VOLUME 9 NUMBER 3 DECEMBER 2000

# TRANSNATIONAL CORPORATIONS

United Nations
United Nations Conference on Trade and Development
Division on Investment, Technology and Enterprise Development

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# Between global market constraints and national dependencies: the internationalization of the world's leading telecommunications equipment suppliers

Christoph Dörrenbächer *

There is a strong divide in the current literature on international business strategy. One school of thought argues that, due to market constraints, there is only one best practice for the internationalization of companies. This view is strongly opposed by a second major approach, which stresses structural dependency. According to this second view, the internationalization strategy of a company is largely shaped by its origin — in other words, by its historical embeddedness in the economic, political and institutional context of its home country. This article shows that there is no need for such a strong divide. Looking at the internationalization trajectories of the top ten telecommunications equipment suppliers of the world, it is demonstrated that all suppliers — irrespective of their national origin — follow an industry-wide best practice, both in the timing and the location of their internationalization. However, all internationalization aspects that are more process and style oriented (e.g. market entry patterns or global management styles) show a strong correlation with the specific design of the national institutional context. So far, the institutional context, and thus also the specific telecommunications policy of the small countries, has turned out to be particularly favourable. Whether this will also be true in the future seems rather doubtful when looking at current sector trends.

* Senior Fellow, Wissenschaftszentrum Berlin für Sozialforschung (Social Science Research Center Berlin), Research Unit, Organisation and Employment, Berlin, Germany, and Forschungsgemeinschaft für Aussenwirtschaft, Struktur-und Technologiepolitik (FAST), Berlin, Germany. The author is indebted to Frieder Naschold, who died in 1999, for very helpful comments and advice.

## Introduction

One of the most prominent general debates in the social sciences is the controversy concerning best practice and path dependency. Widely discussed in such diverse fields as the transformation of Eastern Europe or labour market politics, perhaps the most intense debate on the topic occurs in the realm of corporate organization and management. This should not come as a surprise, considering the major structural adjustments of the post war economy, such as market liberalization, reduced transport costs, improved communication means and product homogenization. This meant that more and more corporations from different countries and continents, with different historical legacies and institutional backgrounds, entered the global market and became competitors. The pressure of international competition, but also the discovery that companies with diverse national roots differ from each other have spurred the discussion on how to organize and manage a company, especially important when there is slow growth in the world economy.

During the 1990s, the key reference point of this debate was the production model. Do corporations have to follow the path of lean production or die, as maintained by J. P. Womack et al. (1990)? Or, do corporations shape their own viable models in interaction with, and according to, their specific national environments, as argued by R. Boyer and M. Freyssenet (2000)? With enormous amounts of empirical literature produced so far, the line of demarcation between these questions can be drawn. However, a new key issue is emerging in the debate. It deals with the question of whether corporations have to follow a specific (best practice) internationalization strategy, or whether different internationalization trajectories are more or less functionally equivalent in global markets. This issue, somewhat reflecting an increased awareness of transnational corporations' (TNCs) growing importance in the world economy (UNCTAD, 1999, pp. 4-17), is also central to the topic presented here. Starting with a brief examination and critique of the relevant theoretical positions on what shapes the internationalization behaviour of TNCs (market constraints or structural dependencies), an approach is presented that reconciles and enlarges both positions by distinguishing between different aspects of corporate internationalization. The subsequent

section provides background information on the telecommunication industry, followed by a section presenting empirical findings on convergence and divergence in the internationalization of the top ten telecommunications equipment suppliers in the world, encompassing the years from 1980 to 1995. Then convergence and divergence are explained by market constraints, institutional legacies and corporate idiosyncrasies. The final section discusses implications for national telecommunications policy.

## Market constraints and structural dependencies

The past 40 years have witnessed a growing discussion of corporate internationalization as a scientific topic (Wright and Hicks, 1994). Major goals have been (and still are) to identify specific patterns of corporate internationalization, to explain them and to discuss their political, social and cultural implications. Taking the perspective of the corporation (and not that of a single investment, or of the society as a whole), there seems to be a trend towards an integrated view that includes all corporate functions (e.g. research and development (R&D), sourcing, production and marketing), as well as the international configuration and coordination (management) of the respective activities. However, there is a lively debate on what shapes this overall picture of corporate internationalization.

The first approach, mainly put forward by management science and consulting firms, derives a single best practice for the internationalization of companies from its understanding of market forces. Following this approach, which is termed here the "market constraints-approach", a company has to go for a global presence, while integrating economies of scale and national responsiveness. Here, one finds three similar positions with a different scope. According to McKinsey's stage-model (Henzler, 1992), companies typically internationalize themselves in six steps with discrete sourcing and marketing policies. At stage six, which is the optimum (best practice), a company follows a global sourcing strategy and manages a web of specialized centres of competence that allow it to sell its products and services worldwide. According to McKinsey, however, companies are not able to reach stage six in all industries.

The latter point is also shared by C. Bartlett and S. Ghoshal (1989). They use as their starting point different industries characterized by specific constraints (or dominant requirements) with strong implications for corporate internationalization. However, they foresee an ongoing trend of cross-industry harmonization. According to Bartlett and Ghoshal, this process will lead to the emergence of a single best practice in corporate internationalization. They call it the transnational solution, but they do not describe it very precisely. Following K. Ohmae (1985, 1990), the last position to be mentioned here, there are at least some clear indications of what best practice in internationalization looks like. According to his model of "global localization", corporations need to have a more or less equal presence in all three regions of the Triad (European Union, North America and Asia), due to the growing importance of fixed costs, the worldwide convergence of consumer preferences and the creation of key technologies in all regions of the Triad. However, Ohmae's ideas on how this Triad-based company is managed are also rather vague.

The second major approach strongly opposes the idea that market constraints are imposing a specific best practice on corporate internationalization and, instead, stresses the notion of structural dependency. According to this view, which is deeply rooted in institutional economics, companies are neither free to choose a single best solution in their internationalization strategies, nor do their specific internationalization strategies reflect best practice requirements (or parts thereof). On the contrary, this approach argues that the internationalization strategy of a company is largely shaped by its origin — in other words, by its historical embeddedness in a certain economic, political and institutional (home) context. According to this view, companies follow generic internationalization strategies, either derived from shortcomings in their home markets (Porter, 1990) or from previously developed concepts of control (Ruigrok and van Tulder, 1995).

While M. Porter's idea that internationalization only compensates shortcomings of home markets is self-explicatory (but not necessarily true), W. Ruigrok and R. van Tulder's argument requires some further explanation. According to Ruigrok and van Tulder, core companies (usually large companies that are able to

exercise power throughout the value chain) try to manage the rigidities and imponderabilities of their specific national business systems by developing a coherent system of control. This concept of control evolves over a long period of time in a complex process of interaction with the main agents of the national business system (governments, distributors, suppliers, financiers, trade unions). Once this concept of control is found and has proven its viability, core firms have to use the same concept when going abroad due to sunk cost. However, since the different concepts of control are not neutral to corporate internationalization, a specific concept of control also defines a specific internationalization trajectory, with "globalization" and "glocalization" being the two ideal types of internationalization paths.[1]

## Critique of the two approaches

A detailed look at the methodology and the empirical basis of the two main approaches, however, identifies systematic shortcomings. Neither the market constraints approach nor the structural dependency approach, nor both approaches combined, are able to explain the real life variance of corporate internationalization. Three arguments can prove this point:

- The first argument refers to the market constraints approach. One main deficit here is the fact that the best practice (derived from the relevant market constraints) is often not very precisely defined. Bartlett and Ghoshal (1989, p. 61), for instance, present their "transnational solution" as an integrated network, in which the flow of components, resources, people and information can be best managed by a broad diffusion of company-wide values. Furthermore, almost all best practice models (no matter how precise they are) generalize from a few cases, and usually lack a sound empirical proof of their

[1] "Globalization" describes a path in which a company aims at a worldwide intra-firm division of labour with high coordination requirements and direct control. Following the "glocalisation" path, the geographic spread of corporate activities is much more narrow; however, it often transcends firm borders (network production). There are fewer coordination requirements, and coordination generally follows a bargaining logic (Ruigrok and van Tulder 1995, p. 178).

superiority. In addition, in most cases, best practices have no clear historical point of reference, e.g. as to when they are compulsory to survive in a certain market (the timeframe usually mentioned here is "in the future"). All these issues make it very difficult (if not impossible) to decide whether or not there is only a single best practice, or if there exist other functionally equivalent internationalization strategies.

- The second argument refers to the structural dependency approach, which generally refuses the existence of best practice solutions for corporate internationalization. In contrast to that position, F. T. Knickerbocker's (1973) classical study on internationalization strategies in oligopolistic markets, for instance, shows that TNCs tend to imitate the internationalization behaviour (more precisely: the geographical market orientation) of their competitors. This means that, at least in certain aspects of their internationalization, companies seem to follow a best practice model, even though this best practice is a relative one. However, absolute best practices (or, better, best practice aspects) also seem to exist, considering that a specific innovative cluster or the location of raw materials enforces the presence at a particular place.

- The third argument refers critically to the market constraints and the structural dependency approaches. Both represent a somewhat deterministic view and ignore those issues that are firm specific. In other words, the fact that firms are actors with at least a certain degree of autonomy is, by and large, neglected. However, there are clear indications in the literature that companies rooted in the same national institutional environment (or business system) and in the same industry (or even in the same industry segment) might follow very different internationalization strategies. This has been demonstrated by U. Jürgens (1992) for the German automobile industry and by C. Dörrenbächer and M. Wortmann (1991, 1993) for the R&D internationalization of German pharmaceutical companies, or the European strategies of United States tissue paper companies.

## Towards a market, institution and actor approach to corporate internationalization

A concept that adequately deals with the above mentioned critiques has to use a wider analytical framework. Referring to structuration theory (Giddens, 1984), as well as to the actor-centred institutionalism (Mayntz and Scharpf, 1995), an approach is developed that tries to explain corporate internationalization in terms of market constraints, institutional impacts and idiosyncratic actions of corporations. This approach, termed here as "market, institution and actor approach" follows two basic assumptions. The first assumption is that even if corporate behaviour seems to be considerably shaped by the economic and institutional environment, there definitely remains room for idiosyncratic corporate actions. The second assumption aims at the ways in which empirical findings that occur at different levels are explained. Here, the approach uses a specific concept of analytical hierarchy as developed by R. Mayntz and F. W. Scharpf (1995). Its main idea is that findings that can be explained by market constraints or institutional impacts, do not have to be explained by individual corporate actions (since market constraints and institutional conditions already include a certain rationale for corporate behaviour).[2]

Central to the the approach taken in this article are the following definitions:

- *Best practice requirements* are only existent if, in a precisely defined period of time, either all companies show the same internationalization behaviour (or immediately bring their behaviour into line with the behaviour of their competitors),

[2] An opposite analytical hierarchy is used by the global commodity chain approach (Gereffi, 1996). Here, the individual position (or power) of a company in the commodity chain is the main explanatory factor, with national institutional factors being of minor importance. According to the view presented here, there should be no general rule as to which analytical hierarchy has to be used except for rules applicable to the specific industry and the *a priori* evidence of national institutional impact. Here, the above mentioned analytical hierarchy was chosen, since despite a strong trend towards deregulation, the national institutional legacies in the telecomunications industry are still very prominent.

or unwillingly suffer market exit as a result of non-conformist behaviour.[3]

- *National path dependencies* can be proved in a two-step procedure: step one is looking for shortcomings in the "national diamond" as defined by Porter (1990)[4] and testing if these shortcomings can be compensated by a specific internationalization strategy. Following the analytical framework of the corporate governance literature (Hall, 1986; Hollingsworth et al., 1994; Whitley, 1996; Crouch and Streeck, 1997); step two is looking at the impact that specific national institutional arrangements have on corporate internationalization.

- *Corporate idiosyncrasies* are all those aspects that cannot be traced back either to best practice requirements or to national path dependencies. Theoretically, the notion of corporate idiosyncrasies is rooted in company history, as well as in "soft institutionalist approaches", such as the work of A. Chandler (1962, 1977) and, more recently, the work of the GERPISA group (Freyssenet et al., 1998).[5] Firms and their managers are seen here as at least partly autonomous actors, who are able to take idiosyncratic decisions that shape the trajectory along which the company is developing. Important factors to be considered here are firm characteristics, such as the age of the corporation, degree of diversification etc. The impact of personal preferences of managers is more or less excluded in this analysis.

Unlike both approaches mentioned above, for which TNC are usually studied in thier entirety, the "market, institution and actor approach" follows a narrower sectoral scope. This is due to the fact

[3] It is obvious that the fulfillment of these criteria is heavily dependent on the lengh of the period of time chosen.

[4] That is shortcomings in the following four broad national attributes: factor conditions, demand conditions, related and supporting industries and firm strategy, structure and rivalry.

[5] GERPISA (Groupe d´Étude et de Recherche Permanate sur l´Industrie et les Salariés de L´Automobile) is an association of roughly 130 social scientitists from about 20 countries with research interests in the automotive industry.

that studies using the entire corporation as the unit of analysis only deliver useful findings for corporations that produce a single product or products that are very similar in terms of production and marketing. This is usually not the case, because many, not to say most, TNCs have a multidivisional or even conglomerate structure. To give a simple, but striking example: to compare Motorola and Intel as in their entireties will not yield any useful insights, Intel only produces chips, but Motorola produces both chips and telecommunications equipment — products that do not have much in common, neither concerning their production processes nor their customers. Furthermore, choosing the whole company as the unit of analysis also means choosing a level of aggregation that very likely hides important sectoral differences. Again the example of Motorola: while the rationale for internationalization of Motorola's telecommunications division is mainly to gain access to high-volume markets, main causes for internationalization in chip production are the availability of a suitably trained workforce and subsidies (Flamm, 1985).

All in all, the combination of a wider analytical framework and a narrower sectoral scope poses some methodological problems. Up until now, empirical work on the internationalization of corporations was either quantitative (with studies based on foreign direct investment (FDI) statistics on the one end and multiple company comparisons on the other), or qualitative, often dealing with an individual investment (e.g. the take over of Rover by BMW), or an aspect thereof (e.g. the integration of human resources at BMW and Rover). Both traditions have their limits. As discussed above, studies that use higher aggregation levels might lack important insights, since some tendencies might neutralize each other. The qualitative approach (usually a case study) delivers detailed insights, in most cases, however, analytical and/or statistical generalization is difficult or impossible (Yin, 1989).

Nevertheless, in oligopolistic industries it is possible to combine the depth of a case study with a high level of generalization by looking at a critical mass of leading suppliers. In the telecommunications equipment industry, the industry studied here, the top ten suppliers (more precisely, their telecommunications

equipment divisions) account for 60 per cent of the world market (Pouillot and Dartois, 1991).[6]

## Sector transformation and the growing importance of corporate internationalization in the telecommunications equipment industry

Political liberalization, technical change and an increasing transnational standardization of networks have led to tremendous changes in the telecommunications industry. Traditionally, the telecommunications industry has been characterized by a close cooperation between national service operators and their preferred equipment supplier(s). As the example of Germany demonstrates, the German PTT (later called Telekom) used to plan its investments on a long-term basis. Plans were both detailed and reliable. Every year in October the German PTT started to fine tune its plans with the suppliers for the following year. The final decisions were then made in December. Following the words of an industry spokesperson "the suppliers had nothing to do but to translate the plans into action" (Reich, 1996, p. 31).

However, this kind of cooperation has been fading out. The introduction of competition in former monopoly markets has forced the operators to lower the prices for their services and to increased demand-led investments in their networks. In cases where liberalization is combined with privatization, profit motives become increasingly important. A natural reaction of the operators in this situation is to loosen their close relationships with their former equipment suppliers aiming at better prices by introducing competition into their procurement policies. This development includes two major challenges for equipment suppliers. The first challenge is to defend the home market through price reductions, political influence, or the active use of established contacts with the national operators. The second challenge, discussed here a little more extensively, is internationalization.

[6] If not stated otherwise, the telecommunications equipment industry here encompasses the three main product categories: switching equipment, transmission equiment and terminal equipment (OMSYC, 1996).

As a countermove to the loss of market shares at home, new market opportunities for telecommunications equipment suppliers have arisen abroad. One strategic move for suppliers is to follow the national operator abroad. However, even if the home market is defended successfully (which is not very likely in the long run), an international market orientation is inevitable, since an exclusive national marketing is not sufficient to compensate for the strongly increasing R&D investments suppliers have to make in new switching and transmission technologies. This fact is reinforced by strong pressures on prices and shorter life cycles in the two technologies mentioned above. All in all, there are projections that in the long run only five full-range suppliers will survive.

In the global race for growth in which (according to the chief executive officer of an important supplier) "speed is god and time is the devil",[7] two items are critical:

- First, equipment suppliers have to draw on outside resources. Despite strong tendencies to the contrary, local content requirements and national standards still exist in telecommunications. Due to this fact efficient market access abroad is very often only possible by the acquisition of, or the cooperation with, indigenous firms (Garette and Quelin, 1994). A further rationale to join forces with other corporations (either by cooperation or takeovers) is the high technological complexity of telecommunications that makes it impossible (or inefficient) to follow all important developments in-house.

- Second, equipment suppliers have to restructure their production and R&D networks across borders, since their configuration is usually sub-optimal compared to the state of liberalization and standardization. On the one hand, this is due to the importance of external growth in the industry mentioned above, in which the companies taken over are not tailor-made and which, in many cases, leads to strong geographical disproportions and/or excess capacities. On the other hand, sub-optimal configurations are (still) a legacy of

[7] Personal Communication of J. C. Monty, CEO of Nortel, at the Communications Exposition: Supercom in Dallas, Texas, 24 June 1996.

historically closed markets that did not allow economies of scale to take place. As a matter of fact, until the late 1970s, only markets in developing countries, as well as small Triad countries lacking a national industry (such as Austria), were accessible at all.

## Empirical evidence on corporate internationalization in telecommunications

A look at different rankings of the top players in telecommunications equipment shows that worldwide supply of such equipment is highly concentrated. In 1995, the top ten companies that form the sample of this study (table 1) alone accounted for more than 60 per cent of the world market. The sample is composed of corporations from North America, Europe and Japan. Usually these corporations are more or less diversified electronics corporations. Only two of them produce exclusively telecommunications equipment. To make the data on the companies examined comparable and to avoid the methodological problems of the approaches discussed above, all information given below refers strictly to the telecommunications equipment activities of the companies.

Spanning from 1980 to 1995 (the first marked liberalization phase) and based on ten individual company profiles, as well as on a more formalized comparison of company related data (Dörrenbächer, 1999, pp. 85-134, pp. 147-150), both convergence and divergence in the internationalization of telecommunications equipment suppliers is found.

### *Convergence*

All companies studied undertook great efforts to increase their international market presence between 1980 and 1995, and all of them more or less succeeded. On average, turnover growth abroad was double the growth in their home markets. Furthermore, all companies showed the same orientation towards Triad markets and, more specifically, towards the core Triad countries. A major exception

here is Asia, with the "tiger" economies and later China being the main targets. Another convergence took place in the sequencing of internationalization steps. All companies first increased internationalization within the Triad countries where they were based (home Triad), and then turned to a second (foreign) Triad. Here, a clear hierarchy of Triads is found, with companies from Europe and Japan both choosing North America (and more precisely the United States) as major internationalization target outside their home base. This pattern is due to the lead function of the United States market, based on a specific combination of its large volume, early

**Table 1. The top ten telecommunications equipment suppliers, 1995 and 1998**

*(Billions of dollars and percentage)*

| Firm | Turnover telecom-munications equipment, 1995 (Billions of dollar) | Ratio: turnover telecom-munications equipment to total turnover, 1995 (Per cent) | Turnover telecom-munications equipment, 1998 (Billions of dollar) | Ratio: turnover telecom-munications equipment to total turnover, 1998 (Per cent) |
|---|---|---|---|---|
| AT&T-Lucent[a] | 21.4 | 66.3 | 26.9 | 89.0 |
| Motorola[b] | 17.9 | 66.3 | 20.6 | 70.0 |
| Siemens[c] | 17.1 | 27.5 | 16.3 | 24.3 |
| Alcatel Alsthom[d] | 16.3 | 48.1 | 19.9 | n.a. |
| Ericsson | 13.9 | 100.0 | 23.2 | 100.0 |
| NEC[e] | 11.5 | 28.0 | 11.7 | 31.3 |
| Nortel | 10.7 | 100.0 | 17.3 | 98.1 |
| Nokia[f] | 6.1 | 72.6 | 13.7 | 92.4 |
| Fujitsu[g] | 5.9 | 16.6 | 5.3 | 13.0 |
| Bosch[h] | 3.7 | 14.8 | 2.7 | 9.4 |

*Sources*: annual reports; Idate (www.idate.fr/maj/cle/nmt/index_a.html, downloaded on 21 September 2000).

a Total turnover = without telecommunications services; turnover telecommunications equipment = including microelectronics.

b Turnover telecommunications equipment = divisions: General Systems Products; Messaging, Information and Media Products; Land Mobile Products

c Financial year 1994/1995 ended 30 September; turnover telecommunications equipment = divisions: Öffentliche Netze (ÖN); Privat Kommunikationssysteme (PN) (data for 1995 include consolidated minority stakes).

d Turnover telecommunications equipment = divisions: Telecommunications; Telecommunications Cables.

e Financial year 1995/1996 ended 31 March; turnover telecommunications equipment = division: Communications Systems and Equipment.

f Turnover telecommunications equipment = divisions: Nokia Telecommunications; Nokia Mobile Phones.

g Financial year 1995/1996 ended 31 March, turnover telecommunications equipment = division: Communications Systems.

h Turnover telecommunications equipment = division: Kommunikationstechnik.

liberalization and sophisticated demand structure. All in all, the striking time-space convergence of international market orientation sheds light on the intensity of competition in the industry. Nevertheless, the uniforming power of competitive pressures remains restricted to the market orientation as described. As the next section shows, all more process or style-oriented aspects of internationalization showed strong divergence.

### *Divergence*

First, there is the question of *partnering*. Two basic strategies are possible, a dominance strategy, relying exclusively on internal processes and routines and a cooperative strategy, aimed at the integration of external resources and routines. Companies following a dominance strategy are usually oriented towards the takeover of the majority shares of a foreign corporation, and they by and large refuse to cooperate with local partners when establishing a new venture abroad.[8] On the contrary, companies that are following a cooperative strategy take minority stakes and let foreign partners take part in the establishment of new ventures. Non-capital forms of cooperations are much more frequent for companies following a cooperative strategy. Looking at the sample, only four companies showed a cooperative orientation (table 2). However, the patterns of

**Table 2. Partnering strategies**

*(Company names)*

| Dominance strategy | Cooperative strategy |
|---|---|
| Alcatel | Nortel |
| Siemens | Ericsson |
| AT&T-Lucent | Motorola |
| Bosch | Nokia |
| NEC | |
| Fujitsu | |

*Source*: Dörrenbächer, 1999, p. 137.

[8] With the exception of markets that formally or informally require cooperation with local partners, such as India and China.

cooperation have been manifold. Nortel, for instance, only cooperated in non-English speaking countries, while Ericsson showed a cooperative attitude only in foreign markets that have a strong indigenous telecommunications industry. Motorola restricted its cooperative behaviour to a specific market segment (switching equipment) and Nokia, the company with the most cooperative attitude in the sample, used cooperations mainly to access markets and to acquire technology.

Closely related to the issue of partnering is *the style of international management*. Here, one finds all types of H. V. Perlmutter's (1969) well-known typology (ethnocentric, polycentric, geocentric style). Criteria used to classify the style of international management were mainly derived from D. A. Heenan and H. V. Perlmutter (1979, pp. 15-26) and mostly refer to the headquarter/affiliate relation in a TNC. Individual criteria that were used include: authority and decision making, evaluation and control, communication and information flow and recruitment and staffing. As an industry specific indicator, the policy towards foreign technical standards was also included.[9] In sum, there is a clear dominance of the ethnocentric style, with all important decisions made at headquarters and all norms and rules transferred unilaterally from the headquarter to the foreign affiliates (table 3). Among the seven companies that showed clear signs of ethnocentric behaviour, two companies showed a much more moderate level of ethnocentrism. Here one finds, for instance, a strong attempt to bring an international mindset in headquarter decisions (Ericsson), or the partial transfer of important decisions outside the headquarter (Nortel). Only one company, Alcatel, followed a polycentric approach, where integration is low and foreign affiliates have a high autonomy. This was mainly due to the extraordinary concentration on external growth that made Alcatel resemble a loose

[9] To give an example: a company was classified as ethnocentric when there were clear signs that (i) authority and decision making are strongly concentrated at headquarters, that (ii) evaluation and control are exercised by headquarters on the basis of norms and standards of the home country; (iii) the communication flow includes a high volume of orders and advices from the headquarters to the affiliates; (iv) management in the affiliates is mainly composed of nationals from the home country; and (v) there is a general attitude not to accept local technical standards.

**Table 3. Style of international management**

*(Name of company)*

| Ethnocentric | Moderate ethnocentric | Polycentric | Geocentric |
|---|---|---|---|
| AT&T-Lucent<br>Bosch<br>NEC<br>Fujitsu<br>Siemens | Nortel<br>Ericsson | Alcatel | Motorola<br>Nokia |

*Source:* Dörrenbächer, 1999, p. 138.

net of independent corporations that all had their own corporate culture, management style and technical heritage.[10] However, since the beginning of the 1990s there are strong attempts to integrate the corporation under a French (headquarter) regime. A geocentric approach — that is, in short, the application of the best solution company-wide irrespective of its origin within the company — was found at Motorola and Nokia.

Another divergent pattern occurred in the way in which companies entered foreign markets, or, in other words, whether or not they used external or internal growth to increase their international presence. The two different ways have specific opportunities and constraints. For instance, a strategy of external growth abroad (by acquisition) makes market access much more efficient than a strategy of internal growth (by the foundation of new ventures). This is especially true in an industry, such as telecommunications, that has been secluded politically and technically for a long time. However, problems of integration are much more prominent, too. In the sample, the vast majority showed a clear preference for either external or internal growth (expressed in terms of the growth of foreign employment). Only two corporations used both internal and external growth to more or less the same extent (table 4).

[10] Of special importance here is the takeover of ITT's European telecommunications activtities in 1987, including some quite large companies with a strong tradition, such as SEL, Germany (33,000 empoyees), Standard Electrica, Spain (13,000 employees) and Bell Telephone Manufacturing, Belgium (8,000 employees).

**Table 4. Internal versus external growth abroad**

*(Name of company)*

| Internal growth | Internal and external growth | External growth |
|---|---|---|
| NEC<br>Fujitsu<br>Motorola<br>Nokia | Nortel<br>Ericsson | Alcatel<br>Siemens<br>AT&T-Lucent<br>Bosch |

*Source:* Dörrenbächer, 1999, p. 139.

Since external growth is not as tailor-made as internal growth, the way international markets are entered is one factor that defines the specific need for international restructuring within a corporation. The second important factor, as discussed above, is whether a corporation had a widespread network of foreign affiliates before the liberalization phase.[11] In the sample, the vast majority of corporations that followed a strategy of external growth were confronted with a high need for international restructuring, with Siemens (large number of acquisitions and a long internationalization history) and Alcatel (extraordinary number of acquisitions) having very high needs (table 5). Compared to those corporations, Ericsson, Nortel, NEC and Fujitsu faced moderate restructuring pressure, even though the underlying causes were different. Only Nokia and Motorola, both companies with a historically moderate international presence and on the stream of a strong growing market segment (mobile communications), had no need for international restructuring during 1980-1995.

**Table 5. Need for international restructuring**

*(Name of company)*

| Very high | High | Medium | Low |
|---|---|---|---|
| Alcatel<br>Siemens | Bosch<br>AT&T-Lucent | NEC<br>Fujitsu<br>Ericsson<br>Nortel | Motorola<br>Nokia |

*Source:* Dörrenbächer, 1999, p. 140.

[11] There are two other factors boosting international restructuring: (i) labour-saving effects, which are inherent to the change from anlogue to digital switches; and (ii) increasing R&D costs for digital switches. However, those changes influence all companies to a comparable extent.

Not very surprisingly, neither Motorola nor Nokia cut their workforce in telecommunications equipment production. However, in both companies, a noteworthy transfer of jobs from low to high-growth divisions occurred. At Ericsson, both job transfers and massive job reductions took place. All other companies had to concentrate on workplace reductions in telecommunications equipment, with reductions by the Japanese corporations NEC and Fujitsu being much more moderate than those by the European and North American companies (table 6).

**Table 6. Job reduction and job transfer**

*(Name of company)*

| Job reduction | Moderate job reduction | Job reduction and job transfer | Job transfer |
|---|---|---|---|
| Alcatel<br>Siemens<br>AT&T-Lucent<br>Bosch<br>Nortel | Fujitsu<br>NEC | Ericsson | Motorola<br>Nokia |

*Source*: Dörrenbächer, 1999, p. 141.

A final difference is in the increase in internationalization that companies realized between 1980 and 1995. Table 7 shows the proportion of turnover abroad in 1980 and 1995. The biggest increase occurred for Nokia, Nortel, Alcatel and Motorola. Next to Ericsson, a traditionally highly internationalized company, those four had the highest internationalization ratios in 1995, followed by Siemens, and then Fujitsu, NEC, Bosch and AT&T-Lucent.

### *Typology*

Taking all differences together, two basic types of corporate internationalization have emerged in the telecommunications equipment industry:

- Companies belonging to the first type (i.e. Fujitsu, NEC, Bosch, A&T-Lucent, Siemens, Alcatel) followed a stand-alone strategy combined with an ethnocentric style of international

**Table 7. Ratio of turnover abroad to total turnover 1980 and 1995**

*(Percentage)*

| | High | Medium | Low |
|---|---|---|---|
| 1980 | Ericsson (78) | Siemens (46)<br>Nortel (34)<br>Motorola (30)<br>Alcatel (29) | NEC (25)<br>Nokia (25)<br>Fujitsu (20)<br>Bosch (5)<br>AT&T-Lucent (0) |
| 1995 | Nokia (93)<br>Ericsson (91)<br>Nortel (90)<br>Alcatel (77)<br>Motorola (65) | Siemens (55) | Fujitsu (30)<br>NEC (30)<br>Bosch (22)<br>AT&T-Lucent (17) |

*Source:* Dörrenbächer, 1999, p. 142.

management. No matter whether they relied on external or internal growth, their need for international restructuring was medium to high, and their reaction was exclusively a reduction in the workforce. In addition, the increase in internationalization in those companies was very moderate, with the result that in 1995 they all belonged to the group of companies with a low or medium rate of turnover abroad.[12]

- Companies belonging to the second type (i.e. Nokia, Ericsson, Motorola, Nortel) met the challenge of internationalization by a cooperative strategy combined either with a geocentric, or at least a moderate ethnocentric management style. Due to the dominance of internal growth, their need for international restructuring was medium to low, and was to a large extent resolved through job transfers. Furthermore, all companies showed a remarkable increase in their foreign presence[13] and belonged, in 1995, to the group of companies with a high ratio of foreign turnover.

[12] The exception here is Alcatel, whose high ratio of turnover abroad is due to one exceptionally big takeover abroad (the takeover of all European telecommunications affiliates of ITT in 1986).

[13] The exception here is Ericsson, which was already highly internationalized in 1980.

Before turning to the next section, some comments on the success of the two types of internationalization need to be made. Unfortunately, a full set of data is only available for the development of market shares and not for the profitability of the telecommunications divisions (table 8).

The data available show that all companies that followed the second type gained market shares, while the picture for corporations that followed the first type is disparate. However, the two companies that followed the first type and won market shares (Alcatel and Bosch) showed by far the strongest external growth in relation to their original telecommunications business.

## Triggers of internationalization behaviour

What shapes convergence and divergence in the internationalization of the telecommunications equipment suppliers? Following the market, institution and actor approach specified above, market constraints that generate best practices, as well as national path dependencies and corporate idiosyncrasies need to be examined.

Two criteria tell us whether or not market constraints have led to a compulsory *best practice*, and if so what that best practice looks like. Taking the first criterion, i.e. identical or similar behaviour of all companies, the best practice in internationalization in the telecommunications equipment industry between 1980 and 1995 is as follows:

> All companies have to grow abroad, also in countries that have a strong equipment industry of their own. They first have to increase their internationalization in their home Triad and then approach a second Triad. For companies from Europe and Japan, the second Triad is North America, especially the United States market, that is the lead market in telecommunications equipment.[14]

[14] The second Triad for North American companies is Europe.

**Table 8. Change in market share in the world telecommunications equipment industry**

*(Billions of dollars and percentage)*

| Firm | Turnover telecommunications equipment, 1980 (Billions of dollars) | Market share, 1980 (Per cent) | Turnover telecommunications equipment, 1995 (Billions dollars in prices of 1980) | Market share, 1995 in prices of 1980 (Per cent) | Change in market share, 1980-1995 (Per cent) |
|---|---|---|---|---|---|
| Motorola[a] | 1.40 | 5.1 | 22.78 | 16.2 | +11.1 |
| Alcatel[b] | 1.90 | 6.9 | 19.18 | 13.6 | +6.7 |
| Nokia[c] | 0.03 | 0.1 | 6.93 | 4.9 | +4.8 |
| Bosch | 0.07 | 0.3 | 4.71 | 3.4 | +3.1 |
| Nortel | 1.80 | 6.6 | 12.46 | 8.9 | +2.3 |
| Ericsson | 3.10 | 11.3 | 18.54 | 13.2 | +1.9 |
| Fujitsu[d] | 0.50 | 1.8 | 2.39 | 1.7 | -0.1 |
| NEC[d] | 1.50 | 5.5 | 4.67 | 3.3 | -2.2 |
| Siemens[e] | 5.10 | 18.6 | 21.76 | 15.5 | -3.1 |
| AT&T-Lucent[f] | 12.00 | 43.8 | 27.23 | 19.4 | -24.4 |
| | 27.40 | | 140.65 | | |

*Sources:* annual reports; OECD, 1983, p. 130; United States, Department of Commerce, 1983, p. 18; author's compilation and calculations.

[a] Turnover 1980 = estimation on the basis of turnover 1981.
[b] Earlier called CGE.
[c] Turnover 1980 = estimation on the basis of turnover 1981.
[d] Financial years 1980/1981 and 1995/1996 ended 31 March.
[e] Financial years 1979/1980 and 1994/1995 ended 30 September.
[f] Earlier called AT&T/Western Electric.

*Note:* Market share = share among the top ten.

If one compares this best practice with the ones given in the literature, big differences show up. For instance, according to Ohmae (1985, 1990) a more or less equal presence in all three regions of the Triad is seen as prerequisite for survival. Furthermore, Ohmae's best practice includes that all Triad members have more or less the same importance, which is not true for the telecommunications equipment industry, given the lead role of the United States market. Another important point to stress is that the empirical results presented here do not show any additional best practices, other than the one described. This is especially true for the coordination style. Although companies of the second type, following a cooperative strategy combined with geocentric or moderate ethnocentric management style, resemble more the idea behind Bartlett and Ghoshal's (1989) transnational solution, this does not mean that all type two companies were threatened by market exit — the second criterion to determine compulsory best practices. The most important market exit during the time period examined here was the sale of the European telecommunications equipment activities of ITT to Alcatel in 1986 (with some 60,000 employees). However, that sale was not due to coordination and management problems due to the introduction of digital switching technology at ITT, as Bartlett and Ghoshal have argued. If that were true, only two or three companies might exist today, since all others faced major problems with the introduction of that technology. The real causes lie in the strict portfolio policy of ITT, a very heterogeneous conglomerate, with telecommunications being only one industry segment among many others.[15]

While best practices explain convergence, one point that might explain divergence is *national path dependency*. The impact that the country of origin (or, say, national path dependency) has on the internationalization behaviour of corporations can be traced back to two somewhat overlapping items: specific shortcomings in the home market, and the influence of national institutional arrangements.

[15] A second noteworthy case is the sale of the United Kingdom's telecommunications industry (i.e. the *de facto* sale of GPT to Siemens and the sale of STC to Nortel and Fujitsu). However, in this case there was an important contingent impact, i.e. the extraordinarily anti-supplier oriented institutional change in the United Kingdom (Weinstein, 1992).

- Shortcomings in the home market. Referring to Porter's (1990) national diamond, one finds no big differences both in factor conditions and in the availability of related and supporting industries among the countries in which the companies studied are based. However, big differences occur in demand conditions, with all companies of the second type, except Motorola, being based in small countries with low volume markets. Another big difference is the structure and competition in the different national telecommunications industry segments. However, these differences are the result of divergent national institutional arrangements, dealt with below.

- Differences in national institutional arrangements. Looking at the telecommunications industry, the most important institutional influence is the specific relationship between the main equipment suppliers and the national service operator or between the main equipment suppliers and the regulatory body, in the case of private monopolies. This relationship, which is more than just a reflection of structure and competition in the industry, evolved over a long period of time, and incorporates national technological, infrastructural and labour market objectives. Looking at the seven countries where the companies examined here are based, two distinct patterns of relationships are found, both varying in the tightness of the supplier-operator relationship and in the orientation of the operator's or regulator's policy (national versus global orientation, for instance, in technical network requirements, procurement policies including prices and conditions of payment). The first pattern is that of a historically tight supplier-operator relationship that is more (United States, Germany, France) or less (Japan) loosening, combined with an operator policy that is more (United States, Germany, France) or less (Japan) changing from a national to a global orientation. All companies coming from the countries mentioned so far are of the first

[16] Motorola is the exception here. This is due to the fact that Motorola historically never concentrated on public infrastructure, but on the heavily fragmented mobile communications market.

type.[16] The second pattern, found in Sweden, Canada and Finland, combines a traditionally more (Finland) or less (Canada,[17] Sweden) loose supplier-operator relationship, with a strong global orientation of the operator policies. All companies that are rooted in this institutional environment are of the second type in their internationalization.

Another factor that might explain the divergence in internationalization behaviour is *corporate idiosyncrasies*. According to this approach, idiosyncrasies are restricted to structural differences among corporations (and thus exclude personal preferences of the decision makers). However, neither the size of the telecommunications business, nor the age thereof produced a useful correlation. Big and small, as well as young and old, firms can be found among both types of internationalization. However, a clear correlation showed up according to the degree of diversification (no concentration on telecommunications equipment, concentration on the telecommunications equipment, concentration on a specific segment in the telecommunications equipment industry), with all companies of the second type being focused companies (with at least one concentration on telecommunications equipment) and all companies of the first type being diversified companies.

In conclusion, the two types of internationalization show a striking correlation with the volume of the market, the type of institutional arrangement and the degree of corporate diversification. This is interpretated here that diversified companies active in large home markets characterised by a historically tight supplier-operator relation (including a more or less national orientation of the operator) have no or low incentives to grow abroad. This explains the relatively low degree of internationalization of companies from Germany

[17] It is interesting to note that in the case of Nortel this is the result of both close relations to Bell Canada and to AT&T-RBOCs (Regional Bell Operating Companies).

[18] In the case of AT&T-Lucent, two contingent influences have to be considered. First, due to a settlement with ITT dating from 1925, the equipment divison of AT&T did not expand outside the United States before the end of the 1970s. Second, since AT&T was very internationalized in telecommunications services, it was very difficult for the equipment division to enter markets where AT&T was competing with national operator(s) in telecommunications services.

(Siemens), the United States (AT&T-Lucent)[18] and Japan (NEC, Fujitsu). Furthermore, their strong implantation in their home markets also shapes the style and process aspects of their internationalization. Here, foreign markets are only seen as an enlargement of the home market, and thus are developed with the same policy (dominance strategy and ethnocentric style). On the contrary, focused companies based in small markets characterised by a rather loose supplier-operator relationship (including a global orientation of the operator) have high incentives to grow abroad. This explains the relatively high degree of internationalization of companies from Canada (Nortel), Sweden (Ericsson) and Finland (Nokia). They see foreign markets much more as a source of strategic assets and try to integrate these assets by means of a cooperative strategy and a less ethnocentric or even geocentric management style.

## Policy implications

To summarize the findings so far: the internationalization behaviour of a corporation is not uniform, but rather a complex phenomenon that encompasses at least three different aspects: geographical market orientation, style and process. In sharp contrast to both the market constraints approach and the structural dependency approach, the finding here was that different aspects of internationalization follow different rationales. There is a clear indication that all telecommunications equipment manufacturers — irrespective of their national origin — follow an industry-wide best practice both in terms of timing and location of their international production. However, internationalization aspects that are more process and style oriented (e.g. market entry patterns, management styles, degree of diversification) show a strong correlation with the specific design of the national institutional context (i.e. the dominant supplier-operator relation).

However, what does this pattern mean for national telecommunications policy? It is obvious that the telecommunications policy of the small countries examined here (Finland, Canada and Sweden), which are characterized by a loose supplier-operator relationship and a global orientation of the operators, has allowed the suppliers from these countries to adapt much better to the

liberalization process. This is illustrated by the fact that, over the period examined, all these corporations increased their market share (table 8), and by the model character that these countries' sectoral policy has been for policy changes in larger countries over the past 20 years. With the exception of Japan, all big countries have initiated a more or less pronounced loosening of the supplier-operator relationship, and the operators have oriented their supporting measures more towards the requirements of the world market. Yet, even two decades after the initial opening of the industry, the convergence to the industrial policy of small countries, which P. J. Katzenstein as early as 1985 (p. 9) described as having a model character, is nowhere near complete. It would seem more appropriate to speak of a partial integration.

How the integration of these different policy models will develop in future largely depends on changes in the industry itself and their impact on the companies. Three trends determine the current change in telecommunications:

- The growing uncertainty of how to implement technically the current two basic changes in telecommunications, namely, the ongoing introduction of mobility as a standard option for any communication and the strong increase in data traffic due to the Internet.

- The increasing disembedding of technological developments from a national or narrowly operator-oriented context. In this repesct, the most important step in Europe was the development of the digital mobile communication standard, GSM (Group Spécial Mobile), which simultaneously facilitated the establishment of new institutional structures for technology development in European telecommunications. Changes occurred, among other things, in the steering mode, leaving behind the hierarchical coordination through operator-dominated projects of the past for flexible negotiations in a network of actors from international telecommunications organizations (e.g. European Telecommunications Standards Institute or International Telecommunications Union), as well as suppliers and operators from different countries (Bender,

1996, pp. 196-204). The increasing disembedding of technology development from a national context is by no means a European phenomenon, as can be seen from the development of Universal Mobile Telephone System (UMTS), the worldwide standard that followed GSM. It is not restricted solely to mobile communication, but affects increasingly the fixed networks as well.

- The dramatically increased importance of trade policy as a result of the gradual opening of the Triad's markets for foreign telecommunications goods. Trade policy, in this context, aims at creating reciprocal market access and turns mainly against R&D subsidies, discriminating technical standards and procurement policies, as well as against restrictive measures concerning investments (Zampetti and Sauvé, 1996, p. 18). Examples of the growing importance of trade policy are the market opening policies adopted by the Government of the United States *vis-à-vis* Japan from the mid-1980s onwards and the strongly politicized conflict between AT&T and Siemens concerning the investment in the second biggest French telecommunications supplier CGCT (Compagnie Générale des Constructions Téléphoniques) in 1987. Other highly publicized cases were the criticism by the Government of France of AT&T's procurement policy in 1991 and the conflict between the United States and the European Community concerning the procurement guidelines of the latter (1993/1994).

The changes illustrated by these trends do, by no means, affect all companies in the same way. For companies from small countries, the increasing technological uncertainty represents a considerable threat, since they have a much higher degree of technological specialization and certain specific disadvantages with regard to clustering, due to the generally more strongly concentrated industrial structure of their countries. Furthermore, they cannot count on any specific support in conflicts concerning trade policy, since even in a posthegemonic system of international trade blocks their countries' political status is comparatively low (Gilpin, 1987, p. 406). Nevertheless, the traditionally loose supplier-operator relationship gives companies from small countries a distinctive advantage when

it comes to utilizing chances occurring from the increasing denationalization of technology development. This is a particular weakness of firms from large countries that traditionally had — or, in the case of Japan, still have — strong ties to a national operator. Companies from large countries usually have a comparatively strong political representation, a broad technology portfolio and advantages with regard to clustering.

These basic findings also offer an explanation for the recent technological and commercial shifts in the telecommunications industry, i.e the strongly growing importance of mobile communications since the early 1990s and the enormously increased use of the Internet starting in the mid 1990s. The "mobile revolution" and the "Internet revolution" are clearly linked to a few companies that boosted the technical, as well as the commercial development of both changes.

In the case of mobile communications almost all of these companies came from smaller countries, e.g. Nokia from Finland and Ericsson from Sweden. All of them succeeded in improving their competitive position. However, their success did neither lead to other top telecommunications equipment suppliers market exit, nor did their success in mobile communications enabled these companies to take the lead in the development and commercialization of the next technological step in the industry, i.e the development of Internet hardware (such as routers etc.).

Unlike mobile communication, the origin of the Internet revolution does not lie in the voice-oriented telecommunications industry discussed here. Companies from the emerging data network industry, such as Cisco Systems, Ascend, Bay Networks or Newbridge Networks have taken the lead in the Internet evolution. Since the traditional business of these companies was in corporate networks (i.e. linking computers by local and wide area networks), they never had a close relationship to the national telecommunications operator, regardless of whether they were from a small home country, such as Newbridge Networks from Canada, or from a large one, such as Cisco Systems from the United States. In this emerging market, almost all companies could increase tremendously their turnover. However,

since most of these companies were rather small, many of them were taken over by traditional telecommunications equipment suppliers.[19] Out of the more important companies in this market, only Cisco Systems managed to stay independent and to break into the league of the top ten telecommunications equipment suppliers.

For national industrial policy strategies, these findings point to a path-dependent development. In the future, small countries will serve as models for larger ones, as described by Katzenstein (1985), but vice versa too. ■

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[19] E.g. AT&T-Lucent acquired Ascent ($20 billion), Nortel took over Bay Networks ($9 billion) and Alcatel bought four smaller companies (DSC Communications, Xylan, Paket Engines, Assured Access Technology).

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# Industrial restructuring through mergers and acquisitions: the case of Argentina in the 1990s

Daniel Chudnovsky and Andrés López*

In the 1990s, Argentina had received substantial amounts of foreign direct investment (FDI) inflows, of which cross-border mergers and acquisitions (M&As) accounted for almost 60 per cent. In the early 1990s, most were related to privatizations. During 1993-1994, most were acquisitions of private firms, and these accounted for one-third of FDI inflows during 1996-1998. Domestic M&As also increased during the 1990s. The experience of Argentina is relevant for understanding the impact of M&As on developing economies. By comparing the performance of manufacturing firms participating in cross-border M&As with an appropriate control group of firms that did not do so, the evidence presented here suggests that M&A firms, besides being more dynamic in terms of domestic sales growth than non-M&A firms, have also devoted more resources to training activities and have been able to introduce more improvements in process and product technologies, as well as in managerial and organizational routines. In turn, contrary to expectations, job rationalization has not been more significant in M&A firms than in non-M&A firms. Almost no public policies were in place to assist domestic firms to adapt to the changes in the rules of the game introduced by the structural reforms adopted in the 1990s. M&As operated as a sort of "market-driven" restructuring strategy, delivering some positive effects in most cases. However, this restructuring process has not led to higher export propensities of the firms involved, which remains low. Even when spillovers were created by

* The authors are, respectively, Director and Researcher, Centro de Investigaciones para la Transformación (CENIT), Buenos Aires, Argentina and Professors at the University of Buenos Aires. Research assistance by Laura Abramovsky and Silvana Melitsko is gratefully acknowledged. Comments to an earlier draft by Zbigniew Zimny, Gabriele Köhler and three anonymous referees are gratefully acknowledged.

M&As through training of human resources, domestic innovative activities remained negligible. Furthermore, the effects of this restructuring process on welfare and competition still remain to be analyzed.

## Introduction

Most developing countries have made a shift in their economic policy regimes in the past two decades. Leaving behind the import substitution industrialization (ISI) stage, they have liberalized their economies, have reduced sharply their tariffs and other trade barriers and have often privatized their public enterprises. As a key part of these reforms, most developing countries have dismantled restrictions on FDI inflows, and are now welcoming and even competing to attract TNCs. There are two main reasons for this changing attitude towards TNCs. At the microeconomic level, FDI is acknowledged as a potentially powerful instrument for improving access to international markets, obtaining the technological and organizational capabilities required for producing and exporting new goods and services and fostering backward and forward linkages. In this way, FDI can be a tool for restructuring the economies of those developing countries that have undertaken structural reforms programmes and for enhancing their international competitiveness. At the macroeconomic level, FDI may fill domestic savings gaps and may also finance current account deficits that often take place during the process of trade liberalization. Moreover, since TNCs invest following strategies with long time horizons and long-term objectives and, once installed, have large sunk costs, FDI is considered less volatile than portfolio investment and other types of international financial flows. For these reasons, a large volume of FDI is usually considered as a vital contribution to the development process. However, the contribution of FDI to the economic development of host countries depends not only on its volume, but also on its quality and on the conditions under which it operates. Hence, to examine whether the potential benefits of FDI are translated into actual ones, it is important to analyze the evidence in countries have attracted significant FDI flows, such as Argentina.

M&As have been a key feature of the worldwide FDI upsurge during the 1990s. They have increased from 50 per cent to almost 85 per cent of total FDI inflows between 1994 and 1999.[1] In 1999, the value of all cross-border M&As amounted to $720 billion.[2] The worldwide M&A boom has stirred up much attention in the media, but mainly because of the size of the operations and the impact on stockholder values. Nonetheless, it is clear that the impact of M&As goes far beyond the stock exchange. Especially in developing countries, M&As may play an important role in the economic restructuring process and may have a significant influence on the conditions of competition in the host economy.

In this connection, a leading businessperson[3] has argued that M&As (not specifically cross-border ones) may play a key role in the restructuring of those economies that have undertaken market-oriented reforms:

> "M&As are an important and efficient strategic instrument for enhancing the competitiveness of a company ... (as well as) ... an effective and comparative gentle tool for the necessary reshaping of the industrial structure of an economy, such as the restructuring of the production apparatus, a more rapid processing of innovation, and the transformation of duplicated efforts into synergies. They allow a constructive adaptation to fundamentally new conditions. They allow companies, such as those in emerging economies, to be incorporated by a process of network consolidation into the global market that is shaped by more intensive and more broadly-based competition" (Maucher, 1998, p. 179).

[1] The value of cross-border M&As and FDI flows are not truly comparable, for a variety of reasons that relate to how M&As are financed and to the balance-of payments methdology used in calculating FDI flows, which is not applicable to M&As (see UNCTAD, 2000).

[2] According to the UNCTAD (1999), new investment by foreign direct investors through M&As in United States enterprises accounted for 90 per cent of total investment expenditures in foreign affiliates in 1998.

[3] H. Maucher, Chairperson of Nestlé SA and of the European Round Table of Industrialists.

In contrast to this positive view of the role of M&As, a more critical view has also emerged. There are widespread fears that M&As may stifle competition, may reduce rather than create employment and may lead to the closing of some production or functional activities in host countries. Besides these negative effects, cross-border M&As may contribute to the "denationalization" of the domestic host economy, especially in developing countries. Furthermore, contrary to greenfield investments, M&As merely involve a change in ownership of the acquired assets and do not add to the productive capacity of the host country, at least initially (UNCTAD, 1999; UNCTAD, 2000).

Elements of truth may be found in both positions. Hence, to make progress in the understanding of this important issue for the development research agenda, it is crucial to carry out an empirical assessment of the impact of cross-border M&As through individual country studies. The experience of Argentina in the 1990s is particularly relevant in that connection.

Argentina has important locational advantages that have attracted both resource and market-seeking FDI since the beginning of the century. It is a resource rich developing country with a significant domestic market, fairly high wages and a large base of skills. While, in the 1980s, in a domestic context characterized by strong macroeconomic instability and stagnation, FDI inflows were very low, since the early 1990s, jointly with price stabilization and growth resumption, the country re-emerged as a key recipient of FDI among developing countries.

From about $650 million on average during 1984-1989, annual FDI inflows to Argentina reached $2.1 billion in 1990-1991, $3.6 billion in 1992-1993, $5.1 billion in 1994-1996 and $7.6 billion in 1997-1998. Due to the sale of the remaining shares of the former State oil company YPF to Repsol (Spain) for $15.2 billion,[4] in 1999

[4] This operation marked the entrance of Latin America "into the world of international mega deals ... (and) in itself is a landmark for the region. Never before has such a large Latin company been purchased by a single buyer" ("This bid breaks a big taboo", *Business Week*, 17 May 1999).

a record level of $23.1 billion was registered.[5] As a result of these trends, FDI inflows increased from 1.6 per cent during 1992-1993 to 8.1 per cent in 1999 as a ratio to GDP (table 1).

The recent FDI boom in Argentina has been closely related to cross-border M&As. According to UNCTAD, although Argentina accounted for a relatively small share (1.9 per cent) of worldwide cross-border M&A sales in the 1990s, it has been a key host country within Latin America (23 per cent of cross-border M&A purchases between 1991 and 1999), as well as among developing countries (14.5 per cent of cross-border M&As along the same period). Furthermore,

**Table 1. FDI and portfolio investment inflows into Argentina**

*(Millions of dollars and percentage)*

| Year | 1992/1993 | 1994/1996 | 1997/1998 | 1999 |
|---|---|---|---|---|
| **Foreign direct investment (FDI)** | | | | |
| **Total (annual average)** | 3 574 | 5 109 | 7 633 | 23 153 |
| FDI as a ratio to GDP (per cent) | 1.6 | 1.9 | 2.6 | 8.1 |
| **Source of financing** | | | | |
| Profit reinvestments (per cent) | 23.5 | 11.8 | 10.0 | 3.8 |
| Investments (per cent) | 15.4 | 32.5 | 35.4 | 14.6 |
| Debt to parent company and profits (per cent) | 8.7 | 13.4 | 8.5 | 2.6 |
| Takeovers (per cent) | 6.8 | 31.4 | 39.0 | 60.8 |
| Privatizations (per cent) | 45.6 | 10.9 | 7.1 | 18.1 |
| **Portfolio investment (PI)** | | | | |
| **Total (annual average)** | **5 294** | **8 953** | **11 283** | **-4 638** |
| PI as a ratio to GDP (per cent) | 2.4 | 3.4 | 3.8 | -1.6 |

*Source:* own elaboration from Argentina, Ministerio de Economía, 1999.

[5] YPF, Argentina's largest corporation with activities in oil and gas exploration and development both upstream and downstream, was privatized in 1993 through the sale of shares in small blocks on domestic and international markets. A total of shares representing 58 per cent of the company's capital stock were placed in this way. An unknown part of the stock was acquired by foreign investors, but these operations were considered in the official balance-of-payment figures as portfolio investments. The Government and several provincial administrations retained a minority interest in the company, and a share ownership programme was implemented covering 10 per cent of the capital stock. In 1999, the Government sold its minority interest (15 per cent) to Repsol. A few months later, Repsol acquired the rest of the shares through a public bid.

in 1999, Argentina ranked eighth among the top host countries worldwide in terms of cross-border M&As (UNCTAD, 2000).

M&As in Argentina have been mainly, but not exclusively, associated with FDI. Information from the Secretariat of Industry, Commerce and Mining shows that M&As reached almost $80 billion between 1990 and 1999, of which $24 billion were through privatizations. Domestic M&As reached more than $12.4 billion during the same period (nearly 17 per cent of all M&As). According to the same source, M&As have been the preferred modality of investment in Argentina economy during the 1990s, with total greenfield investments amounting to only $32 billion between 1990 and 1999.

It is relevant to bear in mind the context in which the cross-border M&As boom in Argentina took place. Argentina went through a process of big economic policy changes in a very short time period, from the late 1980s until the early 1990s. The most important changes were trade liberalization and economic integration with Brazil in the context of MERCOSUR (Southern Common Market or Mercado Común del Sur). As a result of these changes in economic policy, import competition became significant threat for firms operating in the domestic market for the first time in many years. Local manufacturing firms, which had been highly protected during the ISI phase, were expected to restructure rapidly in order to become more efficient and, thus, be able to compete against imported goods in the domestic market. As public authorities put their thrust in market forces, virtually no policies were adopted by the Government of Argentina to assist local enterprises in their restructuring efforts during the 1990s.

Many indigenous firms, especially, but not only small and medium-sized enterprises, were not able to upgrade their technological and management capabilities and went bankrupt. In contrast, several leading domestic conglomerates consolidated their positions in market niches. Some of them became TNCs with affiliates operating mainly in other Latin American countries (Chudnovsky, Kosacoff and López, 1999). In turn, TNCs from industrialized countries gained presence in almost every economic sector. In fact, besides its crucial

macroeconomic role (since FDI financed a huge part of current account imbalances during the 1990s), the massive entry of TNCs was considered by the Government as a key instrument to upgrade the competitiveness of the domestic economy.

Both the expansion of a small group of domestic conglomerates, as well as entry by foreign-based TNCs, were typically carried out through the acquisition of domestic firms. The acquired firms used to have leading positions in their respective market segments, but were unable to keep up with increased competition following trade liberalization. M&As have been, therefore, a key instrument in the restructuring of Argentina's economy, especially in the manufacturing sector.

In this scenario, it is relevant to shed light on the performance and impact of M&As, and in particular to analyze whether or not M&As have played a positive role in Argentina's economic restructuring by addressing the following questions:

- How effectively have M&As contributed to accelerating the restructuring of Argentina's manufacturing firms and made them more competitive and able to meet the challenges arising from trade liberalization?

- What impact have M&As had on key variables such as employment, exports, investments, research and development (R&D) activities and human resources training?

- In a scenario in which most M&As have been made by TNCs, have TNCs been in a better position to undertake successful M&As in terms of upgrading the competitiveness of the acquired enterprises *vis-á-vis* the local firms?

- Which are the main policy implications of an industrial restructuring process mainly undertaken through cross-border M&As?

The objective of this article is to provide some answers to those questions using new data and information. It is the first analysis

of its kind in Argentina and one of the few in developing countries. Besides discussing the context in which the FDI and M&As boom has taken place, its main purpose is to examine the performance of acquired and independent firms based on a survey of more than 1,600 manufacturing firms in 1997. The bulk of the firms in the survey were privately owned, though a few M&As involving former public manufacturing enterprises were also included.

M&As related to privatization of public utilities and services are not analyzed here, but are partly discussed elsewhere (Chudnovsky, López and Porta, 1997). Due to lack of sound evidence, no attempt will be made here to discuss welfare aspects, although this is a key research and policy issue. After a brief examination of the recent evolution of Argentina's economy and of the main trends and legal provisions concerning FDI and M&As in Argentina, the main research findings are presented. The conclusions, policy implications and further research issues are discussed in the final section.

## The recent evolution of Argentina's economy

After the so-called "lost decade" of the 1980s, characterized by permanent macroeconomic instability that led to hyperinflation by the end of the decade, price stabilization was achieved through a currency board scheme which pegged the Argentine peso to the United States dollar since April 1991 (the so called Convertibility plan). In turn, a far-reaching programme of structural reforms was implemented quickly, including the liberalization of the trade and capital accounts, the privatization of almost all State-owned firms and the deregulation of different activities (banking, oil etc.). The FDI regime, already one of the most deregulated among developing countries, was further liberalized.[6]

[6] The liberal foreign investment law of 1976 underwent some revisions in 1989 and 1993. No approvals, formalities and registry of any kind are required for FDI operations. The few sectoral restrictions for FDI remaining at the end of the 1980s have been almost completely eliminated. (The only one which is still in place is related to real estate property in frontier zones.) There are neither discriminatory withholding taxes on income, nor taxes applied to the remission of profits and dividends emanating from FDI.

Notwithstanding this general movement towards an economic policy regime close to the recommendations of the so-called "Washington Consensus", an automobile regime was established in 1991, in which trade-related investment measures and performance requirements for local producers were included. A mining regime was adopted in 1993, in which a 30-years guarantee of no tax increase for investors was included. A similar regime for the forestry industry was recently also implemented. Argentina's privatization programme also had some specific features geared to attract foreign investors. All this meant that, despite of the fact that most FDI has been attracted by growth resumption, macroeconomic stability, reinforced legal protection for property rights and the adoption of a market and investor-friendly economic policy package, some specific incentives had also been put in place to attract investments.

The results of macroeconomic stabilization *cum* structural reforms have been that price inflation has practically been non existent since 1994, and GDP per capita growth of an average annual rate of 3.3 per cent a year during 1991-1999, reaching $7,800 in 1999.

On the negative side, the distribution of the benefits from the rapid growth has been uneven: income distribution has worsened and unemployment has reached record levels during 1995-1996 (18 per cent), falling slowly to 14.3 per cent in 1999.

Although exports started to increase in 1994 to reach record levels during 1997-1998, imports have grown even more rapidly (from $4.2 billion in 1990 to $31.4 billion in 1998) than exports (from $12.5 billion in 1990 to $26.4 billion in 1998), leading to huge trade deficits. Even if as a result of the growth in trade flows the import/GDP and export/GDP ratios have both grown (from 7.8 per cent to 10.2 per cent in the case of exports and from 9.0 per cent to 12.5 per cent in the case of imports between 1990-1995 and 1996-1998), Argentina is still a relatively closed economy in the international context.

The availability of foreign savings made it possible to finance the increasingly bigger current account deficits (that reached peaks of $11 billion in 1994 and $14.3 billion in both 1998 and 1999). FDI played a key role. According to official estimates, during 1992-1999 FDI financed 80 per cent of Argentina's current account deficit and

represented 60 per cent of net income of the capital and finance accounts. The role of FDI in balance-of-payments financing became especially important in 1995 and 1999, the only two years of recession in the 1990s, while foreign portfolio inflows sharply decreased or reversed. Foreign portfolio investment flows have been more significant than FDI, but they have also been more erratic (table 1).

Between 1990 and 1998, the manufacturing sector grew at an annual rate of 5 per cent. To cope with trade liberalization and increased competition, most manufacturing enterprises operating in Argentina implemented rationalization strategies to reduce costs and increase efficiency (Chudnovsky et al., 1996). At the same time, as part of a technological modernization strategy, capital goods imports by manufacturing enterprises increased from an annual average of $470 million during 1990-1991 to $2.6 billion during 1997-1998. The introduction of new organizational technologies — such as just in time, total quality systems, work teams etc. — has also been a significant feature of the restructuring process, especially among large firms (Kosacoff, 1998).

As a result of these trends, labour productivity in industry increased by 52 per cent between 1990 and 1997 (Alvaredo et al., 1998). The industrial productivity gap between Argentina and the world leader, the United States, diminished as domestic productivity rose from 55 per cent of the United States levels in 1990 to 67 per cent in 1996 (Katz, 1999). Regarding quality improvements, the number of firms or institutions with ISO 9000 certificates rose from only three in 1993 to 869 in 1999. In their search for higher productivity, many local firms reduced their personnel, as well as the local content of their products, weakening the domestic value chain and reducing the demand for labour (employment in the manufacturing sector decreased 6 per cent between 1990 and 1997). In this context, it is not surprising to find that foreign manufacturing enterprises have been very active in undertaking efficiency seeking activities. In comparison with national firms, foreign firms have quicker access to product, process and organizational innovations and can rely on intra-firm trade to get inputs and final products from other affiliates of the TNC system. Hence, it has been generally easier for TNCs *vis-á-vis* local firms to adapt themselves to the new rules of the game in the domestic economy.

M&As have been a key feature of this restructuring process. Their performance and impact are analyzed below. To have a better understanding of the context in which M&As have taken place, the next section presents the main trends regarding FDI flows and M&As during the 1990s, as well as the legal provisions regulating M&As in Argentina.

## M&As: main trends and legal provisions

Since M&As are closely related with the FDI boom in Argentina, it is useful to describe briefly the main features of the latter. At the beginning of the 1990s, most FDI inflows were channeled into the privatization of State enterprises in public utilities and services. Privatizations accounted for 46 per cent of total FDI inflows during 1992-1993, mostly in electric power and natural gas generation and distribution. Privatizations were also important in 1990, when the national telecommunications company was sold to foreign investors. While privatizations lost relevance by the mid-1990s, takeovers of private, mainly domestic, firms by TNCs became increasingly important. Their share of FDI inflows rose from 7 per cent during 1992-1993 to 61 per cent in 1999 (table 1). Privatizations together with acquisitions of private firms by TNCs accounted for almost 60 per cent of total FDI inflows between 1992 and 1999.

As a consequence of the growth in FDI inflows, the share of foreign-owned firms in the sales of the 1,000 leading firms in the Argentina has increased from 34 per cent in 1990 to 56 per cent in 1997, while the share of exports by TNCs increased from 31 per cent to 50 per cent in Argentina's total exports between the same years. In turn, between 1993 and 1997, foreign firms increased their share in total value added of the top 500 firms in Argentina from 62 per cent to 76 per cent; in total investments from 77 per cent to 86 per cent; and in employment from 40 per cent to 56 per cent. It is important to note that these are very high shares, comparable to those found in East Asian countries whose economies have been dominated traditionally by TNCs, such as Singapore.

Cross-border M&As in Argentina, according to UNCTAD, have increased from an annual average of $1.1 billion during 1991-

1994, to $7.9 billion during 1995-1999. As a result of the acquisition of YPF by Repsol, cross-border M&As inflows reached a record level in 1999, with $19.2 billion.

The sectoral distribution of M&As can be estimated from data compiled by the Industry, Commerce and Mining Secretariat. According to the Secretariat, M&As have been concentrated strongly in those industries in which privatizations have taken place (telecommunications, petroleum, electric power, gas transport and distribution, petrochemicals and steel), though not all M&As in those industries have been related to privatizations. M&As have also been significant in other industries, such as food and beverages, chemicals, automobiles and auto parts, pulp and paper, banking, retailing and wholesale trade and health services (table 2).

M&As have been the preferred modality of investment by TNCs in several activities. Ninety per cent of FDI in banking, 83 per cent in oil and gas, 46 per cent in retailing, 47 per cent in food and beverages, 54 per cent in chemicals, 48 per cent in electric power and 60 per cent in natural gas transport and distribution were undertaken through M&As between 1990 and 1999.

**Table 2. Industrial distribution of M&As in Argentina, 1990-1999**
*(Thousand of dollars and percentage)*

| | Cross-border M&As | | Domestic M&As | | Total M&As | |
|---|---|---|---|---|---|---|
| Industry | Value | Percentage | Value | Percentage | Value | Percentage |
| Petroleum and gas | 21 698 | 33.5 | 2 181 | 17.5 | 23 879 | 30.9 |
| Communications | 11 109 | 17.1 | 2 540 | 20.4 | 13 649 | 17.7 |
| Electric power | 5 132 | 7.9 | 1 534 | 12.3 | 6 667 | 8.6 |
| Banks and financial services | 5 940 | 9.2 | 653 | 5.2 | 6 593 | 8.5 |
| Food and beverages | 4 130 | 6.4 | 1 408 | 11.3 | 5 538 | 7.2 |
| Retail and wholesale trade | 3 659 | 5.6 | 719 | 5.8 | 4 378 | 5.7 |
| Gas transport and distribution | 2 204 | 3.4 | 1 183 | 9.5 | 3 387 | 4.4 |
| Chemicals | 1 671 | 2.6 | 141 | 1.1 | 1 812 | 2.3 |
| Pulp and paper | 941.9 | 1.5 | 65.4 | 0.5 | 1 007 | 1.3 |
| Automobiles and auto parts | 740.4 | 1.1 | 10.2 | 0.1 | 751 | 1.0 |
| Petrochemicals | 434.9 | 0.7 | 205.4 | 1.7 | 640 | 0.8 |
| Health services | 477.8 | 0.7 | 154.2 | 1.2 | 632 | 0.8 |
| Steel | 17 | 0.0 | 239 | 1.9 | 256 | 0.3 |
| **Total** | **64 855** | **100.0** | **12 444** | **100.0** | **77 300** | **100.0** |

*Source:* own elaboration of data obtained from the Industry, Commerce and Mining Secretariat.

Investors from the United States and Spain account for nearly 75 per cent of all cross-border M&As operations in Argentina between 1990 and 1999. France, Chile, Italy and the United Kingdom have also been significant investors through M&As. In turn, 77 per cent of all Spanish investments and 50 per cent of all United States and United Kingdom investments in Argentina during the same period were undertaken through M&As (table 3).

There is no reliable information about the impact of M&As on concentration ratios. Nonetheless, it is worth mentioning that the importance of the leading firms within Argentina's economy has increased in the 1990s. The value added generated by the largest 500 firms increased from 24 per cent to 27 per cent of the country's GDP between 1993 and 1997. In turn, the sales of the 1,000 leading firms increasid from 38 per cent of the GDP in 1990 to 44 per cent in 1997. Several studies (Chudnovsky et al., 1996) have showed rising concentration ratios in industries, such as steel, petrochemicals, banking, retailing etc.

It is important to take into account the fact that, until 1999, there was no effective control or regulations regarding M&A operations in Argentina. The Government did not use any special instrument to encourage or discourage cross-border M&As versus greenfield investments, and the 1980 Antitrust Law (No. 22262) contained no special provisions regarding mergers, acquisitions or joint ventures. Besides, that law was generally deemed as outdated and ineffective in the 1990s when concerns about the effects of the

**Table 3. Cross-border M&As in Argentina by country of purchaser, 1990-1999**

*(Thousands of dollars and Percentage)*

| Country | Value | Percentage |
|---|---|---|
| United States | 24 578 | 37.9 |
| Spain | 23 567 | 36.3 |
| France | 4 332 | 6.7 |
| Chile | 3 035 | 4.7 |
| United Kingdom | 2 726 | 4.2 |
| **Total** | **64 855** | **100.0** |

*Source:* own elaboration on data from the Industry, Commerce and Mining Secretariat.

growing market concentration in many areas of Argentina's economy were increasing. Parliamentary discussions on a new antitrust regime began in 1997, but it was only in September of 1999 when the Congress passed a new law. The complete takeover of YPF by Repsol in the first months of 1999 accelerated the approval of the new law.

The new Defense of Competition Law (Number 25156) stipulates the creation a Tribunal for the Defense of Competition (TDC) and increases the Government's power to block, or at least to regulate, M&As on the basis of an obligatory preliminary authorization system. All M&As involving firms whose joint local turnover exceed $200 million, or whose aggregated worldwide sales surpass $2.5 billion, must be notified to the TDC. The TDC may authorize, deny or establish certain requirements to approve the operation. Even if the law does not contemplate any specific follow-up by the Government once a M&A has been approved, the newly acquired firm is subject to the general dispositions of the law regarding competition restrictions and unfair market practices, abuses of dominant position etc.

The elements which the TDC must take into account when analyzing M&A operations are mainly related to competition effects. The Antitrust Law establishes that the eventual negative welfare effects of an M&A must be compared with the potential efficiency gains resulting from the operation. If the latter clearly exceeds the former, the operation should be authorized.

Since M&As have contributed to higher market concentration ratios in many business activities (e.g. petroleum, steel, petrochemicals, cement, banking, retailing etc.), it is expected that the new law may help to reduce the negative welfare effects of M&As through a more effective control of the dominant firms' market practices.

## The performance and impact of M&As

To examine the performance of firms participating in M&As *vis-à-vis* independent firms, data from a survey of technological behaviour conducted by Argentina's National Institute of Statistics and Census in 1997 were utilized (INDEC, 1998). The

survey was carried out for 1,639 manufacturing firms representing 54 per cent of sales, 50 per cent of employment and 61 per cent of exports in the manufacturing sector. The survey provided data on sales, foreign trade, employment, innovation activities, manufacturing practices, investments and other variables for the years 1992 and 1996.

The performance of manufacturing firms participating in M&As ("M&A firms") was compared with that of an appropriate control group of firms that did not participate in M&As in the same industries and of similar size as those that did. (See annex for details.) Matching firms were arranged in pairs in three different samples. First, the performance of M&A firms, both domestic and cross-border, was compared with that of non-M&A firms (sample A). Secondly, the performance of firms participating in cross-border M&As was compared with that of domestically owned firms not participating in M&As (sample B). Third, the performance of domestic M&As was compared with that of domestic firms not participating in M&As (sample C).[7] In addition to this indirect comparison between foreign and domestic M&A firms, the performance of the two groups (not necessarily including the same firms) was compared directly with each other (sample D). Since all but three of the M&A firms included in these four samples were privately owned before the takeover, the analysis is primarily related to M&As involving private firms.

The findings show (table 4) that M&A firms have clearly been more dynamic than non-M&A firms. The average sales, productivity, exports, investment expenditures and imports of capital goods have grown much more rapidly in M&A firms than in non-M&A firms, with export propensity showing the smallest difference in growth (sample A). M&A firms have also introduced more improvements in product and process technologies and in organizational and managerial practices. They have incurred larger expenditures in training and have increased their R&D expenditures

[7] It is worth noting that samples B and C are not a part of sample A. This is because, in sample A, M&A firms were matched with non-M&A firms regardless of whether or not the latter were domestic or foreign owned. Since in samples B and C, respectively, foreign and domestic M&A firms were compared with domestic non-M&A firms, some of the firms included in the control group in sample A had to be replaced.

**Table 4. The performance of foreign and domestic M&A and non-M&A firms in Argentina in the 1990s**

*(Number and percentage)*

| | Sample A[a] | | Sample B[b] | | Sample C[c] | | Sample D[d] | |
|---|---|---|---|---|---|---|---|---|
| | **M&A firms (All)** | **Non-M&A firms (All)** | **M&A firms (Foreign)** | **Non-M&A firms (Domestic)** | **M&A firms (Domestic)** | **Non-M&A firms (Domestic)** | **M&A firms (Foreign)** | **M&A firms (Domestic)** |
| Number of firms | 99 | 99 | 51 | 51 | 41 | 41 | 19 | 19 |
| *Change (in per cent) between 1992 and 1996* [e] | | | | | | | | |
| Sales | 51* | 25 | 63** | 25 | 24 | 28 | 64 | 44 |
| Exports | 143 | 122 | 138 | 110 | 111 | 58 | 145 | 48 |
| Imports of inputs and final goods | 56 | 34 | 25 | 31 | 58 | 70 | 161 | 214 |
| Imports of capital goods | 166 | 57 | 189 | -15 | 23 | -39 | 53 | 328 |
| Investments in productive assets | 92 | 52 | 85 | 13 | 36 | 18 | 65 | 97 |
| Employment | -4 | -5 | 1 | -9 | -18 | 2 | 3 | -23 |
| Productivity (37 pairs) | 50 | 29 | n.a.[f] | n.a.[f] | n.a.[f] | n.a.[f] | n.a.[f] | n.a.[f] |
| R&D expenditures | 70 | 50 | 53 | 34 | 278 | 39 | 79 | 220 |
| Training expenditures accumulated between 1992 and 1996 (thousand dollars) | 569* | 113 | 820 | 150 | 459 | 133 | 261 | 115 |
| Improvements in product and process technology and organizational and managerial routines (per cent)[g] | 62.1* | 55.8 | 61.6* | 49.4 | 55.8 | 50.2 | 56.8 | 71.0 |

/...

**Table 4. The performance of foreign and domestic M&A and non-M&A firms in Argentina in the 1990s (concluded)**

| | Sample A[a] | | | | Sample B[b] | | | | Sample C [c] | | | | Sample D[d] | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | M&A firms (All) | | Non-M&A firms (All) | | M&A firms (Foreign) | | Non-M&A firms (Domestic) | | M&A firms (Domestic) | | Non-M&A firms (Domestic) | | M&A firms (Foreign) | | M&A firms (Domestic) | |
| *Ratios* [h] | 1992 | 1996 | 1992 | 1996 | 1992 | 1996 | 1992 | 1996 | 1992 | 1996 | 1992 | 1996 | 1992 | 1996 | 1992 | 1996 |
| Exports/Sales (per cent) | 8.7 | 10.7 | 6.7 | 9.7 | 10.9 | 12.8 | 6.0 | 8.0 | 6.1 | 7.9 | 5.0 | 6.7 | 13.2 | 16.0 | 11.7 | 11.1 |
| R&D/Sales (per cent). | 0.14 | 0.19 | 0.15 | 0.20 | 0.20 | 0.24 | 0.24 | 0.28 | 0.04 | 0.12 | 0.11 | 0.10 | 0.10 | 0.14 | 0.07 | 0.17 |

*Source*: own calculations on INDEC, 1998.

a M&A firms include firms that have been acquired by local and/or by foreign investors between 1990 and 1996. Non-M&A firms include both local firms, as well as TNCs that did not undergo a change of ownership.

b Foreign M&A firms include firms in which foreign investors have acquired at least a 10 per cent stake in their total equity. Domestic non-M&A firms include firms in which the total equity stake is in the hands of domestic investors.

c Domestic M&A firms include firms that have been acquired by domestic investors. Domestic non-M&A firms include firms in which the total equity stake is in the hands of domestic investors.

d Foreign M&A firms include firms in which foreign investors have acquired at least a 10 per cent stake of in their total equity. Domestic M&A firms include firms that have been acquired by domestic investors.

e Estimated as the increase in the average values of each group.

f Since not all the firms delivered data on productivity, only 37 pairs could be arranged to compare the evolution productivity between M&A and non-M&A firms. In the case of samples B, C and D, the size of the sample was too small and the comparative data lacked representatives, hence this information was not included.

g Firms were asked to inform whether or not they had adopted 19 different types of possible improvements in the fields of product and process technology, labour organization, quality control, managerial routines, marketing etc. For each firm, the share of the adopted improvements in relation to the total number of possible improvements was estimated. Thus, the data on this row represent the average of each of those ratios.

h Estimated as the average of each firm's ratio.

* Indicates statistical significance at the 0.05 level.

** Indicates statistical significance at the 0.01 level.

more rapidly. Last but not least, and contrary to expectations, the average employment level has not fallen more in non-M&A firms,[8] despite the fact that sales per employee have grown considerably faster in M&A firms than in their non-M&A counterparts. The average differences in performance between M&A firms and non-M&A firms were found to be statistically significant in the case of sales, training expenditures and technological, organizational and managerial improvements.[9]

The performance of firms acquired through cross-border M&As *vis-à-vis* domestic non-M&A firms was found to be superior for almost all of the variables examined, except imports (sample B). In fact, samples A and B showed the same pattern of performance for all but one of the variables estimated.[10] Surprisingly, employment in foreign M&A firms increased slightly, while that in domestic non-M&A firms decreased considerably (though it should be noted that sales per employee increased more in M&A firms than in non-M&A firms). The differences in performance between foreign M&A firms and domestic non-M&A firms were statistically significant for sales and technological, organizational and managerial improvements.

The comparison of domestic M&A firms with domestic non-M&A firms (sample C) does not provide clear evidence of a better performance by the former. Sales by domestic M&As firms grew less rapidly than those by non-M&A firms. Moreover, whereas employment was significantly reduced in the former, it increased slightly in the latter. Domestic M&As showed stronger performance in training and technological, organizational and managerial changes, but the differences compared with non-M&A firms were not

[8] This finding does not stand against the widely known fact that, when an M&A occurs, it is usually the case that job rationalization takes place. In this case, the initial loss of jobs may have been compensated by the creation of new jobs once the acquired firms were restructured and began to expand to increase market share. The available evidence, nonetheless, is not detailed enough to provide information on the extent to which this sequence has taken place in the firms in the samples.

[9] Statistical significance tests were performed for samples A, B and C, but not for sample D because its size was too small.

[10] The only difference is that while in sample A imports by M&A firms increased by more than imports by non-M&A firms, the opposite occurred in sample B.

statistically significant. On the whole, the findings, combined with those regarding the relative performance of foreign M&A firms as compared with non-M&A firms, suggest that firms acquired through cross-border M&As have tended to perform better than those acquired through domestic M&As.

The performance of foreign versus domestic M&As is compared in sample D. Since the sample size is too small, the results are not statistically significant. Nevertheless, they suggest that foreign M&A firms performed better in terms of sales and exports, while domestic M&A firms performed better in terms of investment, R&D expenditures and technological, organizational and managerial improvements. As regards employment, domestic M&A firms rationalized their labour forces more than foreign M&A firms, in which employment increased slightly. This finding, jointly with the findings of the analysis of samples B and C, suggest that contrary to expectations domestic M&As are more prone to job rationalization than foreign M&As.

In spite of the generally favourable microeconomic effects of M&As in Argentina, it is important to note two weaknesses in the performance of M&A firms (that are also weaknesses for most firms in Argentina): export behaviour and R&D activities.

Export propensities have increased during the 1990s, but they are still quite low.[11] Hence the increased efficiency after the take over may have contributed to a rise in domestic market shares, but not to a significant increase in export volumes. This finding goes in line with findings reported in previous studies (Chudnovsky, López and Porta, 1997; Chudnovsky and López, 2000) showing that manufacturing affiliates in Argentina, having increased their export propensities during the 1990s, still have the bulk of their sales in the domestic market.

[11] The fact that M&A firms' export propensities are low is not related to the industrial distribution of foreign M&As, since the latter, as far as the manufacturing sector is concerned, have not been concentrated specifically in low-export industries.

This situation may change in the future. Once ongoing investments are made and efficiency gains are consolidated, M&A firms may be in a better position to increase their exports, especially if a more favourable macroeconomic environment and specific policies for export promotion are implemented. However, in the case of cross-border M&As, greater export coefficients by foreign affiliates in Argentina and greater integration to TNC systems do not only depend on local conditions, but they are also influenced by global and regional decisions by the parent firms.

In turn, although increasing, the small size of R&D expenditures in relation to sales (table 4) is to some extent a reflection of a more general phenomenon in Argentina. R&D expenditures as a percentage of GDP are low (0.42 per cent) not only when compared with industrialized countries, but also in relation to Brazil and Chile. All expenditures by the business sector account for only 0.12 per cent of Argentina's GDP.

The same survey used here showed that in 1996 there were only 407 firms with in-house R&D employing 4,900 people, or 1.4 per cent of their total personnel. R&D in relation to sales was on average 0.37 per cent. The 125 foreign-owned firms included in the survey had a slightly higher expenditure on sales (0.39 per cent) than the 282 national firms (0.35 per cent). Hence, although the M&A firms increased somewhat their R&D expenditures, their performance in this area is even below the average both for foreign-owned, as well as domestic firms.

The evidence available on R&D efforts suggests clearly a lack of technological deepening. This may be attributed to several factors: the lack of design and development capabilities in the acquired firms, the weaknesses of local supply linkages and institutions, explicit policies of TNCs regarding the role to be played by the affiliates in Argentina and/or the lack of consistent technology policies, despite some timid recent initiatives geared to foster R&D activities in private firms (Chudnovsky, Niosi and Bercovich, 2000). In any case, the evidence suggested that spillovers from innovative activities carried out in M&A firms have been quite low.

## Concluding remarks and policy implications

In a developing country like Argentina, the discussion about M&A-related policies includes several issues and (potentially) conflicting objectives. On the one hand, M&As should be controlled to avoid serious negative welfare effects and to encourage actual market competition. On the other hand, M&As may have significant positive developmental effects that should be counterbalanced against any negative ones. Furthermore, an M&A operation could be the only way to avoid the closure of local firms, often lacking the capabilities needed to compete in an open economy.

Whereas the welfare effects of M&As are not considered here, evidence on the efficiency effects of M&As has been analyzed. This evidence tends to support the above mentioned positive view, which states that M&As have been a useful tool for undertaking successful microeconomic restructuring in developing countries that enter into far-reaching trade liberalization phases.

In the specific case of Argentina, in which almost no public policies were in place during the 1990s to assist local firms to adapt to the new rules of the game after many years of inward oriented economic regimes, M&As operated as a sort of "market-driven" restructuring strategy, which appears to have delivered some positive results in most cases. Some of the results are not statistically significant and, hence, must be taken cautiously. Nonetheless, the evidence clearly suggests that M&A firms, besides being more dynamic in terms of domestic sales growth than non-M&A firms, have also devoted more resources to training activities and have been able to introduce more improvements in process and product technologies, as well as in managerial and organizational routines. In turn, contrary to expectations, job rationalization has not been more significant in M&A firms than in non-M&A firms, although it must be noted that M&A firms have generally increased their sales per employee ratios faster than non-M&A firms.

While successful microeconomic restructuring has contributed to an upgrading in the long-term competitiveness of the acquired firms, some social benefits often assumed by the positive

view of M&As are not visible. Fore example, the restructuring process has not been reflected in increased export propensities of the firms surveyed, which remain low. Furthermore, even if spillovers have been created by M&As through human resource training or domestic innovative activities (as measured by R&D expenditure), they are negligible.

On the whole, these findings call for further research in order to learn more about the microeconomic dynamics of M&As, as well as their general impact on host economies. Regarding the former, it is of particular interest to shed more light on the factors that have been most relevant in the improved performance of M&A firms *vis-à-vis* non-M&A firms. For instance, it may be argued that the good performance of the acquired firms after the take over may be attributed partly to the fact that they possessed previous some key competitive capabilities that were enhanced by the new owners. If this is the case, these firms could have survived by themselves, if a more favourable policy environment had been in place (e.g. better access to credit and technology). More research is required on this relevant policy issue.[12]

Regarding the relative performance of domestic and foreign M&As, even if the available evidence is far from conclusive, it tends to suggest that foreign M&A firms have expanded relatively faster in the domestic market than their local counterparts and, perhaps more importantly, that job rationalization has been deeper in domestic M&A firms. Nonetheless, it is not clear that foreign M&As may have contributed more than domestic M&As to upgrading the competitiveness of the local firms. More research is also needed on this issue.

In turn, the consequences of the M&A boom for Argentina's economy as a whole need to be addressed seriously by future research.

[12] Unfortunately, the data available in the survey on which the present research is based are insufficient to evaluate properly whether or not M&A firms have been more promising than non-M&A firms. Besides, since the survey was confidential, it was not possible to know the names of the surveyed firms (knowing the names of the firms would have permitted the exploration of other sources of information to complement the data).

The phenomenon is indeed very recent to evaluate properly what have been the contributions of M&As in terms of exports, investments and spillovers. Regarding employment, the evidence does not seem to support the fears that M&As are job-destructive. This may be interpreted in the sense that M&As, insofar as they enhance microeconomic competitiveness, may preserve some jobs that would have been probably lost in a context in which many old domestic firms are not capable of keeping up with foreign competition in the domestic market and complementary policies and institutions are not in place.

Which are the policy implications of the findings presented here? On the one hand, from the fact that M&As seem to have played a positive role in the microeconomic restructuring of Argentina's manufacturing sector, it cannot be concluded that M&As should be encouraged *per se*. Defence of competition is surely a key part of M&A related policy. But other microeconomic effects of M&As should also be taken into account, since M&As may play a positive role in the restructuring process of the economies of developing countries. In this light, Argentina's new law seems to go in the right direction, since it contemplates explicitly the need to counterbalance the welfare effects with efficiency gains of M&A operations. On the other hand, if policies geared to assist domestic firms to restructure their operations and enhance their competitiveness both at home and abroad would have been in place, a non purely market-driven restructuring process might have occurred. Had these policies been undertaken, as suggested before, perhaps many of the firms acquired by TNCs could have survived on their own, thus reducing the extent of the denationalization process that took place in Argentina in the 1990s.

In fact, both kinds of restructuring policies, may be complementary. Horizontal policies, such as those related to export promotion, information provision, better technological infrastructure, R&D incentives, labour training, industrial extensionism etc., may not only upgrade the competitive capabilities of domestic firms, but they may also enhance TNC spillovers in terms of technology, international market networks and other strategic assets. In this light, it can be suggested that the restructuring process would have been

less costly and more successful if explicit policies, such as those suggested above, would have been in place, even in a scenario of "denationalization" of the domestic industry.

This obviously leads to the issue of foreign versus domestic M&As, which relates to a key debate within development economics, namely, on the role of domestic conglomerates versus TNCs. Many analysts used to argue that for a developing country to catch up with the more advanced countries, one of the prerequisites is to have strong local companies or conglomerates. These conglomerates first operate in the local market, but later advance towards greater levels of internationalization through exports and, eventually, through FDI. Japan and the Republic of Korea are two examples frequently quoted to support this hypothesis. If it can be proven that domestic M&As may also be an apt tool for microeconomic restructuring, it might be suggested that governments in developing countries should foster a market concentration process led by domestic conglomerates, which could increase their size and enhance their competitive capabilities. Although more research is needed on this issue, the findings presented do not support this hypothesis.

Finally, regarding the global impact of foreign M&As on host economies, it can be said that the benefits stated by the positive view cannot be taken for granted. Time, and especially a well defined set of policies, are required for M&As to contribute significantly in terms of exports, innovative activities etc., thus rendering not only microeconomic, but also macroeconomic and social positive impacts on host economies. In sum, further research is needed on the microeconomic, dynamics and on the macroeconomic and social impacts of M&A (foreign as well as domestic), as well as on the pros and cons of different restructuring strategies to diagnose better the concerns and to suggest sensible policy recommendations to developing countries that now confront the same challenges that Argentina has been facing since the early 1990s.■

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## Methodological and statistical annex

To test whether significant differences existed in the performance of M&A and non-M&A firms, as well as between cross-border and domestic M&As, during the period 1992-1996, a matched-pairs approach was used.

The statistical test consisted of arranging pairs of firms belonging to the same industry and similar in terms of sales in 1992 (i.e. differences in sales should not exceed 15 per cent). In the case of mergers, the specified criteria were applied to the combined sales of the merged companies, while in the case of acquisitions only the sales of the acquired company were taken into account. To match pairs by industry, the ISIC-Rev. 3 (International Standard Industry Classification) at the 3 digit-level was used (see annex table 1 for the industry distribution of the different samples). When there were more

**Annex table 1. Distribution of firms by industry in each sample**

*(Number of firms)*

| Industry | Sample A | Sample B | Sample C | Sample D |
|---|---|---|---|---|
| Meat, poultry, fish and other related products | 18 | 6 | 12 | 2 |
| Milk, cream and derivatives | 2 | - | 2 | - |
| Other food products | 18 | 8 | 12 | 6 |
| Beverages | 22 | 12 | 14 | 12 |
| Textiles | 10 | 2 | 8 | 2 |
| Leather | 4 | 2 | 2 | 2 |
| Pulp and Paper | 6 | 4 | - | - |
| Printing and publishing | 10 | 2 | 6 | 2 |
| Basic chemicals | 8 | 4 | 2 | 4 |
| Pharmaceutical products and other chemicals | 26 | 20 | 4 | 4 |
| Rubber | 4 | - | - | - |
| Plastic products | 8 | - | 6 | - |
| Glass and products made of glass | 2 | - | - | - |
| Other non-metallic minerals | 8 | 4 | 2 | - |
| Iron and steel | 4 | 2 | - | - |
| Fabricated metal products, except machinery and transport equipment | 10 | 6 | 6 | 2 |
| Special industrial machinery | 4 | 2 | 2 | - |
| Electrical household appliances | 12 | 8 | 4 | 2 |
| Other electrical equipment, components and accessories | 2 | 2 | - | - |
| Medical equipment | 2 | 2 | - | - |
| Motor vehicles | 2 | 2 | - | - |
| Automotive parts and components | 16 | 14 | - | - |
| TOTAL | 198 | 102 | 82 | 38 |

*Source*: own calculations.

than two non-M&A firms fitting the industry and sales criteria, the chosen one was that closest to the respective M&A firm in terms of sales.

Once the pairs were arranged, the average of the absolute differences in the accumulated growth rates of sales, exports, imports, employment, investment and R&D was estimated. In the case of training, the only available data were those of accumulated expenditures between 1992 and 1996. Regarding technological, organizational and managerial improvements, the firms were asked to inform how many of a total of 19 possible improvements had been implemented between 1992 and 1996. Hence, in these two cases, the average differences in performance are not related to growth rates, but to total training expenditures and percentage of adopted improvements, respectively, between 1992 and 1996.

The large size of samples A, B and C allowed to make use of the Central Limit Theorem to assume normality and to use standard techniques of statistical inference. In all cases, the null hypothesis was that there was no difference in performance between M&As and non-M&As. A positive statistical coefficient indicated a difference in favour of M&As, and the difference was considered significant at the 5 per cent level when it exceeded the critical value of 1.96, and at the 1 per cent level when it exceeded the critical value of 2.57 (see highlighted values in annex table 2).

## Annex table 2. Basic calculations

*(Thousands of dollars and percentage)*

| Sample A | M&As 1992 | M&As 1996 | M&As Growth rate | Non-M&As 1992 | Non-M&As 1996 | Non-M&As Growth rate | Statistical coefficient |
|---|---|---|---|---|---|---|---|
| *(Thousands of dollars)* | | | | | | | |
| Sales | 36 604 | 55 239 | 51% | 36 639 | 45 916 | 25% | **2.05*** |
| Exports | 3 244 | 7 866 | 143% | 2 477 | 5 491 | 122% | 1.39 |
| Imports of final goods and inputs | 4 708 | 7 364 | 56% | 3 935 | 5 281 | 34% | 1.56 |
| Imports of capital goods | 437 | 1 161 | 166% | 571 | 895 | 57% | 1.34 |
| Investments in productive assets | 1 945 | 3 730 | 92% | 2 384 | 3 621 | 52% | 1.20 |
| R&D expenditures | 47 | 80 | 70% | 48 | 72 | 50% | 1.43 |
| Training expenditures (1992-1996) | - | 569 | - | - | 113 | - | **2.10*** |
| Number of employees | 413 | 397 | -4% | 373 | 356 | -5% | 1.21 |
| Technological/productive/ Organizational improvements (1992-1996) | - | 62% | - | - | 56% | - | **2.00*** |

| Sample B | M&As 1992 | M&As 1996 | M&As Growth rate | Non-M&As 1992 | Non-M&As 1996 | Non-M&As Growth rate | Statistical coefficient |
|---|---|---|---|---|---|---|---|
| *(Thousand dollars)* | | | | | | | |
| Sales | 40 496 | 65 856 | 63% | 40 963 | 51 267 | 25% | **2.60**** |
| Exports | 4 137 | 9 845 | 138% | 2 679 | 5 638 | 110% | 0.84 |
| Imports of final goods and inputs | 6 140 | 7 654 | 25% | 4 731 | 6 198 | 31% | 1.75 |
| Imports of capital goods | 526 | 1 521 | 189% | 657 | 560 | -15% | 1.57 |
| Investments in productive assets | 2 656 | 4 913 | 85% | 2 525 | 2 842 | 13% | 0.92 |
| R&D expenditures | 71 | 109 | 53% | 104 | 140 | 34% | 1.28 |
| Training expenditures (1992-1996) | - | 820 | - | - | 150 | - | 1.75 |
| Number of employees | 436 | 439 | 1% | 476 | 432 | -9% | 1.88 |
| Technological/productive/ Organizational improvements (1992-1996) | - | 62% | - | - | 49% | - | **2.48*** |

| Sample C | M&As 1992 | M&As 1996 | M&As Growth rate | Non-M&As 1992 | Non-M&As 1996 | Non-M&As Growth rate | Statistical coefficient |
|---|---|---|---|---|---|---|---|
| *(Thousand dollars)* | | | | | | | |
| Sales | 27 065 | 33 638 | 24% | 27 499 | 35 216 | 28% | 0.45 |
| Exports | 1 655 | 3 499 | 111% | 3 404 | 5 371 | 58% | 0.44 |
| Imports of final goods and inputs | 1 784 | 2 817 | 58% | 1 221 | 2 080 | 70% | 0.70 |
| Imports of capital goods | 577 | 706 | 23% | 603 | 365 | -39% | 1.25 |
| Investments in productive assets | 1 588 | 2 164 | 36% | 1 623 | 1 917 | 18% | 1.08 |
| R&D expenditures | 7 | 26 | 278% | 27 | 38 | 39% | 1.13 |
| Training expenditures (1992-1996) | - | 459 | - | - | 133 | - | 0.75 |
| Number of employees | 375 | 306 | -18% | 299 | 304 | 2% | -1.44 |
| Technological/productive/ Organizational improvements (1992-1996) | - | 56% | - | - | 50% | - | 1.04 |

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## Annex table 2. Basic calculations (concluded)

*(Thousands of dollars and percentage)*

| Sample D | Foreign M&As 1992 | Foreign M&As 1996 | Foreign M&As Growth rate | Domestic M&As 1992 | Domestic M&As 1996 | Domestic M&As Growth rate | Statistical coefficient |
|---|---|---|---|---|---|---|---|
| *(Thousand dollars)* | | | | | | | |
| Sales | 33 189 | 54 451 | 64% | 33 170 | 47 618 | 44% | - |
| Exports | 3 818 | 9 353 | 145% | 6 031 | 8 914 | 48% | - |
| Imports of final goods and inputs | 1 965 | 5 119 | 161% | 2 717 | 8 520 | 214% | - |
| Imports of capital goods | 884 | 1 352 | 53% | 243 | 1 041 | 328% | - |
| Investments in productive assets | 3 146 | 5 181 | 65% | 2 220 | 4 371 | 97% | - |
| R&D expenditures | 58 | 104 | 79% | 12 | 38 | 220% | - |
| Training expenditures (1992-1996) | - | 261 | - | - | 115 | - | - |
| Number of employees | 348 | 358 | 3% | 434 | 336 | -23% | - |
| Technological/productive/ Organizational improvements (1992-1996) | - | 57% | - | - | 71% | - | - |

*Source*: own calculations based on INDEC, 1998.

- Not applicable.

* Significant at the 0.05 level.

** Significant at the 0.01 level.

# The internationalization of retail banking: the case of the Spanish banks in Latin America

Mauro F. Guillén and Adrian E. Tschoegl*

Since 1995, two Spanish banks — Banco Santander Central Hispano (BSCH) and Banco Bilbao Vizcaya Argentaria (BBVA) — have become the largest retail banks in Latin America. This recent development merits careful analysis because foreign direct investment is rare in retail banking. The finding is that the Spanish banks are exhibiting asset-seeking, asset-exploiting and oligopolistic behaviours, thus posing no serious challenge to established theories of foreign direct investment. The implications for research on cross-border banking are also discussed.

## Introduction

In a review of the literature on cross-border banking, A. E. Tschoegl (1987) concluded that retail banking does not generally lend itself to foreign direct investment (FDI). Retail banking is a mature industry, proprietary knowledge is difficult to protect against imitation, and there is no reason to expect foreign banks to have any particular advantage over domestic banks familiar with their local environment. Historically, only Citibank (now Citigroup) has pursued a global retail strategy, though it has focused on credit card and banking services for an urban professional class without attempting to enter the mass retail market as the Spanish banks in Latin America are doing.

* The authors are Associate Professor of Management and Assistant Professor of Management, respectively, at The Wharton School, University of Pennsylvania, Philadelphia, United States. The authors would like to thank the anonymous referees for helpful suggestions. Citibank provided a generous grant to the Wharton School that made this research possible. Thirty-three regulators and bankers gave freely their time to answer questions. The authors relied on Irene Corominas, Pilar Freire, Gerardo Méndez, Camilo Muñoz and Arnaud Ripert for able research and logistical support. Lastly, Carlos Pertejo provided useful industry reports. Still, the analysis and opinions presented here are those of the authors, and all flaws are solely the authors' responsibility.

Since 1995, three Spanish banks — Banco Santander (Santander), Banco Bilbao Vizcaya (BBV) and Banco Central Hispano (BCH) — have become the largest foreign banks in Latin America. (In 1999 Santander and BCH merged to form Banco Santander Central Hispano (BSCH) and BBV merged with formerly State-owned Argentaria to form BBVA.) These banks have spent over $7 billion to acquire large stakes in 30 major banks located in more than 10 different countries (table 1). The combined assets of their Latin American operations amount to some $40 billion. Moreover, the information in table 1 does not include the numerous acquisitions of credit card, consumer and commercial loan, insurance, stock brokerage and pension fund management companies, electronic banking services, or earlier acquisitions and pre-existing operations. As of mid-2000, BSCH was the largest retail bank in the region, with 9.4 per cent of all banking assets, followed by BBVA (7.5 per cent), Brazil's Bradesco (4.9 per cent), Mexico's Banamex (3.4 per cent) and BankBoston (3.3 per cent). The Spanish banks hold leading positions in every large market, except for Brazil,[1] at least until BSCH's successful bid in late-2000 for Banco do Estado de São Paulo (Banespa).

What is novel about this expansion is that the Spanish banks are acquiring some of the largest domestic banks in their target countries and are entering the general commercial and mass retail markets. Furthermore, the stock market seems to have endorsed this strategy. Of the world's 50 largest banks (in terms of market capitalization), BBV (at 56 per cent) and Santander (47 per cent) ranked first and third, respectively, in terms of total stockholder returns between 1993 and 1998.[2] The recent turmoil in emerging markets reduced the banks' valuations, but this reflects judgments about the markets and not necessarily about the banks' activities.

The approach taken here in this paper is evolutionary. Like biological evolution, evolutionary economics is a historical science. As E. Mayr (2000) points out, the evolutionist attempts to explain events and processes that have already taken place. The aim is not to

[1] *El País*, 14 June 2000, p. 84.
[2] *The Banker*, July 1998, p. 20.

**Table 1. Acquisitions of Banks[a] in Latin America since 1990 by Spanish banks**

*(Million of dollars and percentage)*

| Acquisition year[b] | Acquirer | Bank acquired | Country/ economy | Per cent stake[c] | Purchase Price[c] |
|---|---|---|---|---|---|
| 1990 | Santander | Caguas Central Federal Savings Bank | Puerto Rico | 100 | 51 |
| 1991 | BBV | Probursa | Mexico | 70 | 480 |
| 1992 | BCH | GFBital | Mexico | 8 | 105 |
| 1995 | OHCH[d] | Banco Santiago | Chile | 100 | 1 050 |
| | OHCH | Banco del Sur | Peru | 98 | 108 |
| | Santander | Banco Interandino & Intervalores | Peru | 100 | 45 |
| | Santander | Banco Mercantil | Peru | 100 | 44 |
| 1996 | BBV | Banco Francés del Río de la Plata | Argentina | 60 | 300 |
| | BBV | Banco Ganadero | Colombia | 62 | 328 |
| | BBV | Banco Oriente & Banco Cremi | Mexico | 100 | 21 |
| | BBV | Banco Continental | Peru | 79 | 256 |
| | BBV | Banco Provincial | Venezuela | 51 | 300 |
| | OHCH | Banco Tornquist | Argentina | 100 | 75 |
| | Santander | Banco Osorno y La Unión | Chile | 51 | 496 |
| | Santander | Banco Central Hispano Puerto Rico | Puerto Rico | 99 | 289 |
| | Santander | Banco de Venezuela | Venezuela | 99 | 351 |
| 1997 | BBV | Banco de Crédito Argentino | Argentina | 100 | 466 |
| | Santander | Banco Río de la Plata | Argentina | 53 | 1 068 |
| | Santander | Banco Noroeste | Brazil | 100 | 500 |
| | Santander | Banco Geral do Comercio | Brazil | 100 | 202 |
| | Santander | Banco Comercial Antioqueño | Colombia | 59 | 146 |
| | Santander | Grupo Financiero InverMéxico | Mexico | 61 | 502 |
| 1998 | BBV | Banco Industrial | Bolivia | | |
| | BBV | Banco Excel Economico | Brazil | 100 | 450 |
| | BBV | Banco Hipotecario de Fomento | Chile | 62 | 352 |
| | BBV | Banco Ponce | Puerto Rico | 100 | 166 |
| | BBV | Opns. of Chase Manhattan | Puerto Rico | | 50-60 |
| | BBV | Banco Pan de Azúcar | Uruguay | | |
| | BCH | Banco de Galicia y Buenos Aires | Argentina | 10 | 200 |
| | OHCH | Banco Santa Cruz | Bolivia | 90 | 168 |
| | OHCH | Banco Asunción | Paraguay | 98 | |
| 1999 | Santander | Banco de Río Tercero | Argentina | | 6 |
| | BBV | CorpBanca | Argentina | 100 | 84 |
| 2000 | BSCH | Banco Meridional | Brazil | 97 | 1 000 |
| | BSCH | Banco do Estado de São Paulo | Brazil | 33[e] | 3 600 |
| | BSCH | Banco Serfin | Mexico | | 1 500 |
| | BSCH | Banco Caracas | Venezuela | 85 | 340 |
| | BBVA | Bancomer | Mexico | 30-40 | 1 400 |

*Sources*: annual reports and news reports.

[a] We have not listed the numerous acquisitions of credit card, consumer and commercial loan, insurance, stock brokerage and pension fund management companies.

[b] Year of initial purchase even if subsequent purchases followed.

[c] Cumulative to present.

[d] A holding company jointly owned by Banco Central Hispano (BCH) and the Luksic family through its holding in Banco O'Higgins.

[e] Of the total equity. This represents a majority share of the voting capital.

prove, i.e. test, a particular explanation; rather, the intention is to describe a unique phenomenon and see the extent to which existing FDI theory helps to understand it, or whether FDI theory requires modification (Eisenhardt, 1989). The focus is on the phenomenon, not the theory, and the research approach is idiographic (i.e. a case study). As L. Bengtsson et al. (1997) point out, idiographic research seeks to create rich description that emphasizes qualitative and multi-aspect concerns, in contrast to the nomothetic approach that seeks statistical generalizations based on the analysis of a few aspects of large samples. The research included semi-structured interviews with 33 bankers and bank regulators in Latin America and Spain (see appendix A), and examination of bank documents, industry reports and banking system statistics.

Lastly, the object of the analysis presented here is the foreign bank. This is in contrast to the stream of research of economists, such as S. Claessens and M. Jansen (2000), and the authors of the chapters in their book, which take the markets that foreign banks enter as their object.

The sudden foray by the hitherto unknown Spanish banks brings up the standard six questions in any study of FDI (Caves, 1996) — who, where, what, when, how and why? **Who** is the question of exactly which banks are responsible for the phenomenon. **Where** raises the issue of the choice of Latin America as the target region. **What** is the question of retail banking — the banks' apparently anomalous choice of the product market to enter. **When** involves the timing of the banks' expansion. **How** is the question of the banks' different market entry strategies. **Why** is the issue of the reasons behind the banks' strategies. We deal with each of these questions in turn. Lastly, we also discuss some policy implications of the entry of foreign bank for host countries.

## Who: Santander and BCH (now BSCH) and BBV (now BBVA)

BSCH and BBVA are the survivors in an ongoing process of consolidation in Spain's banking sector. For decades, seven big institutions dominated Spanish banking. Given their extensive branch

networks and the tight regulatory framework, they grew primarily by acquiring smaller institutions. For much of the postwar period, these banks operated as a *de facto* cartel; the banks met regularly to fix interest rates and lobby the Government (Pérez, 1997). By the late 1980s, however, the situation started to change. Competition for market share intensified, and the Government encouraged mergers as a way to break the cartel and to prepare for European integration (Pastor, Peréz and Quesada, 2000). Intermediation margins fell and, though still solid, the banks worried about their long-term profitability. Besides entering new product markets — stock brokerage, pension funds and value-added services — several of the big banks began to view international expansion as a way to enhance profitability by exploiting their skills more fully.

In 1995 Santander, BBV and BCH were fairly similar in terms of age, size and focus on retail banking. Yet, they differed in terms of control, managerial style and strategic posture (Interviews #7, 9, 14, 16, and 17 in appendix A). A brief profile of each bank reveals these common and divergent features, and how they have shaped the banks' international strategies.

**Banco Santander**, the largest bank in Spain as of 1995 (see table 2), was founded in 1857. It was a commercial bank and also a bank of issue until 1874, when note issuance became a monopoly of the Banco de España, the central bank. Although Santander initially

**Table 2. Characteristics of the leading Spanish financial institutions, 1997**

*(Billions of dollars and percentage)*

| Item | Santander[a] | BBV | BCH | Argentaria |
|---|---|---|---|---|
| Assets (billion dollars) | 171 | 139 | 77 | 77 |
| Net loans (billion dollars) | 72 | 57 | 39 | 42 |
| Net interest income/total assets (per cent) | 2.3 | 3.0 | 2.7 | 1.9 |
| Operating expenses/total assets (per cent) | 2.6 | 2.8 | 2.5 | 1.7 |
| Return on asset (per cent) | 0.7 | 1.0 | 0.6 | 0.6 |
| Return on equity (per cent) | 19 | 18 | 11 | 11 |
| Branches (in Spain) | 3 842 | 2 829 | 2 659 | 1 734 |
| Branches (abroad) | 1 446 | 1 520 | 212 | 60 |
| Employees (number) | 72 740 | 60 282 | 27 930 | 15 354 |

*Source*: JP Morgan.

[a] Includes Banesto.

specialized in the Spanish-American trade flowing through the northern port city of Santander, it did not venture abroad until the 1950s, when it opened representative offices in Mexico City and London. In the 1970s and 1980s, it expanded its network of offices in Latin America and elsewhere and made a few small acquisitions. One of these was its 1982 acquisition of the insolvent Banco Español Chile, which it later renamed Banco Santander Chile.

At home, Santander grew via acquisition, but remained a mid-sized institution until the late 1980s. Between 1989 and 1992, Santander seized the moment to revolutionize Spain's retail banking by introducing mutual funds, high-yield checking and savings accounts and low-interest mortgages. The market quickly became too competitive for any major bank to gain significant market share in the absence of mergers, so in 1994 Santander bought Banco Español de Crédito (Banesto). This catapulted Santander into the first place among Spanish banks. Santander's chairperson is Emilio Botín, whose family has controlled the bank since the 1950s.

Santander started its current expansion abroad in the late 1980s with several small acquisitions, including that of Portugal's Banco de Comércio e Indústria in 1990. Santander's only foray into the United States commercial banking market took place in 1991, when it acquired 13 per cent of First Fidelity Bancorporation for $650 million. First Fidelity merged with First Union in 1995, and Santander sold its stake in 1997 for $2.2 billion, using the proceeds to amortize the goodwill of its Latin American acquisitions. Santander built its current expansion in Latin America around Santander Investment, its investment-banking arm, and many of its acquisitions are banks with a strong local investment banking franchise. The head of Santander Investment was Ana Patricia Botín, the chairperson's daughter and his then heir-apparent. (She left the bank after the merger with BCH.) Santander has generally bought majority stakes in its acquisitions and has put its brand name on them (Interviews #3 and 21). Its Latin American operations accounted for almost 50 per cent of foreign assets and for 48 per cent of net attributable profits in 1997.

**Banco Bilbao Vizcaya (BBV)**, the second largest bank in Spain, was the result of a merger in 1988 between Banco de Bilbao

and Banco de Vizcaya. Merchants and industrialists started Banco de Bilbao in 1856 to serve their needs and as a bank of issue. In the following decades it became a key financier for the development of steel making in the Basque region. Banco de Bilbao opened its first foreign office in Paris in 1902, but remained focused on the domestic market. Banco de Vizcaya started in 1901, also in Bilbao. Both banks grew via acquisition, but Vizcaya always had a stronger foreign orientation. In the late 1920s, it founded the Banque Français et Espagnol in Paris. Since the early 1970s, it has opened branches in New York, Amsterdam, London, Paris and San Francisco and representative offices in Mexico, Frankfurt, Tokyo and Rio de Janeiro.

In the 1990s, BBV followed Santander into Latin America, where BBV originally tended to buy minority stakes, providing the project was large enough and BBV had management control. Over time, the bank gained confidence and knowledge, and when the price would be acceptable, it would increase its stake to a majority position. Recently, BBV has appointed a manager in Madrid to be responsible for BBV América (Interview #16), which includes all its Latin American operations. These accounted for 23 per cent of consolidated assets and 17 per cent of net attributable profits in 1997. BBV has established an organizational structure in which the country manager dominates. Functional managers in each country coordinate with their counterparts in Madrid, but do not report to them.

**Banco Central Hispano (BCH)**, the third largest bank in Spain during the 1990s, is the result of a difficult 1991 merger between Banco Central and financially troubled Banco Hispano-Americano. Its founders started Hispano-Americano at the turn of the century with capital repatriated to Spain from its last colonies, but the bank became primarily a domestic institution (Garcma Ruiz, 2000). BCH inherited a number of investments that Central and Hispano-Americano had made in the 1960s, but disposed of or reorganized most of these. BCH was therefore a latecomer in the recent Spanish drive into Latin America. It was also the only bank that accomplished its entry through joint venture arrangements with local partners.

In 1999 Santander and BCH announced their merger. Banco Santander Central Hispano is now the largest commercial bank on

the Iberian peninsula.[3] The Co-Chairpersons of the merged bank are the previous Chairpersons of the merged banks, while Ángel Corcóstegui, the CEO of BCH, is now the CEO of BSCH. The merger is resulting in some consolidation of the banks' investments, and a partial divestiture in Chile mandated by the Government on the grounds of maintaining competition.

Other Spanish banks have played a role in Latin America, but generally a small one. The most notable is Argentaria — now merged with BBV into BBVA — which was a government-owned amalgam of several banks. Argentaria had a preexisting presence in Latin America through its affiliate, Banco Exterior, once Spain's official export credit bank. It also maintained retail operations in Panama and Paraguay.

## Where: Latin America

Given that the Spanish banks wished to expand internationally in order to overcome the competitive saturation in the home market, the issue of where to go was relatively straightforward. The Western European markets were already mature and offered no particular foothold; they were already well-served by domestic institutions. Also, the Spanish banks had already established themselves in Portugal, where BBV and Santander had acquired local banks and BCH had taken a minority position in BCP-BPA, the largest Portuguese bank.

Still, the Spanish banks had acquired some small banks in Europe, had taken small (generally less than 10 per cent) stakes in larger banks, and had also established strategic alliances. BSCH has cross shareholdings with Commerzbank (4.8 per cent), Royal Bank of Scotland (9.7 per cent), and Grupo Champalimaud, and holds stakes in Société Génerale (5.1 per cent) and San Paolo IMI (6.9 per cent). It also owns 100 per cent of Banco Totta e Açores in Portugal. BBVA, for its part, has stakes in Crédit Lyonnais (3.8 per cent), and Banca

[3] Banco Santander, under the chairpersonship of Emilio Botín, the grandfather of the chairperson of Santander at the time of the 1999 merger, was in 1919 one of the founding shareholders of Banco Central (Garcma Ruiz, 2000).

Nazionale del Lavoro (10 per cent). As of June 1999, BSCH was the largest bank in the "Euro zone" in terms of market capitalization ((37 billion), followed by Deutsche Bank ((32 billion), ABN Amro ((30 billion), and BBV ((29 billion). BSCH was the fourth largest if United Kingdom banks are included (*Actualidad Económica*, 28 June-4 July 1999, pp. 90-91). BBV is a member of the Trans-European Banking Services Group (established in 1997), which brings together eleven European banks, and Inter-Alpha (established in 1972), which brings together thirteen banks. These alliances represent agreements between the banks to share information and generally not to compete with each other (Marois and Abdessemed, 1996).

Intermediation margins in Europe, however, were not much higher than in Spain at the time. Greater returns could only be achieved in the emerging markets of Asia, Eastern Europe and Latin America. As A. Demirgüç-Kunt and H. Huizinga (1999) have found, foreign banks have higher margins and profits than domestic banks in developing countries, whereas the opposite holds true in industrial countries.

Before the recent crisis, most Asian countries did not permit foreigners to acquire local commercial banks. Also, the Spanish banks clearly had no particular advantage vis-à-vis other foreign banks in either Eastern Europe or Asia, except in the Philippines, where Santander did establish an affiliate. Lastly, other European banks, many with historical ties to the region, such as the German and Austrian banks, had already established themselves in Eastern Europe.

Latin American countries, by contrast, were privatizing and deregulating their financial markets during the 1990s (Mas, 1995; Molano, 1997). Latin America also offered relatively affordable acquisition prices. As the Deputy Chairperson of BBV once pointed out, the $3 billion that BBV had invested in all of Latin America until the late 1990s would not have bought them even 1 per cent of the market in a major European country, such as Italy. The commonality of language also made Latin America comfortable for the Spanish banks and permitted easy communication (there was no need to translate memos or manuals), and transfer of managers (Interviews #12 and 19). Along these lines, J. R. Hanson (1999)

showed a correlation between FDI flows to a developing country and the diffusion if western culture, suggesting the importance of cultural ties. Lastly, the Spanish banks already had some familiarity with the region. All of them had already established some offices, branches or small affiliates there since the 1970s and early 1980s. In the late 1980s, Santander Investment re-entered several Latin American countries from which Santander had withdrawn at the start of the debt crisis. This is consistent with J. Johanson and J. E. Vahlne's (1977) model of internationalization as escalating commitment accompanying increasing knowledge.

The same dynamic can be observed among the Portuguese banks (appendix B). In addition to their investments in Brazil that parallel the Spanish investments in the rest of Latin America, Portuguese are also returning to their former colonies, especially in Africa.[4]

## What: retail banking to the mass market

The Spanish banks have bought large stakes in large banks. Automatically, they have chosen to compete in the mass market, rather than in a niche (Interviews #7, 9, 14, 16, 17). They are competing in the lower and middle-income (LMI) segments, in which they come into competition with the largest domestic banks. The only foreign bank that had previously made a foray into Latin America comparable in its geographic scope was Citibank. By contrast to the Spanish banks, Citibank focused traditionally on the upper-income market, frequently referred to as the A, B and C1 segments (Interviews #4 and 12). BankBoston too has focused on the upper-income market, but has such operations only in Argentina and Brazil. Citibank and BankBoston are well-established operations, as their presence in many Latin American countries often dates back to the early twentieth century. In particular, when World War I disrupted trade between United Kingdom and Germany on the one hand and Latin America, especially Argentina, on the other, United States manufacturers rushed in to take advantage of the opening (Eichengreen and Irwin, 1998). Citibank arrived in Argentina in 1914, and BankBoston in 1917.

[4] Its purchase of Banco Totta e Açores has given Santander an affiliate in Mozambique.

Deutsche Bank and some other European banks have owned isolated retail operations in Argentina and elsewhere that are indistinguishable from domestically owned banks.

The Spanish banks have transferred banking skills that are primarily useful in the mass retail market. Interviews revealed that after making an acquisition and gaining managerial control, Spanish banks would bring in expertise from their home operations on both the asset and the liability sides. Information systems and risk assessment were among the first areas subject to overhaul (Interviews #3, 4, 6, 8, 9, 16-18, 21). The introduction of new products to expand the deposit base would then follow. The Spanish banks brought from home innovations such as savings accounts with an attached lottery (Interviews #3, 7, 9, 12, 13, 16, 19) and fast-approval mortgages.

The Spanish banks have also entered business areas related to retail banking, first in Spain and later in Latin America. They have become the leading providers of pension funds, mutual funds and electronic banking throughout the region. In early 2000, BBVA formed a strategic alliance with Telefónica of Spain to launch electronic banking operations. Telefónica is the majority owner of Terra Networks, the firm that acquired Lycos, the third largest portal in the United States month later, BSCH acquired patagon.com, Latin America's largest financial portal.

## When: since 1995

The issue of timing emerged from the field research as a key variable in the observed FDI pattern. The scissors had two blades: Latin America opened its doors to FDI, and Governments put banks that they owned on the auction block (for Mexico, see Unal and Navarro, 1999) at the precise time that the Spanish banks were looking for possible foreign acquisitions (Mas, 1995; Molano, 1997; Interview #12).

Although the timing and sequence of economic and political opening differs by country, the logical common historical reference point is the Latin American debt and banking crises of 1982. Since then, and as Latin America's "lost decade" lingered on (Grosse and

Goldberg, 1996), democratically elected presidents came to power across the region. These Governments, with the support of broad coalitions of the middle class and business interests, managed to introduce market-oriented reforms, such as liberalization of foreign entry. As R. Grosse (1997) reports, from 1971 to 1987 the Andean Pact countries barred foreign banks from owning more than 20 per cent of local banks. Thus, only recently have these countries' banking sectors become open to FDI. Colombia, an Andean Pact member, for instance, opened in 1991 (Barajas, Steiner and Salazar, 2000).

The Spanish banks were not the only ones to respond to this opportunity. As table 3 shows, following the start of the Spanish push in 1995, a number of foreign banks also started to buy banks in Latin America. The two with the widest geographic scope are Bank of Nova Scotia (BNS) and Hongkong and Shanghai Banking Corporation (HSBC). More recently ABN-AMRO has joined in. Still, as one can see by comparing tables 1 and 3, the Spanish banks' strategy differs in that it aims at dominating as many national markets as possible in the region.

At the same time as the Spanish and other foreign banks were making their concerted push, a normal ebb and flow was also occurring. Thus, Deutsche Bank withdrew from its long-time retail presence in Argentina to concentrate on Europe, selling all but one of its branches to BankBoston. Losses from over-ambitious expansion elsewhere forced Crédit Lyonnais to sell its earlier acquisitions, including one affiliate to long-established Deutsche Südamerikanische Bank. Similarly, Banque Sudameris, which has been in Latin America since its foundation as a Franco-Italian overseas bank in 1910, made an acquisition.[5]

However, in general, there were few other well-capitalized banks in a position to make acquisitions in the region (Interview #21). Since the early 1990s, Japanese banks have been under tremendous strain domestically and have been withdrawing from investments

[5] Banque Sudameris started as the Banque Française et Italienne pour l'Amerique du Sud with Banca Commerciale Italiana (BCI) and Banque de Paris et des Pays-Bas as its parent bank. It is now a wholly owned affiliate of BCI, after having been a consortium bank for some years in the 1970s.

**Table 3. Acquisitions of banks in Latin America since 1990 by foreign (non-Spanish) banks**

*(Million of dollars and percentage)*

| Acquisition year[a] | Acquirer | Bank acquired | Country | Per cent stake[b] | Purchase price[b] |
|---|---|---|---|---|---|
| 1992 | Bank of Nova Scotia | GFInverlat | Mexico | 15 | 106 |
| 1994 | Infisa (Chile) | Banco Consolidado (Corpbanca) | | | |
| 1995 | Banco Sudameris[c] | Banco de Lima | Peru | 68 | |
| | Deutsche-Sudamerikanische Bank[d] | Banco Crédit Lyonnais | Chile | 88 | 49 |
| 1996 | Banco Espírito Santo & Crédit Agricole[e] | Banco Boavista | Brazil | 40 | 120 |
| | Bank of Montréal | GFBancomer | Mexico | 16 | 475 |
| | Bank of Nova Scotia | Banco Quilmes | Argentina | 95 | 245 |
| | Bank of Nova Scotia | Banco Sudamericano | Peru | 25 | 14 |
| | Citibank | Confia | Mexico | 100 | 45 |
| | Crédit Agricole | Banco Bisel | Argentina | 64-68[f] | 131 |
| | HSBC | Banco Roberts | Argentina | 70 | 668 |
| | HSBC | Bamerindus | Brazil | 100 | 940 |
| | HSBC | Banco Santiago | Chile | 7 | 144 |
| | HSBC | Banco Serfin | Mexico | 20 | 300 |
| | HSBC | Banco Sur | Peru | 10 | 16 |
| 1997 | Chase Manhattan Bank | Banco Consolidado | Venezuela | 90 | |
| 1998 | ABN Amro | Banco Real[g] | Brazil | Majority | 2100 |
| | ABN Amro | Banco do Estado de Pernambuco | Brazil | 100 | 154 |
| | Caixa Geral de Depósitos | Banco Bandeirantes | Brazil | 79 | 64-300[h] |
| | Citibank | Banco Mayo Cooperativo | Argentina | 100 | |
| | Wachovia Bank | Banco Português do Atlântico-Brasil | Brazil | | |
| | Bank of Nova Scotia | Banco del Caribe | Venezuela | 25 | 88 |
| | Standard Chartered | Extebandes | | | 165 |
| 1999 | Banco Sudameris | Banco Wiese | Peru | 65 | 130 |

*Sources*: news reports.

[a] Year of initial purchase if subsequent purchases followed.

[b] Cumulative to present.

[c] Banca Commerciale Italiana.

[d] Dresdner Bank.

[e] The two banks jointly own Banco InterAtlantico (see appendix B ) into which they have merged Boavista. The shareholding percentage refers to Banco Espírito Santo, whereas the dollar amount is the total price the banks paid Boavista.

[f] Reports differ; also, Crédit Agricole owns 20 per cent of Chile's Banco del Desarrollo, which owns 15 per cent of Bisel.

[g] The deal includes affiliates in Argentina, Colombia, Paraguay and Uruguay.

[h] Reports differ.

around the world. Many European banks, including from the Netherlands and Germany, were busy expanding to Eastern Europe. During the early 1990s, United States banks were busy with mergers and acquisitions in their home market, though now Citibank, BankBoston and Chase Manhattan have started to make selective acquisitions in Latin America.

## How: acquisition of major domestic banks

Entry via acquisitions rather than greenfield operations follows equally from a decision to make what is purely a portfolio investment, or a decision to operate in the mass retail market. Obviously, if one's intent is a portfolio investment, then acquiring a suitably sized operation, or taking a small portion of a large operation, makes more sense than establishing a *de novo* operation that will, of necessity, be small.

If the entrant wishes to compete in retail banking by introducing new products, it is very important to gain market share in significant chunks, as opposed to growing organically from scratch. The inability to patent innovations means that having an extensive branch network through which product can be delivered matters. Thus, the entry strategy of the Spanish banks is in sharp contrast to the strategies of BankBoston and Citibank, which traditionally have focused on a smaller clientele, and hence have been content to grow more organically.

The Spanish banks have kept even their wholly owned acquisitions as local affiliates rather than as branches of the parent bank.[6] Banks generally use foreign branches for wholesale and corporate banking activities in host countries (Heinkel and Levi, 1992). As M. Sabi (1988) has pointed out, the reasons banks most

[6] Branches are an integral part of the parent bank; a branch cannot fail unless the parent bank fails. Foreign affiliates are separate legal entities, typically incorporated in the host country. Because they are separate entities, an affiliate may fail even though the parent bank remains solvent. Conversely, an affiliate may remain solvent even though the parent bank has failed. Host country supervisory authorities are responsible for prudential supervision of affiliates, and home country authorities are responsible for the supervision of the branches of the parent bank.

frequently cite for their presence in developing countries is financing international trade and servicing their home country (corporate) customers, both of which banks can do readily via a single branch in the host country's financial centre. R. L. Heinkel and M. D. Levi (1992) showed that foreign banks respond to different factors when creating foreign affiliates than when creating representative offices, agencies or branches. Unless forced to by local regulation, banks do not use foreign affiliates as a substitute for other organizational forms. Affiliates appear frequently simply to represent financial investments, to be vehicles for specialized activities, such as leasing or commercial credit, or as vehicles for retail banking.

The Spanish banks already had some operations in Latin America since at least the 1970s. These were generally branches and representative offices in the various national financial centres, and a few small retail affiliates. Had the banks simply wished to continue serving their existing Spanish corporate customers, this network of branches would have sufficed. This was Argentaria's original strategy; however, the push into mass-market retail banking did not mean that BSCH or BBVA had abandoned their traditional corporate business. As far as retail banking is concerned, Santander at least could have built such an operation on the basis of organic growth. However, it was Santander that set off the rush by buying large, existing local banks, even in countries such as Chile where it already had a small foreign affiliate.

Beyond the issue of greenfield *versus* acquisition, it is important to explain why the three Spanish banks followed different entry strategies regarding majority *versus* minority stakes, joint venture partners and the degree to which the head office involves itself in the management of the acquired banks. Santander has been very aggressive in seeking majority stakes with full managerial control and brand-image coordination, whereas BBV initially preferred minority stakes, gradually increasing them over time (Interviews #3, 21 and 16). In sharp contrast to either of these two strategies, BCH has opted for joint ventures with local partners, without promoting its own brand (Interviews #19 and 21).

Santander was the most assertive in its Latin American

expansion, primarily because of its strong capital base, prior investment banking experience in the region and the strong personality and leadership of its chairperson — who liked to make expeditious and far-reaching decisions. Numerous press reports have contrasted Santander's then "presidencialista" style with BBV's professional "team style" of management. Our interviewees singled this out as a key difference between the two banks (Interviews #3, 6, 8, 9, 16-18 and 21).[7]

Initially, BBV was more cautious than Santander because BBV lacked the exposure to the region that Santander Investment had given Santander. In 1998, BBV inaugurated its "1,000 Days Plan". This was its new international strategy, explicitly aimed at creating shareholder value. The first phase included the acquisition of leading local banks in Latin America. Over the last three or four years, BBV has leveraged its strong capital base and managerial resources to take full control and coordinate its strategy across borders. Currently, the bank is in the second phase of its plan: consolidation to cut costs and increase efficiency throughout the BBV system, including in Latin America. As a bank run by managers rather than a dominant owner, BBV may also have been more tolerant of partners (Interviews #16 and 18).

Lastly, BCH was the weakest in terms of resources on which to build its international expansion. Of the three, it was the least profitable and had the least managerial depth (Interview #21). The difference in behaviour between Santander and BBV on the one hand and BCH on the other is consistent with C. P. Kindleberger's (1969) argument for FDI as stemming from "surplus managerial resources".

BCH's decision to enter into joint ventures with local partners also reflected its perception that the risks of entering emerging markets were high. BCH allied itself with the Lúksic group, one of the largest family-controlled industrial and service conglomerates in Chile. The investment vehicle was O'Higgins Central Hispano (OHCH), an almost 50-50 joint venture (BCH held a few more shares than did the

[7] Also, see *Euromoney*, September 1997, pp. 209-216; *AméricaEconomía*, December 1997, pp. 58-66 and 4 June, 1998, pp. 44-47.

Lúksic group). BCH had acquired banks in the Southern Cone through OHCH rather than directly, and was looking for a partner in northern South America. In Mexico and elsewhere BCH had taken minority stakes, and in Puerto Rico it had sold its affiliate there to Santander. In the opinion of Ángel Corcóstegui, its chief executive officer at the time, the joint venture arrangement allowed BCH to test the waters, learn and then consider whether or not to escalate its commitment. Also, this strategy hedged against the possible emergence of xenophobia in the host countries. The enthusiasm for foreign owners as rescuers of the banking system could have faded over time, only to be replaced by concern over foreign domination (Interviews #14 and 19). Since the merger with Santander, BSCH has bought out the Lúksic group's share in OHCH.

In order to support their on-going ambitions and further acquisitions in Latin America, both BSCH and BBVA have recently (mid-2000) issued shares to raise ( 3.3 billion each. Since these share issues, BBVA has acquired Bancomer in Mexico, and BSCH has acquired Banespa in Brazil, Serfin in Mexico and Banco Caracas in Venezuela.

## Why: asset seeking and exploiting, and oligopolistic reaction

B. Williams (1997) provides a recent and comprehensive review of the literature on FDI in banking. His assessment is that the internalization approach, which goes back to Stephen H. Hymer (1976) and Kindleberger (1969), provides an adequate general explanation. That said, most of the extant empirical literature uses aggregate and macroeconomic data to examine what in fact is a microeconomic phenomenon. It also tends to focus on FDI in corporate and wholesale banking (Grubel, 1977), precisely because of the relative rarity of FDI in retail banking.

Three sets of explanations for the Spanish banks' sudden rise to international prominence emerge from the analysis of the evidence. The first two explanations fall under R. E. Caves' (1996 and 1998) rubrics of asset-seeking and asset-exploiting behaviour. The third is oligopolistic reaction (Hymer, 1976; Knickerbocker, 1973).

### *Asset-seeking*

The Spanish banks have been seeking to enter markets that permit them faster growth and higher margins than they would have been able to achieve at home, as virtually all of our interviewees explained. As table 4 shows, Latin America differs both from the Asian emerging markets and the advanced markets in terms of the development of the banking sector. The ratio of money supply to GDP (a rough guide to the size of the banking sector relative to that of the economy) is lower than elsewhere. Also, expenses in Latin America and interest margins, even net of expenses, are higher than elsewhere. As discussed below, the Spanish banks believed that they could introduce efficiencies. Even without this, the Spanish banks saw markets that provided the possibility of growth with the development of the banking sector and high margins.

As G. Ragazzi (1973) has pointed out, barriers to the flow of portfolio capital alone may motivate FDI. There is no penalty to acquiring assets when barriers segment capital markets. If it is cheaper for Santander to assemble a portfolio of Latin American banks than for its shareholders to do it by themselves, FDI itself adds value even if the investor does not change cash flows in the acquisitions (Errunza and Senbet, 1981).

One should also note that the investments in Latin America are both a "poison pill" to some acquirers, and a distinct bargaining chip *vis-à-vis* others. Spain has been in the European Union since 1986, and is one of the initial entrants into the European Monetary Union. A single financial market and currency in Europe may encourage other European banks to consider the Spanish banks as possible acquisition targets. As Emilio Ybarra, Chairman of BBV, has pointed out, "BBV's global franchise in Latin America represents a substantial interchange value for any future agreement with European banks." *El País* (9 July, 1998, p. 51) has reported Rolf E. Breuer, President of Deutsche Bank, as saying that Spanish banks "are not big enough" to compete in the new European market. He added that their "aggressive though successful" position in Latin America has turned them into "attractive partners" for future mergers or alliances.

**Table 4. Comparative banking statistics of selected emerging and developed economies**

*(Percentage)*

| Country/economy | M2/GDP[a] | Bank share in financial intermediation[b] | Share of state-owned banks[c] | Share of foreign-owned banks[d] | Non-interest operating costs[e] | Net interest margins[f] | Non-performing loans[g] |
|---|---|---|---|---|---|---|---|
| Argentina | 19 | 98 | 36 | 22 | 8.5 | 9.2 | 11 |
| Brazil | 26 | 97 | 48 | 9 | 6.0 | 6.8 | 6 |
| Chile | 36 | 62 | 14 | 21 | 3.0 | 6.1 | 1 |
| Colombia | 20 | 86 | 23 | 4 | 7.3 | 8.3 | 3 |
| Mexico | 25 | 87 | 28 | 1 | 3.9 | 5.1 | 15 |
| Venezuela | 17 | 92 | 30 | 1 | 5.7 | 8.1 | 18 |
| India | 45 | 80 | 87 | 7 | 2.6 | 2.9 | 20[h] |
| Hong Kong, China | 166 | ... | 0 | 78[i] | 1.5 | 2.2 | 3 |
| Singapore | 81 | 71 | 0 | 80 | 1.4 | 1.6 | ... |
| Indonesia | 47 | 91 | 48 | 4 | 2.4 | 3.3 | 11 |
| Republic of Korea | 43 | 38 | 13 | 5 | 1.7 | 2.1 | 1 |
| Malaysia | 85 | 64 | 8 | 16 | 1.6 | 3.0 | 8 |
| Taiwan Province of China | ... | 80 | 57 | 5 | 1.3 | 2.0 | 3 |
| Thailand | 75 | 75 | 7 | 7 | 1.9 | 3.7 | 8 |
| Germany | 64 | 77 | 50[i] | 4 | 1.1 | 1.4 | ... |
| Japan | 111 | 79 | 0 | 2 | 0.8 | 1.1 | 3 |
| Spain | 78 | ... | ... | 2 | ... | ... | 4 |
| United States | 60 | 23 | 0 | 22 | 3.7 | 3.7 | 2 |

*Sources:* World Bank, 1998; Goldstein and Turner, 1996.

a Money and quasi money as a percentage of GDP in 1996; Malaysia in 1995.
b Assets as a percentage of the assets of banks and non-bank financial institutions in 1994.
c Percentage share of assets in 1994.
d Percentage share of assets; date not given.
e As a percentage of total assets, averaged over the period 1990-1994.
f As a percentage of total assets, averaged over the period 1990-1994.
g Average during 1994-1995; these figures may not be strictly comparable.
h Relates only to public sector banks.
i Not strictly comparable.
... not available.

### *Asset-exploiting*

The Spanish banks have not just been passive acquirers of assets. If they were, there would be no need to insist on management control. Their public statements and the interviews (#3, 4, 6, 8, 9, 14, 16-18 and 21) clearly signal that the Spanish banks believed that they had something to offer. That is, they believed that they could improve cash flows in their acquisitions. Having just gone through a transition at home from non-competitive to extremely competitive markets (Peréz, 1997; Pastor, Peréz and Quesada, 2000), they believed that they had relevant skills and experience to bring to the table. The evidence is mixed, but suggests that after some turbulence around the time of deregulation, the Spanish banks overcame their earlier limitations and became efficient (Rodríguez, 1989; Grifell-Tatjé and Lovell, 1996; Maudos, Pastor and Quesada, 1997).

The starting point for what Caves (1998) has called asset-exploiting explanations for FDI is Hymer's (1976) classic proposition: "Given the costs of operating at a distance and in an unfamiliar environment, the foreign firm must have some off-setting advantage if it is to compete against local firms". Retail banking is a mature industry in which one cannot patent one's innovations. Hence foreign banks generally have no advantage *vis-à-vis* the local banks. One common exception is ethnic banking — providing banking services to home-country emigrants resident in the host country. Ethnic banking is not what the Spaniards are doing in Latin America, and opportunities for ethnic banking are limited, especially when the host country and the immigrants share a common language. Thus, Tschoegl (1987) has argued that one should generally not expect to see foreign banks entering retail markets. G. Dufey and B. Yeung (1993) make the same point in their prognosis for the evolution of banking in the European Union. Ethnic banking aside, Tschoegl (1987) did suggest two (not mutually exclusive) situations in which FDI in retail banking might be possible for a time. The first case involves markets where the incumbent banks are not very competitive. The second case involves fast growing markets.

Relative to domestic banks in Latin America, the Spanish banks are better managed and have more experience operating in a competitive market (Dietsch and Lozano Vivas 1996). Some of the

local banks, frequently the largest, are government-owned. As C. Marichal (1997) points out, dominance of banking by government-owned banks, especially in Argentina, Brazil, Chile and Mexico, dates from the nineteenth century. For the six Latin American countries in table 4, the share of banking system assets in government banks averages 30 per cent. Typically, government-owned banks have created price and service standards that have taken little effort to match. Often, this has been an unintended consequence of implicit taxes in the form of policy mandates to maintain employment, uneconomic branches in rural areas and preferential services for designated recipients (Grosse, 1997). Generally, the lack of a rivalrous domestic market has made the domestic privately-owned banks backward. The Spanish banks in Latin America therefore provide an interesting example of a situation in which foreign direct investors have no advantage *vis-à-vis* each other, but have an advantage *vis-à-vis* their host-country competitors. This is in line with Y-S. Hu's (1995) warning against blindly inferring an entrant's advantage abroad from their advantages at home.

The Spanish banks have transferred knowledge from Spain to Latin America. One obvious contribution has been the introduction of an aggressive posture built on the introduction of new products. Generally, wherever local regulations have permitted it, the Spanish banks have introduced the lottery-linked deposit accounts they offer in Spain (Guillén and Tschoegl, 1998); these have been an innovation everywhere the Spanish banks have introduced them. The banks have also improved the issuing, pricing and terms of mortgages relative to all other banks targeting the local mass market, have introduced mini-branches in supermarkets, gas stations and other non-traditional venues, and have improved generally the assessment of credit risk and other banking processes in the banks they have acquired.

Both Santander and BBV make use of expertise within their affiliates. Both send individual executives and teams on short-term assignments to other affiliates to help with specific projects such as the introduction of new systems or products. BBV also has a program under which 50 lower and middle managers from Latin America will work in BBV Spain for two years in regular jobs (not internships) before returning to their home banks. In some cases the parent banks have brought in senior managers from Spain.

One could argue that, relative to most other foreign banks, the Spanish banks have a linguistic and cultural advantage, though this is not as true relative to the long-established foreign banks, such as Citibank and BankBoston. Citibank and BankBoston have tried to be "embedded" — Citibank's term — in each host country. However, Citibank and BankBoston have followed a cream-skimming strategy of corporate banking and banking to urban professionals, while not pushing the limits in terms of aggressiveness. Neither Citibank nor BankBoston have targeted the mass market that the Spanish banks did through their acquisitions. In his survey of 16 United States, Canadian and Netherlands banks in Latin America, Grosse (1997) found that these banks had a strong orientation towards wholesale commercial banking and little interest in retail banking. Lastly, the very few other foreign-owned retail banks in Latin America prior to the acquisition wave that followed the Spanish banks (table 3) were indistinguishable in their behaviour from the domestic banks. Thus, to a great degree, the Spanish banks' chief competitors have been each other. Citibank and BankBoston's recent acquisitions of local banks or branches suggest that they may be amending their strategies in response to the entry of the Spanish and others banks.

The second situation that Tschoegl (1987) suggested would be one in which FDI in retail banking might be possible for a time when markets are growing rapidly. These tend to be forgiving markets. If most of the participants are fully occupied with simply managing the problems of average growth, they will have neither the time nor the resources to devote to taking market share away from each other. The countries in Latin America are underbanked, and the density of bank branches is low. Now that these countries are recovering from the "lost decade", the situation is one in which the opportunities for growth may not depend solely on taking market share away from others.

### *Oligopolistic reaction*

In addition to the asset-seeking and asset-exploiting motives, the whole expansion of the Spanish banks represents a case of oligopolistic moves and countermoves. In the "oligopolistic reaction" pattern that Knickerbocker (1973) and E. B. Flowers (1976) first

identified, a firm matches the location choices of a rival in a pattern of move-countermove or action-reaction. The pattern may begin with one firm (e.g. Santander) making the first move and others (e.g. BBV and BCH) following the leader, but as in the case of the Spanish banks, a leapfrogging of leadership occurs, so that at some point one can no longer unambiguously describe one firm or the other as the overall leader.

Oligopolistic reaction is a form of rivalrous behaviour that stands in contrast to the "mutual forbearance" pattern, in which a firm avoids markets where a rival has already established itself and the rival reciprocates. C-M. Yu and K. Ito (1988) and K. Ito and E. L. Rose (1994) found evidence of oligopolistic reaction among manufacturing firms. Empirical studies of banks offer mixed results. While S-R. Choi et al. (1986 and 1996) found support for forbearance among large, international banks, C. A. Ball and A. E. Tschoegl (1982) found evidence consistent with oligopolistic reaction for foreign banks establishing themselves in Tokyo and California. Engwall and Wallenstäl (1988) argued that Swedish banks, in their internationalization, copied each other. S. F. Jacobsen and A. E. Tschoegl (1999) argued that the Nordic consortium banks may have exhibited both oligopolistic reaction and some mutual avoidance depending on the characteristics of the places involved. That is, they clustered in major international financial centres, such as London and New York, and avoided each other elsewhere. By contrast, the Spanish banks were engaging in oligopolistic matching in Latin America, not mutual forbearance, something that the bankers that were interviewed fully acknowledged (Interviews #4, 5, 10 and 21).

In oligopolistic reaction, the reference set starts parochial and in time may become, in H. Perlmutter's (1969) terms, geocentric. The Spanish banks started by reacting primarily to each other's moves, but now have, by-and-large, established their Latin American networks. This has brought them into contact with competitors, such as Citibank and HSBC, both of which have built worldwide networks that include Latin America. The Spanish are also now in contact with Bank of Nova Scotia and other Canadian banks that have started to expand beyond the Caribbean (Baum, 1974) into Latin America. Before, the Spanish banks met Citicorp only in a few financial centres

around the world, and HSBC and Bank of Nova Scotia in even fewer locations, and probably competed little if at all with any of them. Now, they are all competing intensively with each other throughout Latin America.

## Policy implications

The entry of foreign banks has policy implications for the regulatory authorities both in the host and home countries. As one of our respondents remarked (Interview #20), the Banco de España was taking notice of the fact that an increasing part of the largest banks' operations was taking place outside its jurisdiction and beyond its purview. Because the Spanish banks' acquisitions in Latin America have remained as foreign affiliates, according to the Basle Accords of 1975, supervisory responsibility for the local operations rests with the host country authorities. However, the same legal separation that complicates supervision *in extremis* insulates the solvency of the home country operation from developments in the host country.

As far as the economic impact on host countries of foreign bank entry is concerned, S. Claessens, A. Demirgüç-Kunt and H. Huizinga (2000) found that the entry of foreign banks significantly reduces host-country banks' profitability, non-interest income and overall expenses. These benefits correlate with the number of foreign banks rather than their market share. The decrease in non-interest income suggests that the foreign banks may have superior know-how in fee-based services; this reflects primarily corporate services and not retail banking. The overall increase in efficiency that resulted from the presence of foreign banks would have been more broad-based.

Claessens et al.'s (2000) findings are for a cross-section of countries that includes some Latin American countries, but others as well. Some studies of individual markets, though not singling out the Spanish banks, come to similar conclusions. G. Clarke, R. Cull, L. D'Amato and A. Molinari (2000) examined the case of Argentina before the Spanish banks made their major acquisitions there. They found increased competition in the form of lower profits and margins in markets where foreign banks had entered, e.g. in lending to

manufacturers. Consumer lending, at the time not subject to much foreign entry, showed higher returns. By contrast, A. Barajas, R. Steiner and N. Salazar (2000) found a more limited impact of foreign banks in Colombia. This, they argued, was due to two factors. First, the Government owned more than half of the banking system's assets. Second, the foreign banks originally could only enter via minority participations in domestic banks. Lastly, F. J. Cardim de Carvalho (2000) points out that Brazil, where the foreign banks only started to enter in force in the mid-1990s, has not yet felt the impact of foreign competition.

This evidence, and that of our interviews, suggests that foreign banks bring benefits to the host countries as increased competition yields new products and lower prices. The foreign banks improve the functioning of the host country banks, both those they acquire, and those that they cause to renovate themselves to meet the competition. The foreign banks also contribute to the consolidation process by sweeping up those domestic banks that cannot adjust, and by recapitalizing their acquisitions. In a number of cases, Mexico in particular comes to mind, the foreign banks are the only possible acquirers in privatization that can both recapitalize the banks they acquire and add to competition. The result is a banking system of fewer, more competitive, nationwide banks, and a banking system that is more robust because its banks are well capitalized, more efficient, and their fortunes are not tied to those of small regions.

However, there is another important policy issue. The entry of the foreign banks may undermine certain social policies, and the ability of the central bank to regulate by moral suasion. In Argentina, Brazil, Chile and Mexico, government-owned banks have dominated banking since the nineteenth century (Marichal 1997). The Government favored these banks with its business and with other concessions, but at the same time assigned these banks a development or policy role. Today, this may take a variety of forms, including the maintenance of bank branches in rural areas and small towns where business would not normally justify a bank branch, lending for agriculture or other favored sectors on better-than-market terms, and sometimes, simply the provision of jobs. What has made this possible is an implicit cross-subsidy scheme. These government-owned banks

have implicitly taxed the urban and corporate sectors while subsidizing the policy targets. The tax has taken the form of wider than otherwise necessary spreads between deposit and lending rates.

The entry of foreign banks undermines this system of cross-subsidization. The foreign banks offer better deposit rates to urban middle and upper class customers, and better lending rates to the same customers on credit cards and mortgages, and better lending rates to profitable corporations. This leaves the government-owned banks with the burden of the policy branches and loans, but with a reduced ability to fund them. The result then is that the government-owned banks appear unprofitable and incompetent relative to the foreign-owned banks. The government-owned banks may be less well run, but this is often in part a mandated inefficiency. Ultimately, the Government faces the problem that if it privatizes these apparently unprofitable banks, the result will be that the new owners will close uneconomic rural branches, call-in unprofitable loans, and initiate mass redundancies among bank employees.

A possible positive outcome of the whole process may be an increased transparency of the costs of the government's policies. The problem is that the benefits of the subsidies may be less quantifiable and some socially worthwhile policies such as the integration of rural areas into the modern economy may suffer. In principle, the government can initiate a system of explicit subsidies to banks, for instance, to maintain rural branches, or programs for them to act as administering agents for loan programs. However, such policies are easier to posit in the abstract than to establish in the face of political and practical difficulties.

Such cross-subsidy schemes do not depend on government-ownership of banks for their existence. In an insightful paper, A. Breton and R. Wintrobe (1978) analyze the practice of "moral suasion." They theorize that moral suasion is an exchange between the authorities and the commercial banks. The authorities provide information and other services that facilitate collusion. In return, the commercial banks comply with the goals of the authorities. The entry of foreign banks can undermine the system for at least two reasons. First, the increase in the number and variety of participants

complicates the task of establishing agreement among the banks *vis-à-vis* the regulators. For the foreign banks the operations in say, Trans-Amazonia, are only a small part of their total operations whereas operations there represent almost all of the activities of Trans-Amazonian banks. The foreign banks are also likely to have a different mix of activities than are local banks. Foreign banks are, therefore, likely to react in different ways to the authorities' strictures than will Trans-Amazonian banks. Second, the foreign banks, if they do not wish to cooperate, can appeal for support to their home governments, making domestic policy issues matters of international trade and investment policy.

## Conclusion

The three strategic behaviours observed here — asset seeking, asset exploiting and oligopolistic reaction — provide the basis for formulating the following explanation for the massive presence of Spanish banks in retail banking markets throughout Latin America. By the late 1980s, the Spanish banking market was becoming saturated and rivalrous. Consequently, Spanish banks sought other growth opportunities. For a variety of reasons, Western and Eastern Europe and Asia held limited attraction. However, during the early 1990s, banking markets in Latin America were experiencing the kind of deregulation and liberalization that Spanish banks had experienced in their home market a few years back. Once the first bank, Santander, started to invest in Latin America, oligopolistic reaction set in. The other two leading Spanish banks quickly matched Santander, as all three raced to acquire banks across the region. Here, in environments that were linguistically and culturally comfortable, the Spanish banks started to transfer their technology and knowledge about product differentiation to their acquisitions, and hence to the host countries.

Spain's FDI in banking in Latin America requires understanding the shifting competitive environment of banking over the last decade. Financial deregulation and privatization in Europe and Latin America have opened up new horizons, and have enhanced competition via product differentiation and effective leverage of new information and telecommunications technologies. The Spanish banks have been uniquely exposed to these winds of change because of

their sudden exposure to European financial liberalization and Latin American opportunities for growth.

Although the Spanish banks' expansion is a breakthrough in retail banking, it does not pose a serious problem to existing theories of FDI. Asset-seeking, asset-exploiting and oligopolistic behaviours explain for the expansion of the Spanish banks in Latin America. Scholars initially formulated the bulk of FDI theory with manufacturing activities in mind; still, extensions to service industries, such as banking, are indeed appropriate and useful. However, more research is needed to understand better and to measure the intangible assets that transnational banks bring to bear and to grasp better what leads banks to use different entry strategies.

Finally, the issue of the entry of the Spanish and other foreign banks has provided cases for fruitful research into the politics and policy implications of this development. The foreign banks bring new products and lower prices, but they also frequently undermine some pre-existing implicit or explicit social policies. ■

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## Appendix A. Interviews

In the interviews, confidentiality was promised to the respondents. Therefore, the institutional affiliation of the interviewees, as well as the place and date of the interviews, are noted in the table below, but not their names or titles. Interviews are listed chronologically. Interviews lasted between 30 and 90 minutes, with an average of about 45 minutes. The 33 interviewees included presidents, chief executive officers, vice-presidents or director-generals of 21 different banks, bankers' associations and regulatory agencies in Argentina, Chile, Mexico and Spain. In some cases, more than one interviewee was present at the interview.

**Appendix table. List of interviews**

| No. | Venue | Date | Institution |
|---|---|---|---|
| 1. | Santiago | 4 May 1998 | Superintendency for Banking and Financial Institutions |
| 2. | | | Banco Central de Chile |
| 3. | | 5 May 1998 | Banco Santander Chile |
| 4. | | | Citibank, Chile |
| 5. | | 6 May 1998 | Research Department, Superintendency for Banking and Financial Institutions |
| 6. | | | Banco de Chile |
| 7. | | | Santander Investment |
| 8. | Buenos Aires | 7 May 1998 | Santander Investment |
| 9. | | | Banco Río de la Plata |
| 10. | | | BBV Banco Francés |
| 11. | | | Superintendency of Financial Institutions, Banco Central de la República Argentina |
| 12. | | 8 May 1998 | Financial Institutions Clearing House, Banco Central de la República Argentina |
| 13. | | | Citibank Argentina |
| 14. | | | Asociación de Bancos de la República Argentina |
| 15. | Mexico City | 13 May 1998 | Financial Sector Bureau |
| 16. | | | National Banking and Securities Commission |
| 17. | | 14 May 1998 | Banco Bilbao Vizcaya |
| 18. | | | Grupo Santander Mexicano |
| 19. | Madrid | 17 June 1998 | Banco Central Hispano |
| 20. | | | Inspection Bureau for Credit and Savings Institutions, Banco de España |
| 21. | | 22 June 1998 | Banco Bilbao Vizcaya |
| 22. | | 25 June 1998 | Banco Santander |

## Appendix B. The Portuguese banks in Brazil and Latin America

Portuguese banks, too, have recently started to acquire retail-oriented commercial banks in Brazil, but little elsewhere in Latin America. While significant, the Latin American operations of Portuguese banks, do not compare nearly to those of the Spanish banks especially in terms of their geographic scope.

Like Spain, Portugal has undergone substantial deregulation. The nationalizations of 1975 led to a banking system that was 95 per cent government-owned, though the three foreign-owned banks (including Banco do Brasil, which had entered in 1975) were unaffected. A gradual process of deregulation began in 1984, with réprivatization starting in 1989 (Barros, 1995). In 1991, the Espírito Santo family reclaimed Banco Espírito Santo e Commercial. Since 1994, a wave of mergers swept Portugal, and the banking market is now one of the freest in Europe.

Banco Financial Português (BFP) has been in Brazil since 1887, but in a very limited capacity. Apparently, for much of its history, it existed to support the financial affairs of the Portuguese consulates there. Other Portuguese banks that entered between 1900 and World War I included Banco Alliança (1906; head office in Opporto), and Banco Nacional Ultramarino (1912; head office in Lisbon). M. B. Levy (1991, p.369) points out that the foreign banks in Brazil were "above all, tuned to international trade".

Caixa Geral de Depósitos (CGD), the largest bank in Portugal, still government-owned, has been in Brazil since 1924. In 1972 it bought BFP. It also bought 8 per cent of Banco Itaú, Brazil's second largest private bank. In 1997, CGD bought 79 per cent of Banco Bandeirantes; the acquisition added 575 branches to the 3 that it owned through BFP. In 2000, CGD and União de Bancos Brasileiros (Unibanco) announced an alliance in Brazil based on a swap of assets for shares. CGD will give up its Brazilian assets (valued at (5.3 billion) in return for new shares representing a 15 per cent stake in Unibanco, including 10 per cent of the voting rights. Unibanco now

hopes CGD will sell its stake in Banco Itaú, Brazil's biggest bank and one of Unibanco's principal rivals. Elsewhere, CGD also has representative offices in Mexico and Venezuela.

Banco Espírito Santo (BES) entered Brazil in 1975, just before the bank's nationalization. In 1976 it established Banco InterAltantico, a merchant bank consortium that it co-owned with Crédit Agricole of France, and the Brazilian industrial group Monteiro Aranha. In 1998, InterAtlantico acquired Banco Boavista, the fourteenth largest Brazilian bank, from the Paula Machado family; the owners have merged the two banks into Banco Boavista InterAtlantico, which is now the ninth largest bank. BES also has a representative office in Venezuela. BES is a member of the Inter-Alpha banking club, as is BBV from whom it bought 17 branches in Spain.

In 1991, Banco Comercial Português (BCP) established a cross-shareholding agreement with BCH. BCP acquired 6 per cent of BCH and BCH acquired 14 per cent of BCP. In 1992, the two each took 8 per cent of Banco Bital in Mexico.

In 1993, Banco Português do Atlântico (BPA) established an affiliate in Brazil. BCP took control of BPA in 1995, and in 1998 it sold the Brazilian operation to Wachovia Bank (United States), which changed the name to Banco Wachovia. In 1999, BCP and BSCH dissolved their alliance; BCP then took back BSCH's shares in BCP in exchange for some of its shares in BSCH.

In 1998, Banco Português de Investimento (BPI) announced that it would open a representative office in Brazil and expand into securities. Banco Itaú owns 10 per cent of BPI, which has said that it does not intend to enter retail activities.

# RESEARCH NOTE

## *World Investment Report 2000: Cross-border Mergers and Acquisitions and Development Overview*

United Nations Conference on Trade and Development*

### *Transnational corporations, the firms driving international production,…*

International production by transnational corporations (TNCs), now numbering some 63,000 parent firms with around 690,000 foreign affiliates and a plethora of inter-firm arrange-ments, spans virtually all countries and economic activities, rendering it a formidable force in today's world economy. The world's top 100 (non-financial) TNCs (with General Electric in first place), based almost exclusively in developed countries (see table 1 for the top 25 of those firms), are the principal drivers of international production. The $2 trillion in assets of their foreign affiliates accounted for about one-eighth of the total assets of all foreign affiliates worldwide in 1998. The foreign affiliates of the top 100 TNCs employ over 6 million persons, and their foreign sales are of the order of $2 trillion. They are concentrated

* The *World Investment Report 2000* was prepared by a team led by Karl P. Sauvant and coordinated by Anne Miroux. Its member included Victoria Aranda, Persephone Economou, Wilfried Engelke, Torbjörn Fredriksson, Masataka Fujita, Kálmán Kalotay, Mark Knell, Gabriele Köhler, Padma Mallampally, Ludger Odenthal, Marko Stanovic, James Xiaoning Zhan and Zbigniew Zimny. Specific inputs were received from Kumi Endo, Boubacar Hassane, Abraham Negash and Katja Weigl. This is a reprint of pages 1-38 of the *World Investment Report 2000: Cross-border Mergers and Acquisitions and Development. An Overview* (New York and Geneva: United Nations). UNCTAD/WIR/2000(Overview).

**Table 1. The world's top 25 TNCs, ranked by foreign assets, 1998**

(Billions of dollars and number of employees)

| Ranking 1998 by: | | Ranked in 1997 by: | | | | | Assets | | Sales | | Employment | | TNI [a] (Per cent) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Foreign assets | TNI[a] | Foreign assets | TNI[a] | Corporation | Country | Industry [b] | Foreign | Total | Foreign | Total | Foreign | Total | |
| 1 | 75 | 1 | 84 | General Electric | United States | Electronics | 128.6 | 355.9 | 28.7 | 100.5 | 130 000 | 293 000 | 36.3 |
| 2 | 85 | 4 | 91 | General Motors | United States | Motor vehicles | 73.1 | 246.7 | 49.9 | 155.5 | ... | 396 000 | 30.9 |
| 3 | 45 | 3 | 44 | Royal Dutch/Shell Group [c] | Netherlands/ United Kingdom | Petroleum expl./ref./distr. | 67.0 | 110.0 | 50.0 | 94.0 | 61 000 | 102 000 | 58.0 |
| 4 | 76 | 2 | 80 | Ford Motor Company | United States | Motor vehicles | ... | 237.5 | 43.8 | 144.4 | 171 276 | 345 175 | 35.4 |
| 5 | 19 | 5 | 29 | Exxon Corporation [d] | United States | Petroleum expl./ref./distr. | 50.1 | 70.0 | 92.7 | 115.4 | ... | 79 000 | 75.9 |
| 6 | 60 | 6 | 75 | Toyota | Japan | Motor vehicles | 44.9 | 131.5 | 55.2 | 101.0 | 113 216 | 183 879 | 50.1 |
| 7 | 54 | 7 | 54 | IBM | United States | Computers | 43.6 | 86.1 | 46.4 | 81.7 | 149 934 | 291 067 | 53.0 |
| 8 | 21 | 30 | 42 | BP AMOCO | United Kingdom | Petroleum expl./ref./distr. | 40.5 | 54.9 | 48.6 | 68.3 | 78 950 | 98 900 | 74.9 |
| 9 | 59 | 10 | 71 | DaimlerChrysler | Germany | Motor vehicles | 36.7 | 159.7 | 125.4 | 154.6 | 208 502 | 441 502 | 50.4 |
| 10 | 3 | 9 | 4 | Nestlé SA | Switzerland | Food/beverages | 35.6 | 41.1 | 51.2 | 52.0 | 225 665 | 231 881 | 94.2 |
| 11 | 51 | 8 | 50 | Volkswagen Group | Germany | Motor vehicles | ... | 70.1 | 52.3 | 80.2 | 142 481 | 297 916 | 53.8 |
| 12 | 7 | 18 | 5 | Unilever | Netherlands/ United Kingdom | Food/beverages | 32.9 | 35.8 | 39.4 | 44.9 | 240 845 | 265 103 | 90.1 |
| 13 | 63 | - | - | Suez Lyonnaise Des Eaux | France | Diversified/utility | ... | 84.6 | 12.9 | 34.8 | 126 500 | 201 000 | 45.6 |
| 14 | 73 | - | - | Wal-Mart Stores | United States | Retailing | 30.2 | 50.0 | 19.4 | 137.6 | ... | 910 000 | 37.2 |
| 15 | 8 | 14 | 2 | ABB | Switzerland | Electrical equipment | ... | 32.9 | 23.1 | 27.7 | 154 263 | 162 793 | 89.1 |
| 16 | 43 | 11 | 39 | Mobil Corporation [d] | United States | Petroleum expl./ref./distr. | ... | 42.8 | 29.7 | 53.5 | 22 100 | 41 500 | 58.6 |
| 17 | 17 | 42 | 25 | Diageo Plc | United Kingdom | Beverages | 27.9 | 46.3 | 10.5 | 12.4 | 65 393 | 77 029 | 76.7 |
| 18 | 38 | 24 | 32 | Honda Motor Co Ltd | Japan | Motor vehicles | 26.3 | 41.8 | 29.7 | 51.7 | ... | 112 200 | 60.2 |
| 19 | 52 | 19 | 56 | Siemens AG | Germany | Electronics | ... | 66.8 | 45.7 | 66.0 | 222 000 | 416 000 | 53.6 |
| 20 | 41 | 21 | 34 | Sony Corporation | Japan | Electronics | ... | 52.5 | 40.7 | 56.6 | 102 468 | 173 000 | 59.3 |
| 21 | 34 | 33 | 68 | Renault SA | France | Motor vehicles | 23.6 | 43.2 | 25.4 | 39.8 | 92 854 | 138 321 | 61.8 |
| 22 | 12 | 28 | 21 | News Corporation [e] | Australia | Media/publishing | 22.9 | 33.6 | 10.5 | 11.7 | ... | 50 000 | 78.7 |
| 23 | 40 | 25 | 38 | BMW AG | Germany | Motor vehicles | 22.9 | 35.7 | 26.8 | 37.7 | 53 107 | 119 913 | 59.9 |
| 24 | 81 | 22 | 78 | Mitsubishi Corporation | Japan | Diversified | 21.7 | 74.9 | 43.5 | 116.1 | 3 668 | 11 650 | 32.7 |
| 25 | 67 | 17 | 60 | Nissan Motor Co Ltd | Japan | Motor vehicles | 21.6 | 57.2 | 25.8 | 54.4 | ... | 131 260 | 42.6 |

*Source*: UNCTAD/Erasmus University database.

[a] TNI is the abbreviation for "transnationality index", which is calculated as the average of three ratios: foreign assets to total assets, foreign sales to total sales and foreign employment to total employment.

[b] Industry classification for companies follows the United States Standard Industrial Classification as used by the United States Securities and Exchange Commission (SEC).

[c] Foreign assets, sales and employment are outside Europe.

[d] Mergers between Exxon and Mobil into ExxonMobil, and Hoechst AG and Rhone-Poulenc SA into Aventis are not documented yet as they took place in 1999.

... Data on foreign assets, foreign sales and foreign employment were not made available for the purpose of this study. In case of non-availability, they are estimated using secondary sources of information or on the basis of the ratios of foreign to total assets, foreign to total sales and foreign to total employment.

*Note*: The list includes non-financial TNCs only. In some companies, foreign investors may hold a minority share of more than 10 per cent.

mainly in electronics and electrical equipment, automobiles, petroleum, chemicals and pharmaceuticals.

Despite the prominence of the top 100, the universe of TNCs is quite diverse, and includes a growing number of small and medium-sized enterprises, TNCs from countries in Central and Eastern Europe that have only recently begun to engage in international production, and large TNCs based in the developing world. Although less transnational overall than the world's top 100 TNCs, some of the developing-country TNCs are quite sizeable — witness, for example, the size of the foreign assets ($8 billion) of Petroleos de Venezuela, the largest TNC from the developing world and the only developing-country firm to appear in the top 100 list (see table 2 for the top 25 of those firms).

The expansion of international production has been facilitated by virtually all countries through changes in their regulatory environments. Over the period 1991-1999, 94 per cent of the 1,035 changes worldwide in the laws governing foreign direct investment (FDI) created a more favourable framework for FDI (table 3). Complementing the more welcoming national FDI regimes, the number of bilateral investment treaties — concluded increasingly also between developing countries — has risen from 181 at the end of 1980 to 1,856 at the end of 1999. Double taxation treaties have also increased, from 719 in 1980 to 1,982 at the end of 1999. At the regional and interregional levels, an increasing number of agreements (most recently between the European Community and Mexico) are helping to create an investment environment more conducive to international investment flows.

Evidence on the expansion of international production over the past two decades abounds. Gross product associated with international production and foreign affiliate sales worldwide, two measures of international production, increased faster than global GDP and global exports, respectively (figure 1). Sales of foreign affiliates worldwide ($14 trillion in 1999, $3 trillion in 1980) are now nearly twice as high as global exports, and the gross product associated with international production is about one-tenth of global GDP, compared with one-twentieth in 1982 (table 4). The ratio of

**Table 2. The top 25 TNCs from developing economies, ranked by foreign assets, 1998**

(Millions of dollars, number of employees)

| Ranking by Foreign assets | Ranking by TNI [a] | Corporation | Economy | Industry [b] | Assets Foreign | Assets Total | Sales Foreign | Sales Total | Employment Foreign | Employment Total | TNI [a] (Per cent) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 34 | Petróleos de Venezuela S.A. | Venezuela | Petroleum expl./ref./distr. | 7 926 | 48 816 | 11 003 | 25 659 | 6 026 | 50 821 | 23.7 |
| 2 | 14 | Daewoo Corporation | Republic of Korea | Trade | .. | 22 135 | .. | 30 547 | .. | 15 000 | 49.4 |
| 3 | 6 | Jardine Matheson Holdings, Limited [d] | Hong Kong (China)/ Bermuda | Diversified | 5 954 | 9 565 | 7 921 | 11 230 | .. | 160 000 | 67.6 |
| 4 | 12 | Cemex, S.A. | Mexico | Construction | 5 639 | 10 460 | 2 334 | 4 315 | 9 745 | 19 761 | 52.4 |
| 5 | 35 | PETRONAS - Petroliam Nasional Berhad | Malaysia | Petroleum expl./ref./distr. | 5 564 | 26 184 | 3 757 | 11 133 | 2 700 | 18 578 | 23.2 |
| 6 | 8 | Sappi Limited | South Africa [c] | Pulp and Paper | 4 574 | 6 475 | 3 246 | 4 308 | 10 725 | 23 640 | 63.8 |
| 7 | 19 | Hutchison Whampoa, Ltd. | Hong Kong (China) | Diversified | .. | 13 389 | 2 191 | 6 639 | 20 845 | 39 860 | 39.4 |
| 8 | 9 | First Pacific Company Ltd. | Hong Kong (China) | Other | 4 086 | 7 646 | 2 527 | 2 894 | 15 063 | 30 673 | 63.3 |
| 9 | 39 | Sunkyong Group | Republic of Korea | Diversified | 3 851 | 36 944 | 12 029 | 38 274 | 2 400 | 29 000 | 16.7 |
| 10 | 49 | Petroleo Brasileiro S.A. - Petrobras | Brazil | Petroleum expl./ref./distr. | 3 700 | 33 180 | 1 300 | 15 520 | 417 | 42 137 | 6.8 |
| 11 | 45 | New World Development Co., Ltd. | Hong Kong (China) | Construction | 3 414 | 13 465 | 376 | 2 628 | 30 | 16 512 | 13.3 |
| 12 | 31 | China State Construction Engineering Corporation | China | Construction | 3 290 | 7 300 | 1 950 | 5 890 | 5 535 | 239 102 | 26.8 |
| 13 | 36 | YPF Sociedad Anonima | Argentina | Petroleum expl./ref./distr. | 3 278 | 13 146 | 880 | 5 500 | 1 754 | 9 486 | 19.8 |
| 14 | 21 | LG Electronics, Incorporated | Republic of Korea | Electronics and electrical equipment | 3 127 | 12 824 | 4 841 | 12 213 | 27 819 | 60 753 | 36.6 |
| 15 | 17 | China National Chemicals Import & Export Corporation | China | Trade | 3 000 | 4 950 | 7 920 | 13 800 | 510 | 8 415 | 41.4 |
| 16 | 43 | Keppel Corporation Limited | Singapore | Diversified | 2 598 | 17 321 | 376 | 2 127 | 1 700 | 11 900 | 15.7 |
| 17 | 24 | Companhia Vale do Rio Doce | Brazil | Transportation | 1 947 | 13 539 | 3 025 | 4 321 | 7 076 | 40 334 | 34.0 |
| 18 | 20 | Hyundai Engineering & Construction Co. | Republic of Korea | Construction | .. | 7 094 | .. | 3 815 | .. | 22 787 | 37.6 |
| 19 | 15 | Citic Pacific, Limited | Hong Kong (China) | Diversified | 1 842 | 8 771 | 908 | 1 755 | 7 639 | 11 871 | 45.7 |
| 20 | 28 | Enersis, S.A. | Chile | Electric utilities or services | 1 697 | 16 117 | 306 | 3 406 | 9 342 | 14 336 | 28.2 |
| 21 | 3 | Guangdong Investment Ltd. | Hong Kong (China) | Diversified | 1 695 | 2 577 | 614 | 812 | 16 015 | 17 330 | 77.9 |
| 22 | 26 | San Miguel Corporation | Philippines | Food and beverages | 1 676 | 3 552 | 287 | 1 811 | 4 338 | 15 923 | 30.1 |
| 23 | 40 | Samsung Electronics Co., Ltd. | Republic of Korea | Electronics and electrical equip. | .. | 17 213 | .. | 16 640 | .. | 42 154 | 16.3 |
| 24 | 44 | Shougang Group | China | Steel and iron | 1 610 | 6 990 | 830 | 4 270 | 1 548 | 212 027 | 14.4 |
| 25 | 16 | Barlow Limited | South Africa [c] | Diversified | 1 574 | 2 624 | 1 734 | 3 769 | .. | 27 804 | 43.9 |

*Source:* UNCTAD/Erasmus University database.

[a] TNI is the abbreviation for "transnationality index", which is calculated as the average of three ratios: foreign assets to total assets, foreign sales to total sales and foreign employment to total employment.

[b] Industry classification for companies follows the United States Standard Industrial Classification which is used by the United States Securities and Exchange Commission (SEC).

[c] Within the context of this list, South Africa is treated as a developing country.

.. Data on foreign assets, foreign sales or foreign employment were not made available for the purpose of this study. In case of non-availability, they are estimated using secondary sources of information or on the basis of the ratios of foreign to total assets, foreign to total sales and foreign to total employment.

**Table 3. National regulatory changes, 1991-1999**

| Item | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 |
|---|---|---|---|---|---|---|---|---|---|
| Number of countries that introduced changes in their investment regimes | 35 | 43 | 57 | 49 | 64 | 65 | 76 | 60 | 63 |
| Number of regulatory changes | 82 | 79 | 102 | 110 | 112 | 114 | 151 | 145 | 140 |
| of which: | | | | | | | | | |
| More favourable to FDI [a] | 80 | 79 | 101 | 108 | 106 | 98 | 135 | 136 | 131 |
| Less favourable to FDI [b] | 2 | - | 1 | 2 | 6 | 16 | 16 | 9 | 9 |

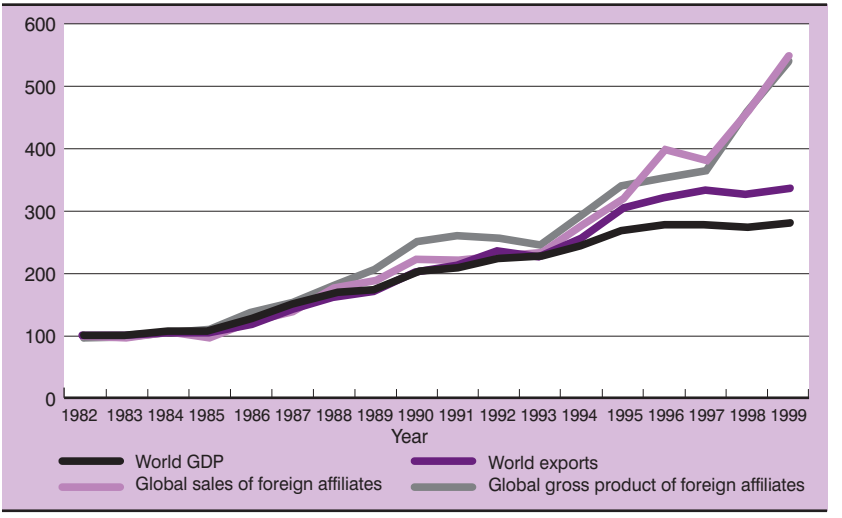
*Source:* UNCTAD, *World Investment Report 2000: Cross-border Mergers and Acquisitions and Development*, table I.3, p. 4.

[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.

**Figure 1. The growth of sales and gross product associated with international production, GDP and exports, 1982-1999**

(Index, 1982=100)




*Source:* UNCTAD, *World Investment Report 2000: Cross-border Mergers and Acquisitions and Development*, figure I.1, p. 6.

**Table 4. Selected indicators of FDI and international production, 1982-1999**

(Billions of dollars and percentage)

| Item | Value at current prices (Billion dollars) | | | Annual growth rate (Per cent) | | | | |
|---|---|---|---|---|---|---|---|---|
| | 1982 | 1990 | 1999 | 1986-1990 | 1991-1995 | 1996-1999 | 1998 | 1999 |
| FDI inflows | 58 | 209 | 865 | 24.0 | 20.0 | 31.9 | 43.8 | 27.3 |
| FDI outflows | 37 | 245 | 800 | 27.6 | 15.7 | 27.0 | 45.6 | 16.4 |
| FDI inward stock | 594 | 1 761 | 4 772 | 18.2 | 9.4 | 16.2 | 20.1 | 18.8 |
| FDI outward stock | 567 | 1 716 | 4 759 | 20.5 | 10.7 | 14.5 | 17.6 | 17.1 |
| Cross-border M&As[a] | .. | 151 | 720 | 26.4[b] | 23.3 | 46.9 | 74.4 | 35.4 |
| Sales of foreign affiliates | 2 462 | 5 503 | 13 564[c] | 15.8 | 10.4 | 11.5 | 21.6[c] | 17.8[c] |
| Gross product of foreign affiliates | 565 | 1 419 | 3 045[d] | 16.4 | 7.1 | 15.3 | 25.4[d] | 17.1[d] |
| Total assets of foreign affiliates | 1 886 | 5 706 | 17 680[e] | 18.0 | 13.7 | 16.5 | 21.2[e] | 19.8[e] |
| Exports of foreign affiliates | 637 | 1 165 | 3 167[f] | 13.2 | 13.9 | 12.7 | 13.8[f] | 17.9[f] |
| Employment of foreign affiliates (thousands) | 17 433 | 23 605 | 40 536[g] | 5.6 | 5.0 | 8.3 | 11.4[g] | 11.9[g] |
| *Memorandum:* | | | | | | | | |
| GDP at factor cost | 10 611 | 21 473 | 30 061[h] | 11.7 | 6.3 | 0.6 | -0.9 | 3.0[h] |
| Gross fixed capital formation | 2 231 | 4 686 | 6 058[h] | 13.5 | 5.9 | -1.4 | -2.1 | -0.3[h] |
| Royalties and fees receipts | 9 | 27 | 65[h] | 22.0 | 14.2 | 3.9 | 6.3 | 0.5[h] |
| Exports of goods and non-factor services | 2 041 | 4 173 | 6 892[h] | 15.0 | 9.5 | 1.5 | -1.8 | 3.0[h] |

*Source:* UNCTAD, *World Investment Report 2000: Cross-border Mergers and Acquisitions and Development*, table I.1, p. 2.

[a] Data are only available from 1987 onwards.

[b] 1987-1990 only.

[c] Based on the following regression result of sales against FDI inward stock for the period 1982-1997: Sales = 636 + 2.71 * FDI inward stock.

[d] Based on the following regression result of gross product against FDI inward stock for the period 1982-1997: Gross product = 239 + 0.59 * FDI inward stock.

[e] Based on the following regression result of assets against FDI inward stock for the period 1982-1997: Assets = -714 + 3.86 * FDI inward stock.

[f] Based on the following regression result of exports against FDI inward stock for the period 1982-1997: Exports = 129 + 0.64 * FDI inward stock.

[g] Based on the following regression result of employment against FDI inward stock for the period 1982-1997: Employment = 13 287 + 5.71 * FDI inward stock.

[h] Estimates.

*Note:* Not included in this table are the value of worldwide sales by foreign affiliates associated with their parent firms through non-equity relationships and the sales of the parent firms themselves. Worldwide sales, gross product, total assets, exports and employment of foreign affiliates are estimated by extrapolating the worldwide data of foreign affiliates of TNCs from France, Germany, Italy, Japan and the United States (for sales and employment) and those from Japan and the United States (for exports), those from the United States (for gross product), and those from Germany and the United States (for assets) on the basis of the shares of those countries in the worldwide outward FDI stock.

world FDI inflows, which stood at $865 billion in 1999, to global gross domestic capital formation is now 14 per cent, compared with 2 per cent twenty years ago. Similarly, the ratio of world FDI stock to world GDP increased from 5 per cent to 16 per cent during the same period. And the number of transnational parent firms in 15 developed home countries increased from some 7,000 at the end of the 1960s to some 40,000 at the end of the 1990s.

The ascendance and deepening of international production have given rise to new policy challenges. The distribution of international production, and of the corresponding benefits associated with it, is one of the most important of these. While the size of international production has risen significantly over the past few decades, not all countries have participated in it to the same extent. FDI, albeit an imperfect measure of international production, is concentrated in a handful of countries — ten countries received 74 per cent of global FDI flows in 1999. Just ten developing countries received 80 per cent of total FDI flows to the developing world. The transnationality index, a more complex measure of the extent of a country's involvement in international production, shows a similar picture (figure 2). More importantly, there are no signs that the concentration of international production across countries has been declining over time. However, in many least developed countries that have received only small amounts of FDI, such investment is important vis-à-vis the size of domestic investment. What remains a challenge for these countries is the ability to attract not only more, but also higher-quality FDI — broadly defined as investment with strong links to the domestic economy, export orientation, advanced technology and skill or spillover effects.

Another challenge is posed by issues arising from the ability of TNCs to internalize cross-border transactions and bypass national controls and scrutiny. For example, TNCs can use transfer pricing on intra-firm trade to minimize their tax exposure, depriving host or home countries of tax revenues. Furthermore, cross-holdings, share listings in several stock exchanges, the location of headquarters in countries other than the country of origin, and sourcing of inputs from facilities in multiple countries are all examples of how the ownership and nationality of TNCs have become less clear-cut. Finally, given that the micro-economic interests of TNCs and the

**Figure 2. Transnationality index[a] of host economies,[b] 1997**

(Percentage)

*Source:* UNCTAD, *World Investment Report 2000: Cross-border Mergers and Acquisitions and Development*, figure I.13, p. 23.

[a] Average of the four shares : FDI inflows as a percentage of gross fixed capital formation for the past three years (1995-1997); FDI inward stocks as a percentage of GDP in 1997; value added of foreign affiliates as a percentage of GDP in 1997; and employment of foreign affiliates as a percentage of total employment in 1997.

[b] Only the economies for which data for all of these four shares are available were selected. Data on value added are available only for Finland (1996), France (1996), Italy, Japan, Norway, Portugal (1996), Sweden (1996), the United States, China, India (1995), Malaysia (1995), Mexico (1993), Singapore and Taiwan Province of China (1994). For other economies, data were estimated by applying the ratio of value added of United States affiliates to United States outward FDI stock to total inward FDI stock of the country. Data on employment are available only for Austria, Denmark (1996), Finland, France (1996), Germany, Ireland, Italy, Japan, Portugal (1996), Sweden (1998), the United States, Brazil (1995), China, Hong Kong (China), Indonesia (1996), Mexico (1993) and Taiwan Province of China (1995). For other economies, data were estimated by applying the ratio of employment of German and United States affiliates to German and United States outward FDI stock to total inward FDI stock of the economy.

development objectives of host countries do not necessarily coincide, governments need to ensure that policies are in place to ensure that they maximize the benefits gained from FDI. This means creating dynamic locational advantages so as to attract especially higher-quality FDI. It also means creating an integrated and coherent framework of policies conducive to development, implementing it properly and establishing a framework for property rights and dispute settlement. However, it requires effective bargaining capabilities in host countries.

### *…invested record amounts abroad in 1999, but mostly in the developed world.*

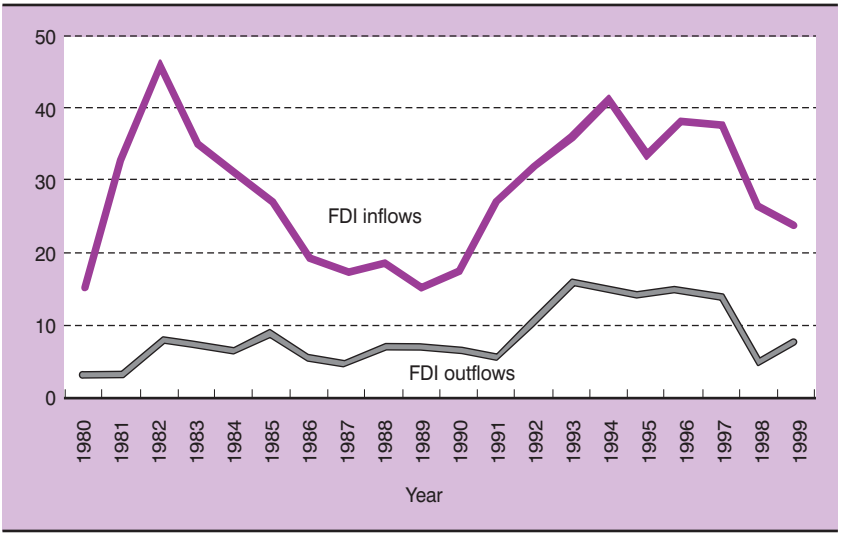
Driven by the recent wave of cross-border mergers and acquisitions (M&As), global FDI outflows reached $800 billion in 1999, an increase of 16 per cent over the previous year. Indications are that FDI flows in 2000 may well surpass the one-trillion-dollar mark. (Beyond that year, predictions are difficult to make.) After stagnating in 1998, FDI flows to developing countries have resumed their earlier growth trend. In 1999, developing countries received $208 billion in FDI, an increase of 16 per cent over 1998 and an all-time high. The share of developing countries in global FDI inflows has, however, fallen, going from 38 per cent in 1997 to 24 per cent in 1999 (figure 3).

Developed countries attracted $636 billion in FDI flows in 1999, nearly three quarters of the world's total. The *United States* and the United Kingdom were the leaders as both investors and recipients. With $199 billion, the United Kingdom became the largest outward investor in 1999, forging ahead of the United States. Large M&As in the United States, driven partly by the continuing strength of its economy, rendered it the largest recipient of FDI with $276 billion, nearly one-third of the world total.

TNCs based in the *European Union* (EU) invested $510 billion abroad in 1999, or nearly two-thirds of global outflows. Within the EU, the United Kingdom, France and Germany were the largest outward investors, while the United Kingdom and Sweden were the largest recipients — in the case of the latter, owing to one single

**Figure 3. Share of developing countries in world FDI flows, 1980-1999**

(Percentage)




*Source*: UNCTAD, *World Investment Report 2000: Cross-border Mergers and Acquisitions and Development*, figure I.9, p. 18.

large acquisition. In the case of outflows, extra-EU FDI has been more important than intra-EU investment since 1997, owing to a few large M&A deals, but intra-EU FDI remained significant as TNCs were still adjusting their investment plans to the various EU directives deregulating and opening up new industries. The EU's single currency, the euro, has stabilized exchange rates, contributing in this manner to a reduction of transaction costs for investors in the region; but it has also increased competition, which has exerted more pressure on firms to restructure and consolidate their operations.

FDI flows to *Japan* quadrupled, reaching a record $13 billion in 1999, the largest annual inflow to date. Dispelling the image of Japan as a country where M&As are either unwelcome or difficult to undertake, most of these inflows arrived through cross-border M&A deals. As for Japanese FDI outflows, they declined in 1999 by 6 per cent, to $23 billion, although Japanese TNCs, among the most affected by the Asian financial crisis, are beginning once again to increase production in Asia.

***FDI rebounded in East and South-East Asia, and gained momentum in Latin America and the Caribbean,…***

Contrary to general expectations, FDI flows to *East and South-East Asia* increased by 11 per cent, to reach $93 billion in 1999. The increase was mainly in newly industrializing economies (Hong Kong, China; Republic of Korea; Singapore; and Taiwan Province of China), whose inflows increased by almost 70 per cent. In the Republic of Korea, FDI inflows reached an unprecedented $10 billion. Inflows to Singapore and Taiwan Province of China experienced a significant recovery after a sharp decline in 1998. FDI in Hong Kong (China), now the second largest recipient in the region, increased significantly — by more than 50 per cent — to reach $23 billion in 1999. This increase was largely due to the 1998 wave of "re-domiciling" funds owned by Hong Kong investors and foreign investors based in Hong Kong (China) and also to a large amount of reinvested earnings as a result of the distinct turnaround in local economic activity in 1999. Nevertheless, FDI flows declined in three of the five countries most affected by the recent financial crisis (Indonesia, Thailand and the Philippines). Flows to China, which had been well above $40 billion for four consecutive years, dropped by nearly 8 per cent, to just over $40 billion in 1999. South-East Asian low income countries which are dependent on other countries in the region for FDI continued to be adversely affected by the negative impact of the crisis on Asian outward investment.

Behind the recovery of FDI in the region lies intensified efforts to attract FDI, including greater liberalization at the sectoral level and increased openness to cross-border M&As. Cross-border M&As in the five countries (Indonesia, Malaysia, the Philippines, Republic of Korea and Thailand) most affected by the recent crisis reached a record level of $15 billion in 1999. Indeed, M&As have become an important mode of entry for TNCs investing in the region, averaging $20 billion during the period 1997-1999, compared with an average of $7 billion during the period 1994-1996.

FDI in *South Asia* declined in 1999 by 13 per cent, to $3.2 billion. Inflows to India, the single largest recipient in the sub-region,

were $2.2 billion (a 17 per cent decrease). FDI flows to *Central Asia* declined slightly in 1999 to $2.8 billion, losing the momentum exhibited during the initial phases of liberalization and regulatory reform. The *Pacific Island* economies saw an improvement in their inflows in 1999, which rose to $250 million. FDI flows to *West Asia* increased to $6.7 billion, with Saudi Arabia receiving most of the new investment.

Outward FDI from developing Asia recovered from its recession during the financial crisis (increasing by 64 per cent in 1999 to an estimated $37 billion), still lower than the pre-crisis level. Hong Kong (China) remained the major outward investor, accounting for over half of the total outflows from the region. Divestment by Asian TNCs continued in 1999. In some cases, Asian TNCs sold their existing overseas businesses; in others, they were themselves acquired by foreign TNCs. Many Asian TNCs have been unable to take advantage of the cheap assets available due to the crisis; exceptions were those based in Hong Kong (China), Singapore and Taiwan Province of China, which managed to maintain their financial strength to engage in M&As, mostly in neighbouring countries.

FDI flows to *Latin America and the Caribbean* continued to increase in 1999, reaching a new record level of $90 billion, a 23 per cent increase over 1998. For the fourth consecutive year, Brazil was the largest recipient in the region, with $31 billion in investment inflows, mostly in non-tradable services and domestic-market-oriented manufacturing. Argentina's inflows more than tripled, reaching $23 billion in 1999; it overtook Mexico as the region's second largest recipient. Mexico received $11 billion in 1999, mainly in export-oriented manufacturing. A significant part of FDI flows to Latin America has entered through M&A deals, which reached a value of $37 billion in 1999. Some $16 billion of it involved the acquisition of local private companies by foreign-based TNCs. Privatization, however, remained important in Argentina, Brazil and to a lesser extent Chile, with a significant participation by TNCs based in Europe. For the Andean Community countries, FDI through privatization remained low.

***…but flows to Central and Eastern Europe rose only modestly, while Africa continued to receive no more than a marginal share of FDI inflows.***

In 1999, FDI flows into *Central and Eastern Europe* increased for the third consecutive year, reaching $23 billion in 1999. Still, the region accounted for less than 3 per cent of global FDI flows. As in 1998, Poland, the Czech Republic and the Russian Federation continued to be the top recipients of FDI flows. In the case of the last, FDI flows have rebounded, but they are still half the level of their 1997 figure of $6 billion. In relation to the size of their economies, Estonia, Hungary and the Czech Republic are the region's leaders. TNCs based in the European Union are the principal investors in Central and Eastern Europe, and services are gaining in importance over manufacturing. The size of the domestic market in the case of large recipients, such as Poland, or privatization programmes allowing the participation of foreign investors, as in the case of the Czech Republic, are the principal determinants of FDI in the region. Central and Eastern European countries are not significant outward investors, registering less than $3 billion of outflows in 1999.

Despite a modest rise in FDI flows to *Africa* — from $8 billion in 1998 to $10 billion in 1999 — the region's performance remains lackluster. On a more positive note, though, FDI flows to Africa have stabilized at much higher levels than those registered in the early 1990s, in response to the sustained efforts of many countries to create more business-friendly environments. Some countries, such as Angola, Egypt, Morocco, Nigeria, South Africa and Tunisia, have attracted sizeable amounts of FDI in recent years. Angola and Egypt, in particular, have been especially successful, overtaking Nigeria to become the largest FDI recipients in the region in 1999. Although the absolute levels of FDI were small for most countries, they were nevertheless often significant in relation to the size of their domestic economies, as measured by both GDP and gross domestic capital formation. Finally, there is more diversification in terms of both source countries — with the United States being the most important one, followed by European countries — and in terms of sectors — with manufacturing and services gaining in importance over natural resources. On the negative side, FDI in Africa continues to be highly

concentrated in five countries (whose composition, however, has changed over the years), with the bulk of African countries receiving meager amounts and the continent's share of world FDI inflows languishing at 1.2 per cent.

The responses to a survey of 296 of the world's largest TNCs carried out jointly by UNCTAD and the International Chamber of Commerce at the beginning of 2000 indicate that the modest increase in the level of FDI flows into Africa observed in recent years may well be sustained in the future. One-third of the 65 respondents intend to increase investment in Africa in the next three to five years, and more than half expect their investment to remain stable. More than 43 per cent of the respondents expect that Africa's overall prospects for attracting FDI will improve in the next three-to-five years, but another 46 per cent expect no change. South Africa and Egypt are viewed as the most attractive African locations. In general, the more developed countries in the region ranked higher than those at the bottom of the ladder, but a few least developed countries, notably Mozambique, Uganda, the United Republic of Tanzania and Ethiopia, were also viewed as attractive FDI destinations. Tourism, natural resource industries, or industries for which the domestic market is important — such as telecommunications — were viewed as the most promising in their potential to attract FDI. Textiles and clothing industries for which the international market is important ranked low. The survey findings also pointed out that the negative image of Africa persists and acts as a disincentive for foreign investors. But they also underline the need to differentiate among the countries of the continent.

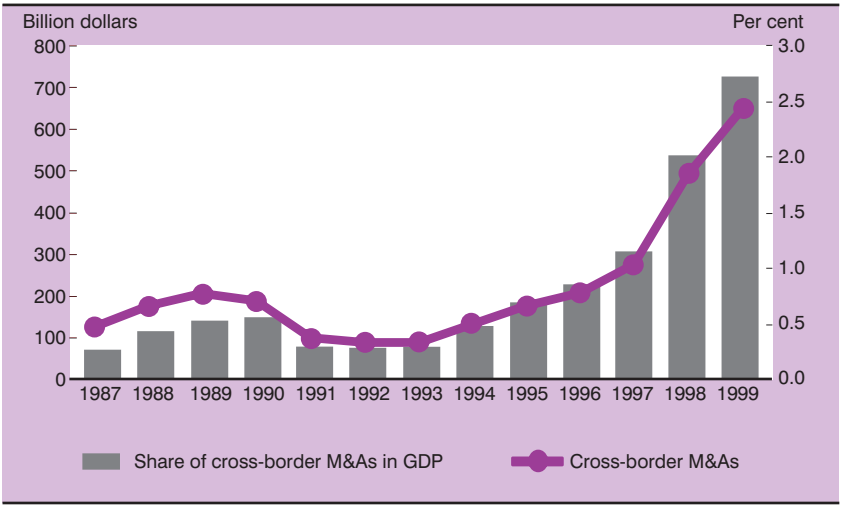
The findings of the survey are broadly in line with those of an earlier survey of African investment promotion agencies conducted in 1999. There are, however, some interesting differences as regards the determinants of FDI decisions. TNCs ranked the size of domestic markets high and access to international markets low, while it was the belief of African investment promotion agencies that TNCs placed more emphasis on access to global markets, regulatory frameworks and incentives. Both TNCs and investment promotion agencies, however, recognized that corruption, the high costs of doing business, the poor state of the physical infrastructure and difficulties in

accessing capital will be obstacles to attracting FDI in the foreseeable future.

### *Cross-border M&As, transacted in an emerging global market for firms, are the main force behind the latest rise of FDI,…*

Over the past decade, most of the growth in international production has been via cross-border M&As (including the acquisitions by foreign investors of privatized state-owned enterprises) rather than greenfield investment: the value of completed cross-border M&As rose from less than $100 billion in 1987 to $720 billion in 1999 (figure 4). It should be cautioned, however, that data on the value of cross-border M&As and FDI flows are not truly comparable, for a variety of reasons that relate to how M&As are financed and to the balance-of-payments methodology used in calculating FDI flows, which is not applicable to M&As. Still, regardless of whether investments take place through greenfield establishments or M&As, they add to the size of international production.

**Figure 4. Value of cross-border M&As and its share in GDP, 1987-1999**

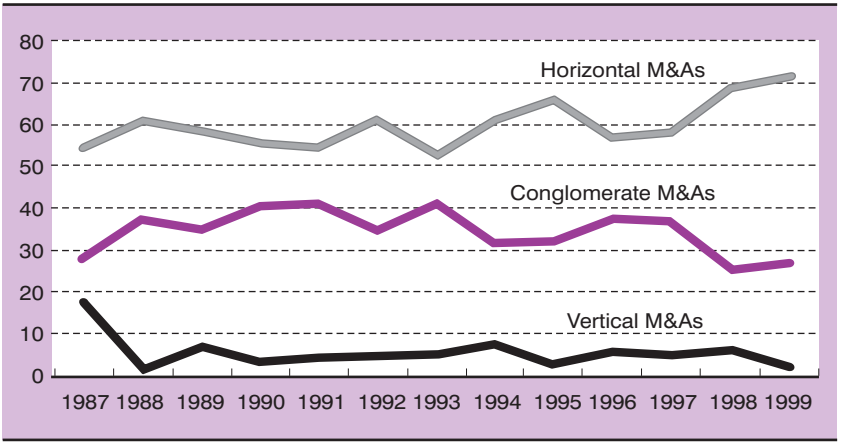



*Source*: UNCTAD, UNCTAD, *World Investment Report 2000: Cross-border Mergers and Acquisitions and Development*, figure I.4, p. 13.

Less than 3 per cent of the total number of cross-border M&As are officially classified as mergers (although many of them are so only in name) — the rest are acquisitions. Full acquisitions account for two thirds of the total number of cross-border acquisitions. Minority acquisitions (10-49 per cent) account for about one-third of cross-border acquisitions in developing countries, compared with less than one-fifth in developed countries. Cross-border M&As can be classified functionally as horizontal (between firms in the same industry), vertical (client-supplier or buyer-seller M&As), or conglomerate (between companies in unrelated industries) (figure 5). In terms of value, about 70 per cent of cross-border M&As are horizontal. In terms of number, that share is 50 per cent. Vertical M&As have been increasing in numbers in recent years. While many of the cross-border M&As in the late 1980s were driven by the quest for short-term financial gains, most M&As today appear to have strategic and economic rather than immediate financial motives. Also, most of the recent cross-border M&As are not hostile: hostile M&As accounted for less than 5 per cent of the total value and less than 0.2 per cent of the total number of M&As in 1999.

**Figure 5. World cross-border M&As, by type (horizontal, vertical, conglomerate),[a] 1987-1999**

(Percentage of the total value)

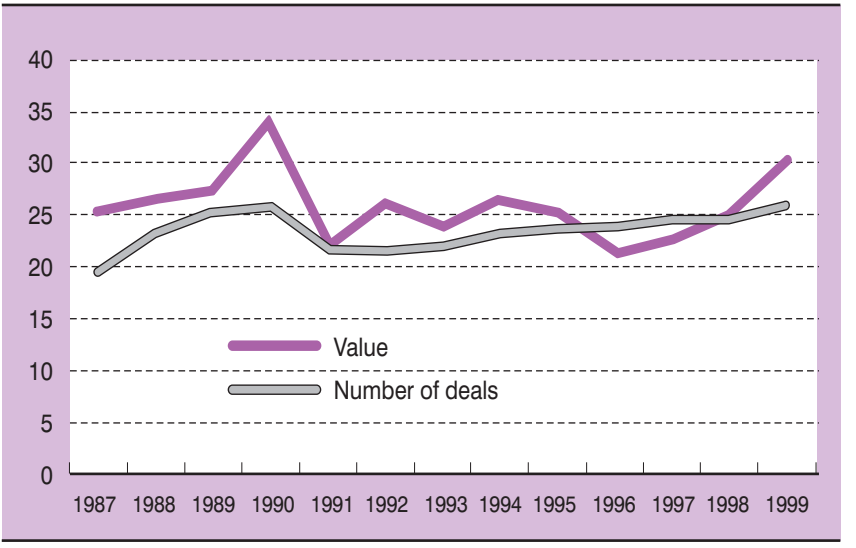



*Source*: UNCTAD, *World Investment Report 2000: Cross-border Mergers and Acquisitions and Development*, figure IV.2, p. 102.

[a] For the definition of each type of M&As, see annex table A.IV.1.

The total *number* of all M&As worldwide (cross-border and domestic) has grown at 42 per cent annually between 1980 and 1999. The *value* of all M&As (cross-border and domestic) as a share of world GDP has risen from 0.3 per cent in 1980 to 8 per cent in 1999. Two big M&A waves can be distinguished during this period: one in 1988-1990 and another from 1995 onwards. The recent wave has taken place alongside a boom in domestic M&As. Consequently, during the 1990s, the share of cross-border M&As in all M&A deals has not changed: it averaged about 25 per cent in terms of both value and number of completed transactions. (In 1999, however, that share in terms of value was nearly 31 per cent (figure 6).) Apart from traditional bank loans, the recent M&A boom has been facilitated by the increased use of such financing mechanisms as the issuance of common stocks, the exchange of stocks and corporate debt. In addition to the traditional bank loans venture capital funds have also been significant as a source of finance, enabling many new firms or small and medium-sized enterprises (SMEs) to engage in M&A activity.

**Figure 6. Cross-border M&As as a percentage of all M&As in the world, 1987-1999**



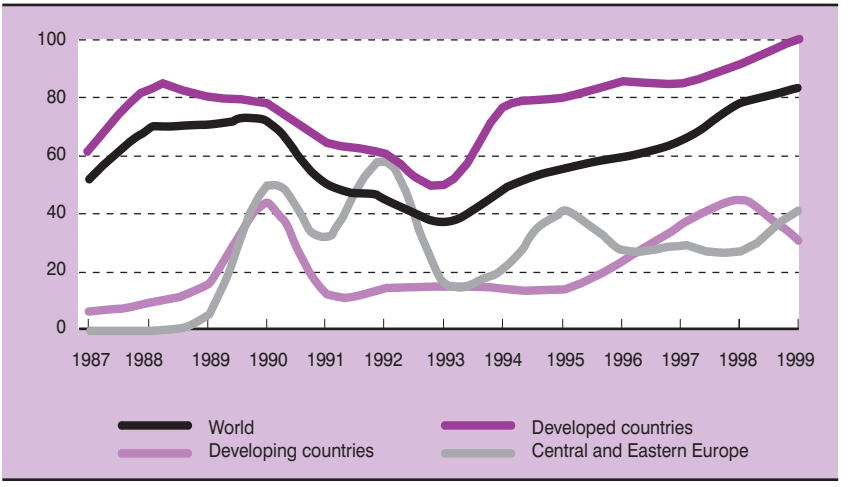

*Source*: UNCTAD, *World Investment Report 2000: Cross-border Mergers and Acquisitions and Development*, figure IV.6, p. 107.

Following earlier trends, cross-border M&As increased by 35 per cent in 1999, reaching — according to UNCTAD estimates — $720 billion in over 6,000 deals. About one-sixth of these M&A transactions (in terms of number) involved foreign affiliates already present in host countries. Cross-border M&As are expected to increase further in 2000, with several mega deals already announced or completed (e.g. Vodafone AirTouch-Mannesmann). The year 2000 may well see a total value of cross-border M&As above $1 trillion.

The ratio of the value of cross-border M&As to world FDI flows reached over 80 per cent in 1999. M&As are particularly significant as a mode of entry for FDI in developed countries. In the developing world, greenfield FDI is still dominant. FDI flows to developing countries associated with M&As have been on the rise, however, their value increased roughly from one-tenth of the value of total FDI inflows at the end of the 1980s to one-third at the end of the 1990s (figure 7). In Central and Eastern Europe, due to fluctuations in cross-border acquisitions associated with

**Figure 7. Value of cross-border M&As in relation to the value of FDI flows, world and by host region,[a] 1987-1999**

(Percentage)




*Source:* UNCTAD, *World Investment Report 2000: Cross-border Mergers and Acquisitions and Development*, figure I.5, p. 16.

[a] Cross-border M&A sales as a percentage of FDI inflows.

privatizations, the share of M&As in total FDI inflows has varied widely from year to year.

Some interesting parallels can be drawn between the current M&A boom and the one that occurred in the United States at the turn of the nineteenth century, reaching its climax between 1898 and 1902. Both M&A waves have been affected by major technological developments, new means of financing M&As and regulatory changes. But while the recent wave is an international one, the older one was confined to the United States. And just as the earlier boom in the United States contributed to the emergence of a national market for goods and services and a national production system, complemented by a national market for firms, so is the current international boom reinforcing the emergence of a global market for goods and services and the emergence of an international production system, complemented by an increasingly global market for firms.

### *…driven by strategic corporate objectives …*

The current spate of cross-border M&As is occurring despite the fact that many M&As have not delivered the anticipated positive results to the acquiring firms in terms of both share prices and "real" economic effects such as profits and productivity. Although the impact on the target firms often appears to be more favourable, the growth of cross-border M&As as a mode of expansion may still be regarded as somewhat paradoxical. In order to understand the phenomenon more fully, both basic motivations for M&As and changes in the economic environment — and their interaction — need to be taken into account.

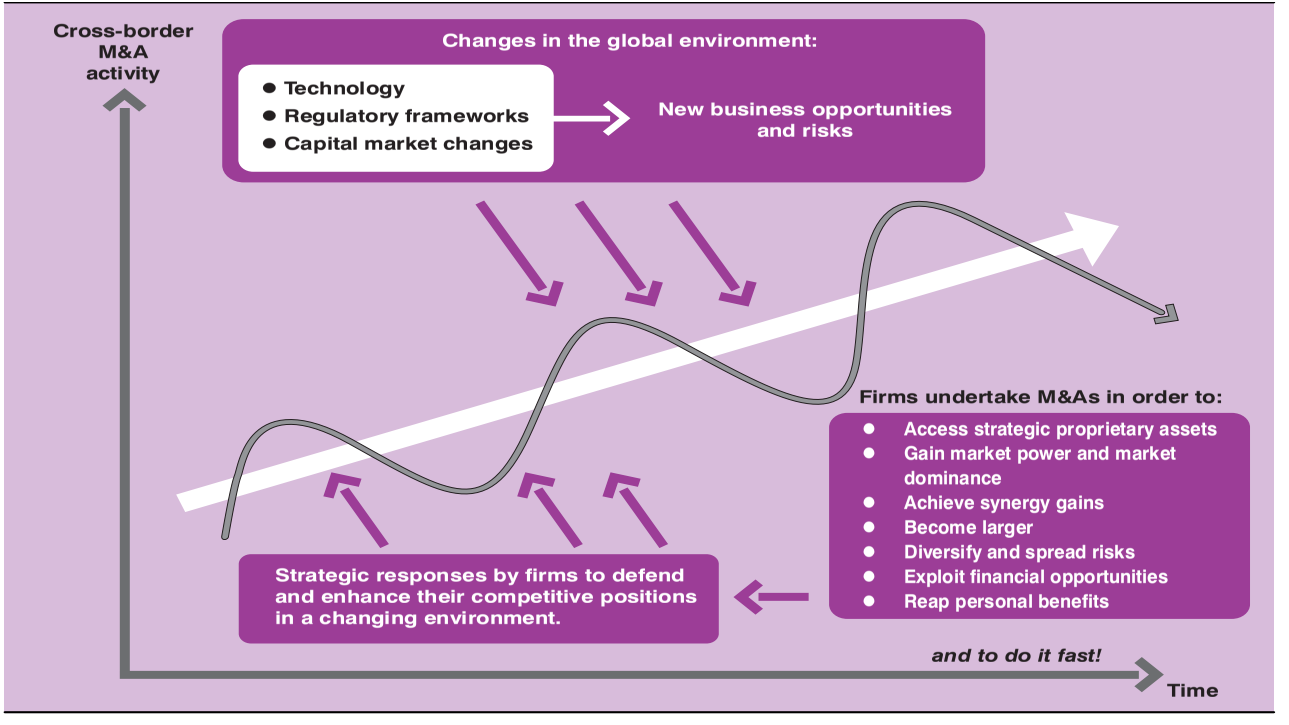
In general, from a foreign investor's perspective, cross-border M&As offer two main advantages compared with greenfield investment as a mode of FDI entry: speed and access to proprietary assets. The crucial role of speed in today's business life is illustrated by such quotes from top executives as: "In the new economy in which we live, a year has 50 days" or "Speed is our friend — time is our enemy". Cross-border M&As often represent the fastest means of building up a strong position in a new market, gaining market power — and indeed market dominance — increasing the size of the firm or

spreading risks. At the same time, financial opportunities may be exploited and personal gains be reaped by top management. Moreover, cross-border M&As may allow firms to realize synergies by pooling the proprietary resources and capabilities of the firms involved, with potential static and dynamic efficiency gains. The relatively poor financial performance record of M&As suggests, however, that there may be other reasons to consider.

They have to do with advances in technology, liberalization and changes in capital markets. The rapid pace of technical change has intensified competitive pressures on the world's technological leaders, which are often TNCs. By merging with other TNCs with complementary capabilities, firms can share the costs of innovation, access new technological assets and enhance their competitiveness. The spreading and deepening of the international production system through cross-border M&As has furthermore been facilitated by the ongoing removal or relaxation of restrictions on FDI (including restrictions on cross-border M&As) in many countries. Trade liberalization and regional integration efforts have added an impetus to cross-border M&As by setting the scene for more intense competition and by prompting regional corporate restructuring and consolidation. Capital market liberalization, in turn, and the proliferation of new methods of financing M&As, have made cross-border M&As easier. Finally, the idea that there is an increasingly global market for firms, in which firms are bought and sold, has become more widely accepted.

The current wave of unprecedented global and regional restructuring through cross-border M&As reflects a dynamic interaction between the various basic factors motivating firms to undertake M&As and changes in the global economic environment, in the pursuit of strategic corporate objectives (figure 8). For many firms, the quest to survive and prosper in the emerging global market for firms becomes the key strategic issue and, hence, drives the M&A trend. In the market for firms, sanctions can await those that fail to deliver growth and profits. One such sanction is to be taken over. All the basic motivations for firms to undertake cross-border M&As then combine to become key elements in the overarching strategic goal to defend and develop competitive market positions. Cross-border M&As are growing so rapidly in importance precisely because they

Figure 8. The driving forces of cross-border M&As




*Source:* UNCTAD, *World Investment Report 2000: Cross-border Mergers and Acquisitions and Development*, figure V.1, p. 154.

provide firms with the fastest way of acquiring tangible and intangible assets in different countries, and because they allow firms to restructure existing operations nationally or globally to exploit synergies and obtain strategic advantages. In brief, cross-border M&As allow firms rapidly to acquire a portfolio of locational assets which has become a key source of competitive strength in a globalizing economy. In oligopolistic industries, furthermore, deals may be undertaken in response to the moves or anticipated moves of competitors. Even firms that would not want to jump on the bandwagon may feel that they have to, for fear of becoming targets themselves.

### *…and concentrated mainly in a handful of developed countries and industries.*

Some 90 per cent of all cross-border M&As (by value in 1999; table 5), including most of the 109 mega deals with transaction values of more than $1 billion, were carried out in developed countries. These countries have had the highest share of M&As in their GDPs and have witnessed a parallel increase in FDI flows.

Western European firms engaged actively in cross-border M&As in 1999, with a total of $354 billion in sales and $519 billion in purchases. Intra-European-Union M&A activity accounts for a significant share of these transactions, driven by the introduction of the single currency and measures promoting greater regional integration. Most of the purchases outside the region involve United Kingdom firms acquiring United States firms. The United Kingdom, Sweden, Germany and the Netherlands were the largest target countries, while Germany and France were the largest acquirers after the United Kingdom.

The United States continued to be the single largest target country with M&A sales of $233 billion to foreign investors in 1999 (table 5). More than a quarter of all M&A deals in the United States in 1999 were concluded by foreign acquirers in 1999, compared with 7 per cent in 1997. Cross-border M&As are today the dominant mode by which FDI enters the United States market. M&A-associated investment in foreign affiliates in the United States accounted for 90

**Table 5. Cross-border M&As: sales and purchases, by region, 1990-1999**

(Billions of dollars)

| Region/economy | Sales | | | | | Purchases | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1990 | 1995 | 1997 | 1998 | 1999 | 1990 | 1995 | 1997 | 1998 | 1999 |
| **Developed countries** | **134.2** | **164.6** | **234.7** | **445.1** | **644.6** | **143.2** | **173.7** | **272.0** | **511.4** | **677.3** |
| *of which :* | | | | | | | | | | |
| European Union | 62.1 | 75.1 | 114.6 | 187.9 | 344.5 | 86.5 | 81.4 | 142.1 | 284.4 | 497.7 |
| United States | 54.7 | 53.2 | 81.7 | 209.5 | 233.0 | 27.6 | 57.3 | 80.9 | 137.4 | 112.4 |
| Japan | 0.1 | 0.5 | 3.1 | 4.0 | 15.9 | 14.0 | 3.9 | 2.7 | 1.3 | 9.8 |
| **Developing countries** | **16.1** | **15.9** | **64.3** | **80.7** | **63.4** | **7.0** | **12.8** | **32.4** | **19.2** | **41.2** |
| *of which :* | | | | | | | | | | |
| Africa | 0.5 | 0.2 | 1.7 | 0.7 | 0.6 | - | 0.1 | - | 0.2 | 0.4 |
| Latin America and the Caribbean | 11.5 | 8.6 | 41.1 | 63.9 | 37.2 | 1.6 | 4.0 | 10.7 | 12.6 | 24.9 |
| Europe | - | - | - | - | 0.3 | - | - | - | - | - |
| Asia | 4.1 | 6.9 | 21.3 | 16.1 | 25.3 | 5.4 | 8.8 | 21.7 | 6.4 | 15.9 |
| Pacific | - | 0.1 | 0.3 | - | 0.1 | - | - | - | - | - |
| **Central and Eastern Europe[a]** | **0.3** | **6.0** | **5.8** | **5.1** | **10.3** | **-** | **0.1** | **0.3** | **1.0** | **1.6** |
| **World[b]** | **150.6** | **186.6** | **304.8** | **531.6** | **720.1** | **150.6** | **186.6** | **304.8** | **531.6** | **720.1** |

*Source:* UNCTAD, *World Investment Report 2000: Cross-border Mergers and Acquisitions and Development*, table IV.3, p. 108.

[a] Includes the countries of the former Yugoslavia.

[b] Includes amounts that cannot be allocated by region.

per cent in terms of value and 62 per cent in terms of the number of projects of all FDI in 1998. On the outward side, United States firms acquired foreign firms valued at $112 billion in 1999, $25 billion less than in 1998. The decline reflects a lower number of mega deals.

The value of Japanese M&A purchases overseas increased significantly in 1999, primarily due to a single transaction. In general, Japanese TNCs still prefer greenfield investments to M&As, especially when investing in developing countries. Cross-border M&A sales in Japan have risen rapidly in recent years, and were larger than purchases during the period 1997-1999. This is due to changes in the regulatory framework for M&As, corporate strategies favouring M&As pursued by foreign-based TNCs, and the changing attitudes of Japanese firms towards M&As.

Automobiles, pharmaceuticals and chemicals, and food, beverages and tobacco were the leading industries in the manufacturing sector in terms of worldwide cross-border M&A activity in 1999. Most M&As in those industries were horizontal, aiming at economies of scale, technological synergies, increasing market power, eliminating excess capacity, or consolidating and streamlining innovation strategies and R&D budgets. In most of the industries in which horizontal M&A activity is strong, concentration ratios have intensified. In automobiles, M&A activity between car makers and suppliers has also led to greater vertical consolidation. Telecommunications, energy and financial services were the leading industries in M&A activity in the services sector, largely as a result of recent deregulation and liberalization in these industries. In financial services, competitive pressures and mounting information technology costs have given an added impetus to M&As.

It was not until the late 1990s that developing countries emerged as important locations for incoming cross-border M&As in terms of value. While their share in world cross-border M&As remained constant at less than 10 per cent in terms of value almost every year until the mid-1990s, in terms of the number of deals, it increased from 5 per cent in 1987 to 19 per cent in the late 1990s. The value of cross-border M&As undertaken by firms *from* developing countries rose from $3 billion in 1987 to $41 billion in 1999 (table 5).

Among the developing regions, Latin America and the Caribbean dominate cross-border M&A sales, with Brazil and Argentina as the main sellers. Privatization has been the main vehicle for M&As in both countries. In Asia, cross-border M&A sales gathered pace in 1999. In the Republic of Korea, acquisitions by foreign firms exceeded $9 billion in 1999, making it the largest recipient of M&A-associated FDI in developing Asia. In Africa, Egypt, Morocco and South Africa have been the targets of most foreign acquisitions. In the other African countries, M&A activity has been slow, due partly to the slow pace of privatization and partly broader reasons related to the investment climate and limited availability of attractive firms for purchase in the private sector.

The principal acquirers of firms based in developing countries have traditionally been TNCs based in developed countries. European Union firms became the largest acquirers during 1998-1999, replacing United States firms and accounting for more than two-fifths of all cross-border M&As in developing countries. Cross-border M&A purchases by firms based in developing countries nearly doubled in 1999 after dipping in 1998 in response to the Asian financial crisis. Asian firms in fact became the principal targets of these purchases in 1999, with Singapore the leading buyer. Cross-border M&A purchases by firms from the five Asian countries most affected by the financial crisis also increased, reflecting improvements in their liquidity position. The same trend can be observed in Latin America and the Caribbean, with significant increases in purchases by firms from this region in recent years.

In Central and Eastern Europe, M&A activity has fluctuated widely, doubling in 1999 to $10 billion. Poland, the Czech Republic and Hungary have been the major target countries owing to their large privatization programmes. European Union firms are the principal acquirers in this region.

Among developed countries, the sectoral patterns of cross-border M&A activity differ significantly between the European Union and the United States. In the former, chemicals, food, beverages and tobacco are the most targeted industries for M&As by foreign firms. In the latter, electrical and electronic equipment and chemicals are

the preferred target industries. In the European Union and the United States, financial firms are the most aggressive acquirers. In Latin America and the Caribbean, M&A activity is concentrated in public utilities, finance, petroleum products, transport, storage and communications. In the five countries most affected by the Asian financial crisis, finance is the dominant industry in foreign acquisitions. Finance, but also food, beverages and tobacco, are the principal target industries in Central and Eastern Europe.

### *The special features of cross-border M&As raise concerns about the balance of benefits for host countries…*

Cross-border M&As, particularly those involving large firms, vast sums of money and major restructurings of the activities of firms, are among the most visible faces of globalization. And, as with globalization generally, the impact of M&As on development can be double-edged and uneven. Indeed, perhaps to a greater extent than many other aspects of globalization, cross-border M&As — and the expanding global market for firm ownership and control in which these transactions take place — raise questions about the balance of their benefits and costs for host countries (box 1). These concerns are further accentuated in the prevailing context of globalization and the rapid changes associated with it. TNCs are seen to benefit disproportionately from globalization, while local SMEs in host developing countries are affected adversely. M&As, and in particular their cross-border variety, appear to be little more than a vehicle for the expansion of big business.

Concerns related to cross-border M&As are not confined to developing countries. They are also expressed in many developed countries, often more vehemently. When Japanese investors acquired the Rockefeller Center in New York and film studios in Hollywood, the press reacted with indignation. When Vodafone AirTouch (United Kingdom) recently sought to acquire Mannesmann (Germany), the reaction was similar in some quarters. While nationalistic reactions to foreign takeovers are diminishing in force, they can be strong enough to lead host governments to intervene, particularly if takeovers are hostile.

**Box 1. What concerns do cross-border M&As raise for host countries?**

In a number of host countries, concern is expressed in political discussions and the media that FDI entry through the takeover of domestic firms is less beneficial, if not positively harmful, for economic development than entry by setting up new facilities. At the heart of these concerns is that foreign acquisitions do not add to productive capacity but simply transfer ownership and control from domestic to foreign hands. This transfer is often accompanied by layoffs of employees or the closing of some production or functional activities (e.g. R&D capacities). It also entails servicing the new owner in foreign exchange.

If the acquirers are global oligopolists, they may well come to dominate the local market. Cross-border M&As can, moreover, be used deliberately to reduce competition in domestic markets. They can lead to strategic firms or even entire industries (including key ones like banking) falling under foreign control, threatening local entrepreneurial and technological capacity-building.

Concerns over the impact of cross-border M&As on host-country development arise even when M&As go well from a corporate viewpoint. But there can also be additional concerns related to the possibility that M&As may not, in fact, go well. Half of all M&As do not live up to the performance expectations of parent firms, typically when measured in terms of shareholder value. Moreover, even in M&As that do go well, efficient implementation from an investor's point of view does not necessarily mean a favourable impact on host-country development. This applies to FDI through M&As as well as to greenfield FDI. The main reason is that the commercial objectives of TNCs and the development objectives of host economies do not necessarily coincide.

The areas of concern transcend the economic and reach into the social, political and cultural realms. In industries like media and entertainment, for example, M&As may seem to threaten national culture or identity. More broadly, the transfer of ownership of important enterprises from domestic to foreign hands may be seen as eroding national sovereignty and amounting to recolonization. When the acquisitions involve "fire sales" — sales of companies in distress, often at low prices considered abnormally low — such concerns are intensified.

*Source:* UNCTAD.

All these concerns need to be considered carefully. They are examined in *WIR2000* by focussing on the impact of cross-border M&As in key areas of economic development, and whether it differs from that of greenfield FDI. A good part of the discussion in this

volume is conceptual, and more empirical work is needed to understand the matter fully.

The starting point of the examination is the impacts of FDI in general on different key areas of development, as identified in UNCTAD's *WIR99*. The *Report* then compares the impact of FDI through M&As with that of FDI through greenfield ventures. Comparing cross-border M&As with greenfield FDI often means considering counterfactuals — what might have happened if cross-border M&As had not taken place. Such counterfactuals need to take account of not just the industry and host-country context, but also of the broader setting of trade, technology and competition.

Not all cross-border M&As are FDI. Some are portfolio investments (acquisitions of less than 10 per cent equity, for measurement purposes). Yet others are akin to portfolio investments, being solely or primarily motivated by financial considerations, regardless of the equity share involved. Portfolio or near-portfolio M&As are not considered here, since the focus is on M&As as a mode of *FDI* entry, not on cross-border M&As *per se*. In any event, the share of portfolio or near-portfolio M&As in the total value of cross-border M&As is small.

For some direct investors there is a genuine choice between entering a host country through greenfield FDI and entering it through M&As. However, the two modes of entry are not always realistic alternatives for either TNCs or host countries, as for example when a telecommunication network is privatized or a large ailing firm needs to be rescued and no domestic buyers can be found. Hence *WIR2000* also considers situations in which cross-border M&As are the only realistic way for a country to deal with a given situation, focusing on how M&As affect the performance of the acquired enterprise and the host economy.

### *…especially at the time of entry and shortly thereafter,…*

The essential difference between cross-border M&As and greenfield FDI is that the former involve, by definition, a change of assets from domestic to foreign hands and, at least initially, do not

add to the productive capacity of host countries. The discussion in *WIR2000* suggests that, especially *at the time of entry and in the short term*, M&As (as compared to greenfield investment) may involve, in some respects, smaller benefits or larger negative impacts from the perspective of host-country development. To summarize:

- Although FDI through both M&As and greenfield investment bring foreign financial resources to a host country, the financial resources provided through M&As do not always go into additions to the capital stock for production, while in the case of greenfield FDI they do. Hence a given amount of FDI through M&As may correspond to a smaller productive investment than the same amount of greenfield FDI, or to none at all. However, when the only realistic alternative for a local firm is closure, cross-border merger or acquisition can serve as "life preserver".

- FDI through M&As is less likely to transfer new or better technologies or skills than greenfield FDI, at least at the time of entry. Moreover, it may lead directly to the downgrading or closure of local production or functional activities (e.g. R&D), or to their relocation in line with the acquirer's corporate strategy. Greenfield FDI does not *directly* reduce the technological assets and capabilities in a host economy.

- FDI through M&As does not generate employment when it enters a country, for the obvious reason that no new production capacity is created in a merger or an acquisition. Furthermore, it may lead to lay-offs, although it can conserve employment if the acquired firm would have otherwise gone bankrupt. Greenfield FDI necessarily creates new employment at entry.

- FDI through M&As can increase concentration in host countries and lead to anti-competitive results; in fact, M&As can be used deliberately to reduce or eliminate competition. It can, however, prevent concentration from increasing when takeovers help preserve local firms that might otherwise have gone under. Greenfield FDI, by definition, may increase the number of firms in existence and cannot directly increase market concentration upon entry.

***…but those fade in the longer term, when both direct and indirect effects of M&As come into play,…***

Most of the shortcomings of FDI through M&As in comparison with greenfield FDI relate to effects at entry or soon after entry. *Over the longer term,* when direct as well as indirect effects are taken into account, many differences between the impacts of the two modes diminish or disappear. To summarize:

- Cross-border M&As are often followed by sequential investments by the foreign acquirers — sometimes large, especially in special circumstances such as privatizations. Thus, over the longer term, FDI through M&As can lead to enhanced investment in production just as greenfield FDI does. The two modes are also likely to have similar effects regarding the crowding in and crowding out of domestic enterprises.

- Cross-border M&As can be followed by transfers of new or better technology (including organizational and managerial practices), especially when acquired firms are restructured to increase the efficiency of their operations. To the extent that TNCs invest in building local skills and technological capabilities, they do so regardless of how those affiliates were established.

- Cross-border M&As can generate employment over time, if sequential investments take place and if the linkages of acquired firms are retained or strengthened. Thus, in the longer run, differences between the two modes as regards employment generation tend to diminish and depend more on the motivation for entry than on the mode of entry. If employment reductions occur due to restructuring for greater efficiency, the consequences may be less disruptive than when greenfield FDI eliminates uncompetitive firms.

- The effects on market structure, whether negative or positive, can persist after entry. The capacity to engage in anticompetitive practices is greater with M&As that increase concentration, especially when they occur in weakly regulated oligopolistic industries.

In sum, host-country impacts of FDI are difficult to distinguish by mode of entry once the initial period has passed — with the possible exception on market structure and competition.

In addition to the principal effects on the important *individual* aspects of economic development summarized above, the overall impact of cross-border M&As as against greenfield investment also needs to be considered, taking into account the specific economic context and the development priorities of individual host countries. Particularly important here is the impact on economic restructuring. The restructuring of industries and activities is necessary for growth and development, especially under conditions of rapid technological change and increasing global competition. It can also be important under exceptional circumstances, such as financial crises or transitions to market-based economic systems. Cross-border M&As may have a role to play here since they provide a package of assets that can be used for various types of restructuring and, furthermore, have the attributes of speed and the immediate involvement of local (acquired) firms; they can thus usefully supplement domestic resources and efforts. Greenfield investment, of course, can also help economic restructuring; but it has no role to play in conserving domestic enterprises and may, indeed, hasten the demise of weaker domestic firms if and when it out-competes them.

### *…although concerns regarding foreign control and ownership generally may linger.*

Finally, there are the broader apprehensions regarding a weakening of the national enterprise sector and a loss of control over the direction of national economic development and the pursuit of national social, cultural and political goals. These issues acquire urgency when cross-border M&As result in industries thought to be strategic coming under the control of foreign TNCs. They may acquire a yet further edge in developing countries since these countries are predominantly host rather than home countries for FDI in general and cross-border M&As in particular.

The basic question here is what role foreign firms should play in an economy, regardless of whether they enter through greenfield

investment or cross-border M&As. It has to do with the extent of foreign ownership that a country can accept comfortably, and the economic, social, cultural and political consequences of such ownership. Many governments, local enterprises and civil-society groups feel that certain activities (e.g. the media) should be exclusively or primarily in local hands.

There are no *a priori* solutions to these concerns. Each country needs to make its own judgement in the light of its conditions and needs and in the framework of its broader development objectives. It also needs to be aware of — and to assess — the trade-offs involved, whether related to efficiency, output growth, the distribution of income, access to markets or various non-economic objectives. And it needs to note as well that some of these concerns are raised by *all* FDI, although the specific nature of M&As may exacerbate them. Trade-offs between economic objectives and broader, non-economic ones, in particular, require value judgements that only countries alone can make.

### *The circumstances of host countries are particularly important for determining impact.*

Apart from consideration related to the time at entry versus the longer run, circumstances in which host countries find themselves deserve underlining when it comes to the assessment of the costs and benefits of cross-border M&As:

- Under *normal circumstances* (i.e. in the absence of crises or systemic changes), and especially when cross-border M&As and greenfield investments are *real* alternatives, greenfield FDI is more useful to developing countries than cross-border M&As. Other things (motivations, capabilities) being equal, greenfield investment not only brings a package of resources and assets *but* simultaneously creates additional productive capacity and employment; cross-border M&As may bring the same package but do not create immediate additional capacity. Furthermore, certain types of cross-border M&As involve a number of risks at the time of entry, from reduced employment through asset stripping to the slower upgrading of domestic technological capacity. And when M&As involve competing firms, there are,

of course, the possible negative impacts on market concentration and competition, which can persist beyond the entry phase.

- Under *exceptional circumstances*, cross-border M&As can play a useful role, a role that greenfield FDI may not be able to play, at least within the desired time-frame. Particularly relevant here is a situation of crisis in which firms in a country experience several severe difficulties or face the risk of bankruptcy and no alternative to FDI (including public funding) to M&As by foreign investors is available to help them. Large capital-intensive privatizations (or a large number of privatizations within the framework of a comprehensive privatization programme) may also fall in this category, because domestic firms may not be able to raise the required funds (including in international financial markets) or have other assets (such as modern managerial practices or technology) that are needed to make the privatized firms competitive. The need for rapid restructuring under conditions of intense competitive pressures or overcapacity in global markets may also make host countries find the option of FDI through cross-border acquisitions of some of their firms useful. The advantage of M&As in such conditions is that they restructure existing capacities. In some of these circumstances, host countries have thus found it useful to relax cross-border M&A restrictions, extend incentives previously reserved for greenfield investment to FDI through M&As, and even make active efforts to attract suitable cross-border M&A partners.

Although there are countries in which exceptional circumstances may be overriding for some time (for example, for economies in transition implementing massive privatization programmes or countries experiencing financial crises), most countries face a mixture of normal and exceptional circumstances. Thus, even countries in sound economic condition might have a number of enterprises (or even entire industries) that are uncompetitive and require restructuring. And, of course, competitive enterprises can also be targets of cross-border M&As. The factors that influence the impact of cross-border M&As on development — regardless of circumstances — were summarized in June 2000 in the

"Outcome" of an intergovernmental Expert Meeting on Mergers and Acquisitions as follows (UNCTAD, 2000, para. 7):

"The economic policy framework and the country's level of development are key. Other factors affecting the impact are: whether a short or long-term perspective is taken to evaluate effects; the normal or exceptional circumstances (such as privatization programmes or financial crises) in which cross-border M&As take place; motivation of the investor (e.g. market seeking vs. efficiency seeking); the situation of the acquired enterprise; and the availability of alternatives as regards modes of entry of investment."

***Regardless of circumstances, policy matters — and competition policy takes pride of place among policies addressing cross-border M&A concerns.***

Many of these factors — and the specific consequences of cross-border M&As — can be influenced by policy measures. This underlines the central message of the *World Investment Report 1999*, which dealt with FDI and development generally, namely that policy matters. Policy matters especially when it comes to the risks and negative effects associated with cross-border M&As. This is not to minimize the importance of various alternatives to cross-border M&As. For example, while cross-border M&As are an alternative to greenfield FDI, the viability of other options such as strategic alliances or public intervention must also be considered carefully. There may even be a role for international assistance, especially for firms in distress because of developments over which they have no influence.

Policy also matters (as in the case of domestic M&As) in that sectoral policies need to address a number of potential negative effects, e.g. as regards employment and resource utilization. In addition, FDI policies in general can be used to maximize the benefits and minimize the costs of cross-border M&As, through sectoral reservations, ownership regulations, size criteria, screening and incentives. Specific cross-border M&A policies can also be used for some of the same purposes, e.g. the screening of cross-border M&As to ensure that they meet certain criteria.

The most important policy instrument, however, is competition policy. The principal reason is that M&As can pose threats to competition, both at the time of entry and subsequently. The search for increased market shares and indeed market domination is one of the characteristics of business behaviour. In the new knowledge-based economy, the search for market power — or even monopoly — is accentuated by the nature of the costs of knowledge-based production. As was recently observed: "the constant pursuit of that monopoly power becomes the central driving thrust of the new economy" (Summers, 2000, p. 2). Indeed, the threat of monopoly, or tight oligopoly, is potentially the single most important negative effect of cross-border M&As and therefore poses the single most important policy challenge. The challenge, more precisely, is to ensure that policies are in place to deal with those M&As that raise competitive concerns, and that they are implemented effectively.

Indeed, as FDI restrictions are liberalized worldwide, it becomes all the more important that regulatory barriers to FDI are not replaced by anticompetitive practices of firms. This means that, as observed in *WIR97*, "the reduction of barriers to FDI and the establishment of positive standards of treatment for TNCs need to go hand in hand with the adoption of measures aimed at ensuring the proper functioning of markets, including, in particular, measures to control anticompetitive practices by firms" (UNCTAD, 1997, p. XXXI). This puts the spotlight squarely on coordinated competition policy as a means to assess and address the impact of cross-border M&As on host-country economies, although policies aimed at maintaining a well-defined contestability of markets also have a role to play. It also suggests that the culture of FDI liberalization that has become pervasive, combined with the growing importance of cross-border M&As as a mode of entry, has to be complemented by an equally pervasive culture recognizing the need to prevent anticompetitive practices of firms. In the context of cross-border M&As, this requires the adoption of competition laws and their effective implementation, paying full attention not only to domestic, but also to cross-border M&As, both at the entry stage and subsequently. M&A reviews are indeed the principal interface between FDI and competition policy. Thus, there is a direct, necessary and enlarging relationship between liberalization of FDI entry through

M&As on the one hand and the importance of competition policy on the other.

Increasingly, however, competition policy can no longer be pursued effectively through national action alone. The very nature of cross-border M&As — indeed the emergence of a global market for firms — puts the phenomenon into the international sphere. This means that competition authorities need to have in place, and to strengthen, cooperation mechanisms among themselves at the bilateral, regional and multilateral levels, in order to respond effectively to M&As and anti-competitive practices of firms that affect their countries. International action is particularly important when dealing with cross-border M&As with global dimensions, especially for smaller countries that lack the resources to mount and enforce such policies on their own.

### *A postcript*

*WIR2000* draws an intriguing parallel between the emergence of a *national* market and production system in the United States during the last decade of the nineteenth century, in the wake of a massive domestic M&A wave, and the emergence at the present time of a *global* market for firms, as a complement of the evolving global market for products and services and the development of an international production system. The United States wave, and the quest for increased market power that was part and parcel of it, caused the courts of that country to interpret the Sherman Antitrust Act to cover M&As and, eventually, Congress to adopt the Clayton Act, which prohibited M&As likely to lessen competition, and the Federal Trade Commission Act, which created the Federal Trade Commission to police violations of the Act. This marked the beginning of M&A control in the United States and of a process which has, over the nearly 100 years since then, led to a further strengthening of that country's competition control system. The Sherman Act also was the antecedent of similar legislation in other countries. Today, some 90 countries have adopted antitrust laws, most of which were introduced in the 1990s.

The world economy today may well be seeing the beginning of a similar challenge in terms of global market structure and competition. If the parallel with the United States experience is indicative, this could mean that what is already happening may be only the beginning of a massive consolidation process at the regional and global levels. If so, it is all the more important to put in place the necessary policy instruments to deal with this process. Among these policy instruments, competition policy has pride of place. In the end, a global market for firms may need a global approach to competition policy, an approach that takes the interests and conditions of developing countries fully into account. ■

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# Is the sky the limit? The absorptive capacity of Central Europe for FDI

Kálmán Kalotay *

This note seeks to challenge the view that Central Europe is a case of failure or deception in terms of its inward foreign direct investment performance. It argues that both absolute and relative foreign direct investment figures in themselves are misleading in the evaluation of the performance of the region, which is a latecomer as a host to such investment. Rather, what should be examined is the region's foreign direct investment performance as compared with its potential. For this purpose, the concept of "foreign direct investment absorptive capacity" is introduced. As a first step towards the measurement of absorptive capacity, findings based on UNCTAD's 1998 survey of Central European investment promotion agencies are presented. The findings show that Central Europe is somewhere halfway towards becoming a foreign direct investment success story.

## Is FDI really low in Central and Eastern Europe?

In today's world, there is a growing perception that the more foreign direct investment (FDI) a country attracts, the more its welfare and development will be enhanced. But the belief that this investment

* Economic Affairs Officer, United Nations Conference on Trade and Development, Geneva, Switzerland. The opinion presented in this note is that of the author, and does not necessarily reflect the views of the United Nations. The author is grateful to Padma Mallampally and Joerg Weber (UNCTAD) for their comments on a previous version of this note. He is also indebted to El Mouhoub Mouhoud (University of Paris 13 Nord and Commissariat Général du Plan, Paris, France) and Rogério G. Santos (Technical University of Lisbon) for their constructive comments on a second version of this note, presented at the Seventh Sorbonne International Conference on "Multinational Firms' Strategies: Location, Impacts on Employment and Exports, Technological Spillovers", 17-18 June 1999, University of Paris 1 Panthéon-Sorbonne, as well as to three anonymous referees for their suggestions. All remaining errors are those of the author.

should be secured in a global locational tournament [1] is a less desirable side effect of that perception. In this view, success is at hand if a country attracts more FDI in absolute terms than its neighbours. Furthermore, if the country in question is small, it is conceded that relatively high FDI inflows (in relation to gross fixed capital formation) or inward stocks (in relation to GDP) are signs of success.

In this global FDI tournament, Central Europe, defined here as Central and Eastern Europe except the Russian Federation [2] (see appendix 1), with an inward FDI stock of $54 billion at the end of 1997, ranks low compared with e.g. the United States ($721 billion) or China (217 billion). [3] But it would be too hasty to conclude from these absolute figures that inward FDI in Central Europe is unsatisfactorily low. First of all, the majority of Central European countries opened up to inward FDI relatively recently, and thus their FDI stocks have been accumulated over a relatively short period. Secondly, the low absolute figure of inward FDI stocks reflects the fact that these countries represent a small part of the world economy (their combined GDP in 1997 was $426 billion, compared with $8 trillion for the United States and $1 trillion for China). If relative measures of inward FDI, such as the ratios of FDI inward stock to GDP, or FDI inflows to gross fixed capital formation, are taken into consideration (UNCTAD, 1998, tables IX.6 and IX.7), the region fares much better. In fact, the ratio of FDI inflows over gross fixed capital formation (8 per cent) is above the world average (5 per cent). Thirdly, and most importantly, this note argues that success should be measured against the potential that a given country or region has in attracting FDI. Hence, even if a country outperforms another one in terms of the relative FDI indicators mentioned above, this does not reveal which country has made better use of its opportunities.

[1] The author is grateful to Lynn K. Mytelka for the invention of this colourful term.

[2] Albania, Belarus, Bosnia and Herzegovina, Bulgaria, Croatia, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Macedonia TFYR, Republic of Moldova, Romania, Slovakia, Slovenia, Ukraine, Yugoslavia.

[3] In this note, unless otherwise stated, data on FDI are from UNCTAD (1998).

## The concept of FDI absorption

If the FDI performance of Central Europe is compared with its potential, it can be argued that it has been quite successful in attracting FDI. To demonstrate this, the region's FDI absorptive capacity will be used to measure its potential. "Absorption" (appendix 2) in the FDI context means the assimilation of FDI in a given host economy. Thus, "absorptive capacity" denotes the maximum amount of FDI that a host economy can assimilate or integrate into the working of its economy in a meaningful manner. A foreign affiliate becomes a domestic firm for legal purposes once that affiliate has duly undergone the local registration and incorporation process. Often the affiliate itself sees advantages in presenting itself as a genuinely local firm.

Apart from the straightforward legal treatment of a foreign affiliate as a local firm, absorption is a relatively complex (and perhaps lengthy) process, under which both affiliates and the host country's environment undergo changes. A parallel with physics is useful here because it highlights that absorption is a two-way phenomenon, whereby both the absorbent and the absorbed substance undergo substantive changes. It also illustrates the links between the concept of absorption and the impact of FDI on host economies. This link is one of the crucial elements of economic transition (McMillan, 1993).

Absorptive capacity thus goes beyond the question of how much FDI a country can be expected to attract given its locational advantages — a question that can be examined by comparing its FDI performance with that of a region or other countries — to an evaluation of the country's FDI performance relative to its specific economic characteristics. A country may receive more FDI in both absolute and relative terms than another, but may absorb it less efficiently or less effectively. If FDI is efficiently absorbed, it will have some measurable positive impact on the host economy.

The idea of absorptive capacity differs greatly from the idea of FDI attraction. In the case of attraction, it is hard to define any theoretical limit to the inflow of FDI — or at least the intermediaries involved in attracting FDI would like to believe so. In the case of absorption, it is usually assumed that there is a limit to the amount of inward FDI, beyond which it is not realistic to expect more, given

the locational advantages of the host country (or region). This limit relates to declining marginal rates of potential increases in productivity as the amount of FDI exceeds a certain level. This, in turn, would result in decreasing returns on investment, effectively stopping "excessive" investment. If one accepts a close link between productivity and return on investment, the limit, in theory, is at the point where productivity starts to decline. The only short-term exception may be in the case of excessive incentives (UNCTAD, 1996).

Another difference between the two concepts is their time frame.[4] The approach to attractiveness tends to be static, with a short time frame. The approach of absorption focuses on long-term determinants and on the dynamics of inward FDI.[5]

While it is clear that, from an investor's point of view, it is undesirable to surpass such limits, it is less easy to determine whether the same may create problems for a host country at the macroeconomic level. The parallel with physics should be used with caution here. In physics, there have been thousands of documented cases of surpassing limits, hence the effects have been easy to gauge. In the case of FDI, such documented cases do not exist. It may well be that the limit can not be surpassed at all, or that its effects are not comparable with the findings in physics.

Indirect indications can be found in the economic literature, in which absorptive capacity is analyzed in relation to technology transfer. The notion of absorptive capacity in the framework of technology transfer incorporates technical capabilities, management style, organizational structure and cultural values (Chen, 1994). The process of absorption is complex, requiring the utilization of considerable consulting or advisory resources (Teece, 1977). The technological absorptive capacity of a host country has a major impact on the effectiveness of technology transfer (ESCAP/UNCTC, 1984). Transfer of technology will be effective only if the recipient firm already possesses an adequate base to absorb the acquired technology

[4] The author is grateful to El Mouhoub Mouhoud for drawing his attention to this point.

[5] E. M. Mouhoud has even raised the possibility that attractiveness is a concept linked with fluctuations in FDI flows, while absorption is linked with the ways of stabilizing FDI. This is a fruitful hypothesis that remains to be tested.

without recourse to broad-ranged and long-term services from the foreign affiliate (Usui, 1983). And investment in human capital is crucial in promoting the absorptive capacity of local firms for foreign technology and management skills. "Countries with higher investment in human capital will be able to gain more benefit from foreign direct investment and to build up ... its indigenous economic strength" (Chen, 1990, p. 24). At first sight, it may seem easier to transfer a given technology to a wholly owned affiliate than to a local enterprise with links to that affiliate with an arm's length contract only. But the success of absorption will also depend on indigenous research effort, the skills and capabilities of local firms and on an affiliate's commitment to the host country. The degree of success in absorbing foreign technology is important for judging the effectiveness of international industrial cooperation between transnational corporations (TNCs) and local firms (Buckley, 1983). Another strain of literature (Borensztein et al., 1995) extends the question of technology transfer to the area of contribution to growth.

All these considerations carry a relevant message for the evaluation of FDI absorptive capacity. The process of FDI absorption is at least as complex as technology transfer is. Similar to technology transfer, the FDI absorption process incorporates management, organizational and cultural values. Absorptive capacity is a key issue in all of these domains because it determines, to a large extent, both the effectiveness of technology transfer and the contribution of FDI to host country efficiency. The latter suggests that one has to look at the situation of individual countries not only in terms of their ability to attract FDI, but also in terms of their ability to benefit from FDI by absorbing it effectively. FDI absorption, just like technology transfer, is successful if the host economy and local enterprises are prepared adequately to receive FDI. The two phenomena are also analogous in their dependence on the availability of skilled human resources. And FDI absorption, too, raises the question of whether or not, in principle, FDI could be replaced by arm's length forms of cooperation between domestic and foreign firms.

Recently, the analysis of technological absorptive capacity has made further inroads that can be used for the explanation of FDI absorption (see Santos, 1999, for a summary). This analysis of technological absorption of FDI focuses on the spillover of technology

linked with FDI. It stresses three main conduits for spillovers: research and development (R&D), innovation and learning (Cohen and Levinthal, 1990). In addition, it considers historical and cultural variables (Santos, 1999, pp. 8-9). As will be shown in this note, this theory is mostly in line with a general macroeconomic analysis of absorptive capacity. Some of the factors mentioned as key in the literature, such as those related to labour skills and to proximity to investors, are also found to be highly significant in the analysis described below. It is notable, however, that even here there is some ambiguity about the difference between FDI absorptive capacity and its utilization. To illustrate: it is sufficient to highlight that labour skills typically belong to the determinants of absorptive capacity, while proximity to investors refers to the utilization of absorptive capacity. Another problem is that this literature does not separate clearly the parent-affiliate spillovers from spillovers between an affiliate and local firms.

There are still notable differences between the definition of technological absorption of FDI and FDI absorption in general, too. The overall macroeconomic analysis of FDI absorptive capacity wants to go beyond technology absorption, covering aspects such as management and insertion into the local economy as well. The focus of FDI absorption is much more on the insertion and assimilation of a foreign affiliate into a host country than on the relationship of a parent firm with an affiliate (a point of view of equal importance in technology discussions). The general view of absorption also intends to widen the scope of the technology-based analysis, which is well adapted to the manufacturing sector, but less so to services, which account for almost half of the inward FDI stock of Central Europe. In the same vein, the wider concept of absorption covers not only greenfield FDI, but also privatization-related FDI, which has been a main conduit for such investments. And in privatization-related FDI, educational and technological efforts are not only too complicated to be defined, but they are also relatively less important compared with other factors of absorption. As mentioned above, this leads to the relatively broad definition of general absorptive capacity as the maximum inflow of FDI that a host economy can assimilate and integrate into the working of its economy without major difficulty and with positive results.

## The measurement of FDI absorptive capacity

An objective and thorough assessment of the FDI absorptive capacity of host countries is a difficult task. The main difficulty arises from the fact that it may be measured at several levels: at the enterprise level, on a case-by-case basis, at the industry level and at the level of national economies. Here, the focus is on the latter (macroeconomic level), with brief remarks also made on the determining factors and on industry-by-industry differences. The survey of investment promotion agencies presented in the *World Investment Report 1998* (see box 1) is used as the basis of the analysis. Although the *WIR98* did not define explicitly the dividing line between attraction and absorption, it offered insights into the absorptive capacity of Central Europe, going into the details of enhancing and hindering factors, as well as possible differences across industries.

**Box 1. The UNCTAD survey on the FDI absorptive capacity of Central Europe**

To measure the FDI absorptive capacity of Central Europe, UNCTAD conducted during January-April 1998 a survey covering 16 investment promotion agencies in that region (except Bosnia and Herzegovina and Yugoslavia). UNCTAD asked the investment promotion agencies to evaluate their countries' abilitiy to absorb FDI during two separate periods: 1993-1997 and 1998-2002. UNCTAD also invited these agencies to identify major factors that determined their countries' FDI absorptive capacity and utilization in 1993-1997, and the factors that, in their view, would most improve during 1998-2002. Finally, the agencies were invited to specify three industries that they considered to have been the most successful and three they thought to have been the least successful in utilizing their FDI absorptive capacity, both during 1993-1997 and during 1998-2002. UNCTAD received responses from 15 countries (Albania, Belarus, Bulgaria, Croatia, Czech Republic, Estonia, Macedonia (the former Yugoslav Republic), Hungary, Lithuania, Republic of Moldova, Poland, Romania, Slovakia, Slovenia and Ukraine).[a]

*Source:* based on UNCTAD, 1998, p. 283.

[a] The response received from Hungary was based on the consensus view of 16 locally established banks and six other institutions.

The results of the survey seem to fit well, too, into the discussion of absorption. For example, some countries usually regarded as successful in terms of attracting FDI are less satisfied with the utilization of their absorptive capacity than some apparently less successful countries. One advantage of the UNCTAD survey is that with an impressive response rate of 94 per cent, it is representative of the region.

How can a subjective survey be a good indicator of the region's absorptive capacity? There are three elements that suggest that the survey results are at least as reliable as any type of survey used in economic analysis. First of all, asking the views of representatives of investment promotion agencies is unavoidable, as they are the main coordinators of investment promotion efforts and, by possessing a wealth of information in this area, are perhaps the best judges of the economic strengths and weaknesses of their countries. Secondly, the survey asked for the consensus opinion of the investment promotion agency, and not just for the view of an individual staff member. Thirdly, the responses given by the investment promotion agencies are remarkably consistent between themselves, and with the FDI data. This indicates again that the opinions of the agencies were quite close to the region's actual FDI performance. Nevertheless, the standard cautionary note on the subjectivity of opinion surveys applies.

One major point of consensus among the respondents was that none of them expressed a view that their country received too much FDI over the period of 1993-1997. The general view was rather that the region's FDI potential was largely untapped. Second, the overwhelming majority of respondents were of the view that the utilization of the region's absorptive capacity would markedly improve during 1998-2002, particularly in countries that lagged behind in this respect during 1993-1997. Even then, the region would still not live up to its full potential.

To quantify these observations, the respondents to the UNCTAD survey could give a mark to themselves on a scale of 0 to 10 to grade their satisfaction (or dissatisfaction) with the utilization of their absorptive capacities during 1993-1997 ("10" meant full or overutilization of absorptive capacities, and "0" meant practically

no utilization of absorptive capacities). In the estimation presented here, the marks were transformed into a linear scale as a proxy for the degrees of utilization of FDI absorptive capacities, each number representing a 10 per cent range: 0=0 per cent, 1=10 per cent, 2=20 per cent etc. Thus, the theoretical absorptive capacity of the individual countries of Central Europe during 1993-1997 can be described by the following equation:

$$(1)\, ABC93-97i = FDI93-97i / CAU93-97i$$

whereby $ABC93\text{-}97_i$ is the theoretical annual absorptive capacity of country *i* during 1993-1997, $FDI\ 93\text{-}97_i$ represents its actual annual FDI inflows during 1993-1997 (for these inflow data of the sample countries, see table 1[6]); and $CAU93\text{-}97_i$ is the degree of FDI capacity utilization derived from the questionnaire. Once the actual FDI flows are *divided* by the perceived capacity utilization, one arrives at the theoretic absorptive potential. The division ensures that the lower the capacity utilization, the bigger is the difference between potential and real flows.

**Table 1. Central Europe: FDI inflows, 1993-1997**

*(Million dollars)*

| Country | 1993 | 1994 | 1995 | 1996 | 1997 | 1993-1997 average |
|---|---|---|---|---|---|---|
| Albania | 58 | 53 | 70 | 90 | 48 | 64 |
| Belarus | 18 | 11 | 15 | 73 | 200 | 63 |
| Bulgaria | 37 | 105 | 90 | 109 | 505 | 169 |
| Croatia | 123 | 122 | 121 | 551 | 513 | 286 |
| Czech Republic | 653 | 868 | 2 561 | 1 429 | 1 301 | 1 363 |
| Estonia | 162 | 215 | 202 | 151 | 267 | 199 |
| Hungary | 2 481 | 1 319 | 4 570 | 2 040 | 2 107 | 2 504 |
| Lithuania | 30 | 31 | 73 | 152 | 355 | 128 |
| Macedonia, TFYR | 0 | 24 | 10 | 12 | 17 | 12 |
| Moldova, Rep. of | 0 | 28 | 67 | 24 | 75 | 39 |
| Poland | 1 715 | 1 875 | 3 659 | 4 498 | 4 908 | 3 331 |
| Romania | 94 | 342 | 420 | 265 | 1 229 | 470 |
| Slovakia | 168 | 245 | 195 | 251 | 177 | 207 |
| Slovenia | 113 | 128 | 176 | 186 | 321 | 185 |
| Ukraine | 198 | 159 | 267 | 521 | 624 | 354 |
| Total | 5 850 | 5 524 | 12 495 | 10 351 | 12 644 | 9 373 |

*Source:* based on UNCTAD, 1998.

[6] To safeguard the confidentiality of the survey, the individual country marks are not presented here.

As for the absorptive capacity of the region as a whole, a first approximation is to add up the individual absorptive capacities of the 15 sample countries:

To reflect better reality and to increase consistency, this method may be fine-tuned by two modifications:

- To make the individual country responses on FDI absorptive capacity utilization more comparable between themselves, the marks were adjusted by comparisons made between the sample countries and absorptive successes, in general, of Central and Eastern Europe, South, East and South-East Asia, Africa and Latin America. To measure the latter, the same 0 to 10 scale was applied. As these responses were consistent with the ones given to the first question on stand-alone perceptions of absorptive capacity, the adjustment required to be done for the sake of consistency and comparability was minimal.

- Another adjustment to calculations was made to take into consideration potential FDI diversion within the region. By measuring the same potential twice, calculations based on a simple addition of country-by-country flows, may exaggerate the region's absorptive capacity. Thus, from the original aggregate figure, the flows supposedly diverted from the two countries that reported FDI diversion as a serious problem and from the two countries that reported it as a moderate problem were deducted. Hence the equation of individual countries was amended in the following way:

$$(3)\, ABC * 93-97 = \sum_{1}^{15} (ABC93-97i)(1-DIVi)$$

whereby $DIV_i$ is the degree of intra-regional FDI diversion in country *i*. For countries that reported no diversion problem, the value of *DIV* is equal to zero. In the cases of a moderate diversion problem, 25 per cent was chosen as the value for *DIV*. In the case of a serious diversion problem, *DIV* was assumed to be 50 per cent.

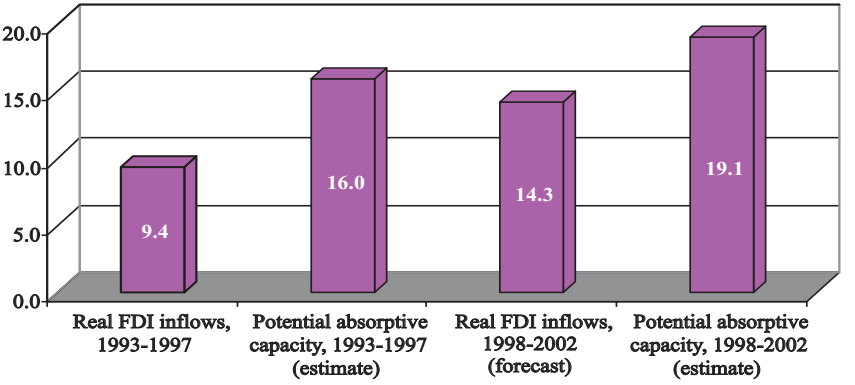
According to these calculations (shown in figure 1), the FDI absorptive potential of the sample countries (*ABC93-97*) was $16 billion per year over the period 1993-1997. This compares with actual inflows of $9.4 billion per annum (*FDI93-97*). This implies a respectable, although not very high, 57 per cent rate of FDI capacity utilization (*CAU93-97*). The advantage of this simple calculation, in addition to its transparency, is the fact that it gives automatically higher weight to higher FDI inflows (in fact, it is a calculation of a weighted average).

This estimate could be, in principle, compared with another calculation, based on the forecasts for the period 1998-2002. There are, nevertheless, two elements that increase the uncertainty of predictions. First, as the marks given for the forecasts could not be standardized, the intra-regional consistency of results worsens. Secondly, there are some countries that did not give their own estimates of their absorptive capacity for the period 1998-2002; for the purpose of a regional aggregate, their estimates should be deducted from the figures given by the other countries. With these two reservations in mind, a calculation on the absorptive capacity of a respondent country is based on the following equation:

$$(4)\ FDI98-02i = (ABC98-02i)(CAU98-02i)$$

**Figure 1. Real and potential annual FDI inflows of 15 Central and Eastern European countries**

*(Billions of dollars)*




*Source:* The UNCTAD survey on the absorptive capacity of Central Europe, 1998.

whereby $ABC98\text{-}02_i$ is the theoretical annual absorptive capacity of country *i* during 1998-2002; $FDI98\text{-}02_i$ represents actual annual FDI inflows during 1998-2002; and $CAU98\text{-}02_i$ is the degree of FDI capacity utilization derived from the questionnaire. In contrast to the calculations for the period1993-1997, it is FDI that is on the left side of the equation, calculated as the absorptive capacity multiplied by its utilization.

Using a method analogous with that of the 1993-1997 period, a first approximation to the region's estimated future real FDI would be to simply aggregate individual country estimates. This would result in an FDI inflow of $21.2 billion per year for the period 1998-2002 for the sample:

This would need to be adjusted for intra-regional FDI diversion, the same way as it was done for the period 1993-1997:

$$(6) FDI*98-02 = \sum (FDI98-02i)(1-DIVi)$$

The adjusted absorptive capacity would be $19.1 billion per year for the period 1998-2002 (figure 1), a rather conservative estimate in the light of significant macroeconomic improvements (e.g. high GDP growth rates). This would mean an increase of 19 per cent only in the region's absorptive capacity compared with the previous period.

In turn, on the basis of the responses to the questionnaire, the adjusted inflows of the 14 countries are expected to shoot up to $14.3 billion, representing a 52 per cent increase over the period 1993-1997. This would lift the utilization ratio to 75 per cent.

In testing this model, one can refer to the actual 1998 FDI inflow data for the 15 countries in the sample. While the prediction of the model was $14.2 billion inflows per year, the 1998 data — with $16.2 billion — somewhat surpassed the predictions, due to higher than forecasted inflows into 9 countries, particularly into the Czech Republic. (There are notable exceptions to this trend, such as Albania, Bulgaria, Republic of Moldova, Slovakia and Slovenia.) As there were still four years left in the forecast period at the time of the

writing, it remains to be seen whether this is a sign that the region can better use its absorptive capacity than most the investment promotion agencies expected.

## Factors determining the FDI absorptive capacity

The UNCTAD survey fits well with both the concept of absorptive capacity and the quantitative marks the investment promotion agencies of the countries in the region gave to themselves. In fact, the results on the factors determining successes or failures, presented in *WIR98* (UNCTAD, 1998, pp. 283-286) can be interpreted more logically in the framework of FDI absorptive capacity than as general statements about the success or failure of attracting FDI. Also, these factors shed new light to the positive and negative feedbacks between FDI absorption and the impact of FDI.

This note makes an attempt to separate the determinants of absorptive capacity itself from the determinants of the utilization of such capacity. Some of the factors mentioned by the survey respondents could find a logical place in both categories. In those cases, they were categorized according to the features deemed more important. This separation is nevertheless necessary because this is the only way to highlight the changing face of absorptive capacity in Central Europe (tables 3 and 4).

Among the factors that determine absorptive capacity (table 2), in line with expectations and existing theories of absorption, is low labour cost, combined with the availability of skilled labour, that was seen by the majority of respondents contributing positively to the region's ability to absorb FDI during 1993-1997. This result is quite consistent with the findings of the theory of technological absorption of FDI on *educational efforts*. Another factor exerting positive influence on absorptive capacity was the improved prospects for closer integration with major partner countries.

Among the factors limiting absorptive capacity was the size of local markets. Apparently, during 1993-1997, local markets had not yet attained the size and growth rate that would have helped create room for substantial market-seeking FDI. Only a few respondents

**Table 2. Central Europe: factors determining FDI absorptive capacity and utilization during 1993-1997**

*(Number of responses)*[a]

| Factor | Enhancing factors | Constraining factors |
|---|---|---|
| **Determinants of absorptive capacity** | | |
| Labour cost | 13 | - |
| Labour skills | 12 | 1 |
| Integration prospects | 7 | 1 |
| Economic reconstruction possibilities | 3 | 3 |
| Market size | 2 | 8 |
| Market growth | 2 | 3 |
| Progress of privatization | 2 | 2 |
| Natural resources | 1 | 5 |
| Managers' skills | 1 | 1 |
| Enterprise restructuring | - | 3 |
| Access to the Russian Federation's market | - | 1 |
| *Niche* industries | - | 1 |
| **Determinants of capacity utilization** | | |
| Subjective proximity to investors | 11 | - |
| Macroeconomic stability | 9 | 1 |
| Currency convertibility | 5 | - |
| Favourable privatization strategies | 4 | 3 |
| Information | 3 | 5 |
| Political environment | 3 | 2 |
| Readiness of local firms | 3 | 2 |
| Country image | 1 | 8 |
| Financial incentives | 1 | 8 |
| Enterprise registration | 1 | 4 |
| Physical infrastructure | 1 | 4 |
| Financial infrastructure | 1 | 3 |
| Market incentives | 1 | 3 |
| Bilateral investment treaties | 1 | 2 |
| Legal stability | - | 5 |

*Source:* based on UNCTAD, 1998, p. 286.

[a] Refers to the number of country respondents who identified a particular item.

saw the size of their local markets as a major factor enhancing their FDI absorptive capacity during 1993-1997. Consistent with this is the perception of low purchasing power and low or negative growth as disincentives for FDI. Also, consistent with the profile presented in table 1, the absence of natural resources was seen by many as a constraint to absorptive capacity.

There are also some factors on which opinions diverged. For example, advances in privatization were assessed very differently by the respondents. While progress in privatization strategies was seen as a factor enhancing FDI absorption in advanced countries, the slowness of privatization was still regarded as a major factor constraining capacity utilization in other countries. Another example is economic reconstruction possibilities. While some countries appeared to have these possibilities in place during 1993-1997, others did not.

Taken together, the survey responses suggest that the region's capacity to absorb market and natural resource-seeking FDI has been limited by small markets, low growth and inadequate resource endowments. However, the respondents considered that the utilization of opportunities for efficiency-seeking investment has been better, given the availability of low-cost, high-skill labour. This result contradicts the findings of standard surveys of motivations of TNCs, which emphasize the prevalence of market seeking motives. One explanation of this phenomenon may be that the expectations of market seeking investors were less realized than the less ambitious hopes of efficiency-seeking investors. Further research in this area would yield more fruitful results.

As for the determinants of FDI capacity utilization during 1993-1997, the overwhelming majority of the respondents identified geographical and psychological proximity as the single most important factor enhancing their countries' ability to use their absorptive capacity. Less expectedly, macroeconomic stability and currency convertibility were seen as the second and third most important factors contributing positively to the utilization of FDI absorptive capacity.

Image problems and a perceived lack of financial incentives were cited as the most important factors hindering the realization of the FDI absorptive potential. Only one response judged that no special improvement in this category was needed. Legal uncertainties were seen as another major impediment to utilizing FDI absorptive capacity: no respondent expressed satisfaction with the current degree of legal stability, while five out of the 15 considered legal stability to be inadequate. In the same vein, the state of the physical and financial

infrastructure was seen as a limiting factor by nearly a third of the respondents.

Ambiguities also prevailed among the factors determining FDI absorptive capacity utilization. Privatization strategies were assessed very differently by the respondents. While favourable privatization strategies were mentioned as factors enhancing FDI flows into advanced countries, the reluctance to accept foreign investor involvement in privatization plans was still regarded as a major handicap hindering FDI flows into other countries. Another element of ambiguity was information: some advanced countries were satisfied with the 1993-1997 level of information flows, while some less advanced countries were dissatisfied with it.

As observed earlier, the respondents overall foresaw an increase in the ability of the region to absorb more FDI flows in the future. They expected various locational determinants to change over the period 1998-2002 (table 3).

A number of the determinants of absorptive capacity were expected to improve. The most salient one was improvements in R&D potential, mentioned by 11 respondents. This implies that the quality of FDI and the FDI absorptive capacity were expected to change, giving way to a potential for higher value-added and more sophisticated activities for potential FDI absorption. This result reflects the findings of the theory of technological absorption of FDI on *technological effort*, usually proxied by R&D expenditures. This finding of the UNCTAD survey may, for example, suggest that there is some logical sequencing between educational and technological effort.

Among the determinants of general FDI absorptive capacity already prevalent during 1993-1997, prospects for economic integration with investor countries was a factor that was expected to improve. If one adds to this enterprise restructuring (seen as inadequate during 1993-1997) and privatization (regarded as an ambiguous factor during 1993-1997), at least some improvement in FDI absorptive capacity and utilization should take place.

**Table 3. Central Europe: most improving factors enhancing FDI absorptive capacity and its utilization during 1998-2002**

*(Number of responses)*

| Factor | |
|---|---|
| **Determinants of absorptive capacity** | |
| R&D potential | 11 |
| Integration prospects | 5 |
| Enterprise restructuring | 5 |
| Progress of privatisation | 4 |
| Labour skills | 2 |
| Market size | 2 |
| Niche industries | 2 |
| Managers' skills | 1 |
| Labour cost | 1 |
| Economic reconstruction possibilities | 1 |
| Access to the Russian Federation's market | 1 |
| Determinants of capacity utilization | |
| Physical infrastructure | 9 |
| Legal stability | 9 |
| Country image | 8 |
| Information | 6 |
| Financial incentives | 6 |
| Macro-economic stability | 4 |
| Financial infrastructure | 4 |
| Political environment | 3 |
| Readiness of local firms | 3 |
| Bilateral investment treaties | 2 |
| Favourable privatization strategies | 1 |
| Enterprise registration | 1 |
| Tax system | 1 |

*Source:* based on UNCTAD, 1998, p. 288.

The list of factors that could improve during 1998-2002 also included the region's physical and financial infrastructure. As regards to policy factors determining the region's capacity utilization, the stabilization of the legal environment was the single most important factor expected to boost FDI flows in the future. Most respondents forecasted improved country images, reflecting improvements in the economic and regulatory determinants, coupled with better information about investment opportunities. Many also envisaged better incentives, and began to move in that direction. All this suggests that, if these evaluations are realistic, the utilization of FDI absorptive capacity is in a position to increase substantially.

## Industry-by-industry absorptive capacity

The remarks made about the determinants of FDI absorptive capacity and utilization are also valid for the evaluations made across industries, i.e. they reflect more the status of FDI absorption than the status of FDI attraction. At the industry level, judging from the survey responses, there is considerable variation for both the 1993-1997 and the 1998-2002 periods (table 4). According to the responses, the secondary and tertiary sectors, on balance, used their absorptive capacity quite well in the first period, while the performance of the primary sector was disappointing. Food, chemicals (including pharmaceuticals), cement and building materials and automotives were the successful industries cited most often. Chemicals and automotives are relatively skill- and technology-intensive, and major contributors to the modernization of Central European economies. The success of the building materials industry is linked to both the availability of competitively priced raw materials (including those required for exports) and economic reconstruction, while the success of the food industry is related to the basic need to improve the quality and safety of food products and the attractiveness of newly opening local markets. These successful stand in sharp contrast with the experience of electrical machinery and apparatus, and of machinery and equipment generally, which were marked by a number of respondents as not having reached their FDI absorptive potential.

Of the previous successful cases in terms of absorbing FDI, the food industry and, to a lower degree, chemicals, were expected to continue to perform well in 1998-2000. Not so for the cement, building materials and automotive industries, because in there first-mover advantages had already been reaped during 1993-1997. The electrical machinery and apparatus industry, as well as machinery and equipment, were expected to continue to lag behind in the near future. Textiles, basic metals and metal products were also believed by the respondents to improve marginally in using their FDI potential during 1998-2002.

According to the evaluation of the respondents, most industries successful in absorbing FDI during 1993-1997 had been in the secondary sector. For the period 1998-2002, however, services

**Table 4. Central Europe: survey responses on degrees of success in absorbing FDI, by industry**

*(Number of responses)*

| Sector and industry | 1993-1997 Mentioned as best absorbing industry | 1993-1997 Mentioned as less absorbing industry | 1998-2002 Mentioned as best absorbing industry | 1998-2002 Mentioned as less absorbing industry |
|---|---|---|---|---|
| Primary sector | - | 11 | 4 | 8 |
| Agriculture, hunting, forestry and fishing | - | 8 | 3 | 5 |
| Mining and quarrying | - | 3 | 1 | 3 |
| Secondary sector | 31 | 19 | 23 | 16 |
| Food, beverages & tobacco | 7 | 2 | 6 | 1 |
| Textiles, leather & clothing | 1 | 1 | 1 | 3 |
| Wood and paper | 1 | 2 | 2 | 1 |
| Publishing and printing | 1 | - | 1 | - |
| Chemicals and chemical products(including pharmaceuticals & industrial gas) | 5 | 1 | 3 | - |
| Rubber and plastic products | - | - | - | 1 |
| Non-metallic mineral products (cement and building materials) | 4 | - | - | 1 |
| Basic metals and metal products | 2 | 1 | - | 3 |
| Machinery and equipment | 2 | 3 | 2 | 2 |
| Electrical machinery and apparatus | - | 4 | 1 | 2 |
| Precision instruments | 2 | 1 | 2 | - |
| Motor vehicles and other transport equipment (automotive) | 3 | - | 1 | - |
| Unspecified secondary | 3 | 4 | 4 | 2 |
| Tertiary sector | 2 | 15 | 24 | 6 |
| Electricity and water distribution | - | 2 | 3 | 2 |
| Construction | 1 | - | - | - |
| Wholesale trade and distributive trade | 5 | - | - | 2 |
| Hotels and restaurants (tourism) | - | 4 | 5 | - |
| Transport and storage | 1 | 3 | 2 | 1 |
| Post and telecommunications | 3 | 2 | 2 | 1 |
| Finance (including banking and insurance) | 5 | 1 | 5 | - |
| Real estate | 1 | - | 1 | - |
| Rental activities | 1 | - | 1 | - |
| Business services (including engineering and information services) | 3 | 2 | 5 | - |
| Health and social services | - | 1 | - | - |

*Source:* based on UNCTAD, 1998, p. 285.

*Note:* The table tabulates the responses according to UNCTAD's classification of industries. It should be noted that standardization has resulted in a certain amount of double-counting, as some of the answers are reflected under more than one industry.

were viewed as having better chances than manufacturing to use their potential to absorb FDI. It is even more striking that services rarely appeared on the list of industries expected to be less successful in the future.

If the countries in Central Europe succeed in improving the various conditions that determine both FDI absorptive capacity and utilization (especially the latter), and manage to do so for a wide range of industries, their expectations for higher FDI inflows may prove to be realistic. If that were the case, a scenario under which FDI would become more important in more countries ¾ and in the region as a whole ¾ seems most likely. In such a scenario, the inward FDI stock in the region by the year 2000 may well exceed the figure of $100 billion.

## Conclusions

FDI absorption is a complex phenomenon. This note intended to shed some light on possible interpretations and indicate some directions for further analysis. It defined FDI absorptive capacity as a close to ideal situation, under which a host country can both maximize the FDI inflow and derive maximum welfare from it.

With respect to absorbing FDI, Central Europe has been partially successful, but the situation is expected to improve in the near future. Already in some Central European countries, the involvement of foreign affiliates in the domestic economy has reached a very high level.

A wider implication of the findings on absorptive capacity calls for the reconsideration of the definitions of successes and failures in attracting FDI. Inequalities in FDI inflows may be the consequence of unequal economic sizes and levels of development. Such inequalities are hard to change, and to do so requires more than investment promotion *per se*. For investment promotion, these findings may call for a re-evaluation of post-investment services for existing investors and the design of new aggressive promotion campaigns. However, before trying to attract FDI aggressively, it is also necessary to put in place adequate conditions for receiving and

absorbing such investments. This note has also aimed at hinting at new ways of analyzing absorptive capacity, relying on an opinion survey that by definition includes elements of subjectivity (although measures have been taken to reduce any bias caused by subjectivity). Future research can try to eliminate further subjectivity.

As for the methodology, the simple equations presented here could be further fine-tuned. In the same vein, research on the factors determining FDI absorptive capacity and utilization may use econometric techniques to gain more insights into the interaction and impact of those factors both in individual countries and for the region as a whole.

Future research on the topic may also need to look at the FDI absorptive capacity of sub-national locations. For the sake of simplifying the analysis, this note has treated territories within countries as homogeneous, although this may not be automatically the case (Krugman, 1991). To illustrate this point, in Hungary, the capital city alone accounted for 55 per cent of the country's inward FDI stock in 1997 and 65 per cent together with the surrounding county (Hungarian Central Statistical Office, 1999, pp. 38-39). This concentration of FDI in a small geographical area raises the necessity to analyze FDI absorptive capacity of different sub-national locations separately, even in small Central European countries.

Another strain of future research may focus on industry or enterprise case studies. It has yet to be tested whether or not industries and enterprises share common characteristics in terms of FDI absorption. This is perhaps the most fruitful avenue for future research because the absorptive capacity of countries is an abstraction, the translation of a micro-level phenomenon to the macro level. One gets one step closer to reality by examining the firms that actually carry out that absorption. Further research in this area would be particularly useful. ■

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## Appendix 1. The definition of Central Europe

The reasons for analyzing Central and Eastern European countries separately from the Russian Federation are straightforward: despite great differences in levels of development, measured by per capita GDP,[1] these countries share many common characteristics, such as relatively small territories and population, limited natural resource endowments and reliance on created investment opportunities (appendix table 1). In contrast, the Russian Federation shows greater similarities with other large, natural resource-rich economies. In terms of land area, the Russian Federation is more than eight times bigger than the combined area of Central Europe. Central Europe has a higher population (196 million) than the Russian Federation (149 million), but it is divided among 18 countries. In terms of GDP, in 1997, the Russian Federation was bigger than the 17 countries of Central Europe for which data were available.[2] Finally, to illustrate the differences in natural resource endowments, it is enough to highlight that petroleum represents 16 per cent of the Russian Federation's inward FDI stock, as compared with 1 per cent for Central Europe. This definition of Central Europe can be well accommodated among the diversity of concepts in use for defining Central Europe.[3] This wide definition of Central Europe is also compatible with certain recent political developments in the region, such as the strengthening the loose cooperation mechanism of the Central European Initiative that encompasses most of the countries west of the Russian Federation, as well as Belarus and Ukraine (see CEI, 1998, pp. 2-3).

[1] In 1997, the standard deviation of GDP per capita was $2,072, and the average was $2,311.

[2] Note that due to a 71per cent devaluation of the Russian ruble *vis-à-vis* the United States dollar, this situation was reversed in 1998: the GDP of the Russian Federation shrank to an estimated $336 billion, while that of Central and Eastern Europe increased to an estimated $440 billion.

[3] For a review of the different concepts of "Central Europe", see "Introduction: where is Central Europe?", in Johnson (1996, pp. 3-13).

**Appendix table 1. Basic indicators of the Russian Federation and Central Europe in 1997**

*(Various indicators)*

| Indicator | Russian Federation | Central Europe[a] |
|---|---|---|
| Area (million $km^2$) | 17.1 | 2.2 |
| Population (million) | 147.1 | 184.4 |
| GDP (billion dollars) | 448.8 | 426.0[b] |
| Share of petroleum in inward FDI stock (per cent) | 16.0 | 1.0[b] |

*Sources:* UN, 1999; UNCTAD, 1998; UNCTAD, 1999; UNCTAD FDI/TNC data base.

[a] Albania, Belarus, Bosnia and Herzegovina, Bulgaria, Croatia, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Macedonia TFYR, Republic of Moldova, Romania, Slovakia, Slovenia, Ukraine, Yugoslavia.

[b] Excluding Yugoslavia.

## Appendix 2. The concept of absorption

The term of absorption is often applied to subjects related to economic issues. The archives of *The Economist* covering the period from January 1995 to May 1998, for example, contained eight references to absorption and banking, seven to absorption and economy, five to absorption and industry and two to absorption and finance. If the noun "absorption" is replaced with the verb "absorb", a search on each of these items returns more than 100 entries. The term "absorption" is used, for example, in relation to technical efficiency, labour, the economic implications of a potential unification of the Republic of Korea and the People's Democratic Republic of Korea, mergers and acquisitions, external economic shocks in Chile, and the existence of economic slack to absorb rapid growth in spending.

When discussing whether or not FDI in Central Europe is too much or too little, one definition may draw on the original concept of absorption, derived from natural sciences. In physics, absorption "refers to processes in which a substance penetrates into the actual interior of crystals, of blocks of amorphous solids, or of liquids" (Source: *Britannica Online*, http://www.eb.com:180/cgi-bin/g?DocF/micro/6/16.html, accessed 10 March 1998). While the room for strict parallels between physics and economics is rather limited, a brief reference to physics helps to clarify the term "absorption" in its original sense. Those who are more familiar with Hungarian economists may find analogies with natural sciences less surprising. János Kornai, the doyen of those economists, in his seminal *Economics of Shortage* (Kornai, 1980), used an analogy with hydraulics (in chapter 21) to describe the macroeconomic relations determining the reproduction of shortage. The same author, in "The health of nations ..." (Kornai, 1983), went even further and drew an analogy between medical and economic sciences.

# The determinants and impact of FDI in Central and Eastern Europe: a comparison of survey and econometric evidence

Dawn Holland,[*] Magdolna Sass,[**]
Vladimir Benacek[***] and Miroslaw Gronicki[****]

This note considers evidence that has been collected on the determinants and effects of foreign direct investment in Central and Eastern Europe, with a strong focus on Hungary, Poland and the Czech Republic. There are two main sources from which information is drawn: survey studies and econometric studies. We consider how each of these sources can contribute to research, whether they provide complementary or contradictory information, and how the information can be best exploited. We conclude that the findings of econometric studies tend to support survey results. This suggests that market size and growth potential have been the driving forces behind foreign direct investment, with factor-cost advantages playing a lesser, but still significant role. Macroeconomic and political stability were also taken into account. Investment incentives have not had a decisive influence on foreign direct investment inflows; however, the privatization process has affected the timing of foreign direct investment. Access to markets has

[*] National Institute of Economic and Social Research, London, United Kingdom.
[**] Organisation for Economic Co-operation and Development (OECD)/ Institute of Economics, Hungarian Academy of Sciences, Budapest, Hungary.
[***] Charles University, Prague, Czech Republic.
[****] Center for Social and Economic Research, Warsaw, Poland.

The authors would like to thank Andrea Elteto and Tamas Szemler for their contributions to the study of Hungary; Jan Visek for contributing to the study of the Czech Republic; and Ray Barrell and Nigel Pain for extensive comments on earlier drafts of this note. Comments from an anonymous referee were also helpful. This research was undertaken with support from the European Union's Phare ACE Programme 1996. The content of this research note is the sole responsibility of the authors and it in no way represents the views of the European Commission or its services.

been the primary motive for foreign direct investment; however, the absence of trade barriers and membership in free trade areas have been important for export-oriented investments. Foreign direct investment inflows have improved the overall growth potential of the economies under consideration, primarily through productivity improvements within foreign affiliates, rather than through linkages with domestic firms or spillovers.

## Introduction

Since the outset of economic transition in Central and Eastern Europe, there have been widespread expectations that foreign direct investment (FDI) would play an important role in the process of restructuring, economic growth and development (Blanchard et al., 1991; UN/ECE, 1994). FDI differs from other forms of international capital movement in the manner and duration of the commitment it involves. Its purpose is to control assets abroad by exerting managerial influence over foreign affiliates. The long-term nature of FDI motivates investors to take an active part in the decision-making process, and often necessitates basic changes in a targeted firm's structure and strategy.

A major problem faced by transitional economies is the lack of knowledge and new technology. These economies have displayed "idea" and "object" gaps (Romer, 1993) that the transition process has attempted to bridge. This problem can be addressed in a number of ways, such as through education, or by importing the missing technology. FDI is widely thought to be an important channel for the diffusion of new ideas, technologies and business skills across national borders. Raymond Vernon's (1979) product cycle hypothesis suggests that innovations originating in industrialized economies will gradually be introduced to transition economies as wealth levels and wages there rise, helping to close "object" gaps. Many "ideas" are an inherent feature of technologies introduced by transnational corporations (TNCs), and reflect ways of doing business that are unique to the firm. Other ideas are more approachable, but may be

kept under the control of their proprietor by licensing. In both cases, direct involvement of the possessor of knowledge enables the flow of information to take place. Such ownership-specific advantages are thought to be a driving force behind the establishment of TNCs (Dunning, 1981).

Prior to the transition process in the Central and Eastern European countries (CEECs), strict limitations were imposed on foreign capital and technology. Experiences of the transition period suggest that lifting the barriers to foreign capital, combined with an expansion of trade linkages with the major industrialized economies, could give rise to rapid increases in productivity. FDI may, therefore, be of particular importance in the transition process of the formerly centrally planned economies. It can also be a supplement to domestic savings, as low levels of savings combined with credit rationing and financial market failures are likely to keep investment levels sub-optimal. In addition, FDI in tradable sectors helps to integrate a country into the world economy, as nearly two thirds of global trade is conducted by or within TNCs (UNCTAD, 2000, pp. 3-4).

If FDI does contribute to the transition process, it is important to understand what drives investment decisions. This note considers evidence that has been collected on the determinants and effects of FDI in the CEECs, with a strong focus on Hungary, Poland and the Czech Republic. It is a collaborative study, which builds on the work of four research teams. There are two main sources from which information is drawn: survey studies and econometric studies. We consider how each of these can contribute to the field of research, whether they provide complementary or contradictory information, and how this information can be best exploited.

The note is organized as follows: in the first section, the theoretical foundations for the analysis of FDI are examined, and evidence from studies in other regions is presented. The following section outlines the available sources of information regarding TNC activity in CEECs. The subsequent two sections examine the available evidence on the determinants and effects of FDI, respectively. The final section concludes.

## Theoretical foundations and evidence from other regions

The analysis of FDI in transitional economies relies upon a variety of theoretical foundations. TNCs view FDI primarily as a tool to help them improve their competitiveness and as a way of gaining access to markets. In conventional models, the existence of TNCs is explained by a combination of industrial organization motives and comparative advantage reasons (Krugman, 1995). Economies of scale are increasingly found at the level of the firm, encouraging FDI to expand over time. Intangible assets, such as knowledge, patents and business practices create these firm-level scale economies. As such, "horizontal" (intra-industry) enterprises are becoming increasingly important. Market-oriented multi-plant firms save on transport costs, and in a world of many countries this encourages the establishment of TNCs (Barrell and Pain, 1997a).

The comparative advantage framework, based on the Hecksher-Ohlin model, developed from the view that location patterns are pre-determined by natural endowments of raw materials and labour, relative prices and transport costs. This suggests that costs in the host country relative to those elsewhere are potentially a major factor in the location decision, particularly for firms seeking to produce labour intensive products for export, or produce products previously obtained from imports. In addition to wage costs, labour productivity is important, as this determines the actual cost of production.

D. A. Riker and S. L. Brainard (1997) found that cross-wage elasticities of labour demand are positive across regions with similar skills, indicating that workforces compete with areas of the same skill makeup. However, they found negative cross-wage elasticities across regions with different skill levels, indicating that activities in different regions are complementary. Workforce skills help determine comparative advantage patterns, and so can influence the pattern of FDI.

C. P. Kindleberger (1969) argued that, in order for FDI to exist, there must also be market imperfections or government intervention. Otherwise, individual economies would produce only those goods and services for which they have a comparative advantage, and other

goods would be imported. Trade and FDI can be either substitutes or complements, and consequently barriers to trade can have two conflicting influences on FDI. Trade barriers are thought to encourage FDI by increasing the costs associated with serving a market through exports. This is the fundamental argument behind the location theory of FDI, and it is particularly important for investments aimed at serving the host country market, where trade and FDI are substitutes. On the other hand, TNCs tend to conduct a high level of trade internally, between the parent firm and the foreign affiliates. Barriers to trade are likely to deter investors who are dependent on intra-firm trade, or whose output is exported. A number of studies have suggested that investment and growth in developing economies are positively associated with indicators of "openness" (Balasubramanyam et al., 1996). Such findings may suggest that investors prefer countries with relatively liberal trade regimes and few constraints on profit repatriation, possibly within regions with wider supra-national free trade arrangements.

Market imperfections include product differentiation, patents and other limitations on access to technology, trade barriers, such as import tariffs and quotas, as well as internal and external economies of scale. Strategic motives for investment are strongly tied to market imperfections. First-mover advantages are gained when a degree of market power is awarded to the earliest investors in the market for a particular good. Ownership of intangible and non-transferable assets introduces incomplete contract and moral hazard issues, which increase licensing costs and encourage FDI. Specialization due to product differentiation and economies of scale offer advantages to placing certain activities under common ownership.

Exchange rate fluctuations may also create incentives for undertaking FDI, as TNCs stabilize profits by spreading exchange rate risk across countries (Rugman, 1979). The location of investments may also be influenced by risk perceptions. J. Slemrod (1990) found that perceived risk has played an important role in determining FDI in Mexico. The prospects for political and macroeconomic stability, together with the transparency of legal regulations governing factors, such as foreign ownership of land and profit repatriation, all matter to potential investors (Jun and Singh,

1996), and the risks must be compensated for by higher expected gains.

Large markets and rapidly growing markets can both attract FDI. Although these variables are not built usually into a formal theoretical model, a variable representing the size of the host country appears in a large number of empirical papers. The intuitive understanding of the market size hypothesis is relatively straightforward. A larger economy affords more opportunities to foreign investors, as there are physically more firms and business projects in which one can invest. The motive for investment can stem from a combination of economies of scale and trade barriers. The latter implies that it is more costly to distribute goods within a region of several small countries than in a single large country of equivalent size. J. R. Markusen (1990) demonstrated that a firm's early decision to invest in a region could promote specialized services, reinforcing the area's attractiveness for other investors. It also acts as a signal of macroeconomic stability and reform. Once a critical mass of investment is reached, inflows of FDI are expected to accelerate substantially.

Most Western European countries offer incentives to foreign investors, in the form of preferential tax rates, tax holidays, special depreciation schemes, social security relief, special tax deductible items and exemptions from tariff payments. These are all intended to encourage FDI, although the empirical evidence for such an impact has been limited. The existence of incentives can be justified by the externalities that accompany FDI. However, in practice, the welfare impact of incentives may be ambiguous, when lost revenues do not match the direct and indirect benefits of FDI. This is especially true with the emergence of the "incentive competition" among countries and with the offering of more and more generous incentives (UNCTAD, 1996).

Because the classical theory could not deal with all the issues emerging in connection with FDI flows, John H. Dunning (1981) laid out a theoretical paradigm for explaining FDI. Using his eclectic OLI framework, the characteristics and motivations of foreign investors can be described and explained more fully. This framework

embraces all of the above mentioned factors determining FDI flows, grouping them into ownership, location and internalization advantages from the point of view of the investing company. For example, relative factor endowment can result in location advantages for the host country, thus initiating FDI; the presence of intangible assets indicates exploitable ownership advantages and thus potential for FDI activity; and incomplete contracts make producing internally preferable to licensing arrangements. Some of these ideas have been formalized by Markusen (1995).

The theoretical foundations and evidence from other regions can offer little insight into the impact of certain factors specific to the transition process on FDI. Taken from the behavioural and institutional point of view, CEECs are very different from both developing countries and industrialized countries. Market-oriented policies and legal reform conducive to foreign firms were introduced very rapidly. The privatization process, acting as a strong signal of the commitment of the government to private ownership, was also prevalent. The one-off opportunities offered by the transfer of State monopolies to the private sector gave a strong incentive for strategic investments. First-mover advantages were intrinsic in the privatization of a monopoly, and the new owner was likely to gain a degree of market power even if the monopoly was divided.

Several factors affect which countries and which sectors will receive higher levels of investment. For example, political stability may influence the distribution of investment across countries, while specific incentives may direct investment towards certain sectors. All these factors can be encompassed in the equation below:

$$FDI_{ij} = f(RULCI_{ij}, RULCO_{ij}, VA_{i(j)}, SKILL_{ij}, BAR_{ij}, REGION_i, RISK_i, PRIV_{i(j)}, INCEN_{ij}),$$

where:

- **RULCI** is labour costs in the host country relative to the investor country, while **RULCO** is labour costs in the host country relative to other potential host countries.

- **VA** is value added. Country-wide GDP can capture market size effects, while gross product by sector is a measure of the

demand for goods produced within a certain industry. VA or population size can be used to normalize variables that incorporate size.

- **SKILL** measures the skill level of the workforce. This can be represented by the average years of schooling; the results of test scores such as the Third International Mathematics and Science Study (TIMSS), which assessed the mathematics and science performance of students around the world; the ratio of white collar to blue collar workers within a given industry; or the number of technical workers employed in a given field.

- **BAR** is trade barriers. A general proxy for this could be the ratio of total trade to GDP, perhaps adding a correction for the fact that smaller countries tend to have relatively higher levels of trade. A detailed proxy would identify the degree to which each sector is affected by various tariffs.

- **REGION** represents a range of potential variables reflecting the transaction costs or positive externalities of the country: membership to a free-trade area, proximity to a large market such as the European Union, or existing trade linkages. Proximity to the investor country will reduce transport costs, and may also offer the advantage of cultural proximity and special knowledge of the host country.

- **RISK** is a measure of country risk and exposure to an institutional failure.

- **PRIV** is a measure of private ownership. For a country, this can indicate the commitment of the government to private ownership, while the method of privatization is an indication of openness to foreign investors. At the sectoral level, this variable indicates the share of firms that can potentially be acquired by foreign owners.

- **INCEN** represents special incentives offered by governments to foreign investors, for example, the option of setting up a Customs Free Zone in Hungary.

Additional factors, such as agglomeration effects, economies of scale, intangible assets or capital intensity of production, may also be important determinants of FDI. These are more difficult to measure, and most existing studies have excluded such factors from their analyses. The section below reports the results of a number of surveys and econometric studies that consider the role of one or more of the above determinants in the distribution of FDI across CEECs. The results are summarized in table 1.

Much of the literature on FDI focuses on the potential impact of FDI on growth prospects. FDI inflows can modernize and expand the stock of physical and human capital in an economy, helping to fill what Romer (1993) termed "object gaps". This is particularly important if domestic resources are insufficient to cover the investment requirements of an economy. FDI increases the productive capacity of an economy and can influence employment levels. By bringing access to foreign technology and management techniques and by making available products and processes that embody foreign knowledge, FDI also helps to close "idea gaps". This can improve efficiency of production and raise the average productivity level of the entire economy.

FDI can also have an impact on growth levels through trade. Many new theories of economic growth emphasize the importance of international linkages in determining productivity performances of individual economies. Imports of new technologies are thought to affect productivity levels in the same way as FDI. Foreign affiliates tend to engage in trade with parent companies, which can act as a boost to the total trade of the host economy, and help to integrate host economies into world markets. However, the net impact of this trade on the current account is uncertain.

In terms of a simple growth model, there are two routes through which FDI can influence output. The total productive capacity of an economy ($Q$) can be represented by a production function such as:

$$Q = f(A,K(FDI),L,H(FDI)),$$

where $L$ is labour, $K$ is physical capital, $H$ is the stock of human capital, and $A$ captures all other indicators of the level of technology. The stocks of human and physical capital are both dependent on the level of FDI. Human capital interacts with physical capital and labour to determine the productive capacity of the economy. It can also have a neutral impact on output through $A$, which will not affect the relationship between capital and labour. Adopting the framework developed in R. Barrell and N. Pain (1997b), we can impose a CES production function and assume that the marginal product of labour is equal to its mark-up real price.

This functional form allows us to estimate the impact of FDI on productivity without a measure of the capital stock, which is very useful for studies of the CEECs, where there is a lack of accurate time series data on the size of the effective capital stock, the user cost of capital and the depreciation rate. $H$ can be defined as:

$$H = \delta_1 Time + \delta_2 ln(FDI) + \delta_3 ln(R\&D^{host}).$$

This allows the stock of human capital to increase over time due to factors exogenous to the model, and to increase with the stock of FDI and the level of research and development (R&D) performed by a host country. Assuming constant returns to scale, demand for labour can then be expressed as:

$$ln(L/Q) = \alpha + (\sigma\text{-}1)(\eta_1+\lambda_1)Time + (\sigma\text{-}1)(\eta_2+\lambda_2)FDI + (\sigma\text{-}1)(\eta_3+\lambda_3)R\&D - \sigma ln(W/P),$$

where $W/P$ denotes the real wage, $s$ *is* the elasticity of substitution, $h$ represents neutral technical progress parameters and $l$ indicates labour augmenting technical progress parameters. This simple framework does not allow us to distinguish between neutral and labour augmenting technical progress, or to test for capital augmenting technical progress. It also does not allow us to analyze the short-term impacts of such technological advancements on employment. Development studies have shown that, in certain sectors, foreign investors have squeezed out domestic producers by introducing more efficient technology (Leamer, 1994; Jenkins, 1990). The introduction of labour-saving techniques may not even be desirable in a country

with a large supply of labour and little capital. P. Egger and M. Pfaffermayr (1999) showed that technological improvements associated with FDI in Austria have been primarily labour augmenting, and therefore suggest that the job creation potential of FDI may be less than generally assumed. Government policy can attempt to increase the benefits accrued by requiring certain levels of inputs to be purchased from host country firms. However, if this condition deters investment the net impact on the economy is ambiguous.

E. Borensztein et al. (1998) found that FDI is an outstanding instrument of technology transfer from industrialized states to developing nations, and makes a marked contribution to economic growth, particularly in countries with relatively high levels of human capital. The study also found that FDI has a multiplier impact on total capital accumulation. Barrell and Pain (1997b) reported evidence of productivity improvements in the United Kingdom and Germany due to FDI inflows. But other studies have been less positive. F. Lichtenberg and B. van Pottelsberghe de la Potterie (1996) did not find evidence of technology transfer from inward FDI in industrialized countries, whereas I. S. Saltz (1992) found that there is a significant negative correlation between the stock of FDI and economic growth in developing countries.

The transition economies can learn from the experience of both industrialized and developing countries. The technological content of their capital stock is similar to that of more advanced developing economies. However, the skill level of the economy, measured as the number of years of schooling of the average worker, is relatively high compared to both developing and technologically advanced economies. Several studies have indicated that the educational attainment of the labour force may influence a country's ability to absorb new technologies. This should place the CEECs at a relative advantage in terms of the potential for productivity improvements through FDI.

The final section reports the results of a number of studies on the impact of FDI on transition economies. The econometric studies covered focus on the impact on productivity using frameworks similar

to that discussed above. The estimated relationships between FDI and productivity in a selection of studies are reported in table 2. The survey studies also report additional information on the impact of FDI on trade and total fixed capital formation.

## Sources of information

There are three main sources of information that address the question of FDI in CEECs. The first is aggregate data collected by national statistical offices and international sources, such as the International Monetary Fund (IMF). The second is firm level sample data collected by official sources. The third is the responses to detailed sample survey questionnaires of foreign affiliates operating in the region.

### *Surveys*

There has been a wide range of survey-based studies of FDI in individual countries, as well as some cross-country studies. In general, surveys can provide more detailed information than aggregate statistics because they report the results of in-depth interviews with firm managers. Aggregate data present only the end result, without any qualitative comment on how the end was reached. Surveys can provide a range of descriptive statistics, such as the main function of an investment (i.e. to serve the home market, host market or other markets); the sector of the investment; whether the investment decision involved the relocation of production or foregone investment elsewhere; whether it is greenfield investment or an acquisition; whether the investment was motivated by strategic interests; and the importance of intangible assets to the success of the firm. Aggregate statistics are able to determine better such things as the distribution of investment across regions and sectors, the contribution of FDI to national income and the share of employment accounted for by foreign affiliates.

The interpretation of survey studies must be approached with caution. A degree of subjectivity is normally involved in survey questions, and these value judgements ought to be viewed with some scepticism. A degree of selectivity bias should be expected in the

results if the targeted population of respondents comprises managers of firms with FDI in CEECs. By definition, these managers were not deterred from investing by influences such as high costs and risks. In general, survey respondents who already had an investment in a CEEC rated risk substantially lower than those that did not (Lankes and Venables, 1997). The quantitative importance of factors also matters, and this is something that can be examined further by econometric evidence, which can help to establish causal relationships.

***Empirical work***

Empirical analysis of FDI tends to rely on aggregate data due to the biases that are likely to arise when working with sample survey results. Considerable care is also needed in the interpretation of these studies. Due to the short time period since the first significant FDI inflows into the transitional economies took place, the sample size of data sets tends to be very small. There is a wide literature on the likelihood of misleading results when working with few degrees of freedom. A single outlier can have a disproportionate impact on the mean estimate. Outliers are also likely to distort an apparent relationship if data sets are severely skewed or heteroskedastic. Statistical techniques such as Least Trimmed Squares (Benacek and Visek, 1999c) can help to minimize this bias. Procedures to assess the influence of individual panel members, such as countries or industries, are also available (Holland and Pain, 1998).

As with survey studies, causal inference derived from econometric studies should also be approached with care. Statistical analysis of data sets can lead us to reject a given hypothesis with a degree of certainty. However, it cannot provide definitive evidence in favour of a particular alternative hypothesis. Several alternative scenarios may appear to explain the data. A simple regression equation will indicate the share of total variation in the dependent variable that is captured by the regressors. In order for this to represent a causal relationship, the explanatory variables must do more than co-vary with the dependent variable. We also have to eliminate the possibility of reverse causality by showing that the determinant precedes the dependent variable in time. It is also

essential to consider whether the relationship is spurious. For example, if both the dependent and explanatory variables are trended over time, they may appear to have a dependent relationship with each other when in fact they do not.

In principle, tests are available to discriminate between different models and to guard against spurious regressions. However, not all can be applied easily when using panel data. This is especially true when the time span is limited. Given all of these reservations, the most credible conclusions can be drawn where both the survey studies and the econometric studies point to the same outcome.

## Evidence on the determinants of FDI

The results of the earliest studies on FDI are presented by the European Bank of Reconstruction and Development (EBRD) (1994). These surveys tended to suggest that national and regional market access was the primary factor that influenced potential investors, citing first-mover advantage and market potential as the dominant factors. Factor cost advantages were not considered as an important motive for locating in CEECs by most investors. This suggests that TNCs did not view low labour costs initially as a sufficient reason for relocating to the region. Uncertainty, risk and bureaucracy were all considered to be significant obstacles to investment in transition economies, but little weight was given to tax incentives. In general, most of these early results have been confirmed in more recent studies. Market access is considered to be the most important factor in the investment decision, with factor costs playing a lesser, although in many cases still significant, role. The results of a collection of recent studies are presented in table 1.

### *Market size and growth*

#### *Survey findings*

R. B. K. Pye (1998) considered a sample survey of investments from major European and North American countries into the Czech Republic, Hungary, Poland, Romania and Slovakia between 1989 and 1996 (334 firms). The results showed that the primary motive in 34

**Table 1. Primary, secondary and other determinants of FDI**

| Study | Market size and growth | Factor costs | Trade barriers | Stability and risk | Strategic/transition specific factors | Other |
|---|---|---|---|---|---|---|
| **Survey findings**[a] | | | | | | |
| **INDICATOR (1995)**<br>**Hosts**: Poland.<br>**Investors:** Any.<br>**Sample**: Results of 2 separate surveys in 1993 and 1995. | Primary in 1993: Growth.<br>Secondary: Size. | Primary in 1995: Labour costs. | Other: Export quotas and high tariffs deterred FDI. | Other: Lack of competition deterred FDI. | | |
| **Konings/Janssens (1996)**<br>**Hosts**: Hungary.<br>**Investors**: Belgium. | Primary: Market exploration. | Other: Low labour costs. | | | Secondary: Achieving a strategic position . | |
| **Lankes/Venables (1997)**<br>**Hosts**: 16 countries in Central and Eastern Europe and Commonwealth of Independent States.<br>**Investors:** Any.<br>**Sample**: 117 parent firms and 145 affiliates. | Primary for market oriented investors: Local market size, except in Hungary and the Czech Republic. | Primary for export oriented investors: Low-cost, skilled labour. | Other in the Czech Republic & Hungary: Proximity.<br>Other: Trade barriers deterred FDI.<br>Not significant : Access to European Union/European Free Trade Association. | Primary in the Czech Republic and Hungary: Political and economic stability.<br>Other: Progress in transition. | Other: One-off opportunities. | Secondary: Agglomeration. |
| **Savary (1997)**<br>**Hosts**: Central and Eastern Europe.<br>**Investors**: France.<br>**Sample:** 22. | Primary in Poland: Market size. | Primary: Factor costs, except in Poland and Hungary. | | | Secondary: Privatization process. | Primary in Hungary: Technology base.<br>Other: Labour skills attracted investment. Poor technology base deferred FDI except in Hungary. |

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**Table 1. Primary, secondary and other determinants of FDI (continued)**

| Study | Market size and growth | Factor costs | Trade barriers | Stability and risk | Strategic/transition specific factors | Other |
|---|---|---|---|---|---|---|
| **Pomery (1997)**<br>**Hosts**: Czech Republic.<br>**Investors**: Any, in manufacturing sector only.<br>**Sample**: 163. | | | Secondary:<br>Customs regulations and bureaucracy deterred FDI. | Secondary:<br>Legal environment deterred FDI. | | |
| **Éltetõ/Sass (1998)**<br>**Hosts**: Hungary.<br>**Investors:** Any.<br>**Sample**:<br>125 joint ventures. | Primary for non-exporters:<br>Growth prospects and market share. | | Secondary to exporter:<br>Lack of trade barriers. | Secondary to exporters:<br>Stability. | | Secondary to exporters:<br>Labour skills. |
| **Pye (1998)**<br>**Hosts**: Czech Republic, Hungary, Poland, Romania, Slovakia.<br>**Investors**: Western Europe and United States.<br>**Sample:** 334. | Primary:<br>Growth potential and market share. | Secondary in Czech Public and Slovakia:<br>Labour costs.<br>Other:<br>Financial efficiency | Other:<br>Size of Central and Eastern European market. | Secondary in Czech Republic:<br>Overall stability. | Secondary in Poland and Romania:<br>First-mover advantage. | Secondary in Slovakia:<br>Labour skills. |
| **Altzinger (1999)**<br>**Hosts**: Central and Eastern Europe.<br>**Investors**: Austria.<br>**Sample:** 150. | Primary:<br>Market potential. | Secondary:<br>Lower wages. | Secondary:<br>Proximity. | | | Not significant:<br>Human capital and know-how of firms. |

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**Table 1. Primary, secondary and other determinants of FDI (continued)**

| Study | Market size and growth | Factor costs | Trade barriers | Stability and risk | Strategic/transition specific factors | Other |
|---|---|---|---|---|---|---|
| **Econometric findings**[b] | | | | | | |
| **Lansbury et al. (1996)**<br>**Hosts**: Hungary, Poland, Czech Republic.<br>**Investors**: 14 industrialized countries.<br>**Sample:** 126. | | Significant: Costs relative to other panel members<br>Not-significant: Costs relative to Western Europe. | Significant: Trade with the investor country. | Not significant: Risk. | Significant: Private sector share. | Significant: Technology base. |
| **Holland and Pain (1998)**<br>**Hosts**: 11 Central and Eastern European and Baltic economies.<br>**Investors**: All, 1992-1996.<br>**Sample:** 55. | Not significant: Growth rate, once market size was taken into account. | Significant: Wages relative to other panel members.<br>Not significant: Wages relative to Western Europe. | Significant: Trade with the European Union. Proximity to the European Union. Central European Free Trade Area membership. | Significant: Risk. | Significant: Privatization method.<br>Not significant: Private sector share. | Significant: Productivity relative to the regional average. |
| **Gronicki (1999)**<br>**Hosts**: Poland, 14 manufacturing industries.<br>**Investors**: All, 1992-1997.<br>**Sample:** 84. | Significant: Sector size. | Significant: Sectoral wage. | Not significant: Export orientation. | Not significant: Change in risk ratings over time. | Significant: Private sector share of employment. | Not significant: Real exchange rate. |
| **Benacek and Visek (1999a)**<br>**Hosts**: Czech Republic.<br>**Investors**: Any, in 91 manufacturing industries.<br>**Sample:** 91. | | Significant: Total factor productivity. Capital intensity. | | | Significant: Returns to scale. | Significant: Research content of production. |

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**Table 1. Primary, secondary and other determinants of FDI (concluded)**

| Study | Market size and growth | Factor costs | Trade barriers | Stability and risk | Strategic/transition specific factors | Other |
|---|---|---|---|---|---|---|
| **Benacek and Visek (1999b)**<br>**Hosts**: Czech Republic.<br>**Investors**: All, in 16 manufacturing industries, 1991-1997.<br>**Sample:** 112. | | Significant:<br>Inflation. Profits relative to labour. Total factor productivity K/L ratio. | | | Significant:<br>Market power and increasing returns. | Not significant:<br>Skill levels within industries. |
| **Sass and Szemler (1999)**<br>**Hosts**: Hungary.<br>**Investors**: All, in 23 manufacturing industries, 1993-1996.<br>**Sample:** 92. | Significant:<br>Sector size.<br>Market orientation. | Significant:<br>Unit labour costs relative to Western Europe.<br>Sectoral labour costs. | | | Significant:<br>Sectoral tendency towards outward processing trade (OPT). | Significant:<br>Sectoral proportion of white-collar workers. |
| **Barrell and Holland (2000b)**<br>**Hosts**: Czech Republic, Poland, Hungary.<br>**Investors**: All, in 11 manufacturing industries, 1993-1996.<br>**Sample**: 132. | Significant:<br>Sector size. | Significant:<br>Long-run cost differentials between the host and investor country. | Not significant:<br>Market orientation. | Significant:<br>Risk. | Significant:<br>Sectoral private sector share. | Significant:<br>Capital intensity. |

[a] Primary indicates primary motive of investment; Secondary indicates secondary motives of investment.

[b] Significant indicates statistical significance at the 5 per cent level.

per cent of the sample was market size, growth potential and maintaining market share. Strategic motives, which include serving regional and European Union markets, were listed second. H. P. Lankes and A. J. Venables (1997), in a survey of 117 western European firms operating, formerly operating, or planning to operate in one of 16 EBRD-member countries, found that market size is the most important determinant for market-oriented investors, except in Hungary and the Czech Republic, where political and economic stability dominated.

INDICATOR (1995) found that Poland's attractiveness lies in the size and homogeneity of its market, as well as its high growth level. It was also shown that personal incomes in Poland, Hungary and the Czech Republic, which are the highest in the region, have encouraged investment flows into these countries. K. Meyer (1996), in a survey which covered 267 United Kingdom and German companies investing in Hungary, also found that the purchasing power of consumers is important to the investment decision for market-oriented investors. The most important factor for market-oriented investors is the size of the market in terms of population. For factor price-oriented investments, access to local markets is also important, although to a somewhat lesser extent, as would be expected.

W. Altzinger (1999), in a survey of 150 Austrian firms investing in CEECs, found that market potential is the most important factor for investors. It is especially important for investors in finance and insurance, construction and food and beverages. Julien Savary (1997) showed that the majority of the 22 French industrial firms surveyed found investment opportunities in CEECs more attractive than in southern Europe from the point of view of market size. In Poland, market size was the most important motive for investment. However, in other countries of the region, market size was found to be slightly less important than factor costs. J. Konings and S. Janssens (1996) found expansion prospects to be an important factor in the location decision in Hungary. Market exploration or testing was chosen as the most important factor by 43 per cent of the survey respondents. A. Éltetõ and M. Sass (1998), analyzing the response of 125 joint ventures in Hungary, found that growth prospects and gaining market share were the most important factors to non-exporters in Hungary.

### *Econometric findings*

Any econometric analysis of the market size hypothesis must be undertaken with care. Initially, FDI inflows coincided with a period of recession that lasted until 1993, owing to the process of the transition to market economies in several CEECs. This suggests a perverse relationship between FDI and output growth. Expected market growth may be a more important factor in determining the distribution of FDI, but such expectations are very difficult to measure.

There are several possible ways of overcoming this statistical problem. Market size can be proxied by population size, as suggested by Meyer (1996). In a panel regression with fixed effects, this will be captured by the country-specific intercepts. Alternatively, a cross-section analysis can be used as in V. Benacek and J. A. Visek (1999a), or a time-series analysis starting at the point of economic recovery can be employed as in R. Barrell and D. Holland (2000b). Control for market size can be achieved by looking at FDI inflows relative to GDP, as in Holland and Pain (1998) and Benacek and Visek (1999b). Benacek and Visek (1999a) approached this slightly differently, by considering the stock of FDI relative to the total stock of capital, with the latter considered as an alternative measure of market size. M. Gronicki (1999), Barrell and Holland (2000b) and M. Sass and T. Szemler (1999) all found that FDI is strongly tied to market size. Barrell and Holland (2000b) found this relationship to be roughly proportional, which indicates that the use of the ratio of FDI to GDP as the dependent variable in Holland and Pain (1998) and Benacek and Visek (1999b) should not introduce a distortion.

## *Factor costs*

### *Surveys*

Wages in the transitional economies are amongst the lowest in Europe. The issue of whether or not labour costs affect the decision to invest in the transition economies is an important one and the subject of some debate. INDICATOR (1995) showed that labour costs were among the factors influencing the investment decision in Poland,

especially in the earlier years. Konings and Janssens (1996) found labour costs to be a relatively important factor in the location decision in Hungary, although less important than achieving the desired market share. Savary (1997) found that French firms viewed CEECs as more attractive in terms of production costs, especially labour costs, than Southern Europe. Except in Hungary and Poland, low production costs proved to be the most important motive for investment. In the Czech Republic and Slovakia, labour cost advantages were considered to be the most important factors, along with overall stability, profitability and local market access. Elsewhere, labour cost advantages were viewed as less important than market access. Altzinger (1999) found that Austrian investors, with the exception of the engineering industry, viewed low wage costs as significant, but less important than exploiting the market potential. Labour costs were of particularly low importance to investors in finance and insurance.

The importance of factor costs seems to depend, not surprisingly, on the purpose of the investment. Lankes and Venables (1997) found that export-oriented firms place much greater importance on production costs and low-wage skilled labour, as is expected intuitively. Transport costs were found to be relevant for heavy industry, which is also to be expected.

### *Econometric findings*

Benacek and Visek (1999a) analyzed FDI in 91 manufacturing industries in the Czech Republic in 1994. The results indicate that FDI prior to 1994 was biased away from capital-intensive industries. They attribute this to the lack of functioning property rights, which is essential for capital-intensive production. This result was supported by Barrell and Holland (2000b), a panel study of investment in 11 manufacturing industries in the Czech Republic, Poland and Hungary for the period 1993-1996. They attributed the bias away from capital-intensive industries to profit opportunities, as industries with a low level of capital intensity offer the greatest scope for the introduction of new capital and labour-augmenting technologies. However, Benacek and Visek (1999b), analyzing FDI in Czech manufacturing industries over the period of 1991-1997, found investment attracted

to sectors with a relatively high capital to labour ratio, although the explanatory power of this variable was not found to be robust. Sass and Szemler (1999), in a study of investment in 23 Hungarian manufacturing industries during 1993-1996, found that export-oriented investments (which were a minority of investments overall) tend to flow towards capital-intensive industries.

The econometric evidence reported by M. Lansbury et al. (1996), which considered FDI by 14 industrialized countries into Poland, Hungary and the formet Czechoslovakia during 1991-1993, indicates that relative labour costs within the Visegrad economies have influenced the distribution of FDI within those economies, more so than costs relative to Southern Europe. Similarly, Holland and Pain (1998), in a panel of FDI projects in 11 transition economies between 1992 and 1996, found that wages relative to other transition economies have a significant impact on FDI inflows, although there was no strong evidence to suggest that wages relative to low-cost locations in the European Union have an important impact on the investment decision. This supports the D. A. Riker and S. L. Brainard (1997) finding that countries compete for FDI against similar locations, but not against dissimilar locations.

Barrell and Holland (2000b) found that investors appear to be driven by the expected long-term cost differentials between the host and investor counties. Sass and Szemler (1999) also found that unit labour costs in relation to unit labour costs in capital rich countries affected FDI in Hungary. Gronicki (1999) and Sass and Szemler (1999) found that the distribution of FDI across manufacturing industries is partly determined by wage levels in Poland, with low-wage industries attracting relatively higher levels of FDI.

## *Skills*

### *Survey findings*

In the early years of transition, high levels of FDI were expected to flow into the CEECs, mainly due to the relatively skilled workforce, combined with low wages. The expected inflows were not realized early on. This may, in part, have been due to the fact that despite

high qualifications, productivity was low in many transition economies. Case studies, such as General Electric's investment in Hungary, also suggest that it takes time for investors to recognize that skilled and unskilled labour is relatively inexpensive in the CEECs. C. Pomery (1997), where details of the results of the CzechInvest's survey covering 163 manufacturing firms can be found, indicates that the state health insurance scheme in the Czech Republic encourages high absenteeism, which leads to lower productivity and deters investment. However, investors point to excellent prospects for increases in productivity.

The attraction of a skilled labour force was found to be of significant importance only in Hungary, the Czech Republic (Lankes and Venables, 1997) and Slovakia (Pye, 1998). Éltetõ and Sass (1998) and Meyer (1996) found that a qualified labour force is one of the most important determinants of FDI in Hungary, especially for assemblers and domestic supply based exporters. Labour quality is of lesser importance to non-exporters. Savary (1997) found that French firms evaluated CEECs as roughly equivalent to southern Europe in terms of labour qualification. In Hungary, the high average qualification of labour was one of the most important attracting factors. In terms of the technological and industrial environment, southern Europe was thought to be superior to the CEECs. However, in Hungary, the relatively good quality of the technological and industrial environment was also one of the most important factors in attracting FDI.

### *Econometric findings*

Benacek and Visek (1999b) found that skill levels did not influence the distribution of FDI across industries in the Czech Republic, suggesting that investors were attracted by the general educational foundations of the country, rather than by specific qualifications in a given industry. Anecdotal evidence from Hungary also suggests that it may take time for investors to recognize the quality of the research base in an unfamiliar location. Sass and Szemler (1999) found that investors are attracted to industries with a high proportion of white-collar employees in the workforce.

Holland and Pain (1998) found that productivity relative to the regional average is important in both the Baltic States and the CEECs. However, there was no strong indication that investors compared productivity levels between the two regions in making investment decisions. This indicates that there is less competition for FDI between the Baltic States and CEECs than there is within the two regions. Benacek and Visek (1999a) found that foreign investors in the Czech Republic prefer industries where total factor productivity is higher. They also found that investors are biased towards industries in which there is a high level of R&D relative to output. However, the possibility of reverse causality can not be eliminated.

Lansbury et al. (1996) found that domestic technology, proxied as the stock of patents granted to residents of a host economy, has a positive impact on the level of inward FDI. This suggests that investors may seek to locate in Hungary in order to take advantage of its relatively advanced research base.

### *Trade barriers and regions*

In the context of the CEECs, the extent to which membership in the Central European Free Trade Area has had an impact on FDI decisions was examined. There is some evidence that contiguity and proximity to the European Union are important factors in observed trade and investment decisions. Knowledge of the local market and existing business linkages may help especially small and medium-sized enterprises in neighbouring industrialized economies and allow them to take advantage of the opportunities presented by a rapidly evolving market structure (Bod, 1997). Agreements with the European Union have been reached by most of the Central European countries, establishing timetables for free trade and eventual negotiations about membership. This may encourage FDI aimed at exporting to the European Union. All countries have also accepted international trade obligations required for GATT/WTO membership, reducing worldwide trade barriers by the end of 1996. Hungary and the Czech Republic are considered to have the least barriers to trade, which can help explain why a large portion of FDI has been directed to these two countries. Industrial differences in terms of openness to trade remain. For example, the automobile industry is relatively

closed and well protected, which helps explain the large FDI inflows there.

### *Survey findings*

Pye (1998) confirmed earlier findings that export-oriented firms are in the minority of firms surveyed. Those that do exist are geared towards supplying neighbouring CEECs. Altzinger (1999) found that the creation of an export base is important to Austrian investors in Central Europe, especially in the food and beverages industries. Nonetheless, 83 per cent of the output in this industry was sold locally in 1995.

According to Lankes and Venables (1997), trade barriers are not considered an impediment to FDI in Hungary and the Czech Republic, although import tariffs from the European Union are thought to deter FDI in Poland and other Central European countries. Geographical closeness to the European Union was considered important, especially to market-oriented investors. However, survey respondents indicated that FDI was not primarily motivated to gain access to European Union markets, suggesting that proximity was important mainly for engaging in intra-firm trade. Altzinger (1999) found that proximity to Austria is important to Austrian investors, especially in the finance and insurance industries. He suggested that this was partly due to historical and cultural ties. INDICATOR (1995) found that export quotas and high customs rates impeded Polish exports, but that the efficient customs laws in Hungary encouraged FDI. Pomery (1997) indicated that customs regulations in the Czech Republic were a problem for about half of the respondents. Éltetõ and Sass (1998) reported that assemblers and domestic supply based exporters found the lack of trade barriers relatively important factors in their decision to locate in Hungary.

### *Econometric findings*

A special feature of Hungarian regulation is the establishment of customs free zones. Every company can set up its own custom free zone inside the country. However, the significance of this is diminishing as tariffs have a decreasing role in Hungary's trade with

its most important partners (European Union, European Free Trade Association, Central European Free Trade Area). There are more than 100 companies functioning in customs free zones. From the list of the biggest exporters, for example, IBM Storage, Audi and Opel operate in a customs free zone. Their very important role in Hungarian foreign trade is underlined by the fact that they accounted for 42 per cent of total exports and 29 per cent of total imports in the first 5 months of 1999.

There are some export-oriented industries (in terms of the high ratios of exports/total sales) in which the extent of FDI in Hungary remains very limited. The reason for that is that foreign investors have opted for outward processing trade (OPT), which is less risky and requires less financial investment compared to FDI. This is especially applicable in the case of certain labour-intensive industries, like clothing, textile, footwear, furniture etc., and some other industries in which the labour intensive parts of the production process can be separated from the whole production process and transferred to a different location where costs are lower. Sass and Szemler (1999) found that industries likely to attract OPT receive significantly less FDI.

Lansbury et al. (1996) found that trade with the investor country is positively associated with FDI. Holland and Pain (1998) found that those countries with a contiguous border with the European Union (excluding Bulgaria) received relatively high levels of FDI after factor costs, risk and approach to privatization were taken into account. These are also the countries that have formed the Central European Free Trade Area, and four of the five economies were among the first transition economies to make accession agreements with the European Union. Econometric evidence cannot separate fully the impacts of these three factors. However, there is some evidence to suggest that proximity to the European Union was the most important factor.

Barrell and Holland (2000b) and Gronicki (1999) found that there is no significant relationship between market orientation, defined as exports relative to total output, and FDI. Poland may present a special case where the trade-off between imports and FDI counterbalances the openness required by TNCs. A high level of

FDI in Poland is drawn towards closed industries, such as food processing and automobiles.

### *Risk*

As a group, the transition economies have seen improved international credit ratings over time (UN/ECE, 1998), helped by greater macroeconomic stabilization and, in the case of the Czech Republic, Hungary and Poland, by membership to the Organisation for Economic Co-operation and Development (OECD). However, it is notable that countries such as Bulgaria and Romania have consistently received poor ratings by international credit agencies. Much of the risk associated with working in Central Europe stems from uncertainty and lack of experience. This gives neighbouring countries with close historical and cultural ties to the region, such as Austria, a distinct advantage over more distant investors.

### *Survey findings*

Lankes and Venables (1997) found that risk, as measured by the EBRD's transition indicators, affects the likelihood of a FDI project being abandoned. Hungary, the Czech Republic, Poland, Slovenia and Slovakia are considered to have considerably less risk than other transitional economies (Dabrowski, 1998). The Czech Republic and Hungary are popular partly owing to low inflation throughout much of the transition. Surveys of investors in Poland show that economic growth trends are among the main factors influencing the decision to invest there. Éltetõ and Sass (1998) found that good prospects for economic development are an important secondary factor for non-export oriented firms investing in Hungary. Legal, economic and political stability were also found to be relatively important. Assemblers and domestic supply based exporters put stability in the host country as the most import issue. Meyer (1996) also found that market-oriented investors in Hungary regarded political and economic stability as an important factor in the location decision. Factor-price oriented investors are less concerned with stability. Pye (1998) found that overall stability in a host country is somewhat important, especially in the Czech Republic.

Complicated bureaucracy and lack of transparency in the legal system may also deter FDI. They both introduce uncertainty and increase risk. Pomery (1997) points to the following barriers to FDI in the Czech Republic: non-transparent legislation and a poorly performing judiciary system, bureaucratic complications regarding ownership, product innovation and taxation and over-regulation in greenfield FDI. In Hungary, INDICATOR (1995) found that the legal system encouraged FDI because many laws were comparable to those in the European Union. Surveys in Poland showed that two thirds of foreign investors had anti-competitive measures used against them, such as price fixing of inputs and outputs, which deterred further investment.

### *Econometric findings*

The econometric analysis in Lansbury et al. (1996) did not find a significant role for risk. This might have been due to the fact that risk levels are relatively similar across the countries considered: Poland, Hungary and the Czech Republic. Holland and Pain (1998), however, considered a broader range of countries, with varying levels of risk, and did find a significant impact of the measure of risk on FDI. This was a principal component measure based on consumer price inflation, GDP growth, the reserve cover ratio and the average country score in the transition indicators developed by EBRD. Barrell and Holland (2000b) used an alternative measure of risk, described in Gronicki (1999). This was found to be an important factor in determining the distribution of FDI across Poland, Hungary and the Czech Republic. Gronicki (1999) used this same measure in a study of Poland, but did not find it to be significant. This suggests that investors compare risk levels across countries at a given point in time, but are less concerned with the absolute level of risk in a single country.

## *Investment incentives*

Lankes and Venables (1997) found that tax incentives for FDI are not considered important to the location decision in CEECs, although individual agreements between the investor and the government are significant for a small group of investors. This is

especially the case in Hungary. The Czech Republic has offered little in the way of incentives to foreign investors, according to the 1998 CzechInvest survey. However, new incentives were introduced in April 1998.

Survey results suggested that foreign affiliates in Poland did not benefit from tax exemptions and privileges. Over two thirds of foreign affiliates did not indicate any tax exemptions or privileges. For investors enjoying tax privileges, the incentive mostly identified was exemption from profit tax (applied according to the foreign capital regulations of 1989 and 1991). In a separate survey of the Slupsk region in Poland (Kalinowski and Jacaszek, 1996), more than half of the region's localities did not provide any incentives to foreign investors. Only one of the localities it was reported that tax incentives were taken into account when considering the location of FDI; however, certain non-tax incentives were offered throughout the region, such as infrastructure development.

Éltetõ and Sass (1998) found that infrastructure services in Hungary are of some importance to export-oriented investors. INDICATOR (1995) also found that an efficient transport system encouraged FDI in Hungary. However, Lankes and Venables (1997) found that local infrastructure appears to be of only minor importance in the location decision. None of the econometric studies covered here have included a measure of investment incentives, reflecting the lack of an adequate time length of such data.

### *Privatization*

The privatization process played a key role in determining the level FDI in CEECs during the early years of transition. The earliest countries to embark upon significant privatization programmes were those in Central Europe. Those economies have also attracted the highest shares of FDI of all CEECs. One means of capturing the speed of privatization is through the private sector's share of GDP[1]. Estimates reported in EBRD (1998) suggest that several countries

[1] This measure captures both the privatised sector and newly established private firms.

have experienced very rapid growth of their private sectors during the transition period. The Visegrád economies appear to be converging on a level of about 75 per cent, close to the levels of the market economies in Western Europe. Poland lags behind slightly, with only 65 per cent of the country's output produced in the private sector. The guidelines introduced in mid-1998 indicate that most of the remaining State assets in Poland will be privatized by 2001. The private sector share in the Balkan economies is lower, at 50-60 per cent. The privatization process has been notably slower in the Balkan states, partly reflecting a lack of clear political will, as well as the substantial autonomy enjoyed by some enterprises notionally owned by the state in the former Yugoslavia.

The chosen means of privatization may matter as much as the speed and scale of adjustment (Hunya, 1997a). Certain countries, such as Hungary, have pursued a policy of sales to strategic owners, with few restrictions on the involvement of TNCs. Other countries, such as the Czech Republic and Slovakia, have largely adopted voucher-based mass privatization schemes, at least in the initial wave of privatizations, directed towards domestic residents. Such schemes offer fewer direct opportunities for FDI. A third method of privatization, used largely in the Balkan countries has consisted of management-employee buy-outs. Again this approach offers few opportunities for the direct purchase of assets by TNCs during the initial stages of privatization.

### *Survey findings*

First-mover advantages appear to have played a strong role in the investment decision, especially for market-oriented investors (Lankes and Venables, 1997). Pye (1998) found that strategic advantages were particularly important in Romania and Poland, while Konings and Janssens (1996) found such advantages to be very important n the location decision in Hungary. Meyer (1996) also found that market-oriented investors in Hungary are influenced by the lack of competitors in a given market.

Savary (1997) found that French firms view CEECs as more attractive in terms of one-off opportunities, as afforded by the

privatization process, than Southern Europe. This was especially important in the case of Poland. However, Lankes and Venables (1997) found that one-off opportunities are of only moderate importance to the investment decision. The aggregate data indicate that acquisitions of formerly state-owned firms by foreign investors outnumber greenfield investments in the Czech Republic, Hungary and Poland. However, even in the early years, Hungary received significant levels of greenfield investment, while bureaucratic barriers curtailed greenfield investment in the Czech Republic. Benacek and Visek (1999d) also found that greenfield investment in the Czech Republic is very low. This is confirmed by Pye (1998), who found that acquisitions have dominated greenfield investment in Poland, Hungary and the Czech Republic[2]. However, the share of greenfield investment has increased significantly in Hungary now that the privatization process is complete. This strongly suggests that the privatization process has played an important role in the majority of FDI projects, even if it is considered unimportant by certain managers interviewed in surveys. If the firms surveyed were actually dominated by greenfield investments, it would indicate that the sample is not representative of the real population of foreign investors.

### *Econometric findings*

Lansbury et al. (1996) found that inward FDI is higher in those Visegrád economies with a higher private sector share. This was supported by the findings of Barrell and Holland (2000b) and Gronicki (1999). Holland and Pain (1998) found that the privatization method is more important than the private sector's share of the economy. They attributed this to strong multicollinearity between the private sector's share and the measure of risk. The EBRD transition indicator is constructed using several measures of progress in transition that capture the scale of privatization among other things. If the method of privatization is more important than the private sector's share, this would suggest that the opportunities afforded by one-off investments are more significant to the investment decision than the commitment to private ownership for any given level of risk.

[2] In Romania and Slovakia, however, greenfield investment has dominated slightly.

### *Other influences*

Survey evidence of agglomeration effects is very limited. Lankes and Venables (1997) found that about half of the foreign investors are influenced positively by similar investments by competitors in the same country. According to the 1998 CzechInvest survey, there has been significant re-investment by FDI manufacturers in the Czech Republic for several years. However, they could not quantify the amount. Anecdotal evidence shows that many companies with foreign participation in Hungary induce their suppliers to establish a presence in the region, in order to supply the Hungarian affiliate with the raw materials or semi-finished products that they provided to the parent firm (Sass, 1996). This provides one example of the potential for agglomeration effects.

Benacek and Visek (1999a) found evidence that investors are attracted to industries with increasing returns to scale. This supports the assumption of new trade theorists, namely, that industrial organization motives, such as ownership of intangible assets, leads to firm-level economies of scale that promote FDI.

## Evidence on the impact of FDI

At the outset of the transition period, the CEECs suffered from an increasingly obsolete capital stock, inadequate infrastructure and an industrial structure in need of modernization. Foreign investors were expected to provide a vital source of new physical capital, due to limited domestic resources for investment. In some countries, shortages of foreign currency reserves restricted the ability to import new products and equipment and to establish trading links in order to integrate fully into the world economy.

A wide literature has developed on the impact of transferring ownership from the State to the private sector on incentive constraints. Theory suggests that the allocation of new property rights should be more efficient, leading to reductions in transaction and information costs. Foreign investors are expected to make the most efficient use of the scope for productivity increases, as they bring with them external expertise. Below we consider the impact of FDI on growth

prospects through trade, aggregate investment and productivity levels, based on the results of a selection of surveys and econometric studies.

### *Trade*

Despite the overwhelming evidence that foreign investors in Central Europe tend to be primarily market rather than export oriented, there is a strong indication that firms with foreign participation export more than purely domestic firms do. According to Hoekman and Djankov (1997), in an econometric analysis of 12 tradable industries in five CEECs between 1990-1995, FDI inflows were highly correlated with the volume of intra-industry trade, which determines the export performance of CEECs.

INDICATOR (1995) found that firms with foreign participation in Poland are more export oriented than domestic firms. From a sample of 582 firms, 31 per cent indicated that more than 75 per cent of output was exported in 1994. Germany was identified as the main recipient of these exports.

A. Zemplinerova (1998) confirmed that firms with foreign participation in the Czech Republic are more export oriented than domestic firms. The 1998 CzechInvest survey found that manufacturing firms with foreign participation in the Czech Republic are strong exporters. More than 70 per cent of responding firms expected to export over half of their production, while a third expected to export more than 90 per cent. If this is a representative sample, it suggests that foreign manufacturing firms are motivated by different industries. A clear majority of FDI in Czech manufacturing is shown to be export oriented, although FDI overall are predominantly market oriented. This can be explained by the fact that investments in services are very frequently market oriented.

The role of foreign affiliates is very important to the export performance of Hungary. The share of Hungarian manufacturing exports accounted for by foreign firms increased from 70 per cent in 1995 to 80 per cent by the end of 1998. The main engine of export growth in recent years has been exports of foreign affiliates in the machinery industry. Again, there is an indication that foreign

investors in manufacturing behave differently from investors in other sectors. The list of the nine biggest exporters in Hungary contains almost exclusively foreign affiliates.[3] The nine biggest exporters accounted for almost one third of Hungary's total exports.

Although foreign affiliates tend to export more than domestic firms, they also tend to import more, so the net impact on the current account is uncertain. In Hungary, the Privatization Research Institute (1997) evaluated the overall effect of foreign affiliates on the trade balance as negative[4]. Altzinger (1999) showed that Austrian investors tend to export roughly one third of their output, while about one third of their inputs are imported from the parent firm. Assuming other inputs are purchased locally, this will not have much of an impact on the current account. Pye (1998) suggested that the general lack of export orientation puts into doubt the proposition that FDI can create a boom in export sales to benefit of the host country's trade balance. However, Pain et al. (1998) found that inward FDI had a positive effect on net export volumes for the Central European economies. A 1 per cent rise in the stock of inward FDI at constant prices is estimated to raise merchandize export volumes by 0.18 per cent, and import volumes by 0.13 per cent. The impact on the current account will depend on the relative changes in import and export prices, as well as the impact on services trade. In general, those countries that receive high levels of FDI can be expected to have a current account deficit, as the positive inflows on the capital account must be offset by current account debits.

Lankes and Venables (1997) found that export-oriented foreign investors sell almost half of their output within the corporation, while they import roughly one third of inputs from parent firms. This

[3] *Figyelô* [Hungarian economic weekly newspaper], 9 July 1998, p. 29.

[4] The method of calculation applied was questionable because, for example, companies with less than the standard 10 per cent foreign equity share were included. The oil and gas monopoly responsible for importing fuel from Russia was also included. Another important problem is whether or not the trade balance of foreign-owned firms can be separated from the overall trade balance of a country. For example, the forward and backward linkages of companies with foreign participation with domestic firms give rise to "indirect exports" or "import substitution" effects that may have a significant impact on the trade balance.

suggests a positive impact on the current account. However, market-oriented investors were found to export only 3 per cent of their output back to parent companies, while still importing about one third of their inputs. This indicates a negative impact on the current account.

The ownership type of the firm may also affect the impact on the trade balance. Fully foreign-owned firms tend to sell a larger share of output within the corporation than joint ventures, whereas they import roughly the same amount of inputs. Lankes and Venables (1997) showed that joint ventures are more prevalent in locations with higher risk, so FDI in these countries is likely to have a more negative impact on the trade balance.

***Investment***

The recovery of fixed investment in the CEECs has been financed largely by the resources of the enterprises themselves, not by the intermediation of domestic savings, or by foreign investors. Benacek and Visek (1999a) suggested that the gap for FDI formed by a deficit between savings and domestic investment in the Czech Republic was too narrow. This resulted in a large part of foreign capital acting to increase foreign reserves in the central bank. This placed upward pressure on the exchange rate, which in turn worsened the current account deficit. There has been some concern, particularly in the smaller and more open economies, that high FDI inflows will erode their competitive position and lead to serious current account deficits.

Net domestic savings is equivalent to the current account balance. If investment is greater than domestic savings, the remaining financing must be obtained abroad. Inflows on the capital account must be offset by a current account deficit. By the same token, if an economy exhibits a current account deficit, this indicates that gross domestic savings is insufficient to cover total investment. An analysis of the current account shows that savings exceeded investment slightly in the earlier years of transition, but Poland, Hungary and the Czech Republic have all exhibited a current account deficit since 1996. L. Lizal and J. Svejnar (1998), using a firm-level panel of investments in the Czech Republic during 1992-1995, found that foreign-owned

companies invest more than domestic companies. Foreign enterprises are also playing an increasing role in capital investment in Hungary, according to official data. The empirical evidence (Hunya, 1997b; Szanyi, 1997; Szanyi and Szemlér, 1997) indicates that foreign capital involvement in joint ventures acts as a catalyst, triggering substantial new investments. Moreover, these investments tend to be financed by the foreign owners, rather than purely through the reinvestment of profits. Additional investment in Poland, however, has been primarily through the reinvestment of profits. Nearly three fourths (71 per cent) of firms with foreign participation in Poland that registered profits in 1994 reinvested at least a portion of their profits.

***Productivity***

In the early years of transition, there did not seem to be any macroeconomic impact of FDI on growth. The contribution of FDI to the host country's growth appears to be subject to a considerable time lag, and consists primarily of increases in productivity, rather than increases in output through capital investment. In more recent years, foreign affiliates have shown generally higher productivity and more dynamic sales than their domestic counterparts (Aghion and Carlin, 1997). This stems from more efficient technological processes, improved corporate governance and the fact that foreign investors tend to target the more viable businesses. Given time, the more advanced technology of foreign affiliates should spillover to the domestic economy, as the new ideas introduced by them add to the human capital stock of domestic managers.

Major (1996a, 1996b) compared the performance of different ownership groups in the Hungarian economy during the period 1988-1995. He did not find major differences in the financial efficiency of the groups of majority foreign, Hungarian private and Hungarian state-owned companies until 1994, as they were all hit by recession in the early years. Modest improvements in foreign affiliate productivity relative to domestic firms began in 1994, and this process accelerated in 1995, when financial performance measures generally became positive in most areas of the economy. Z. Pitti (1997) compared a series of performance measures of companies for the years 1995 and

1996. The results suggest that improvements in efficiency in foreign affiliates continued in the mid-1990s, with clearly superior performance indicated in 1996. The analysis of the 1996 balance sheet data also shows that firms with foreign involvement performed better than the national average overall. G. Hunya (1998) confirmed that endowments of capital and labour productivity were higher in foreign affiliates than in domestic enterprises.

Zemplinerova and Benacek (1997) and Zemplinerova (1998) confirmed similar findings for the Czech Republic. Firms with foreign participation have shown clearly that they are more efficient, with higher productivity of both labour and capital. They also invest significantly more than indigenous firms. The 1998 CzechInvest survey indicates that three fourths of foreign affiliates planned to improve their productivity significantly in the near future. Hunya (1997b) indicated that labour productivity in Polish firms with foreign involvement was higher than in domestic firms in 1993.

D. Floyd and J. Morrison (1999), in an econometric analysis based on a survey of 145 manufacturing firms with foreign participation in Poland, found that linkages to domestic firms had increased significantly since the point of entry. About 75 per cent of firms had their major source of supply within Poland; and linkages with firms in other Eastern European countries had also increased.

Surveys have indicated several sources of improved productivity for foreign affiliates. I. Major (1996b) and T. Csányi (1997) found that wages accounted for a significantly smaller share of input costs in foreign affiliates than in domestic firms in Hungary. This indicates the use of fewer labour-intensive production processes and a quicker and more determined downsizing in companies with foreign participation. This confirms the findings of T. Novák and M. Szanyi (1996). There is also strong evidence that foreign affiliates pay higher average wages than other companies. Higher wages attract the better-trained part of the workforce, with above average productivity.

Despite the higher levels of productivity, many foreign affiliates in Central and Eastern Europe still record low levels of profitability.

This apparent contradiction can be explained by a tax strategy (indicating lower profits in order to pay lower taxes), one-off fixed costs required during the first few years of operation, which often lead to loss making, macroeconomic developments, and transfer pricing. L. Halpern (1997) analyzed balance-sheet data and the evolution of export and import prices in Hungary to determine if there was any evidence of transfer pricing. Export prices of TNCs increased much more slowly than import costs, which was not the case for Hungarian exporters and importers. Import prices paid by TNCs proved to be higher than Hungarian importers' prices. These factors make transfer pricing by TNCs very likely.

S. Djankov and B. Hoekman (1998) used firm-level data for the Czech Republic during the period 1992-1996 for an econometric analysis of the impact of FDI on total factor productivity, using a growth accounting model. They found that FDI tends to flow to firms of above-average size, initial profitability and initial labour productivity. After controlling for this selection bias, they found that FDI had a positive, but insignificant, impact on total factor productivity growth. This suggests that the observed productivity improvements in the Czech Republic depend on the initial conditions of firms, rather than the transfer of new technologies and knowledge from their foreign partners.

Holland and Pain (1998) used the model developed in the previous section to estimate the impact of FDI on technical progress in eight transition economies during the period 1992-1996. The results indicated that FDI inflows had a positive impact on labour productivity in the economy overall. These results suggest that the higher levels of productivity in foreign affiliates are due to more than just the initial conditions of firms. However, the impact on productivity was found to be small relative to the impact of FDI on technical progress in the United Kingdom and Germany found by similar studies (Barrell and Pain, 1997b). This might suggest the main impact of foreign affiliates on the transition economies has arisen from the rapid growth in the number of such firms, rather than from significant spillovers in the technologies and working practices of indigenous firms. Barrell and Holland (2000a), using the same model in a sectoral level study of FDI in Hungary, Poland and the Czech

Republic between 1993 and 1996, found the impact of FDI on technical progress to be positive in most manufacturing industries, with the exception of leather, transport equipment and other manufacturing industries. This may be explained by the fact that the model could not capture changes in the quality of goods produced.

The evidence to date indicates that FDI is a major channel of technology transfer to developing countries. Case study evidence indicates the CEECs do benefit from the transfer of advanced technology, management and marketing knowledge. Macroeconomic developments suggest that FDI has contributed to the upgrading of production and export structures, and has raised the prospective medium-term growth rate (Pain et al., 1998). Evidence of associated spillovers into domestic firms is much less robust. Negative impacts have even been reported in some cases, as well as short-term problems involving capacity destruction, lay-offs and increasing imports. In the initial stages of transformation, foreign investors were, in many instances, able to enforce competitive restrictions through their market power, which was detrimental to the host countries.

**Table 2. Econometric evidence on the impact of FDI on productivity**

| Study | Dependent variable | Findings |
|---|---|---|
| **Djankov and Hoekman (1998)** **Sample**: Firms in the Czech Republic, 1992-1997. **Observations**: 513. | Output growth. | Foreign participation increases annual growth by between 0.005 and 0.031 percentage points, although estimates are not statistically significant. |
| **Holland and Pain (1998)** **Sample**: 11 Central European and Baltic economies, 1992-1996. **Observations**: 55. | Labour productivity. | A 1 per cent rise in the real stock of FDI is associated with an 0.03-0.05 per cent increase in labour productivity. |
| **Barrell and Holland (2000a)** **Sample**: 11 manufacturing industries, in the Czech Republic, Hungary and Poland, 1993-1996. **Observations**: 132. | Labour productivity. | In the food, paper, rubber, chemicals, textiles, wood, minerals and machinery manufacturing sectors, a 1 per cent increase in the real stock of FDI is associated with an 0.1 per cent increase in labour productivity. In the leather, transport equipment and other manufacturing sectors, there was no significant relationship. |

Some experts say[5] that the inflow of foreign capital and the operation of companies with foreign capital has created a kind of a duality in the Hungarian economy. A relatively small amount of inputs are purchases from domestic suppliers, so backward linkages with the domestic economy are limited. These experts suggest that foreign affiliates operate as a separate, isolated isle in the domestic economy and that spillover effects are quite limited. This supports the evidence of Holland and Pain (1998), which indicates that spillovers from foreign affiliates to the domestic economy have been limited in the Czech Republic.

On the basis of a questionnaire survey, the following characteristics were found to be valid for companies with foreign participation regarding their local supplier policy (Sass, 1996). The sample consisted of 125 companies with foreign participation. According to the size of the companies, their country of origin, the geographical and sector distribution and their foreign share, this sample was very representative of the population of companies with foreign participation in Hungary. The share of domestic suppliers varied between 21 and 30 per cent on average. However, the standard deviation was large: most of the companies relied either very much (above 50 per cent), or to a negligible extent (below 10 per cent) on domestic suppliers. The first group comprises mainly privatized companies, while in the second group greenfield investments dominate. This can be explained by the existing company links in the case of privatized companies, and by the relatively long time required to build up a local supplier networks in the case of greenfield investments. However, greenfield investors do not always want to raise the local supplier share. These tend to be companies that export most of their products, although companies producing mainly for the local market tend to rely more on local suppliers. This can be explained by quality differences in the demand between the two different markets. Interestingly enough, there are no country differences (in terms of the investing country) in the share of local suppliers. The food and electronics industries seem to attract mostly local suppliers, which may reflect the relatively high level of protection in the case of the food industry. Textile, clothing and

[5] See, for example, "Thinking global, survey of foreign investment", *Business Central Europe*, April 1996, pp. 39-42.

footwear have the smallest share of domestic links, which can be explained by the fact that companies in those industries tend to carry out OPT activities.

The limited role of local suppliers — and thus the limited modernization effect of FDI on other segments of the economy — induced Hungary's Ministry of Trade and Industry to initiate a special program to help local firms engage in supplying activities, and to establish the so called Suppliers' Charter. Already 48 TNCs investing in Hungary have joined the Charter, under which the government and TNC representatives together try to increase the role of local suppliers.[6] (This type of government intervention — if it is successful — may improve dramatically the impact of FDI on the domestic economy.)

The Polish surveys considered the potential impact of new technologies and equipment introduced by foreign investors. The results showed that foreign affiliates generally used equipment and technologies that were one to five years old. This indicates that foreign affiliates tend to use new technologies, although not always the latest ones. More than a quarter (29 per cent) of foreign affiliates were found to also use equipment that was over ten years old. In general, foreign investors from Canada, Austria, the United States and the United Kingdom tend to use the latest technologies and equipment.

The 1997 CzechInvest survey (Pomery, 1997) found that 44 per cent of foreign affiliates in the Czech Republic had no expatriate staff based in the Czech Republic and 68 per cent had a Czech managing director. This suggests that the potential for human capital transfers from foreign managers to the domestic workforce is limited. However, there are many other modes of human capital transfer, such as training courses, which may counter balance this finding.

Djankov and Hoekman (1998) found that spillovers associated with the presence of FDI are negatively correlated with performance of domestic firms. This suggests that industries with the most room

[6] Világgazdaság [Hungarian economic daily], 22 April 1998.

for productivity improvements are better able to adopt productivity improvements from foreign affiliates. Imports were found to have a significant positive effect on total factor productivity growth of firms. This suggests that trade rather than FDI has had a more important role in increasing the productivity of domestic firms.

Holland and Pain (1998) investigated the cross-sectional relationship between the share of foreign firms in total output in 20 industries in the Czech Republic and labour productivity in domestic firms in 1994. They found no evidence of a significant link between the two, which suggests that there had not been significant spillover effects by 1994. Evidence from other countries, such as Ireland, suggests that these impacts take time to emerge, and it is important to remember that inflows up to 1994 remained limited. This was confirmed by Santos R. Guerra (1999) in a cross-sectional study in which he compared the FDI spillovers in Portugal, the Czech Republic and Hungary. While the existence of spillovers was evident in Portugal, they were absent in the Czech Republic throughout the period 1993-1997. Hungary was at a turning point, with the model rejecting the existence of technological spillovers, but finding evidence of human capital spillovers.

## Summary and conclusions

In general, econometric evidence supports the findings of survey studies and both back up a few elements found in the theoretical literature explaining FDI, especially those connected to location advantages. Taken individually, a single survey may produce misleading conclusions. For example, a study that excludes Hungary and the Czech Republic may conclude that political and economic stability is not very important to investors. But a study that does include them will indicate that their relative stability explains why such a large share of FDI in the transition economies has gone to these two countries. A broad collection of several different studies, such as the ones presented here, offers considerably more insight into the motivations of investors in CEECs.

Survey evidence suggests that market size and growth potential has been the driving force behind investment in the CEECs, with

factor cost advantages playing a lesser role. Econometric evidence confirms these findings, and indicates that the lesser role played by factor costs is nonetheless significant, supporting the theory of the impact of comparative advantages on FDI flows. Labour costs relative to other transition economies are more important than costs relative to other low-cost locations in the European Union, such as Spain and Portugal. This suggests a two-stage investment decision, where the investor first chooses to locate in Central and Eastern Europe, and then chooses a location within the region. Costs relative to the investor country also appear to be significant. Both types of studies indicate that trade barriers and membership in free trade areas are taken into account in the investment decision. Indeed, the relevant measure of market size may be the regional market. Thus as in the theoretical literature, some market-seeking FDI may be of a "tariff-jumping" nature, while export-oriented investments prefer more open trade regimes.

Macroeconomic and political stability have also played an important role in the location of FDI. Investment incentives have not, in general, had a decisive influence on the investment decision, but the privatization process has had an important influence on the timing of FDI. Evidence on importance of the attractiveness of skilled labour force in CEECs has been variable. Altogether, survey and econometric evidence indicate that only a few factors found in the economic literature on FDI are responsible for FDI inflows in the countries analyzed here. Other factors, especially privatization policy and market growth prospects, have been equally important in explaining why investors have chosen to invest in these economies.

There is some indication that FDI has had a negative impact overall on the trade balance in CEECs, which supports the evidence that foreign investors have been primarily market seeking rather than export oriented, at least during the period analyzed here. This is to be expected, as inflows through the capital account must be offset by debits to the current account. The indirect effects from a stimulus to domestic demand and an appreciation in the real exchange rate have offset the direct beneficial effects of TNC activity on export volumes. There is considerable evidence to suggest that domestic market-oriented investors and export-oriented investors behave differently,

and that they can have a significantly different impact on the host economy. FDI inflows have improved the overall growth potential of the receipt economies, but primarily through productivity improvements within the foreign affiliates themselves, rather than through increased capital investment, or technology spillovers to domestic firms.

On the basis of the above analysis, it is important for policy makers to note that the role of FDI policy in attracting FDI is much smaller than the role of other elements of the economic policy. Good economic policy helps to create the stable economic environment, which is one of the main factors attracting foreign investors. Besides relative wages, the quality of the labour force, which in turn depends on education and health policies is also important. The liberalization of foreign trade and FDI also supports the inflow of private capital. Privatization policy may offer attractive targets to foreign investors, although the privatization process is now more or less complete in the larger CEECs. Incentives are less important in attracting FDI. However, once an investor decides to invest in the region, incentives may influence the choice of location among similar locations within the region. In order to increase the spillover effects of FDI, government policy has to enhance its linkages with the domestic economy. ■

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# BOOK REVIEWS

## *Multinationals as Flagship Firms*

Alan M. Rugman and Joseph R. D'Cruz

(Oxford, Oxford University Press, 2000), 219 pages

The authors of *Multinationals as Flagship Firms*, Alan Rugman of Oxford University and Joseph D'Cruz of the University of Toronto, are well known for their work on transnational corporations (TNCs), business strategy and international competitiveness. According to the authors, the main motivation for this particular book is that "the international dimension of business networks tends to be unexplored, mainly because international business writers focus upon multinationals and network writers ignore international issues" (p. v). The volume is a compilation of papers on "flagship firms" and the authors' "five partners business network" model published in various journals and books in the early and mid-1990s, packaged with new introductory and concluding chapters and with updates for several of the case studies found in the original papers.

The first half of the book consists of a series of pieces that describe the "flagship firm" and the "five partners business network." A "flagship firm" is defined as a firm that "provides leadership to a vertically integrated chain of businesses with which it has established key relationships" (p. 8). The authors claim that such flagship firms take advantage of a specific type of business network in order to succeed in international competition. Other members of the "five partners business network" include key suppliers, key customers, selected competitors and the non-business infrastructure. "Key suppliers" are those that are brought into close relationships with the flagship firm due to the criticality of the inputs they supply for the development of competitive advantage for the network. "Key customers" are seen as sharing resources and information with the flagship firm, rather than acting as competitors for a share of network profits. The "non-business infrastructure" includes universities, trade

unions, research institutes and governmental bodies that provide intangible assets to the network. "Key competitors" are those competing companies with which flagship firms form limited alliances to further their goals.

According to the authors, it is the flagship firm that has the leadership and resources to act strategically for the network as a whole. Others in the network yield leadership to the flagship firm because they view it as in the interest of the network as a whole and as in their own self-interest. Network linkages are built through the harmonization of the strategies of the various participants. The result is a set of long-term relationships that go beyond the zero-sum interfirm relationships found in the strategy literature in the early 1980s. The authors state that their emphasis on large central firms and the potential for cross-border linkages sets their framework apart from work on "industrial clusters" and small firm business networks. Chapter 4, in which the authors explore whether networks of small and medium-sized firms might replace larger TNCs (their answer is no), is particularly interesting in this regard.

The second half of the book applies the "flagship firm/five partners business network" model to the context of the Canadian telecommunications and chemical industries, the French telecommunications industry, the North American auto industry and the Scottish electronics industry. The case studies identify the nature of the business networks found in the industries, and the extent to which there are flagship firms that provide leadership for the networks. Conclusions are drawn as to the potential future of individual companies and networks.

The authors offer their model as an integration of work on cooperative business relationships, business networks and the TNC, as well as an antidote to approaches to strategy based purely on arm's length transactions and bilateral bargaining power. To their credit, the authors do make a strong case that the relationships they highlight are critical for the development of competitive advantage in modern international competition. They correctly point out that the literatures on business networks and TNCs have remained largely separate.

The authors' framing of the position of their work in the literature is rather curious. In the introductory chapter, the authors contrast their five partners model with the five forces industry analysis framework of Michael Porter's *Competitive Strategy* (1980). The contrast is clear, and Rugman and D'Cruz are correct in pointing out the purely competitive aspect of the five forces model, in which suppliers, buyers and competitors act in a zero-sum game to pull profits away from each other. However, the five partners business model, with its emphasis on the role of relationships with suppliers, customers, infrastructure and even competitors in creating competitive advantage, is far closer in spirit to the "diamond" framework of Porter's *The Competitive Advantage of Nations* (1990), in which competitiveness at the industry level is determined by local factor conditions; demand conditions; related and supporting industries; and strategy, structure and rivalry; and is influenced by government policy and chance.

Porter claimed that cooperative relationships with suppliers, companies in related industries, buyers, non-business infrastructure and even on occasion competitors all contributed to industry level competitiveness, all features very similar to the five partners model. The similarities can be seen in the significant overlap between the managerial implications of the five partners model set forth in Rugman's and D'Cruz's final chapter with those found in Porter's chapter on implications for firms. In fact, the five partners model might be viewed as an adaptation of the diamond framework that focuses on a similar set of relationships at the firm rather than at the industry level. The biggest differences are the lack of a focus on TNCs in Porter's framework (as pointed out in Dunning, 1993) and the more flexible geography of Rugman and D'Cruz.

Although a number of the papers in this volume are interesting on a stand-alone basis, the book suffers from the fact that it is a compilation of papers rather than a unified book-length treatment. The present volume supplies repetition where the reader would naturally search for depth. Instead of one detailed description of the authors' model, the reader must go through versions of the model in eight different chapters. Instead of one detailed review that engages all or even most of the relevant literature, the reader finds the same

literature reviewed in five different chapters. Thus, there are several mentions of a portion of the literature on regional clustering, but pieces that address the variety of business network forms, including those dominated by large firms (such as Storper and Harrison, 1991) are not addressed. Nor is the literature on the so-called "post-Fordist" production networks, such as those highlighted in Michael J. Piore and Charles F. Sabel (1984), literature with a direct bearing on the authors' arguments about the superiority of flagship firm led networks. While sufficient for individual papers, in the present work, the treatments of the model and the literature come across as sparse and repetitive.

The industry chapters generally restate the flagship model and provide short descriptions of the industries and conclusions about whether there are "flagship" relationships. The chapter on the Canadian telecommunications network (chapter 7), for example, starts with seven pages describing the five partners model, followed by five and a half pages on the Canadian telecommunications industry in the early 1990s, followed by a six page update. This might be reasonable for a short, stand-alone paper, but after the five partners model has been described in each of the preceding six chapters, one is left wanting less (of a description of the model), as well as more (of an exploration of the variety of linkages highlighted in the model or evidence that argues persuasively that the five partner model with a flagship firm is preferable to alternatives). The reader will be frustrated by the absence of a detailed discussion of which industries would be most likely or least likely to have flagship firms (the case studies are in global or regional oligopolies that will have flagship firms almost by definition), analysis that compares the competitive performance of business networks with flagship firms versus other organizational forms, descriptions of industries in which flagship firm-based networks compete directly with small firm networks, and more detailed discussion of how the specific networks have been organized and coordinated.

The papers compiled in this volume were published mostly in the first half of the 1990s and few of the entries in the book's bibliography are dated later than 1993. As a result, there is a wealth of more recent literature that has not been taken into account. The

tendency for students of firms and firm strategies to ignore the literature on business networks and for students of business networks to ignore the literature on firms and firm strategies rings far less true today than it did when the original papers were published. In addition, more extensive treatments of strategic relationships with customers, suppliers and competitors (Brandenburger and Nalebuff, 1996), contrasts between large firms and small firm networks (Harrison, 1994; Grabher, 1993; for example), the interaction of firms and regions (Chandler et al., 1998; Dunning, 2000), and the links between TNCs and regional development (Hood and Young, 2000) now exist. This is not to minimize the contribution the authors made in their initial papers, but it does make the timing of the present volume unfortunate.

In the current volume, the authors' published work on flagship firms and the five partners model presents several interesting ideas, but on the whole the collection fails to impress. Too few of the individual papers deserve archival treatment, and the collection highlights the weaknesses rather than the strengths of the set. The reader would have been better served by a deeper, more unified treatment that explored the concepts, literature and case studies in greater detail and eliminated the repetition found in the current volume. ■

**Michael J. Enright**

Sun Hung Kai Professor
School of Business
University of Hong Kong
Hong Kong, China

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## *Enterprise Restructuring and Foreign Investment in the Transforming East: The Impact of Privatization*

Val Samonis (ed.)

(Binghamton, NY, International Business Press, 1998), 214 pages

Long titles always promise something extraordinary, something special, a complicated topic that the title tries to identify in one sentence. It might then turn out to be a special aspect of a broader and better-known phenomenon, or it may as well be a selection of subjects that are loosely related to each other and the title. In both cases, the content of the volume will probably not be a coherent and comprehensive analysis of milestones in social or economic development simply because such books will deal with marginal issues, or because there will be no strong interaction between the individual contributions. This happens to this volume too.

Many readers of the comparative economics literature believe that it is too early to publish a coherent volume on the topic of the interactions between privatization, foreign direct investment (FDI) and corporate restructuring in transition economies. The process has not been finished yet: only preliminary analyses can be made. Many of the obstacles of corporate restructuring have already been identified. Several authors taking into account both the pre- and post-privatization performances of firms have evaluated the process of privatization through different methods. There is a vast literature of FDI as well. Yet, nobody tried to check in a coherent way the very plain hypothesis that is also implicitly expressed by the title of this volume: *is FDI through privatization the ultimate superior solution for corporate restructuring of former State-owned enterprises (SOEs) in transition economies?* This volume does not provide a coherent analysis either. This is why the title is misleading: it promises much more than what this book really can provide.

With somewhat reduced ambitions and expectations readers nevertheless may find something interesting in this book. The editor collected papers of authors from different fields of academic research

and economic policy making, whose background and attitudes are also very blunt. (This is also one of the reasons why the individual papers are rarely connected to each other.)

The first paper by Klaus Meyer describes comprehensively the multifaceted tasks faced by firms of transition economies and concludes that longer-term strategic restructuring is only possible through massive investments in new products, technologies and markets. It is limited access to capital that effectively prevents firms undertaking major restructuring. Foreign firms' better access to capital, superior skills and corporate governance can make a key contribution to transition.

Further papers also tangle with the process of restructuring and raise the question whether restructuring is better carried out prior to privatization, or this is a post-privatization task. An important finding is that *corporate restructuring usually starts before privatization and is ended after privatization*. Patterns of restructuring are illustrated by interesting case studies.

Cross-country analysis enthusiasts will be pleased to read Vladimir Popov's analysis of investment patterns in no less than 28 transition economies. This contribution comes up with rather unusual conclusions. The author states that progress in reforms and the pace of privatization do not explain much of the variations in investment/GDP ratios during transition. Instead, changes in external finances and the institutional capacity of the state explain 75 per cent of the variance. Another conclusion of this chapter is that the real restructuring impact of investments depends less on their absolute volume, but rather on the varying marginal capital productivity of countries and investments.

The second part of the volume contains four very different contributions. First comes a report on an interesting empirical research on the goals and the realization of goals of different parties in the privatization process. The paper concludes that fully privatized former SOEs are the actors that have the most likely chances that their major objectives will be fully achieved. Unfortunately, no distinction between domestic and foreign ownership is made here. The next paper deals with country of origin problems affecting transition economies. The analysis concludes that there are massive barriers to market penetration due to negative attitudes developed by Western economies/customers. We may ask here if negative attitudes are justified or not.

The next paper is the first in the book that directly addresses FDI in a transition economy. Ken Morita's contribution analyses the rather limited Japanese capital inflow in Poland and concludes that it is more or less in synchrony with the trade patterns. These two aspects of overall Japanese business orientation in the globalized world economy are pretty the same.

FDI is also an important aspect of the case study prepared by Marjan Svetlicic and Matija Rojec. Kolektor's story is a typical one for medium-sized, technology-based dynamic firms' restructuring and privatization through FDI in Central Europe. The study is of interest because *it incorporates almost all important aspects, obstacles and chances of corporate adjustment*. Readers may ask after this success story, if there is also a typical story of losers. One can be pretty certain that such stories also exist on a large scale.

The last section of the book contains interviews and short contributions of policy-makers the most renown of whom is *Leszek Balcerowicz*. The contributors and interviewees talk here about privatization and corporate restructuring. Interesting statements are made about the size of the restructuring task in the Russian Federation. There is also some indication that a large number of already privatized firms would and perhaps should not escape bankruptcy and market exit. Aspects of policy making regarding these issues become more emphasis here.

In sum, this book contains interesting papers that are not strongly related to each other. The explanatory power of the volume is therefore limited. It is, however, an interesting reading for all those who are interested in the microeconomic issues of transition. ■

**Miklós Szanyi**

Senior Research Fellow
Institute of Economics
Hungarian Academy of Sciences
Budapest, Hungary

## *Foreign Direct Investment: Firm and Host Country Strategies*

Magnus Blomström, Ari Kokko and Mario Zejan

(Houndsmills, Hampshire, Macmillan and New York, St. Martin's Press, 2000), xii+253 pages

This book is about the strategy of transnational corporations (TNCs) and their affiliates, and the impact that foreign direct investment (FDI) has on the host economy. The authors pull together 12 papers published in journals during the past decade plus two introductory chapters in one book and edit them to avoid unnecessary repetition. There are two parts to the book: one covering firm strategies and another covering host country strategies. The first part focuses on the mode of entry by TNCs and the strategies followed by their affiliates. In these chapters the authors explore a wide range of choices faced by TNCs, such as majority versus minority ownership (and joint ventures), greenfield FDI versus acquisition, intra-firm trade versus local outsourcing and the location of research and development (R&D) activities within a TNC. The second part of the book focuses on productivity spillovers in the host economy. This part of the book starts with a survey of the literature on spillovers and then provides several empirical studies of productivity spillovers at the plant and industry levels.

TNCs can play an important role in facilitating transfer of technology across borders and the diffusion of technology within borders. The decision to invest in a country provides an opportunity for the transfer of technology, and the host country characteristics provide the basis for the technology to spillover to local enterprises. This book looks at both sides of the problem by focusing on the strategies of Swedish TNCs abroad and the impact that FDI has had in Mexico and Uruguay. There is no apparent connection between the choice of countries studied other than those data for this kind of analysis is not readily available. Before the 1990s, almost all the empirical analysis of TNC entry strategies concentrated on the strategy of United States TNCs. And while Sweden may have its own

peculiarities (being a small European country), an analysis of Swedish TNC strategies into 35 countries provides an interesting counter-example to the experience in the United States. Moreover, until recently, there have been few data available for a systematic analysis of technology spillovers to the local economy.

One interesting feature of the Swedish data is that they allow the authors to compare TNC strategies across different host countries. By focusing on technology as a key factor in determining the mode of entry, the authors make a number of interesting observations. Both the probability of acquisition by Swedish TNCs (chapter 4) and the likelihood of a foreign affiliate engaging in R&D activities (chapter 5) increase with the per capita income of the host country. Greater product differentiation (chapter 4) and the majority-ownership (chapter 3) also increase the likelihood of choosing acquisition over greenfield investment. Yet, if TNCs had little or no experience abroad, they preferred minority-ownership (chapter 3). They also found that acquisitions tended to have lower import intensities, but that the import intensities were similar between developed and developing countries (chapter 6). However, there is a strong desire to have a discussion that pulls together the seemingly distant findings into one complete story at the end of part 1.

Another problem with the first part of the book is that the theoretical framework oversimplifies the problem that the empirical model is testing. Uncertainty appears as the key factor determining the mode of entry in this framework, but the empirical analysis considers many other factors. Those readers interested in the theoretical framework might find it difficult to reduce all of these factors into uncertainty. Part of the problem is that the literature on firm strategies has become much richer since the authors published the papers in this part of the book (see, for example, the OLI paradigm by John H. Dunning and UNCTAD's *World Investment Report*s).

The second half of the book focuses on technology (or productivity) spillovers in the host economy. It starts with a comprehensive survey of both the conceptual and empirical literature on spillovers and is up to date except for a discussion that started only recently.Spillovers can occur between enterprises that are

vertically integrated with TNCs (inter-industry spillovers) or in direct competition with it (intra-industry spillovers). Almost all of the empirical studies of spillovers focus on intra-industry spillovers, including those contained in the book. The reason is that it is very difficult to measure backward and forward linkages in a systematic way. Most empirical evidence on productivity spillovers relies on panel data of individual enterprises or plants or aggregations of the panel data to the two- and three-digit industry level.

Chapter 9 of the book provides one of the most straightforward empirical analyses of intra-industry productivity spillovers in the literature. In the study, productivity convergence between local enterprises and foreign affiliates depends on the size of the labour productivity gap and the degree of foreign ownership of an industry. TNCs are found to have a significant impact on productivity convergence between local enterprises and foreign affiliates in Mexico and between these industries and average productivity in United States industry. These conclusions, however, appear optimistic given the weak evidence of spillovers in other developing countries and the economies in transition.

Other chapters in part 2 attempt to explain why spillovers are not so widespread. Using the same Mexican data, chapter 10 extends the analysis to explain why foreign affiliates might operate in isolated segments of the market and how they can crowd out local enterprises in these markets. Using detailed plant-level data from Uruguay, chapter 11 also finds that spillovers tend to occur more frequently when the productivity gap is smaller. The remaining three chapters focus on maximizing the spillover effects of FDI. Their conclusion is that policies should be directed towards the competitive environment and social capabilities of the host economy, rather than on regulating the TNCs directly.

A major shortcoming of the book is that some papers were outdated before being reprinted and that considerable repetition remained the book even after editing. It is a pity that the authors did not go one step further and write a concluding critical essay that not only pulls together some common themes, but also reflects on their original conclusions. But despite these shortcomings, the book makes

use of several rich data sets and brings together several seminal papers under one cover. It should be essential reading for everyone interested in the role that FDI plays in facilitating growth and technological change. ■

**Mark Knell**

United Nations Economic Commission for Europe
Geneva, Switzerland

# JUST PUBLISHED

## The Competitiveness Challenge: Transnational Corporations and Industrial Restructuring in Developing Countries

(Sales No. E.00.II.D.35) ($42)

This book is a contribution to the issues facing developing countries as they try to meet the competitiveness challenge and benefit from globalization. It traces the role that FDI has played in developing the garments, colour television receivers and automobile industries of Argentina, Brazil, Costa Rica. Dominican Republic, Malaysia, Mexico, Morocco and Thailand. It also compares the role that FDI has played in Chile and Zimbabwe in the development of their natural resource-based industries. The analysis presented straddles three levels: the microeconomic effects on individual firms; the meso-level impacts on the industry examined; and the policy responses at the macroeconomic level. It therefore allows a comprehensive view of the interlocking needs of firms, industries and the macroeconomy. The contributors to this book are: Mohammed Ariff, Rikkert van Assouw, Gonzalo Cid Passarini, Jorge Carrillo, Sanjaya Lall, Karim Laraki, Eddy Martinez, Michael Mortimore, Nipon Poapongsakorn, Henny Romijn, Jens Erik Torp, Lorenzo J. Vicens, Siew Yong Yew and Ronney Zamora.

## An Investment Guide to Bangladesh: Opportunities and Conditions

### Co-published with the International Chamber of Commerce

(UNCTAD/ITE/IIT/MISC.29)

Since the beginning of the 1990s, Bangladesh has adopted a number of policies to facilitate the expansion of its private sector and the

inflow of FDI. The private sector in Bangladesh is recognized widely as the country's engine of growth. Although the transition process from an agrarian to an industrial economy is fairly recent, there is a consensus among the political parties on the desire to promote market-oriented economic policies. TNCs are therefore welcome. In fact, a recent assessment showed that the country offers one of the most liberal FDI regime in South Asia, with no prior approval requirements, limits on equity participation or restrictions on the repatriation of profits and income. Notwithstanding the obstacles facing foreign investors in countries with low levels of economic development, Bangladesh offers important investment opportunities for foreign companies. With its nearly 130 million inhabitants, Bangladesh is one of the most populous countries of the world. Besides representing a large market in itself (and potential access to the much larger South Asian market), Bangladesh also offers considerable potential as a base for labour-intensive manufacturing. In addition to its large population and low-cost labour, Bangladesh offers major reserves of natural resources, in particular natural gas. Finally, the Bangladesh economy is in need of major investments to upgrade its infrastructure, with opportunities present in power generation, telecommunication etc.

## Investment Regimes in the Arab World: Issues and Policies

ASIT Advisory Studies, No. 15

**(Sales No. E/F.00.II.D.32) ($39)**

Although the Arab countries welcome FDI and have attracted foreign investors, FDI flows to the region as a whole remain modest and have not kept pace with the upward global trend. One important reason for that modest performance is the general deficiencies and shortcomings of the legal and institutional framework in many countries. A modernization of the national legal and institutional frameworks for investment is the necessary first step towards the harmonization of laws and regulations among countries and the

emergence of an integrated Arab market for investors. This book identifies a number of areas that require immediate attention in enhancing investment flows, such as the protection of minority interest in corporate law and financial market regulation, preferential treatment for inter-Arab investment, regimes of exception and incentives regimes, the settlement of investment-related disputes, investment guarantee schemes, competition law, the regulatory aspects of technology transfer, and the stability and transparency of investment legislation. It consists of three main parts: a general overview, four country case studies (Egypt, Lebanon, Morocco, Saudi Arabia) and three selected topics (investment-related dispute settlement, the potential role of a Euro-Arab arbitration system and Arab stock markets).

## TNC-SME Linkages for Development: Issues-experiences-best practices

Proceedings of the Special Round Table on TNCs,
SMEs and Development,
UNCTAD X, 15 February 2000, Bangkok

(UNCTAD/ITE/TEB1)

In many developing countries, TNCs have the potential to build up, from competitive local small and medium-sized enterprises (SMEs), complex supplier networks, complementing their core operations in developed home countries. But in most developing countries, the vast majority of local SMEs remain de-linked from TNCs, thus missing potential opportunities for technological spillovers, access to markets, market information, and finance. This book, based on the proceedings of the Special Round Table held in the context of UNCTAD X in Bangkok, identifies ways of creating mutually beneficial TNC-SME linkages in order to enhance the competitiveness of SMEs at both the national and international levels.

## World Investment Directory, Volume VII – Parts 1 and 2, Asia and the Pacific

(Sales No. E.00.II.D.11) ($80)

As part of the *World Investment Directory* series, these two volumes present country-specific statistical data on FDI and TNCs and bibliographical references for 41 economies of the Asia and Pacific region (Armenia, Azerbaijan, Bangladesh, Bhutan, Cambodia, China, Democratic People's Republic of Korea, Fiji, Georgia, Hong Kong (China), India, Indonesia, Kazakhstan, Kiribati, Kyrgyzstan, Lao People's Democratic Republic, Macau (China), Malaysia, Maldives, Marshall Islands, Micronesia (Federal States of), Mongolia, Myanmar, Nepal, Pakistan, Palau, Papua New Guinea, Philippines, Republic of Korea, Samoa, Singapore, Solomon Islands, Sri Lanka, Taiwan Province of China, Tajikistan, Thailand, Tonga, Turkmenistan, Uzbekistan, Vanuatu and Viet Nam). These data are presented as available in December 1999. The first part also features an analytical overview and a detailed technical introduction. The various tables provide extensive coverage of both FDI stocks and flows by their geographical and sectoral distributions, together with data on economic activities of TNCs and listings of the major TNCs in each economy, along with selected financial data. Each country profile contains the maximum number of tables, presenting all information available from the national authorities at the time of compilation of the data.

## UNCTAD series on issues in international investment agreements International Investment Agreements: Flexibility for Development

(Sales No. E.00.II.D.6) ($15)

This paper examines ways in which international investment agreements can provide for flexibility with a view towards promoting development, while encouraging FDI and providing stability and predictability in investment relations. The paper first discusses the

meaning and purpose of flexibility in the interest of development in the context of international investment agreements and then looks at how existing agreements have provided for flexibility from four main angles: the objectives of an agreement, its overall structure and modes of participation, its substantive provisions and its application.

## Bilateral Investment Treaties 1959-1999

(UNCTAD/ITE/IIA/2)

The 1990s saw a quintupling in the number of bilateral investment treaties (BITs), rising from 385 at the end of the 1980s to 1,857 at the end of the 1990s. The number of such treaties concluded by developing countries and Central and Eastern European countries soared from 63 at the end of the 1980s to 833 at the end of the 1990s. This booklet lists all BITs, providing the names of the countries involved and the dates of signature and ratification, preceded by a short introduction. The full document can be downloaded in pdf format at: http://www.unctad.org/en/pub/poiteiiad2.en.htm.

## Investment Policy Review Peru

(Sales No. E.00.II.D.7) ($22)

The UNCTAD *Investment Policy Reviews* are intended to familiarize governments and the international private sector with an individual country's investment environment and policies. After Egypt, Uzbekistan and Uganda, Peru is the forth country featured in this series. Since 1990, Peru has been very successful in attracting FDI. A state-of-art investment framework and a skilful privatization programme were the fundamentals of that success. The Government made the privatization of assets in industries such as telecommunication, mining and fisheries, conditional on a commitment by the foreign purchaser to additional future investments. However, with privatization opportunities dwindling, the question arises: how will Peru build on its past success to attract investments

in new areas? In this context, the privatizations already completed should be seen not as one-off deals but as catalytic transactions with a potential to generate new FDI over the medium term. From the perspective of a long-term strategy, there is need to upgrade FDI to build industries into industrial clusters, in a system of linked suppliers and related industries. According to UNCTAD, a number of measures could contribute to diversify investment opportunities in Peru.

## Guide d'investissement au Mali

(UNCTAD/ITE/IIT/Misc.24)

After, Ethiopia and Bangladesh, Mali is the third least developed country (LDC) for which UNCTAD and International Chamber of Commerce (ICC) have produced an investment guide. The guides are written mostly for potential investors. They provide a concise overview of the investment conditions in the country, the regulatory framework governing FDI as well as of concrete investment opportunities. The information in the guide on Mali is partially based on two seminars UNCTAD organised in Bamako (Mali) to which participants of the public as well as of the private sector were invited. This guide was originally published in French. Its translation into English is under preparation. A copy of this guide can be found in the IPAnet's Document Catalogue at: http://www.ipanet.net/documents/WorldBank/databases/unctad/investmentguide/mali.pdf.

## World Investment Report 1991-2000 web page

(http://www.unctad.org/wir/)

Includes links to the table of contents and the executive summaries of all *World Investment Reports* and the real video of the discussion on "Emerging key issues relating to foreign direct investment and transnational corporations", plus a direct link to the WIRteam@unctad.org. It is under permanent upgrading.

## Books on foreign direct investment and transnational corporations received since August 2000

Acs, Zoltan and Bernard Yeung, editors, *Small and Medium Sized Enterprises in the Global Economy* (Ann Arbor, MI: University of Michigan Press, 1999), 192 pages.

Barrell, Ray, Geoff Mason and Mary O'Mahony, *Productivity, Innovation and Economic Performance* (Cambridge, New York and Melbourne: Cambridge University Press, 1999), 289 pages.

Barrell, Ray and Nigel Pain, editors, *Innovation, Investment and the Diffusion of Technology in Europe: German Direct Investment and Economic Growth in Postwar Europe* (Cambridge, New York and Melbourne: Cambridge University Press, 1999), 194 pages.

Borrmann, Christine, Ulrike Denning, Rolf Jungnickel, Dietmar Keller and Georg Koopman, *Deutschland in Wettwerb mit Hochlohnländer: Internationale Unternehmensstrategien und nationale Standortpolitik* (Hamburg: Hamburg Institute of International Economics, 2000), 262+51 pages.

Buckley, Peter J. and Pevez N. Ghauri, editors, *The Global Challenge for Multinational Enterprises* (Oxford: Pergamon, 2000), 560 pages.

Dunning, John H., editor, *Regions, Globalization and the Knowledge-Based Economy* (Oxford and New York: Oxford University Press, 2000), 506 pages.

van Hoesel, Roger and Rajneesh Narula, editors, *Multinational Enterprises from the Netherlands* (London and New York: Routledge, 1999), 307 pages.

*Investing in Brazil: A Legal and Practical Guide* (Brasília: Alexandre de Gusmão Foundation, São Paulo: Noronha Advogados, Paris: Organisation for Economic Co-operation and Development, 1999), 165 pages.

Kwame Sundaram, Jomo, Greg Felker and Rajah Rasiah, editors, *Industrial Technology Development in Malaysia: Industry and Firm Studies* (London and New York: Routledge, 1999), 399 pages.

Montbrial, Thierry de and Pierre Jacquet, editors, *Rapport Annuel Mondial sur le Système Économique et les Stratégies (RAMSES) 2001* (Paris: Dunod, for the Institut français des relations internationales, 2000), 371 pages.

Organisation for Economic Co-operation and Development, *Measuring Globalisation: The Role of Multinationals in OECD Economies – Mesurer la Mondialisation: Le Poids des Multinationales dans les Économies de l'OCDE, 1999 Edition* (Paris: OECD, 1999), 306 pages.

*Österreichs Aussenwirtschaft, das Jahrbuch – Austrian Foreign Trade Yearbook, 1999-2000* (Vienna: Federal Ministry of Economics and Labour, 2000), 322+30 pages.

Peltzmann, Sam and Clifford Winston, editors, *Deregulation of Network Industries: What's Next?* (Washington, D.C.: AEI-Brookings Joint Center for Regulatory Studies, 2000), ix+199 pages.

Picot, Gerhard, editor, *Handbuch Mergers & Acqisitions: Planung, Durchführung, Integration* (Stuttgart: Schäffer-Poeschl Verlag 2000), 484 pages.

Régnier, Philippe, *Small and Medium Enterprises in Distress: Thailand, the East Asian Crisis and Beyond* (Aldershot: Gower, 2000), 181 pages.

Tran Van Hoa, editor, *China's Trade and Investment after the Asia Crisis* (Cheltenham: Edward Elgar, 2000), 156 pages.

Tsuji, Masatsugu, Sanford V. Berg and Michael G. Pollitt, *Private Initiatives in Infrastructure: Priorities Incentives and Performance* (Chiba: Institute of Development Economies, Japan External Trade Organization, 2000), 395 pages.

## GUIDELINES FOR CONTRIBUTORS

### I. Manuscript preparation

Authors are requested to submit three (3) copies of their manuscript in English (British spelling), with a signed statement that the text (or parts thereof) has not been published or submitted for publication elsewhere, to:

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UNCTAD
Division on Investment, Technology
and Enterprise Development
Room E-9123
Palais des Nations
CH-1211 Geneva 10
Switzerland

Tel: (41) 22 907 5707
Fax: (41) 22 907 0194
E-mail: Karl.Sauvant@UNCTAD.org

Articles should, normally, not exceed 30 double-spaced pages (12,000 words). All articles should have an abstract not exceeding 150 words. Research notes should be between 10 and 15 double-spaced pages. Book reviews should be around 1,500 words, unless they are review essays, in which case they may be the length of an article. Footnotes should be placed at the bottom of the page they refer to. An alphabetical list of references should appear at the end of the manuscript. Appendices, tables and figures should be on separate sheets of paper and placed at the end of the manuscript.

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## II. Style guide

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B. **Footnotes** should be numbered consecutively throughout the text with Arabic-numeral superscripts. Footnotes should not be used for citing references; these should be placed in the text. Important substantive comments should be integrated in the text itself rather than placed in footnotes.

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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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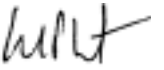

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