VOLUME 7

NUMBER 1

APRIL 1998

TRANSNATIONAL CORPORATIONS



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

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Transnational Corporations

Volume 7, Number 1, April 1998

Contents

		Page
ARTICLES		
Peter J. Buckley and Francisco B. Castro	The investment development path: the case of Portugal	1
Grazia Ietto-Gillies	Different conceptual frameworks for the assessment of the degree of internationalization: an empirical analysis of various indices for the top 100 transnational corporations	17
Mark Mason	Foreign direct investment in East Asia: major trends and critical United States policy issues	41
RESEARCH NOTE		
Alexander S. Bulatov	Russian direct investment abroad: main motivations in the post-Soviet period	69
VIEW		
Patrick L. Robinson	Criteria to test the development friendliness of international investment agreements	83
BOOK REVIEWS		91
Just Published Books Received Report of the Editors		115 118 119

The investment development path: the case of Portugal

Peter J. Buckley and Francisco B. Castro*

This article develops the idea of an investment development path, which relates net foreign direct investment to per capita income, for Portugal. A novel form of relationship between investment and development is proposed, based on empirical evidence for 1943-1996. This is supported by an analysis of Portuguese conditions, which suggest that the investment development path is substantially influenced not only by government policy but also by external political events, such as Portugal's accession to the European Economic Community, European Union integration and the fall of the Berlin wall, the latter bringing Central and Eastern European countries to the fore as locational competitors for inward investment.

Introduction

The idea of an "investment development path" (IDP) was introduced by John H. Dunning (1981a) as a dynamic approach within the paradigm of ownership, locational and internalization advantages (OLI).¹ The IDP hypothesizes an association between a country's level of development (proxied by GDP per capita) and its international

^{*} The authors are, respectively, Professor, Leeds University Business School, Leeds, United Kingdom; and Researcher, Leeds University Business School, Leeds, United Kingdom, and Lecturer, Faculdade de Economia do Porto, Porto, Portugal. This research was partially financed by Programa Praxis XXI. The authors would like to thank Paulo Sousa (Faculdade de Economia do Porto) and two anonymous referees for their suggestions on an earlier version of the paper.

¹ Dunning (1981a: p.134, footnote 13; 1981b: p.30, footnote) describes the genesis of the investment development cycle as follows: it was first presented in 1975 by him and Peter J. Buckley at a conference of the United Kingdom Chapter of the Academy of International Business, and again in 1978 with Buckley and Robert D. Pearce at a similar conference.

investment position (net foreign direct investment (FDI) stock, i.e. outward minus inward direct investment stocks). The basic assumption of this theorem is that as the country develops, the conditions for domestic and foreign companies change, affecting the flows of inward and outward FDI. However, inward and outward FDI affect the economic structure as well – there is a dynamic interaction between the two. The IDP also acknowledges that governments can influence a country's conditions by creating public goods on which competitiveness can be based (Buckley and Casson, 1998). Consequently, they will influence both FDI flows and domestic firms' ownership advantages (Dunning, 1988). This is a novel concept for the mainstream theory of FDI.

According to the IDP theory, countries evolve through five stages of development (Dunning, 1981a, 1981b, 1986; Tolentino, 1987; Dunning and Narula, 1996a). *Stage 1* is associated with pre-industrialization. Inward and outward FDI flows are almost non-existent because domestic markets are very small, infrastructure is inadequate, the labour force is poorly educated and commercial and legal frameworks are undeveloped.

The development of some location specific advantages (e.g. basic infrastructure, eventually as the result of government policies) will give rise to *stage 2*. This leads to more inward direct investment, mostly targeting the emerging domestic market in consumer goods and infrastructure, but to little outward investment, because domestic firms lack ownership advantages. Consequently, the net stocks of outward investment will become increasingly negative. In this stage, inward FDI stocks rise faster than GDP.

Stage 3 is associated with less spectacular growth rates of inward FDI. This is eventually overtaken by outward direct investment, and the net FDI stock will for the first time start to increase despite remaining negative for some time. Behind this change are the domestic firms' growing ownership advantages, which become also more firmspecific and less country-specific. Stronger domestic firms will be more competitive in the domestic market, while engaging in resourceseeking investment in less developed countries and in market- and strategic asset-seeking investment in more-developed countries.

The deepening of these trends will eventually turn countries into net outward investors (*stage 4*). Location advantages become almost entirely based on created assets, and the firms' ownership advantages that result from managing and coordinating geographically dispersed assets (O_t advantages) become far more important than those based on the home country's specific characteristics (O_a advantages). Intra-industry production is a consequence of the growing similarity in the advantages of countries at this stage, and it generally follows prior growth in intra-industry trade. In part, it results from an increasing propensity by transnational corporations (TNCs) to internalize trade and production (Dunning and Narula, 1996a, p. 7).

Finally, Dunning (1986, pp. 30-31) and Dunning and Narula (1996a, pp. 7-9) postulate the existence of a *stage 5* in the IDP, corresponding to today's situation in the leading developed countries. With permanently high stocks of both inward and outward FDI, the net outward investment (NOI) position of stage-5 countries will revolve around zero, alternating between positive and negative balances, depending on the short-term evolution of exchange rates and economic cycles. "Beyond a certain point in the IDP, the absolute size of GNP is no longer a reliable guide of a country's competitiveness; neither, indeed, is its NOI position" (Dunning and Narula, 1996a, p. 11).

Dunning and Narula (1996a) suggest, however, that the shape and position of the IDP vary widely across individual countries as a result of specific economic structures (market size, availability of natural resources), the type of FDI undertaken and government policies. This raises the question of whether the concept of an individual country's IDP is of any use. In other words, do individual countries follow a pattern similar to the one suggested in the theory. and which has been extensively supported by cross-section tests (Dunning, 1981a; Tolentino, 1987; Narula, 1996)?

Theory suggests the notion of an IDP for individual countries and even industries inside countries. However, empirical tests of this are rare, a notable exception being those in Dunning and Narula (1996b). The lack of long statistical series of FDI stocks, in particular, makes this a difficult task. This could probably explain researchers' apparent reluctance to test the hypothesis. Also, the interactions between the large number of variables that affect inward FDI, outward FDI and GDP growth limit the scope for secure conclusions.

Testing the Portuguese IDP

This test of the Portuguese IDP uses a recently available new data set on inward and outward FDI flows. It examines whether Portugal's FDI is following a path similar to the one described by the IDP theorem. The data available, however, do not permit an analysis desegregated by industry or country of origin/destination. From that perspective, the aim of this article is to provide a first step towards a more integrated evaluation of the Portuguese IDP.

The data

To our knowledge, apart from those based on past flows, no estimations exist of inward or outward stocks of FDI for Portugal. Even the data on flows used to be largely unreliable and figures for different periods could not be easily put together to build a coherent long series (Taveira, 1984). However, as part of a major exercise to review Portugal's long-term macroeconomic data, the Bank of Portugal has published updated figures on FDI flows between 1965 and 1993 (Banco de Portugal, 1997). These data are now consistent and comparable with more recent statistics on FDI produced by the same institution (Banco de Portugal); thus the series can run between 1965 and 1996.²

In our analysis, a further step was to estimate FDI flows before 1965. The Bank of Portugal keeps a record of medium- and long-term capital flows since 1943, but until 1963 only the aggregated

 $^{^2\,}$ The authors are grateful to António Agostinho, Department of Statistics and Economic Studies of the Bank of Portugal, for making the data available to them.

values were collected and published (Salgado de Matos, 1973). It was possible, in turn, to obtain estimates for FDI flows between 1943 and 1964 which were both fairly reliable and coherent with the new figures. The comparison was made by computing the ratio between the new values of FDI (as in Banco de Portugal, 1997), on the one hand, and the old values for medium- and long-run capital movements (Salgado de Matos, 1973, p. 111) between 1965 and 1974,³ on the other. This value (20.0 per cent for inward capital movements, and 8.2 per cent for outward capital movements) was then used to estimate the share of FDI in of medium- and long-term capital movements between 1943 and 1965.⁴

With this new series of inward and outward FDI flows, longer and more reliable than any other existing before, new estimates for foreign capital stocks were produced. Narula (1996, pp. 40-42) makes several criticisms of the use of FDI flows to estimate stocks. Apparently, the sum-of-flows method underestimates both inward and outward investment stocks, in particular for industrialized countries. But Narula (1996, p. 41) uses only five-year flows in his comparison with stocks. Our main point in estimating the FDI flows since 1943 was precisely to obtain a workable estimate of FDI stocks from the point from which flows are more reliable (1965). We expect this to improve the quality of our estimates for FDI stocks, even bearing in mind the shortcomings of the sum-of-flows method.

The Banco de Portugal (1997) also has revised GDP and population figures for the same period (1965-1993). For 1994 to 1996, estimations were constructed on the basis of growth rates implicit in nominal GDP (Banco de Portugal, various years a) and other sources' population estimates (Institutó Nacional de Estatística, 1997).⁵ A plot of the values obtained is presented in figure 1.

³ The data available made it possible to use a longer period, but the figures suggest that the changes brought about by the revolution in 1974 considerably modified the proportion of FDI in total capital movements.

⁴ A similar method was used by Salgado de Matos (1973) and Taveira (1984), but with a different data set.

Figure 1. GDP per capita versus net FDI per capita in Portugal, 1965-1996 (Thousand Portuguese escudos)

Source: authors' calculations based on Bank of Portugal and Instituta Nacional de Estatisticas data.

The function

Dunning (1981a, 1981b, 1986), Paz Estrella E. Tolentino (1987, 1993) and Narula (1996) used a quadratic function to describe the IDP curve. The observation of figure 1, however, suggests that it might not be the best fit. We decided to test two alternative models:

Model A: NFIpc = α + β_1 GDPpc + β_2 GDPpc² + μ **Model B:** NFIpc = α + β_1 GDPpc³ + β_2 GDPpc⁵ + μ

⁵ We used estimates based on implicit growth rates instead of the figures published in those sources, because the latter were not consistent with the 1965-1993 series in Banco de Portugal (1997).

Where: NFIpc = Net Foreign Investment Stock per capita (Outward FDI per capita - Inward FDI per capita)

GDPpc = Gross Domestic Product per capita

Although the choice of model B was partially based on the observation of figure 1, there is strong theoretical support for this rather unfriendly expression. Implicit in the quadratic function is the assumption that inward FDI is the engine of growth: NOI per capita decreases sharply in the early stages of the IDP (reflecting high inward FDI and low or nil outward FDI), while GDP per capita has a slow start. But this is not in line with the IDP rationale.

Dunning and Narula (1996a, p. 2) suggest that, in the first stage of the IDP, both inward and outward FDI will be very low. It is argued that governments must intervene "providing basic infrastructure and the upgrading of human capital via education and training" (p. 3). In other words, before a country can attract significant inward FDI, it must develop its location-advantages, including an increase in GDP per capita.⁶ Consequently, what is to be expected in the first stage is a more rapid increase in GDP per capita than in NOI per capita. Only in the second stage should the growth rate of the NOI per capita be expected to be higher than that of the GDP per capita (Dunning and Narula, 1996a, p. 4).

This evolution can be fully appropriated by model B. Having an inflection point to the left of the turning point (a minimum in our case), it represents a function where the dependent variable grows very slowly in the early stages. Only in a second stage does it grow faster than the independent variable. Nevertheless, it soon slows down and eventually reaches a minimum - the U-turn that corresponds to the transition between stages 2 and 3, when the country becomes a net outward investor.

⁶ Even if not a policy target in itself, GDP growth will inevitably be a consequence of such policies.

Estimation

The statistical software SPSS (version 7.0) was used for an ordinary least square estimation of the models described above. The results are presented in table 1.

Model A			Dependent variable:	net FDI per capita		
	R	R square	Adjusted R square	F	F (sig.)	DW
	0.993556	0.987147	0.986261	1113.675	0.000	0.641
		Unstandardized	coefficients	Standardized		
		ß	Std. Error	coefficients beta	t	Sig.
	(Constant)	0.98873555	2.155410737		0.45872	0.64985
	GDPpc	-0.015531435	0.01098474	-0.12047	-1.41391	0.16803
	GDPpc^2	-7.95595E-05	7.73498E-06	-0.87637	-10.28567	0.00000
Model B			Dependent variable:	net EDI ner canita		
mouorb	R	R square	Adjusted R square	F	F (sig.)	DW
	0.999205	0.998411	0.998301	9108.059	0.000	1.670
		Unstandardized	coefficients	Standardized		
		ß	Std. Error	coefficients beta	t	Sig.
	(Constant)	-1.622025855	0.575861318		-2.81670	0.00864
	GDPpc^3	-1.37645E-07	2.48157E-09	-2.151163	-55.46699	0.00000
	GDPpc^5	3.67821E-14	1.18787E-15	1.20115	30.96463	0.00000

Table 1. Estimation of the Portuguese IDP

Source: authors' calculations.

Both estimates seem to give quite a good fit, although the quadratic function in model A has the wrong curvature. If the trend of the last two years continues, the goodness of the fit will erode, which suggests that model A is not a good description for the Portuguese IDP.

Model B, on the other hand, performs better by any standard and, as expected, provides very strong results: all the parameters estimated are highly significant (very strong t-tests), as seems to happen with the overall model (F-test significant at 1 per cent), and the Durbin-Watson statistic does not seem to be a major problem. Fitted and real values can be compared in figure 2.

> Figure 2. Estimation of the IDP of Portugal (model B) (Thousand Portuguese escudos)

Source: Authors' calculations.

Comments

The regression provided above seems to support the claims that international investment follows a more or less predictable path, accompanying and influencing economic growth. It suggests that Portugal entered stage 2 of the IDP in the early 1980s, when GDP per capita reached 150,000-200,000 escudos (approximately \$3,000 at the time). The positive net increases in the country's outward FDI stock in 1995 and 1996 (despite still being largely negative) suggest that Portugal is now in stage 3.

This aggregate analysis must be treated with care, however. Despite what has been said, the classification of Portugal as a stage 1 country during the second half of the 1960s and the 1970s is difficult to support. Between 1965 and 1980, inward FDI averaged 0.5 per cent of GDP, and NOI averaged minus 0.4 per cent. Despite not being an outstanding value, it is by no means negligible. Also, it explains why it seemed that Portugal was already approaching stage 3 both in 1975 and in 1988 (Narula, 1996, pp. 47-48).

In fact, it must be accepted that the transition from stage 1 to stage 2 happened years ago, in the early 1960s, after Portugal joined the European Free Trade Area (EFTA) as a founding member. EFTA membership, and not the level of GDP per capita or other economic characteristics of the country, seems to have been the element that triggered inflows of FDI (Salgado de Matos, 1973). The dictatorial regime that lasted until 1974 and the political and economic instability that followed probably deterred larger inflows of foreign investment. Between 1965 and 1975, they remained rather stable at around 0.4/ 0.5 per cent of GDP, dropping to 0.3 per cent between 1976 and 1979. Outward FDI flows, on the other hand, remained very low throughout this period, averaging just 0.1 per cent of GDP between 1965 and 1980.

Figure 3. FDI flows in Portugal, 1965-1996 (Per cent GDP and Portuguese escudos)

Source: Authors' calculations.

This picture changed dramatically after 1980, at least for inward FDI. As expected (Dunning, 1988; Dunning and Narula, 1996a), government policies played a significant role. During that period, not only did the Government mount a major effort to stabilize the economy and to upgrade Portugal's infrastructure and other domestic assets, but also, and in particular, it sought to attract inward FDI (Taveira, 1984, p. 192). Economic integration again played a substantial role. By the beginning of the 1980s, it was already clear that Portugal would soon join the European Economic Community. It did so in 1986, and this was followed by a dramatic increase in the stock of inward FDI. As in the 1960s, however, the new international conditions were accompanied by substantial changes in domestic macroeconomic and industrial policies, which makes it difficult, if not impossible, to distinguish between the two.

On the other hand, outward flows, which averaged less than 0.1 per cent during the 1980s (even lower than in the previous two decades), registered a sudden increase in the 1990s.⁷ It is very likely that this corresponds to the effect described by Dunning and Narula (1996a, p. 15): as a medium-income and reasonably fast growing industrializing nation, Portugal is expected to engage in strategic asset seeking investment. The European Union's Internal Market Programme can only increase this pressure. This hypothesis receives clear support from the fact that most of that outward FDI was directed towards other European Union countries, in particular the most developed ones (Banco de Portugal, various years b).

However, there is also growing evidence that several Portuguese firms are investing abroad to exploit their specific advantages. In particular, those investing in Central and Eastern Europe are expected to take advantage of the acquired knowledge of how to do business in fast-growing markets in the European semiperiphery, and probably also of technologies and firm structures well adapted to low-/medium-income countries strongly and increasingly integrated with the European Union. Again, this exploitation of

⁷ In 1993 and 1994, Portugal registered serious slowdowns in outward FDI flows, but this probably simply reflects the difficult economic conditions at home - GDP real growth rates of 0.2 per cent and 0.5 per cent, respectively.

ownership advantages by firms from middle-income countries in less developed markets is totally consistent with the IDP theory.

A last but not insignificant specificity of the Portuguese IDP is a major drop in inward FDI in the 1990s. After reaching 4.1 per cent of GDP in 1990, it plunged to a mere 0.6 per cent in 1996. In addition to the increase in outward FDI, this reduction was a key element responsible for the U-turn in the Portuguese IDP curve. There is no straightforward explanation for this fall, although it is believed that the political changes in Central and Eastern Europe may have played a role, for suddenly Portugal was no longer the lowest labourcost location among the European democracies.

In any event, in 1995 and 1996, inward FDI flows were lower than outward flows for the first time in the country's recent history. The consequent increase in net outward stocks in those years - the last in our analysis - clearly influences our estimations. However, from the information available on the Portuguese economy and individual industries it is not certain whether the upturn shown in figure 2 will be sustained in the future.

Conclusion

The present analysis seems to give some support to the IDP paradigm. However, our findings for Portugal suggest that the IDP does not follow the previously assumed quadratic function. More important, the transformations that took place in the Portuguese economy can be reasonably well explained by the interaction between three factors. These are government policies that create public goods which firms in Portugal can internalize, indigenous resources and the evolution of inward and outward FDI stocks.

But this study of the Portuguese IDP also highlights some of the weaknesses of the paradigm. First of all, it is quite clear that the IDP cannot be used as a prediction mechanism. Data for 1975 and 1988 both suggested that Portugal was approaching stage 3 of the IDP (Narula, 1996), but it is now clear that this was not the case in either of these years, the former in particular. The unpredictability of economic and non-economic variables is probably the reason for this limitation. Second, the IDP curve taken straightforwardly can be misleading. We have shown that it seemed that Portugal entered stage 2 only in the early 1980s, which was proved to be a miscalculation of some 20 years. A more careful analysis of the individual elements behind the IDP is obviously necessary. Finally, non-economic factors - EFTA and EEC membership, the 1974 revolution, and the political changes in Central and Eastern Europe can be more important for the evolution of inward and outward FDI than the economic determinants usually discussed in the IDP theory. Despite the relevance of interaction between domestic economic variables and FDI flows and stocks, politics will always play a substantial role. It can be argued, as in Dunning and Narula (1996a), that this "politics" is simply one of the elements that will make each individual IDP idiosyncratic, like the possession of natural resources, but it must be admitted that this undermines the relevance of the paradigm.

Despite these shortcomings, it must be acknowledged that, as a dynamic analysis, the IDP is a major contribution to the theory of international investment. It can largely explain the role of the Government of Portugal in the evolution of the competitiveness of Portuguese enterprises and of Portugal as a production location. It also predicts fairly well the direction of Portuguese outward FDI. Also, it highlights the relevance of the two-way relationship between inward flows and the upgrading of the country's location advantages, on the one hand, and with the development of domestic firms' ownership advantages on the other hand. Undoubtedly, further research on the lines presented here is needed in order to fully address the potential of the theory.

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Different conceptual frameworks for the assessment of the degree of internationalization: an empirical analysis of various indices for the top 100 transnational corporations

Grazia Ietto-Gillies*

This article analyses two different conceptual frameworks on which indices of the degree of firm internationalization are based: one based on the home versus foreign dichotomy in the location of activities, and the other based on the extent to which such activities are geographically spread among many countries. It introduces indices into the two frameworks and attempts to combine the two. Estimates on the three sets of indices are given for the top 100 transnational corporations worldwide, following the estimates of UNCTAD's World Investment Reports, on which the first framework is based. Policies implications at the micro and macro level are drawn in the light of the results and suggestions for further work are outlined.

Introduction

The growing internationalization of economic systems is a topic of considerable interest in the economics and business literature. Transnational corporations (TNCs) are generally considered to be the agents most responsible for the internationalization process and for cross-country business integration in modern economies. There is no single way of assessing the degree to which companies, industries or

^{*} Professor of Applied Economics, South Bank University, London. The author is grateful to anonymous referees for useful comments on an earlier version of this article. Their comments have led to substantial rethinking and development of the article. The author would also like to thank P. Antonioni for assistance with the empirical work and H. Cox for comments on the earlier draft. A version of this article was presented at the annual conference of the Academy of International Business (United Kingdom Chapter), City University Business School, London, 3-4 April, 1998.

countries are internationalized: it all depends on what patterns and aspects of internationalization we choose to emphasize and what variables we consider relevant for expressing those patterns and aspects.

Many authors have developed indices of internationalization as simple, synthetic measures of companies' activities across countries. Sometimes indices are considered as proxies for structural features of companies, and sometimes they are used as explanatory variables for the performance of the latter. In order to arrive at indices, some authors focus on a single variable, such as sales, assets, employment, profits or research and development (R&D), while others develop multidimensional, composite indices. Dunning and Pearce (1981) developed a widely-used unidimensional index based on companies' sales; and Dunning (1996) further developed three unidimensional indices based on assets, employment and R&D. Sullivan (1994) constructed a composite five-dimensional index based on "sales", "profits", "assets", "top managers' international experience" and "psychic dispersion of international operations."¹ UNCTAD (1995, 1996, 1997) published both a composite tridimensional index and the data related to its components (assets, sales and employment).

The various indices mentioned above differ in (a) the type of variable(s) used to represent TNCs' activities; and (b) the dimensionality of the index in terms of the number of variables it incorporates - in other words, whether the index is constructed with one dimension or variable only or with more than one.

Nonetheless, all these indices have some basic, fundamental features in common. They are all based on a micro or company focus, although it is possible in many cases to arrive at aggregate industry and/or country indicators from the micro data.² Moreover, all these

¹ Sullivan's work has given rise to a lively debate on the theoretical and statistical foundations of his composite index (Ramaswamy, *et al.*, 1996; Sullivan, 1996).

² Other indicators based on entirely macro elements are also used in the literature – for example, ratios of foreign direct investment (FDI) to gross domestic capital formation (GDCF) or to gross domestic product (GDP) as in many UNCTC and UNCTAD publications; or the ratio of the sum of inward and outward FDI to GDCF as an indicator of TNC domination of national economies (Ietto-Gillies, 1989).

indicators have in common an underlying conceptual framework of internationalization. The concept of internationalisation which underpins them all is based on the foreign *versus* home production dichotomy. Thus, the indices are constructed as shares of activities that the company has abroad in relation to its total activities. These activities are represented by sales, assets, employment, R&D, profits or other variables. In some cases only one of these variables is represented; in others, a composite basket - usually aggregated together as a linear average with the same weights, is used (Sullivan, 1994; UNCTAD, 1995, 1997).

This conceptual framework based on the foreign *versus* home activities dichotomy is only one of the many possible frameworks for the measurement and assessment of the degree of internationalization. There are other possible frameworks within which internationalization can be conceptualized and operationalized. Among these are the degree to which a company's activities are dispersed among the many countries of the world, and the degree to which they are concentrated in specific regions (such as one or more legs of the Triad, or developing versus developed countries). Each of these frameworks may be relevant for explaining characteristics of companies and industries; it may also be useful for making predictions about the performance of TNCs or the effects of their activities on the industrial and macro- environment.

This article focuses on a comparison of two different conceptual frameworks for internationalization: the framework based on the foreign/home dichotomy and the framework based on the spread of activities among different countries of the world. It will stress how behind the two frameworks are relevant conceptual elements regarding behaviour of companies, their relationship with other economic players and the possible impact of their activities on the macro economy. The analysis is conducted with reference to two specific indices belonging to the two different frameworks: the *UNCTAD transnationality index* and the *network spread index*. An attempt is made to reconcile the two frameworks by presenting a synthesis of them in an index called the *transnational activities spread index*.

The rest of the article begins by introducing the two sets of indices related to the two frameworks second and third sections. The

fourth section develops a combined framework and presents related indices. The fifth section analyses results for the various indices for the world's 100 largest TNCs. The last section summarizes and draws policy implications.

Foreign versus home framework: the UNCTAD index of transnationality and its components

The 1995 World Investment Report (UNCTAD, 1995), chapter I introduced for the first time a composite index of transnationality, which assesses the degree to which transnational corporations are engaged in foreign activities compared with their total activities. It is designed to give a summary view of the position of different companies, countries and industries in the internationalization process. At the basis of this index - which will here be referred to as the transnationality index - is the relationship between home and foreign activities for any particular company. Thus a company is considered to be very internationalized if the ratio of its foreign to total activities is very high, independently of whether those foreign activities take place in one single foreign country/region or in many.

The index is multidimensional and is calculated as the average of three ratios: the shares of foreign sales in total sales, of foreign assets in total assets and of foreign employment in total employment. Each of these elements provides scope for a unidimensional index of its own. More specifically, we have the following.

Let:

A = company's total assets	and $Af = company's$ foreign assets
S = company's total sales	and Sf = company's foreign sales
E = company's total employment	and Ef = company's foreign
	employment
We get the following three unidimen	nsional indices:
Ai = foreign assets index	= Af/A

=

Ei = foreign employment index = Ef/E

Si = foreign sales index

Sf/S

The UNCTAD index is an average of the three as follows:

TNi = transnationality index = [Ai + Si + Ei] : 3

The transnationality index concentrates on both the demand and the supply side of internationalization: while the variable related to sales captures demand and markets, the variable related to assets and employment captures the production/supply side and its location. Its composite nature gives a good feel for the overall interest of companies in foreign countries. However, from the point of view of the home country - or indeed of the foreign countries - it does not allow the distinction between locations where markets are and those where production takes place. This distinction can, of course, be captured by decomposing the index into its three separate elements.

As already noted, this composite index is only one of the many possible indices within the same framework: it is possible to include other elements relevant to international activities such as the research and development location between home and foreign countries (see Sullivan, 1994) or profits in foreign countries versus total profits.

The UNCTAD index is part of the conceptual framework based on the dichotomy in the location of business activities between home and foreign countries. Thus it assesses the percentage of activities which are not in the home country of the TNC. At the micro level the index tells us something about the extent to which the TNC business and interests are outside the home country. The reasons for a higher foreign projection can be numerous and can relate to supply and/or demand conditions. Another important element in the home/foreign dichotomy is the fact that some countries are chosen as convenient locations for holdings because of their regulatory and fiscal framework in relation to companies. Given its conceptual framework, the index cannot distinguish between those companies whose foreign activities are concentrated in one or few countries and those whose activities are spread in many foreign countries.

What is the significance of such an indicator for the home country of TNCs? In any interpretation and conclusion we must bear

in mind that the results from the UNCTAD study refer only to the largest companies; their size and growth is bound to be linked to their foreign operations. This is more so if the companies originate from small countries where the scope for growth via domestic-only markets may be limited. In theory, high foreign sales are compatible with low foreign production if the company produces at home and exports. However, in practice, new markets are secured partly through a production presence where the market is. Moreover, new locations may also facilitate exports to third countries which might have been more inaccessible - geographically or politically - from the homecountry base. An example of this is the location of many Japanese TNCs in the United Kingdom, which allows them to jump trade barriers and enter markets of other European Union economies.

At the macro level, a high average index of transnationality is an indication of a high propensity for home-based TNCs to invest abroad. Whether this is the outcome of factors which are industryspecific, regulation-specific or specific to country size is something that can be analysed on a country-by-country and/or industry-byindustry basis. However, in all cases, a very high propensity to do business away from the home country has a significant impact on some structural features of the macro economy, and on the possible effectiveness of policies. Among the structural features which may be affected in the domestic economy are the industrial and the geographical structure of trade. TNCs as a whole are known to have a high propensity to trade in general, and to engage in a considerable amount of intra-firm trade. The existence of a large number of companies whose production facilities are mainly abroad may influence the direction, structure and pattern of trade. This, and the related issues of transfer pricing to which it gives scope, may influence the structure of the balance of payments. Large outward FDI in relation to the size of a country will influence inward foreign earnings from investment. These can be particularly significant for countries with a very long tradition of FDI.

Thus and *ceteris paribus*, a high index of transnationality is an indication of considerable structural impact by TNCs on the home country, which can also have policy implications. Some of these may be linked to the possible effects on the balance of payments, some to the structure of trade and some to the effectiveness of industrial policy.

Assessing the geographical spread of transnational corporations' activities: a network spread index

An alternative framework to the one based on the foreign versus home dichotomy, is based on the spread of countries in which the company operates. An approach based on such a framework is relevant because many issues and effects - at both micro and macro levels relate to the geographical spread of activities. At the micro level, the spread of activities into many countries may involve the company in extra managerial costs, but it may also bring it additional advantages, including:

- the spread of risks among many countries;
- opportunities that knowledge of different locations gives, including the speed to react to any such opportunities.

Such advantages can be translated into a stronger competitive position towards rivals. Moreover, a wide spread of activities can also result in increased power *vis-à-vis* governments and labour. Companies that already have a foot in many countries may be in a stronger position to bargain with national governments to secure favourable conditions for the location of additional investment. As regards labour, the spread of production over many countries leads to a more fragmented labour force employed by the same company, compared with a situation in which the same output is achieved in one or few countries (Ietto-Gillies, 1992, 1996). This fragmentation weakens, *ceteris paribus*, labour's organization and bargaining power. It thus gives advantages to companies, which can be translated into competitive advantages towards rivals.

The advantages of multiple locations are also highlighted by the findings in Dunning (1996) based on perceptions of the executives of 144 large world TNCs. One of the conclusions of this study is that "the evidence suggests strongly that, for each of the advantages identified, a multiple (or at least a dual) location of value-added activities was perceived to yield positive gains" (p. 10).

Vernon (1979) argues that the increased spread of activities which he noticed among large United States and European TNCs shows an increased potential for "global scanning" on the part of TNCs, and that this affects their strategies vis-à-vis location at home versus abroad. He uses the results to argue that the changed economic environment of the 1970s may have affected the operations and sequence of the international product life cycle. Dunning (1977, 1980) in his analysis of ownership advantages includes multinationality as one of the elements that give an advantage to companies. In response to Porter's home-based competitive advantages (Porter, 1990), Dunning (1993) and other authors argue that international operations enhance the firm-specific advantages and thus firms' competitive Other authors argue that a high degree of positions. internationalization gives TNCs "detection power", which they can use in dealing with rivals and labour (Cowling and Sugden, 1987).

The advantages that companies derive from transnationalism are usually based on knowledge of markets and production conditions in foreign locations. If this is the case, the wider the geographical network over which this knowledge extends, the greater the advantages over competitors, labour or governments. The effects of a large spread of transnational activities on labour were considered by Ietto-Gillies (1992). The author argued that a wide spread of activities by TNCs leads to the fragmentation of labour employed by the single company, with effects on labour's ability to organize and on its strength. This is due to the fact that while companies are able to plan and organise themselves internationally, labour has - so far - been unable to organize beyond the confines of the single nation State.

There have been some attempts to assess the extent to which companies' network of activities extends to different countries/nation States of the world and to arrive at international and inter-temporal comparisons.

So far, simple indicators of the geographical spread of activities have been constructed by taking the number of direct "linkages" affiliates, associates or both - of each company within a set band in terms of the number of countries in which the company operates. In the studies reported here it is given as number of "linkages" in less than 6 countries, between 6 and 20 countries and more than 21 countries.

The Commission of the European Communities (1976) conducted a wide-ranging study of all TNCs, large and small, in 1975 for all OECD countries. An appropriate adaptation of the results (Ietto-Gillies and Seccombe-Hett, 1997) shows that 79.3 per cent of these TNCs had affiliates in less than 6 countries, and only 20.7 per cent in more than 6 countries. The countries with a geographical network well above the average are Sweden, the United States, the United Kingdom and France. They have, respectively, 28.6, 25.6, 24.6 and 24.6 per cent of the affiliates in more than 6 countries.

Vernon (1979) used data from the Harvard Multinational Project to analyse trends in the globalization strategies of United States and European TNCs in the 1950s and 1970s. An adaptation of his results (John et al., 1997, p. 52, table 2.3) shows that the majority of the largest TNCs increased their geographical network of operations considerably between the 1950s and 1970s. Specifically, 76 per cent of United States companies and 86 per cent of European ones had a network in less than 6 countries in 1950. The network widened over time, and in the 1970s it showed 95 and 77 per cent of United States and European companies, respectively, having subsidiaries in 6 or more countries. A more recent study (Ietto-Gillies, 1996) follows the trend in the network spread of affiliates of the largest United Kingdom TNCs over the past 30 years. The results are reported in table 1. They reveal that in 1963, 23 per cent had affiliates in less than 6 countries and only 20 per cent in more than 21 countries. By 1990 the corresponding percentages were 3 and 72, respectively, thus showing a clear increase in the spread of affiliates.

An analysis of these three studies leads to the following conclusions. First, the internationalization of the largest companies measured by the geographical spread of their activities - has been increasing considerably over time. Both results are consistent with expectations. Second, there seems to be a small amount of evidence that, at each point in time, the largest TNCs may have a wider spread of activities compared with smaller ones.

		Com	panies wit	th a network	in	
	< 6 0	countries	6-20 c	ountries	21+ c	ountries
Year	Total	Per cent	Total	Per cent	Total	Per cent
1963	10	23	25	57	9	20
1970	0	0	14	30	32	70
1980	1	2	20	36	35	63
1990	2	3	16	25	45	72

 Table 1. Largest United Kingdom TNCs in manufacturing and mining:

 network of affiliates abroad, by number of countries, 1963-1990

 (Total and percentages)

Source: Ietto-Gillies, 1996, p. 200, table 1.

These various attempts to give an indication of how the network of companies worldwide compares over time and from country have not resulted in any simple, continuous and easily comparable index similar to the one developed by UNCTAD.

It is proposed here to arrive at such an index in the following way. Let:

n = the number of foreign countries in which a company has affiliates; and

n* = the number of foreign countries in which, potentially, the company could have located affiliates.

In theory, n^* could be taken to be all the countries of the world; in practice, it is likely to be confined to all the countries that receive inward investment. In the study, n^* is the total number of countries in which there is inward stock of FDI minus 1, to allow for the fact that the home country should not be included in the potential number of "foreign" countries. From the information in UNCTAD, 1997; DTCI, 1997, annex table B.3, n^* is equal to 178.³

³ There might be a degree of arbitrariness in the choice of this number; however, such a choice does not affect the results since the exact value of the denominator in the index is not very relevant. What is needed is a datum which expresses the potential number of countries and which can be kept constant for all companies, at any given period of time.

From the above, the network spread index (NSi) can thus be derived:

 $NSi = network spread index = n/n^* = n/178$. This index can give us, for each company, the percentage of foreign countries in which it has affiliates in relation to the total number of foreign countries in which, potentially, it would have had opportunities to locate affiliates.

The network spread index considers the overall spread of countries rather than the home/foreign configuration. It relates to the location of linkages in general not to the value or "quantum" of those activities. Like the transnationality index, it does not distinguish between the propensity to spread direct sales across countries and the propensity to spread production facilities. Some of the linkages are sales points, some are production plants; some are large in terms of value added and/or employment, some are small.

Transnational spread indices

The major problem with the transnationality index and its unidimensional components is that no allowance is made for the fact that, for one company, "foreign" comprises (say) three countries, while for another it may comprise 80 countries.

The network spread index has drawbacks of its own. The main one is the fact that it does not take account of the "quantum" of activities in the foreign countries. The foreign country is counted independently of whether the amount of assets, sales or employment located in it is large or small. This drawback is due to lack of information on the country breakdown in the "quantum" of firms' foreign activities, rather than to conceptual issues.

How can the two frameworks be combined? And how to overcome the major problems of the two? One way of doing so is to use the network spread index as weight for the uni- and multidimensional transnationality index as follows:

 $ASi = assets spread index = Af/A \times (n/178) = Ai \times NSi$

SSi = sales spread index = $Sf/S \times (n/178)$ = $Si \times NSi$ ESi = employment spread index = $Ef/E \times (n/178)$ = Ei x NSi TASi = transnational activities spread index = TNi x (n/178)

Before interpreting the combined index, let us consider a few examples. First, take two companies – X and Y – both with the same Ai (i.e. the same percentage of total assets abroad), and let this Ai be equal to 60 per cent. Company X has its foreign assets spread in 50 foreign countries (thus it has a NSi = 0.28), while company Y has its foreign assets spread in 10 foreign countries (thus its NSi is equal to approximately 6 per cent). In percentage terms we have the following values for the ASi index of the two companies:

ASi for company X is: (0.6 x 0.28)100	= 16.8 per cent
ASi for company Y is: (0.6 x 0.06)100	= 3.6 per cent

Thus the company with the wider network spread (X) will have a much higher value for the transnational assets spread index compared with the other company. The gap between the two reflects the gap in their network spread indices.

Conversely, in a second alternative example, let us take two other companies -Z and W – with the same NSi = 0.5; this means that both companies operate in 89 foreign countries. The two companies have different Ai: company Z has 70 per cent of its assets abroad, while company W has 10 per cent of its assets abroad. We can derive the following values for the ASi index in percentage terms:

ASi for company Z is: (0.7 x 0.5)100	=	35 per cent
ASi for company W is: (0.1 x 0.5) 100	=	5 per cent

Thus the company with the higher share of assets abroad will have a higher value for the transnational assets spread index (TASi). The gap between the two TASi reflects the gap in the corresponding foreign assets indices.

The combined index proposed here (TASi) is a synthesis of two indicators of internationalization: the share of activity (assets, sales, employment or a combination of the three, or indeed of other variables expressing activities) and the percentage of foreign countries in which the company operates in relation to the total number of foreign countries in which it could, potentially, operate. The combined index indicates that the overall degree of internationalization of a company is higher, the higher the percentage of activities abroad and the higher the spread of such activities in foreign countries.

It is also possible to give the indices a probabilistic interpretation as follows. Take any country at random from the 178 (= n^*); the NSi (= n/n^*) can be considered as the probability that a given company (C) has located activities in it. The same is true of the interpretation of Ai, which can be taken to be the probability that any random unit of the company's total assets (A) is located abroad. The combined index ASi will give the probability that, for any given random country from the n^* list, any random unit of the company's total assets will be located in it.

Empirical results for the various indices

The first group of results relates to uni- and multidimensional indices based on the general framework of foreign versus home activities. The second group relates to the framework based on the geographical spread of activities (by nation States): in how many countries does a TNC operate directly, through its affiliates? Two measures can be used in this context: the number of foreign countries (n) and the network spread index (n/n*). The second one can be expressed as a percentage and is therefore comparable with other indices. The third group emerges as a synthesis of the two previous frameworks; the indices in this third, combined framework are affected by the degree of involvement outside the home country and by the spread of activities in various host countries.

The three groups of indices have been calculated for the 100 largest TNCs worldwide as published in *World Investment Report 1997* (UNCTAD, 1997, pp. 29-31). The results are presented in table 2, where companies are listed according to foreign assets ranking as in

the World Investment Report 1997; indices are expressed as percentages.

The results in table 2 are difficult to interpret or indeed to take in, owing to the large amount of information contained in the table. In order to give the reader a feel for the ranking relationship between the various variables and indices to which the table relates, rank correlation coefficients between them have been calculated and are presented in table 3.

The following picture emerges from table 3. The two main variables representing the size of the corporation - total assets and total sales - are highly correlated with each other as one would expect (0.89). However, both of them have considerably lower correlation with total employment (0.39 and 0.35 respectively). This could be explained by the fact that the corporations in the sample belong to a variety of industries⁴ – some in the manufacturing and mining sectors, and some in services; they are therefore likely to operate at different degrees of labour intensity, *ceteris paribus*, in terms of size.

The rankings for the variables expressing total assets, sales and employment are positively and highly correlated with the rankings for the corresponding foreign variables (foreign assets, sales and employment), giving values of 0.67, 0.80 and 0.83 respectively.

The two main size variables (total assets and total sales) are negatively correlated to the transnationality index (-0.54 and -0.49 respectively). This is a reflection of the way the index is constructed; this index is in fact an average of three indices, each of which has total assets, sales or employment in the denominator. The correlation between these two main size variables and the network spread index is positive, though extremely low (0.06 and 0.08). This last result may seem surprising at first. However, all TNCs considered here are very large and they belong to many industries and home countries. A proper analysis of the relationship between size and spread of activities may require a sample with large, medium-sized and small companies. Moreover, and *ceteris paribus*, the spread of activities

⁴ See details in the original list in UNCTAD (1997, pp. 29-31).

various indices of internationalization	
00 TNCs: V	
100	
The world's top	
2. T	
Table	

		Fr	Framework I: indices	dices	Fram	Framework II		Fra	Framework III	
	Foreign	Foreign	Foreign	Transnationality	No. of	Network	Assets	Sales	Employment	Transnationality
	assets	sales	employment c:	- NI	countries	spread index	spread	spread	spread	spread
corporation	A	•		INI		ICN	ASI		ESI	IAJI
General Electric Company	30.4%	26.6%	35.1%	30.7%	34	19.1%	5.8%	5.1%	6.7%	5.9%
Shell, Royal Dutch	66.2%	55.4%	78.2%	66.6%	109	61.2%	40.5%	33.9%	47.9%	40.8%
Ford Motor Company	30.7%	44.8%	37.7%	37.7%	46	25.8%	7.9%	11.6%	9.7%	9.7%
Exxon Corporation	58.2%	87.2%	72.7%	72.7%	34	19.1%	11.1%	16.7%	13.9%	13.9%
General Motors Corporation	24.9%	31.7%	34.2%	30.3%	59	33.1%	8.3%	10.5%	11.3%	10.0%
International Business Machines (IBM)	51.0%	61.3%	50.6%	54.3%	50	28.1%	14.3%	17.2%	14.2%	15.3%
Toyota Motor Corporation	34.6%	47.3%	23.1%	35.0%	34	19.1%	6.6%	9.0%	4.4%	6.7%
Volkswagen Group	55.2%	63.6%	47.2%	55.3%	23	12.9%	7.1%	8.2%	6.1%	7.1%
Mitsubishi Corporation	41.4%	39.4%	43.4%	41.4%	36	20.2%	8.4%	8.0%	8.8%	8.4%
Mobil Corporation	67.5%	66.0%	53.3%	62.3%	42	23.6%	15.9%	15.6%	12.6%	14.7%
Nestle SA	90.9%	98.1%	96.9%	95.3%	94	52.8%	48.0%	51.8%	51.2%	50.3%
Abb Asea Brown Boveri Ltd	96.1%	97.5%	94.7%	96.1%	84	47.2%	45.3%	46.0%	44.7%	45.3%
Elf Aquitaine SA (A)	61.7%	59.3%	48.7%	56.6%						
Bayer AG	91.0%	82.2%	66.4%	79.9%	70	39.3%	35.8%	32.3%	26.1%	31.4%
Hoechst Aktiengesellschaft	79.1%	54.5%	63.4%	65.6%	93	52.2%	41.3%	28.5%	33.1%	34.3%
Nissan Motor Co., Ltd.	46.5%	54.3%	-50.4%	50.4%	13	7.3%	3.4%	4.0%	-3.7%	3.7%
Fiat Spa	38.0%	38.6%	38.0%	38.2%	43	24.2%	9.2%	9.3%	9.2%	9.2%
Unilever	85.2%	86.3%	89.8%	87.1%	92	51.7%	44.0%	44.6%	46.4%	45.0%
Daimler-Benz Ag	39.7%	62.8%	23.2%	41.9%	38	21.3%	8.5%	13.4%	4.9%	8.9%
Philips Electronics N.V.	77.3%	95.1%	82.3%	84.9%	72	40.4%	31.3%	38.5%	33.3%	34.3%
Roche Holding AG	83.1%	98.2%	79.8%	87.0%	54	30.3%	25.2%	29.8%	24.2%	26.4%
Siemens AG	43.4%	61.3%	46.4%	50.4%	79	44.4%	19.3%	27.2%	20.6%	22.4%
Alcatel Alsthom Cie Generale	48.6%	77.6%	62.3%	62.9%	43	24.2%	11.7%	18.8%	15.1%	15.2%
Sony Corporation	51.2%	71.9%	58.3%	60.5%	47	26.4%	13.5%	19.0%	15.4%	16.0%
Total SA	75.8%	75.8%	75.8%	75.8%	88	49.4%	37.5%	37.5%	37.5%	37.5%
Novartis (Former Ciba Geigy)	49.3%	97.9%	78.5%	75.2%	69	38.8%	19.1%	38.0%	30.4%	29.2%
British Petroleum Company Pl	65.1%	56.1%	70.3%	63.8%	70	39.3%	25.6%	22.1%	27.6%	25.1%
Philip Morris Companies, Inc	37.5%	44.4%	61.5%	47.8%	45	25.3%	9.5%	11.2%	15.5%	12.1%
Eni Group	33.5%	33.5%	33.5%	33.5%	44	24.7%	8.3%	8.3%	8.3%	8.3%

			F	Framework I: indices	dices	Fran	Framework II		Fra	Framework III	
Ai Si Fi TNI NSI ASI SI urs 45.0% 53.9% 33.1% 43.7% 73.8% 73.8% 88% urs 645.0% 53.9% 35.1% 43.7% 79.1% 67.2% 73.9% 88% (The) 07.4% 71.4% 55.6% 63.2% 53.1% 73.3% 13.1% (The) 07.4% 71.4% 55.6% 07.4% 51 29.7% 13.2% 35.8% 63.2% 53.1% 64.4% 55.6% 55.6% 51 24.4% 55.6% 73.3% 13.1% 24.9% 55.6% 53.1% 64.4% 55.6% 55.6% 55.4% 51.4% 55.3% 24.1% 53.3% 14.1% 24.7% 53.6% 73.8% 14.1% 11.3% 12.4% 11.3% 12.4% 11.3% 12.4% 53.6% 53.5% 53.4% 53.5% 53.4% 53.5% 53.4% 53.5% 53.4% 53.5% 53.4% 53.5% <th></th> <th>Foreign assets</th> <th>Foreign sales</th> <th>Foreign employment</th> <th>Transnationality</th> <th>No of countries</th> <th>Network spread index</th> <th>Assets spread</th> <th>Sales spread</th> <th>Employment spread</th> <th>Transnationality spread</th>		Foreign assets	Foreign sales	Foreign employment	Transnationality	No of countries	Network spread index	Assets spread	Sales spread	Employment spread	Transnationality spread
45.0% 53.9% 30.8% 43.2% 73.4% 81.7% 91.1% 67.2% 79 16.3% 7.3% 88% (The) 97.4% 91.1% 67.2% 67.4% 71.3% 35.8% 33.7% 31.3% 35.8% 35.8% 35.8% 35.8% 35.8% 35.8% 37.3% 35.8% 35.8% 37.3% 35.8% 37.3% 35.8% 37.3% 35.8% 37.3% 35.7% 37.8% 37.3% 13.3% 11.3% 27.3% 7.3% 7.3% 11.3% 17.4% 11.3% 17.4%	Corporation	Ai	Si	Ei	TNI		NSi	ASi	SSi	ESi	TASI
29.7% 80.7% 91.1% 67.2% 73 44.4% 13.2% 35.8% (The) 97.8% 97.3% 97.3% 51.7% 51.2% 73.3%<	Renault SA	45.0%	53.9%	30.8%	43.2%	29	16.3%	7.3%	8.8%	5.0%	7.0%
urs 48.4% 47.6% 55.1% 43.7% 49 27.5% 13.3% 13.1% (The) 77.8% 79.1% 59.2% 67.4% 79.7% 19.3% 22.7% 13.3% 21.1% 22.7% 13.3% 21.1% 22.7% 13.3% 21.1% 22.7% 13.3% 21.1% 22.7% 13.3% 21.1% 22.7% 13.3% 21.7% 22.7% 21.7% 22.7% 21.7% 21.7% 22.7% 21.7% 21.7% 22.7% 21.7%	B.A.T. Industries Plc	29.7%	80.7%	91.1%	67.2%	79	44.4%	13.2%	35.8%	40.4%	29.8%
	Du Pont (E.I.) De Nemours	48.4%	47.6%	35.1%	43.7%	49	27.5%	13.3%	13.1%	6.6%	12.0%
	Rhone-Poulenc SA	67.4%	79.1%	55.6%	67.4%	51	28.7%	19.3%	22.7%	15.9%	19.3%
63.2% 73.4% 40.9% 59.2% 68 38.2% 24.1% 28.0% 53.1% 62.4% 74.4% 56.6% 22 12.4% 6.6% 7.7% 1 35.4% 56.6% 22 12.4% 6.6% 7.7% 1 34.8% 35.4% 35.4% 37.4% 51.4% 7.3% 91.8% 1 34.8% 35.4% 35.4% 35.4% 10.4% 9.6% 21.1% 26.5% 25.5% 25.2% 36 10.4% 9.6% 13.1% 26.2% 26.5% 25.2% 36 10.4% 9.6% 13.1% 26.2% 26.5% 35.3% 21.6% 11.4% 11.3% 14.4% 7.3% 10.8% 4.9% 4.1% 13.3% 14.4% 56.6% 54.5% 35.3% 10.4% 9.6% 14.4% 56.2% 52.2% 47.8% 16.1% 23.5% 14.4% 56.2% 52.2% 42		97.8%	96.8%	97.3%	97.3%	35	19.7%	19.2%	19.0%	19.1%	19.1%
53.1% 52.4% 54.4% 56.6% 22 12.4% 6.6% 7.7% 1 21.9% 73.4% 44.7% 59.1% 73.4% 9.1% 1 21.9% 73.4% 44.7% 59.1% 73.4% 9.1% 1 34.8% 55.6% 39.5% 50.0% 45 53.3% 11.3% 11.3% 1 34.8% 55.6% 39.5% 50.0% 45 23.4% 47% 5.3% 1 34.8% 55.6% 39.5% 50.0% 45 25.3% 11.3% 11.4% 1 45.9% 38.8% 73.8% 53.3% 21 11.3% 12.4% 1 41.4% 66.7% 35.3% 21 11.3% 11.4% 11.8% 1 56.2% 52.2% 55.3% 13.0% 16.1% 16.3% 1 41.4% 66.3% 35.3% 21 11.8% 25.3% 21.4% 1 41.4% 66.3%	BASF AG	63.2%	73.4%	40.9%	59.2%	68	38.2%	24.1%	28.0%	15.6%	22.6%
circe AG 59.1% 73.4% 44.7% 59.1% 73.4% 7.3% 9.1% 1 34.8% 35.4% 35.4% 59.1% 7.4% 1.3% 9.1% 1 34.8% 35.4% 35.4% 35.4% 51.5% 9.1% 7.4% 11.3% 1 34.8% 55.6% 39.5% 50.0% 45 53.4% 9.1% 9.1% 1 34.8% 55.6% 39.5% 50.0% 45 20.8% 11.3% 12.4% 53.3% 1 54.9% 55.6% 30.5% 20.3% 13.9% 14.1% 53.3% 1 41.4% 37% 29.6% 35.5% 48 27.0% 16.3% 11.3% 12.4% 1 56.37% 55.6% 30.1% 44.6% 61 34.3% 26.3% 25.3% 25.3% 25.3% 25.3% 25.3% 25.3% 25.3% 25.3% 25.3% 25.3% 25.3% 25.3% 25.3% 25.3% 25.3%	Honda Motor Co., Ltd.	53.1%	62.4%	54.4%	56.6%	22	12.4%	6.6%	7.7%	6.7%	7.0%
2779% 42.8% 35.4% 47 26.4% 7.4% 11.3% any 53.4% 35.4% 35.4% 47 5.3 29.8% 10.4% 9.6% any 54.8% 55.6% 39.5% 50.0% 45 25.3% 11.3% 5.3% any 54.8% 76.2% 59.4% 68.3% 29 16.1% 5.3% any 54.9% 70.6% 35.3% 29 16.1% 23.5% and 45.9% 87.0% 64.9% 70.6% 48 27.0% 16.1% 23.5% and 59.8% 87.0% 64.9% 70.6% 35.3% 21 17.9% 14.1% 27.0% 16.1% 23.5% and 55.6% 35.3% 20.4% 35.3% 24.4% 23.5% 14.1% 23.5% and 58.4% 56.2% 55.6% 35.3% 24.4% 23.5% 14.1% 15.4% and 58.4% 56.2% 52.4%	Bayerische Motoren Werke AG	59.1%	73.4%	44.7%	59.1%	22	12.4%	7.3%	9.1%	5.5%	7.3%
1 34.8% 32.4% 29.9% 32.4% 53 29.8% 10.4% 9.6% any 55.6% 55.6% 55.6% 55.6% 55.6% 57.3% 13.9% 14.1% 5.3% ed 45.9% 55.6% 59.4% 65.6% 59.4% 66.3% 53.3% 10.4% 9.6% v6 45.9% 57.6% 59.4% 64.9% 70.6% 48 27.0% 16.1% 23.5% v6 59.8% 87.0% 64.9% 70.6% 43 27.0% 16.1% 23.5% v6 59.8% 87.0% 64.9% 70.6% 43 27.0% 16.1% 23.5% v6 59.8% 87.0% 62.4% 62.4% 55.6% 48 27.0% 16.1% 21.8% 15.1% v6 52.4% 62.4% 62.4% 62.4% 62.4% 55.6% 47.8% 16.1% 17.1% 16.1% 17.1% 16.1% 17.1% 16.1% 16.1%	Mitsui & Co., Ltd.	27.9%	42.8%	35.4%	35.4%	47	26.4%	7.4%	11.3%	9.3%	9.3%
Inv 23.1% 26.2% 25.2% 36 20.2% 4.7% 5.3% any 54.8% 55.6% 39.5% 50.0% 45 22.3.6% 13.9% 14.1% 45.9% 55.6% 39.5% 50.0% 45 22.3.6% 13.9% 14.1% 46.9% 78.8% 54.5% 42 23.5% 10.3% 11.3% 2.4% 9 59.8% 87.0% 64.9% 70.6% 35.3% 21 11.8% 4.9% 4.1% 9 59.4% 52.4% 52.6% 36.3% 27.0% 16.1% 23.5% 9 52.4% 52.6% 30.1% 30.1% 30.1% 416.7% 16.1% 16.1% 16.1% 16.1% 16.1% 16.1% 16.1% 16.3% 16.3% 16.3% 16.3% 16.1% 16.1% 16.1% 16.3% 16.1% 16.1% 16.1% 16.1% 16.1% 16.1% 16.1% 16.1% 16.1% 16.1% 16.1% 16.1% <td>Nissho Iwai Corporation</td> <td>34.8%</td> <td>32.4%</td> <td>29.9%</td> <td>32.4%</td> <td>53</td> <td>29.8%</td> <td>10.4%</td> <td>9.6%</td> <td>8.9%</td> <td>9.6%</td>	Nissho Iwai Corporation	34.8%	32.4%	29.9%	32.4%	53	29.8%	10.4%	9.6%	8.9%	9.6%
any 54.8% 55.6% 39.5% 50.0% 45 25.3% 13.9% 14.1% 69.4% 76.2% 59.4% 68.3% 29 16.3% 11.3% 12.4% 12.4% 11.4% 79% 38.8% 78.8% 54.5% 44 27.0% 16.1% 23.5% 9.2% 55.6% 48 27.0% 16.1% 1.1% 1.2% 1.1% 1.1% 1.1% 1.2% 1.5% 1.5.1% 23.3% 2.1 11.1% 1.6% 9.2% 25.5% 48 27.0% 1.6.1% 1.5.1% 1.6% 97.2% 97.4% 0.1% 23.3% 2.1 11.1% 1.9% 1.9% 4.1% 1.1% 1.1% 1.5% 1.5.1% 1.5.1% 97.2% 94.1% 0.3.1% 0.3.1% 0.5.4% 0.2.4%	Itochu Corporation	23.1%	26.2%	26.5%	25.2%	36	20.2%	4.7%	5.3%	5.4%	5.1%
69,4% 76,2% 59,4% 68,3% 29 16,3% 11,3% 12,4% ed 54,5% 54,5% 54,5% 42 23,6% 10,8% 9,2% y 58,4% 56,9% 37,6% 10,8% 9,2% 9,2% y 58,4% 55,6% 48 27,0% 16,1% 49% 41% y 58,4% 52,2% 55,6% 48 27,0% 15,8% 15,1% y 58,4% 62,4% 62,4% 52,4% 54,9% 41,8% 41,8% y 21,5% 38,8% 30,1% 78,1% 54,9% 98,8% 98,8% y 22,4% 62,4% 62,4% 52,2% 74,6% 98,8% y 23,7% 71,6% 79,1% 78,1% 54,8% 88,8% y 23,5% 94,4,6% 61 34,3% 16,1% 16,3% y 71,6% 71,9% 24,4,6% 61 34,3% 16,1% </td <td></td> <td>54.8%</td> <td>55.6%</td> <td>39.5%</td> <td>50.0%</td> <td>45</td> <td>25.3%</td> <td>13.9%</td> <td>14.1%</td> <td>10.0%</td> <td>12.6%</td>		54.8%	55.6%	39.5%	50.0%	45	25.3%	13.9%	14.1%	10.0%	12.6%
45.9% 38.8% 78.8% 54.5% 42 23.6% 10.8% 9.2% v 59.8% 87.0% 64.9% 70.6% 48 27.0% 16.1% 23.5% v 59.8% 87.0% 64.9% 70.6% 48 27.0% 16.1% 23.5% v 51.8% 52.2% 55.6% 48 27.0% 16.1% 23.5% v 51.4% 52.4% 52.4% 52.4% 54.9% 15.1% 41.8% 15.1% 41.1% 27.0% 16.1% 23.5% v 21.5% 30.1% 71.6% 79.1% 73.1% 45 25.3% 54.8% 55.3% 54.8% 55.3% 54.8% 55.3% 54.8% 55.3% 54.8% 55.3% 54.8% 55.3% 54.8% 54.8% 54.8% 54.8% 54.8% 54.8% 54.8% 54.8% 54.8% 54.8% 54.8% 54.8% 54.8% 54.8% 54.8% 54.8% 54.8% 54.8% 54.8% <td>Ferruzzi Finanziaria</td> <td>69.4%</td> <td>76.2%</td> <td>59.4%</td> <td>68.3%</td> <td>29</td> <td>16.3%</td> <td>11.3%</td> <td>12.4%</td> <td>9.7%</td> <td>11.1%</td>	Ferruzzi Finanziaria	69.4%	76.2%	59.4%	68.3%	29	16.3%	11.3%	12.4%	9.7%	11.1%
ed 59,8% 87.0% 64.9% 70.6% 48 27.0% 16.1% 23.5% 41.14% 34.7% 29.6% 35.3% 21 11.8% 4.9% 4.1% 55.2% 55.6% 48 27.0% 15.8% 15.1% 55.2% 55.6% 48 27.0% 15.8% 15.1% 21.5% 33.7% 71.6% 79.1% 30.1% 30.1% 55 31.5% 2.6.3% 2.2.5% 54% 98% 97.2% 94.1% 97.2% 94.1% 97.2% 94.9% 119 10.7% 110.4% 110.6% 17.0% 84.9% 84.9% 24 13.5% 2.5.3% 5.4% 98% 61 31.5% 2.5.3% 2.5.5% 61 31.5% 2.5.5% 64.6% 61 24.5% 55 110.7% 110.4% 11.4% 11.4% 11.6% 17.0% 93.2% 54.4% 98.9% 55 11.9% 17.0% 84.9% 84.9% 24 13.5% 2.5.3% 54.4% 84.9% 84.9% 24 13.5% 2.5.3% 54.4% 84.9% 84.9% 24 13.5% 2.5.3% 54.4% 84.9% 84.9% 58 32.0% 24 13.5% 2.5.3% 54.4% 84.9% 84.9% 33 39.2% 64.6% 33.0% 46.9% 35 19.7% 110.7% 110.5% 61.6% 64.6% 33.0% 66.7% 61.6% 32 119.7% 113.5% 55 110.7% 11.7% 22.5% 55 110.7% 22.5% 55 110.7% 11.7% 22.5% 55 110.7% 22.5% 55 110.7% 110.5% 25.6% 65.7% 23.3% 35 110.7% 110.5% 25.6% 26.4% 33.0% 46.9% 35 110.7% 110.7% 110.5% 25.6% 26.1% 27.5% 27.7% 29.9% 26.1% 25.1% 27.6% 28.4% 11.1% 20.0% 39 21.9% 7.3% 15.6% 56.1% 22.5% 26.1% 22.7% 29.9% 56.1% 22.5% 26.1% 27.5% 20.5% 55 110.7\% 110.5% 56.1% 27.5% 26.1% 22.7% 29.9% 56.1% 22.5% 55 110.7% 110.5% 56.1% 22.5% 55 110.7% 110.5% 56.1% 25.6% 26.1% 27.5% 27.7% 29.9% 56.1% 26.1% 27.5% 26.1% 27.5% 26.1% 27.5% 26.1% 27.5% 20.5% 56.1% 26.1% 27.5% 20.5% 56.1% 26.1% 27.5% 26.1% 27.5% 26.1% 27.5% 26.1% 27.5% 26.1% 27.5% 26.1% 27.5% 26.1% 27.5% 20.5% 56.1% 27.5% 20.5% 56.1% 27.5% 20.5% 56.1% 27.5% 26.1% 27.5% 26.1% 27.5% 26.1% 27.5% 26.1% 27.5% 27.5% 26.1% 27.5% 26.1% 27.5% 26.1% 27.5% 26.1% 27.5% 27.5% 26.1% 27.5% 27.5% 27.5% 27.5% 27.5% 26.1% 27.5% 27.5% 27.5% 27.5% 27.5% 27.5% 27.5% 27.5% 26.1% 27.5% 27.5% 27.5% 27.5% 27.5% 27.5% 26.1% 27.5% 27.5% 27.5% 27.5% 27.5% 27.5% 26.1% 27.5% 27.5% 27.5% 27.5% 27.5% 27.5% 26.1% 27.5% 27.5% 27.5% 27.5% 27.5% 27.5% 26.1% 27.5% 27.	Daewoo Corporation	45.9%	38.8%	78.8%	54.5%	42	23.6%	10.8%	9.2%	18.6%	12.9%
y 41.4% 34.7% 29.6% 35.3% 21 11.8% 4.9% 4.1% y 58.4% 56.2% 55.6% 4.8 27.0% 15.8% 15.1% 2 58.4% 56.2% 55.6% 4.8 27.0% 15.8% 15.1% 21.5% 56.2% 55.6% 4.8 27.0% 15.8% 15.1% 21.5% 51.6% 71.6% 79.1% 70.1% 70.1% 70.0% 15.8% 2.5.3%		59.8%	87.0%	64.9%	70.6%	48	27.0%	16.1%	23.5%	17.5%	19.0%
y 55.6% 48 27.0% 15.8% 15.1% i 62.4% 62.4% 62.4% 62.4% 15.1% 15.1% i 83.7% 71.6% 79.1% 78.1% 55.6% 48 27.0% 15.8% 15.1% i 83.7% 71.6% 79.1% 78.1% 56 31.5% 9.4% 9.8% i 83.7% 71.6% 79.1% 78.1% 56 31.5% 9.4% 9.8% 97.2% 94.9% 94.9% 10 78 10.4% 10.0% 47.0% 47.7% 39.1% 44.6% 61 34.3% 16.1% 16.3% ustries 18.2% 94.9% 84.9% 28.3% 27.9% 14.4% 11.4% 17.0% 93.2% 94.9% 84.9% 27.9% 14.7% 16.4% 16.3% 1810 71.0% 93.2% 23.3% 16.1% 17.4% 11.4% 17.0% 93.2% 57	Chevron Corporation	41.4%	34.7%	29.6%	35.3%	21	11.8%	4.9%	4.1%	3.5%	4.2%
62.4% 62.4% 62.4% 62.4% 62.4% 82.4% 82.4% 88% 8.8% 8.8% 8.8% 8.8% 8.8% 8.8% 8.8% 8.8% 8.8% 8.8% 8.8% 8.8% 8.8% 8.8% 8.8% 8.8% 8.8% 8.8% 8.8% 21.5% 97.2% 94.9% 91.9% 16.1% 10.4% 10.0% 10.4% 10.0% 10.4% 10.0% 10.4% 10.0% 11.4% <	Dow Chemical Company	58.4%	56.2%	52.2%	55.6%	48	27.0%	15.8%	15.1%	14.1%	15.0%
21.5% 38.8% 30.1% 30.1% 30.1% 45 25.3% 5.4% 9.8% 83.7% 71.6% 79.1% 78.1% 56 31.5% 26.3% 22.5% 97.2% 94.1% 93.5% 94.9% 19 10.7% 10.4% 10.0% 83.7% 71.6% 79.1% 78.1% 56 31.5% 26.3% 22.5% 97.2% 47.0% 47.7% 39.1% 44.6% 61 34.3% 16.1% 11.4% 84.9% 84.9% 84.9% 84.9% 28.3% 23 11.4% 11.4% 18.1% 17.0% 47.8% 28.3% 37.3% 72.5% 57 32.0% 22.7% 29.9% 61arus 92.1% 46.9% 35 19.7% 18.1% 17.0% 38.2% 64.6% 33.0% 46.9% 33.0% 31.6% 73.6% 11.7% 53.1% 64.6% 61.6% 71.6% 33.9% 33.9% 56.6% 11.7% 16.5% 53.1% 64.6% 86.3% 31.6% 32	Robert Bosch Gmbh	62.4%	62.4%	62.4%	62.4%	25	14.0%	8.8%	8.8%	8.8%	8.8%
 B3.7% 71.6% 79.1% 78.1% 56 31.5% 26.3% 22.5% 97.2% 94.1% 93.5% 94.9% 19 10.7% 10.4% 10.0% 97.2% 94.1% 93.5% 94.9% 19 10.7% 10.4% 10.0% B4.9% 84.9% 84.9% 24 13.5% 11.4% 11.4% B2.8% 38.4% 28.3% 23 39 21.9% 4.0% B4.9% 84.9% 55 57 32.0% 2.2.7% 29.9% Glarus 92.1% 86.3% 91.0% 89.8% 35 19.7% 18.1% 17.0% 53.1% 65.0% 66.7% 61.6% 32 18.0% 7.3% 6.6% (BHP) 14.7% 23.6% 31.5% 28.4% (BHP) 14.2% 28.8% 31.5% 28.4% 13 7.3% 1.9% 2.0% 	Marubeni Corporation	21.5%	38.8%	30.1%	30.1%	45	25.3%	5.4%	9.8%	7.6%	7.6%
97.2% 94.1% 93.5% 94.9% 19 10.7% 10.4% 10.0% 47.0% 47.7% 39.1% 44.6% 61 34.3% 16.1% 16.3% B4.9% B4.9% B4.9% B4.9% B4.9% 24 13.43% 16.1% 16.3% B4.9% B4.9% B4.9% B4.9% 24 13.5% 11.4% 11.4% B4.9% B4.9% B4.9% 28.3% 23 22.19% 14.7% 16.5% 71.0% 50.6% 47.8% 72.5% 57 32.0% 22.7% 29.9% 6larus 92.1% 86.3% 91.0% 89.8% 35 19.7% 18.1% 17.0% 38.2% 64.6% 38.0% 46.9% 32 18.0% 9.5% 11.7% 53.1% 65.0% 61.6% 31.1% 20% 7.3% 6.6% 14.7% 16.8% 33.9% 31.1% 20% 31.7% 6.9% 53.1% <td< td=""><td>Cable And Wireless Plc</td><td>83.7%</td><td>71.6%</td><td>79.1%</td><td>78.1%</td><td>56</td><td>31.5%</td><td>26.3%</td><td>22.5%</td><td>24.9%</td><td>24.6%</td></td<>	Cable And Wireless Plc	83.7%	71.6%	79.1%	78.1%	56	31.5%	26.3%	22.5%	24.9%	24.6%
47,0% 47,7% 39,1% 44,6% 61 34,3% 16,1% 16,3% ustries 18,4% 84,9% 84,4% 11	Thomson Corporation	97.2%	94.1%	93.5%	94.9%	19	10.7%	10.4%	10.0%	10.0%	10.1%
B4.9% B4.9% B4.9% B4.9% Composition Compositententent	Texaco Incorporated	47.0%	47.7%	39.1%	44.6%	61	34.3%	16.1%	16.3%	13.4%	15.3%
Ustries 18.2% 38.4% 28.3% 28.3% 39 21.9% 4.0% 8.4% 45.0% 50.6% 47.8% 47.8% 58 32.6% 14.7% 16.5% 71.0% 93.2% 53.3% 72.5% 57 32.0% 14.7% 16.5% 71.0% 93.2% 72.5% 57 32.0% 14.7% 16.5% 71.0% 92.1% 86.3% 91.0% 89.8% 35 19.7% 18.1% 17.0% 53.1% 65.0% 64.6% 38.0% 46.9% 32 18.0% 9.5% 11.7% 53.1% 65.0% 61.6% 37.1% 20.7% 21.9% 3.3% 64.4% 31.7% 20.0% 33.9% 37.1% 2.5% 11.7% 7.3% 28.8% 17.1% 20.0% 39 21.9% 3.3% 6.6% 80.1 21.6% 31.5% 21.4% 13 7.3% 1.9% 2.0%	Michelin	84.9%	84.9%	84.9%	84.9%	24	13.5%	11.4%	11.4%	11.4%	11.4%
45.0% 50.6% 47.8% 47.8% 58 32.6% 14.7% 16.5% 71.0% 93.2% 53.3% 72.5% 57 32.0% 22.7% 29.9% 6larus 92.1% 86.3% 91.0% 89.8% 35 19.7% 18.1% 17.0% 38.2% 64.6% 38.0% 46.9% 32 18.0% 9.5% 11.7% 53.1% 65.0% 66.7% 61.6% 32 18.0% 7.3% 6.6% 61.0% 33.9% 37.1% 20.7% 21.9% 7.3% 6.6% 20.1 14.2% 21.7% 20.9% 33.9% 21.9% 317.4% 6.6% 26.1% 27.6% 31.5% 28.4% 13 7.3% 1.9% 20%	Matsushita Electric Industries	18.2%	38.4%	28.3%	28.3%	39	21.9%	4.0%	8.4%	6.2%	6.2%
71.0% 93.2% 53.3% 72.5% 57 32.0% 22.7% 29.9% Glarus 92.1% 86.3% 91.0% 89.8% 35 19.7% 18.1% 17.0% 38.2% 64.6% 38.0% 46.9% 35 19.7% 18.1% 17.0% 53.1% 65.0% 66.7% 61.6% 32 18.0% 7.3% 6.6% 14.2% 36.8% 33.9% 37.1% 23.1% 6.6% 26.1% 27.6% 31.7% 20.3% 31.7% 50.4% 26.1% 27.6% 31.5% 28.4% 13 7.3% 1.9% 20%	Xerox Corporation	45.0%	50.6%	47.8%	47.8%	58	32.6%	14.7%	16.5%	15.6%	15.6%
Glarus 92.1% 86.3% 91.0% 89.8% 35 19.7% 18.1% 17.0% 38.2% 64.6% 38.0% 46.9% 32 18.0% 9.5% 11.7% 53.1% 65.0% 66.7% 61.6% 32 18.0% 9.5% 11.7% (BHP) 14.2% 28.8% 17.1% 20.0% 39 21.9% 3.1% 6.5% 26.1% 27.6% 31.5% 28.4% 13 7.3% 1.9% 2.0%	Ericsson LM	71.0%	93.2%	53.3%	72.5%	57	32.0%	22.7%	29.9%	17.1%	23.2%
38.2% 64.6% 38.0% 46.9% 53.1% 64.6% 38.0% 46.9% 53.1% 9.5% 7 64.0% 65.0% 66.7% 61.6% 3.2 18.0% 9.5% 7 7.3% 7.9% 7.3% 7.3% 7.3% 7.9% 7.3% 7.9% 7.3% 7.9% 7.3% 7.9% 7.3% 7.9% 7.3% 7.9% 7.9% 7.3% 7.9%	Holderbank Financiere Glarus	92.1%	86.3%	91.0%	89.8%	35	19.7%	18.1%	17.0%	17.9%	17.7%
53.1% 65.0% 66.7% 61.6% 32 18.0% 9.5% 7 40.7% 36.8% 33.9% 37.1% 32 18.0% 7.3% 14.2% 28.8% 17.1% 20.0% 39 21.9% 3.1% 26.1% 27.6% 31.5% 28.4% 13 7.3% 1.9%	Bce Inc. (B)	38.2%	64.6%	38.0%	46.9%						
(BHP) 40.7% 36.8% 33.9% 37.1% 32 18.0% 7.3% 14.2% 28.8% 17.1% 20.0% 39 21.9% 3.1% 26.1% 27.6% 31.5% 28.4% 13 7.3% 1.9%	Saint-Gobain SA	53.1%	65.0%	66.7%	61.6%	32	18.0%	9.5%	11.7%	12.0%	11.1%
14.2% 28.8% 17.1% 20.0% 39 21.9% 3.1% 26.1% 27.6% 31.5% 28.4% 13 7.3% 1.9%	\sim	40.7%	36.8%	33.9%	37.1%	32	18.0%	7.3%	6.6%	6.1%	6.7%
26.1% 27.6% 31.5% 28.4% 13 7.3% 1.9%	Hitachi, Ltd.	14.2%	28.8%	17.1%	20.0%	39	21.9%	3.1%	6.3%	3.7%	4.4%
	Sumitomo Corporation	26.1%	27.6%	31.5%	28.4%	13	7.3%	1.9%	2.0%	2.3%	2.1%

		Fr	Framework I: indice:	dices	Fram	Framework II		Fra	Framework III	
	Foreign assets	Foreign sales	Foreign employment	Transnationality	No of countries	Network spread index	Assets	Sales spread	Employment spread	Transnationality spread
Corporation	Ai	Si	Ē	TNI		NSI	ASI	SSi	ESI	TASI
Electrolux AB	86.0%	92.5%	87.6%	88.7%	49	27.5%	23.7%	25.5%	24.1%	24.4%
At&T Corp.	19.3%	16.9%	18.1%	18.1%	17	6.6%	1.8%	1.6%	1.7%	1.7%
Procter & Gamble Company	38.7%	48.8%	43.7%	43.7%	67	37.6%	14.6%	18.4%	16.5%	16.5%
International Paper Company	37.0%	29.9%	35.6%	34.2%	42	23.6%	8.7%	7.1%	8.4%	8.1%
Amoco Corporation	32.1%	22.2%	22.3%	25.5%	17	6.6%	3.1%	2.1%	2.1%	2.4%
Volvo AB	49.8%	88.8%	36.8%	58.5%	33	18.5%	9.2%	16.5%	6.8%	10.8%
Mcdonald'S Corporation	55.0%	57.0%	64.6%	58.9%	7	3.9%	2.2%	2.2%	2.5%	2.3%
Grand Metropolitan Plc	54.3%	90.5%	83.7%	76.2%	90	33.7%	18.3%	30.5%	28.2%	25.7%
Glaxo Wellcome Plc	66.4%	92.1%	75.2%	77.9%	66	37.1%	24.6%	34.2%	27.9%	28.9%
BTR PIC	66.3%	75.5%	70.9%	70.9%	59	33.1%	22.0%	25.0%	23.5%	23.5%
Johnson & Johnson	45.7%	49.5%	53.3%	49.5%	57	32.0%	14.6%	15.9%	17.1%	15.9%
Petroleos De Venezuela (A)	19.6%	93.5%	21.5%	44.9%						
Fujitsu Limited	23.2%	29.8%	31.7%	28.3%	58	32.6%	7.6%	9.7%	10.3%	9.2%
Hanson Plc	58.1%	94.3%	62.5%	71.6%	26	14.6%	8.5%	13.8%	9.1%	10.5%
Motorola, Inc.	35.7%	60.4%	45.9%	47.3%	30	16.9%	6.0%	10.2%	7.7%	8.0%
Generale Des Eaux	18.6%	30.8%	26.4%	25.3%	32	18.0%	3.3%	5.5%	4.8%	4.5%
Nippon Steel Corporation	23.4%	23.4%	23.4%	23.4%	12	6.7%	1.6%	1.6%	1.6%	1.6%
Akzo Nobel N.V.	71.1%	73.7%	74.8%	73.2%	51	28.7%	20.4%	21.1%	21.4%	21.0%
Chrysler Corporation	14.8%	13.4%	20.6%	16.3%	26	14.6%	2.2%	2.0%	3.0%	2.4%
Canon Electronics Inc.	36.8%	67.6%	50.5%	51.6%	26	14.6%	5.4%	9.9%	7.4%	7.5%
Coca-Cola Company (The)	68.2%	67.6%	66.7%	67.5%	22	12.4%	8.4%	8.4%	8.2%	8.3%
Solvay SA	92.2%	95.6%	88.7%	92.2%	42	23.6%	21.7%	22.6%	20.9%	21.7%
Mitsubishi Motors Corporation	30.8%	28.7%	25.3%	28.3%	14	7.9%	2.4%	2.3%	2.0%	2.2%
Northern Telecom Limited (B)	72.3%	88.9%	80.6%	80.6%						
Petrofina SA	67.4%	80.1%	67.8%	71.8%	33	18.5%	12.5%	14.9%	12.6%	13.3%
Bridgestone Corporation	51.4%	55.7%	53.5%	53.5%	27	15.2%	7.8%	8.4%	8.1%	8.1%
Pepsico, Inc.	31.8%	29.1%	30.4%	30.4%	23	12.9%	4.1%	3.8%	3.9%	3.9%
Danone Groupe SA	39.9%	56.3%	68.6%	54.9%	35	19.7%	7.9%	11.1%	13.5%	10.8%
Crown Cork & Seal Company	60.3%	60.1%	60.2%	60.2%	40	22.5%	13.5%	13.5%	13.5%	13.5%
Toshiba Corporation	16.2%	31.8%	24.0%	24.0%	27	15.2%	2.5%	4.8%	3.6%	3.6%
Kvaerner ASA	81.7%	76.9%	86.4%	81.7%	48	27.0%	22.0%	20.7%	23.3%	22.0%

Foreign Foreign Transnationality No Network Assets Sales Employment Ai Si Ei TNi Si Ei TNi Sieses Sales Employment Ai Si ssets sales employment No No Network Assets Sales Employment field Company 28.7% 18.1% 23.4% 23.4% 26 14.6% 4.2% 5.6% 34.% AG 47.0% 35.6% 34.8% 39.1% 44 24.7% 11.6% 8.8% 8.6% No Macuback Corporation 18.6% 13.1% 15.8% 15.8% 15.8% 16.4% 20.0% 0.0% <th>Corporation</th> <th></th> <th></th> <th></th> <th>inice 3</th> <th></th> <th></th> <th></th> <th>Ē</th> <th></th> <th></th>	Corporation				inice 3				Ē		
thattic Richfield Company 28.7% 18.1% 23.4% 23.4% 23.4% 24.5% 34.6% 3.4% 34.8% 37.1% 16.4% 4.2% 2.6% 34.8% 9.7% harmesman AG 47.0% 35.6% 34.8% 39.1% 44 24.7% 16.8% 9.7% harmecia & Upjohn, Inc. (C) 65.1% 67.7% 66.4% 55.8% 15.8% 15.8% 15.8% 20 11.2% 8.8% 8.6% 9.7% harmecia & Upjohn, Inc. (C) 65.1% 67.7% 66.4% 20 11.2% 16.8% 16.8% 4.6% 5.3% 4.6% 5.3% 4.6% 5.3% 4.6% 5.3% 4.6% 5.3% 4.6% 5.3% 4.6% 5.3% 4.6% 5.3% 4.6% 5.3% 4.6% 5.3% 4.6% 5.3% 4.6% 5.3% 4.6% <		Foreign assets Ai	Foreign sales Si	Foreign employment Ei	Transnationality TNi	No of countries	Network spread index NSi	Assets spread ASi		Employment spread ESi	Transnationality spread TASi
RTZ CRA 46.3% 50.0% 61.4% 52.5% 58 32.6% 15.1% 16.3% 20.0% 17.1% Alannesmam AG 47.0% 35.6% 34.8% 59.1% 44 24.7% 11.6% 8.8% 8.6% 9.7% Tharmacia & Upiohn, Inc. (C) 65.1% 67.7% 66.4% 66.4% 66.4% 51.8% 17.6% 8.8% 8.6% 9.7% Tharmacia & Upiohn, Inc. (C) 18.6% 31.1% 15.8% 15.8% 20 17.4% 2.3% 1.6% 5.3% 4.6% Intercand nome Products Corporation 33.9% 47.8% 75.6% 76.4% 0.0% 0.0% 0.0% 0.0% 0.0% 16.6% 4.	Atlantic Richfield Company	28.7%	18.1%	23.4%	23.4%	26	14.6%	4.2%	2.6%	3.4%	3.4%
Annesman AG 47.0% 35.6% 34.8% 39.1% 44 24.7% 11.6% 8.8% 8.6% 9.7% harmacia & Upjohn, Inc. (C) 65.1% 67.7% 66.4% 66.4% 20.1% 11.6% 8.8% 8.6% 9.7% FE Corporation 13.6% 13.1% 15.8% 15.8% 22 11.2,4% 2.3% 1.6% 5.3% 4.6% interican Home Products Corporation 33.9% 47.4% 40.7% 20 11.2% 3.8% 4.6% 5.3% 4.6% 20% 0.0%	RTZ CRA	46.3%	50.0%	61.4%	52.5%	58	32.6%	15.1%	16.3%	20.0%	17.1%
harmacia & Upjohn, Inc. (C) 65.1% 67.7% 66.4% 66.4% 22 12.4% 2.3% 1.6% 2.0% STE Corporation 18.6% 13.1% 15.8% 15.8% 20 11.2% 3.8% 4.6% 2.0% merican Home Products Corporation 33.9% 40.8% 47.4% 40.7% 20 11.2% 3.8% 4.6% 5.3% 4.6% initian Beghin-Say SA (A) 75.0% 78.7% 75.6% 76.4% 0.0% 0	Mannesmann AG	47.0%	35.6%	34.8%	39.1%	44	24.7%	11.6%	8.8%	8.6%	9.7%
5TE Corporation 18.6% 13.1% 15.8% 15.8% 22 12.4% 2.3% 1.6% 2.0% 2.0% merican Home Products Corporation 33.9% 40.8% 47.4% 40.7% 20 11.2% 3.8% 4.6% 5.3% 4.6% 5.6% 0.0% 0.0% 0.0%	Pharmacia & Upjohn, Inc. (C)	65.1%	67.7%	66.4%	66.4%						
wmerican Home Products Corporation 33.9% 40.8% 47.4% 40.7% 20 11.2% 3.8% 4.6% 5.3% 4.6% ridania Beghin-Say SA (A) 75.0% 75.6% 76.4% 0.0% <td< td=""><td>STE Corporation</td><td>18.6%</td><td>13.1%</td><td>15.8%</td><td>15.8%</td><td>22</td><td>12.4%</td><td>2.3%</td><td>1.6%</td><td>2.0%</td><td>2.0%</td></td<>	STE Corporation	18.6%	13.1%	15.8%	15.8%	22	12.4%	2.3%	1.6%	2.0%	2.0%
iridania Beghin-Say SA (A) 75.0% 78.7% 75.6% 76.4% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0	American Home Products Corporation	33.9%	40.8%	47.4%	40.7%	20	11.2%	3.8%	4.6%	5.3%	4.6%
ociete Au Bon Marche SA (A) 31.3% 64.4% 47.9% 47.9% 0.0% 0.0% 0.0% 0.0% 0.0% Ranked here by foreign assets Source: UNCTAD/ERASMUS UNIVERSITY DATABASE for framework I and III and calculations by author and Peter Antonio om DUN AND BRADSTREET: WHO OWNS WHOM 199703 for frameworks II and III.	Eridania Beghin-Say SA (A)	75.0%	78.7%	75.6%	76.4%	0.0%	0.0%	0.0%	0.0%		
Ranked here by foreign assets Source: UNCTAD/ERASMUS UNIVERSITY DATABASE for framework I and III and calculations by author and Peter Antonio om DUN AND BRADSTREET: WHO OWNS WHOM 199703 for frameworks II and III.	Societe Au Bon Marche SA (A)	31.3%	64.4%	47.9%	47.9%	0.0%	0.0%	0.0%	0.0%		
	Ranked here by foreign asso Source: UNCTAD/ERA om DUN AND BRADSTRE)	ets SMUS (ET: WH(JNIVEF 0 OWN	SITY DAT S WHOM	ABASE for frai 1997Q3 for frai	mework I meworks	and III and II and III.	calculati	ions by	author and]	Peter Antonio

								Fram	Framework 1: Indices		Framework II
Ι	Total assets A	Total sales S	Total employment E	Foreign assets Af	Foreign sales Sf	Foreign employment Ef	Assets Ai	Sales Si	Employment Ei	Employment Transnationality Network spread Ei TNi NSi	Network spread NSi
Total assets A	1.00	0.89	0.39	0.67	0.66	0.12	-0.56**	-0.46	-0.52	-0.54**	.00%
Total sales S		1.00	0.35	0.63	0.80	0.11	-0.46	-0.44**	-0.49	-0.49**	0.08*
Total employment E			1.00	0.35	0.32	0.83	-0.14	-0.06	-0.11**	-0.10**	0.14*
Foreign assets Af				1.00	0.79	0.36	0.18	0.13	0.09	0.15	0.38*
Foreign sales Sf					1.00	0.30	-0.01	0.13	-0.03	0.04	0.35*
Foreign employment Ef						1.00	0.24	0.30	0.39	0.33	0.36*
Assets index Ai							1.00*	0.79	0.83	0.93	0.33*
Sales index Si								1.00	0.79	0.92	0.36*
Employment index Ei									1.00	0.93	0.44*
ransnationality index TNi										1.00	0.40*
Network spread NSi											1.00*

Table 3. Rank correlations between variables/indices

* Coefficient calculated for a sample of 89 companies. In all other cases a sample of 95 companies is used. ** These coefficients are affected by the way the indices are constructed.

Transnational Corporations, vol. 7, no.1 (April 1998)

may also be affected by the industries in which companies operate as well as the size of their home countries.

The variables representing foreign activities (foreign assets, sales and employment) are also positively correlated to the transnationality index; the coefficients are very low (0.15, 0.04 and 0.33 respectively), though slightly higher for the foreign employment variable than for the other two. The coefficients between these three variables and the network spread index are also positive (0.38, 0.35 and 0.36) and consistently higher than the ones for the transnationality index.

Of all the three dimensions of activities - assets, sales and employment - the latter is the one that shows the most internationally specific characteristics, which appears consistently throughout all the indices. The coefficients seem to show that the TNCs with high employment are also likely to be the ones with a high share of foreign employment (a coefficient of 0.83 higher than for the corresponding one for assets and sales, which are 0.67 and 0.80 respectively). Moreover, the employment index (Ei) has the highest correlation with the network spread index (0.44) as well as high correlation with the transnationality index (0.93).

Those TNCs that are large employers seem also to be responsible for large percentages of foreign employment; they also have a relatively good chance of having their foreign employment spread among many foreign countries. There appears, therefore, to be some evidence that their employment is more internationalized (foreignbased) as well as more fragmented in foreign countries than their assets and sales.

Policy implications

An examination of the different indices points to the following:

• Employment and in particular the share of foreign employment seems to be more highly correlated with internationalization - and more so when expressed in terms of foreign share than in terms of number of countries in which TNCs operate - than assets or sales.

• Among the three dimensions -- assets, sales and employment -- the latter one is the most internationalized and the most fragmented among foreign countries.

The indices based on the home/foreign dichotomy show the extent to which TNCs' activities and interests are away from the home country. At the company level, a high degree of internationalization is an indication of substantial ownership advantages. At the macro level, it may be an indication of low or declining locational advantages at home, especially if the level of inward investment is also low. High values for the indices denote a structure which may have effects on trade levels and patterns. However, the analysis cannot indicate whether the activities giving rise to high indices are trade-enhancing or substituting. Much depends on the FDI determinants and companies' strategies regarding market sourcing and/or vertical integration across countries. Any effect on trade is likely to add to the effects on the balance of payments due to investment activities as well as the earnings from those investments. A high degree of foreign involvement by domestic companies may also have implications for the effectiveness of industrial policies; however, a full analysis of such effects must take account of both inward and outward investment

Similar implications can also be drawn from the network spread indices. Moreover, at the company level, a high degree of spread can be taken as an indication of possible effects on managerial costs/ effectiveness on the one hand, and of increasing market shares and power on the other. Companies with large spread may face extra costs, but they may also be at an advantage *vis-à-vis* labour and rivals; they may also have increased bargaining power with regards to governments in actual and potential host countries. More research is needed in order to assess the net benefits of high spread for companies.

At the macro level the points about trade and industrial policy made above are still valid. Moreover, governments in home countries may feel that companies with a high spread of activities are less embedded in the home country and potentially more footloose in an *ex-ante* sense (in terms of new planned investment) if not in an *expost* sense (in terms of existing productive capacity). These aspects may be particularly relevant in view of the fact that employment appears to be more foreign-specific and spread compared with the other two dimensions of activities – assets and sales.

In general, it seems that both frameworks are useful and can be used in conjunction with each other, either separately or as combined indices. More detailed research is needed in order to ascertain the usefulness of the various frameworks and the related indices in the assessment of the effects of TNCs' activities and as guidance on policies.

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Foreign direct investment in East Asia: major trends and critical United States policy issues

Mark Mason*

This article explores major trends in foreign direct investment in East Asia, together with the chief policy issues which these trends raise for the United States. It provides an overview of foreign direct investment by the United States and other economies in East Asia from home and host country perspectives, and examines the principal causes and consequences of this investment expansion in the region. It then analyzes current United States policies towards foreign direct investment in East Asia, and presents policy recommendations on those critical issues now confronting United States policy makers.

Introduction

Foreign direct investment (FDI) in East Asia has grown considerably in recent years.¹ The United States has steadily increased its FDI in the region both in absolute terms and as a share of its global outflows. However, intraregional FDI, originating largely in Japan

^{*} Associate Professor, School of Management, Yale University, New Haven, Connecticut, United States. The author gratefully acknowledges the comments of Bijit Bora (Flinders University), Thomas Brewer (Georgetown University), Geza Feketekuty (Monterey Institute of International Studies), Edward Graham (Institute for International Economics), Stephen Guisinger (University of Texas), Mary Rykman (United States Trade Representative) and four anonymous referees.

¹ Unless otherwise noted, in this article "East Asia" refers to the following ten East Asian economies: China, Hong Kong Special Administrative Region of the People's Republic of China (hereafter referred to as Hong Kong, China), Indonesia, Japan, Malaysia, the Philippines, the Republic of Korea, Singapore, Taiwan Province of China and Thailand.

and Asia's newly industrializing economies (NIEs), has grown still more quickly. Until recently, several members of the Association of South-east Asian Nations (ASEAN) and certain other East Asian economies have received the largest quantities of regional FDI inflows. Since 1992, China has been the single largest FDI recipient in the region.²

Economic and political factors largely explain this growth of FDI in East Asia. The increased value of the Japanese yen, sustained United States economic expansion and rapid development of the Asian NIEs are among the principal home country causes. On the other hand, liberalization of FDI and related economic policies, broader moves towards market-based systems, increasing regional integration and, most important, rapid economic growth furnish the primary host country explanations.

Although they can incur costs, in general these FDI flows to East Asia have created major benefits for home and host countries alike. Foreign direct investment in East Asia has enabled transnational corporations (TNCs) based in the United States to source inexpensive and increasingly skilled East Asian labour and gain increased access to local markets. Foreign direct investment also has provided growing East Asian economies with fresh sources of capital and technology, rising levels of employment, increased exports, higher tax revenues and other advantages.

The growth of FDI in East Asia raises at least two critical policy issues for the United States. First, in its negotiations with East Asian counterparts, what priority should the Government of the United States assign to FDI as compared with international trade? And second, what kinds of international policy arrangements should the United States seek to fashion to support its broader goal of freer cross-border capital flows in East Asia (and elsewhere)? Alternative arrangements include not only differing types and levels of substantive coverage, but also varying degrees of geographical scope.

 $^{^2}$ The following discussion examines FDI in East Asia through the mid-1990s. Analysis of the impact of more recent Asian economic difficulties on FDI can be found in Graham (n.d.) and Mason (n.d.).

FDI in East Asia: a comparative overview

United States FDI in East Asia

By almost any measure, United States FDI in East Asia has increased substantially in recent years. In absolute terms, the total stock of United States FDI in the region grew from approximately \$300 million in 1950 to about \$14 billion in 1980, and then increased to an estimated \$95 billion by 1995.³ Rapid outflows of United States FDI to the region during the early 1990s in particular contributed to these dramatic increases in the United States' FDI presence (table 1).

Host economy	1990	1991	1992	1993	1994	1995
China Hong Kong, China Indonesia Japan Malaysia Philippines	30 352 691 984 175 177	40 474 413 -203 270	50 1 914 834 627 -132 136	556 1 366 475 1 625 377 369	745 2 373 8 2 522 349 359	436 828 918 1 583 1 114 273
Singapore Republic of Korea Taiwan Province of China Thailand Total	620 330 222 316 3 897	1 067 209 479 228 2 977	1 190 -133 184 517 5 198	1 743 293 173 285 7 262	1 162 530 773 769 9 590	1 994 1 107 478 891 9 622

 Table 1. United States FDI outflows to East Asia, 1990-1995

 (Millions of dollars)

Source: United States Department of Commerce, Survey of Current Business, various years.

East Asia also has come to account for an increasing share of accumulated United States FDI throughout the world. Accounting for less than 3 per cent of the United States FDI stock abroad in 1950 and less than 7 per cent three decades later, the proportion of total United States FDI located in East Asia had exceeded 13 per cent by 1995 (and 18 per cent for Asia and the Pacific as a whole).⁴

³ The following position data from the United States Department of Commerce are calculated on an historical cost basis.

⁴ Calculated from United States Department of Commerce (1982, pp. 1, 21), and *Survey of Current Business*, August 1981, p. 32, and July 1996, p. 47.

Nonetheless, more than half of the United States FDI stock was still located in Europe by 1995, and quantities of such investment in the western hemisphere exclusive of Canada came close to those in Asia and the Pacific (figure 1). More than one-third of the aggregate 1995 stock of United States FDI for East Asia as a whole was concentrated in manufacturing, followed by major positions in the petroleum and wholesale trade sectors (table 2).

Figure 1. United States outward FDI position, by region, 1995

Source: United States Department of Commerce, Survey of Current Business, various years.

Note: percentages do not total 100, owing to rounding.

The growth of United States FDI in East Asia, however, has not been evenly distributed. In 1995, Japan hosted more than 40 per cent of accumulated United States FDI in the region, followed by Hong Kong (China), Singapore and Indonesia (see figure 2 for a percentage breakdown of the United States FDI position in East Asia, excluding Japan, as of 1995). China, by contrast, hosted that year by far the smallest stock of United States FDI in East Asia, followed by the Philippines and Malaysia. Yet recent changes in the regional destinations of United States FDI flows suggest that the ranking of China in particular will change significantly in the coming years.

Figure 2. United States outward FDI position in East Asia (excluding Japan), 1995

Source: United States Department of Commerce, *Survey of Current Business*, various years.

Despite the relative concentration of accumulated United States FDI in Japan as compared with other East Asian hosts, among advanced industrialized nations Japan has received relatively modest quantities of United States (and other) FDI. Although it remains the second largest economy in the world, it ranked fourth as host to United States FDI by 1995 – behind the United Kingdom, Canada and Germany.⁵ Indeed, the modest amount of accumulated FDI in Japan from all home countries as a percentage of GDP marks Japan as an outlier among the major OECD nations (Mason, 1995).⁶ Combined

⁵ United States Department of Commerce, *Survey of Current Business* (July 1996, p. 47). Yet the United States is by far the largest foreign direct investor in Japan. As of 31 March 1996, for example, on approval basis, the United States share of total stocks of FDI in Japan stood at an estimated 41 per cent; the share held by all European nations (the second-largest source of FDI in Japan) amounted to just 31 per cent (Ministry of Finance, Japan).

⁶ An alternative measure of the United States FDI presence in Japan is the gross product of United States majority-owned non-bank affiliates in Japan as a percentage of Japanese GDP. According to this measure, which addresses the central issue of United States-owned or controlled economic activity in Japan as a share of total Japanese economic activity, this share in 1994 stood at just 0.5 per cent. This figure placed Japan 44th among 48 countries analyzed for such United States shares of host GDP by the United States Department of Commerce (United States Department of Commerce, *Survey of Current Business*, December 1996, p. 19).

with the massive surges of Japanese FDI to the United States in recent years, Japanese FDI stocks in the United States now greatly exceed United States FDI stocks in Japan (United States Department of Commerce, *Survey of Current Business*, July 1996, pp. 47, 50).

The sectoral distribution of United States FDI in individual East Asian host economies has also been spread unevenly. According to 1995 stock figures, large (one half or more) shares of United States FDI in Malaysia and Taiwan Province of China, for example, are concentrated in manufacturing (table 2). More than one-third of United States FDI in Hong Kong, China is located in wholesale trade, whereas almost three-fourths of accumulated United States FDI in Indonesia is found in petroleum. United States FDI in Japan and the Republic of Korea is somewhat more evenly distributed across major industry categories.

Host economy	All industries	Petroleum	Manu- facturing	Wholesale trade	Banking	Finance, insurance and real estate	Other services	Other industries
China	1 997	794	899	95	(D)	(D)	(D)	135
Hong Kong, China	13 780	600	1 980	4 953	1 323	3 7 7 2	565	587
Indonesia	7 050	5 132	204	64	(D)	36	(D)	1 404
Japan	39 198	6 3 4 6	16 664	7 561	451	6736	686	753
Republic of Korea	5 332	(D)	1 548	613	1819	407	49	(D)
Malaysia	3 653	570	2 685	137	41	150	-1	71
Philippines	2 648	(D)	1 254	200	259	(D)	(D)	235
Singapore	12 570	2 4 2 0	5 272	1 802	557	1 820	432	268
Taiwan Province								
of China	4 391	(D)	2 914	430	488	176	157	(D)
Thailand	4 596	1 375	1 768	369	476	70	43	495
Total	95 215	17 237	35 188	16 224	5 414	13167	1 933	3 948
Total (excluding Japan)	56 107	10 891	18 524	8 663	4 963	6 431	1 2 4 7	3 195

 Table 2. United States outward FDI position in East Asia, by sector, 1995

 (Millions of dollars)

Source: United States, Department of Commerce, Survey of Current Business, various issues.

Note: finance excludes banking; (D) denotes suppression to avoid disclosure of data of individual companies.

Other principal sources of FDI in East Asia

The United States maintains a significant but not pre-eminent position among foreign direct investors in the region. It is estimated

that aggregate FDI stocks in East Asia from Western Europe, for example, now roughly equal those of the United States.⁷ Indeed, United Nations data as cited in Petri (1995) suggest that rough parity had been achieved as early as 1980.

On the other hand, for a number of years Japan has apparently outinvested the United States in the rest of East Asia in terms of flows and, more recently, may have come to rank above the United States on a stock basis as well. From 1990 through 1995, for example, Japan may have directly invested as much as \$25 billion in the five principal ASEAN economies, whereas the United States directly invested less than \$18 billion.⁸ And for East Asia as a whole (excluding Japan), FDI flows from Japan may have exceeded FDI flows from the United States by as much as \$15 billion during these same years.

By 1995, these flows had apparently catapulted Japan ahead of the United States in terms of accumulated FDI in the rest of East Asia. The Japanese FDI position in 1995 stood at roughly \$87 billion, whereas the corresponding United States position amounted to just \$56 billion that same year.⁹ On a global basis, Japan had also invested a far larger proportion (23 per cent) of its FDI in other parts of East Asia than had the United States (18 per cent).¹⁰ By individual host country, however, it is estimated that in 1995 the United States had

⁷ For example, EC/UNCTAD data on Triad FDI in "developing Asia" suggest that, as of 1993, total European Union FDI stock accounted for 13 per cent of total FDI stocks in the region, as compared with 14 per cent for the United States. "Developing Asia" comprises the NIEs, ASEAN and China. See European Commission and UNCTAD (1996, pp. 28-29).

⁸ Cross-national FDI comparisons based on data compiled by different national governments, used here, should of course be treated with considerable caution. The Japanese Ministry of Finance measures FDI on a notification basis, whereas the United States Department of Commerce measures FDI actually carried out. (The Bank of Japan does report certain measures of Japanese FDI on a balanceof-payments basis, but such data are not as detailed as Japanese FDI statistics issued by the Ministry of Finance.) Other definitional and measurement techniques further complicate the story. The numbers cited above therefore provide only very rough approximations of relative FDI flows and stocks.

⁹ The following official Japanese data are based on the Japanese fiscal year, which begins on 1 April.

¹⁰ These Japanese FDI data refer to the proportion of total Japanese stocks in "Asia and Oceania", as defined by the Ministry of Finance; United States data refer to shares of total United States stocks in "Asia and the Pacific", as defined by the United States Department of Commerce.

still amassed more FDI in Singapore than had Japan, and approached parity with Japan in Taiwan Province of China as well. On a sectoral basis, Japan had a proportionately greater amount of FDI in regional manufacturing than did the United States.

Owing to the rapid growth of Japanese and other East Asian FDI in the region, intra-East Asian FDI has recently outpaced FDI from the United States and other extraregional sources.¹¹ In addition to Japan, the four Asian NIEs had become major foreign direct investors in East Asia. According to Petri (1995), for example, these four economies together accounted for some 70 per cent of all FDI stock in China and almost 30 per cent of such stock in ASEAN during the period 1986-1992 (table 3). It is estimated that, for these same years,

			Host o	country	
Home cour	ntry	China	NIEs	ASEAN	All East Asia
Linited Ct	a				
United St	ales 1980	16.9	35.6	12.0	20.0
	1988	15.8	31.9	13.2	20.0
	1986-1992	8.0	J1.7	13.5	20.7
Europe	1700 1772	0.0		10.0	
Laropo	1980	14.6	22.4	20.5	19.8
	1988	9.5	20.4	26.0	20.5
	1986-1992	4.4		15.6	
Japan					
	1980	5.8	24.1	32.9	24.4
	1988	7.2	32.0	28.8	25.5
	1986-1992	10.2		25.8	
NIEs	4000				04.0
	1980	55.8	6.7	24.3	26.0
	1988	63.1	6.2	22.3	24.7
ASEAN	1986-1992	70.9		29.5	
ASLAN	1980	0.5	2.1	0.7	1.1
	1988	0.8	1.1	1.0	1.0
	1986-1992	0.8		2.5	1.0
Other		010		2.0	
	1980	6.5	9.0	9.5	8.7
	1988	3.6	8.4	8.7	7.6
	1986-1992	5.6		13.1	

Table 3. Distribution of inward FDI stocks in East Asia by home country,1980-1992

(Percentage)

Source: Petri (1995).

¹¹ Much of the FDI flowing into East Asia in recent years originated among overseas Chinese enterprises located both within and outside the region. Owing to a variety of measurement problems, however, there are no accurate estimates of the volume of these flows.

FDI flows from Hong Kong, China, alone accounted for some 30 per cent of total FDI flows in East Asia, and more than 60 per cent of total FDI flows to China.¹² Among the other Asian NIEs, Taiwan Province of China also had become a major investor in the region, especially in China (Kawaguchi, 1994).

Major East Asian recipients

From the host perspective, FDI in East Asia has expanded dramatically. It is estimated that FDI stocks in East Asia (excluding Japan) more than doubled between 1988 and 1992.¹³ Inward FDI flows to the region have accelerated markedly in recent years, although the pattern of these flows differs somewhat from the distribution of existing stocks. Specifically, since 1992 China has been the largest regional recipient of FDI inflows by far, followed by Singapore, Indonesia and Malaysia (table 4).¹⁴

In sum, a number of important patterns emerge from these data. First, United States FDI in East Asia has increased significantly in recent years, both absolutely and as a percentage of United States FDI throughout the world. Second, although the United States has directly invested more in Japan than in any other economy in the region, when adjusted for the size of its economy Japan has received unusually small amounts of United States FDI. Third, the United States has directly invested in East Asia accumulated sums roughly equivalent to those of Western Europe, but was then eclipsed as an FDI source by Japan and other East Asian economies. In addition to Japan, Hong Kong (China), Taiwan Province of China and the other Asian NIEs have directly invested very substantial amounts in the region. And finally, these changes are reflected in rapid FDI increases from host perspectives as well. In particular, China has become by far the largest recipient economy of FDI inflows in the region in recent years.

¹² "Round-tripping" FDI from China via Hong Kong (now Special Administrative Region of the People's Republic of China) back to China, however, certainly inflates these figures substantially. It has been estimated, for example, that in 1992 at least one-fourth of all FDI flows from Hong Kong, China, to China originated in China (Kawaguchi, 1994, p. 5).

¹³ The following data are from Petri (1995, p. 36), and IMF statistics and World Bank estimates as cited in Kawaguchi (1994, pp. 2-3).

¹⁴ Indeed, by 1992 China had become the largest recipient of FDI inflows in the developing world.

	1984-1989							
Host economy	(annual average)	1990	1991	1992	1993	1994	1995	1996
Cambodia	-	-	-	33	54	69	80	350
China	2 282	3 487	4 366	11 156	26 515	33 787	37 500	42 300
Hong Kong, China	1 422	1 729	538	2 051	1 667	2 000	2 100	2 500
Indonesia	406	1 093	1 482	1 777	2 004	2 109	4 500	7 960
Korea, Republic of	592	788	1 180	727	588	809	1 500	2 308
Lao, People's Democra	atic							
Republic	1	6	8	9	60	60	75	104
Malaysia	798	2 333	3 998	5 183	5 006	4 348	5 800	5 300
Myanmar	1	5		3	4	4	10	100
Philippines	326	530	544	228	1 025	1 457	1 500	1 408
Singapore	2 239	5 575	4 879	2 351	5 016	5 588	5 302	9 440
Taiwan Province of								
China	691	1 330	1 271	879	917	1 375	1 470	1 402
Thailand	676	2 444	2 014	2 116	1 726	640	2 300	2 426
Viet Nam	2	16	32	24	25	100	150	2 156

Table 4. FDI inflows to East Asia (excluding Japan), by host economy, 1984-1996 (Millions of dollars)

Source: UNCTAD (1997).

It is generally expected that many of these trends will persist over the long term, although they may well moderate during the next few years. Some observers argue that the recent series of currency crises and related economic developments sweeping across much of East Asia will diminish fresh inflows of United States and other FDI during the period of adjustment which a number of these economics must now undertake. Yet East Asia's brighter long-term economic growth prospects, among other factors, suggest that rapid FDI inflows to the region will resume even if there is a brief period of correction.¹⁵

Causes and consequences

Causes

Why has FDI in East Asia generally grown so quickly in recent years? Part of the explanation lies in developments in the principal home economies. The post-Plaza rise in the value of the yen, for example, motivated large numbers of Japanese firms to invest abroad,

¹⁵ On the region's long-run growth prospects, see Radelet and Sachs (1997).

partly to reduce costs in labour-intensive assembly and manufacturing industries. Movement by such firms into geographically proximate East Asian markets also can minimize transportation and other transaction costs. In addition to the sustained competitive advantages of many individual United States firms, continued United States economic growth has probably encouraged its firms to expand further into East Asia.¹⁶ Recent growth in the Asian NIEs provided Asian TNCs with the means also to expand beyond their borders.

Perhaps more important, however, have been changes in host economies in East Asia. Consider, for example, changing political conditions. The wave of privatizations in a number of major industries has attracted significant amounts of foreign participation in recent years. These privatizations, in turn, have often formed part of larger and more broad-based national strategies to limit state participation in the economy. This transition to increasingly open and marketbased systems has, in turn, attracted the interest of growing numbers of TNCs.

Still more significantly, a number of East Asian governments have liberalized their traditionally restrictive FDI policy regimes in recent years.¹⁷ China, for example, began to open its domestic market to significant inflows of FDI beginning in 1979 with the passage of a landmark law on joint ventures (Lardy, 1994, pp. 63-66). This was followed by the promulgation in 1980 of regulations permitting FDI in special economic zones on China's south-east coast. These initial moves were followed by a nearly continuous series of further FDI liberalizations, including the opening of secondary markets in 1985, new rules permitting wholly foreign-owned affiliates announced in 1988, and further regulatory loosening and related measures in subsequent years. Neighbouring Japan completed its so-called capital liberalization process in 1980 when it abolished the foreign investment law that had protected the Japanese market from FDI inflows for three decades.

 $^{^{16}\,}$ On source country GDP growth/outward FDI behaviour, see studies as cited in UNCTAD (1994, pp. 18-19).

¹⁷ For a general discussion of global trends towards less restrictive FDI regimes, see UNCTAD (1996, chapter V).

Other East Asian governments have taken similar steps in more recent years. Perhaps most notably, Indonesia has greatly liberalized restrictions on inward FDI. This process included major new developments in 1994 which moved far beyond earlier such initiatives. Under the new rules, the Government of Indonesia proclaimed that foreign firms would henceforth be allowed to invest in wholly owned operations throughout wide areas of the Indonesian economy. Among other ASEAN governments, that of Thailand, to cite another important example, has gradually introduced new liberalization measures as well (Hill, 1994, p. 840). Initiatives such as these complement the longstanding openness of FDI regimes in other regional economies such as Hong Kong (China) and Singapore. Even the Republic of Korea, which for years had imitated restrictive Japanese practices of the postwar period, had by the 1990s begun to move beyond earlier policies by loosening restrictions on inward FDI.¹⁷

These changes in FDI regimes often have been accompanied by liberalizations of related trade measures and other changes in government policies which can affect cross-border economic activity.¹⁸ The creation of the ASEAN Free Trade Area in 1993 committed member governments to reduce intraregional tariffs on industrial goods to below five per cent within 15 years, and enabled two or more such governments to "fast track" tariff cuts on a variety of industrial products in less than 10 years. Export-promotion policies and FDI incentive programmes -- pursued by, among others, the Governments of Malaysia and Singapore -- have in some cases attracted FDI inflows. Other governments in the region have loosened restrictions on capital repatriation, boosted protections of intellectual property rights for foreign companies and opened up government procurement to such companies.¹⁹

¹⁷ Other governments in the wider Asian region which have significantly liberalized FDI policies in recent years include those of Cambodia, India, the Lao People's Democratic Republic, Myanmar and Viet Nam.

¹⁸ In addition, some East Asian governments have instituted incentives specifically to encourage FDI in export-oriented, high-technology and high value-added industries.

¹⁹ The Government of Japan, for example, has acted in recent years to somewhat improve intellectual property rights protections and open up government procurement to foreign firms.

Still more importantly, changing economic conditions in East Asia have influenced the development of FDI. The availability of increasingly skilled, low-cost labour has attracted significant interest among foreign firms. So too has the development of modern transportation, communications and other critical infrastructure in certain regional economies.

Most significant of all, however, has been recent East Asian economic growth. As is well known, many of the principal economies of the region enjoyed impressive rates of real GDP growth through the mid-1990s. Notable among are the economies of China, Malaysia, the Republic of Korea and Singapore. This rapid economic growth (together with the significant size of the Chinese market, in particular) acted as a powerful attraction to foreign investors.

Economic conditions and other factors in Japan, by contrast, have kept inward FDI there at a relatively low level. That country's subdued economic performance in recent years, for example, has certainly discouraged some potential foreign investors. The post-Plaza rise in the value of the yen (*endaka*), moreover, substantially raised the costs of investing in an economy whose domestic land prices and associated business costs had already ranked among the highest in the world. Indeed, many foreign (as well as Japanese) companies reluctantly concluded that *endaka* had raised local labour costs so high that, in many cases, labour-intensive manufacturing in Japan could no longer be justified on economic grounds.

In addition, numerous private-sector arrangements continue to impede inflows of FDI.²¹ Closed industry associations deny potential foreign companies access to critical information flows and business networks. Informal cartels and related features of Japanese industrial organization impede the free operation of markets and the ability of foreign companies to enter and grow. Japanese human resource practices and other aspects of local labour markets often make it difficult for foreign investors to hire adequate numbers of quality, educated Japanese workers.

²¹ The Government of Japan also continues to operate a number of FDI restrictions. On such remaining official FDI barriers, see Mason (1995).

Perhaps the most serious private-sector impediments to greater FDI in Japan stem from obstacles to foreign mergers and acquisitions. As is well known, United States TNCs have often favoured mergers and acquisitions abroad to expand into foreign markets rapidly and effectively -- particularly when seeking to enter complex overseas markets such as those in Japan, where long-standing relationships often prove critical to business success. However, unusual systems of corporate governance, relatively small quantities of publicly traded stocks of individual Japanese firms, limited disclosure requirements of listed companies and a general Japanese dislike of hostile take overs – by Japanese suitors or otherwise – have rendered acquisitions unusually difficult, even since the removal of formal government controls in 1980. In addition, the high levels of intra-corporate shareholdings between allied members of keiretsu business groups, which were greatly increased during the 1960s explicitly to prevent foreign take-overs after completion of the Government's capital liberalization programme, have contributed substantially to the host of problems which potential foreign acquirers must confront in Japan.²² Indeed, data point to the low levels of foreign mergers-and-acquisitions activity in Japan, as compared with the far greater mergers-andacquisitions activities carried out by Japanese companies both at home and abroad (Yamaichi Securities, n.d.). For these and other reasons, Japan continues to host relatively small amounts of FDI.

Consequences

Though often difficult to measure with precision, the generally rapid increase in FDI in East Asia has created a number of important consequences for home and host countries alike. From the home country standpoint, these consequences include costs as well as benefits. In some instances, for example, FDI can cause considerable economic dislocation in specific home firms and industries. Such dislocation may, in turn, give rise to significant transactions costs in labour and other markets. Also, shifting operations abroad can diminish tax revenues collected by home country governments, and may create other undesirable effects as well.

 $^{^{22}\,}$ On impediments to foreign acquisitions in Japan, see in particular Lawrence (1993) and Mason (1995).

On the other hand, FDI has created important benefits for home economies whose firms have directly invested in foreign countries. In the case of East Asia, for example, United States FDI has enabled many United States TNCs to exploit a range of location-specific advantages including cheap and increasingly skilled human resources. This, in turn, has reduced the costs of many products manufactured by these TNCs. The export of these products back to the United States ultimately should lower prices paid by American consumers.

Moreover, recent research suggests that exports and FDI often act as complements rather than substitutes, and that certain types of FDI may appreciably increase exports from home to host economies. Graham (1996a), for example, found that United States FDI and United States exports in the manufacturing sector were positively correlated, both cross-sectionally and cross-nationally. Encarnation (1992) found that United States FDI in majority-owned affiliates in Japan often created substantial demand for United States exports to Japan (often through intra-company shipments) by these overseas affiliates, particularly in the wholesale sector. If further research corroborates these findings, greater levels of United States FDI in East Asia may well increase United States exports (as well as overall market access) to that region.²³

Some host East Asian economies have borne important costs associated with the rapid influx of FDI in recent years. Perhaps most controversial are the alleged effects of FDI on the host country's economic and political sovereignty. The high level of FDI in the Malaysian manufacturing sector, for example, has led to questions about Malaysian dependence on foreign TNCs in determining the economic performance of critical sectors of that country's economy. The Singaporean economy likewise remains critically dependent on the actions of overseas direct investors. Cases such as these also raise long-standing fears about increasing political as well as economic dependence of host countries on foreign TNCs, popularized in the

 $^{^{23}}$ Although the logic for a causal connection between FDI and exports is clear, some dispute the direction of causality and, indeed, the very existence of such causality. See, for example, Ito (1994) on the relationship between Japanese FDI in the United States and Japanese exports to that market.

United States by debates over "Who is us?" (Reich, 1990; Tyson, 1991).

Despite these drawbacks, however, the growth of FDI in East Asia has brought enormous benefits to host economies. Consider some of the recent contributions of FDI to the Chinese economy. It is estimated that, in 1995, the industrial output of foreign affiliates in China as a share of China's total industrial output amounted to roughly 13 per cent, and that these affiliates accounted for some 10 per cent of total Chinese tax revenues (table 5). In addition, such firms have contributed significantly to China's export performance. Exports of foreign affiliates as a share of total Chinese exports have been increasing steadily since at least the late 1980s, for example, reaching an estimated 31 per cent by 1995. By 1995, these affiliates also had directly created some 16 million jobs in China. The contributions of FDI in China do not stop there. Such investment also has provided vast amounts of fresh capital to this rapidly growing economy: it is reported, for example, that, by 1995, FDI accounted for about 26 per cent of China's total gross domestic investment. And, finally, the local entry of TNCs has led to important transfers of advanced technology, management methods and other firm-specific assets.

Measure	1991	1992	1993	1994	1995
Actual FDI flows (billions of dollars)	4.4	11.2	27.5	33.8	37.5
Average amount per project (millions of dollars)	0.9	1.2	1.3	1.8	2.5
FDI as a share of gross domestic investment (per cent)	4.5	8.0	13.6	18.3	25.7
Volume of exports by foreign affiliates (billions of dollars)	12.1	17.4	25.2	34.7	46.9
Share of exports by foreign affiliates in total exports (per cent)	17.0	20.4	27.5	28.7	31.3
Share of industrial output by foreign affiliates in total					
industrial output (per cent)	5.0	6.0	9.0	11.0	13.0
Number of employees in FDI project (millions)	4.8	6.0	10.0	14.0	16.0
Tax contribution as share of total (per cent)	-	4.1	-	-	10.0

 Table 5. The contribution of FDI to the Chinese economy, 1991-1995

Source: Zhan (1993, pp. 121-148) and MOFTEC data, as cited in UNCTAD (1996).

In short, among other positive effects, FDI in China has raised tax revenues, boosted exports, created new jobs, increased domestic investment, transferred technology and other assets, and, more generally, increased the competitiveness of the host economy. Although the contributions of FDI have probably been more dramatic in the case of China than in that of many neighbouring East Asian economies in recent years, benefits such as these are illustrative of the positive effects which FDI has produced throughout the region.

United States policy

Current policy

With certain exceptions, official United States policy supports the free and open flow of FDI throughout the world. Just as it generally permits such investment at home, the Government of the United States seeks similar rights for United States investors abroad. The United States, therefore, works to modify or eliminate foreign government policies that impede FDI flows based on market forces. This policy was clearly enunciated by Presidents Ronald Reagan in 1983 and George Bush in 1991, and broadly reiterated by President Clinton in a 1993 speech affirming that "as we welcome [foreign investment in the United States], we insist that our investors should be equally welcome in other countries".²⁴ Yet the United States, like virtually all other countries, does maintain various sectoral exceptions that relate to the rights of foreign investors, and has adopted other measures as well which can or do impede the entry or operation of FDI in the United States.²⁵

This overall United States policy supporting free international capital flows is based on a number of underlying principles. Chief among these is the principle of national treatment, which holds that governments in general should treat foreign investors no less

²⁴ Clinton's address on international economics at the American University, Washington, D.C., 26 February 1993. Reagan's policy was set forth in the "International investment policy statement," 9 September 1983; and Bush's policy was articulated in "United States foreign direct investment policy," 26 October 1991.

²⁵ On various United States exceptions to national treatment, for example, see Brewer (1995, pp. 130-131). In addition, the Exon-Florio Amendment empowers the President to block foreign acquisitions that threaten United States national security; and the Helms-Burton Act raises the specter of extra-territorial application of United States laws through imposition of sanctions on certain foreign companies.

favourably than they treat domestic investors in similar situations. Only in exceptional circumstances, such as national security, does the United States recognize legitimate grounds for governments to treat foreign investors less favourably than domestic counterparts. In such cases, the United States instead supports treatment of foreign investors consistent with the most-favoured-nation principle.²⁶ The United States also explicitly supports the right of establishment by foreign investors.

To achieve its policy goals, the United States currently pursues initiatives with foreign governments on a number of different levels. At the multilateral level, United States officials have supported efforts to modify the Agreement on Trade-Related Investment Measures (TRIMs) and similar public policies that affect FDI. The United States not only adheres to the OECD's Guidelines for Multinational Enterprises and its Code of Liberalisation of Capital Movements, but has also sought to fashion a consensus within the OECD for investment measures that go beyond those contained in the Guidelines and the Code.²⁷ In addition, the United States has participated in recent OECD discussions to elaborate a more comprehensive investment instrument under the auspices of that organization. At the regional level, the Government of the United States concluded with Canada and Mexico the North American Free Trade Agreement (NAFTA), which contains various FDI-related measures, and agreed with other Asian-Pacific Economic Cooperation (APEC) members to establish a regional code of non-binding investment principles.

At the bilateral level, the United States continues to negotiate with individual foreign governments on specific standards of treatment for FDI, dispute-settlement mechanisms, performance requirements and other matters. These negotiations have led to the recent conclusion of bilateral investment treaties (BITs) with Bangladesh, Mongolia and Sri Lanka, and to substantial progress in discussions with Hong Kong,

²⁶ In addition to national security and related concerns, these exceptions include certain international obligations which may affect the position of United States direct investment abroad.

²⁷ The United States also sought, unsuccessfully, to include investment measures in the Uruguay Round beyond those covered in the TRIMs and the General Agreement on Trade in Services (GATS).

China.²⁸ In addition, the United States seeks to conclude BITs and other bilateral FDI arrangements with additional East Asian countries.

Critical policy issues

Among the range of FDI-related policy issues in East Asia that currently confront the United States, two especially important issues stand out. First, policy makers should determine what priority the United States should assign to FDI as opposed to international trade with East Asian counterparts. To date, the Government of the United States has generally emphasized the importance of international trade issues in East Asia and elsewhere, and successive postwar United States administrations have therefore placed trade negotiations at or near the top of their international economic agendas.

Yet recent trends underline the growing significance of FDI in the global economy. Global FDI flows, for example, have expanded prodigiously in recent years. As a result, UNCTAD estimated that, by 1995, the total stock of FDI worldwide approached \$3 trillion, and that such investment by that date had created some 200,000 foreign affiliates of TNCs. Indeed, this same United Nations body reported that, in 1995, these affiliates accounted for roughly \$6 trillion in net sales – an amount which surpassed the value of total exports of goods and non-factor services worldwide by more than 25 per cent (UNCTAD, 1996, chapter I). And, as previously discussed, United States FDI in East Asia in particular recently has increased even more rapidly than its overall FDI growth rates. To this must be added the growing recognition, noted above, that investment and trade have become highly interrelated economic phenomena, and that investment apparently often acts as a complement to (rather than a substitute for) international trade. However, compared with international trade, there exist far fewer rules and conventions designed to promote FDI flows based on market principles (UNCTAD, 1996, chapter V). To properly adjust to these new international economic and political realities, the Government of the United States should therefore significantly increase the priority it assigns to FDI policy matters.

 $^{^{28}}$ The United States has so far been more successful in concluding bilateral investment treaties with other western hemisphere countries than it has been with Asian economies.

Second, United States officials should identify and work to implement those international investment policy arrangements that would most effectively advance the broader United States policy goal of freer capital movements in East Asia (and elsewhere). There are, of course, a multiplicity of alternative investment arrangements that vary in terms of substance as well as geographical coverage. Examples of "strong" or "high-standards" substantive provisions in international investment accords include those that require binding adherence to the terms of an agreement, commitments to national treatment and most-favoured-nation treatment, prohibitions on performance requirements, use of binding dispute-settlement mechanisms, and strict limits on the ability of parties to maintain exceptions to specific aspects of an investment instrument (UNCTAD, 1996, p. 162). In addition, of course, the geographical scope of international investment accords may be bilateral, regional or multilateral.²⁹

There are strong reasons to argue that the United States should support the implementation of a comprehensive multilateral accord under the auspices of the World Trade Organization (WTO) which contains high standards. Of course, such an agreement on FDI, even if ultimately achieved, would not be without significant drawbacks. For one thing, such an overarching accord would limit future policy options available to individual member countries (or groups of countries) in elaborating their own FDI policies. Second, it is quite conceivable that any such accord would favour the relatively small number of powerful and advanced countries, whose officials would presumably yield enormous clout in negotiations to draft any such investment arrangement. And third, successful conclusion of an agreement on FDI would require difficult policy adjustments by numerous countries, particularly many developing countries.³⁰

Yet the arguments in favour of a multilateral approach are numerous and compelling. First, such an approach would ultimately create a clearer, simpler, more consistent and more coordinated

²⁹ This list of geographical arrangements may now include the notion of "plurilateral" agreements, which generally signifies an accord within the WTO in which not all WTO members participate.

³⁰ For further discussion of the potential drawbacks of such a multilateral investment accord, see for example UNCTAD (1996, pp. 161-166).

international policy regime with broad geographical coverage to deal with this increasingly important aspect of international business. Second, it would logically build upon – and establish an investment policy arrangement corresponding to – the current WTO multilateral trade regime.³¹ Third, a broad-based multilateral instrument would provide home country governments with a powerful defence against domestic interests attempting to secure special local treatment. And finally, such a comprehensive international investment accord could ultimately replace the proliferating series of arrangements at various levels of geographical coverage whose provisions often overlap, contain gaps and exhibit important inconsistencies (UNCTAD, 1996, chapter VI; Graham, 1996).

However desirable the ultimate adoption of such a highstandard, multilateral policy instrument, it will clearly require a long period of sustained effort to achieve. For one thing, the history of multilateral trade accords suggests that wide-ranging agreement on substantive international economic issues is enormously complex, time-consuming and difficult to reach even in the best of circumstances. And it will certainly take some time to persuade many WTO member countries, including India, Malaysia and Pakistan among others in the Asian region alone, to sign up to such an international policy arrangement.³²

As it pursues this longer-term objective, the United States should also work to fashion certain "second best" accords which, even if greatly limited in geographical scope, can at least be achieved more rapidly and set high standards. Naturally, any such accords should be crafted so as to foster rather than discourage longer-run attempts to achieve a more comprehensive arrangement such as that outlined above (or, in current parlance, fashion agreements which are "building blocks" rather than "stumbling blocks"). Also desirable are agreements which contain relatively strong provisions, for such agreements not only carry immediate impact, but also could effectively

³¹ Indeed, the WTO has already adopted a number of important investmentrelated measures covering services, intellectual property rights and so forth.

³² Also, until it becomes a WTO member, China would not be covered under such a multilateral arrangement.

demonstrate the advantages of high-standards accords to those countries still reluctant to accept them. By contrast, broader multilateral accords short on substance, even if attainable, would have little practical significance for either business or government.

The most effective strategy consistent with this "second best" component of a broader United States approach is for United States officials to concentrate greater efforts on concluding new BITs with one or more leading East Asian countries whose FDI policy regimes are already fairly open. Such bilateral accords, if properly fashioned, could create useful stepping stones along the road towards a strong multilateral WTO instrument in part by offering sceptical East Asian nations concrete examples of neighbouring States which committed themselves to - and then presumably benefited from - the extension to foreign investors of national treatment, MFN status, binding disputesettlement mechanisms and other strong provisions. In recent years, of course, a number of key East Asian countries have been reluctant to adopt high-standard international investment instruments, in part because they believe that such instruments could threaten national development strategies. However, the conclusion and successful operation of a strong United States BIT with an important regional player, such as Singapore, might well assuage the fears of neighbouring countries about the economic consequences of such agreements.

On the other hand, the United States Government would be well advised to curtail current efforts either to strengthen the APEC code of non-binding investment principles or to conclude the OECD Multilateral Agreement on Investment (MAI). As part of its larger programme to encourage more open, rules-based market competition throughout the region, APEC's Eminent Persons Group recommended in early 1994 that the APEC member States adopt a "Concord of Principles" relating to FDI in the region. Subsequently, a draft code was adopted at the APEC summit meeting in Indonesia in November 1994. In its final form, the code, which is open to non-APEC member countries, calls upon adherents to "aspire" to numerous principles critical to foreign direct investors, including transparency, nondiscrimination and national treatment. The text of the APEC code, however, omits many items and remains vague in numerous other instances. The national treatment provision, for example, permits member States to exempt themselves – through invocation of official domestic measures – from enforcing this important principle in specific cases . The investment incentives provision, on the other hand, does not include numerous categories of official FDI incentives. Moreover, the performance requirements provision, to cite a third example, calls on member States to minimize rather than eliminate such measures regarding inward direct investment. In addition, of course, the entire code is voluntary rather than binding. Greatly strengthening these provisions would be very difficult to accomplish in the near future, for numerous important East Asian governments, including those of China and Malaysia, currently oppose adoption of a high-standard APEC investment code.³³

Also problematic is the proposed MAI still (since 1995) under negotiation at the OECD. Although the current draft agreement contains certain relatively "strong" provisions covering the protection of FDI and binding dispute-settlement mechanisms, the singularly ineffective OECD secretariat has been unable to stop the proliferation of national exceptions -- now running to hundreds of pages -- or to bring the process to a close by hammering out a final accord. In addition, serious opposition has arisen among certain OECD-based trade unions and environmental groups, as well as representatives of specific industrial sectors, to one or more provisions of the draft accord. And, of course, any such document would not cover the vast majority of Asian countries which do not belong to the OECD.³⁴

To achieve its broader policy goals in this increasingly important field of international business, the Government of the United States

³³ Indeed, in a recent review of progress towards improving this APEC investment regime, Bora and Graham (n.d.) found disappointingly "little to cheer about", and saw little prospect of substantial improvement in the APEC code in the near future. Moreover, even the initial decision to sign up to this weak regional code proved highly controversial for the many United States officials (including then Chief United States Trade Representative Mickey Kantor) who originally had sought a far stronger agreement. See, for example, Green and Brewer (1995, p. 7).

³⁴ On recent difficulties encountered in drafting the MAI, see for example The Financial Times, 19 January, 15 and 16 February 1998, and the Economist, 14 March 1998.

should, in sum, focus its efforts on concluding high-quality international investment accords with the ultimate aim of broader geographical coverage. This means focusing official energies on the conclusion of rigorous individual BITs in the short term and on achieving a high-standard WTO-administered multilateral investment treaty in the longer term. Major new United States initiatives either to bolster the weak APEC investment code or to push through the poorly coordinated and now watered-down MAI among OECD member countries, on the other hand, would not constitute the best use of limited official resources.

Conclusions

Foreign direct investment in East Asia has grown substantially in recent years, and such investment is likely to remain at a relatively high level over the longer term. With respect to both absolute amounts and relative global shares, United States firms have invested substantial and increasing sums throughout most of the region. At the same time, intraregional FDI, originating largely in Japan and the Asian NIEs, has grown still more quickly in recent years. China has emerged as the largest regional recipient of FDI inflows, followed by Singapore and other economies in the region. Fresh inflows of FDI to certain East Asian host economies may temporarily slow down as countries in the region adjust to current economic difficulties, but such inflows likely will resume their rapid pace once this period of adjustment has passed.

Investments to date have been driven by political as well as economic factors. Sustained United States economic expansion, the post-Plaza rise in the value of the Japanese yen and rapid growth in the NIEs are among the principal factors as far as the home economies are concerned. Liberalization of FDI regimes, further policy moves towards market-based economic systems, growing regional integration and high rates of economic growth through the mid-1990s furnish the principal host country explanations.

Although FDI in East Asia has incurred costs in home and host countries alike, the benefits to both have been very substantial indeed.

For home countries, these benefits include access to increasingly skilled, inexpensive labour and improved access to local markets. For host countries, high levels of FDI have often provided fresh sources of capital, increased tax revenues, more jobs, increased exports and the inward flow of technology and other firm-specific assets.

The United States confronts at least two major policy issues with respect to FDI in East Asia. First, in talks with its East Asian partners, the Government of the United States must decide what priority to assign FDI as compared with international trade. Because of the dramatic growth of United States and other FDI in recent years in East Asia (and elsewhere), the related proliferation of foreign affiliates and the growing interconnections between FDI and trade, United States officials should attach greater importance to FDI. And second, United States policy makers should identify and promote the adoption of high-quality international policy arrangements that foster freer capital flows in East Asia. This policy goal points to a twopronged approach. On the one hand, United States officials should concentrate longer-term efforts on the adoption of a comprehensive, high-standard multilateral arrangement under the experienced guidance of the WTO, while on the other hand continuing their shorterterm efforts to conclude high-quality BITs with individual East Asian countries whose provisions could well act as models for the more ambitious multilateral WTO policy accord of the future.

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RESEARCH NOTE

Russian direct investment abroad: main motivations in the post-Soviet period

Alexander S. Bulatov*

Based on a questionnaire, this research note analyzes the main motivations for outward foreign direct investment by Russian transnational corporations. These motivations include the exploration of business opportunities, the need to have a direct presence in foreign markets, the strengthening of already existing trade links, the exploitation of company-specific advantages, a search for activities abroad, as well as a wish to establish a "spare business" abroad. These findings are further supported by historical and statistical information.

Historical introduction

Russian firms started to invest abroad in the last decades of the nineteenth century. Capital was exported primarily to China and Persia, as well as to Mongolia. During the period 1886-1914, Russian capital exports amounted to about 2.3 billion roubles (equivalent to \$33 billion at 1996 prices).

Between the two World Wars, the Union of Soviet Socialist Republics did not withdraw all outward investment, although it radically diminished it. To support trade with Turkey, Iran, Afghanistan and Mongolia, a whole net of trading companies was established and operated in those traditional partner countries. Trading affiliates in Western Europe were added later. Also, various

^{*} Professor at the Russian Foreign Trade Academy, Moscow, Russian Federation.

banks, transport, insurance and other types of firms were established abroad with Soviet capital.

In the post-war period, the number of companies abroad increased somewhat. In 1988 there were 125 such companies located in 35 countries (Dracheva, 1989). They were selling about 40 per cent of Soviet oil and oil product supplies abroad, 60 per cent of the timber, paper and cellulose exports and more than 50 per cent of the exports of civilian- use manufactured goods (Sokolov, 1991).

However, for the post-war Union of Soviet Socialist Republics, it was more typical to grant government loans to selected countries. In 1986, Soviet net official economic aid to the developing countries only (including Asian communist countries and Cuba) amounted to about \$23 billion (*Pravda*, 1987), i.e. about 2 per cent of the GNP of the Union of Soviet Socialist Republics. The sum did not include "price aid" (via low prices of Soviet exports to selected countries and high prices of Soviet imports from those countries) or military aid, which in some years was larger than economic aid. Later on, the amount of official loans decreased radically (with the exception of 1992-1993 when the Russian Federation repaid substantial loans to the other former Soviet republics). Nowadays, official Russian foreign aid (public and publicly guaranteed loans) amounts to \$0.2 billion (according to balance-of-payments figures for 1995-1997).

Simultaneously, outward private portfolio and other capital flows have increased radically. In 1997 alone, the value of loans granted by Russian banks amounted to \$2.2 billion, while the export credits and import advances of Russian non-banking enterprises amounted \$6.8 billion. These flows were accompanied by a reduction of Russian deposits legally held abroad (by \$1.5 billion), and a growth of foreign currency cash held by Russian residents (by \$13.5 billion).

Another relatively novel feature of Russian outward investment is the increase in flows which are thought to contribute to capital flight. Capital flight (impossible in the Soviet period because of the closed nature of the Soviet economy) may occur in various ways legal ones (relying on legislative loopholes) and illegal ones described in Bhagwati's pioneering work (Bhagwati, 1974) and measured by various methods, including the one based on balance-of-payments data (Claessens and Naude, 1993). Table 1 presents the 1995-1996 data for the Russian Federation. The last five entries in particular are supposed to be related to capital flight.

In 1995, capital outflows equalled about 6 per cent of Russian GDP, amounting to \$620 billion on a purchasing power parity basis (Goskomstat, 1997). The estimate for 1996 and 1997 is 8 per cent of GDP. The stock of Russian investment abroad – direct, portfolio and other – was estimated by Rybkin (1995) to amount to \$130 billion at the beginning of 1995. Gorshenin's estimate (1995) is of the same

()							
Type of investment outflow	1995	1996	1997				
Direct investment	0.3	0.8	2.5				
Portfolio investment	1.5	0.2	0.2				
Official sector loans extended and guaranteed	0.2	0.2	0.2				
Bank loans	3.8	-0.4	2.2				
Merchandise credits and advances	9.0 ^a	9.5	6.8				
Deposits in foreign banks	-4.4	1.0	-1.5				
Foreign currency cash	0	8.9	13.5				
Migrants' capital transfers	3.5	3.5	2.9				
Other assets	0.3	0.1	-0.2				
Receipts delays of export earnings	3.8	5.5	4.6				
Receipts of import advances	6.3 ^b	4.3	6.9				
Export and import misinvoicing, net	1.8	0.8	-0.2				
Smuggled export goods	2.0 ^c	3.0 ^c	4.0 ^c				
Errors and omissions ^a	8.1	7.3	8.1				
Total	38.9	44.7	50.0				

 Table 1. Russian investment outflows by balance-of-payments

 components, 1995- 1996
 (Billions of dollars)

Source: "Platezhnyi balans Rossii v 1995", Vestnik Banka Rossii, No. 23 (26 May 1996), pp. 9-13; "Platezhnyi balans Rossii v 1997", Vestnik Banka Rossii, No. 43 (29 June 1998), pp. 12-13, 23-33.

^a Author's estimate.

^b Bank of Russia's estimate.

^c Customs Committee of Russia's estimate for 1992 is extrapolated to 1995 and 1996.

^d The errors and omissions item of the balance of payments primarily covers unregistered capital movements, especially capital flight (see Claessens and Naude, 1993).

order of magnitude. But Khaldin and Andrianov (1996) believe that the volume of Russian investment abroad is more than \$300 billion, of which direct and portfolio investments each represent \$30-40 billion.

These are very rough estimates. For Russian FDI outward stock, a figure of \$20-30 billion would seem to be more realistic. This figure is based on certain deductions. Sokolov (1991) estimated the book value of Soviet companies abroad to be \$2 billion at the beginning of the 1990s, while Gorshenin (1995) put its market value at \$10 billion. In 1992-1996, the accumulated FDI outflows based on balance-of-payments data amounted to about \$3.5 billion. Their market value, however, may be much greater. At the same time, part of Russian assets is financed through outflows registered under other flows (see table 2), thus increasing the whole outward FDI stock substantially. For the sake of international comparison, the 1996 estimates for the outward investment stock of China, Hungary and Poland were, respectively, \$18 billion, \$0.5 billion and \$0.3 billion (UNCTAD, 1997).

Scope of the enquiry

Data on Russian outward FDI stock are not available in official Russian statistics. The Government Registration Board (Gosudarstvennaya Registratsionnaya Palata) under the Ministry of Economy focuses on the registration and statistics of inward FDI in the Russian Federation. It has outward data only on 2,000 foreign affiliates of Russian companies, although the number of those affiliates is estimated to be dozens of thousands (predominantly small offshore companies, whose number is more than 60,000 -- see Khaldin and Andrianov, 1996). This is why the most reliable way to obtain data on Russian FDI abroad is to question Russian investors themselves.

In 1996, 22 Russian companies with FDI responded to a questionnaire prepared for the purpose of analyzing their activities. They were chosen in order to constitute a representative sample of Russian TNCs, the majority of which are in one of the first stages of transnationalization - ethnocentric or polycentric (see Heenan and

Perlmutter, 1979) - i.e. sales/purchases operations are a priority for doing business abroad (for the composition of the sample, see box 1). The respondents were top- and medium-level managers. The questionnaire was anonymous.

Box 1. Composition of the sample: two examples

The largest TNC participating in the survey was the NFM trading company (for the sake of anonymity, the real names were changed to three-letter random abbreviations), founded in 1931. The State still owns 49 per cent of this joint stock company, although it operates independently. NFM primarily distributes Russian oil and oil products abroad (it has sales of \$3,300 million) and foreign oil products in the Russian Federation (the volume of sales is \$150 million). NFM is headquartered in Moscow, and has 180 employees and 10 foreign affiliates, mainly in Europe.

One of the smallest TNCs is UVL, founded in 1995. Private in origin, this partnership operates in the Russian Federation (with sales of \$3 million) and abroad (sales of \$5 million), where it has two affiliates (in Switzerland and the Czech Republic) and four offices. It is a jewellery company, producing and distributing jewellery in the Russian Federation and Europe.

Of the 22 Russian parent companies in the sample, there are:

- 9 trading companies, 3 of which focus on machinery and equipment, 1 on technology-related products, 3 on industrial materials, fuel and agricultural and forestry products and 2 on miscellaneous goods. Four of them (STI, LTG, CIM and ELS) are still state-owned. The others are private in origin or have been privatized (NEM is privatized up to 51 per cent of its shares);
- 10 industrial and service companies, 2 of which operate in mining, 6 in manufacturing, agriculture and forestry, and 2 in service industries (insurance and navigation). Most of them

are private companies, except for ZNF (state-owned), FGS (privatized up to 25 per cent of its shares) and UAS (privatized up to 75 per cent of its shares);

• 3 conglomerates with interests in at least two Russian industries, all of them of private origin.

In some cases, respondents did not answer all the questions or gave multiple answers to the same question. As a result, the number of questions does not coincide with the number of answers. For the sake of anonymity the real name of each company was changed to a three-letter random abbreviation (see box 1).

General characteristics of the sample companies

The general characteristics of the sample firms are summarized in table 2.

The companies in the sample have 80 foreign affiliates (where their share is not less than 10 per cent). The number of affiliates that each company owns abroad varies. Only companies that are more than 30 years old have five or more foreign affiliates. Presumably this is because the traditional participants in the world market carrying out large-scale international operations with a stable group of clients are better positioned to build up international networks.

Most of the foreign affiliates are located in Western Europe (see table 3). This finding is in line with Russian trade figures: Western Europe accounts for 50 per cent of its merchandise exports and more than 40 per cent of its imports. As for the former Soviet republics, they attract only a few foreign affiliates, although they represent the Russian Federation's second largest market, and account for about 25 per cent of Russian exports and imports. The contradiction between low FDI and a high level of exports to the former Soviet republics is presumably the result of their proximity to the Russian Federation, the uncertain prospects of these markets and

Parent companies (profile and year of establishment)	Foreign affiliates of parent companies	Number of foreign affiliates	Business forms of foreign affiliates*	Shareholder equity (Thousands of dollars)	Parents part in shareholder equity (Per cent)	Russian personnel per foreign affiliate (persons)	Annual volume of sales (millions of dollars)	Industrial profile**
Trading compa	nies							
machines and e								
	AVE (1956)	6	corp. (2)					
			part. (4)	35-70	60-100	1-3	0.3-1.0	а
	TRE (1961)	10	corp.					
	CTI (1020)	10	part.	35-50	10-100	1-4	max. 1.5	а
to observations and	STI (1930)	13	corp.		97-100	4-11		а
technology-rela	LTG (1962)	2	corp.					
	LIG (1702)	2	part.	100, 800	49, 50	1		а
industrial mate	rials, fuel.		purt.	100, 000	17, 00			u
agricultural and		s						
5	NFM (1931)		corp.	1.5-13000	47-100	1-4	7-1500	p (a)
	CIM (1951)	6	corp.	300-2500	5-75	1-3	0.03-16	а
	ELS (1926)	3	corp.	10-1000	10-50	0-7		а
mixed profile								
	ABC (1992)		part.	1300	100	1		a
	TTT (1992)		part.		50	2		p (a,d,m)
Industrial and s mining industrie		anies						
mining muusun	ZNF (1967)	5	corp. (4)					
	2101 (1707)	5	JV (1)	1500-1500000	24.30			
			5. (.)	1000 1000000	36, 50, 50	1-900		p (a, b, e,
								f, n)
	FGS (1994)	1	corp.		51	10		p (a,e,n)
manufacturing,	agriculture							
and forestry								
	KMK (1988)		corp.	100	51	0	5	f
	MSC (1988)		corp.	100 65000	80 30	2 12	10 420	
	SVZ (1992) UAS (1991)		corp. corp.		30 50	12	420 5	p (c, l) p (l)
	UVL(1995)		part.	 100	60	10		р (i) I
	CHL (1993)		corp.	100	25	0	3	p (f)
services (insur			- o. p.			-	-	F \\/
(indu	IGH (1977)		part.		10-70	1-5		С
	PRH (1993)		corp.	3000	100	0	5	d
Conglomerates								
	ATR (1991)		corp.	200	50	1	12	o, b
	FZM (1992)		part.	100-1500	10, 60, 100	0		0
	OFK (1990)	3	part. (2) JV (1)		20, 100	2-6	4-6	a, b, e, g, h, I, m, n

Table 2. FDI by selected Russian companies

Source: responses to the author's questionnaire.

* "Corp. = corporation, part. = partnership, JV = joint venture

- ** Industrial profile of foreign affiliates:
- a. trade
- b. finance
- c. insurance
- d. transportation
- e. mining industries
- f. agriculture, forestry and food industry
- g. metallurgyh. chemistry and petrochemistry

- 1. manufacturing and assembling
- m. construction
- n. consulting
- o. mixed profile
- p. mixed profile with domination of a, b, c, d, etc. industries

Table 3. Geographical distribution of foreign affiliates of selected Russian companies (based on the number of affiliates) (Percentage)

Region	Share	Region	Share
Western Europe	58	Central and Eastern Europe (excluding former Soviet republics)	9
of which: Germany	11	North America	8
Finland	8	South, East and South-East Asia	16
United Kingdom	6	West Asia and North Africa	2
Switzerland	6	Sub-Saharan Africa	1
Italy	5	Former Soviet republics	6
Austria	5	Total	100

Source: responses to the author's questionnaire.

the Russian Federation's diminishing trade with them up to 1995-1996 (when this trade started to grow again).

The size of shareholder equity varies greatly -- from \$1,500 to \$1.5 million. The largest affiliate is a Russian-Vietnamese joint venture of the Russian mining company ZNF. The answers in the questionnaire suggest that the shareholder equity of a typical affiliate does not exceed \$100,000. The parent firm's share in shareholder equity varies considerably, especially if the parent firm was established during the Soviet period. Not less than one-third of all affiliates are those where the Russian parent company has 50 or more per cent of the shareholder equity.

The Russian personnel of foreign affiliates usually consists of top employees (general directors or deputy general directors, executive directors, commercial, financial and technical directors). The number of Russian employees is higher if an affiliate sells goods or is involved in production. In the latter case, there may be several hundred Russian staff members, including foremen and workers, if there is a shortage of qualified personnel in the country of location (as in the case of the Russian-Vietnamese joint venture of ZNF).

On the other hand, in seven affiliates there are no Russian employees at all. Two of them (ELS and KMK) are located in the

Ukraine and Belarus, where it is not difficult to find top managers with the requisite business mentality and background. Another example – CHL – has minimal participation in the shareholder equity of an affiliate, which is in itself small in size (\$10,000). In the case of the Liechtenstein affiliate of PRH, there are no Russian employees because its only task is to manage a Russian ship with a Russian crew. In the last three cases (three affiliates of FZM), a foreign presence was presumably not established for the purpose of managing the affiliate (motivations that might be close to capital flight).

The industrial profile of the foreign affiliates established by trading companies is mainly foreign trade, although the affiliates of two trading companies are engaged not only in commerce. The industrial profile of other companies' foreign affiliates is diversified. Probably this reflects the industrial diversification of the parent companies, which themselves engage in several businesses in the Russian Federation in order to counteract an unstable business situation. The most typical industry is trade, or trade and other businesses, even in the cases of diversified affiliates. Therefore, the typical foreign affiliate of a Russian company is engaged wholly or primarily in trade.

Motivations for FDI

To explain their motivations for investing abroad, the respondents could choose among 40 possible responses in the questionnaire. These were divided into six blocks, with a main question in each of them (see table 4).

The first block covered answers (motivations) connected with the negative aspects of the Russian investment climate (push factors). Traditional trading and service companies believe that these are not the reasons why they invest abroad. Established before the end of the 1980s, they have always been focusing on export-import transactions and related insurance services and therefore have traditionally invested outside the Russian Federation.

Table 4. Motives of FDI

(frequency of responses to the following questions)

	I. Investment is made abroad because investing	·					
a		9	e.	high level of taxation			
b	J. J	9	f.	high level of inflation	1		
С		3	g.	absence of proof of legal origin of capital	1		
d	high level of criminalization of business life	4	h.	limited possibilities or absence of			
				sibilities of profitable or reliable of			
			reli	able operations in Russia	1		
	2. Investment is made abroad because it	makes					
а			d.	reduce taxation in business operations			
	against disturbances in Russia	7		with the Russian Federation	6		
b	Jeres		e.	reduce taxation of business operations			
	permanently	0		with foreign countries	6		
С			f.	gather information and/or establish			
	proof of legal origin in Russia	3		and develop useful contacts	10		
		g.		open up new possibilities for business	13		
	3. FDI enhances the export and im	port op	eration	ns of a Russian investor because it			
	(52 respor	nses of	22 coi	mpanies):			
а	is more profitable than operations with		d.	helps the investor to know the situation			
	the assistance of intermediaries	9		in foreign markets	14		
b	more reliable than operations with		e.	provides presence on foreign markets	15		
	the assistance of intermediaries	10	f.	is necessary for pre- and post-			
С	more promising than operations with			sales services	2		
	the assistance of intermediaries	2					
	Investment is made in production capacity	ies abri	oad be	cause it is (16 responses of 11 companies):			
а			C.				
	a foreign market because of customs			of transportation, intermediaries			
	and other barriers	2		and other expenses	6		
b	 the only possible way to sell products on 		d.	more profitable than to sell a licence	1		
	a foreign market because of the nature of		e.	profitable for further exports by a			
	products themselves	2		foreign affiliate	5		
	5. Russian companies invest in production	on capa	acities	abroad because they have the following			
	competitive advantages in a fore	eign ma	arket (2	?7 responses of 11 companies):			
а	high quality of product	2	f.	financial experience	2		
b		3	q.	knowledge of the local business environment	3		
С		2	ĥ.	support of some local groups	6		
d		2	i.	support of the Russian Government	3		
e		2	j.	other advantages	2		
			,	3			
6. Russian companies invest abroad because (32 responses of 21 companies):							
а			C.	business abroad is more forward-looking			
ŭ	position in a prospective market	16		than in the Russian Federation	4		
h	the interest of their business group		d.	business abroad is not less forward-looking			
2	demands it	5		than in Russian Federation	7		
		Ū					

Source: responses to the questionnaire.

The other 13 companies are more concerned with the domestic business climate. They gave 38 answers (some gave several answers).

For them the leading reasons for investing abroad are excessive taxation and political and legal instability in the Russian Federation. To a lesser degree, a high level of criminality and bureaucratization are also perceived as a serious motivation for outward FDI (the scope of the problem is illustrated by the estimate that the "black economy" was believed to account for more than 20 per cent of Russian GDP in 1995; see *Finansovye Izvestiya*, 1995). Inflation, the illegal origin of capital and limited possibilities for investing in the Russian Federation are not perceived by the majority of the respondents as serious reasons for outward investment.

The second block focused on entry motivations (pull factors). Of the 45 responses received from 19 companies, the main ones relate to the exploration of the business opportunities of foreign markets as well as an attempt to reduce the taxation of business operations both in the Russian Federation and in foreign countries. The other important motivations (for private and partly privatized companies only) are to have "a spare business" abroad and to legalize the investor's capital (even though the respondents are not going to move their whole business abroad).

The third block of motivations focuses on the trade-investment link. All 22 companies answered the questions in this third block. Of the 52 responses they gave, the main ones relate to the desire to be present in foreign markets and to get to know them. Another principal motivation for FDI is to work without intermediaries because it is more profitable, reliable and sometimes more promising. The necessity of FDI for pre- and post-sales service is mentioned by only two trading companies (dealing in machinery and equipment).

The fourth block concerned only those companies that have their own production capacities abroad. The 16 responses given by 11 companies (2 mixed-profile trading companies, 2 conglomerates and 7 companies in the mining, manufacturing, agriculture and forestry industries) explain the establishment of production capacities abroad first and foremost as an attempt to have an activity more profitable than exports (including export of licences) to service the market of the host country or third countries. Local production is the only possible way to enter the local market in the case of the UVL jewellery company's affiliates in Switzerland and the Czech Republic, as well as of the affiliates of the ZNF and FGS mining companies in Viet Nam.

The fifth block covered the motivations related to the competitive advantages of parent companies. Russian companies believe that their most frequent competitive advantage is the support of some local groups. In all these cases (the TTT, ZNF, FGS, KMK, MSC and UAS companies), foreign affiliates are joint ventures. Also, they sometimes consider the knowledge of the local business environment and the support of the Russian Government (presumably some government agencies and their officials) to be their competitive advantages.

Some Russian companies see a product or a technology that is unique in some foreign markets as their most typical competitive advantages. For example, several types of KMK's mixed feeder and its components are not yet produced in Belarus; UVL has unique jewellery for the Swiss market; and SVZ has unique technology for the production of some elements of communication equipment for the French market.

The general conclusion to be drawn from the answers to the fifth block is that, in organizing production abroad, Russian companies, which usually do not have great financial power, international experience or highly qualified personnel, try to rely on local partners, the Government of the Russian Federation, the knowledge of the environment and their own unique products and technology to create a competitive edge.

The sixth block contained questions about the level of interest which Russian companies have in operating in foreign markets via FDI. The conclusion is that FDI is necessary for a parent company (which is interested in foreign markets), first of all, to consolidate its position in these markets. Pursuing this aim, a company is driven by its own interests as well as by those of its business group. For some companies, expanding business abroad offers better prospects than in the Russian Federation (the TRE trading company, the ZNF and FGS mining companies, and the UVL manufacturing company). It is worth mentioning that three of these companies (ZNF, FGS and UVL) also indicated (in the first block) that they have problems with investing in the Russian Federation.

Conclusion

Foreign affiliates of Russian TNCs are engaged mainly in commerce, although some have industrial and service affiliates. Twothirds of them locate in Western Europe, the principal trade partner of the Russian Federation. The shareholder equity of a typical affiliate does not exceed \$100,000, although larger foreign affiliates are not rare. The overwhelming majority of affiliates have Russian personnel in top posts. These are typical features of a country whose companies are mainly in the early stages of transnationalization.

The main reasons for FDI are the efforts of parent companies to ascertain the business situation and to have a presence in foreign markets; assistance to their own export and import operations via foreign affiliates; the need to use the parent companies' competitive advantages, the high level of profitability of the production of goods and services abroad; problems with investing in the Russian Federation, chiefly because of high taxation and political and legal instability; and a wish to establish "a spare business" abroad.

These reasons are something of a mix of the traditional reasons in the early stages of investing abroad, as well as motivations related to capital flight. Even in this inquiry, in which companies with a classic pattern of FDI were dominant, more than a quarter of all answers were related to problems of investing in the Russian Federation itself and a wish to keep some assets outside the Russian Federation. It proves the strong trend towards capital flight among Russian companies in the current economic conditions.

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VIEW

Criteria to test the development friendliness of international investment agreements

Patrick L. Robinson*

There have been few, if any, developments in customary international law regarding foreign investments since 1970, when the International Court of Justice had occasion to remark in the Barcelona Traction Case (International Court of Justice, 1970, p. 1 at 46-47) that:

"Considering the important developments of the last half century, the growth of foreign investments and the expansion of the international activities of corporations, in particular of holding companies, which are often multinational, it may at first sight appear surprising that the evolution of law has not gone further and that no generally accepted rules in the matter have crystallized on the international plane."

If in 1970, the Court was right in its assessment about the absence of rules of customary international law in the area of foreign investment, and if the evaluation quoted above is also correct about the period after 1970, then it is perhaps correct to say that, throughout its entire history, the regime of foreign investments has not been affected very much, if at all, by customary international law.

^{*} B.A, LL.M., Attorney-at-Law, Deputy Solicitor General of Jamaica. This article is an elaboration of a presentation made by the author in a panel discussion on "Criteria to test the development friendliness of investment agreements", held under the auspices of UNCTAD's Commission on Investment, Technology and Related Financial Issues at its second session on 1 October 1997. The views expressed in this article do not necessarily reflect the views of the Government of Jamaica.

However, that regime has been significantly affected by conventional international law, starting with the treaties of friendship, commerce and navigation, concluded by the United States and other developed countries after the Second World War, and is characterized now by some 1,300 bilateral investment treaties (BITs) concluded over the past 40 years. It is to BITs more than any other source that one must look for the development of a law related to foreign investment, although it is doubtful whether they evidence rules of customary international law, as distinct from treaty law binding the two contractual parties (for a commentary on the issue, see Robinson, 1986). A striking feature of BITs is the multiplicity of provisions they contain that are specifically designed to protect foreign investments, and the absence of provisions specifically designed to ensure economic growth and development.

There is no discrete multilateral regime for foreign investment, although the Organisation for Economic Co-operation and Development (OECD) appears to be near to concluding negotiations on a Multilateral Agreement on Investment (MAI). Some non-binding instruments, such as the 1992 World Bank Guidelines on the Treatment of Foreign Direct Investment, are devoted to the promotion and protection of foreign investment. Regional instruments, such as the Agreement establishing the North American Free Trade Area, do not deal in specific terms with development issues.

It is against this background that many developing States, and some international bodies, such as UNCTAD, have in recent years, and particularly in the light of a broad liberalization that has had adverse effects on many States, raised the question of criteria to test the development friendliness of investment agreements, or how to render such agreements more development friendly.

Understanding the topic

The topic should be viewed as calling for a positive rather than a neutral or non-committal approach; that is, it should be interpreted not merely as a search for criteria by which the development friendliness of investment agreements may be tested, but more positively, as the identification of provisions which, if included in investment programmes, would render them more development friendly.

The scope of the topic covers bilateral, regional and multilateral investment agreements. It must be appreciated that provisions in one kind of agreement may not be achievable in another. Thus, in some cases a BIT may be more receptive to development-friendly provisions than a regional or multilateral investment agreement; in other cases, regional or multilateral investment agreements may be more accommodating to development-friendly provisions than bilateral investment agreements.

Although the topic appears to posit a relationship between developed and developing States, with a view to enhancing the growth and development of developing States by including developmentfriendly provisions in an investment agreement, it is also applicable to the relations between developed States, between developing States, and also involving economies in transition (in the case of either the latter, either among themselves, or with developed or developing States.) This is so because development is a goal for all States.

The term "development friendly" is unfortunate in that it seems to suggest that something is being given without anything being received in return, as though to have an investment agreement promote development were not a legitimate end in itself, and as though such an agreement could not be mutually beneficial to the developing host State, the developed home State and the investor. Some other term, such as "development oriented", would be more appropriate suited.

The purpose of development-friendly provisions is not to turn back the tide of liberalization and globalization, but to ensure that liberalization and globalization take place at such a pace and in such a manner as to promote the growth and development of developing States; in other words, a development-friendly investment agreement is consistent with liberalization and globalization, and can offer adequate protection to investment.

General approach to development-friendly investment agreements

The general approach (although, admittedly, this is more appropriate for the multilateral and regional agreements than the bilateral agreements) is to have agreements that ensure the sustainable participation of developing countries in the regime established by those agreements. This means much more than the approach of the World Trade Organization's Marrakesh Agreement of phasing the assumption of obligations of developing States, because at the end of the phasing period when the obligations have to be assumed, no growth or development may have taken place, owing to the fact that no measures have been put in place to facilitate and promote growth and development. It means a level of participation which, in the era of liberalization, is necessary for ensuring reasonable growth and development. The concept of the sustainable participation of developing States calls for an integrated approach that looks at the problem of developing States as a whole, and incorporates measures for growth and development in the regime of the investment agreement.

The general approach calls for developed States and their investors to assume certain responsibilities in investment agreements which are designed to promote development. The general approach also calls for investment agreements to be so structured as to allow developing States to determine and pursue their development objectives.

BITs

BITs, in their traditional form, are examined first, since they are the most common form of investment treaty. Many of the points made here would also be applicable to multilateral agreements.

BITs do not in any serious or explicit manner address development friendliness in the preamble. Therefore the title and the preamble should be formulated in such a way as to refer not only to the promotion and protection of investment, but also to growth and development. Thus, in addition to making a general reference to the economic development of the parties, the preamble should recognize the different levels of development between the parties, and the need to adopt special measures to promote the development of the developing party. The preamble should also acknowledge the consistency between investment that can be profitable for an investor and investment that can promote the economic development of the host country.

Traditionally, BITs are very weak in provisions on promotion of investments. Developing countries conclude several BITs without attracting investment from their developed treaty partner. In addition to encouraging investment, BITs should oblige parties to consult and collaborate with each other upon the entry into force of the BIT, as to the most effective ways of encouraging and promoting investment by investors of one party in the territory of the other. Developed home countries should promote investment in the host countries through schemes such as insurance programmes and incentives. Provision should be made for cooperation between the investment promotion agencies of both parties. A more liberal attitude should be adopted to the use of certain identified performance requirements which can promote development without prejudicing the investment. In the interest of determining their development, developing countries should be permitted to exempt certain sectors of their economies from the provisions of investment agreements. Finally, BITs should allow for the phasing of the transfer of the proceeds of the sale or liquidation of an investment in periods of exceptional balance-of-payments difficulties

With regard to the regimes established by these agreements, the latter should provide for:

- training of local personnel;
- equity participation by locals in investment;
- joint ventures;
- technology transfer and technology upgrading;
- progressive indigenization;
- stress on high-quality investment in certain areas;

- the right of the developing country to choose the timing of investments;
- a level playing field in the area of competition between stronger foreign investment and weaker domestic investment. To that end, it should envisage domestic-friendly competition policies and an appropriate international competition policy (this element is more relevant to a multilateral agreement);
- standards for environmental and consumer protection;
- the control of restrictive business practices;
- the social responsibilities of investors;
- financial and/or technical assistance to developing countries to enable them to make the best use of the agreement's disputesettlement procedures, whether as a complainant or a respondent. In some cases, developing countries have the expertise to litigate a dispute, but lack the financial resources to deploy that expertise, particularly in relation to overseas commitments. In other cases, developing countries do not have the required expertise, and will need technical assistance in the form of personnel.

Regional and multilateral agreements

Investment agreements which establish regional and multilateral regimes have a special responsibility to be development friendly. This orientation should be reflected in the title and preamble as well as in the substantive provisions. An agreement such as the OECD's Multilateral Agreement on Investment should become the Multilateral Agreement on Investment and Development - MAID - an appropriate acronym, since the agreement should be a servant both to investment and to development. Multilateral agreements should not only establish transitional periods for developing countries, but also provide for the establishment of a development fund for the benefit of developing countries.

Conclusions

It is one thing to identify criteria to test the development friendliness of investment agreements or to identify provisions to be included in such agreements in order to make them development friendly; it is quite another matter to ensure that investment agreements include these provisions. The pattern of negotiating BITs, particularly between developed capital-exporting and developing capital-importing States, does not conduce to optimism about the inclusion of development-friendly provisions in investment agreements. Negotiations between developed and developing States for BITs are carried out in the context of a power relationship which works to the disadvantage of the developing States; these negotiations are usually part of a wider programme for economic growth in which the developed treaty partner is expected to play an important role. The bargaining power of the developing State is therefore usually weak, or, at any rate, is perceived by the developing State itself as being weak. The globalization and liberalization phenomena have served to strengthen the negotiating position of developed States in the conclusion of BITs, and this situation is likely to be the same in the negotiation of any multilateral regime for investments. Α concerted effort based on compromise and accommodation among the interested players will be needed in order to ensure the inclusion of development-friendly provisions in investment agreements.

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BOOK REVIEWS

Multilateral Investment Systems and Multinational Enterprises

Thomas L. Brewer and Stephen Young

(Oxford, Oxford University Press, forthcoming), 320 pages

This is a timely study of an important and complex set of issues which has rarely received the comprehensive treatment it requires. Thomas L. Brewer and Stephen Young provide a broad assessment of the development of rules on international investment since 1945, analyze a number of current policy issues, and comment on the policy dilemmas which now face the various interests involved. They have utilized a wide range of published sources and have also drawn on discussions with officials in international organizations and transnational corporations (TNCs) and colleagues in international business. The result is a book which should appeal to a wide variety of readers.

Brewer and Young argue that international investment agreements should be extended to the global level. They believe that it is now easier to do so, given the relatively favourable recent attitude to TNCs. They also believe this to be necessary, in view of problems raised by "fragmentation, confusion and conflict" caused by bilateral, regional and partial approaches. But they also point to some problems that must be resolved first, particularly to allow for the development needs of the poorest developing countries, many of which still remain suspicious of TNCs, and to ensure that the current emphasis on the rights of TNCs and obligations of nations becomes more balanced.

Brewer and Young travel a long road in reaching this conclusion. Part I of the book sets out the context, including an historical overview of TNCs in the world economy, and also an examination of the public policy issues involved in considering TNCs. One theme is the increasing rationale for international agreements in an age of strategic alliances and networks, friction between governments determined to support some types of firms, and a growing tendency for countries to be both home and host to TNCs. Another theme is the need for a holistic approach to policies in this area: the treatment of TNCs is closely related, for example, to policy on trade, technology transfer, factor-market access and competition. International rules that neglect the overlaps are likely to be unsatisfactory even if feasible.

Part II is a thorough examination of the main agreements on investment rules, including analyses of the key influences and implications for future policy. It reveals the extraordinary range of attempts that have been made and issues that have arisen in the past half century. The International Trade Organization (ITO), bilateral treaties, the International Bank for Reconstruction and Development (IBRD), the United Nations Conference on Trade and Development (UNCTAD), the Organisation for Economic Co-operation and Development (OECD), the General Agreement on Trade and Tariffs (GATT) and the World Trade Organization (WTO) -- these are only some of the organizations or methods, ranging from partial coverage of particular issues to comprehensive codes, from negotiations by pairs of countries to those involving much of the globe, from attempts to reach binding agreements to reliance on persuasion and publicity, from some degree of consensus and action to a collapse of negotiations. In particular, the failure to reach a comprehensive and balanced agreement in the ITO early on has come back more than once to challenge the organizations and interests involved. Another theme is the way in which policy towards TNCs has fluctuated, from a generally non-regulatory approach in the 1950s and 1960s to national regulation and attempts at international rules in the 1970s and early 1980s, with a period of relative deregulation, thereafter accompanied recently by renewed efforts to establish investment rules.

In part III, Brewer and Young examine a number of policy problems in more detail. They note, for example, that a general agreement on TNCs will have to come to terms with the spread of regional agreements which involve rules on TNCs, particularly where such regional agreements are highly discriminatory with respect to those outside them. They discuss the relation between TNCs and both intellectual property rules and competition policy, noting the differences between governments on such issues, partly on the basis of the degree of development. The chapter on competition policy is particularly detailed and instructive, extending, for example, to an analysis of the spread of anti-dumping policies.

The final chapter considers some of the implications of the history and analysis for current issues in the field of investment rules, and some approaches to resolving a number of problems. As before, the emphasis is on a "holistic framework for rule-making around the concepts of market contestability, modal neutrality, and policy coherence", with emphasis on both efficiency and equity issues.

This study has many admirable features. It is firmly grounded in the key concepts of economics, politics and business theory as they apply to TNCs, and it has a detailed historical base. It has obvious current relevance, as witnessed by discussions of the proposed Multilateral Agreement on Investment and the "new issues" facing the WTO -- foreign investment, competition policy and labour standards. It lays out the conflicting principles and viewpoints both within and between developing and developed countries while proposing some intermediate solutions to the deeper incursions into national policy which many governments resist. It contains an extraordinary range of tables, summaries and cases relating to everything from the contents of existing international agreement to details on the subsidies available to TNCs. And it does the readers the all-too-rare courtesy of citing specific pages when that is necessary, rather than leaving them to search through a volume or a long article.

Any comprehensive research study will elicit different ways of organizing the material and ideas that need further development. Two are worth noting briefly. First, the politics of policy-making are by no means overlooked in this study. They are raised at the beginning of the study, considered at various points, and highlighted in a final chapter which concludes with the idea that the evolution of agreements "will depend as much on domestic politics as on economic diplomacy". Yet at several points in between one senses that some key elements of the political process are receiving inadequate weight – for example, electoral processes, and rent-seeking which redistributes income between groups in a country, as against that which redistributes income between countries. A fuller analysis at the beginning of what drives public policy might have overcome this problem. As it is, one can achieve the same effect by reading the first and last chapters together before going on to the rest of the book. Since the authors let the reader know at the beginning of the book where they are heading, this will not give away any secrets.

Secondly, on a more technical note, the authors comment often on the problems of measuring the various policies on FDI so that meaningful work can be done on their impact and on negotiations regarding them. A parallel might be drawn with the ways in which measurement, analysis and negotiations were affected by the conversion of non-tariff barriers to tariff equivalents. It is true that policy on FDI cuts more deeply into national policy than does policy on trade, although Brewer and Young point out a significant number of parallels. It is also true that quantification by itself does not resolve the underlying economic welfare issues, much less the political ones. But at least this would narrow the range of issues under discussion, perhaps lead governments to reconsider their choice of instruments for given ends, and hence contribute to the resolution of quite complex issues.

A. E. Safarian

Senior Research Fellow Centre for International Studies University of Toronto Toronto, Canada

The Theory of the Firm

Mark Casson (ed.)

(Cheltenham and Brookfield, Vermont, Edward Elgar, 1996), xxii + 739 pages

The theory of the firm is the subject of a particularly large body of literature in economics. To select a balanced volume, therefore, is very challenging. The publisher of this book managed to find an able editor for this volume in the person of Mark Casson, who brings to bear a deep understanding of the literature. In addition to selecting a set of readings that gives the reader a complete overview of the development and current state of the theory, Casson organizes the selected articles into thematic sections that provide an excellent perspective, even for the established researcher in this field.

In the neo-classical view, the firm existed as little more than a production function for much of this century. Then, Williamson (1975) and Buckley and Casson (1976) recalled the insights of Coase (1937), and the firm became identified as the activities bounded by transaction costs. These costs provide the rationale for the existence of the firm. This is the fundamental question -- but it leads to a host of others, in particular about the organization and growth of the firm. Here Simon (1947) and Penrose (1959) provided early leads, taken up only belatedly. (Questions pertaining to the organization of interfirm relations also arise, but these are not central to the theory of the firm.) Although analyses of organization focusing on information costs are relatively recent (Casson, 1994; Carter, 1995), they are already included as chapters in the current volume.

The growth and success of the firm have also been the subject of study in the management literature. Here the emphasis has been on the firm's resources (Wernerfelt, 1984), rather than on transaction costs. In the resource-based view, it is the strategic value of a particular activity that determines whether it should be performed inside or outside the firm's boundaries. On this view, it is imperative that a firm retain, protect and develop its resources, which are the source of its core competencies (Barney, 1991). Costs, including production and transaction costs, are important, but secondary components of boundary decisions.

A particularly important development in these streams of research was their application to the theory of the transnational firm. Here, the insights of Coase were taken up by Dunning (1977, 1980) in setting up his paradigm based on ownership-specific, locational and internationalization (OLI) advantages. One of the major streams of research in the international business literature concerns, indeed, the rationale for the existence of the transnational corporation. In other words, what is the nature of transaction costs and firm resources that favour the transnational form of organization over other competing forms of conducting international business? Meaningful attempts at answering this question hinge upon a clear understanding of the nature of the firm. Thus, the contents of this volume can be viewed as a valuable reference work for international business scholars as well.

The articles selected for this volume reflect the approach of economics rather than that of management science. The fundamental theoretical questions concerning the nature and organization of the firm are all addressed. The issues of hierarchy and vertical integration are particularly well covered in parts II and III. Some applications dealing with competence, flexibility and growth appear in part IV, and a short section dealing with inter-firm cooperation appears as part V. A historical perspective is provided in part VI.

It is important to consider this book from the point of view of its objectives. It is a collection of texts that seek to understand the firm in the spirit of scientific inquiry. Its remit does not extend to issues relating to actually managing a firm. Thus, strategic applications relating to the development of competitive advantage are not covered. The applied literature of industrial organization and strategic management, which does study these issues, builds on solid foundations laid down in this volume. Scholars in both economics and management will find this collection a valuable resource.

Ram Mudambi

ISMA Centre, University of Reading Reading, United Kingdom

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How to Penetrate the World Market by Chinese Enterprises

N.T. Wang

(Hefei, Anhui Province, China, Science and Technology Press, 1995), 308 pages

N.T. Wang's writings on economic development and transnational corporations (TNCs) are well known internationally, reflecting his many years of contributions to United Nations analysis, as well as field work in numerous countries and research and teaching in academic institutions. This book is primarily aimed at a Chinese audience and is written in Chinese most of his previous publications are in English. Its high degree of readability, and even virtuosity, is a pleasant surprise. The book further distinguishes itself by drawing from many disciplines and dealing with micro as well as macro issues and theoretical as well as practical issues.

The book has five parts. The first one deals with the domestic and international environment within which Chinese enterprises operate. The main theme is that the step-by-step approach of Chinese domestic reform is appropriate because many institutions which are taken for granted in developed market economies cannot be established and nurtured within a short period of time in transition. For example, a sudden decontrol of all, admittedly distorted, prices could result in severe inflation since in many industries, free markets are non-existent. Furthermore, a large-scale bankruptcy of enterprises is unacceptable because a social safety net is yet to be instituted. The Chinese step-by-step approach is not necessarily gradual in the strict sense, but often goes in fits and starts. It is, on the whole, more practical and more humane than the shock therapy adopted by many other economies in transition. It has, of course, its attendant problems, notably a lack of coordination and a risk of reversals. Therefore, it is suggested that as reform proceeds, it should become more comprehensive and thorough. Fortunately, domestic reform is stimulated and guided by an opening up to the world. The move towards the adoption of international rules of the game, such as competitive markets and protection of intellectual property, is not limited to the external sector, but also applies domestically.

The second part of the book analyzes China's export strategy as well as its performance. Its successes are attributed to a relatively favourable international environment, as well as a policy of progressive opening up to the world, especially in the special economic zones and coastal areas, and to contributions by TNCs.

Against the fears that China's miraculous export performance and aggregate growth will not be sustainable, Wang advances two reassuring arguments. The first is precisely the relatively low level of China's economic development and efficiency: it is easier to catch up than to lead the way. The other refers to China's comparative advantages in globalization: capital and technology can be obtained from abroad while relatively inexpensive labour, less mobile internationally, is easily available domestically. The implications of these arguments for China's participation in the world trade regime are evident, although some measures for cushioning against shortterm disruptions are called for.

In the third part of the book, Wang discusses entrepreneurship as well as enterprise organization and operation. Here, the influence of Schumpeter is evident, although the author pushes beyond Schumpeter's thesis (that entrepreneurship is a key to capitalist development, but that its very existence becomes uncertain in a socialist economy) by highlighting the crucial role of entrepreneurship in socialist as well as capitalist development. On the issue of corporate organizational structure, there is a hint that the best Western styles of management could be tempered by Eastern values. The author hopes they will arrive at an appropriate mix. For instance, although downsizing may be good for corporate effliciency and profits, its traumatic effect on the losers may need to be reduced by compassionate measures and restraint in the levels of greed often manifested by management. The discussion on possible diseconomies of scale and scope as seen, for example, in *keiretsu* in Japan and *chaebols* in the Republic of Korea should be a useful antidote to the Chinese zeal for size and all-inclusiveness.

The fourth part of the book is most directly related to TNCs and foreign direct investment (FDI). It is a succinct synthesis and extension of Wang's earlier publications, mostly available in English. The numerous policy guidelines, presented persuasively with clarity, common sense and even humour, would appear to be especially relevant and useful these days.

The emphasis on the crucial role of information reflects the author's personal involvement in this area as the first director of the Information Analysis Division of the United Nations Centre on Transnational Corporations. In our age of information explosion, it cannot be overemphasized that information, through commission or omission, may lie or mislead. Thus, any collection of information related to TNCs must be combined with painstaking analysis. This is especially relevant to formulating and implementing codes of conduct relating to TNCs and international investment guidelines (Wang, 1975, 1977, 1981a, 1981b).

The most original passages can be found in the chapter on forms of cooperation (see also Wang, 1980). The simplified triad of export, licencing and FDI is presented in over 30 theories on TNCs, and has been extended to even more when various combinations are counted. One of the implications is that TNCs do not have to introduce a comprehensive package or bundle of all the factors of production. Nor does a package necessarily harm the interests of the host firm when its ability to put together an appropriate package is limited. A second implication is that enterprises of a developing country suffering from a shortage of capita, such as China, may also extend their activities abroad because they have certain comparative advantages and needs, just as enterprises in more developed countries have other ones. The precise form of activities depends on strategies that may or may not include investment abroad. Even if they do, they do not imply that, in macro terms, China would be a net capital exporter, since the aggregate inflow may exceed the aggregate outfiow. Another implication is that, in dynamic terms, the most pertinent forms may change over time. Thus, original equipment manufacturing for TNCs, sometimes frowned upon on the grounds of low margin and scanty transfer of technology or capital, may be appropriate, at least at an early stage of the learning curve (see Wang and Weizao, 1988b). Investment in certain industries such as fast foods, sometimes considered unwelcome may, nevertheless, be highly beneficial to the host country through the diffusion of good business practices, such as cleanliness, quality control, prompt and pleasant service, market survey and financial management -- not only in the industry concerned, but also in upstream and downstream activities.

The chapter on corruption is timely because it is generally perceived as a problem in China, both by foreign enterprises and by Chinese leaders. Drawing on his personal experience, Wang gives three critical pieces of practical advice. First, transparency is a key deterrent to all forms of corruption and cronyism, public or private. Second, corruption is an ongoing game, and its treatment requires special institutions, such as disclosure requirements and independent watchdog and judiciary bodies; consequently, occasional anticorruption campaigns are unlikely to be effective. Third, even in a generally corrupt environment, it is possible to create an oasis of an uncorrupt "micro environment".

The fifth and final part of the book includes a series of case studies, which are in great demand by enterprises wishing and willing to learn from others' experiences, as well as from academic training. The case studies, however, somewhat abridged, reflect the reluctance of Chinese enterprises to disclose sensitive information to outsiders. It is hoped that more detailed cases will emerge in the future as greater transparency gradually takes root (Wang, 1984, 1988a, 1990, 1992).

On the whole, the book makes an important contribution to the study of China and TNCs. It is useful not only to Chinese readers but also to all those who are interested in the Chinese economy and business as well as those of the transition economies. The translation of the book into other languages would increase its accessibility to an international audience. This review may serve as a first step towards that aim.

Zhang Zhong-Li

President, Senior Research Fellow

Zie Kang

Research Fellow Shanghai Academy of Social Sciences Shanghai, China

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The Hong Kong Advantage

Michael J. Enright, Edith E. Scott and David Dodwell

(Hong Kong, China, Oxford University Press, 1997), 369 + xvi pages

This book can be evaluated from two perspectives, that of the casual reader and that of the academic economist. Since I am an academic economist, I will emphasize the academic perspective in this review.

The book discusses the economy of Hong Kong Special Administrative Region of the People's Republic of China (hereinafter Hong Kong, China) and its prospects. It consists of "three major components: an analysis of Hong Kong's overall economic performance; a series of studies on themes and issue that have an important impact on the performance of the Hong Kong economy in general; and a series of detailed studies of the competitiveness [of] specific Hong Kong industries" (p. viii).

The book's primary strength is its rather detailed analysis of competitiveness in nine specific industries, the core of this analysis being presented in chapter 5. These industries were chosen "to provide a representative cross-section of the Hong Kong economy" (p. ix), and the authors have done a reasonable job in this endeavour. Moreover, the authors' methodology and its connection to the empirical analysis are relatively clear in this part of the book. They adopt an approach to studying competitiveness that is similar to Michael Porter's and use it to describe the garments, electronics, trading, fund management, civil engineering, air cargo, sea cargo, telecommunications and tourism industries of Hong Kong, China. The elements that are analyzed are conveniently summarized in figure 5.6, and this part of the book is by far the easiest for an academic to follow. However, as an economist, I have always been disappointed by the failure of studies such as this one to state their theoretical framework in more formal and thus clearer terms. For example, from the discussion, I am still somewhat confused as to whether the authors think it is absolute prices or relative prices that determine international competitiveness. A more formal approach, even a very brief one, could be of great assistance in clarifying this and related points.

Unfortunately, the industry studies are the only strong feature of this book from an academic point of view. With respect to the first component mentioned above -- analysis of the overall economic performance of Hong Kong, China -- the book is lacking in three crucial respects. First, the authors' failure to state clearly their theoretical framework results in superficial economic analysis. This is perhaps understandable since the authors are not professional economists. Some sections of the book (e.g. chapter 1) read like a journalistic description of some major characteristics of the economy. Moreover, a large body of economic literature on the economy of Hong Kong, China, is ignored by the authors. The stories told in this respect are potentially interesting to the casual reader, but the lack of originality and a clear focus makes these parts of the book uninteresting to the academic reader.

Second, the data in the book are poorly coordinated with the text, and it appears that only a minimal effort has been made to collect relevant figures. For example, tables 1.1, 1.2, 1.3, 1.5 and 1.7 show data for recent years only, but the text discusses trends over much longer periods of time, making it difficult for the reader to see the connection between the tables and the text. Another example is where the authors use data on contracted foreign direct investment (FDI) in China (excluding Hong Kong, China), when much more accurate data on realized FDI are available from one of the sources which the authors cite (China Statistical Yearbook). Even more problematic is table 3.1, where the authors have used secondary sources on FDI, without considering the inconsistency of FDI definitions from the different countries covered in the table, or the large margin of error in these estimates. Furthermore, the authors are not specific enough when they claim that "Hong Kong is the biggest foreign investor into the 18-country APEC region" (p. 59), on the basis of ambiguous data for investment flows in only one year, 1994. Even if Hong Kong, China were the largest investor on a flow basis in 1994, it is certainly a much smaller investor in the APEC region on a stock basis than Japan and the United States, and it is the stock dimension that is far more important when evaluating the importance of a group of investors.

Third, the book contains numerous unsubstantiated claims. For example, chapter 2 is entitled "Hong Kong's Unique Combinations", and the authors go to great lengths to describe the unique "balance between government and business, between local and overseas firms, between entrepreneurship, and between strategies of 'commitment' and 'hustle'" (p. 29) in Hong Kong, China. However, they provide very little clear evidence to establish the specific dimensions of the uniqueness of Hong Kong, China, in these respects, much less any formal tests of whether hypothesized differences between Hong Kong, China, and other economies are statistically significant. Moreover, no effort is made to estimate the quantitative effects of the hypothesized differences between Hong Kong, China, and other economies on economic performance. In short, the authors often seem to be asking the reader to simply believe their assertions rather than to evaluate them on the basis of sound theoretical and empirical evidence. The result is a book that is dominated by platitudes (e.g. "Hong Kong's Unique Combinations") rather than meaningful analysis.

In sum, if you are a casual reader wanting a business-oriented perspective on the economy of Hong Kong, China, the book can be valuable because it does tell a number of interesting stories about how the economy works and how the businesses that operate there fit into the economy as a whole. The serious academic can benefit somewhat from the industry case studies and the interesting stories told. However, the serious academic is bound to be disappointed by the superficial nature of much of the analysis and the failure of the authors to put forward their arguments in the form of testable propositions rather than untestable stereotypes.

Eric D. Ramstetter

Research Professor International Centre for the Study of East Asian Development Kitakyushu, Japan

Marketing d'une Région et Implantation des Investissements Internationaux

Hubert Brossard

(Paris, Economica, 1997), 196 pages

This book is unique in many ways and is one of the best overviews of how a region should sell itself to potential investors and where they could look for help. The author of this review wrote his doctoral dissertation at the University of Chicago on this subject almost half a century ago (1950). However, very little has been written or published since then. Few improvements have been made in arranging a marriage between a region and international investment.

The merit of Hubert Brossard's book is that it presents a clear understanding of how a region should attract international investment. At a time of globalization of investment, and of intense competition between European regions for American, European and Japanese investment, complicated by the emergence of the new competitor areas in Asia and Latin America, this book should be of particular interest for all regions.

It is amazing to discover how little the situation has changed since the end of the Second World War. Most regions do not understand the process of locational decision-making by transnational corporations (TNCs). On the other hand, few managers of large companies know how to evaluate the potentials offered by regions in order to optimize projects with a minimum of investment.

The regional development agencies are still mostly staffed by politically selected individuals who lack the professional training for the job, although there has been visible improvement in this respect. Therefore, most of the staff dealing with regional economic development should not only read but also study this book. In it, the author defines "the investment market" as who invests, what and why.

The first task of the regional agency is to understand why a company locates an investment and how it makes money. Some wrongly believe that employment will be automatically created by investment. On the contrary, in many cases the reduction of the labour force, automation and rationalization are at the top of the list of the investment requirements.

What does (or can) a region offer to new investors? Few regions are aware of their assets, and they mostly do not (want to) understand their liabilities.

Should a region attract any kind of investment? Should a location be judged suitable for an indefinite time? How can a large employer be anchored in a region? Replies require an understanding of the location-decision procedure. Also, in the collection of data, the notion that using statistics is usually a way of lying may be unfortunately true. Few statistics are up to date, and most are unclear or biased.

The book's recommendations are a little too short and could have been made stronger. Nevertheless, the book has great value and came on the market at the right time. It may help to emphasize the following:

- Much more research is needed in order to optimize locationdecision progress;
- The need for better professional training to provide specialist staff for regions as well as for TNCs is obvious;
- The desire for better cooperation between regions and investors must be encouraged;
- The evaluation of results should be more objective and detached from local politics.

Brossard's book is thus not an end but a beginning. It should encourage further study of the subject.

Marcel J. De Meirleir

Professor Emeritus Stuivenberg Consulting Company N.V. Mechelen, Belgium

Foreign Direct Investment in Central and Eastern Europe: Multinationals in Transition

Saul Estrin, Kirsty Hughes and Sarah Todd

(London and Washington, Pinter, 1997), vii + 276 pages

In economic history, the last decade of the twentieth century will perhaps be best remembered as the Age of the Investor.¹ Over this unfinished decade, which may well transfer its legacy to the next millennium, direct investors have helped to push the frontiers of international business into previously pristine territories. Their biggest push has perhaps been into the former socialist territories. Press reports on pioneers have been abundant and colourful; now it is time for academics to evaluate this extraordinary adventure. In Foreign Direct Investment in Central and Eastern Europe, such prestigious institutions as the London Business School, the Policy Studies Institute and the Royal Institute of International Affairs joined forces to come up with a systematic approach to the discussion about transition and foreign direct investment (FDI). They did much hard work -- based on a long questionnaire and long, in-depth interviews at both headquarters and affiliates of transnational corporations (TNCs). As a result, the book has many of interesting findings to share with the reader.

The first part of the book identifies some issues related to FDI in transition and looks at the nature and scope of FDI in Central and Eastern Europe. This part relies heavily on existing literature. Nevertheless, some interesting points are raised here. Unfortunately just in a footnote (footnote 1 on page 33), it was noted that 1989 was

¹ This will follow the Ages of Revolution (1789-1848), of Capital (1848-1875), of Empire (1875-1914), and of Extremes (1914-1991), all baptized by Eric J. Hobsbawm. For his latest book, see Hobsbawm (1994). However, the first two years of the new age overlap with the last two years of the Age of Extremes; investors did not wait for the dissolution of the Soviet Union to start investing in Central and Eastern Europe.

not the uniform starting date for transition. Hungary had abandoned central planning in 1968 and Poland in 1981, and this was accompanied by some moderate openings towards joint-venture-type FDI. Perhaps it should also have been mentioned that Central and Eastern Europe was not so much a new as a temporarily abandoned territory: before communist rule, FDI had played an important role in some countries of the region.

A novelty of the book is the concept of "brownfield investment", somewhere between acquisitions and greenfield investment ("[this involves] acquisition of a firm in the region for market share reasons, but entirely new production facilities are then developed within the firm", p. 23). Praise worthy is the approach that gives priority to enterprise restructuring and spillover effects in explaining FDI's role in the transition over the more traditional viewpoints stressing the macroeconomic impact. Also, the book deals professionally with different data sources, including UNCTAD's *World Investment Reports* (UNCTAD, 1995, 1996), whose figures constitute the backbone of the analysis in this part.

However, the majority of readers may appreciate, most of all, the second part of the book, which in line with the emphasis on enterprise restructuring and spillover effects, is devoted to individual case studies of foreign investors, in spite of the incompleteness and modest size of the sample. It does not really matter that the scope of the inquiry was limited to the Czech Republic, Hungary and Poland, the three perhaps most advanced countries in the region. What matters more is that the authors prepared 10 case studies, but failed to achieve the objective of investigating pairs of countries in a given industry. Thus, the book has a case study on a pharmaceutical firm in the Czech Republic only, but not in Poland or Hungary, where this industry has received more FDI. Another imbalance is apparent in the composition of the country samples. The Hungarian sample consisted of three lowtechnology firms and one medium-technology firm, while the Czech sample consisted of one high-technology firm and two mediumtechnology firms. The Polish sample was in between.

The stories are nonetheless intriguing and instructive, since corporate executives -- and not academics -- told us their stories.

Their accounts were then reproduced in accordance with the best traditions of economic reporting. This is why it was worth while to publish this book, however incomplete the examples are.

Most of the stories presented in the book seem to be plausible. But there are problems, for example (pp. 126-127):

"The Budapest Bank proved willing in 1993 to lend Timely Investments [the name of the firm was changed] large amounts of money; the maximum facility reached \$2.7 million. But Timely Investments was unable to make its first repayment, due in 1994, because of the parent company's cash problems... the Budapest Bank had lost confidence in the subsidiary and was unwilling to advance further amounts, even though Timely Investments managed to keep up all later repayments. Other banks in Hungary were unwilling to negotiate with Timely, apparently because it was with Budapest Bank...

According to the finance director, the bank did not understand the concept of lending on security -- the loan from the bank was in fact only around 20 per cent of the Timely Investments secured assets: 'they had decided they did not like Timely and wanted them to go away and pay up'..."

The reader is perplexed. Would a London bank, for example, continue to lend to clients who have not made their first repayments? And how would other London banks react if these clients approached them? If what the Budapest Bank did was just the normal international banking practice in this case, what else did the firm expect? Given the international reputation and international training background of the Budapest Bank management, this would have been a rather surprising expectation.

The third part sums up the lessons learned from the case studies. They reflect, of course, the biases and imbalances of the sample. Moreover, the possibility of an econometric or statistical analysis was excluded by the small population of 10 cases. Even graphs would have been misleading. Finally, the authors rightly decided to present their findings in tables.

Despite their serious limitations, these findings generally confirm the book's hypotheses on the role of FDI in enterprise restructuring and on spillovers. The only Achilles heel in this difficult part is the evaluation of successes and failures. The book has not tried to use an objective benchmark; it has simply accepted what the enterprises declared in this respect. Consequently, the reader may feel confusion, particularly because there seemed to be no clear-cut difference between great and medium success. Even in cases of great success, investors initially had overestimated the potential of the local firm and underestimated the costs of restructuring. Managers did not know much about the nature of the "socialist" firm before investing in Central and Eastern Europe. If they had, they could have avoided most of the surprise costs of their investments. The stories about the hidden, internal problems of local firms remind the reader very much of János Kornai's seminal Economics of Shortage (Kornai, 1980), readily available from North Holland since 1980.² It would have been cheaper and less time-consuming if TNC managers had bought and read the book in time. They would have learned from it that there was nothing more typical of a shortage economy than the proliferation of non-profitable factory capacities and an excessive expansion of the workforce at all levels -- and these phenomena would not go away overnight with the abolition of soft budget constraints and shortages.

As the dividing line between studies of great and moderate success was unclear, and the sample was rather unbalanced, the book contains a table in which Hungary had only cases of medium and low-level success, while Poland and the Czech Republic had only cases of great success. This obviously contradicted the way in which TNCs had voted with their most valued asset: their money. As the authors noted, Hungary was by far the favourite location for investors over the period of the analysis (1989-1994). Perhaps exactly because of this relative success, investors could be more frank and open about their difficulties as well.

This book can be safely recommended to all experts and laypersons who wish to gain insights into how the interaction between

 $^{^2\,}$ It is more difficult to obtain a copy now, as the book is out of print.

enterprises in transition and foreign suitors took place in real life. Even governments, government agencies and international organizations that usually take a more macro view on investment-related issues may find some refreshing analyses in it. It may also be useful for people from other regions who try to find ideas about how to eliminate some soft-budget overhang with the help of, among other things, FDI. The concept of "brownfield investment" will surely stay with us as a basic analytical tool. Despite its weaknesses this book is destined to become part of the basic literature on FDI in transition economies.

Kálmán Kalotay

UNCTAD, Division on Investment, Technology and Enterprise Development Geneva, Switzerland

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JUST PUBLISHED

Handbook on Foreign Direct Investment by Small and Medium-Sized Enterprises: Lessons from Asia

(Sales No. E.98.II.D.4)(\$ 48)

Small and medium-sized enterprises are one of the engines of development and growth. They increasingly face competitive pressures arising from globalization and liberalization. As they respond to the competitive pressures with the internationalization of their activities, their outward foreign direct investment is increasing in importance. Foreign direct investment has the potential to strengthen small and medium-sized enterprises of both home and host countries. The findings of this Handbook are largely based on UNCTAD's survey of small and medium-sized enterprises in developing Asia, the region that is viewed by many experts to have the largest potential to mobilize foreign direct investment by such enterprises. They also draw on the Conference on Foreign Direct Investment, Small and Medium-Sized Enterprises and Development: Attracting Small and Medium-sized Enterprises and Promoting Development in Developing Asia, held in Kunming City, Yunnan Province, China, from 29-31 October 1997.

Part one of the *Handbook* assesses the role and behaviour of small and medium-sized enterprises and their foreign direct investment in Asian countries, the problems they face, their strategies, and the potential impact of their investment and that of large investors on recipient small and medium-sized enterprises and host economies in the region. Part two examines government policies regarding small and medium-sized enterprises and their foreign direct investment in Asian countries that have successfully fostered and incorporated such enterprises into economic development, and attempts to draw lessons from these cases. In Part three, the *Handbook* provides a framework for assessing the costs and benefits of different policies, and for the steps required for the formulation and implementation of measures encouraging the flows of investment and technology from foreign small and medium-sized enterprises to host countries. It also examines avenues for international cooperation.

Handbook on Foreign Direct Investment by Small and Medium-Sized Enterprises: Lessons from Asia. Executive Summary and Report on the Kunming Conference

(UNCTAD/ITE/IIT/6 (Summary))

This volume contains the executive summary of the Handbook on Foreign Direct Investment by Small and Medium-Sized Enterprise, and the report of the Conference on Foreign Direct Investment, Small and Medium-Sized Enterprises and Development: Attracting Small and Medium-Sized Enterprises and Promoting Development in Developing Asia, held in Kunming City, Yunnan Province, China, from 29-31 October 1997. The Conference was organized by UNCTAD, in cooperation with the Ministry of Foreign Trade and Economic Cooperation of China, with the logistical support of the Government of Yunnan Province, China. A limited number of copies of this volume is available free of charge upon request.

International Investment Towards the Year 2002

Fabrice Hatem

(English version: ISBN 92-1-100755-5, Sales No. GV.E.98.0.15) (\$29) (French version: ISBN 92-1-200340-0, Sales No. GV.F.98.0.15) (\$29)

This publication, prepared under the auspices of the Invest in France Mission of France, in co-operation with DATAR, UNCTAD and Arthur Andersen, presents the findings of a 1997 survey on medium-term trends (the next five years) in international investment. More than 300 leading transnational corporations (TNCs) and international experts from North America, Asia and Western Europe responded to the survey questionnaire. Additionally, 100 direct interviews were carried out around the world in order to receive indepth insights. The survey confirms results of surveys from 1996 and 1995 which found that foreign direct investment (FDI) will continue to surge of over the medium term. At the centre of this development are the interests of firms to further internationalize their production capacities and to seek new markets.

Investment inflows will continue to be concentrated in Western Europe and North America. However, Asia, Latin America and Eastern Europe continue, too, to be of substantive interest to TNCs. Despite of the present financial and economic crises in Asia, the company responses of the survey show that medium term interest to invest in this region seems to be unshaken by the crises. The survey also provides a basic overview over investment trends by industrial sector.

Books received on foreign direct investment and transnational corporations since December 1997

- Altin-Sieber, Inci, Joint Ventures, Technologietransfer und -schutz: Abhandlungen zum Recht der Internationalen Wirtschaft (Heidelberg: Verlag Recht und Wirtschaft, 1996), 451 pages.
- Beamish, Paul W., Andrew Delios and Donald Lecraw, Japanese Multinationals in the Global Economy: New Horizons in International Business Series (Cheltenham and Northampton, Massachussets: Edward Elgar, 1997), 328 pages.
- Buckley, Adrien, International Investment Value Creation and Appraisal: A Real Options Approach (Copenhagen: Copenhagen Business School Press, 1998), 321 pages.
- Dicken, Peter, *Global Shift: Transforming the World Economy* (London: Paul Chapman, 1998), 496 pages.
- Dunning, John H., *American Investment in British Manufacturing Industry*, second, updated edition (London: Routledge, 1998), 360 pages.
- Mudambi, Ram and Martin Ricketts (eds.), *The Organization of the Firm: International Business Perspectives* (London and New York: Routledge, 1998), 220 pages.
- Oxelheim, Lars, Arthur Stonehill, Trond Randøy, Kaisa Vikkula, Kåre B. Dullum and Karl-Markus Modén, *Corporate Strategies to Internationalise the Cost of Capital* (Copenhagen: Copenhagen Business School Press, 1998), 334 pages.
- Wang, N.T., How to Penetrate the World Market by Chinese Enterprises (Hefei, Anhui Province: Science and Technology Publishing House, 1995), 308 pages [in Chinese].

Report of the editors of Transnational Corporations

In 1997, its fourth year of publishing in Geneva, Switzerland, *Transnational Corporations* suffered from bottlenecks at the technical level (composition). As a result, numbers 2 and 3 were delayed.

The editorial process

In 1997, the journal continued to benefit from the guidance provided by the members of the Board of Advisers (and especially its chairperson) and reviewers (the reviewers are listed on page iv in vol. 6, no. 3). With the exception of book reviews and views, after an initial review by one of the editors, manuscripts submitted to the journal undergo a double-blind referee process. Under this process, the reviewer is not informed of the author's identity, and at the same time, the editors do not disclose the reviewers' identity to the author. Typically, manuscripts are sent to two or three external reviewers if it is decided by the editors that they fit into the scope of the journal. If the reviews are favourable and the revisions suggested by the referees are adequately implemented, the manuscript is put in the pipeline for publication. As a supplementary measure to improve the style, UNCTAD technical editors were given the opportunity to make further editorial suggestions on vol. 6, nos. 2 and 3. Because of the novelty of the procedure, however, this added to the delay in publishing. We expect to eliminate this delay in the 1998 issues.

Figure 1 shows the breakdown of manuscripts received in 1997. Of the 40 articles and research notes submitted, 6 (15 per cent) were published, 7 (18 per cent) rejected, and the remaining 27 (67 per cent) were still under review. The manuscripts of 4 articles published in 1997 had been submitted in 1996. In 1997, the submission of manuscripts for publication decreased (see figure 2). The ratio of published-to-submitted articles is 38 per cent. In 1997, the rate of rejection was lower than in any year from 1994 to 1996, reflecting an improvement in the general quality of manuscripts submitted.

Figure 1. *Transnational Corporations:* breakdown of manuscripts as of 31 December 1997

Figure 2. Transnational Corporations: breakdown of manuscripts since innception

The popularity of the views and book-reviews sections increased in 1997. The first views article, published in December 1996, was followed by 4 more in the three issues of 1997. The number of book reviews published increased from 12 to 15. In 1997, 2 non-English-language books were reviewed (against only 1 in 1996).

A new feature of the journal that editors and members of the Board of Advisers started to consider in 1997 was the publishing of special issues about well-defined themes, under the guidance of ad hoc guest editors. Such special issues may be published in 1998 and 1999. The circulation of *Transnational Corporations* in 1997 was about 4,500, including subscribers and persons and institutions receiving the journal through UNCTAD's mailing list.

Editors and the Board of Advisers

In 1997, Karl P. Sauvant continued to edit the journal. Persephone Economou was Deputy Editor for vol. 6, no. 1. As Fiorina Mugione had resigned in December 1996 from the post of Deputy Editor (although she stayed on as Associate Editor), the journal was left without a Deputy Editor and faced an acute human-resource shortage, although Kálmán Kalotay and James X. Zhan stayed on as Associate Editors, and Michael Bonello joined the journal as new Associate Editor. Arghyrios Fatouros was the Guest Editor for international framework issues, Kálmán Kalotay was the Book Review Editor, and Teresita Sabico the Managing Editor. The editors would like to extend their appreciation to Persephone Economou for her contribution to the journal, and to Fiorina Mugione for her remarkable work as Deputy Editor.

The Board of advisers consists of 14 experts, and is chaired by John H. Dunning (Universities of Reading and Rutgers). During the past year, there was no change in the composition of the Board of Advisers. The editors are indebted to the Board for the professional advice they received in the course of 1997.

GUIDELINES FOR CONTRIBUTORS

I. Manuscript preparation

Authors are requested to submit three (3) copies of their manuscript in English (British spelling), with a declaration that the text (or parts thereof) has not been published or submitted for publication elsewhere, to:

The Editor Transnational Corporations 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 or to e-mail address: 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.

Manuscripts should be typewritten and double-spaced (including references) with wide margins. Pages should be numbered consecutively. The first page of the manuscript should contain: (i) title; (ii) name(s) and institutional affiliation(s) of the author(s); (iii) address, telephone and facsimile numbers of the author (or primary author, if more than one).

Authors should provide the diskette of manuscripts only when accepted for publication. The diskette should be labelled with the title of the article, the name(s) of the author(s) and the software used (e.g. WordPerfect, Microsoft Word, etc.). WordPerfect is the preferred software.

Transnational Corporations has the copyright for all published articles. Authors may reuse published manuscripts with due acknowledgement. The editor does not accept responsibility for damage or loss of manuscripts or diskettes submitted.

II. Style guide

A. **Quotations** should be double-spaced. Long quotations should also be indented. A copy of the page(s) of the original source of the quotation, as well as a copy of the cover page of that source, should be provided.

B. **Footnotes** should be numbered consecutively throughout the text with arabic-numeral superscripts. Footnotes should not be used for citing references; those should be placed in the text. Important substantive comments should be integrated within the text itself rather than placed in footnotes.

C. **Figures** (charts, graphs, illustrations, etc.) should have headers, subheaders, labels and full sources. Footnotes to figures should be preceded by lower-case letters and should appear after the sources. Figures should be numbered consecutively. The position of figures in the text should be indicated as:

D. **Tables** should have headers, subheaders, column headers and full sources. Table headers should indicate the year(s) of the data, if applicable. The unavailability of data should be indicated by two dots (..). If data are zero or negligible, this should be indicated

by a dash (-). Footnotes to tables should be preceded by lower-case letters and should appear after the sources. Tables should be numbered consecutively. The position of tables in the text should be indicated as:

Put table 1 here

E. **Abbreviations** should not be used, except for FDI (foreign direct investment) and TNCs (transnational corporations).

F. **Bibliographical references** in the text should appear as: "John Dunning (1979) reported that ...", or "This finding has been widely supported in the literature (Cantwell, 1991, p. 19)". The author(s) should ensure that there is a strict correspondence between names and years appearing in the text and those appearing in the list of references.

All citations in the list of references should be complete. Names of journals should not be abbreviated. The following are examples for most citations:

Bhagwati, Jagdish (1988). Protectionism (Cambridge, Massachussetts: MIT Press).

- Cantwell, John (1991). "A survey of theories of international production", in Christos N. Pitelis and Roger Sugden, eds., *The Nature of the Transnational Firm* (London: Routledge), pp. 16-63.
- 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.

All manuscripts accepted for publication will be subjected to editing to ensure conformity with United Nations practice.

READERSHIP SURVEY

Dear Reader,

We believe that *Transnational Corporations*, already in its fifth year of publication, has established itself as an important channel for policy-oriented academic research on issues relating to transnational corporations (TNCs) and foreign direct investment (FDI). But we would like to know what **you** think of the journal. To this end, we are carrying out a readership survey. And, as a special incentive, every respondent will receive an UNCTAD publication on TNCs! So, please fill in the attached questionnaire and send it to:

> Readership Survey: Transnational Corporations Karl P. Sauvant Editor UNCTAD, Room E-9123 Palais des Nations CH-1211 Geneva 10 Switzerland Fax: (41-22) 907-0194 (Internet: Karl.Sauvant@UNCTAD.org)

Please do take the time to complete the questionnaire and return it to the above-mentioned address. Your comments are important to us and useful for improving the quality of *Transnational Corporations*. We look forward to hearing from you.

Sincerely yours,

Karl P. Sauvant Editor Transnational Corporations

TRANSNATIONAL CORPORATIONS QUESTIONNAIRE

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