figure 2. World's top 20 FDI recipients, 2002, 2003**

(Billions of dollars)




*Source*: UNCTAD, *World Investment Report 2004: The Shift Towards Services*, annex table B.1.

principal investment partners. They have also improved cooperation amongst themselves, with the conclusion of several FTAs in 2003, and other economic arrangements with investment components.

FDI prospects for the region continue to be strong: almost three-fifths of the top TNCs surveyed by UNCTAD expected FDI to increase

over the next two years. In particular, prospects for China, India and Thailand were considered bright. There is less optimism for West Asia, with 13% of the respondents predicting a deterioration.

### *... another decline in Latin America and the Caribbean, a plunge in Central and Eastern Europe...*

For the fourth year in a row, FDI flows into *Latin America and the Caribbean* (LAC) fell, by 3% in 2003, to $50 billion (table 2). This is the lowest annual level of inward FDI since 1995. Of 40 economies, 19 saw declining inflows. In particular, declines were registered in Brazil and Mexico, the region's largest recipients. With privatization running out of steam, weak economic recovery in the European Union (EU) (the region's principal source of FDI, apart from the United States) and recession or slow growth in several countries in the region in the aftermath of the Argentine crisis, LAC has been hit hard by the FDI downturn. The apparent decline of the *maquila* industry added to concerns that Mexico might be losing attractiveness for FDI. Several smaller economies, such as Chile and Venezuela, registered increases in 2003, the former recouping its losses of the previous year. As a result, the region's share in developing-country inflows has returned to the levels preceding the latest FDI boom. In 2003, FDI outflows from LAC rose to $11 billion.

With economic growth in LAC expected to pick up, there is optimism that a recovery in FDI inflows will follow. Indeed, a substantial share of corporate executives expect an increase, according to UNCTAD's TNCs survey. Several countries are putting more emphasis on further liberalizing their FDI regimes and streamlining administrative procedures for investors.

The unexpected plunge in FDI flows into *Central and Eastern Europe*, from $31 to $21 billion (table 2), was mainly due to the Czech Republic and Slovakia, two of the largest recipients in the region. Overall, inflows rose in ten countries and fell in nine. Inflows

## Table 7. The top 25 non-financial TNCs from Central and Eastern Europe, ranked by foreign assets, 2002

(Millions of dollars and number of employees)

| Ranking by Foreign assets | Ranking by TNI [a] | Corporation | Home country | Industry | Assets Foreign | Assets Total | Sales Foreign | Sales Total | Employment Foreign | Employment Total | TNI [a] (Per cent) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 11 | Lukoil JSC | Russian Federation | Petroleum and natural gas | 5 354.0 | 22 001.0 | 10 705.0 | 15 334.0 | 13 000 [b] | 180 000 | 33.8 |
| 2 | 4 | Novoship Co. | Russian Federation | Transportation | 962.9 | 1 093.9 | 270.7 | 351.1 | 85 | 6 291 | 55.5 |
| 3 | 3 | Pliva d.d. | Croatia | Pharmaceuticals | 689.1 | 1 382.0 | 668.1 | 815.5 | 3 213 | 7 326 | 58.5 |
| 4 | 13 | Norilsk Nickel, OJSC MMC | Russian Federation | Mining | 502.0 | 9 739.0 | 2 360.0 | 3 094.0 | 34 | 96 410 | 27.2 |
| 5 | 1 | Primorsk Shipping Corporation | Russian Federation | Transportation | 331.8 | 384.2 | 96.0 | 123.9 | 1 305 | 2 611 | 71.3 |
| 6 | 7 | Gorenje Gospodinjski Aparati | Slovenia | Domestic appliances | 312.8 | 632.8 | 531.6 | 755.6 | 731 | 8 772 | 42.7 |
| 7 | 24 | Hrvatska Elektroprivreda d.d. [b] | Croatia | Energy | 272.0 | 2 357.0 | 8.0 | 775.0 | - | 15 071 | 6.3 |
| 8 | 20 | Mercator d.d., Poslovni sistem | Slovenia | Retail trade | 224.6 | 1 040.0 | 139.1 | 1 331.0 | 1 893 | 14 331 | 15.1 |
| 9 | 8 | Krka Group | Slovenia | Pharmaceuticals | 180.7 | 577.9 | 282.6 | 367.7 | 817 | 4 332 | 42.3 |
| 10 | 18 | Far Eastern Shipping Co. [b] | Russian Federation | Transportation | 123.0 | 377.0 | 101.0 | 318.0 | 233 | 5 608 | 22.8 |
| 11 | 22 | Petrol Group | Slovenia | Petroleum and natural gas | 108.5 | 623.5 | 67.0 | 1 154.6 | 25 | 1 632 | 8.2 |
| 12 | 16 | Richter Gedeon Ltd. | Hungary | Pharmaceuticals | 105.6 | 742.7 | 70.3 | 388.1 | 1 996 | 5 124 | 23.8 |
| 13 | 9 | Malév Hungarian Airlines | Hungary | Transportation | 105.0 | 280.0 | 291.0 | 392.0 | 28 | 2 851 | 37.6 |
| 14 | 12 | Podravka Group | Croatia | Food and beverages/ pharmaceuticals | 102.4 | 485.8 | 171.6 | 384.4 | 1 191 | 7 488 | 27.2 |
| 15 | 21 | MOL Hungarian Oil and Gas Plc. [b] | Hungary | Petroleum and natural gas | 95.9 | 3 243.2 | 819.2 | 3 850.0 | 776 | 15 218 | 9.8 |
| 16 | 6 | BLRT Grupp AS | Estonia | Shipbuilding | 66.2 | 116.0 | 53.7 | 111.3 | 1 778 | 3 642 | 51.4 |
| 17 | 2 | Zalakerámia Rt. [b] | Hungary | Clay product and refractory | 65.0 | 120.0 | 39.0 | 64.0 | 1 889 | 2 921 | 59.9 |
| 18 | 17 | Intereuropa d.d. | Slovenia | Trade | 45.0 | 216.0 | 36.0 | 182.0 | 701 | 2 422 | 23.2 |
| 19 | 23 | Merkur d.d. | Slovenia | Trade | 43.3 | 500.5 | 55.1 | 517.8 | 143 | 2 988 | 8.0 |
| 20 | 25 | Petrom S.A., SNP | Romania | Petroleum and natural gas | 31.5 | 4 558.0 | 4.9 | 2 318.0 | 12 | 60 459 | 0.3 |
| 21 | 10 | Budimex Capital Group [b] | Poland | Construction | 23.8 | 372.6 | 50.4 | 610.0 | 1 076 | 1 189 | 35.0 |
| 22 | 15 | Croatia Airlines | Croatia | Transportation | 23.4 | 316.1 | 101.7 | 164.5 | 59 | 992 | 25.1 |
| 23 | 14 | Finvest Corp d.d. | Croatia | Forestry | 22.2 | 71.9 | 6.6 | 31.3 | .. | 547 | 26.1 |
| 24 | 19 | Iskraemeco d.d. | Slovenia | Electrical machinery | 20.7 | 85.2 | 33.1 | 100.2 | 201 | 2 100 | 22.3 |
| 25 | 5 | Policolor S.A. | Romania | Chemicals | 17.2 | 31.0 | 25.5 | 47.1 | 457 | 933 | 52.9 |
| Averages | | | | | 393.1 | 2 053.9 | 679.5 | 1 343.2 | 1 376 | 18 050 | 31.5 |
| Change from 2001 (in %) | | | | | 5.4 | 52.1 | 29.4 | 11.1 | 9.9 | 34.6 | 1.2 |

*Source:* UNCTAD, *World Investment Report 2004: The Shift Towards Services*, annex table A.II.2.

[a] The Transnationality Index (TNI) is calculated as the average of the following three ratios: foreign assets to total assets, foreign sales to total sales and foreign employment to total employment.

[b] 2001 data.

to the Russian Federation also declined, from $3.5 billion to $1 billion. By contrast, outflows from CEE rose from $5 billion to $7 billion, with the Russian Federation accounting for three-fifths of that figure. Four out of the five top TNCs in 2002 among the region's 25 largest TNCs were Russian (table 7). FDI by Russian firms is motivated by a desire to gain a foothold in the enlarged EU, and a desire to control their value chains globally. TNCs from other CEE countries seek to improve their competitiveness by focusing their investment on the lower income CEE countries or developing countries.

Far from diverting FDI flows from the old members of the EU, the accession eight from CEE (the Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Slovakia, Slovenia) actually saw their FDI inflows shrink, from $23 billion in 2002 to $11 billion in 2003. As part of their efforts to enhance their attractiveness to investors (domestic and foreign), several new EU members have lowered their corporate taxes to levels comparable to those in locations such as Ireland. The combination of relatively low wages, low corporate tax rates and access to EU subsidies – enhanced by a favourable investment climate, a highly skilled workforce and free access to the rest of the EU market – makes the accession countries attractive locations for FDI, both from other EU countries and from third countries.

Not surprisingly, therefore, prospects for FDI into CEE are promising: more than two-thirds of the top TNCs and location experts surveyed by UNCTAD expected an upturn in FDI inflows during 2004-2005, the highest proportion of such responses among all regions. IPAs will help, according to survey results, especially through more targeting and further FDI policy liberalization.

### *...and uneven performances in the industrialized world.*

The year 2003 saw a mixed FDI picture for the developed countries: ten posted higher inflows and 16 lower ones. Overall, inflows declined by 25%, to $367 billion (table 2). Intra-company loans plunged and, to a lesser extent, equity flows (two of the three components of FDI flows). However, reinvested earnings rose, thanks to improved profitability. The slow pace of economic recovery did not help. Cross-border M&As fell in number and value for the third year running. United States FDI inflows halved, from $63 to $30

billion, which placed that country behind Luxembourg (because of transshipped FDI), China and France. Flows into the EU as a whole declined by 21%, to $295 billion.

At the same time, FDI outflows from developed countries increased by 4% (to $570 billion), largely owing to higher outflows from the United States – they rose by close to a third, to $152 billion. The United States was again the largest source of FDI, followed by Luxembourg (because of transshipped FDI), France and the United Kingdom, in that order. Higher FDI outflows and lower inflows combined for a negative net balance of $122 billion for the United States on these two items, the largest such deficit ever.

FDI prospects for developed countries for 2004 and beyond are favourable. The first six months of 2004 saw an upsurge in announced M&As, suggesting a more positive scenario for the second half of that year. The findings of UNCTAD's surveys of TNCs and location experts were less optimistic regarding prospects for Western Europe than for North America and Japan.

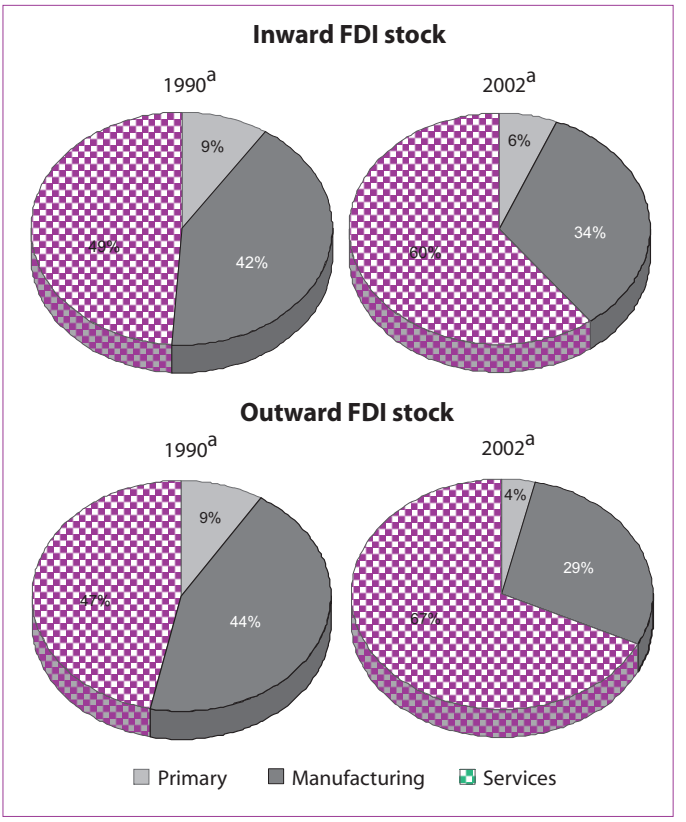
### *The composition of FDI has shifted towards services in all regions, ...*

The structure of FDI has shifted towards services. In the early 1970s, this sector accounted for only one-quarter of the world FDI *stock*; in 1990 this share was less than one-half; and by 2002, it had risen to about 60% or an estimated $4 trillion (figure 3). Over the same period, the share of the primary sector in world FDI stock declined, from 9% to 6%, and that of manufacturing fell even more, from 42% to 34%.

On average, services accounted for two-thirds of total FDI *inflows* during 2001-2002, valued at some $500 billion. Moreover, as the transnationalization of the services sector in home and host countries lags behind that of manufacturing, there is scope for a further shift towards services.

*Outward* FDI in services continues to be dominated by developed countries, but has become more evenly distributed among them (table 8). A few decades ago, almost the entire outward stock of services FDI was held by firms from the United States. By 2002, Japan and the EU had emerged as significant sources. Developing countries' outward FDI in services began to grow visibly from the 1990s. Their share in the global outward FDI services stock climbed

**Figure 3. World FDI stock, by sector, 1990, 2002**




*Source*: UNCTAD, *World Investment Report 2004: The Shift Towards Services*, figure I.18.

*Note*: In calculating the shares of the respective sectors, amounts recorded under "Private buying and selling of property" and "Unspecified" are excluded from the totals.

[a] Or latest year available.

from 1% in 1990 to 10% in 2002, faster than in other sectors. Trade and trade-supporting services by manufacturing TNCs expanded particularly rapidly, while business services, hotels and restaurants, and financial services also grew.

On the *inward* side, the distribution of services FDI stock has been relatively more balanced, though developed countries still account for the largest share. The fastest growth has taken place in Western Europe and the United States, reflecting the fact that most service FDI is market-seeking. Today, developed countries

**Table 8. Distribution of FDI stock in services, by group of economies, 1990, 2002**
(Per cent)

| Sector/industry | 1990 | | | 2002 | | | |
|---|---|---|---|---|---|---|---|
| | Developed countries | Developing economies | World | Developed countries | Developing economies | Central and Eastern Europe | World |
| **Inward FDI stock** | | | | | | | |
| **Total services** | 83 | 17 | 100 | 72 | 25 | 3 | 100 |
| Electricity, gas and water | 70 | 30 | 100 | 63 | 32 | 6 | 100 |
| Construction | 77 | 23 | 100 | 47 | 45 | 8 | 100 |
| Trade | 90 | 10 | 100 | 78 | 19 | 4 | 100 |
| Hotels and restaurants | 87 | 13 | 100 | 70 | 26 | 3 | 100 |
| Transport, storage and communications | 58 | 43 | 100 | 71 | 22 | 7 | 100 |
| Finance | 76 | 24 | 100 | 77 | 20 | 3 | 100 |
| Business activities | 93 | 7 | 100 | 61 | 38 | 1 | 100 |
| Public administration and defence | .. | .. | .. | 99 | 1 | - | 100 |
| Education | 100 | .. | 100 | 92 | 4 | 4 | 100 |
| Health and social services | 100 | .. | 100 | 67 | 32 | 1 | 100 |
| Community, social and personal service activities | 100 | .. | 100 | 91 | 8 | 2 | 100 |
| Other services | 85 | 15 | 100 | 61 | 36 | 3 | 100 |
| **Outward FDI stock** | | | | | | | |
| **Total services** | 99 | 1 | 100 | 90 | 10 | - | 100 |
| Electricity, gas and water | 100 | .. | 100 | 100 | 0 | - | 100 |
| Construction | 99 | 1 | 100 | 80 | 20 | - | 100 |
| Trade | 99 | 1 | 100 | 88 | 12 | - | 100 |
| Hotels and restaurants | 100 | - | 100 | 90 | 10 | - | 100 |
| Transport, storage and communications | 99 | 1 | 100 | 93 | 7 | - | 100 |
| Finance | 98 | 2 | 100 | 93 | 7 | - | 100 |
| Business activities | 98 | 2 | 100 | 84 | 16 | - | 100 |
| Public administration and defence | - | - | - | 100 | .. | .. | 100 |
| Education | 100 | .. | 100 | 100 | .. | .. | 100 |
| Health and social services | 100 | .. | 100 | 100 | - | - | 100 |
| Community, social and personal service activities | 100 | .. | 100 | 99 | 1 | - | 100 |
| Other services | 100 | 1 | 100 | 90 | 10 | - | 100 |

*Source:* UNCTAD, *World Investment Report 2004: The Shift Towards Services*, table III.2.

account for an estimated 72% of the inward FDI stock in services, developing economies for 25% and CEE for the balance. In 2002, the United States was the largest host economy in terms of the size of its inward FDI stock in services. With a few exceptions (such as China), countries that have participated in the FDI boom in services also strengthened their position among home and host countries for all FDI. There is, however, considerable variation in the share of services in the FDI of individual countries.

The composition of services FDI is also changing (table 9). Until recently, it was concentrated in trade and finance, which together still accounted for 47% of the inward stock of services FDI and 35% of flows in 2002 (compared to 65% and 59%, respectively, in 1990). However, such industries as electricity, water, telecommunications and business services (including IT-enabled corporate services) are becoming more prominent. Between 1990 and 2002, for example, the value of the FDI stock in electric power generation and distribution rose 14-fold; in telecoms, storage and transport 16-fold; and in business services 9-fold.

### *... driven by various factors, ...*

What explains the shift of FDI towards services? Partly it reflects the ascendancy of services in economies more generally: by 2001, this sector accounted, on average, for 72% of GDP in developed countries, 52% in developing and 57% in CEE countries. Moreover, most services are not tradable – they need to be produced when and where they are consumed. Hence the principal way to bring services to foreign markets is through FDI. In addition, countries have liberalized their services FDI regimes, which has made larger inflows possible, especially in industries previously closed to foreign entry. Of particular importance has been the privatization of State-owned utilities in Latin America and the Caribbean, and in CEE.

Firms have reacted by expanding their service production abroad. Traditionally, FDI in such services as banking, insurance and transportation had been undertaken by firms moving abroad to support or complement trade or overseas manufacturing by their manufacturing clients. This is still taking place, but the pattern has been changing: service providers more and more invest abroad on their own account, as they seek new clients and exploit their own ownership advantages. Added to that are competitive pressures. In non-tradable services, growth remains the principal location advantage

## Table 9. Distribution of FDI stock in services, by industry, 1990, 2002

(Per cent)

| Sector/industry | 1990 | | | 2002 | | | |
|---|---|---|---|---|---|---|---|
| | Developed countries | Developing economies | World | Developed countries | Developing economies | Central and Eastern Europe | World |
| **A. Inward FDI stock** | | | | | | | |
| **Total services** | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| Electricity, gas and water | 1 | 2 | 1 | 3 | 4 | 6 | 3 |
| Construction | 2 | 3 | 2 | 1 | 3 | 5 | 2 |
| Trade | 27 | 15 | 25 | 20 | 14 | 21 | 18 |
| Hotels and restaurants | 3 | 2 | 3 | 2 | 2 | 2 | 2 |
| Transport, storage and communications | 2 | 8 | 3 | 11 | 10 | 24 | 11 |
| Finance | 37 | 57 | 40 | 31 | 22 | 29 | 29 |
| Business activities | 15 | 5 | 13 | 23 | 40 | 10 | 26 |
| Public administration and defence | - | - | - | - | - | - | - |
| Education | - | - | - | - | - | - | - |
| Health and social services | - | - | - | - | - | - | - |
| Community, social and personal service activities | 2 | - | 2 | 2 | 1 | 1 | 2 |
| Other services | 10 | 8 | 9 | 2 | 4 | 2 | 2 |
| Unspecified tertiary | 2 | 1 | 2 | 6 | 2 | - | 5 |
| **B. Outward FDI stock** | | | | | | | |
| **Total services** | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| Electricity, gas and water | 1 | - | 1 | 2 | - | 2 | 2 |
| Construction | 2 | 2 | 2 | 1 | 2 | 2 | 1 |
| Trade | 17 | 16 | 17 | 10 | 12 | 17 | 10 |
| Hotels and restaurants | 1 | - | 1 | 2 | 2 | - | 2 |
| Transport, storage and communications | 5 | 4 | 5 | 11 | 7 | 19 | 11 |
| Finance | 48 | 62 | 48 | 35 | 22 | 39 | 34 |
| Business activities | 6 | 11 | 7 | 34 | 54 | 19 | 36 |
| Public administration and defence | - | - | - | - | - | - | - |
| Education | - | - | - | - | - | - | - |
| Health and social services | - | - | - | - | - | - | - |
| Community, social and personal service activities | - | - | - | - | - | - | - |
| Other services | 13 | 5 | 13 | 2 | 2 | 2 | 2 |
| Unspecified tertiary | 6 | - | 6 | 3 | - | - | 3 |

*Source:* UNCTAD, *World Investment Report 2004: The Shift Towards Services*, table III.1.

for attracting FDI. In directly tradable services, the main location advantages are access to good information and communication technologies, an appropriate institutional infrastructure and the availability of productive and well-trained personnel at competitive costs.

### *... and with M&As and non-equity arrangements as the most common entry modes.*

The shift towards services is also discernible in cross-border M&As. In fact, most M&As during the second half of the 1990s took place in services and then became a widely used mode of TNC entry. While, in the late 1980s, services accounted for some 40% of global cross-border M&As, their share rose to more than 60% by the end of the 1990s. Up to the 1980s, cross-border M&As were almost exclusively the domain of United States TNCs. Since then, EU TNCs have become the dominant actors: in 2001-2003, they accounted for 61% of all M&A purchases worldwide. Cross-border M&As have also played a prominent role in the overseas expansion of services by TNCs based in developing countries.

Overall, the propensity of TNCs to enter new markets through M&As, rather than greenfield FDI, is much greater in such service industries as banking, telecommunications and water. Privatization programmes open to FDI, which peaked in many countries during the 1990s, have added to the number of M&As.

Across a number of service industries, the growth in TNC activity and international production takes the form of non-equity arrangements – e.g. franchising, management contracts, partnerships – rather than FDI. The greater popularity of non-equity forms in services as compared with goods can be explained partly by differences in the nature of the proprietary assets of the firms involved. Soft technologies and knowledge-based, intangible assets, rather than tangible ones, provide service firms with competitive advantages. Intangible assets, such as organizational and managerial expertise, can be separated from tangible and capital-intensive ones (such as real estate in the case of hotels or water distribution networks). More importantly, because the critical knowledge transferred by TNCs and the capabilities of the local firms are frequently codifiable (e.g. in management contracts), these can be equally well protected and enhanced by non-equity arrangements

– and without putting capital at risk. For instance, quality control, performance conditions and minimum transaction costs can often be embodied in management contracts or franchising agreements. Non-equity forms are common in hotels, restaurants, car rental, retailing, accounting, legal and other professional services. However, such activity is not captured in FDI stock and flow data, or in data on the economic activities of foreign affiliates.

***International production networks in services are in their infancy, and service industries and TNCs are less transnationalized than their manufacturing counterparts – but they may be catching up.***

FDI in services has traditionally been, and continues to be, market-seeking, despite the increase in the cross-border tradability of many information-intensive services. While some services (e.g. financial and, especially, business services) can be rationalized internationally, leading to efficiency-seeking FDI, the integrated production of services on the whole remains in its infancy. In 2001, for example, 84% of sales of services by foreign affiliates of United States TNCs were local sales in host countries, while the corresponding share for goods was 61%.

Nevertheless, there are signs that international services production is evolving in a direction similar to that of international goods production. In the United States, for instance, the share of intra-firm imports in total imports of "other private services" rose from 30% in 1986 to 47% in 2002. To the extent that integrated strategies of TNCs are being pursued, however, they take the form of simple rather than complex strategies, although world product mandates for foreign affiliates exist (e.g. accounting services for a corporate system as a whole), as do simultaneous international production networks (e.g. when affiliates in various countries work on a common R&D database at the same time).

Despite the growth and dominance of services FDI, the services sector is less transnationalized than the manufacturing sector. Judging from data for selected, mainly developed countries, the degree of transnationality of services production, as measured by the shares of foreign affiliates in value-added, employment or sales of services in host and home countries, is lower than that in manufacturing, measured in a similar manner. Although a less satisfactory measure,

the size of FDI stock relative to GDP in the two sectors for selected developed and developing countries indicates the same. This is because of: (i) the much larger size of the services sector; (ii) the continued provision by domestic enterprises of many services such as education, health, government services, media and transportation; and (iii) the relatively recent growth of FDI in other services (such as telecoms, electricity, gas and water and business services). Moreover, service TNCs have a lower degree of transnationality overall than their manufacturing counterparts (20% compared to 40%), according to United States data. However, the service TNCs on UNCTAD's lists of the largest TNCs worldwide and those from developing economies are catching up fast with the manufacturing firms on the list.

### *FDI in services can have benefits – and costs – for host countries,...*

To start with, FDI in services, like FDI in other sectors, injects *financial resources* into a host economy. To the extent that funds are raised internationally, they are a net addition to resource flows into a host country. If funds are raised locally, domestic interest rates may rise, making capital more expensive for domestic enterprises, although the difference between locally-raised and foreign-sourced resources becomes less important as countries open up to international capital markets. A large part of services FDI is in market-seeking, non-tradable activities, which do not contribute directly to foreign-exchange earnings. At the same time, they entail external payments, for example, in the form of repatriated profits. Hence, FDI could have a negative impact on the balance of payments. And payments associated with FDI in services (e.g. repatriated profits) can quickly outweigh the initial capital inflow and exacerbate balance-of-payments crises.

Counterbalancing such possible negative impacts are the potentially positive effects on consumers of final services, and on producers using intermediate services in terms of better service provision and spillover effects. FDI in services affects the provision of services in terms of supply, cost, quality and variety of services in host economies. In some industries, it can add significantly to the volume of services available in a host country. The financial strength of TNCs, together with their ability to implement and manage

complex systems, enables them to expand supply capacities rapidly in complex, capital-intensive services, such as telecommunications and transportation. However, in the absence of appropriate government policies and regulations, TNC involvement in utilities and other basic services may lead to a rise in prices, an inequitable distribution of services and limited access for the poorest segments of society.

Concerns also arise about the impact of services FDI on *competition* and the possible *crowding out* of domestic firms. In banking, for instance, foreign bank entry is sometimes found to be associated with a deterioration of the loan portfolio of domestic banks, a situation that potentially undermines their viability. Domestic banks face a challenge in competing with foreign banks due to their lack of geographical diversification and experience, limited financing capacity and higher costs of new product implementation. In industries such as retailing, the presence of TNCs introduces new ways of doing business, new pricing structures, improved information management processes and new marketing and merchandising methods; all these can squeeze out local producers – although, for the remaining ones, especially when they are able to upgrade, the effect may be beneficial. FDI can spur local service providers to become more competitive through demonstration and skills diffusions, thus helping them improve efficiency. All in all, the competitive impact of FDI entry on service supply conditions, as well as the likelihood of its crowding out domestic firms, depend considerably on initial conditions in a host country, especially the level of economic and service-industry development, market structure of service industries and the regulatory framework.

One of the biggest contributions of FDI in services to development is in the *transfer of technology*. Services TNCs can bring both hard technology (plant, equipment, industrial processes) and soft technology (knowledge, information, expertise, skills in organization, management, marketing). Soft technology is captured in skills – which is often reflected in wages. Evidence on employee remuneration in foreign affiliates of United States-based service TNCs in developing countries suggests that they are more skill-intensive than their manufacturing counterparts. In addition, compensation in service affiliates in developing countries is much closer to that of affiliates in developed countries than in the case of manufacturing. Both reflect the stand-alone nature of many service

affiliates, which requires that the skills profile of parent firms be largely replicated in their foreign affiliates.

What determines whether or not skills transfer actually materializes are the intensity of competition, the quality of education and training in host countries, the training and personnel policies of TNCs, labour market structure and mobility, and linkages between foreign affiliates and domestic service suppliers and buyers. Although evidence exists that services FDI does provide some transfer of skills, expertise and knowledge, data on the overall extent of such transfers are scarce.

Direct *exports* by service TNCs have been relatively limited until recently, but their indirect impact on export competitiveness can be significant. FDI in intermediate services can directly and indirectly improve the efficiency of industrial products. Such services range from banking, insurance and business services to transport, electricity and telecommunications. International hotel chains play an important role in promoting competitiveness in tourism by helping to attract a critical mass of international tourists. Tourism is an important foreign-exchange earner for developing countries, through both equity and non-equity involvement.

FDI in services generates *employment* in host countries, although less so per dollar invested than in manufacturing. Moreover, employees in foreign service affiliates are, on average, better trained and better paid than those in manufacturing. These differences again arise mainly because of the stand-alone nature of most foreign affiliates in services and the (still) limited ability of TNCs to separate labour-intensive activities and locate them in countries with lower labour costs. However, the potential for job creation is growing with the rise of FDI in export-oriented services. Indirect effects are also important, with services FDI supporting production in upstream and downstream industries, thus potentially adding to employment there.

### *... and managing services FDI requires appropriate regulatory structures.*

Both direct and indirect benefits associated with services FDI can boost national and export competitiveness. However, benefits may not be realized if conditions in the host economy are not right. Services FDI can entail three kinds of risk: (i) systemic risk, when the absence of efficient regulation exposes a host economy to

significant economic instability; (ii) structural risk, when the institutions and instruments needed to manage, say, privatization and utilities, are weak and there is the risk of turning State-owned monopolies into private ones; and (iii) contingent risk, when FDI in socially or culturally sensitive areas causes unintended harm.

These risks imply that, while services FDI is becoming an important element of competitiveness, it has to be managed carefully. Indeed, the special nature of some services, particularly in basic utilities and socially or culturally sensitive areas, means that free-market forces may not provide the desired outcomes. Strong, independent and competent regulatory structures are vital if the potential benefits of FDI are to be tapped. Considerable skills and information, as well as the ability to draw upon the experiences of regulators in other parts of the world, are required so that developing countries can build the appropriate structures and reap the maximum benefits from services FDI.

### *The offshoring of services, still a relatively new phenomenon, is on the rise,...*

Services typically need to be produced when and where they are consumed. In the past decade or so, advances in information and communication technologies have made it possible for more and more of these services to be produced in one location and consumed elsewhere – they have become tradable. The implication

**Table 10. Offshoring and outsourcing – some definitions**

| | **Internalized or externalized production** | |
|---|---|---|
| **Location of production** | Internalized | Externalized **("outsourcing")** |
| Home country | *Production kept in-house at home* | *Production outsourced to third-party service provider at home* |
| Foreign country (**"offshoring"**) | *Production by foreign affiliate, e.g.*<br>*- Infineon's centre in Dublin*<br>*- DHL's IT centre in Prague*<br>*- British Telecom's call centres in Bangalore and Hyderabad*<br><br>**"intra-firm (captive) offshoring"** | *Production outsourced to third-party provider abroad,*<br>*To **local company,** e.g.*<br>*- Bank of America's outsourcing of software development to Infosys in India*<br>*To **foreign affiliate of another TNC,** e.g.*<br>*- A United States company outsourcing data processing services to ACS in Ghana* |

*Source:* UNCTAD, *World Investment Report 2004: The Shift Towards Services,* table IV.1.

of this “tradability revolution” is that the production of entire service products (or parts thereof) can be distributed internationally – in locations offshore from firms’ home countries – in line with the comparative advantages of individual locations and the competitiveness-enhancing strategies of firms. This is a process well known in the manufacturing sector.

Offshoring of services can be done in two ways: internally, through the establishment of foreign affiliates (sometimes called “captive offshoring”); or by outsourcing a service to a third-party service provider (“offshore outsourcing”) (table 10). Indeed, an integral part of the restructuring of corporate activities to enhance their international competitiveness is to concentrate on “core competencies”. For many firms in all sectors, this means that the production of various services (accounting, billing, software development, architectural designs, testing, etc.) is outsourced, i.e. turned over to other (specialist) companies. Typically, the lion’s

**Box 1. Offshoring: captive or outsourced production?**

Offshoring can be either captive or outsourced. Captive offshoring is preferred when strict control of an activity is crucial (as in R&D), information is sensitive, internal interaction is important, or when a firm seeks to capture savings and other advantages. Back-office and front-office work that can be easily standardized and separated from other activities are more likely to be outsourced (and eventually offshored). Smaller scale activities are more likely to be kept in-house, because their outsourcing would not generate enough savings. The availability of capable local firms also influences the choice of captive versus outsourced offshoring. If data for India are indicative, perhaps as much as 60% of offshored IT-enabled services takes place within TNCs.

Sometimes, offshoring takes place through a combination of outsourcing and captive models. The expansion of international offshoring has contributed to the emergence of a new breed of TNCs that provides services to other companies, imitating contract manufacturers. Most such "contract service providers" hail from the United States. Some of them have become global players by setting up their own international networks of foreign affiliates. While the main operations of these companies remain in industrialized countries, activities in developing countries are growing more rapidly, and are also expanding abroad.

*Source*: UNCTAD.

share of such outsourcing takes place in the same country, but the international share of outsourcing is likely to increase as services become more tradable. After all, once a decision has been taken to outsource, it is, in principle, only a small step to move such production abroad – to offshore it – if this enhances a firm's international competitiveness. (See box 1 for a discussion of business models.)

While the offshoring of services is still in its infancy, the tipping point may be approaching rapidly. Offshoring represents the cutting edge of the global shift in production activity, giving rise to a new international division of labour in the production of services.

While the fragmentation and globalization processes in services and manufacturing are similar, there are important differences. First, although the services sector is much larger than the manufacturing sector, only some 10% of its output enters international trade, compared with over 50% for manufacturing. Second, the pace of globalization of services affected by the tradability revolution is faster than in manufacturing. Third, whereas the relocation of goods production has involved, overwhelmingly, firms in manufacturing only, service functions are offshored by companies in all sectors. Fourth, the skill intensity is generally higher for offshored tradable services than for manufacturing located abroad, thus affecting white-collar jobs in particular. And fifth, services that are offshored may be more footloose than relocated manufacturing activities because of lower capital-intensity and sunk costs, especially services that do not require high skills.

Obviously, not all corporate services and service functions can or will relocate. For many services, proximity to markets, interaction with customers, trust and confidence outweigh the possible benefits of an international division of labour. Further, technological limitations cannot be discounted. It is not possible for all service functions to be digitized and/or separated from related activities. Some businesses will continue to need localized services or person-to-person contact for exchanging highly confidential information or for adapting to rapidly changing customer needs. Regulations and legal requirements (e.g. regarding privacy) may also raise transactions costs and limit international trade in services. Certain services, such as insurance and banking, are required by law in some countries to be provided by companies established locally. The lack

of international recognition of professional qualifications is another obstacle, as is the lack of globally agreed privacy rules. Some international locations also lack the capacity to host offshored service activities. These include the supply of reliable telecom infrastructure, appropriately educated workers, rising wage costs and high levels of attrition in the fastest growing destinations, all giving rise to shortage risks, at least in the short run. TNCs too have different perceptions of the risks and benefits of offshoring services and some are reluctant to do so.

### *...driven by the search for competitiveness ...*

Cost considerations often trigger offshoring. For example, 70-80% of companies interviewed in various studies mentioned lower costs as the main reason for setting up a shared service centre abroad. Cost savings of 20-40% are commonly reported by companies that have experience in offshoring. Savings relate both to the use of cheaper labour and the consolidation of activities in fewer locations. Hence, considerable savings can accrue from offshoring even among developed countries – where, in fact, most of it takes place.

But cost is only the trigger. In fact, many of the pioneers offshored to access skills and to improve the quality of the services provided. And they are staying (and expanding) to take advantage of the entire range of benefits resulting from the international division of labour in the production of services. Once important firms have started to reap the benefits of this new possibility, others are likely to follow for fear of compromising their own competitive position. Hence, many more companies – large and small, from developed and developing countries – can be expected to establish their own international production networks or otherwise offshore the production of certain services.

As a result, a wide range of newly tradable services is now entering the exports of countries, developed and developing alike. These can be simple, low-value added activities (such as data entry), or more sophisticated, high-value added activities (such as architectural designs, financial analysis, software programming, R&D). They span the full diversity of skills, and some cut across all sectors.

The size of the phenomenon is, however, difficult to establish. As noted above, most outsourcing at present takes place domestically

in the home country; only 1-2% of all business-process outsourcing to date is done internationally. Second, about 90% of all FDI projects during 2002-2003 in export-oriented services originated in developed countries. Firms from the United States dominated, with two-thirds of all export-oriented information and telecommunication service projects, 60% of call-centre projects and 55% of shared-service projects. Third, a significant share of offshoring went to developed countries – for example, more than half of all export-oriented FDI projects related to call centres in 2002-2003. Ireland and Canada are among the most attractive offshore locations.

No one knows how big offshoring will become. The total market for all offshore service exports is estimated to have been $32 billion in 2001, of which Ireland accounted for one quarter. The fastest growth is expected in the offshoring of IT-enabled services, which is forecast to expand from $1 billion in 2002 to $24 billion in 2007. Even among the 1,000 largest firms in the world, 70% still have not offshored any services to low-cost locations, but many have plans to do so. While United States companies have been relatively active, European companies have shown less inclination to offshore services. But there are signs that this is starting to change, beginning with the United Kingdom. Research undertaken in 2004 by UNCTAD, in cooperation with Roland Berger Strategy Consultants, found that 83% of large European companies with offshoring were satisfied with the experience, only 3% were dissatisfied, and 44% of the companies interviewed planned further offshoring in the coming years. This is likely to compel more companies to consider offshoring as a potential strategy to increase their competitiveness.

Offshoring has a long way to go before it matures and settles down in pattern and location. A World Bank assessment of the mid-1990s concerning the number of jobs for which long-distance provision is technically feasible *and* for which cost savings of up to 30-40% would be plausible suggested that some 1-5% of the total employment in the G-7 countries could be affected. More recent estimates by business research groups of the likely impact concluded that 3.4 million service jobs may shift from the United States to low-income countries by 2015; another concluded that 2 million offshored jobs could be created in the financial services industry alone, and that the total number of jobs affected for all industries

could be in the area of 4 million. However, this should be compared with a turnover of 7-8 million jobs every quarter in the United States.

### *... and offering export opportunities for countries with the right mix of costs, skills and infrastructure,...*

While offshoring is creating new FDI opportunities, not all countries are taking part in this process. As with FDI and trade in general, developed countries attract a sizeable share. Given that services generally require higher skills than manufacturing activities, the barriers to entry can be high for potential host countries. For those that do manage to become export bases for services, key benefits include increased export earnings, job creation, higher wages and the upgrading of skills. Export revenues are considerable, as exemplified by India, where exports of software and IT-enabled services grew from less than $0.5 billion a decade ago to some $12 billion in 2003-2004. Jobs created in the services sector, including through offshoring, are typically better paid than in the manufacturing sector. But wage increases are also more rapid than in manufacturing, which makes offshored services more vulnerable to relocation to other sites. Given the short time needed to implement an offshore FDI project, attracting offshored services can offer fast-track job creation for successful host countries.

FDI related to the offshoring of services may also be desirable because of spillover effects, especially if the services provided are also sold in the domestic market. Positive spillovers in terms of raising the competitiveness of human resources and improving the ICT infrastructure benefit all sectors of an economy, with most of the acquired skills being readily transferable to other parts of the economy. Negative spillovers, such as environmental pollution and over-exploitation of natural resources are likely to be limited.

At the same time, given that export-oriented services tend to be relatively skill-intensive, they are mostly geographically concentrated and require a well-developed infrastructure. Therefore, the scope for broader development benefits outside the most advanced regions of an economy may be constrained. In the case of software development, the potential for linkages between foreign affiliates and local firms has also been found to be limited, particularly when production is solely export-oriented and when services are provided on an intra-firm basis. Moreover, an influx of export-oriented services FDI may attract the best skills to certain types of service activities.

Unless continuously upgraded, such activities may easily move on to another location if the competitive situation changes.

Indeed, most offshored services are to date concentrated in a relatively small number of countries. In 2001, Ireland, India, Canada and Israel, in that order, accounted for over 70% of the total market for offshored services, mostly in software development and other IT-enabled services. However, the share of developing countries and CEE in offshored projects is increasing. For example, between 2002 and 2003, their share in the total number of related FDI projects rose from 39% to 52% and their share in the number of jobs created by such projects reached 57%.

Among developing countries, South and South-East Asia dominate as destinations for FDI projects related to service offshoring in developing countries (table 11), particularly in the area of IT services. India is the preferred destination for offshoring of virtually the whole range of services. Firms are attracted not just by its base of low-cost and skilled labour, it also has first-mover and agglomeration advantages. There is, however, scope for more countries to benefit from the offshoring trend, taking into account specific needs in terms of language skills, time zones and cultural affinity.

### *...but it creates concerns that need to be addressed.*

The growth of services offshoring has given rise to concerns mainly in developed countries. In particular, the growth of white-collar, export-oriented service jobs in some developing countries is seen as leading to employment losses in developed countries. (The benefits arising from this new international division of labour typically receive less attention.) Consequently, proposals have been made – particularly in home countries – to constrain the trend towards offshoring.

What is the likely impact of services offshoring on home countries? Offshoring is essentially a manifestation of a shift in comparative advantage, and offers all the advantages and costs of such a shift. It is not a zero sum game in which one party (the country receiving service work, be it developed or developing) gains at the expense of another party (the country offshoring services). Rather, it offers benefits to home countries as well. First, offshoring allows firms to reduce costs and improve quality and delivery, thereby

**Table 11. Export-oriented FDI projects in call centres, shared service centres, IT services and regional headquarters, by destination, 2002-2003**
(Number and per cent)

| Region/economy | Call centres | | SSCs | | IT services | | Regional HQs | |
|---|---|---|---|---|---|---|---|---|
| | No. of projects | Share of total | No. of projects | Share of total | No. of projects | Share of total | No. of projects | Share of Total |
| **World** | **513** | **100** | **139** | **100** | **632** | **100** | **565** | **100** |
| **Developed countries** | **279** | **54** | **48** | **35** | **293** | **46** | **339** | **60** |
| *of which* | | | | | | | | |
| Canada | 56 | 11 | 3 | 2 | 14 | 2 | 25 | 4 |
| France | 13 | 3 | 2 | 1 | 16 | 3 | 11 | 2 |
| Germany | 20 | 4 | 1 | 1 | 34 | 5 | 22 | 4 |
| Ireland | 29 | 6 | 19 | 14 | 14 | 2 | 15 | 3 |
| United Kingdom | 43 | 8 | 7 | 5 | 73 | 12 | 64 | 11 |
| United States | 15 | 3 | 2 | 1 | 26 | 4 | 80 | 14 |
| **Developing economies** | **203** | **40** | **72** | **52** | **315** | **50** | **209** | **37** |
| **Africa** | **7** | **1** | **1** | **1** | **10** | **2** | **4** | **-** |
| **Latin America & the Caribbean** | **29** | **6** | **5** | **4** | **22** | **3** | **10** | **2** |
| **Asia and the Pacific** | **167** | **33** | **66** | **47** | **283** | **45** | **195** | **35** |
| *of which* | | | | | | | | |
| China | 30 | 6 | 4 | 3 | 60 | 9 | 38 | 7 |
| Hong Kong, China | 2 | - | - | - | 14 | 2 | 37 | 7 |
| India | 60 | 12 | 43 | 31 | 118 | 19 | 7 | 1 |
| Malaysia | 16 | 3 | 6 | 4 | 8 | 1 | 17 | 3 |
| Philippines | 12 | 2 | 1 | 1 | 9 | 1 | 4 | 1 |
| Singapore | 16 | 3 | 8 | 6 | 35 | 6 | 36 | 6 |
| United Arab Emirates | 13 | 3 | - | - | 12 | 2 | 31 | 5 |
| **Central and Eastern Europe** | **31** | **6** | **19** | **14** | **24** | **4** | **17** | **3** |
| of which | | | | | | | | |
| Czech Republic | 9 | 2 | 6 | 4 | 5 | 1 | - | - |
| Hungary | 11 | 2 | 7 | 5 | 4 | 1 | 4 | 1 |

Source: UNCTAD, *World Investment Report 2004: The Shift Towards Services*, table IV.7.

enhancing their competitiveness, with positive effects on the home country economy. Second, it allows home countries to shift to more productive and higher value activities, depending on their ability to adapt to changing comparative advantage. The impact on jobs is likely to be similar to, but smaller than, that of technical change, which makes some jobs redundant and creates others, generally at higher wage levels. Finally, host countries that gain from offshoring and earn more foreign exchange spend more on imports of the advanced products that industrialized countries export.

Indeed, there are no signs that offshoring leads to significant declines in similar service jobs in home countries. Recent estimates undertaken on behalf of the Department of Trade and Industry of the United Kingdom, for example, suggest that the number of call centres in the country is likely to increase from 5,500 to 6,000 over the next three years, and that associated employment will rise from below 500,000 in 2003 to 650,000 by 2007. At the same time, employment in industries that are expected to be the most affected by offshoring is showing rapid growth. In many cases, offshoring of services is a response to excess demand and the shortage of adequately trained people at home. Thus, every job created abroad as a result of offshoring does not necessarily equal a job lost in developed economies.

Nevertheless, there are short-term challenges to consider. All shifts in comparative advantage entail adjustment costs at the micro level. Some people will lose their jobs, and there is likely to be a transition period in which they search for new ones. Many may have to acquire new skills or move to new locations to become employable. The challenge for home countries is to minimize such adjustment costs and make the transition process as smooth and efficient as possible for those directly affected. This does not require measures to force service jobs to stay at home, but rather policies that encourage education, training and R&D.

Thus, instead of implementing protectionist measures, white-collar workers in developed countries threatened with job losses could be given assistance (say, through retraining and with finding new jobs), similar to the trade adjustment assistance provided to vulnerable workers in manufacturing. Workers moving to new careers could perhaps be offered “wage insurance” to cover part of the difference between their former wages and new wages. Public-private partnerships could play a role in skills development, say through

the use of fiscal incentives for employee training. Adjustment to any change in employment patterns needs greater labour mobility and changes in skills profiles. Preventing adjustment because of its costs would be only a short-term palliative, and could well handicap income and employment growth in the longer term. In the final analysis, protectionist measures are likely to destroy rather than save jobs in importing countries.

In principle, the challenge for developed countries is the same as that facing developing countries as far as the cost side of offshoring is concerned. Given the risk of some services moving to new locations, even the countries that attract offshored services risk a relocation of those activities to even more competitive sites.

There is a need for an enabling international framework to allow all countries to benefit from the advantages that the services tradability revolution can bring. Developing countries, in particular, should continue to be able to use their comparative advantage to benefit from the globalization of IT and IT-enabled services. Shifts in comparative advantage rarely offer immediate and visible benefits to all concerned. However, the economies from which services are offshored have to ensure that their workers share in the gains enjoyed by enterprises that become more competitive, and that customers get better and cheaper services. Governments need to introduce adjustment policies and consider the longer term benefits of globalization. Holding back offshoring to avoid adjustment costs would strengthen the critics of globalization, who argue that the rich countries only support globalization when they reap immediate gains. Hence the challenge is to maintain an environment in which the benefits from FDI in services in general, and offshoring in particular, can materialize. The WTO's General Agreement on Trade in Services may be of relevance in this respect.

### *In line with their development objectives, countries are gradually opening up to FDI in services and actively seeking to attract it,....*

Returning to FDI in *all* services, there is a growing recognition by governments that, on balance, they benefit from such investment. The result has been a broad-based opening up to services FDI, although, the degree of openness varies across countries and industries. In general, developed countries are more open than

developing ones. But even countries that have liberalized most of their service industries typically retain entry restrictions in specific services, such as media and air transportation. The nature of restrictions and the purpose for which these are introduced vary by industry. Services FDI can bring economic benefits, but policy-makers need to strike a balance between possible efficiency gains and other broader development objectives.

Beyond that, more and more countries are seeking actively to attract FDI in services through investor targeting. IPAs are particularly interested in attracting foreign-exchange-generating services, such as computer and related services, tourism and hotels and restaurants. They are also targeting service functions of manufacturing firms, especially call centres, shared-service centres and regional headquarters functions. In this context, many export processing zones shape their promotional packages to attract services-related FDI beyond commercial services and simple data entry, to include, for example, medical diagnosis, architectural, business, engineering and financial services as well. Countries are also setting up technology parks specifically geared to FDI in IT services, offering high-quality telecommunications, stable power supply, a highly educated workforce and a technology-supporting infrastructure.

General promotion measures, incentives and export processing zones are the most widely used tools for FDI promotion. Incentives, used in the whole range of service industries, are most common in tourism, transport and financial services. As in manufacturing, there is the risk of a race in the use of incentives, especially to attract export-oriented FDI in services. This risk is accentuated by the footloose nature of many export-oriented service projects.

Investment promotion can be particularly successful if the basic requirements are right. For services, skills are vital, as is a reliable, state-of-the-art international communications infrastructure, especially if offshored services are targeted. Regulatory issues are also receiving increasing attention, particularly in the area of data security, an area that needs to be improved in a number of destination countries.

The promotion of FDI in services should be complemented by policies aimed at addressing possible concerns about such FDI, as well as maximizing the benefits from the presence of foreign companies in this sector. The main rewards of FDI accrue over the

longer term, when TNCs strike local roots, expand operations, improve local skills, link up with local institutions and upgrade technologies. Governments need to induce market-seeking TNCs to deepen and extend their operations, and export-oriented ones to stay and upgrade as wages rise and cheaper competitors appear. Policies in this area should seek to improve local capabilities, skills, institutions and infrastructure in line with the changing technological and market realities.

### *...including through privatization, which requires the implementation of complementary policies.*

The opening up of various infrastructure services to FDI in the framework of privatization programmes has triggered unprecedented increases in such investment. While involving foreign companies in infrastructure services can bring new capital and more and better services, it can also entail costs. FDI in services through privatization raises a special challenge in terms of regulation and governance.

Governments need to establish clear objectives for involving FDI in the privatization of services. For privatization to succeed, it is particularly important for a government to strike a balance between budgetary and other considerations, such as the efficient and competitive provision of services at affordable prices for the poor and/or those living in sparsely populated areas. Large privatizations require an appropriate institutional environment that guarantees policy consistency, coherence and efficiency. TNCs are sophisticated institutions, and transactions and related contracts tend to be technical in nature and involve the monitoring of numerous post-privatization obligations. Specialized privatization agencies can help by undertaking a competitive selection process, providing a one-stop shop for investors, as well as maintaining independence from governments and vested interests in State-owned enterprises.

The regulation of service industries is another challenge. While foreign investors are often attracted to assets that enjoy monopolistic or oligopolistic rents, the interest of host countries is to minimize those rents, including through well designed regulatory regimes. Such regimes should address the ability of investors to collect payment for the services they provide; they should also contain clear principles for tariff-setting and procedures for dispute settlement.

In addition, they need to address issues related to securing universal access to essential services, taking into account the situation of poorer and remote populations. Furthermore, regulatory regimes should be complemented by an appropriate policy to encourage competition. The restructuring of an industry prior to privatization may be helpful; in low-income countries, this process can perhaps be facilitated through related official development assistance.

### *Services IIAs are proliferating, creating a multilayered and multifaceted network of rules that present challenges for development.*

Over the past decade, the number of international investment agreements (IIAs) covering FDI in services has proliferated, resulting in a multilayered and multifaceted network of international rules. In many areas of services FDI, therefore, national policy-making increasingly takes place within the framework of these agreements. Agreements differ in their approach towards services FDI (investment-based, services-based, mixed) and in their substantive provisions (e.g. regulating entry as opposed to protecting investment, adopting a positive- as opposed to a negative-list approach when making commitments). Several services IIAs contain follow-up procedures and separate chapters for specific service industries.

IIAs can provide a stable, predictable and transparent framework for attracting FDI in services and benefiting from it. At the same time, there is a complex process of interaction between international and national policies for services FDI. The nature of this interaction can be either autonomous-liberalization-led or IIA-driven, or anywhere in-between. Ultimately, this interaction is country- and context-specific, thereby creating additional challenges for policy-makers seeking to regulate services.

Moreover, policy-makers need to ensure that international rules are consistent with or complementary to each other in order to avoid conflicts. They also need to address issues arising at the interface of the liberalization and regulation of services. Finally, policy-makers need to strike a balance between using services IIAs for attracting FDI in services and preserving the flexibility necessary for the pursuit of national development objectives related to the services sector. It is important for IIAs to allow such flexibility. This is particularly important for developing countries, as they need to accommodate their development-oriented policy objectives and

to undertake the sort of trial-and-error processes required to identify the policy options best suited to their level of development.

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In conclusion, to benefit from an increasingly globalized and interdependent world economy, countries need to strengthen their capabilities for the supply of competitive services. If conditions are right, FDI can help to achieve this. Its most important contribution is in bringing the capital, skills and technology countries need to set up competitive service industries. This applies not only to the new IT-enabled services, but also to traditional services such as infrastructure and tourism. Moreover, as services become more tradable, FDI can help link developing countries to global value chains in services. Such chains comprise international service production networks that are increasingly important to access international markets. At the same time, caution is necessary when attracting FDI in services. For instance, some services (especially basic utilities and infrastructure) may be natural monopolies and hence susceptible to abuses of market power (whether firms are domestic or foreign). Others are of considerable social and cultural significance; the whole fabric of a society can be affected by FDI in those industries. Hence, countries need to strike a balance between economic efficiency and broader developmental objectives.

This is why it matters to have the right mix of policies. In light of the shift towards FDI in services, developing countries face a double challenge: to create the necessary conditions – domestic and international – to attract services FDI and, at the same time, to minimize its potential negative effects. In each case, the key is to pursue the right policies, within a broader development strategy. Basic to them is the upgrading of the human resources and physical infrastructure (especially in information and communication technology) required by most modern services. An internationally competitive services sector is, in today's world economy, essential for development.

# BOOK REVIEWS

## *Making Globalization Good: The Moral Challenges of Global Capitalism*

John H. Dunning, editor
(Oxford and New York, Oxford University Press, 2003),
400 pages

The simple title, *Making Globalization Good*, belies the complexities within. This volume addresses what John H. Dunning refers to as "responsible global capitalism", the mix that is required of global markets and non-market institutions in order to lead to an enhancement of life world-wide.

In addition to being highly respected and influential in the field of international business, Dunning is a religious man concerned with the beneficial functioning of the international economy. It comes as no surprise, therefore, to find that he has been mulling over foundational issues generally associated with theologians. His approach to the interwoven issues of capitalism, globalization, international trade, foreign direct investment, morality, and religion is compelling. His book examines the issues in detail from many perspectives. His arguments have the sophistication of thoughts that have been examined for a long time with considerable effort, honesty and great thoroughness.

As a result, we are presented with a volume of exceptional merit with contributions from experts worthy of his attention. Authors present their personal, well-researched perspectives, which take us beyond the more traditional objective of international business research.

Inequality is directly associated with globalization. Global markets today are dominated by a relatively few, very large firms, which, because of their size and geographical scope,

can exploit the imperfections of markets. Dunning discusses how capitalism may be a better instrument for the creation of wealth than it is for the equitable distribution of its benefits. He contends that capitalist societies accept that it is the responsibility of voluntarism and governments to put right any perceived injustices of the market place. There is general agreement reached in this volume that globalizing capitalism, in its present state, is flawed, and that evolving capitalism will demand a more holistic and integrated approach to its wealth creation. Upward of four-fifths of the world's population live under some form of capitalism. Contemporary capitalism has evolved over time into an economic system for creating and sustaining wealth, economic freedom and liberty of choice. Even if one accepts that globalizing capitalism is preferable to the known alternatives, its workings are seen as sub-optimal. Global capitalism as a unifying, integrated system of cross-border economic governance does not exist today and may not exist in the foreseeable future.

There has been a series of shocks – corporate governance scandals, excessive greed, perceived failures of business-led globalization – that has seriously eroded the confidence of the public, employees and other stakeholders in the values of business, business leaders, capitalism and globalization. There is an awareness of the growing cynicism and real disenchantment about the motives of Western business. The danger implied throughout the volume is that, if we do not try to improve and upgrade the moral component of globalizing capitalism, its functioning will deteriorate.

In this book, leading thinkers in international business and ethics, with rather different backgrounds and varying perspectives, address the issue of a global economic architecture that is efficient, morally acceptable, geographically inclusive, and sustainable. The strength of this volume lies in the link made between ethics and globalizing capitalism, with discussions on alternative approaches for action to promote a more effective and influential ecumenical dialogue. Each of the arguments presented within the 16 chapters is very well-developed, documented and spot-on target.

Far-reaching technological advances, the liberalization of markets and the emergence of dynamic, new players on the world economic scene have brought about a new era in the capitalist system – which Dunning describes as more complex, more uncertain and more volatile than those iterations that preceded it. The moral conscience of society is very much alive. As such, his investigation of globalizing capitalism is both timely and necessary.

This volume discusses the moral challenges of 21st century global capitalism and promotes responsible business practices and partnerships. Most contributors agree that any substantive upgrading of moral capital would require a change in the mindsets and values of individuals and of the attitudes and actions of the institutions with which they are involved. But the success of this volume is that Dunning brings out how these moral challenges interact with various components of global capitalism: the market; national, sub-national and supranational governments; NGOs; and a civil society made up of diverse cultures, religions and ethnicity.

The structural lay-out of this volume is excellent. Each chapter, although regrettably with some redundancy, discusses advantages and disadvantages of the present situation, points out winners and losers, and groups the issues into categories for ease of study with some suggesting recommendations for improvement.

Dunning's introductory chapter sets the background and works to guide readers along, highlighting the main tenets of the book. Following the introduction is an excellent essay by Deepak Lal, professor of international development studies at UCLA in California. Lal's research concludes that, in order to reap the gains from trade and to reduce the "policy" type of transactions costs, morality is needed to reign in opportunistic behaviour.

The chapter by Hans Küng, emeritus professor of ecumenical theology at the University of Tübingen and president of the Tübingen-based Global Ethics Foundation, presents well-

founded research on an ethical framework for the global market economy. As noted by Dunning, his chapter is especially important for students interested in the study of global business.

As John Elliott, Dean of the Zicklin School of Business at the City University of New York, commented at the book's launching in the United States, "each age of capitalism depends on a moral culture which nurtures the virtues and values on which its existence depends". The thesis here is that neither markets nor the non-market institutions of capitalism are value-free. The ways in which they identify, organize and perform their tasks reflect, for good or bad, their codes of behaviour and belief systems just as much as their technical capabilities. Religion comes into play through the promotion and upgrading of moral behaviour – a morality based on religious *belief* that there is a force beyond ourselves that influences actions.

There is growing support in the international community for the view that a global economy needs a global ethic. After all, if we have super-national entities to help reduce or iron out some of the economic instabilities of cross-border commerce, it is reasonable to ask if we should have super-national entities to embrace a moral global ecology. Dunning introduces the religious perspective to globalizing capitalism, because a great majority of the world's population adheres to some kind of religious belief or at least indicates that they do. This book addresses the role that the major religions of the world may play in terms of what each teaches about appropriate behaviour. In the words of Jonathan Sacks, Chief Rabbi of the United Hebrew Congregations of the Commonwealth, "[t]he world's faiths are global phenomena whose reach is broader and in some respects deeper than that of the nation state" (p. 212).

World religion and morality, for good or bad, are now at the heart of much international public debate. Dunning's volume finds common ground among the major belief systems, not perhaps in theology and dogma, but in the teachings on how men and women might best behave in accordance with their faith. Readers are presented with an understanding that there exists a core set of values with an element of trust that have

global appeal and global acceptability, which may lead to increased stability and reduced risk in international transactions.

There is an inherent moral imperative to all faiths. All religions teach that human beings do not live in a vacuum, and actions have consequences. All religions teach ethical codes and have a consensus of moral codes. These codes are reducible to "do no harm" which is vague, open to interpretation, dependent and culturally determined. Of the four major religions investigated in this monograph (Christian, Jewish, Islamic, the Eastern religions – primarily Buddhism), each has different vices and virtues. None live up to the best that they can claim or could be. Each would benefit from stricter adherence to their doctrines.

Some followers of different faiths are more rigid in their adherence to such codes. These strict followers of faith may be called fundamentalists and they exist in many religions. All the authors of the religious chapters represent what we might call "main stream" religion. Dunning did not invite any fundamentalist contribution. His rational is based on his personal perspective that there is great difficulty in having dialogue with someone who thinks they are right about everything, and everyone else is wrong. There is some truth in Dunning's position in that fundamentalism is more a psychological rather than a religious manifestation. But the impact on our world of unquestioning faith is too significant to discount and brush aside. Fundamentalism may make some uncomfortable, and its inclusion would require extreme care in order not to detract from the overall tone and motivation of this volume. However, fundamentalists do exist in many faiths. This reviewer believes that the volume could have benefited from the inclusion of a chapter dedicated to a fundamentalist perspective of globalizing capitalism. The challenge for future research is, therefore, to fill this gap – recognizing the strengths, weaknesses and protested inequities of the strict adherence to doctrine despite cultural evolution and global change.

Four authors present their specifically religious approach to the subject matter. David Loy, professor of international studies at Bunkyo University in Chigasaki, Japan, acknowledges

that, although the various Asian traditions have not commented on capitalism, their teachings include many statements about poverty, wealth creation and other economic terms. He links Buddhism, which does not separate economic issues from ethical or spiritual ones, and conventional economic theory, which assumes that material resources are limited while human desires are infinite. Loy ties in some of the beliefs of Hinduism to give evidence of an ethical context to globalizing capitalism. However, a single chapter devoted to "Eastern Religions" is just not enough. Loy maintains that Southern, Central and Eastern Asia encompass a variety of different cultural traditions, many of which are as much philosophical as religious. This reviewer looks forward to future research with respect to each.

The essay by Sacks links the perspectives of the other three religions addressed in this volume, with his view that, within Judaism, Christianity and Islam, choice, agency and moral responsibility are at the heart of humanity. As the market depends on virtues not produced by the market, Sacks stresses the Jewish emphasis on education as a key to improved understanding. Brian Griffiths, vice chairperson of Goldman Sachs International and member of the United Kingdom House of Lords, distinguishes between the Christian viewpoint and that of liberal economists, who tend to regard the market as an autonomous entity, independent of any reference to morality. Khurshid Ahmad, professor and chairperson of the Islamic Foundation at Markfield, United Kingdom, discusses acceptance of each other despite differences. He builds upon this cardinal principle of the universal religion of Islam to advocate an open society with a genuine plurality of systems, options and diversity – a world in which all participants have the confidence to live according to their own values and yet be partners in a global enterprise.

One of the purposes of this volume is to seek to identify both the unique and common features of different faith persuasions. This reviewer would, therefore, also have enjoyed a chapter devoted to East/West comparisons – the West with a linear concept of time (tomorrow can be a better day) *vs*. the East based on tradition (a cyclical perspective of time). How the concept of individuality, so central in the West, contrasts

with Eastern religions, in which the concept of the individual is submersed.

Joseph Stiglitz, Nobel Laureate and professor of economics at Columbia University in New York, while walking us through a critical feature of the history of economic theory, addresses the inadequacy of traditional statistical modelling techniques in incorporating the significance of the interface between narrowly defined economic transactions and the broader goals of society. He provides the reader with a framework for thinking about long-term economic and social globalization development strategies. Jack Behrman, emeritus professor of international business and ethics at the University of North Carolina, builds upon Stiglitz's research by addressing quality-of-life issues that challenge modern econometric analysis. Although very lengthy and sometimes a bit off-track, Behrman's chapter properly introduces concepts that flow nicely with the volume overall.

In chapter 11, Novak is critical of business schools that have tended to over-emphasize the scientific and value-neutral aspects of economics. Arguing that the success of global capitalism depends upon a supportive moral ecology, Novak encourages a greater emphasis on the spiritual and moral dimensions of the business vocation. An earlier chapter by Alan Hamlin, professor of economics at the University of Southampton, while differentiating between motivation and behaviour, supports Novak's position, cautioning that just because an agent includes moral arguments in motivational structure, this does not imply that the agent will *act* as morality requires – indeed, actions speak louder than words.

Richard Falk, emeritus professor of international law and practice, and emeritus professor of politics and international affairs at Princeton University, argues for a more transparent and supportive form of global governance achieved with continuous and robust pressure exerted by global civil society. His essay introduces some global civil society initiatives that promote awareness of the cumulative dangers associated with unregulated economic growth. He argues that the various

challenges arising from global capitalism, in its post-industrial phase, have not as yet engendered a sufficient response.

In chapter 14, Gordon Brown, the Chancellor of the Exchequer of the United Kingdom, proposes a new global consensus to reduce this imbalance. The research of Baroness Shirley Williams, member of the House of Lords of the United Kingdom, follows Falk's essay. She discusses how the distorted workings of a global market for the benefit of the "haves" rather than the "have-nots" is not the fault of globalization *per se*, but of the power structures that direct it. It is these asymmetricies of power among participants that distort competition.

More work clearly needs to be done to explain further how the ideas brought out in this volume can be put into practice. This reviewer looks forward to research into how politics effects responsible global capitalism. While there are frequent references to government by many contributors, the role of government could be investigated further. Government can function effectively (i.e. discouraging us from being "bad"). Indeed, they are often responsible for reducing crime. Dunning points out that governments are not, however, very effective at making people good – moving from amoral to moral behaviour. Large parts of the world remain largely untouched by globalizing capitalism and the entrepreneurial capacity to create wealth. Government and regulation will continue to have a major role in the functioning of markets, in how societies relate to each other and in our tolerance of globalizing capitalism.

Capitalism, in its process of globalization, may have lost its moral compass. But, through the research presented in this volume, Dunning finds a great deal of common ground about the appropriate behaviour of all the institutions of globalizing capitalism. We are enormously indebted to Dunning, not only for his contributions to the study of international business, but also for pulling together this timely series of essays by experts. The results of the investigations suggest the difficulty in a single "one-size-fits-all" solution. Dunning recognizes, respects and addresses the distinct differences (as well as their sometimes hybrid nature) inherent in individual religions, cultures, attitudes

and governments. He also understands the power of many of the stakeholders. Hamlin states that the world is still a remarkably heterogeneous place. Novak says it well; "[t]he rule of law means a law that looks upon all as equals and on none with special favour" (p. 254).

This volume is successful, in part, because of its applied research approach. It clearly shows a difficult process of the enormous challenge of responsible globalizing capitalism. But, rather than being left feeling discouraged, readers are presented with optimistic approaches for consideration. As the chapter by Robert Davies, chief executive of Prince of Wales International Business Leaders' Forum, shows, the leadership of a few progressive companies, the rise in consciousness of corporate responsibility as an essential feature to sustain global capitalism, and emerging evidence of partnership initiatives, which hold the key to equitable development, are all encouraging pointers towards progress. It is through research, learning, dialogue and project experiences that we create the ability to improve the workings of globalizing capitalism. The significance of Dunning's volume lies in the future.

So, how does one "make globalization good"? How can ideas presented in this volume be put into practice, and the contribution of Dunning's original insights be enhanced further for the benefit of future generations? The strength in this book lies in the research findings that there is greater similarity than differences in the fundamental tenets of the four major religions investigated. Their message is for all nations. Brown states "whatever our concerns about the sheer scale of the challenge of globalization, we must not retreat into the outdated protectionism and isolationism, just as we must not recycle the old laissez-faire doctrine that says there is nothing that can be done" (p. 323). The chapters present frameworks, blueprints and embraceable building blocks for improving globalizing capitalism. Through this volume, Dunning reveals that there is a global moral architecture in place – a basis from which to build, improve and indeed work towards making globalization good.

This volume helps to advance our understanding of the ways in which the structure of globalizing capitalism, its content and effects may be strategically shaped to be, through consensus, better. This is an important, interesting and compelling book by a brilliant individual who has achieved much throughout his career.

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## *Foreign Direct Investment: Research Issues*

Bijit Bora, editor
(London and New York, Routledge, 2002), 368 pages

This is a wide-ranging book of 19 chapters by 23 authors and co-authors. It is essential reading for anyone with a serious interest in theoretical, methodological or government policy issues associated with foreign direct investment (FDI).

The editor states in the introductory chapter that the purpose of the "book is to bring together representatives from [management, trade theory and international macroeconomics] to take stock of the literature in their particular area and identify future research areas and impediments to fulfilling this research agenda" (p. 2). It generally succeeds in these endeavours, except that the research from the "management field" is much less evident, compared with the literature on trade theory and other aspects of macroeconomics.

In order to review the contributions in more detail, it is useful to arrange them into four groups according to the issues of their principal concern: theory, impact, policy, data. (Some chapters are inevitably concerned with two or more of these categories.)

### Theory on the determinants of FDI

Seven of the chapters are principally concerned with theoretical explanations for the occurrence of FDI. Chapter two by Stephen Nicholas and Elizabeth Maitland and chapter three by Ron Edwards offer wide-ranging and competent reviews of the theoretical literature, including transaction costs in the former and the internationalization process in the latter. In chapter four, the editor provides an integrative review that focuses on empirical studies, and concludes with a regret about "the dominance of the United States and industrialized countries as the unit of analysis" (p. 59) in the empirical literature.

Several other chapters also focus on theoretical issues, but from differing perspectives. Roger Farrel addresses theoretical and other issues about Japanese FDI in chapter six and concludes that deficiencies with the data have constrained theoretical progress. James Markusen observes in chapter seven that the "integration of the theory of the multinational corporation … into the theory of international trade" has been "an exciting and important development" (p. 94). Edward M. Graham focuses on the telecom industry in chapter eight, where he analyses the behaviour of rivals in an oligopolistic industry and extrapolates his findings more generally to other industries. In chapter twelve, Keith Maskus considers theory and evidence of how intellectual property rights (IPRs) affect FDI and concludes that "while there are indications that strengthening IPRs can be an effective incentive for inward FDI, it is only a component of a broader set of factors" (p. 208). In chapter fourteen, Susan Stone and Patrick Jomini consider FDI in the context of a computable general equilibrium framework and find that modelling along those lines offers many insights but that it too is constrained by data problems.

## Impact of FDI on development and other aspects

Gaston notes, in chapter nine, that, in Australia, one of the consequences of the "increased importance of multinational firms and the greater exposure to international competition" has been "the demise of centralised wage bargaining" (p. 144). In chapter ten, on the effects of FDI in home countries, especially Sweden, Ari Kokko observes that "the quantitative effects [of FDI on home country exports and employment] are not dramatic" (p. 164). In chapter eleven, on the effects in host countries, particularly in East Asia, Prema-chandra Athukorala and Hal Hill suggest that the increasing knowledge of global markets that TNCs possess will "further strengthen [their] bargaining power and competitive advantages" and thus make it "increasingly difficult for countries to achieve rapid, outward-looking economic development via a policy regime which actively discourages foreign ownership in many sectors" (p. 190). Bijit Bora addresses a series of questions about the

environmental practices of transnational corporations in chapter thirteen, where he concludes "the evidence on the impact of FDI on the ability of host countries to protect their environment is mixed" and some TNCs are "clearly international leaders in mitigating the environmental impact of their entire range of activities. Others fail to utilise their full potential for environmental protection by using a decentralised strategy" (p. 224). In chapter nineteen, Sanjaya Lall emphasizes the change in attitudes towards the role of FDI in development over the past several decades, and the role of technology in that change. "However, the spread of technological benefits is highly uneven [across countries], and the activities of TNCs do not reduce this unevenness – they may exacerbate it" (p. 341).

## Government policy issues

Although most of the chapters contain some explicit discussions of government policy issues, two are principally concerned with such issues. In particular, tax policies and investment incentives are the focus of chapter sixteen by Jacques Morisset and Nedia Pirnia, and multilateral investment rules are the concern in chapter eighteen by David Robertson. The former summarize the evidence as follows: "incentives will generally neither make up for serious deficiencies in the investment environment, nor generate the desired externalities" (p. 286). The latter indicates that "the rising opposition to globalisation" is a "major barrier to opening new negotiations on multilateral investment rules", but that "there remain effective avenues within the Uruguay Round [WTO] agreements to pursue liberalization using the mandated reviews of agreements [from that] Round's built-in agenda" (p. 322).

## Data problems

Theoretical and policy research on FDI has often been hampered by deficiencies in the data, and such deficiencies and ways to overcome some of them are addressed in many of the chapters. In chapter five, Raymond Mataloni assesses the potential for improving the data on the United States TNCs'

overseas activities by focusing on real rather than current dollar indicators using purchasing power parity adjustments. In chapter fifteen, Alexis Hardin and Leanne Holmes consider the formidable difficulties in measuring the extent of barriers to FDI in services as well as manufacturing, and model the effects of reducing such barriers in Australia. In chapter seventeen, Mark Lound and Geoff Robertson consider FDI data problems in the larger context of generating measurements of globalization from diverse sources.

## Business strategy

Although this is not primarily a book about FDI as a strategic alternative for firms, it would be difficult and inappropriate to ignore this dimension of the topic since it is closely related to issues about government policy and the determinants and effects of FDI. In this regard, however, the book is not entirely successful, and readers looking for more explicit and extensive micro-level treatment of issues on business strategy may want to consider other volumes.

## Conclusion

In sum, this volume covers many of the standard concerns of specialists on FDI. In addition, it breaks new ground in a few areas. As is fitting for a book with the subtitle "Research Issues", it provides some new answers to old questions and poses some new questions as well. One might wish that there were more country studies and more industry studies, but it would have been difficult to expand an already extensive collection.

Finally, to their and the editor's credit, the authors avoid two common and unfortunate tendencies in the treatment of FDI that are still evident in some of the literature on FDI – namely, to treat it as if it were either a special kind of trade or a special kind of financial capital flow. Though FDI involves both trade and financial capital flows, it is a fundamentally different phenomenon from both. The theoretical, methodological and

government policy implications of the differences are illustrated throughout this collection of studies. This volume ought at least to help disabuse some scholars and other observers who sometimes still lapse into either of these two unfortunate misconceptions of the nature of FDI.

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## *China: Competing in the Global Economy*

Edited by Wanda Tseng and Markus Rodlauer
(Washington, D.C., International Monetary Fund, 2003),
222 pages

China's economic growth and development has been an issue of much debate recently. There is a large body of research acclaiming its great potential and bright prospect, while others cast a serious doubt on its future (e.g. Chang, 2003; Studwell, 2003). This book is a collection of recent papers by the staff at the International Monetary Fund working on China. It looks at how China has met the challenges arising from its structural weaknesses as well as governmental and environmental problems. It focuses on four topics of interest with respect to the reform and development in China: growth dynamics; macroeconomic stability; State-owned enterprises (SOEs) and banking sector reform; and global integration.

In the part of growth dynamics, chapter 1 provides an overview of the whole book and an introduction of the key issues involved in sustaining China's economic growth. Chapter 2 explores the factors that have been enhancing and sustaining the economic performance of China since the end of the 1970s. It concludes that China's rapid growth in the past two decades is a result of the large scale movement of agricultural labour to the manufacturing sector in the coastal areas. The decreasing control of the Government in the daily operations of SOEs and the slimming down of the government bureaucracy also contributed to the current success of China's continuous growth. In future, whether China succeeds or not in sustaining its current rate of growth will depend on further economic reform in government as well SOEs.

Foreign direct investment (FDI) has been another source of China's economic growth. Since the end of the 1970s, FDI has been strategically utilized by the Government of China as a tool for spurring economic development. Second only to the

United States in terms of FDI inflow since 1993, China has emerged as one of the most important investment destinations around the world. Along with the huge amount of capital inflow, transnational corporations have transferred advanced technologies and patents, offered managerial expertise and introduced international practices to China through FDI. Thus, FDI has played an essential role in continuously supporting China's economic development and strengthening its competitiveness. Chapter 5 looks into the reasons for China's success in attracting FDI and chapter 6 examines the contributions made by FDI on the Chinese economy. It is evident that FDI has contributed to China's growth by way of increased capital formation and higher total factor productivity (chapter 6). The establishment of foreign affiliates and the positive spillover effects arising from the interactions between foreign affiliates and local industries worked hand in hand with China's deregulation of industries in its transition from a centrally planned economy to a socialist market economy. Chapter 5 is right in alerting its readers that China's success in attracting FDI may have been overstated due to misreporting and round-tripping. In both cases, the ill-thought incentive system may be to blame. The extent of the overstatement can be as high as 25% in some years. On the other hand, China could attract even more FDI if "China's legal system became more effective in enforcing contracts" (p. 85). These evidences suggest that the Government of China has not been as productive as it could have been in bringing FDI to the benefits of its economy. More reform is needed to transform the Government of China into a well-qualified "visible hand" in China's economic growth.

Central to the argument of China's economic growth is whether China will continue its growth in the face of its serious problems in the banking industry and SOEs. This book has addressed this issue head-on by looking at the core issues of financial stability and enterprise reform. Chapter 9 shows that the Government of China has made significant progress in reforming SOEs in a wide range of areas, such as improving enterprise autonomy and strengthening enterprise management, reducing the social welfare burden, and enhancing financial

transparency, all of which are essential to the success of the SOE reform. However, there is still a long way to go before the SOE reform can overall be termed a success. As evidenced in chapter 11, "SOEs are less efficient and display poor financial profiles than do enterprises under other forms of ownership" (p. 188). There are a number of key issues to be dealt with, e.g. the establishment of a modern enterprise system, the creation of internationally competitive large enterprises and groups, the technological upgrading of the State-owned industries, the closure of poorly performing enterprises, and the revitalization of small SOEs. Chapter 9 is informative and comprehensive, giving a detailed account of the historical development of China's SOE reform. Perhaps, it should go further to say that the current problems associated with the SOE reform are a reflection of the murky central government policy regarding the ultimate goal of such a reform process. While pushing SOEs to revitalize and transform themselves into modern enterprises, the Chinese Communist Party does not appear to want to give up the control of key SOEs. On the contrary, maintaining a high degree of control of selected SOEs has been the key characteristics of the so-called "socialist market economy" designed by the Government of China. Being both the owner of SOEs and the industry regulator can only complicate the relationship between government and enterprises. Without a rethink on the doctrine of "socialist market economy", it seems difficult to achieve the goal of the SOE reform set by the Government.

The same can be said about the banking industry. Chapter 10 lists the crucial weaknesses of the Chinese financial system, such as non-performing loans, State ownership and control, lending restrictions to the private sector, and inadequate competition in the banking industry. The interesting point is that the Government intends to list the key State-owned banks on stock exchanges in order to diversify their ownership. This is an effective way of improving governance and operating efficiency in these banks. The extent to which the Government relinquishes its ownership is worth monitoring. Will its strategy be to maintain its dominant position so that the listing becomes

an opportunity of transferring current debt and potential risk to investors? Or will Chinese banks transform into real commercial operators free from direct government interference in business decision making? There is no clear answer in the chapter. I guess there is no clear view in the Government either. However, this is the defining indicator regarding China's financial reform. As discussed with respect to the issue of further reform of SOEs, the full withdrawal of the State from the ownership of financial institutions in China is the best option for improving the performance of this industry.

China's comprehensive integration into the global economy is consolidated by its accession into the World Trade Organization (WTO). This has presented both opportunities and challenges to China as well as to the rest of the world. Chapter 12 discusses the potential impact of the WTO accession on China, both sectoral and macroeconomic. China's adjustment to the changes brought about by its WTO accession has long been discussed. How its accession impacts on other countries, however, is less researched. This chapter provides an interesting estimate based on a simulation of a global general equilibrium model developed by the Global Trade Analysis Project (Hertel, 1997; Dimaranan and McDougall, 2001). The results indicate "an overall gain in welfare for the rest of the world from China's WTO accession" (p. 208), but it varies across regions. The industrial countries will benefit most (with the gain of $10.4 billion in1998 dollars projected for 2006) and the Asian newly industrializing economies second (with $1.4 billion as above), while countries in other parts of the world will lose out (with a loss of $5.5 billion as above). When measured as a percentage of GDP, both positive and negative impacts are negligible to these countries. This indicates that the impact of China's WTO accession is not going to be felt globally in the short term except in regard to textile and clothing exports. In the longer term, it depends on the relative change of industrial competitiveness of trading partners.

Of the factors used in assessing the impact of China's WTO accession, the foreign exchange rate is the one that could trigger changes in the whole picture. Chapter 13 looks at the

foreign exchange regime in China and calls for more flexibility to help China respond to structural changes and potential shocks. Should this happen in the next few years, one can expect that the impact of China's WTO accession will be different from the current projections.

While presenting many new insights in the main aspects of China's economic development, this book is limited by its use of secondary data and being slightly outdated for a country such as China, which is changing rapidly. Despite these minor shortcomings, this book paints a positive picture of China, though it is conditional on further effective reform in the SOEs and the financial industry. The editors have produced a collection that can rightly claim to be the most informative volume to date on China's economic growth and development. It will be of considerable benefit to business researchers, students and to businesses interested in engaging the Chinese market.

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## References

Chang, Gordon (2003). *The Coming Collapse of China* (London: Arrow).

Dimaranan, B. V. and Robert A. McDougall (2001). *Global Trade, Assistance and Production: The GTAP 5 Data Base* (Lafayette, Indiana: Centre for Global Trade Analysis, Purdue University).

Hartel, T. W. (ed.) (1997). *Global Trade Analysis: Modelling and Applications* (New York: Cambridge University Press).

Studwell, Joe (2003). *The China Dream: The Elusive Quest for the Greatest Untapped Market on Earth* (London: Profile Business).

## *Japanese Direct Investment in China: Locational Determinants and Characteristics*

John F. Cassidy
(London and New York, Routledge, 2002), 253 pages

The large volume of foreign direct investment (FDI) inflows into China has been the subject of a substantial amount of research that investigates its determinants and impact. The book under review analyzes the spatial characteristics and determinants of Japanese FDI in China – the country's second largest source of inward FDI. Japanese FDI is predominantly located in the coastal regions of China. The author argues that, through FDI in China, Japanese transnational corporations (TNCs) have exploited the location specific advantage that China possesses, such as an abundant supply of low cost labour, future market potential, locational incentives, infrastructure, and coastal location. Japanese FDI in China is characterized by the relative importance of the affiliates' exports back to Japan. Local sourcing is found to exist among the affiliates of Japanese TNCs, but the problem of quality is a major constraint on sourcing materials and components from local suppliers.

The book comprises nine chapters. In chapter two, the author reviews the literature on FDI in general, considering Japanese outward FDI and the regional distribution of inward FDI in China in particular. Chapter three supplies background on the spatial patterns and the characteristics of FDI in China (from all countries), while chapter four examines Japanese FDI in China. It demonstrates that the Japanese FDI stock is even more spatially concentrated in the Chinese coastal areas than FDI from other countries. Shanghai has been particularly successful in attracting Japanese FDI, whereas Guangdong has been the main destination for FDI from other countries.

After setting out his research methodology and hypotheses in chapter five, the author then proceeds, in three chapters, to investigate questions regarding the choice of

location, the destination of resulting exports and the local sourcing of Japanese FDI in China. Chapter six tests a hypothesis about the locational determinants of Japanese FDI in China. The author uses regression analysis based on the cross-section of 23 provinces for the year 1996. His analysis confirms the importance of market size, the cost and quality of labour, the transportation network, exports and coastal location in the location decision of Japanese FDI in China.

Chapter seven examines the characteristics of Japanese FDI in Liaoning Province, with a particular emphasis on the hypotheses regarding export destinations and local sourcing of Japanese FDI. The investigation in this chapter is carried out through a questionnaire-based analysis of the affiliates of Japanese TNCs based in the city of Dalian. "Processing" is reported to be the main type of industrial activity, and Japan to be the dominant export market. Although local sourcing does take place in Dalian, a considerable proportion of the affiliates of Japanese TNCs source from Japan itself and other Japanese affiliates based in China. The author notes that the problem of quality is the major constraint that deters local sourcing.

Chapter eight is a case study of a Japanese healthcare electronics manufacturing company, Omron Corporation, and its wholly-owned affiliate, Omron Dalian. Here, in addition to low factor costs, personal relationships emerged as an important determinant in the firm's choice of location. Given the importance of "guanxi" (network) in the Chinese business culture, this is a finding that econometric analysis would not have revealed. Findings here reinforce those from chapter seven regarding local sourcing. "Omron Dalian sources most of its product from Japan…They have increased their sourcing locally but there remain problems vis-à-vis quality" (p. 213). Most of its products are exported to third country markets rather than to Japan. Omron Dalian is a typical example of a firm that locates and operates in export processing zones (EPZs) in China. Valuable policy implications regarding the impact of EPZs on domestic economy could have been drawn from this study.

This book is the first analysis of the geographic characteristics and determinants of Japanese FDI in China. A special dataset, the Toyo Keizai dataset, has been created for this research. Given that most prior studies focus on the determinants and impact of aggregate FDI in China, this book provides a pioneering analysis of Japanese FDI in China. It also provides a base for future comparative studies in this field.

Another feature of the book is its utilization of various research methods, including econometric analysis, survey-based analysis and a case study, in an effort to provide a systematic and in-depth study of locational determinants of Japanese FDI. The survey and the fieldwork provide useful insights and evidence regarding the location decision of Japanese FDI in China and its characteristics.

This book also touches on the linkage effect of foreign affiliates, which is an important issue in the research of the impact of FDI. The survey and the case study provided valuable evidence in this respect, suggesting that the affiliates of Japanese TNCs in China are primarily engaged in export-processing activities while sourcing most of their materials and components from Japan and exporting their final products to either Japan or third-country markets. There is some local sourcing, but its extent is very limited. This evidence suggests that the backward linkages generated from Japanese FDI to the local economy are limited. Further investigation concerning the technology-intensity of the linkages and the degree of technology transfer that takes place in the local sourcing is needed for an in-depth understanding of the linkage effects of FDI on the local economy.

The book is, on the whole, relatively light on economic analysis and discussion of policy implications regarding regional development, which the author might have addressed more fully. The econometric analysis in chapter six leaves room for future refinement; statistical analysis could be employed for a more comprehensive analysis of the survey data in later chapters.

Nevertheless, this book provides a multi-dimensional description of Japanese FDI in China, with valuable information concerning its spatial determinants and characteristics. Its findings might, in future, provide an empirical basis for a more analytical study of the determinants and impact of FDI in China.

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# *Explaining Offshoring*

Satwinder Singh*

**Outsourcing in India**

Mark Kobayashi-Hillary
(Berlin and Heidelberg, Springer-Verlag, 2004),
xviii+275 pages

***What's this India Business: Offshore Outsourcing and the Global Services Revolution***

Paul Davies
(London, Nicholas Brealey, 2004), 256 pages

A remarkable phenomenon in the field of international business in recent times has been the growth of what has now come to be known as "offshoring", under which back-office work, such as ticketing, accounting, human resource payments, and customer interaction services, has been moved overseas, including developing countries such as India, the Philippines, and Central and Eastern Europe, by North American and European companies. Literature on this aspect of servicing, which is akin to certain vertical chain operations by manufacturing companies, is mounting with rising estimates of job losses in home countries and "undue" employment gains in host countries (see for instance *WIR04*; *Business Week*, 3 February 2003; and the Capco Institute issue of *Journal of Financial Transformation*). One estimate by Forrester Research predicts that, by the year 2015, the service jobs that would have moved abroad from the United States alone will total 3.4 million. Such estimates have generated

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xenophobic feelings, leading certain States in the United States to either cancel contracts or start proceedings to pass bills to stop jobs moving abroad. Similar reactions have been noted by trade unions also in Europe and Australia (*WIR04*). Part of the concern is that the "offshoring" process is not only affecting the job situations of transnational corporations (TNCs), it is also eating equally into the state and federal jobs.

The most obvious reason put forward to explain the phenomenon of offshoring is that companies are taking advantage of lower wages in overseas locations to cut costs and become competitive vis-à-vis rivals, and that modern telecommunication facilities are a vehicle through which this aim is being achieved. This is the underlying current in the largely descriptive literature on "offshoring" and the two books under review are no exception.

The underlying theme in the two books under review is that large-scale savings on labour costs are causing a global revolution in services and that centres, such as India, are proving pivotal, and around which the service operations are beginning to revolve. Kobayashi-Hillary's book is divided into three parts: Part One provides a socio-political introduction and background of India; Part Two is a profile of the existing outsourcing industry; and Part Three advises on how to conduct an outsourcing business successfully. There are a total of 23 chapters in the book. Some of the chapters are quite short – the shortest being 2 pages. Part One is written for an audience completely new to the Indian business environment. The chapter emphasizes the vastness of the country in terms of its population, low literacy rates and the rapidly emerging middle class, which is expected to reach 50% of the population between 2020 and 2040 (p. 5). The socio-political complexities of India arise from its caste system and religious spread (although only 12% of population, Muslims, in absolute terms, account for around 100 million among a population of one billion or so), and its chequered history of being ruled by the Muslim and the British; the latter were largely responsible for introducing the existing bureaucratic and the educational system in the country. The

reader is then given a tour of contemporary Indian politics and its leaders who are beginning to realize the need for reforms. There are also briefs on culture, food, travel, and security concerns arising out of the country's relationship with neighbouring Pakistan. These largely comprise Part One of the book.

Part Two opens with a description of drivers of offshoring. Government policy is cited first, but it is not clear how a largely lukewarm (understandably, owing to political reasons) host Government's approach to offshoring overseas is a driver to it. Globalization and the emergence of a knowledge economy, technology and individual corporate strategies to expand overseas are more plausible reasons. A profile of major industrial players, largely in the information technology (IT) sector, modes of entry (e.g. via direct investment or outsourcing), a description of major locations (Bangalore, Chennai, Delhi, Hyderabad, Kolkata, Mumbai, Pune), and a list of major industry associations follow. Chapters 12 to 15 are "how-to-do" offshoring chapters that exhort clear corporate objectives, an understanding of the country's culture, its strengths and weaknesses as an outsourcing centre and a description of various types of outsourcing, such as tactical, strategic, transformational, business process outsourcing (BPO), or managed outsourcing. The remaining chapters advise the reader on success criteria and pitfalls to avoid that include careful vendor selection, essentials of good contracts, effective cross-cultural communications, and adapting to new organization and change.

Paul Davies' book, which is largely an autobiographical account of the author's experience of doing business in India, is also in three parts: Part One explains what the offshoring business is all about; Part Two, titled "Welcome to India", essentially tells the readers how to survive in India and the right etiquette and attitudes to adopt, largely in business dealings; and Part Three contains advice on how to select the right partner to do offshoring business in India. This is an interesting book, not only for firms planning to offshore their services in India, but also (perhaps more importantly) for Indian companies who

would benefit from having an insight as to how they are perceived by their prospective partners. The book contains a large number of anecdotal instances, which, though often amusing (particularly for Indians for whom such occurrences would be second nature), also have an educational value for the overseas visitor.

The book opens with a brief introductory chapter on the Indian economy and highlights that, at any time, there are eight million undergraduates studying for various degrees in India, which is some indication as to why it is not difficult to pick up some of the best to work in the ever-growing IT-related services, which, according to one estimate, are expected to generate revenues of $142 billion by 2008 (p. 16). Chapters two to four explain the reasons behind and the factors to take into account while undertaking to outsource any part of a business. Cost factors and the strategy to stay focused on core business stand out in this.

The IT industry has been the flag bearer of services offshoring and has reached phenomenal heights in a short space of time. It is not difficult to see why. With 2 million graduates coming out of higher education each year, with a quarter of a million of these in IT, it only needed a spark to light the fire of imagination and entrepreneurship to start the industry rolling and reaching its present heights. Some useful tips on how to start offshoring business are laid out in chapter four. Although some of the suggested criteria, e.g. management capability, size, and alignment of strategic objectives are meaningful, the actual selection criterion is very much company specific or even job-on-hand specific. A caveat against asking too structured a set of questions to one's prospective partner is added. Part Two of the book provides orientation tips to visitors and has an account of some first-hand personal experiences of encounters with Indians and their business practices. Here is a sampler (from chapters seven and eight):

On time: "…time is not absolute in India: it's a moving target and once it's gone, it's always there. India *s t r e t c h a b*

*a l e* Time, the usual version of what IST stands for, is a brilliant encapsulation of so many attitudes and perspectives"; on the use of air-conditioning to ward off heat: "it seems to be a mark of respect of sophistication to run all air conditioning at the level where cryogenic experiments can take place….I have been colder in India than anywhere else in the world". On food and drinks—the further south of the country you go the hotter the food becomes; "… the vast majority of Indians do drink, and with the same range of excuses as we use in the West"; and tea has to have sugar in India; the most basic taxis are three-wheeler cockroaches; on crossing roads, "for a Mumbaiite: crossing road is a supreme declaration of the value of human life. The logic goes something like this: "I am a human being; all life is sacred; no one will kill me, much less the driver of a car; I can therefore walk without any form of care across any road, no matter how busy it is. Look at the cows wandering the streets: no one hits them, and I am a higher form of life than a cow".

The light-hearted tips apart, the book contains some sound advice on how to go about doing offshoring business: e.g. there are tips on negotiations and on a feasible time span for a project, i.e. 24 months for it to be working as effectively as envisaged at the start of the process. The difficulty of enforceability of a contract is another one – the implication of it is to understand your business partner as well as possible, and build the business strongly on personal bonds keeping the contract in the background as an absolute last resort. This, in turn, means that the exit strategy should be given some serious thought. Perhaps the most important tip of all is to listen to your Indian counterparts well, for, being on the front line and directly in touch with the customer, they would come up with suggestions and tips to improve the service, or even suggest the derivates of the existing business line. The final chapter comments on the corporate social responsibility of doing business in a host country.

The books under review should appeal to readers and investors who have no previous knowledge of India and its economy. They may also find handy advice on how to undertake

and succeed in the offshoring business in India. The authors, particularly, the first one in Part One, has also put together enough material to give the reader a flavour of what India is all about. Clearly, the books are directed at the practioners in the industry. Kobayashi-Hillary's book also has a helpful checklist at the end of each chapter. Although the books are on India, it would have been useful to include a chapter on the global offshoring industry to put India into perspective. It would also have helped if there was summary data on key economic variables broken down by States. As the books are aimed at a different audience, an academic reader looking for theoretical rigour on the subject of offshoring, or a framework within which to put the material, or a critical review of existing literature on the subject would not find them here. To give credit to the authors, Kobayashi-Hillary admits that "…. I am not an economist, I am a management consultant" (p. 251).

The single most important tip that companies engaged in the offshoring business in India can pick up from this book is that: "quality matters" – compromise on quality and you will fast lose business. To this reviewer, Indian companies' sustainability of their (almost) first-mover advantage depends on staying alert and moving along the higher value chain, while, at the same time, maintaining a Japanese type obsession for quality control at every step of the chain. It might not be long before labour costs in India rise, and when they do, the decision to still stay in India or to go elsewhere could largely depend on how good Indians are in providing service with *sustained* quality.

## References

United Nations Conference on Trade and Development (2004 - *WIR04*). *World Investment Report 2004: The Shift Towards Services* (New York and Geneva: United Nations). See www.unctad.org/wir

# JUST PUBLISHED

***World Investment Report 2004: The Shift Towards Services***

(Sales No. E.04.II.D.36 [including CD-ROM])
($75 ($30 in developing countries))
http://www.unctad.org/wir

The *World Investment Report 2004* (*WIR04*) presents the latest trends in FDI and explores the shift towards services, with a special analysis of offshoring service activities. Part One discusses recent global and regional trends in FDI and international production by TNCs. Global FDI flows bottomed out in 2003, but there were some regional differences. The sectoral pattern of FDI is shifting towards services. Outward FDI from developing countries is becoming significant. There is also optimism that inflows to these countries will increase in 2004 and beyond. Part Two deals with FDI in services - an important but often neglected area of FDI in the context of development. It examines the shift of FDI towards services with a focus on the entry of TNCs into new service areas. Services FDI, especially in intermediate and infrastructure services, affects the economic performance of a host-country in all sectors. The offshoring of corporate services is taking off rapidly, thanks to advances in information and communications technologies. However, the potential of such offshoring can only be harnessed if countries adopt appropriate policies. Part Three analyses key issues relating to national and international policies on FDI in services. As many services are deeply embedded in the social, cultural and political fabric of host societies, the impact of FDI on those services could be far-reaching. Therefore, national policies matter - not only to attract FDI in services, but also to maximize its benefits and minimize its potential negative impacts. The proliferation of international investment agreements covering FDI in services has resulted in a multifaceted and multilayered network of international rules that

affect national policy-making. The *WIR04* includes a substantial statistical annex, which is also available on CD-ROM.

### *World Investment Report 2004: The Shift Towards Services. Overview*

(UNCTAD/WIR/2004/Overview)
http://www.unctad.org/wir

Available free of charge in Arabic, Chinese, English, French, Russian and Spanish.

### *World Investment Directory 2004: Latin America and The Caribbean (Volume IX)*

(E.04.II.D.32) ($80)
http://www.unctad.org/Templates/
webflyer.asp?docid=4818&intItemID=2095&lang=1

FDI continues to gain in importance as a form of international economic transactions and as an instrument of international economic integration. However, despite its increasing importance, published sources or readily accessible databases that provide comparable and accurate data on this investment and other activities of TNCs are scarce. The *World Investment Directory* series of UNCTAD is an attempt to centralize in the United Nations data-gathering efforts to measure systematically FDI, the activities of TNCs and related variables. Accordingly, the purpose of the *World Investment Directory* and its database is to assemble comprehensive data and information on FDI, operations of TNCs, basic financial data on the largest TNCs, the legal framework in which such investment takes place and selected bibliographic information about FDI and TNCs in individual countries. This publication covers 36 economies of Latin America and the Caribbean. Profiles on all these countries

are contained in this volume, based on data available to the Secretariat. All of these profiles were sent to respective governments for further comments and verification. Data are presented on both inward and outward flows and stocks of FDI, operations of TNCs, and basic information on the largest TNCs in and from these countries and information on the regulatory framework affecting FDI, organized by country. The data on inward and outward FDI flows and stocks are based on information as of March 2004. It is UNCTAD's intention to update the World Investment Directory series regularly, and it is hoped that as work progresses in this area increasing feedback from Governments and researchers will make it possible to enhance the data and information provided.

### *An Investment Guide to Uganda: Opportunities and Conditions Co-published with the International Chamber of Commerce*

(UNCTAD/ITE/IIA/2004/3)
http://www.unctad.org/Templates/
webflyer.asp?docid=5208&intItemID=2095&lang=1

*An Investment Guide to Uganda* offers an objective overview of investment opportunities and conditions in Uganda for potential foreign investors. After an executive summary and a brief introductory chapter, it has a chapter on the operating environment (which deals with such matters as infrastructure, labour and taxation), one on opportunities (which highlights those related to agriculture and tourism) and one on the regulatory framework for foreign direct investment. It also includes a brief chapter summarizing the perceptions of investors, both foreign and domestic, already in the country. The appendices provide pointers to sources of further information, including a list of 51 foreign investors in the country. Wherever possible, the guide provides comparative indicators for Uganda's neighbours: income, education, telecommunications, etc. No familiarity with Uganda is assumed.

***Guide de l'investissement en Mauritanie***
***Co-published with the International Chamber of Commerce***

(UNCTAD/ITE/IIA/2004/4)
http://www.unctad.org/fr/docs//iteiia20044_fr.pdf

The investment guide to Mauritania provides potential foreign investors with an objective overview of investment opportunities and conditions in Mauritania. The democratization process in Mauritania, including the adoption of a new constitution in 1991, has been accompanied by economic reforms. In 2002, all legislation governing economic activity was rationalized to make it more straightforward. This is reflected in a sustained economic growth of around 5%. Mauritania also enjoys privileged access to the international market. Its exports to the United States tripled over 2001-2002. Mauritania's geographic location between the Maghreb and Sub-Saharan Africa, with a long coastline, makes it a strategic place to invest. Investors are welcome in all sectors of the economy. Opportunities are especially to be found in fisheries and mining, which are the two leading sectors. Mauritania's exclusive economic zone is reputed to contain the world's richest fishery resources. In the mining sector, a plan was implemented in 1999 to enhance the country's competitiveness. Opportunities are also to be found in tourism and in agriculture, Mauritania having the advantage of being the tropical country closest to Europe. In tourism, it is worth noting that the number of tourists coming to the country doubled from 1999 to 2000.With continuing political stability, growth can be expected to be steady and the prospects of additional investment promising. [Available in French only.]

***Guide de l'investissement au Mali***
***Co-published with the International Chamber of Commerce***

(UNCTAD/ITE/IIA/2004/1)
http://www.unctad.org/fr/docs//iteiia20041_fr.pdf

Mali is an example of a democratization success story on the African continent. The economic development initiated in the late 1990s through the implementation of a new economic policy is a priority for the Government and has resulted in price liberalization and freer trade. Bordering seven countries, Mali is an ideal place from which to explore the regional market. Mali also enjoys special access to the United States market through the African Growth and Opportunity Act and to the EU market through the "Everything but Arms" initiative. A number of incentives are offered to attract foreign investment, strengthened by the Government's reforms on customs, labour, public finances and corporate tax. Although foreign direct investment remains low, the country has enjoyed a net increase in the last five years, and the political stability reinforced by a broadly secure environment is also contributing to a more hospitable investment climate. Mali offers many opportunities, especially in agriculture (Mali being the leading processor and exporter of cotton in West Africa) and mining. Other opportunities are to be found in telecommunications and tourism. Overall there has been a successful transition to democracy, and legal and economic reform efforts have laid the foundation for attracting greater investment. [Available in French only.]

***An Investment Guide to Ethiopia: Opportunities and Conditions Co-published with the International Chamber of Commerce***

(UNCTAD/ITE/IIA/2004/2)
http://www.unctad.org/Templates/webflyer.asp?docid=4826&intItemID=2095&lang=1

Just over 30 years ago, Ethiopia was most commonly described as "feudal". Since then it has changed very considerably. It was described as the second most improved business environment in the world by the Heritage Foundation in its 2004 Economic Freedom Index. The liberalizing direction taken by the Government over the past 10 years, beginning with the economic reform programme launched in 1992, has resulted in improvements in the areas of trade policy, foreign investment and government intervention. Even those who complain that progress has been slow and uneven concede willingly that the recent trend is very positive. Today, Ethiopia offers a stable, secure and, exceptionally for a developing country, mostly corruption-free operating environment. The country has many assets, beginning with one of the largest domestic markets in Africa, with 70 million consumers. Its mostly temperate climate also offers an excellent environment for various agricultural activities and for tourism. Investment in agriculture and related activities is strongly encouraged by the substantial incentives offered by the Government and the very reasonable rates at which land can be acquired. Opportunities are also to be found in light manufacturing, and, while skills and qualifications remain low, the honest and low-cost workforce is generally a strong plus in the eyes of investors. Although Ethiopia suffers from poor infrastructure, the Government has made serious efforts to improve roads and airports. No doubt a lot remains to be done, especially in telecommunications and power supply, and privatization needs to start moving again, the strengths and opportunities easily outweigh the difficulties, in particular given the recent speeding up of reforms.

***From Bangkok to São Paulo:***
***DITE Activities Report 2000-2004***

(UNCTAD/ITE/2004/2)
http://www.unctad.org/Templates/
webflyer.asp?docid=4852&intItemID=2095&lang=1

The Division on Investment, Technology and Enterprise Development provided this summary of its work from 2000 to 2004 to mark the occasion of UNCTAD XI in June 2004 in São Paulo, Brazil. The Conference also marks the fortieth anniversary of the Organization and thirty years of work of the United Nations in the area of foreign direct investment and transnational corporations. This report is primarily an exercise in transparency to enable the outside world to assess the breadth and depth of the Division's activities. The Division's work has three objectives: to increase the understanding of the role of foreign direct investment, technology and enterprise activities in development; to help devise adequate frameworks to attract investment and benefit from it and to stimulate technology transfer and technological innovation, with a view towards strengthening the supply capacity of developing countries; and to build consensus on matters related to foreign direct investment, technology and enterprise development. It is for the reader to judge whether UNCTAD's work has made a contribution in these respects. It remains for me to thank the staff of the Division for their dedicated efforts to master the growing workload in the face of diminishing budgetary resources.

## *List of Publications on Foreign Direct Investment and Transnational Corporations (1973-2003)*

(UNCTAD/ITE/2004/1)
http://www.unctad.org/Templates/
webflyer.asp?docid=4766&intItemID=2095&lang=1

In 1973, the United Nations Economic and Social Council gave a Group of Eminent Persons the task of advising on matters related to TNCs and their impact on the development process. Taking into account the increasing importance of such companies in the world economy, particularly in developing countries, as a source of FDI, trade and technology transfer, the group recommended that a permanent Programme and Centre be established to study TNCs and related policy issues. The Group also recommended the creation of a Commission on Transnational Corporations, to which the Centre was to report, so as to serve the needs of the United Nations in this area through information gathering, research and policy analysis, technical assistance and consensus-building. The United Nations Centre on Transnational Corporations (UNCTC) began its work in 1974. Established as the focal point within the United Nations Secretariat for all matters related to FDI and TNCs, the Programme was initially carried out by UNCTC (1975-1992) and the Transnational Corporations and Management Division of the United Nations Department of Economic and Social Development (DESD/TCMD) (1992-1993). In 1993, the Programme was transferred to the United Nations Conference on Trade and Development (UNCTAD). In its work in this area, UNCTAD seeks to further the understanding of the nature and impact of TNCs, especially their potential contribution to development, including through the creation of an appropriate enabling environment for international investment and enterprise development. This work is carried out through intergovernmental deliberations, policy analysis and research, technical assistance activities, seminars, workshops and conferences. This catalogue reflects the sustained efforts made by the United Nations with a view towards enhancing the understanding of developing

countries and economies in transition with respect to the role of FDI. It is also a tribute to the dedication of competent staff over 30 years of work. The usefulness of the publications listed has been confirmed regularly through feedback from policy-makers, scholars and journalists alike. The publications themselves can be found at www.unctad.org/dite.

### *WAIPA Annual Report 2003*

(UNCTAD/ITE/IPC/2004/1)
http://www.unctad.org/en/docs//iteipc20041_en.pdf

This 2003 Report provides information on the structure of the World Association of Investment Promotion Agencies (WAIPA) and outlines major activities in the area of investment promotion undertaken by UNCTAD in cooperation with WAIPA in 2003.

### *Beyond Conventional Wisdom in Development Policy: An Intellectual History of UNCTAD (1964-2004)*

(E.04.II.D.39 [including CD-ROM])
($29 ($14 in developing countries))
http://www.unctad.org/Templates/
webflyer.asp?docid=5391&intItemID=1397&lang=1

This book commemorating the fortieth anniversary of the establishment of UNCTAD shows how UNCTAD's work has evolved and identifies some of the major intellectual contributions that the organization has made in terms of both analytical views and policy proposals. Within that book, the chapter on Foreign Direct Investment and Transnational Corporations highlights a historical shift in the thinking and development-oriented work of UNCTAD in this area from a marginal attention to a key area of work in which the Organization has earned a strong reputation for contributing to mainstream thinking on the subject. UNCTAD's approach to

FDI and development reflects changes in the outside world, in particular evolving attitudes of countries towards FDI and TNCs – from perceiving TNCs as being part of the problem to being part of the solution. The changing attitudes took the form of widespread opening up to FDI – since the mid-1980s in developing countries and since the early 1990s in transition economies – and further FDI liberalization in developed countries. Liberalization has led to intense competition among countries to attract FDI. TNCs, helped by technology and under competitive pressure, responded to liberalization, resulting in fast growing FDI flows. While the substantive elements of each study in this book, including the one on FDI and TNCs, are basically personal reflections, they are supported by the official documents listed in the references. These documents represent some of important research or policy contributions accomplished by the organization. Many of these documents (together with some additional ones) are also reproduced on a CD-ROM attached to the inside back-cover of the book.

## Press materials on FDI issued in April to October 2004

(Please visit http://www.unctad.org/press for details)

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**Press materials on FDI issued in April to October 2004 (concluded)**
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| "INDIA´S OUTWARD FDI: A GIANT AWAKENING?" | 20.10.2004 | UNCTAD/PRESS/EB/2004/009 |

## Books on FDI and TNCs received since April 2004

Bhagwati, Jagdish, *In Defense of Globalisation* (New York: Oxford University Press, 2004), 320 pages.

Davies, Paul, *What's this India Buisiness?: Offshore Outsourcing and the Global Services Revolution* (London: Nicholas Brealey, 2004), 256 pages.

Freeman, Nick J. and Frank L. Bartels, eds, *The Future of Foreign Investment in Southeast Asia* (New York: RoutledgeCurzon, 2004), xiii+288 pages.

Ghauri, Pervez and Lars Oxelheim, *European Union and the Race for Foreign Direct Investment in Europe* (Amsterdam: Elsevier, 2004), 256 pages.

Kleinert, Jörn, *The Role of Multinational Enterprises in Globalization* (Heidelberg: Springer-Verlag, 2004), xv+211 pages.

Kobayashi-Hillary, Mark, *Outsourcing to India: The Offshore Advantage* (Berlin and Heidelberg: Springer-Verlag, 2004), xviii+275 pages.

Yusuf, Shahid, M. Anjum Altaf and Kaoru Nabeshima, *Global Production Networking and Technological Change in East Asia* (Washington, D.C.: World Bank, 2004), vi+490 pages.

Weiler, Todd, ed., *NAFTA Investment Law and Arbitration: Past Issues, Current Practice, Future Prospects* (New York: Transnational, 2004), 450 pages.

Wolf, Martin, *Why Globalisation Works* (New Haven, CT and London, United Kingdom: Yale University Press, 2004), 400 pages.

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Dunning, John H. (1979). "Explaining changing patterns of international production: in defence of the eclectic theory", *Oxford Bulletin of Economics and Statistics*, 41 (November), pp. 269-295.

United Nations Centre on Transnational Corporations (1991). *World Investment Report 1991: The Triad in Foreign Direct Investment.* Sales No. E.91.II.A.12.

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