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11 September, 1979	Note by the Executive Secretary	

Correspondents / Participants

Subject / Title
DC/79-11 Restrictions on Access to Capital Markets

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DC/79-13 G-24 Proposals on International Monetary Reform

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DC/79-14 Provisional Record of Discussion on the Twelfth Meeting of the development Committee

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FOR IMMEDIATE RELEASE

DEVELOPMENT COMMITTEE

JOINT MINISTERIAL COMMITTEE
OF THE
BOARDS OF GOVERNORS OF THE BANK AND THE FUND
ON THE
TRANSFER OF REAL RESOURCES TO DEVELOPING COUNTRIES

1818 H Street, N.W., Washington, D.C. 20433 Telephone: (202) 477-1234

September 30, 1979

PRESS COMMUNIQUE

1. The Development Committee held its 12th meeting in Belgrade, Yugoslavia, on September 30, 1979 under the Chairmanship of Mr. Cesar E. A. Virata, Minister of Finance of the Philippines, and with the participation of Mr. Robert S. McNamara, President of the World Bank, and Mr. J. de Larosière, Managing Director of the International Monetary Fund. Sir Richard King, Executive Secretary, took part in the meeting which was also attended by representatives from a number of international and regional organizations and Switzerland as observers.

2. The Committee considered papers prepared by the World Bank and IMF on the flow of financial resources to developing countries and the stabilization of export earnings. They also took note of the proposals contained in the Outline for a Program of Action approved by the Group of 24 and unanimously endorsed by the Group of 77.

3. The Committee discussed current economic trends and agreed that many developing countries will face a particularly difficult situation over the next few years. The non-oil primary producers are likely to experience a slowdown in the growth of demand for their exports and adverse shifts in their terms of trade. The Committee expressed serious concern that in the context of high rates of inflation this would lead to relatively slow rates of economic growth, a further substantial deterioration in their aggregate current account deficit, and an increase in the number of developing countries encountering debt servicing problems.

4. Recognizing the increased interdependence of national economies and in particular the impact on developing countries of developments in industrialized countries, the Committee emphasized the importance of sound economic and financial policies in all countries; it reiterated the need

to avoid protectionist trade measures that would adversely affect the exports of developing countries. The Committee also stressed the urgency of implementing effective policies for energy conservation and development.

5. The Committee recognized that there was a clear need for broad multilateral efforts, including an increasing role for the Bank and the Fund, to assist member countries in coping with the very difficult situation ahead. In this context the Program of Immediate Action outlined by the Group of 24 and endorsed by the Group of 77 would be kept in view. The Committee noted with satisfaction a number of recent developments that had enhanced the Fund's capacity to assist its members, including: the Resolution of the Fund's Board of Governors on the Seventh General Review of Quotas under which quotas in the Fund could be increased to SDR 58.6 billion; the coming into force of the supplementary financing facility; the adoption of new guidelines on conditionality; and the improvements in the compensatory financing facility, including the increase from 75 per cent to 100 per cent of quotas in the maximum amount that could be purchased under that facility. The Committee stressed the importance of an early implementation of the quota increases under the Resolution on the Seventh General Review of Quotas.

6. The Committee noted with satisfaction that over the past year agreement had been reached in the Executive Board of the World Bank to recommend to its Governors a $40 billion General Capital Increase; the Committee urged that all necessary steps be taken to make this increase effective as early as possible. The Committee welcomed the Fifth Replenishment of the Resources of the Inter-American Development Bank, the decision by the Governors of the African Development Bank for a substantial increase in the capital of that institution, and the decision of OPEC's Ministerial Committee on Financial and Monetary Matters to approve the second replenishment of the resources of the OPEC Special Fund.

7. In considering the longer-term economic outlook, the Committee noted that low-income developing countries will continue to depend on official development assistance (ODA) for the bulk of their net capital inflows; in view of this, the Committee regretted that only a modest growth in total ODA flows is projected over the next few years. For many middle-income countries, which depend mostly on private sources for capital flows, as well as certain low-income countries, the anticipated increase in total debt and debt service over the medium term were matters for careful attention.

8. The Committee, while recognizing the difficulties facing some donor countries, stressed the importance of increasing the quantity of ODA flows, particularly from those countries which are now at relatively low levels in relation to gross national product. The Committee also called

for improvements in the quality of ODA such as quick disbursing assistance, untying of aid, finance for local costs, and for greater concentration of ODA on the countries most in need. The Committee stressed the urgency of bringing the Sixth Replenishment of IDA to a prompt conclusion at a level which would enable a significant increase in commitments in real terms to continue.

9. In discussing longer-term structural adjustment problems, the Committee welcomed the willingness of the Bank to consider increasing substantially the relative importance of program lending in its overall operations. The Committee requested the Executive Directors of the Bank to explore the criteria which could govern program and sector loans in situations where external disequilibria had not yet become severe, and to consider whether in individual cases such lending should be additional to that now planned. The regional institutions were invited to review their policies and practices in light of the current prospects for developing countries. The Committee endorsed expanded collaboration between the Fund and the Bank in support of economic programs of developing countries facing severe balance of payments problems.

10. The Committee discussed the problem of medium-term financing for balance of payments adjustment. In this connection, the Committee noted that the Fund's extended facility had proved a useful mechanism and that it had considerable potential in the future. Recognizing the difficult situation facing member countries, the Committee requested that the Executive Board of the Fund give further consideration to increasing the maximum repurchase period under the extended facility from eight to ten years.

11. In view of the heavy needs for balance of payments financing facing many countries in the years ahead, the Committee requested the Executive Board of the Fund to give attention to developing ways and means of lowering the interest costs of the supplementary financing facility.

12. The Committee recognized that in the difficult years ahead there would be a major need for recycling of funds to assist developing countries facing large balance of payments deficits and recognized that this need could not be met by official financial flows only. In this connection, the Committee stressed the important role of additional private capital flows in financing the increasing capital requirements of developing countries; such flows would be facilitated by the promotion of policies in these countries conducive to sustaining their creditworthiness. The Committee welcomed the expansion in cofinancing with the private banking sector that had been achieved by the World Bank and regional institutions to date, and suggested that capital-exporting countries should explore what actions could be taken to encourage greater use of this mechanism by their banks. The Committee also requested the World Bank and the regional institutions to explore steps that could be taken further to expand cofinancing.

13. In discussing possible new approaches relating to capital flows, the Committee reaffirmed that priority should be given to exploiting the full capacity of existing institutions, including possible acceleration in the use of their resources, to meet the urgent problems of the developing countries over the next few years. The Committee considered however that the matter should be kept actively under review.

14. The Committee reviewed the question of stabilization of export earnings on the basis of a staff study. The Committee emphasized the importance of appropriate mechanisms to mitigate the effects of fluctuations in export earnings of developing countries, in particular those countries heavily dependent upon primary commodity exports, and to assist them in diversifying their exports. It recognized that, through coordinated action, the Fund and Bank had developed the capacity to meet the needs of countries suffering from shortfalls and noted in particular the progress that the two institutions had made in providing finance for medium-term commodity shortfalls and in reducing dependence on primary commodities. It requested the Executive Boards of the two institutions to keep this matter under review.

15. The Committee welcomed the recent decision of the Executive Board of the Fund to liberalize the Fund's compensatory financing facility, in particular the increase in the limit on the amount of drawings outstanding under the facility. The changes constitute a substantial improvement in the Fund's compensatory financing facility, making it a more effective mechanism to assist members in dealing with problems of fluctuations of export earnings. The Committee noted that in the longer run vulnerability to fluctuating export earnings would be reduced by diversifying exports, for which purpose Bank and IDA resources should continue to be made available. The Committee also welcomed the new convention replacing the Lomé Convention and the new features of the STABEX incorporated in the new convention. They also noted with satisfaction the progress made in negotiations for the setting up of a Common Fund for commodities.

16. It was agreed that the subject of export earnings stabilization would be reviewed by the Committee in a year's time in the light of experience in operation of the recently improved CFF, the ongoing negotiations on the Common Fund, and the further study of the matter being undertaken in UNCTAD in cooperation with Fund Staff.

17. The Committee will meet again on April 24 in Hamburg.

18. The Committee expressed their sincere appreciation to the Government of Yugoslavia for their hospitality and for the excellent arrangements provided for their meeting.

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Correspondents / Participants

Subject / Title
DC/79-3 Provisional Record of Discussion on the Eleventh Meeting of the development Committee
Washington, DC, September 27, 1978

Exception(s)
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Record Removal Notice

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23 September, 1978	Report

Correspondents / Participants

Subject / Title
DC/78-10 Summary of th Discussion of the Main Substantive Subjects at the Tenth Meeting of the Development Committee by the Chairman Mr. Cesar E. A. Virata

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Development Committee - Meeting - 1979 - Volume 02	30021212

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25 September, 1978	Report

Correspondents / Participants

Subject / Title
DC/77-18 Summary of the Ninth Meeting by the Chairman Mr. Cesar E. A. Virata

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Development Committee - Meeting - 1979 - Volume 02	30021212

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Correspondents / Participants

Subject / Title
DC/77-5 Summary of the Eighth Meeting by the Chairman Mr. Cesar E. A. Virata

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Correspondents / Participants

Subject / Title
DC/79-13 G-24 Proposals on International Monetary Reform

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Correspondents / Participants

Subject / Title
Anticipated attendance as of September 29, 1979

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TASK FORCE ON
INVESTMENT

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Development Committee - Meeting - 1979 - Volume 02	30021212

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13 August, 1979	Report

Correspondents / Participants

Subject / Title
DC/TF/PFI/79-7 Task Force on Private Foreign Investment Notice of Meeting

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Correspondents / Participants

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DC/TF/PFI/79-8 Task Force on Private Foreign Investment

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ADDITIONS TO STATISTICAL TABLES SI.1 and SI.2

NET FLOW OF FINANCIAL RESOURCES TO DEVELOPING COUNTRIES

	1977 US$ millions	1977 % of total
I. Official Development Assistance	14,696	29.7
1. Bilateral grants and grantlike flows	7,203	14.6
2. Bilateral loans at concessional terms	2,881	5.8
3. Contributions to multilateral institutions	4,612	9.3
II. Other Official Flows	3,319	6.7
1. Bilateral	3,192	6.5
2. Multilateral	127	0.3
III. Private Flows	29,988	60.6
1. Direct investment	8,792	17.8
2. Bilateral portfolio	10,454	21.1
3. Multilateral portfolio	2,642	5.3
4. Export credits	8,100	16.4
IV. Grants by Private Voluntary Agencies	1,489	3.0
TOTAL Net Flow	49,492	100.0

ADDITIONS TO STATISTICAL TABLE SI.3: ESTIMATED NET FLOW OF PRIVATE DIRECT FOREIGN INVESTMENT TO DEVELOPING COUNTRIES BY INVESTOR COUNTRY

	1977 US$ millions	1960-1977 US$ millions	1960-1977 % of Total	1977 % of Total
AUSTRALIA	84	857	1.2	1.0
AUSTRIA	18	93	0.1	0.2
BELGIUM	- 25	866	1.2	- 2.8
CANADA	390	2,106	2.9	4.4
DENMARK	-	170	0.2	-
FRANCE	265	5,219	7.1	3.0
GERMANY	846	6,501	8.9	9.6
ITALY	162	2,312	3.2	1.9
JAPAN	724	5,517	7.6	8.3
NETHERLANDS	486	2,740	3.7	5.5
NORWAY	16	164	0.2	0.2
PORTUGAL	-	28	-	-
SWEDEN	126	793	1.1	1.4
SWITZERLAND	211	1,568	2.1	2.4
UNITED KINGDOM	611	6,727	9.2	7.0
UNITED STATES	4,866	37,594	51.3	55.4
TOTAL DAC	8,780	73,295	100.0	100.0

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Correspondents / Participants

Subject / Title
DC/TF/PFI/79-9 Task Force on Private Foreign Investment

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FACTORS INFLUENCING THE LOCATION OF FOREIGN DIRECT INVESTMENT IN DEVELOPING COUNTRIES

Prepared by Professor John H Dunning
(University of Reading and Economists Advisory Group Ltd)
for the
International Finance Corporation

August 1979

Economists Advisory Group

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FACTORS MOTIVATING THE LOCATION OF FOREIGN DIRECT INVESTMENT IN DEVELOPING COUNTRIES

INTRODUCTION

1.1 In seeking to describe and interpret the factors influencing the location of activities of multinational corporations (MNCs) in developing countries, this paper proceeds in the following way. First, it sets out a framework for analysing the determinants of the level and structure of foreign direct investment, and/or production financed by such investment in any country. Second, it uses this framework to discuss the main types of foreign based operations of MNCs, paying particular attention to resource based, import substitution and rationalised manufacturing investment[1], each of which is motivated by very different considerations. Third, it identifies, from a selection of empirical studies, those factors which appear to have been the most significant influences on the locational decisions of MNCs in recent years. In doing so, it pays especial attention to the policy instruments of host governments, and the conditions under which these are most likely to affect the siting of foreign affiliates.

FACTORS INFLUENCING THE PROPENSITY OF ENTERPRISES TO ENGAGE IN FOREIGN PRODUCTION; THE ELEMENTS OF THE ECLECTIC THEORY OF INTERNATIONAL PRODUCTION

2.1 Since it is mainly private corporations which engage in foreign direct investment, any explanation of the propensity of one country (or a group of countries) must rest on whether its corporations perceive such investment to advance their objectives, whatever they may be[2]. Except when treated as an extension of portfolio analysis, the literature on the determinants of foreign direct investment rarely explicitly examines the goals of MNCs; implicitly, in most studies, a constrained profit maximisation model is assumed (Stevens 1974).

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1 For further details see pages 12 to 25.

2 Throughout this paper we shall use the words endowments and assets interchangeably and in the Fisherian sense to mean 'anything capable of generating a future income stream', Johnson (1970)

2.2 The eclectic theory[1] of international production suggests that the level, composition and location of the foreign activities of firms depends on the extent to which three conditions are satisfied. First, the investing corporation must possess (or be able to acquire on favourable terms) asset or rights which its competitors or potential competitors do not possess. The literature has termed these assets ownership or firm specific advantages. Such proprietary advantages may take various forms. They include legally protected rights e.g. patents, trade marks, etc; the exclusive access to inputs e.g. raw materials essential to the production of a product and/or control over market outlets; or they may arise from the technical, organisational or commercial characteristics of the investing firm e.g. technological capability, managerial, organisational and financial skills, economies of large scale production and surplus entrepreneurial capacity. It should be observed that these and other ownership advantages summarised in Table 2.1 are not necessarily exclusive to MNCs (Dunning 1977a). Some arise between national firms producing in the same location; others are those which a branch plant of an enterprise may enjoy over a de novo enterprise of the same nationality. But MNCs may also derive additional ownership advantages because of their territorial diversification. Examples include their ability (subject to government sufferance) to engage in international transfer pricing, to shift liquid assets between currency areas to take advantage of (or protect themselves against) exchange rate fluctuations, to reduce risks by diversifying their investment portfolios; to lessen the incidence of strikes or industrial unrest in one country by operating parallel production capacity in another; to engage in international product and/or process specialisation; and to gain access to, and monitor more speedily, commercially useful information. All of these advantages arise from imperfections in product, resource, information or financial markets, or because of differences in attitudes, policies and legislation of national governments. In a perfectly competitive situation and in the absence of government intervention, such advantages /which must be sufficient to overcome the disadvantages (vis à vis indigenous firms) of operating in a foreign market_/ [2] could only be transient. It will be noted that it is the nature of many (but not all) ownership advantages

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1 For an extensive discussion of the eclectic theory, see Dunning 1977(a), 1979(a) and 1979(f)

2 Such as unfamiliarity with, or lack of knowledge about, local customs, laws and regulations, input sources, needs of markets (Hirsch 1976)

that, although they are internal to the possessing firm, they are mobile i.e. transferable across national boundaries (Hall,1979). These contrast with location specific endowments which comprise resources locked into their country of origin, in the sense that they have to be used where they are available. These are the traditional Ricardian type endowments (the obvious example of which is land), the uneven distribution of which across the world's surface give rise to the principle of comparative advantage and international trade. Unlike differences in ownership specific advantages, differences in location specific endowments between countries are equally available to all firms (i.e. irrespective of their nationality), and trade is based not on differences in production functions of enterprises but on differences in resource intensities and markets. Under such conditions there is no incentive for international direct investment to take place. It is a combination of mobile ownership and immobile location advantages that makes such investment possible. We say possible, because the choice of an an enterprise to serve a foreign market by exports or local production, or a domestic market by local production or by imports from its foreign affiliates, will depend on the spatial distribution of the resources (e.g. whether they are fairly ubiquitous e.g unskilled labour, or concentrated in a few locations e.g. many minerals and raw materials) and the relative extraction, production and marketing costs. Where ownership and location advantages both favour the home country, a foreign market will be serviced by exports rather than by local production and a domestic market will be serviced by local production rather than by imports form foreign affiliates; where they both favour a foreign country, then the home market will be supplied by imports from the foreign country's firms. On the other hand, when ownership advantages favour the home country but location advantages favour a foreign country, foreign production will be preferred to exports by the home country's firms and outward direct investment will occur; when ownership advantages favour a foreign country's firms but location advantages favour the home country, the latter's markets may be served by production financed by inward investment rather than by imports.

2.3 The second condition for international production is, then, that it must be in the best interests of enterprises to exploit their ownership advantages in conjunction with at least some indigenous resources of foreign countries. Such factors influencing a choice of location of an enterprise's

activities, assuming that it can compete effectively with other firms, are similar to those which determine the location of the activities of an enterprise within a country and have been well documented in the literature of industrial location. Basically they comprise seven groups;

i. production costs, which are a function of input prices and the efficiency of resource usage;

ii. transfer costs, which include transport costs, both of inputs and outputs over space and artificially imposed trade barriers e.g. tariffs, import controls, non-tariff barriers and/or incentives e.g. export rebates, subsidies, etc;

iii. differential government (within a country, local government or state, between countries, national government) legislation, attitudes and policies both towards trade and inward and outward investment;

iv. what has been called (by Swedish economists) pyschic distance e.g. language, cultural, sociological, political, legal, environmental et al differences between the home country and possible foreign locations which may affect the balance between exporting and foreign production c.f. e.g. the propensity of Japanese and US owned motor vehicle firms to invest in, rather than export to, Latin America or of French and German firms to invest, rather than export to, the colonial French speaking territories;

v. the size and structure of the market being served, including the extent to which it is desirable for a producing firm to be in close proximity with its customers;

vi. the characteristics and strategy of the investing firms e.g. size, nature of products supplied, degree of multinationality, product diversification, vertical integration and management philosophy; and,

vii. the competitive structure of the industry, and, in particular, whether the constituent firms are prompted to engage in a defensive oligopolistic strategy (Knickerbocker 1973, Graham 1974 and Flowers 1976).

2.4 When an enterprise has a choice between domestic and foreign production, new locational variables enter into their calculations and others may take on different values. Of the former, differences in the form and extent of government intervention e.g. tax rates and investment incentives, performance requirements of affiliates of MNCs, foreign ownership limitations tariff and non-tariff barriers etc. and movements (or expected movements) in exchange rates are the two most important; of the latter, resource endowments, market characteristics and distance generally vary more between countries than

within countries, these variables may assume a greater significance in locational choices in the cost of labour as between the US and developing countries in South East Asia and between different regions in the US. Conceptually, there is no difficulty in incorporating internationally specific variables into traditional location models; from a policy making viewpoint, the key factor is to identify the locational variables most likely to be the sensitive influences on foreign investors in their investment decision taking. These will obviously depend upon the importance of the variable in the supply costs of a particular product or group of products e.g. c.f the significance of transport costs in the supply of cement, breakfast cereals and rubber tyres, with those of pharmaceuticals, jewellery or pocket calculating machines; and the differences in the level and structure of these costs between host or host and home countries, which inter alia, will depend upon the factor endowments and price levels in the countries. Again no generalisations may be possible; much will depend on the type of and motive for the foreign investment e.g. the locational variables influencing resource based investment are very different to those influencing import substituting investment; and, within these broad activity categories, (see Table 2.2) product (or process), country and enterprise specific characteristics. A summary of some of the more important locational variables is set out in Table 2.1.

2.5 Recent work on the siting of activities has emphasised the relevance of firm specific factors, notably the philosophy and strategy of MNCs towards their foreign operations which inter alia is likely to vary according to the degree of their multinationality and the nature and diversity of the products being supplied. Clearly, the more vertically or horizontally integrated in its global operations an enterprise is, the more its locational choice is likely to be governed by the geographical distribution of factor endowments; again, this is most obvious in the case of resource based and export-platform type investments. But companies like Philips, Ford and International Harvester practice a policy of horizontal i.e. product specialisation within their different plants in Western Europe and Latin America, partly to realise the benefits of product rationalisation and scale economies, and partly to exploit differences in the structure of country-specific costs and/or markets. MNCs may also take account of location-specific factors in allocating functions or areas of decision taking. Here

TABLE 2.1 : THE ECLECTIC THEORY OF INTERNATIONAL PRODUCTION

1. OWNERSHIP SPECIFIC ADVANTAGES (of enterprises of one nationality (or affiliates of same) over those of another)

(a) Which need not arise due to multinationality - Those due mainly to size and established position, product or process diversification, ability to take advantage of division of labour and specialisation; monopoly power, better resource capacity and usage.
Proprietary technology, trade marks (protected by patent et al legislation).
Production management, organisational, marketing systems; R & D capacity; 'bank' of human capital and experience.
Exclusive or favoured access to inputs, e.g. labour, natural resources, finance, information.
Ability to obtain inputs on favoured terms (due e.g. to size or monopsonistic influence).
Exclusive or favoured access to product markets.
Government protection (e.g. control on market entry)

(b) Which those branch plants of establishment enterprises may enjoy over de novo firms.
Access to capacity (administrative, managerial, R & D, marketing, etc) of parent company at favoured prices.
Economies of joint supply (not only in production, but purchasing, marketing, finance, etc arrangements).

(c) Which specifically arise because of multinationality
Multinationality enhances above advantages by offering wider opportunities..
More favoured access to and or better knowledge about information, inputs, markets.
Ability to take advantage of international differences in factor endowments, markets, Government intervention. Ability to diversify risks, e.g. in different currency areas.

2. INTERNALISATION INCENTIVE ADVANTAGES (i.e. to protect against or exploit market failure)

Avoidance of transaction and negotiating costs.
To avoid costs of enforcing property rights.

Buyer uncertainty (about nature and value of inputs (e.g. technology) being sold).
Where market does not permit price discrimination.
Need of seller to protect quality of products.
To capture economics of interdependent activities (see 1(b) above.
To compensate for absence of futures markets.
To avoid or exploit government intervention (e.g. quotas, tariffs, price controls, tax differences, etc).
To control supplies and conditions of sale of inputs (including supplies to competitors).
To control market outlets (including those which might be used by competitors). (Where permitted)
To be able to engage in practices, e.g. cross-subsidisation, predatory pricing, etc, as a competitive (or anti-competitive) strategy.

3. LOCATION SPECIFIC VARIABLES

(These may favour home or host countries.)
Spatial distribution of inputs and markets.
Input prices, quality and productivity, e.g. labour, energy, materials, components, semi-finished goods.
Transport, communication availability and costs.
Government intervention.
Control on imports, including new tariff barriers, tax rates, incentives, climate for investmnet, political stability, etc.
Infrastructure (commercial, legal, transportation).
Psychic distance (language, cultural, business, customs, etc, differences).
Economics of R & D production and marketing (e.g. extent to which scale economies make for centralisation of production).

the work of economists like Hymer (1970) and Cohen (1977) and, more recently, geographers like Malecki (1979) and Wood (1978) suggest reasons for the centralisation of high-order (i.e. skill, technology or information intensive) activities in the home country; and low order activities in foreign countries. This concentration of R & D activity by many MNCs in their home countries [1] has caused a lot of concern among host countries, particularly developing countries, who see it as sustaining a technological dependence on the home country, as there is little genuine externalisation i.e. diffusion of the technology, outside the MNCs. This has encouraged some countries to encourage the decentralisation of innovatory activities.

2.6 A related locational concern of host countries is that MNCs in resource based industries do insufficient local secondary processing i.e. that they extract the materials and export them back to the home country for processing. The reason for this is usually one of straight economics e.g. availability and/or price of inputs or capacity in the parent plant. But, from the viewpoint of the host country, the local value added of foreign affiliates is less than it might be, and, as the processing is likely to be more labour intensive than the primary activity, the employment effect is less. Countries engage in various efforts to attract more downstream operations within their borders.

2.7 Locational needs of companies to produce the same product(s) may also vary according to its position in the product cycle. In the innovatory stage it may be desirable for production to take place in close proximity to the centre of innovation; this may be emphasised by market requirements, as it is usually the home market which is initially served with new products. Later, as the product matures and/or the production technology becomes standardised, then output might be better transferred abroad. (Vernon, 1966 1974). Market characteristics and input costs (including government incentives) exert a more important locational influence here too. Here the competitive strategy of other firms in the industry may become very important, as indeed may the options open to the firm to exploit its advantages through other routes than direct investment e.g. licensing. We shall return to this point later. It is worth observing at this stage that the ownership advantages

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1 US and Swedish MNCs undertake at least 90 per cent or more of their R & D activities within their home countries: UK and Dutch firms between 60 and 70 per cent.

advantages of MNCs may also vary with the product cycle. To begin with, in what Vernon calls innovation-based oligopolies, the main advantage is the innovation itself, later, with mature or senescent oligopolies, it takes the form of economies of scale, control of markets, product differentiation and the benefits of product and/or territorial diversification. Each has its distinct locational implications, sometimes favouring domestic production and sometimes foreign production.

2.8 Ceteris paribus then, the more attractive the opportunities open to companies to locate their activities outside their national boundaries, the more foreign investment will take place. It follows too that the more attractive any one country is relative to another in offering the facilities necessary for the foreign investor, the more investment will be steered to that country. As we have said, this will partly depend on the nature of activities and types of products being produced; but given these, country-specific factors may be of crucial importance. Some of these may be fixed e.g. availability of non-renewable or natural resources although the rate at which they are used may not be; others may not be e.g. government policy, social and technological infrastructure, competitiveness of local firms, the availability of skilled manpower etc.

2.9 The third condition for international production, and one which, until recently, has been neglected in the literature is that the enterprises possessing the ownership advantages listed in Table 2.1 must find it to their interests to exploit these themselves rather than make them available (through e.g. licensing, franchising, sub-contracting, management contracts) to other firms to exploit. In other words, the enterprises must find it worthwhile to internalise these advantages and administer them themselves at appropriate transfer prices rather than to externalise them and dispose of them to independent firms through the market at arms length prices. Where the market route is preferable to the internal route of transferring ownership advantages between countries, then direct investment will be replaced by portfolio resource exchanges.

2.10 It is not coincidental that the growth of the MNC in the present century, and particularly since the Second World War, has occurred at a time when conditions have been especially favourable to the expansion of firms

through territorial internalisation or integration. This is in marked contrast to the 19th century when almost all international resource exchanges took the form of arms length contracts between independent buyers and sellers, the most obvious example being portfolio capital movements. It is worth pondering a little on the reasons why this was so, as it is the absence of conditions making for such transfers which has led firms to increasingly prefer to administer the use of the resources exchanged themselves. These are, first, that markets operated efficiently and, by and large, competitively, and second, that institutional, technological and communication constraints inhibited the growth of firms, especially their territorial diversification. The growing functional and structural imperfection of markets in the exchange of ownership specific assets, together with the reduction of growth constraints to size and diversification of corporations aided the internal growth of firms outside their national boundaries and the international transmission of resources within rather than between enterprises. It will be noted that, in some cases, internalisation is simply a route by which ownership advantages are exploited e.g a patent, in others it may be the essence of an ownership advantage e.g. the control over a particular market or access to factor inputs.

2.11 The literature on market failure dates back to Ronald Coase's seminal discussion on the nature of the firm in 1937, and Edith Penrose's work on the theory of the growth of the firm in the late 1950's. (Penrose 1958). In the last few years the theme has been developed and extended by Arrow (1969), Alcheamand (1972), Demsetz (1972) and Oliver Williamson (1975). It has been specifically applied to explain the vehicle by which proprietary advantages of firms transmitted across national boundaries by Buckley and Casson (1976), Casson (1979) and Magee (1978). Firms will internalise their advantages either to avoid the disadvantages or to capitalise on the imperfections of the two other methods of disposing of them, viz the market and government fiat. Very briefly, coroporations may eschew the market route for five main reasons[1]. First, to save transaction and negotiating costs; second, where due to lack of knowledge about, or the inability to efficiently use, the assets offered for sale, the buyer is not prepared to pay a price sufficent to cover the opportunity costs of the seller (these being

the economic rent which the seller could achieve by exploiting the asset itself)[1]; third, to gain an advantage over one's competitors through controlling the sourcing of essential inputs (especially resources) and/or the access to markets; fourth, to protect the property rights of the seller, inter alia by avoiding the misrepresentation by the sellers of one's product, the use of knowledge to build up competitive strength, to ensure product quality and after sales maintenance and servicing, and fourth, to gain synergistic advantages of joint production and the exploitation of unused resources - particularly entrepreneurial and organisational capacity. These and other incentives to internalise activities are set out in Table 2.1. The more an enterprise perceives these advantages, net of any disadvantages of internalisation (Buckley and Casson 1976) to exist, then, provided there are ownership advantages and a foreign location is preferred to a domestic one, international direct investment will take place.

2.12 Public intervention in the allocation of resources may also encourage firms to internalise their activities. This particularly arises with respect to government legislation towards the production and licensing of technology, e.g. patent and trademark legislation; and where there are differential fiscal, competition and exchange rate policies which MNCs may wish either to avoid or capitalise upon e.g. by transfer price manipulation, cross subsidisation, capital transfers, the use of leads and lags and so on.

2.13 As with ownership and location specific advantages, internalisation advantages (or market failure) will vary according to the products or processes being produced and to country-specific considerations. Once again, they are not of the same significance in affecting the choice between the contractual and the direct investment route of exploiting foreign markets. They also vary according to the stage of the product cycle, the functions performed by the investing firms, and its international, financial and marketing strategy. The more vertically or horizontally integrated a firm is, and the more it practices intra-group trade in goods, money, information and resources, the more it is likely to value and/or be able to take advantage of internalisation procedures, and, thus, the more any changes in such advantages, inspired by government policy or other factors, will influence the amount and location of foreign direct investment.

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1 This particularly applies in the case of proprietary technology, where the value of it may not be determinable until it is actually put to use.

2.14 In the last decade, there is some evidence to suggest that foreign direct investment in the developing countries has fallen because the internalising advantages of transferring resources has been reduced. Sometimes this has been because markets have become less imperfect e.g. as (some) technologies have become more standardised, patents have expired, finance capital has become more widely available, future markets have been developed, information channels have improved, competition between MNCs has increased etc; sometimes, it has been the result of governments deliberately disinternalising the operations of MNCs, either by forced divestment procedures, or by controlling the entry requirements of foreign firms e.g. by insisting on joint ventures or contractual arrangements in place of a 100% equity investment. The conditions under which governments are likely to be successful in these programmes has been analysed in the literature, but clearly, much depends on the uniqueness of the advantages which MNCs offer a particular host country, and how far these can only be acquired if they are part of a package put together in the form of foreign direct investment. Within the developing world, the technological capability of some of the newly industrialised countries (NICs) e.g. Korea, India, Brazil and Indonesia, are obviously very different from that of most African states; and, at least, in some sectors, the propensity to disinternalise the transactions of MNCs is much greater.

2.15 In summary the eclectic theory of international production provides a useful framework for analysing the 'why', 'where', 'when' and 'how' of international involvement by enterprises. Enterprises will service markets of those countries wherever they perceive themselves to have net proprietary advantages over indigenous firms; the 'why' of foreign direct investment rests on the nature and extent of these advantages. They will locate all or part of their activities - innovatory, production and post-production - outside their home countries, whenever cost, marketing or strategic reasons suggest it is in their interests so to do; the 'where' of production to supply either a foreign or a domestic market rests on identifying the country (countries) which offers (offer) the greatest net advantages (i.e. contribution, to the enterprise as a whole, of profit or sales). They will exploit their proprietary assets themselves rather than sell them or the right to exploit them to other and foreign firms, wherever by so doing, they are able to more clearly achieve their objectives than by any other route; the 'how' of international involvement being determined by the extent to

which (a) market failure and/or government fiat exists and (b) either or both can be overcome or taken advantage of through internalisation of activities. These three conditions are both necessary and sufficient for corporations to engage in foreign direct investment; they are determined by industry, country and firm specific circumstances, including the extent to which firms practice international product or process or functional specialisation. Finally the 'when' of international production is closely related to each of these considerations, together with the position in the product cycle an investing (or potentially investing) firm happens to be. Since some of these advantages are uncertain and risk avoidance is usually part of the utility function of the firm, portfolio analysis is also useful in helping to identify the optimum geographical and/or industrial spread of foreign direct investment. For further details see Rugman (1979).

MOTIVES FOR INVESTMENT ACCORDING TO TYPES OF ECONOMIC ACTIVITY

3.1 It is suggested that the above analysis provides a tool kit which may be used to explain both the extent and geographical spread of foreign direct investment, and in particular, why particular host countries are more attractive than others to MNCs. Earlier in this paper we suggested the need for an activity-type approach to explain the location of foreign investment. Table 2.2 relates the approach outlined to six types of foreign investment. The rest of this section very briefly summarises their main spatial characteristics.

Resource based activities

3.2 These account for about 45% of all direct investments and 60% in developing countries. They are motivated primarily to promote or ensure the supply of energy, minerals, raw materials and foodstuffs to foreign, mainly industrial markets, and sometimes,although to a lesser extent today than in the 19th century, to their own firms[1]. This was the origin of much of

1 According to Professor Reddaway in the early 1960s only 2½% of UK foreign investment was in resource based activities to supply the investing firm. (Reddaway, 1968) A lot of the 19th century investment e.g. in rubber, tea and sugar plantations, has been externalised over the years with the evolvement of commodity and futures markets. But also n.b. the production of other cash crops e.g. pineapples and bananas, continues to be largely controlled by MNCs.

TABLE 2.2: TYPES OF INTERNATIONAL PRODUCTION; SOME DETERMINING FACTORS

Types of International Production	Ownership Advantages (The "why" of MNC activity)	Location Advantages (The "where" of production)	Internalisation Advantages (The "how" of involvement)	Illustration of types of activity which favour MNEs
1. Resource based	Capital, technology, access to markets	Possession of resources	To ensure stability of oil supply at right price. Control of markets	Oil, copper, tin, zinc, bauxite, bananas, pineapples, cocoa, tea
2. Import substituting manufacturing	Capital, technology, management and organisational skills; surplus R & D and other capacity, economies of scale. Trade marks .	Material & labour costs, markets, government policy (eg with respect to barrier to imports, investment incentives etc.)	Wish to exploit technology advantages, high transaction or information costs, buyer uncertainty, etc.	Computers, pharmaceuticals, motor vehicles, cigarettes
3. Rationalised specialisation (a) of products (b) of processes	As above, but also access to markets	(a) Economies of product specialisation and concentration. (b) Low labour costs, incentives to local production by host governments.	(a) As 2 plus gains from interdependent activities (b) The economies of vertical integration	(a) Motor vehicles, electrical appliances, agricultural machinery (b) Consumer electronics, textiles & clothing, cameras, etc.
4. Trade & distribution	Products to distribute	Local markets. Need to be near customers. After sales servicing, etc.	Need to ensure sales outlets & to protect company's name	A variety of goods - particularly those requiring close consumer contact
5. Ancillary services	Access to markets (in the case of other foreign investors)	Markets	Broadly as for 2/4	Insurance; banking & consultancy services
6. Miscellaneous	Variety - but include geographical diversification (eg airlines & hotels)	Markets	Various (see above)	Various kinds (a) Portfolio investment properties (b) Where spatial linkages essential e.g. airlines & hotels

British, French and US direct investment in the 19th century; in the late 20th century, a secure and adequate supply of energy and raw materials has become even more vital at reasonable prices to many industrialised countries; hence the large foreign direct investments in resource development by resource poor countries like Japan. Obviously, the presence of resources and the cost of resource exploitation (including the extent to which there is adequate infrastructure, e.g. roads, public utilities, harbours, etc.) are the key locational variables affecting the 'where' of resource exploitation, though transport costs, government policy towards exploration concessions, investment incentives, the taxation of income and secondary processing could also play a role, not only in affecting the 'where' but the 'how much' and 'what kind' of resource exploitation is undertaken. Regarding the 'why' of resource exploitation, the ownership advantages of enterprises are usually those of size, technological expertise (particularly in the search for exploration and extraction of minerals) and access to markets; thus, one would expect ceteris paribus that the presence of foreign owned firms would vary inversely with the extent to which indigenous firms possessed (or were able (e.g. by securing contracts) to acquire) these qualities - except that some technological and social infrastructure is necessary to make the investment profitable in the first place. Regarding the 'how' of foreign involvement, the control of markets and the need to ensure regular supplies at a reasonable price provide the main reasons for corporations to prefer the direct investment to the contractual route; in this case, the ownership advantages arise from the act of internalisation. In the past, the absence of a futures market was an additional motive; but, today, many commodities have a thriving futures market. Government intervention may also encourage firms to internalise their operations; though, more than any other, the resource sector has prompted governments to externalise transactions between the buying and selling arm of the same firm (UN, 1978). Nevertheless, there is some evidence that MNCs do attempt to benefit from transfer pricing, leads and lags, etc, inter alia to minimise tax burdens and exchange losses. Historically, at least, MNCs in the oil industry made huge gains as a result of internalising procedures.

3.3 Examples of the kind of resource based industries in which multinationals tend to dominate are illustrated in Table 2.2; these are ones in which ownership and internalisation advantages are most pronounced.

But the location of these activities, their extent, and their form will be influenced by the factors listed in Table 2.1 and by country specific characteristics, which will influence both the extent to which MNCs find it profitable to compete vis à vis indigenous firms and the modality of that involvement[1].

Import-substituting investment

3.4 The characteristic of this investment is that, initially at least, it is primarily intended to produce goods and services for sale in the country of production, although very often, in line with the product cycle concept, the local production unit may eventually export to markets it can supply more cheaply than the parent company. Such investment usually replicates some or all of the products produced by the investing company, suitably modified to local requirements, though it may also produce unique products of its own (e.g. in the case where an existing firm is taken over, or when the affiliate has become well established in the local market). Where several countries in a particular region are supplying a similar range of products, then after a time, it may be economic to engage in some kind of product or process specialisation, in which case there may be a substantial amount of intra-group trade in the region. In this case, the term 'import substitution' may be appropriately applied to the region but not a particular country. In the case of a globally integrated network of manufacturing activities, then the term 'rationalised production' may be a description of this kind of investment. We deal with this separately in paragraphs 3.9 and 3.14.

3.5 Import substituting investment accounts for about 40 per cent of all foreign direct investment and 30 per cent of that in developing countries. It may be aggressive, and prompted mainly by the economics of servicing an expanding market from a local rather than a foreign base; or defensive, to protect existing markets, supplied by exports, now threatened by import controls. It tends to be concentrated in four lines of activity, first, technology-intensive sectors, e.g. pharmaceuticals, computers, semi-conductors, etc; second, large volume, medium technology durable consumer goods, e.g. motor vehicles, tyres and refrigerators; third,

1 A statistical analysis of the participation of MNCs in selected resource based industries by host country is given in UN 1978. For an appreciation of these activities see e.g. McKern (1976) and Mikesell (1971).

mass production, branded consumer goods, e.g. cigarettes, toilet preparations, packaged foods; and fourth, capital-intensive processing industries, e.g. petrochemicals, fertilisers, soap, man-made fibres, etc. The ownership advantages of multinational MNCs engaged in these kind of activities cover most of those listed in Table 2.1, but vary considerably between products. Inter alia, this explains why the industrial pattern of foreign production varies between home countries, e.g. that of the US and Germany, is concentrated in the advanced technology and large volume durable consumer goods industries while that of the UK and Japan in concentrated in branded consumer goods and medium technology industries (Dunning 1979(b), Lall 1979). Such ownership advantages of enterprises from a particular home country will also vary within an industry by host country, which inter alia will reflect the markets and factor endowments of the investing and recipient countries and the extent to which indigenous firms can compete effectively with MNCs. However, the point we wish to stress in the context of this paper is that, ceteris paribus, foreign direct investment will be directed to those countries, (a) whose economic activity tends to be greatest in areas in which MNCs tend to be most active and (b) where their local firms are least able to generate ownership advantages in competition with MNCs.

3.6 Given ownership advantages, what are the main determinants of where these are exploited? Here there is a fairly substantial body of evidence[1] to suggest that, these are first, product specific factors, such as whether or not there are economies of plant size, which will influence whether the location of output is concentrated; second, home and host country characteristics; and third, distance between home and host countries. Of the host country variables influencing import-substituting investment, the Government's attitude and policies to inward investment, economic management, political stability, market size and prospects of market growth appear to be the most frequently quoted influences; followed by fear of losing a particular market, the behaviour of competitors, the likelihood of exchange rate fluctuations, limitations imposed on foreign ownership and barriers to trade. We shall return to these issues later.

3.7 It is worth noting that, since import-substituting investment is intended to supply domestic markets, the choice of location between

1 Described in more detail in pages 25 to 59.

countries is primarily limited to the markets which are best served through foreign production relative to exports from the home country. There is no real competition between different host countries seeking to attract MNCs in the sense that a particular location is chosen for investment, in preference to another. This is a very different state of affairs where foreign production is intended for export.

3.8 The form or 'how' of foreign involvement rests on the extent to which the kind of ownership advantages, associated with import-substituting investment, can be exploited by the internalised rather than the market rate. This, in turn, will depend on country and product-specific characteristics. Take the transfer of technology for example. The more standardised it is, the more numerous its sources, and the greater the local technological capability, the more likely it is to be transferred through sub-contracting or licensing than through direct investment. Governments, of course, may affect the route of transference by their policies - the Japanese refusal to allow inward investment for much of the post-war period is a case in point. Work done by Buckley and Davies (1979) on involvement by UK firms abroad reveals that the proportion of foreign sales, i.e. sales of foreign affiliates plus those of foreign firms producing under licence to unassociated UK firms, accounted for by licensing is positively correlated with the level of economic development and is lowest in those sectors in which the developing countries have the highest share of e.g. food, drink and tobacco and textiles, paper, printing and publishing. This, in turn, suggests that the kind of internalising advantage enjoyed by UK firms in developing countries may arise from product differentiation and the need to ensure quality control, efficient marketing and after sales service, and maintenance and repairs of equipment. The exceptions arise in the case of the export-platform and horizontally integrated industries, e.g. the motor vehicle industry in Latin America. Other work suggests that relative to the investment stake, the control procedures of MNCs in the less developed of the developing countries tends to be greatest, as do the proportion of UK nationals on local Boards of Directors (Dunning 1977(b)). High transaction and negotiating costs, the inadequacy of local capital, technology and skilled labour, and a rudimentary commercial and legal framework also help to explain why MNCs in at least some developing countries prefer to exploit their ownership advantages by direct investment rather than by

contractual relationships with indigenous firms[1]. Buyer uncertainty or ignorance is also likely to be related to stage of development and complexity of knowledge being transmitted. On the other hand, the absence of product and process integration between import-substituting affiliates in different countries suggests that the need for centralised control to efficiently exploit the economies of specialisation and division of labour is not likely to be pressing.

Rationalised specialisation

(a) Of products

3.9 As suggested above, this territorial specialisation of activity by MNCs is usually a rationalisation of investment in several countries, initially designed to produce goods in place of exports from the home country. It is likely to be positively associated with the degree of multinationality as well as type of products being produced and policies of host Governments, particularly towards import controls. It represents the internationalisation of the Adam Smith doctrine that division of labour is determined by the extent of the market. However, instead of specialisation being within different plants under the same ownership in the same country, or within plants of different ownership in different countries, rationalised specialisation by MNCs occurs within plants of the same ownership in different countries. To this extent, it is only fully realised if there is free trade among the nations in which the plants are situated; it is not, then, surprising that this kind of rationalisation is usually associated with regional economic integration or tariff free zones. It is most widely practiced in the European Economic Community (EEC) and Latin American Free Trade Area (LAFTA), and, as measured by the extent of intra-MNC trade (Buckley and Pearce 1977, US Tariff Commission 1978), is most pronounced in the technology intensive sectors (e.g. pharmaceuticals, computers) and those producing products subject to the economies of large scale production (e.g. motor vehicles, consumer electronics, agricultural equipment, office machinery, etc.). In other industries, there may be some specialisation - in this case both between host countries and between home and host countries - according to the

1 By contrast, the propensity to invest in markets like the US by the formation of joint ventures or through contracts with local firms is very considerable.

quality of the product (e.g. textiles and clothing) and whether it is standardised or not (e.g. machine tools, processed foods). Product specialisation of the kind suggested by the product cycle theory may also occur between home and host countries with the newer, less standardised and more specialised lines being supplied by home plants and the bread and butter lines being supplied by foreign plants. Finally, some MNCs may feel it desirable to duplicate production capabilities so as both to protect themselves against interruption in supplies and to enable them to use facilities as available.

3.10 The locational requirements of this kind of investment tend to be cost and transport oriented, although, where it originates as import-substituting investment, the size of the (combined) markets of the affiliates being rationalised, and liberalisation of trade between the markets may be the crucial determinants. The location of rationalised investment is likely to be more footloose than that of import-substitution investment. A good example is the Ford Motor Company in the UK. Originally set up to supply the UK market, the coming into being of the EEC caused Ford to rationalise its European plants to take advantage of integration and scale economies. Initially it did this by redeploying the capacity it had in its existing plants. But with every new expansion Ford chose to make in Europe its locational choice widened. The decision in 1978 for a big new engine plant to be located in South Wales rather than in West Germany was taken on purely cost grounds; in this case, Ford was especially concerned about the future of industrial relations in the UK, low productivity (c.f. that of the German Ford plants) and the uncertain economic climate; but low labour costs, availability of an excellent site and a very sizeable subsidy from the UK government were sufficient to persuade them to invest in South Wales. Such 'footloose' investments, then, may be extremely sensitive to competitive bidding by different countries, although the evidence suggests that since many millions of dollars are often involved, it will be medium to long run prospects, rather than current conditions, which MNCs will take most into consideration. In a study carried out on US direct investment in the UK in 1974, uncertainty over future government economic policy, inflation, low productivity, trade union attitudes (e.g. to mechanisation and job allocation), industrial unrest and strikes (particularly affecting the transport of supplies and finished goods) were quoted more often as factors leading firms to prefer a continential European location; on the other

functions). Earlier we discussed resource based investment as a form of such integration. Within the manufacturing sector, the main division of labour is between labour and capital and/or labour and technology intensive processes, and because of the distribution of factor endowments, is most different between developed and developing countries. But, unlike most product specialisation, most of the transactions of vertically operated affiliates are between parent and affiliate and not within markets which are normally[1] integrated. A major exception is the production of different parts of IBM computers in various parts of Europe. In the case of 'export-platform' or 'offshore' investment in developing countries, rationalised specialisation mainly takes the form of component specialisation and labour intensive processes in the production of those products whose production processes can be split up and whose transfer costs are not sufficient to outweigh the differential production costs.

3.14 The main ownership advantages - the 'why' of international production rests on the access to technology and the access to markets (which more often than not are internal to the investing company). Thus firms producing audio or video consumer electronics in South East Asia have advantages over indigenous firms, both because the former are better able to adjust to the technological intensive stages of production and because the final product is assured a market. (With the dissemination of technology, the learning processes and the education and training of indigenous labour, these advantages are being gradually eroded in some countries, e.g. Korea.) The location advantages are primarily lower labour costs, cheaper energy and favourable Government attitudes and incentives (of the kind earlier described). It is also assumed that there will be free or preferential trade between the countries trading processes with each other[2]. The internalisation advantages, i.e. those which determine the 'how' of foreign involvement, are basically similar to those of the economics of vertical integration, which may be strengthened when the integration takes place

1 We say 'normally' because a lot of this kind of investment is only possible within export processing zones which are exempt from normal import et al duties.

2 Such an example exists in the provisions of the US Tariff Schedules, under items 806.30 and 807.00 which permit import duties to be levied only upon value added abroad where inputs originated in the US. For a detailed analysis of the effects of such provisions, see Helleiner (1974) and Nayyar (1978).

across national boundaries, because of differences in country-specific characteristics which the MNC has more incentive and/or can better take advantage of than national enterprises. It is not without note that the most vociferous criticism of MNCs tends to be directed to those where there is the greatest control over decisions affecting the affiliate; where global goals are most likely to be at odds with the objective of individual countries; and where the flexibility associated with their multinationality means that it is difficult for governments to force the affiliates to behave in a way which the policies intend (Dunning and Gilman, 1976).

Investment in trade and distribution activities

3.15 The motives for this investment, the location of it, and the ownership and internalisation advantages associated with it are sufficiently self-evident not to require other than the briefest elaboration. This kind of MNC activity is linked to the ability of the investing firm to service the market with exports, which, itself, suggests that this is the preferred route of exploiting the market, rather than by direct investment or portfolio resource transfer. Of course, some trade and distribution investments are designed to advance the export of products of independent firms of the home country - the Japanese trading companies being the supreme example. Basically, however, the demand for these activities is derived from the exports of the investing country; in the process of the internationalisation of the firm, they usually follow a period of marketing through local agencies; the point at which investment takes place being a function of the availability of local marketing skills, the nature of the products being supplied and the extent to which after-sales maintenance and servicing is required. From the viewpoint of the locational advantages, countries with the largest markets (or potential markets) and those whose firms do not have the capacity to exploit these advantages are the most attractive candidates for such investment.

Ancillary investment

3.16 The fifth type of investment is in service activities, for which the demand is derived from other foreign affiliates. Many business services, e.g. insurance, banking, legal, advertising, accounting and auditing, and management consultancy, are supplied by MNCs, through locally established

affiliates to supply other foreign affiliates with the kind of services the latters' parent companies are accustomed to in the home market. Subsequently, such services may be sold to local firms, and in many cases, these now account for a major part of their business. The ownership advantages of such firms rest very much on the superior access to information (which is the main technology of the service sector) and the more efficient use made of it. Location variables include the whereabouts of this information and cost of obtaining it - this is one of the reasons why countries with developed capital, financial and foreign exchange markets attract those activities for which a speedy access to financial information (and its interpretation) is necessary; similarly, countries with sophisticated insurance markets (e.g. the UK and Switzerland) attract insurance or reinsurance companies. As some of the developing countries become better able to provide at least some of these needs, they may be expected to attract more of this kind of investment, which though not large in money terms does have quite an impact on the development of office activity and the employment of office labour[1].

3.17 One type of office activity which is unique in that its output is sold within the MNC network is the regional office. In recent years, quite a bit of attention has been paid to the location of regional offices in Europe, the Latin American area and the Pacific. Here ownership and internalisation advantages are inherent in the activity, which is undertaken specifically for the organisation making the investment. Locational considerations are vital in influencing the choice of location as this kind of activity is very footloose. Because of both the prestige and high value added content of regional offices, many countries - or cities within countries - are anxious to attract such offices (the efforts of the French government in recent years to develop Paris as a global city is a case in point, Heenan and Perlmutten 1979[2]). Since labour and rental costs account for a high proportion of office costs, these are among the key components in the locational decision; the others appear to be access to an international airport and frequency of flights, telecommunication facilities, language and

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1 For recent analyses of the factors influencing the location of business services, and the evolution of global cities, see Heenan and Perlmutten (1979).

2 Paris, in fact, now ranks second to London in the number of European regional offices of US MNCs (Dunning and Norman 1979).

cultural considerations and living conditions for expatriates (Dunning and Norman 1979).

Miscellaneous investments

3.18 There remain a mixed bag of investments which range from building and construction, through hotels and airlines to property development. Some, more than others, have obvious spatial connotations, e.g. airlines are obviously related to volume of air traffic, international regulations and policies of host Governments towards the servicing of such traffic. Other activity is locationally fixed to the market; the building and the hotel industry are examples. The hotel industry is a particularly interesting case as the majority of foreign involvement is not through direct investment but through management contracts, leasing and franchising arrangements. Apparently, the major hotel chains believe that they can maintain sufficient control over day to day resource allocation in the hotels bearing their name sufficient to meet their ends, without a substantial (and in some cases without any) equity holding. In such cases, the content of the contract or agreement with the local owners is all important. Reading the agreements made with local hotel owners by such chains as Hilton and Inter-Continental suggests they are able to exert de facto internalisation of decision taking with only a very limited equity interest participation. The location of their involvement then rests on where the hotels are being built, their bargaining strength at the time the contract is drawn up, the policies of Governments towards contractual terms and the function of the hotel (e.g. whether it is intended to serve a business or sun-tour market). The early Inter-Continental hotels followed the Pan American route into South East Asia; more recently, the lucrative Far East (e.g. Hong Kong and Singapore) and Middle East markets (for business traffic) and the newly developing East African and South East Asian resort areas (for holiday tourists) have attracted the hotels. Often, they have advantages over locally operated hotels to the extent that since they cater primarily for an international market, the clients are assured of a certain quality of service and familiarity of culture and facilities in environments often strange and sometimes hostile to them. This ownership advantage of the international chains incidentally applies very much more in the less developed than in the developed countries (Dunning and MacQueen 1979).

3.19 Size and technical expertise play an important role in the building industry - including knowledge about suppliers - and, earlier, at the design stage. Sometimes even labour is supplied by the investing company, e.g. the South Korean investments in the Middle East. There are many linkages in which the building industry is involved - not least with the oil and petrochemicals industries which again tend to be dominated by MNCs. Again, most kinds of building investments are of the import-substituting kind, with the main locational emphasis on the country-specific costs and benefits which will determine the profitability of the investment. Very often, as in the hotel sector, the product is of a 'one-off' kind. The investment decisions between countries are not usually mutually exclusive, save that at a particular period in time, the MNC may not be able to mobilise the necessary management and organisational skills or tie up the amount of capital required to undertake all the jobs which it is profitable for it to do. In such cases, incentives and local overnment attitudes towards foreign investment become of crucial significance.

3.20 Finally, some kinds of investment, classified as direct[1], are more akin to portfolio as there is usually little else than financial capital transferred. Arab investment in London properties, including prestigious hotels, e.g. the Dorchester, is an example of this kind of investment, which, because of oil money, has become increasingly important in recent years. Like portfolio investment, the motives for this kind of foreign activity by MNCs (or governments) are profitability and capital growth, and it will therefore be attracted to industries and countries which offer (in its judgement) the best opportunities to achieve these goals[2].

HOST COUNTRY INFLUENCES ON THE LOCATION OF ACTIVITIES BY MNCS. SOME ILLUSTRATIONS

4.1 The previous two sections have demonstrated that the question "In which countries do MNCs make their investments?" cannot be properly

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1 Because more than a certain percentage of equity involvement (usually 25 per cent) is assumed to imply the investing company has at least some influence on how resources are allocated in the affiliate.

2 The most suitable tool for explaining this kind of investment is probably the theory of portfolio choice (as applied to the international diversification of the foreign assets of MNCs) (Rugman 1979).

answered without reference to:

i. the extent and form of their ownership specific advantages vis à vis firms of other nationalities,

ii. how far it pays them to internalise these advantages, and

iii. the relative attractions of home and host countries as locations for production.

We have further suggested that the answer to these questions will vary according to the motives for foreign direct investment, which can be conveniently classified into six main groups - although, by value, more than four fifths is in resource based and manufacturing activities; and, within these activities, according to industry and/or product specific characteristics. But, as recent work on the industrial structure of the international involvement of enterprises has shown, country-specific factors are also important in influencing the extent, form and location of foreign direct investment; the pattern of Japanese investment is different from that of German investment; the pattern of US investment in Canada is very different from that in the Philippines; and the pattern of Swedish investment in Finland is very different from that of UK investment in Finland[1]. Finally, enterprise-specific characteristics may be important in a number of ways; first, as Horst (1975) has demonstrated, each of the three conditions for foreign direct investment tends to be positively correlated with the size of the investing enterprise, which, in turn, tends to be associated with the extent of product, process and market diversification; second, size, strategy and technical efficiency will influence the way in which particular enterprises of the same nationality serve the same markets, e.g. c.f. the policies of Chrysler and Ford in the EEC, particularly the extent to which a global strategy is pursued.

4.2 Each of these country, activity and enterprise influences on the conditions determining foreign direct investment may vary over time; we have

1 A study by Lecraw (1977) which compared the motivation of investment by foreign firms from developed and developing countries in Thailand suggested the key variables influencing the former were threats to existing markets to exploit experience with high technology production and to use marketing expertise. Those influencing the latter were diversification of risk, small home markets, the expectancy of a high 'local' rate of return and threats to existing markets. The exploitation of experience with labour intensive technology was also ranked quite high.

suggested that the product cycle thesis is relevant in the short to medium term in explaining the timing and pattern of foreign direct investment, c.f. exports; changes in government policy are one of the most obvious macro-forces influencing the variability of country-specific determinants; while over the longer period, economic development itself powerfully affects both the attractions of a particular country as a base for the location of economic activity of foreign-based firms, and of the ability of its own enterprises to compete in domestic and international markets[1].

4.3 If the above analysis is correct, it follows that changes in the geographical composition of the activities of MNCs may not only reflect host country influences on the profitability of such activities; they may also be the result of an improvement or a deterioration in the competitive position of the host country's firms, c.f. foreign based firms and/or the propensity of foreign firms to exploit their advantages through other routes than by direct investment. Some of these changes may be brought about by host country influences , e.g. expropriation effectively disinternalises foreign control, while aids to domestic enterprises reduce the competitive advantage of foreign enterprises, but, in almost all of the literature on the location of foreign direct investment, the implicit assumption seems to be made that ownership and internalisation determinants remain unchanged.

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1 Unfortunately, space does not allow us to explore the concept of the investment development cycle, which hypothesises that, as countries develop, they tend to move from a situation of zero inward and outward direct investment through various stages to the point where they become net outward direct investors. At one point in the cycle, a country may have to determine whether it is going to pursue a policy of self-sufficiency, after an initial build-up of its economy by foreign capital, or of economic interdependence in which case it continues to encourage inward investment in activities in which its firms have a comparative ownership disadvantage and its endowments a comparative location advantage, while it encourages outward investment in activities in which its firms have a comparative ownership advantage and its factor endowments a comparative disadvantage. Which option a country adopts will strongly influence its attractions to foreign direct investors. The concept of the investment development cycle is being developed by Reading economists. See for example Dunning 1979(c).

TABLE 4.1 : SUMMARY OF DETERMINANTS OF FOREIGN DIRECT INVESTMENT (SELECTED STUDIES)

Number of times factors mentioned

	(a) Foreign investment in general					(b) Investment in specific countries			
Name of researcher	Robinson[1]	Behrman	Basi[2]	Kolde	Forsyth[a3]	Brash	Deane	Forsyth[b3]	Andrews[4]
Date of publication	1961	1962	1966	1968	1972	1966	1970	1972	1972
Number of firms in sample	205	72	214	104	105	100	139	105	80
(a) Marketing factors									
i. Size of market	262	..	141	..	..	..	21	..	..
ii. Market growth		19	158	7	82	89		14	28
iii. To maintain share of market or match a rival's investment	130	..	126	12	35	..	30	6	..
iv. To advance exports of parent company	..	1	..	..	2	..	..	1	..
v. Necessity to maintain close contact with customers	..	7	..	..	5	..	15	9	..
vi. Dissatisfaction with existing market arrangements	..	3	..	25	..	..	..	..	..
vii. Export base for neighbouring markets	104	3	..	..	..	30		..	39
	496	33	425	44	124	119	66	30	57
(b) Barriers to trade									
i. Barriers to trade	130		..	21	28	78	76	..	11
ii. Preference of local customers for local products		14							
	..		..	..	1	24	..	..	..
	130	14	..	21	29	102	76	..	11
(c) Cost factors									
i. To be near source of supply	..	..	..	..	3	..	14	2	..
ii. Availability of labour	209	..	..*	..	..	..	..	53	..
iii. Availability of raw materials	..	12	114	..	..	..	7	..	..
iv. Availability of capital/technology	..	..	78	..	..	..	..	11	
v. Lower labour costs	79	..	103	..	..	..	..	18	40
vi. Lower other production costs	..	7	..	20	..	11	..	..	
vii. Lower transport costs	..	...	..	..	..	22	..	18	
viii. Financial (et al) inducements by governments	50	..	..	..	1	13	..	52	45
ix. General cost levels more favourable (less inflation)	..	..	134	..	...	..	14	..	..
	338	19	429	20	4	46	35	154	85

.../

TABLE 4.1 : SUMMARY OF DETERMINANTS OF FOREIGN DIRECT INVESTMENT (SELECTED STUDIES) (contd)

	(a) Foreign investment in general					(b) Investment in specific countries			
Name of researcher	Robinson[1]	Behrman	Basi[2]	Kolde	Forsyth[a3]	Brash	Deane	Forsyth[b3]	Andrews[4]
Date of publication	1961	1962	1966	1968	1972	1966	1970	1972	1972
Number of firms in sample	205	72	214	104	105	100	139	105	80
	Number of times factors mentioned								
(d) Investment climate									
i. General attitude to foreign investment	..[5]	..	145	6	..	..	10	..	..
ii. Political stability	115	..	159	..	..	..	..	..	..
iii. Limitation on ownership	20	..	..	..	..	..	..	..	..
iv. Currency exchange regulations	105[6]	..	..	..	..	..	..	..	..
v. Stability of foreign exchange		..	151	..	..	..	..	..	..
vi. Tax structure	..	..	131	4	..	..	..	..	..
vii. Familiarity with country	..	..	100	..	..	..	..	..	..
	240	..	686	10	..	..	10	..	..
(e) General									
i. Expected higher profits	182	20	144	..	..	..	..	..	..[8]
ii. Other[7]	252	14	112	5	14	37	39	43	50
	434	34	256	5	14	37	39	43	50
	1638	97	1796	100	171	304	226	227	203

Notes: * Included in lower labour costs
1 Number of times factors are ranked 1-3 in a 6-point scale
2 Listed as 'crucially' or 'fairly important' in Basi's 3-point scale
3 Forsyth[a] refers to reasons given by firms on decision to invest outside the US
4 Andrews' survey was concerned with identifying reasons for investing in Ireland
5 Dealt with in a separate part of the survey and regarded as crucially important
6 Classified as 'financial stability'
7 Including 192 mentions for availability of infrastructure, power and banking facilities
8 Including 40 mentions 'to take advantage of Ireland's entry into the Common Market should that occur'

Source: Dunning (1973)

4.4 With this important caveat in mind, we now review a selection[1] of the empirical work on why firms engage in foreign rather than domestic production, and/or why they produce in one country rather than another[2].

4.5 The studies may be divided into three main groups. The first are those which get their data mainly from field research, usually by asking investing firms, or potentially investing firms, what they consider to be their main motives for investing outside their national boundaries or in a particular host country. The second are more macro and econometrically oriented and rely on published data; using time series or cross sectional data they attempt to relate either changes in foreign investment within a country over time or the composition of such investment between countries at a particular time, to selected explanatory variables, mostly of a location specific kind. The third use an industrial structure approach to explain the 'why' of foreign direct investment.

Field studies

4.6 Table 4.1 reproduces some data, culled from various field studies conducted in the 1960s, which give a reasonably clear indication of the most important factors that seem to influence businessmen in their locational decision making. Even allowing for the fact that none of the studies distinguished between different types of investment nor the industrial composition of such investment, nor, in the case of the general studies, of its geographical composition. Almost without exception the host government's attitude towards inward investment, political stability and the prospects of country characteristics such as size and structure of the domestic market growth are emphasised as of key significance. Next in order come the fear of losing an existing market, the likelihood of exchange rate fluctuations, limitations imposed on foreign ownership and barriers to trade. Only a minority of firms appear to have been enticed

1 We stress the word 'selection' as, within the time and space constraints imposed on us, we were unable to investigate or describe all the relevant material.

2 It will be noted that this is not the same question as 'why firms invest abroad?' An answer to this latter question would also require an analysis of why capital expenditure necessary to engage in foreign production is financed from the home country rather than the host country or international capital markets, which we take it is not the primary concern of the readers of this paper.

abroad by lower production costs; neither do savings in transport costs loom large in their calculations.

4.7 Although most of these enquiries were carried out a decade or more ago there is no reason to suggest the findings would be very different in the 1970s except that in so far as rationalised investment of the kind described on page 17 has become relatively more important. Cost factors, including government incentives may also have become a more important determinant. This is shown quite clearly by a very recent study which has sought to identify reasons for Japanese firms investing in South East Asia - by Kawaguchi for the World Bank (1978). He obtained particulars from a sample of six Japanese firms, whose affiliates were exporting substantial quantities of manufacturing exports. (The survey was then deliberately biased towards export-platform investment.) The most important general determinant for investment was the anticpation of lower production costs for export purposes; 16 of the 18 Japanese affiliates giving particulars were established for this reason; 5 were set up in the belief that it would be cheaper to supply the local market from a local production unit rather than by exports from Japan. Import restrictions by the host country was mentioned by only one firm. Of the lower production costs, 17 affiliates mentioned cheaper direct labour costs and 10 mentioned investment and export incentives from host governments. When asked whether they found that the actual cost reduction was as expected all the parent firms replied in the affirmative.

4.8 Parent firms were also asked to consider their reasons for choosing a particular less developed country in South East Asia. The replies are set out in Table 4.2; it is worth noting that 'familiarity with the host country' (e.g. its culture, language, commercial and legal system, etc.) is listed next to 'better labour quality' as the chief reason for choosing one country rather than another. 'Better investment and export incentives' (e.g. the presence of industrial processing zones), together with 'greater availability of parts and components' are ranked joint third.

4.9 Perhaps the main weakness of the early field studies was that they made no attempt to evaluate the significance of particular variables, nor to identify how these varied according to industry and country characteristics. In the 1970s there has been some improvement in the methodology of this kind

TABLE 4.2:JAPANESE MNCs CHOOSING A PARTICULAR LDC IN SOUTH EAST ASIA AS A LOCATION FOR A MANUFACTURING AFFILIATE

Factor	Number of firms[1/]	Country of Location
a. Larger domestic market	2(2)	Taiwan
b. Greater availability of parts and components	5(4)	Korea, Taiwan, Singapore
c. Better investment and export incentives	5(3)	Taiwan, Malaysia
d. Lower labour wages	4(3)	Korea, Malaysia
e. Better labour quality	10(5)	Korea, Taiwan, Hong Kong, Malaysia, Singapore
f. Shorter distance to export market	4(2)	Korea, Taiwan, Singapore
g. Familiarity with the country	6(2)	Korea, Taiwan, Singapore, Malaysia
h. More reliable distributor existed	0	
i. More reliable joint venture partner existed	1(1)	Taiwan
j. Others		
- Better access to operating capital	2(1)	Singapore, Hong Kong
- Easier export and import procedure	1(1)	Hong Kong
- More favourable feelings toward Japan	1(1)	Taiwan

1/ Figures in parenthesis indicate the number of parent firms.

Sources: Kawaguchi (1978)

of approach. Robert Stobaugh (1968) was one of the first researchers to distinguish between two groups of variables - product related influences e.g. technological and marketing characteristics, life cycle pattern, cost structure and economies of scale; and country related influences, e.g. market size, investment climate, local technology and distance from main importing nations. Schöllhammer (1972) added a third group of influences which he called company related, e.g. size of firm, scope of international operations, management strategy, etc. The same authors and Piper (1971) also suggested schemes for the evaluation of these variables. Stobaugh (1969), for example, set out ranges of marks which might be given for each particular environmental variable (attitude to capital repatriation (0-12), extent to which foreign ownership is allowed (0-12), currency stability (4-20), etc) which could then be assigned by firms according to some predefined criteria. The marks are then aggregated and an index of environmental attraction, or investment climate, obtained. Schollhammer (1972) in a study of 140 American and European MNCs asked corporate executives involved in making location decisions to rank seventy-eight country-related influences (classified into nine broad categories, e.g. economic, legal, geographical, political, labour, tax, etc, factors) on a scale from 1 (of no importance) to 4 (very important). His findings broadly confirmed those of earlier surveys. The two most important individual location factors were existing market size and anticipated market growth, but of the nine broad groupings, political, supply and tax considerations outranked the rest.

4.10 In an examination of the factors influencing UK direct investment in developing countries (which covered about one-half of the value of all such investment) the present author attempted to distinguish between industry and geographic area specific influences (Dunning 1976). For each of its affiliates, UK parent firms were asked to rank on a 1-5 scale a number of factors commonly thought to influence the location and extent of foreign direct investment. The results are set out in Tables 4.3 to 4.5, while, as Appendix I to this report, we reproduce Chapter IV of the report which summarises the interpretation of the data[1].

4.11 Other field studies have concentrated on certain types of determinants.

1 We have changed the numbering of the tables in the text to correspond with those used in the present report.

TABLE 4.3: SOME FACTORS INFLUENCING INVESTMENT BY UNITED KINGDOM MNCS IN DEVELOPING COUNTRIES AND TERRITORIES (FROM A SURVEY CARRIED OUT IN 1973/4)

	Rank of importance a/			Average ranking a/	
	4 or 5	3	2 or 1	Main exporting firms	All firms
	(Percentage of times ranked)				
Investment climate					
1 Political stability	56.6	35.8	7.5	3.3	3.5
2 Economic stability	67.9	24.5	7.5	3.4	3.7
3 Tax and other fiscal incentives of host country	24.3	23.3	52.4	2.6	2.6
4 Attitude of host country towards foreign investment (e.g. capital repatriation, remittance of profits etc.)	78.6	14.6	6.8	3.6	4.1
5 (Before entry) tariffs and other import controls	41.3	21.1	36.7	2.6	2.8
6 (After entry) tariffs and other forms of protection	41.3	25.0	33.7	3.7	4.4
Market conditions					
7 Size and character of local market	89.6	9.4	1.0	3.3	4.1
8 Rate of growth of local market	82.1	11.3	6.6	3.2	2.1
9 Anticipated export markets to other developing countries	8.9	23.5	67.6	3.8	1.7
10 Anticipated export to developed countries	10.7	5.8	83.5	2.6	3.0
11 Behaviour of competitors	29.1	51.5	19.4	2.8	3.2
Costs favouring host country					
12 Price of labour	42.9	45.9	11.2	3.2	2.9
13 Price of material and components	17.0	40.0	43.0	3.2	3.1
14 Transport costs	24.5	48.1	27.4	1.8	2.4
15 Optimum size of production plant fairly small	13.7	45.1	41.2	1.3	2.1
16 Price of loanable funds	9.1	30.3	60.6	1.3	2.1
Availability of resources in host country					
17 Land and buildings	31.1	22.3	48.5	3.1	2.8
18 Technology	11.0	26.0	64.0	1.7	2.3
19 Materials and components	39.4	39.4	21.2	3.6	2.2
20 Management	38.6	22.8	38.6	1.8	2.9
21 Skilled labour	25.0	43.0	32.0	2.2	2.8
22 Unskilled labour	35.3	46.1	18.6	3.2	3.1

a/ Rank
5 = Very important
4 = Above average importance
3 = Average importance
2 = Below average importance
1 = Completely unimportant

Source: Dunning (1977 b).

TABLE 4.4: FACTORS INFLUENCING ESTABLISHMENT OF UNITED KINGDOM AFFILIATES BY BROAD INDUSTRIAL GROUPS
(Ranked in order of importance)[a/]

	Food, drink and tobacco	Chemicals	Metals	Other	All
Investment climate					
1 Political stability	3	9	5	9	5
2 Economic stability	3	4	7	5	4
3 Tax and other fiscal incentives of host country	12	21	20	8	17
4 Attitude of host country towards foreign investment (e.g. capital repatriation, remittance of profits, etc.)	2	2	4	3	3
5 (Before entry) Tariffs and other import controls	10	11	3	18	14
6 (After entry) Tariff and other forms of protection	15	14	13	14	15
Market conditions					
7 Size and character of local market	1	1	1	1	1
8 Rate of growth of local market	6	5	2	2	2
9 Anticipated export markets to other developing countries	18	19	19	19	21
10 Anticipated exports to developed countries	21	22	21	21	22
11 Behaviour of competitors	15	10	9	10	10
Costs favouring host country					
12 Price of labour	9	8	10	7	6
13 Price of material and components	11	11	14	13	12
14 Transport costs	17	17	6	4	9
15 Optimum size of production plant fairly small	22	13	11	20	18
16 Price of loanable funds	19	20	22	16	20
Availability of local resources					
17 Land and buildings	5	18	18	12	13
18 Technology	20	6	16	22	19
19 Materials and components	7	6	15	11	7
20 Management	14	3	17	16	11
21 Skilled labour	13	16	12	15	16
22 Unskilled labour	7	15	8	6	8

Source: Dunning (1977 b)

TABLE 4.5:FACTORS INFLUENCING ESTABLISHMENT OF UNITED KINGDOM AFFILIATES BY BROAD GEOGRAPHICAL AREA (Ranked in order of importance) a/

	Africa	Asia	Latin America	Caribbean	All
Investment climate					
1 Political stability	4	5	10	2	5
2 Economic stability	4	4	6	4	4
3 Tax and other fiscal incentives of host country	9	17	17	12	17
4 Attitude of host country towards foreign investment (e.g. capital repatriation, remittance of profits, etc.)	2	2	9	1	3
5 (Before entry) Tariffs and other import controls	7	13	3	18	14
6 (After entry) Tariffs and other forms of protection	6	7	12	20	15
Market conditions					
7 Size and character of local market	1	3	2	2	1
8 Rate of growth of local market	3	1	1	5	2
9 Anticipated export markets to other developing countries	20	21	19	17	21
10 Anticipated exports to developed countries	22	22	21	12	22
11 Behaviour of competitors	13	9	13	11	10
Costs favouring host country					
12 Price of labour	13	8	7	9	6
13 Price of material and components	11	16	7	10	12
14 Transport costs	13	6	11	5	9
15 Optimum size of production plant fairly small	20	17	14	21	18
16 Price of loanable funds	19	20	22	18	20
Availability of local resources					
17 Land and buildings	10	14	16	5	13
18 Technology	18	19	20	22	19
19 Materials and components	11	11	4	12	7
20 Management	16	10	14	12	11
21 Skilled labour	16	12	17	16	16
22 Unskilled labour	8	14	5	5	8

a/ Rank from 1 to 22

Source: Dunning (1977 b)

In his study on private foreign investment in developing countries, for example, Grant Reuber (1973) paid special attention to the role of incentives offered by host countries. Asked to identify which of the varying incentives was "deemed so important that its absence would have caused abandonment of the project or major changes in it", firms responded as follows:

Number of projects

	Type of incentive			Incentives of no importance
	Protection of LDC market	Financial incentives[a]	Other	
TOTAL	31	15	13	10
European investors	21	3	4	4
North American investors	5	3	6	5
Japanese investors	5	9	3	1
Export-oriented projects	5	11	6	1
Market-development projects	12	2	5	8
Government-initiated projects	14	2	2	1
Latin America	11	6	3	3
India	8	-	3	1
Far East	3	6	4	4
Other	9	3	3	2

Note: a Includes tax holidays, duty remissions, accelerated depreciation

4.12 Again it may be useful to quote some of the main conclusions of the Reuber study.

> "Protection of the domestic LDC markets stands out in importance for market-development and government-initiated projects. Financial and other incentives, by contrast, are relatively more important in our sample for export-oriented projects. It is also noteworthy that while some respondents felt that incentives made little or no difference to whether the project was undertaken or not, this was true of only 10 out of a sample of 69 responses. Moreover, most of these were concentrated in market-development projects where presumably the investment was mainly based on long-term underlying market considerations. The survey evidence also indicates that incentives have had some effect on decisions about where to locate projects among the LDCs. The most important of these seem to be tariffs and quotas on competing imports, concessions on imports of inputs, and tax concessions.
>
> A bewildering variety of direct and indirect incentives are made available by the LDCs to foreign investors. All of these may be seen as attempts to raise the rate of return to the investor to the point where it is sufficiently attractive relative to the rate of return elsewhere to induce him to invest. There are several reasons for believing that these incentive systems are relatively

inefficient in the sense that under alternative arrangements the same amount of foreign investment could be attracted from abroad at lower cost. Among the reasons for this inefficiency are, first of all, the highly complex nature of the systems and their relatively high transactions and administrative costs for both the host country and the investors. Secondly, because of their complexity, such systems involve relatively high information costs for the investor. Thirdly, because of their political basis such incentive systems are subject to additional risk and uncertainty unrelated to the normal commercial risks and uncertainty associated with particular projects. And finally, of course, because of the complexity of the systems it is doubtful whether either the host country or the investor can be very clear at the planning stage of a project about exactly how much will be gained from the incentives available, given that the return from the project in some cases is contingent on a wide variety of uncertain demand and supply considerations. In this situation many investors are not unlikely in their planning to make relatively conservative assumptions which, in the event, may lead to higher-than-expected returns.

Not only is it likely that existing systems are relatively inefficient but also changes in rates of return introduced through existing incentive systems are likely to be relatively inefficient in terms of the additional investment that such changes attract. This low elasticity seems likely to reflect the complex and uncertain features of these schemes. One implication of low elasticity is that comparatively large changes in incentives are required to have much effect on capital flows. This is particularly true of financial incentives.

The evidence to support these conjectures admittedly is somewhat impressionistic. In large part it is based on the responses of business firms to questions about the effect of incentives on their investment decisions. It is evident that incentives are of some importance, particularly those provided via trade policy and tax measures. On the other hand, most firms are acutely aware of the difficulties posed by such incentives and frequently assert that they are reluctant to undertake projects that are heavily dependent for their success upon the incentives provided by the host country. How important this is depends on whether the incentives provided are general in nature or specific to particular industries or projects. In the latter situation, the bargaining power of the investor inevitably is weak relative to that of the host country and the long-term future of the project from the investor's viewpoint is subject to considerable risk. This in turn provides an additional reason for inefficiency in the incentive system and relatively small responses in capital flows to the incentives provided.

A further important feature of the incentive system is that various LDCs compete with each other in providing such incentives. As a result, many of the incentives provided largely cancel each other out. This arrangement lends itself to the spread and growth of incentive measures that are relatively inefficient in evoking new capital inflows in response to increases in rates of return; in large measure it may simply raise the rents accruing to existing investments and investors.

> Finally, the incentive systems of many LDCs are rendered inefficient because of the schizophrenic nature of the systems. In most LDCs one finds, cheek-by-jowl, policies that simultaneously provide incentives to enhance foreign investment with policies that provide disincentives to foreign investors. In the latter category are the variety of measures that restrict ownership and control, restrict foreign entry into various industrial sectors, establish local content provisions and mandatory export quotas, limitations on the size and location of investment, restrictions on dividends, royalties and fees. Thus much of what is provided with the right hand may be taken back with the left. Indeed, given that the scope and complexity of the incentive schemes provided may be related to the degree of government interference in private market decisions, an inverse relationship between investment flows and incentive schemes is quite conceivable."

4.13 It will be noted that, although Reuber made some attempt to classify his firms by activity and home and host country (or area), the smallness of his sample prevented him from drawing any hard and fast conclusions. Again work of a conceptual nature has advanced more quickly than empirical investigation; perhaps the most thorough attempt to provide a tool kit of variables, following on the lines of Stobaugh (1968), but applied specifically to evaluating the effect of MNCs on regional development, being that of Yannopoulos and Dunning (1976).

4.14 One other survey, carried out by T W Allen (1974) deserves brief mention. He examined the motivations underlying the establishment of over 400 foreign equity investments in primary and manufacturing investments in the ASEAN countries by Japanese, US and European MNCs over the period 1955-70 (for Japan 1960-70). He also questioned 26 MNCs on the factors they considered most important in assessing the investment climate of a country. The results are set out in Tables 4.6 to 4.8.

Ex-post statistical studies

4.15 The second kind of empirical study has been to use published data and to seek to establish some kind of statistical association between the propensity to invest in certain countries and variables explaining this propensity. Again this has proceeded along various lines. The most ambitious is that which looks at data on per-capital inflows of foreign direct investment (which when aggregated over a period of 10-15 years are a pretty good proxy for the foreign investment stake) of a large number of

TABLE 4.6: MOTIVES UNDERLYING A SAMPLE OF EXISTING FOREIGN EQUITY INVESTMENTS IN PRIMARY AND MANUFACTURING PROJECTS IN THE ASEAN COUNTRIES BY INVESTING COUNTRIES

Motive	United States	Japanese	European	Total
1. Securing, maintaining, or developing an overseas market	134	65	32	231
2. Securing, maintaining, or developing raw material supplies	40	30	19	89
3. Competitive forces necessitating low cost bases	45	11	12	68
4. Securing, maintaining or developing a regional base	21	1	8	30
5. Complementation of activities	2	1	1	4
6. Others	17	3	2	22
TOTAL	259	111	74	444

Note: The statistics refer to enterprises established over the 1955-70 period (for Japan, 1960-70)

Source: Allen (1974)

TABLE 4.7 : MOTIVES UNDERLYING A SAMPLE OF EXISTING FOREIGN EQUITY INVESTMENTS IN PRIMARY AND MANUFACTURING PROJECTS IN THE ASEAN COUNTRIES BY HOST COUNTRIES

Motive	Thailand	Malaysia	Singapore	Indonesia	Philippines	Total
1. Securing, maintaining, or developing an overseas market	82	40	21	12	76	231
2. Securing, maintaining, or developing raw material supplies	17	27	5	21	19	89
3. Competitive forces necessitating low cost bases	4	1	45	2	16	68
4. Securing, maintaining, or developing a regional base	4	-	21	-	5	30
5. Complementation of activities	1	-	3	-	-	4
6. Others	3	2	7	-	10	22
TOTAL	111	70	102	35	125	444

Note: The statistics refer to enterprises established over the 1955-70 period (for Japan, 1960-70)

Source: Allen (1974)

TABLE 4.8 : FACTORS CONSIDERED BY 26 MULTINATIONAL ENTERPRISES IN ASSESSING THE INVESTMENT CLIMATE OF A COUNTRY IN SOUTH EAST ASIA

Factor	Very Important	Important	Not Important
1. Overall economic planning policy	11	13	2
2. Government incentives			
- taxation	15	10	1
- grants	9	5	12
- duty free imports	13	10	3
- tariff protection	10	12	4
3. Political and economic stability	26		
4. Existence of planned industrial estates		8	18
5. Assistance by country in feasibility studies studies	1	6	19
6. Assistance in arranging JV partner	3	7	16
7. Assistance in providing data and locational information	2	16	8
8. Existence of data bank in country	1	9	16
9. Assistance by country during and after establishment	2	16	8
10. Overall interest of country towards investors	9	15	2
11. Existence of training facilities for workers	4	11	11
12. Existence of 'support' facilities	7	15	4
13. Access to local finance	16	9	1
14. Developed manufacturing base		15	11
15. Ready availability of foreign exchange	18	7	1
16. Stable currency value	21	5	
17. Experience of country in high technology industries	1	9	16
18. Infrastructure			
- ports	11	15	
- roads	10	15	1
- railways	8	16	2
- power	9	17	
- communications	11	15	
19. General living conditions	3	19	4
20. Stable labour force	26		
21. Red tape	6	18	2

Source: Allen (1974)

countries, and then relates these to various explanatory variables. In an article published in the Winter 1978 issue of the Journal of International Business Studies, F R Root and A A Ahmed collected data on non-extractive direct investment inflows into 70 developing countries for the period 1966-70. They classified these countries into three groups (measured in terms of investment flows per capita) according to whether they were 'unattractive', 'moderately attractive' or 'highly attractive' to foreign investment over that period. They then selected 44 explanatory variables, suggested by previous researches, as potentially significant discriminators of the three country groups (Groups I to III). Since some of the variables could not be assigned continuous values, multiple discriminant analysis was used as an estimating technique rather than regression analysis. Because, too, the number of independent variables was so large, a stepwise procedure was used; this scanned the initial list of variables and picked out those which added most to the explanation of the variance among the groups, given the others already included. Variables were selected one after the other until no variable could be found which contributed to the variance among the groups at the 5 per cent level of significance. Such a procedure eventually selected six variables as essential discriminators between the three groups of countries; two discriminant functions were estimated (both significant at the 1 per cent level) but since the first function alone accounted for 92 per cent of the discriminable variance, this was used for subsequent analysis.

4.16 The six variables selected were:

i. per capita GDP,

ii. corporate tax level,

iii. import capacity (the ratio of exports to imports),

iv. extent of urbanisation,

v. infrastructure (a commerce, transport and communication variable) and,

vi. political study (regular executive transfers).

The authors found that the following hypotheses with respect to manufacturing investment in developing countries were supported:

i. The higher the per capita GDP, the more attractive the country to foreign investors. Group means are $195.4 (Group I), $214.9 (Group II) and $499.5 (Group III).

ii. Comparatively high tax levels deter direct foreign investment. Group means, expressed as a percentage of corporate pre-tax income, are 51.5 per cent (Group I), 38.4 per cent (Group II) and 38.4 per cent (Group III).

iii. As its per capita GDP rises, a developing country first experiences an improvement in its export/import ratio but later, a deterioration. This import-capacity cycle is accompanied by rising levels of direct foreign investment in manufacturing. Group means are 87.6 per cent (Group I), 89.6 per cent (Group II) and 83.5 per cent (Group III). Clearly the findings do not support the proposition that the more favourable the export/import ratio, the more attractive the investment climate.

iv. Developing countries most attractive to foreign manufacturers are far more urbanised than the other developing countries. Group means are 15.9 per cent (Group I), 14.1 per cent (Group II) and 24.0 per cent (Group III).

v. The greater the volume of its commerce, transport and communication (expressed as a percentage of GDP), the more attractive a country is to foreign investors. Group means are 17.2 per cent (Group I), 20.1 per cent (Group II), and 23.8 per cent (Group III).

vi. A comparatively high level of regular executive transfers deters foreign investment in manufacturing. This hypothesis agrees with statements by foreign investors that frequent government changes are a deterrent to investment because they make the investment climate less predictable. Nonetheless, the influence of this variable on direct foreign investment remains ambiguous given the group means for the period 1956-67: 8.0 (Group I), 5.4 (Group II) and 7.1 (Group III). Possibly the influence of government transfers is negative only; a high frequency discourages foreign investment, but a lower frequency does not encourage it.

4.17 As to some of the variables suggested by other authors, the findings of Root and Ahmed were less conclusive. Of six policy variables tested, only corporate taxation (expressed as a percentage of gross profit) emerged as a significant determinant. This contradicts some earlier findings by Lent (1967) which suggested that the influence of taxes on the foreign investment decision is minimal. Root and Ahmed argue that this might be because the Lent study concentrated on Group II and III countries where the mean value of corporate taxation is generally similar but smaller than the mean value for Group I. Tax incentives fail to differentiate between the three groups of countries, a finding consistent with the Reuber study. Root and Ahmed suggest that competition among countries tends to neutralise tax incentives. Of the other policy variables, viz attitudes

towards joint ventures, local content requirements and limitations on foreign personnel, none discriminates among the three country groups.

4.18 The authors next used the six discriminators to predict the classification of the 41 countries. In 34 (83 per cent of) cases they were classified correctly and these included the majority of countries in each group.

4.19 The overriding conclusion of the Root and Ahmed study - that government policies are not likely to be the decisive determinants of foreign investment climates in developing countries, when compared to economic determinants, is not really surprising when one considers the wide spectrum of developing countries in the sample. The investment cycle (Dunning 1979c) suggests that no direct investment will take place until a certain stage of industrialisation has been reached. But thereafter, the possibility of government policy variables influencing inward investment seems to become more important. On the other hand, since the Root and Ahmed study made no allowance either for activity or industrial characteristics of the investment, or for enterprise specific characteristics, its results may be of limited value in advising particular countries on foreign investment policies. For example, tax concessions may have little influence in deciding an investor between an Ethiopian or Kenyan location, but between Taiwan and South Korea, they could be very important.

4.20 One attempt to take account of the risk associated with investment climates is the so-called business environment index. There are a number of these indices; we shall choose to illustrate from that constructed by BERI, a commercial consultancy. The index, also called BERI, is intended to be a composite indicator of host country risk which is expressed as an index number ranging from 0-100 - the higher the index, the lower the risk. It is constructed by a permanent panel comprising over 100 executives in industry, banking and government on the basis of 15 separate risk criteria. Each of these is subject to a rating scale from zero (unacceptable conditions for investment) to 4 (superior conditions) and a weight is assigned to each criteria according to how critical they are regarded to the success of an investment. With the weights assigned, the risk criteria increase to 25; thus, if all criteria were assigned a value of 4, the index would be 100. BERI is constructed three times a year with the intention of gauging the

short term investment climate in 44 countries. However, data are available back to 1972 and the average indices for 1972/76 are set out as Table Details of four sub-indices are also produced, further details of which, along with the country risk criteria, are set out in Appendix II.

4.21 The compilers of the BERI (which is a very similar index to the one compiled by Business International) suggest that a rating of between 85 and 100 indicates an 'ideal' location for investment by MNCs; one of 70-84 a 'safe' place, one of 55-69 'moderate risk' countries and one of 40-54 a 'high risk' country for foreign owned businesses. A cursory look at Table 4.9 suggests that the index cannot be used for long term planning. At the end of 1976, for example, the United Kingdom was placed as a high risk country while Iran was regarded as a moderate risk country!

4.22 We have cited this approach to evaluating the risk of a foreign environment, which must be set alongside objective factors to do with the prospects of a particular location, not because it has any great academic merit (though its authors argue that it is an extension of the portfolio approach to evaluating foreign investment and helps explain discrepancies between risk exposure and profit performance in moderate and high risk countries) but because it is a technique which is used by business men both in assessing an alternative location for new investment and the way they organise existing operations[1].

4.23 Another group of researchers analysing the factors influencing foreign direct investment have used published data on the numbers of MNCs, foreign capital expenditure, foreign investment flows or sales of foreign affiliates and attempted to relate these to a selection of independent variables thought to affect such flows. Foremost among these have been those which have sought to extend various models of domestic capital formation to explain foreign direct investment. Most of the macro-oriented studies using simple or multiple regression analysis to explain US direct investment in Western Europe in the 1960s and 1970s have been of this kind[2]. Most of these using either time series or cross sectional data relate absolute amounts of investment (or capital stake) or shares of investment

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1 Indeed, because the index is assessing short run situations, the operational implications may be far more important than those to do with the location of new investments.

2 For example see those of d'Arge (1969), Scaparlanda and Mauer (1969)

TABLE 4.9 : BERI INDEX OF ENVIRONMENTAL RISK, 1972-76

	BERI					POLITICAL SUBINDEX					OPERATIONS SUBINDEX				
	1972	1973	1974	1975	1976	1972	1973	1974	1975	1976	1972	1973	1974	1975	1976
Argentina	40.1	37.5	39.4	34.2	34.2	37.2	33.3	35.4	28.8	31.7	43.9	52.8	44.2	42.3	41.2
Australia	79.4	79.1	77.0	67.7	69.1	80.3	78.4	74.9	77.9	69.0	76.8	79.9	78.7	71.6	71.7
Belgium	80.6	80.0	77.8	72.8	71.5	83.6	82.7	79.4	77.1	76.0	78.1	80.7	78.3	73.4	71.4
Brazil	57.4	60.4	60.6	59.0	57.5	59.2	82.6	64.9	62.7	62.5	58.8	61.6	61.6	60.4	58.6
Canada	79.5	79.1	76.9	74.3	74.1	76.9	77.9	75.9	72.6	72.3	81.4	83.3	80.8	80.1	77.8
Chile	17.9	13.6	32.5	37.0	38.4	10.0	5.5	36.4	42.4	45.6	23.7	20.5	33.8	38.5	38.3
China (Taiwan)	63.6	67.6	66.5	60.5	62.1	67.9	71.7	70.1	63.2	65.6	62.7	64.8	66.0	63.2	64.1
Colombia	43.1	45.4	44.6	45.9	47.6	42.9	44.3	46.3	48.2	52.5	41.9	45.5	43.7	44.9	45.6
Denmark	75.4	72.8	71.8	65.9	63.4	80.3	77.7	76.0	68.2	66.1	73.2	75.9	72.9	68.4	65.5
Ecuador	n.a.	n.a.	n.a.	50.7	49.3	n.a.	n.a.	n.a.	n.a.	49.0	n.a.	n.a.	n.a.	n.a.	49.6
Egypt	29.4	32.2	41.2	43.7	45.5	29.2	35.3	46.5	47.9	53.8	31.7	40.0	41.6	41.7	42.5
France	70.6	68.6	66.1	61.6	61.8	69.9	67.9	64.5	60.4	60.8	69.5	71.0	68.9	64.0	62.6
Germany (West)	80.4	81.8	76.7	73.7	77.2	79.4	78.8	77.5	75.1	78.5	82.3	83.9	78.3	76.6	78.9
Greece	55.5	55.8	55.4	53.2	51.1	59.5	59.9	58.5	55.6	54.4	53.2	54.6	56.0	54.5	51.0
India	43.4	42.6	36.8	37.7	36.9	46.3	45.3	39.2	38.9	37.8	40.1	40.1	36.1	37.7	37.9
Indonesia	43.4	47.5	48.5	49.2	47.1	50.0	53.4	55.4	55.5	53.4	40.7	46.1	44.9	43.4	42.1
Iran	49.3	54.5	58.0	59.4	59.7	50.0	57.6	61.1	61.0	62.0	50.2	53.5	55.6	57.2	57.3
Ireland	70.8	71.2	70.5	65.0	60.2	77.7	80.7	77.3	71.0	68.4	65.4	66.3	67.7	63.6	58.4
Israel	63.0	66.0	63.2	58.5	51.1	61.9	62.4	59.5	56.8	52.3	65.9	72.9	71.6	65.3	54.9
Italy	61.5	61.7	55.1	45.9	42.2	59.8	59.4	53.9	44.5	42.0	61.7	64.7	57.6	50.6	45.3
Japan	79.2	81.1	77.8	68.4	70.6	72.9	74.7	70.2	63.5	68.4	81.9	85.3	82.5	73.7	73.3
Kenya	46.0	50.9	47.0	45.7	42.2	53.0	56.2	53.3	50.1	48.9	43.0	49.6	43.1	42.2	39.6
Korea (South)	58.6	61.1	58.3	52.3	56.8	58.7	62.9	58.4	52.6	56.4	59.8	61.1	59.9	53.5	58.5
Lebanon	52.7	54.9	53.7	n.a.	n.a.	54.9	59.3	57.9	n.a.	n.a.	49.8	52.2	52.6	n.a.	n.a.
Libya	38.5	35.9	39.2	38.4	35.1	33.4	32.4	36.1	29.8	31.6	41.5	40.8	40.5	34.3	31.0
Malaysia	59.2	63.7	60.3	60.8	56.9	63.6	66.1	66.4	62.2	58.5	58.9	62.5	58.9	60.1	57.7
Mexico	64.4	64.2	61.8	60.4	58.3	62.2	61.9	59.4	56.8	56.7	64.6	65.3	64.2	64.7	62.0
Morocco	43.2	44.1	46.0	47.4	45.6	44.2	44.9	46.8	51.1	51.2	41.4	42.7	44.8	43.6	43.0
Netherlands	79.6	79.8	76.4	73.8	73.1	81.0	78.8	77.3	75.0	75.6	80.8	82.9	78.8	75.3	74.7
Nigeria	43.9	46.1	47.4	53.9	53.2	49.3	49.5	52.4	54.0	50.6	45.9	44.6	43.4	49.2	50.3
Norway	74.2	73.7	70.4	68.3	69.3	77.7	76.3	75.0	69.8	73.6	73.3	74.8	70.5	70.6	70.3
Pakistan	32.4	29.3	31.7	31.0	28.5	34.5	34.0	35.8	34.6	34.8	33.2	30.5	30.5	28.5	26.4

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TABLE 4.9 : BERI INDEX OF ENVIRONMENTAL RISK, 1972-76 (contd)

	NATIONALISM SUBINDEX					FINANCIAL SUBINDEX				
	1972	1973	1974	1975	1976	1972	1973	1974	1975	1976
Argentina	42.3	33.8	34.7	29.8	37.3	34.4	33.6	35.5	31.7	33.6
Australia	79.7	75.1	74.4	65.8	73.3	79.9	81.5	77.7	67.1	70.2
Belgium	88.8	87.1	84.6	85.4	83.0	79.1	79.2	75.8	70.5	69.7
Brazil	62.4	63.9	62.6	63.6	62.9	49.1	53.9	53.7	49.8	46.4
Canada	79.2	80.4	78.5	70.1	72.9	78.4	78.3	76.0	72.8	74.2
Chile	4.7	6.0	46.2	46.6	47.4	16.6	10.3	24.2	29.0	30.0
China (Taiwan)	74.1	75.8	69.3	69.9	69.2	58.3	65.0	64.0	54.5	56.5
Colombia	41.4	41.2	45.2	47.0	48.7	42.3	40.3	40.5	41.8	43.5
Denmark	80.8	80.1	79.4	70.0	69.5	72.1	69.9	69.0	64.2	62.4
Ecuador	n.a.	n.a.	n.a.	n.a.	51.7	n.a.	n.a.	n.a.	n.a.	n.a.
Egypt	28.0	29.0	45.7	49,4	53.9	22.8	26.1	32.5	37.4	37.9
France	68.4	69.3	65.1	62,0	62.5	68.5	68.1	63.8	59.6	61.0
Germany (West)	83.5	83.6	81.2	78,8	81.6	80.6	79.4	74.9	74.1	78.3
Greece	61.3	60.4	60.6	60,8	54.5	54.6	52.7	53.5	50.0	48.2
India	42.5	41.3	38.3	35,5	33.2	36.2	34.4	31.6	32.9	31.8
Indonesia	51.9	54.2	52.1	54,4	52.3	36.4	43.4	42.7	48.1	43.6
Iran	56.0	58.7	62.2	58,5	58.7	45.8	53.1	58.0	57.2	59.5
Ireland	81.9	85.5	80.0	74,6	74.5	69.7	71.0	69.5	62.3	55.0
Israel	66.9	71.0	70.5	60,2	58.3	56.1	60.4	55.0	51.1	46.0
Italy	63.8	65.5	54.8	48,9	51.0	62.3	61.7	53.6	43.3	41.1
Japan	70.3	70.7	69.5	65.7	69.6	36.4	43.4	42.7	48.1	43.6
Kenya	55.4	58.9	47.7	49.2	49.0	49.0	52.7	47.5	44.3	40.2
Korea (South)	62.2	60.1	58.9	57.5	60.0	51.6	53.5	53.6	44.3	52.4
Lebanon	57.1	61.7	62.8	n.a.	n.a.	54.3	57.6	56.6	n.a.	n.a.
Libya	24.4	22.0	20.1	21,4	27.2	40.1	37.3	42.8	47.1	37.8
Malaysia	66.6	66.0	67.3	56.9	59.1	58.1	63.4	61.2	60.0	54.7
Mexico	60.3	61.6	59.9	55.8	55.5	78.4	78.3	76.0	72.8	74.2
Morocco	48.9	42.6	46.7	47.9	51.1	42.6	43.4	46.1	47.1	44.2
Netherlands	82.4	80.7	81.2	77.8	76.9	77.2	77.3	73.9	73.1	71.8
Nigeria	47.1	47.5	46.5	46.5	52.0	40.4	42.4	44.6	55.5	58.6
Norway	77.6	78.1	75.1	67.8	71.8	71.8	72.3	68.6	66.1	64.4
Pakistan	38.9	41.2	36.9	31.7	33.0	27.5	24.9	27.3	28.6	25.4

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TABLE 4.9 : BERI INDEX OF ENVIRONMENTAL RISK, 1972-76 (contd)

	BERI					POLITICAL SUBINDEX					OPERATIONS SUBINDEX				
	1972	1973	1974	1975	1976	1972	1973	1974	1975	1976	1972	1973	1974	1975	1976
Peru	38.0	37.7	41.9	43.9	36.8	36.6	36.7	42.3	41.6	36.3	39.9	39.8	42.4	46.0	39.1
Philippines	45.4	44.6	47.0	52.0	55.8	46.1	43.1	48.1	52.6	57.0	48.1	47.0	47.7	54.6	58.5
Portugal	54.3	56.8	51.9	34.9	25.1	61.1	65.0	55.4	32.7	25.8	49.4	54.5	52.4	38.6	27.4
Saudi Arabia	n.a.	n.a.	n.a.	62.5	60.0	n.a.	n.a.	n.a.	63.7	62.9	n.a.	n.a.	n.a.	56.4	54.5
Singapore	73.0	78.3	77.5	72.2	68.3	75.7	80.9	81.5	76.0	72.1	71.4	77.9	75.9	70.6	66.4
South Africa	73.5	77.6	74.6	65.8	60.7	73.2	78.9	73.7	67.9	61.6	72.6	76.1	72.5	65.7	62.5
Spain	59.7	60.6	60.2	54.0	52.2	65.2	65.2	64.1	57.5	54.9	57.9	61.1	60.6	55.4	53.9
Sweden	77.5	70.3	70.6	67.4	67.6	70.7	70.6	69.7	65.6	68.5	73.2	72.9	72.6	71.4	70.2
Switzerland	84.8	83.7	81.2	77.9	79.0	83.5	83.0	81.5	79.2	80.5	84.0	85.3	83.2	79.9	78.1
Turkey	43.5	45.0	44.6	43.0	42.1	45.0	46.3	48.9	47.9	45.9	42.6	45.3	43.8	41.0	39.6
United Kingdom	73.0	72.2	66.8	57.4	53.7	76.0	74.7	64.5	55.4	54.5	72.2	73.0	68.3	61.3	55.2
United States	81.9	81.9	78.8	72.9	76.7	81.6	82.2	80.1	74.9	79.6	81.6	83.8	80.9	77.1	79.3
Venezuela	61.1	60.9	56.1	53.8	57.9	59.0	59.8	53.6	50.9	55.3	61.8	63.0	56.9	60.8	58.1

TABLE 4.9 : BERI INDEX OF ENVIRONMENTAL RISK, 1972-76 (contd)

	NATIONALISM SUBINDEX					FINANCIAL SUBINDEX				
	1972	1973	1974	1975	1976	1972	1973	1974	1975	1976
Peru	28.9	32.4	35.6	27.1	27.7	35.6	35.0	38.8	42.0	33.4
Philippines	46.8	46.6	50.6	55.4	60.0	40.1	39.1	43.0	47.5	51.0
Portugal	59.0	61.4	48.3	20.6	28.4	50.3	51.6	48.8	35.3	25.2
Saudi Arabia	n.a.	n.a.	n.a.	62.0	63.1	n.a.	n.a.	n.a.	60.5	62.1
Singapore	81.6	79.9	80.8	77.3	74.1	72.9	79.1	74.6	49.5	66.2
South Africa	74.6	80.3	72.6	70.0	68.8	73.9	76.4	75.7	65.3	61.1
Spain	67.6	62.7	61.7	61.7	61.6	55.1	56.5	56.6	50.1	49.8
Sweden	69.4	70.5	65.2	63.2	67.2	72.6	69.6	68.3	66.3	65.8
Switzerland	83.2	83.2	81.0	77.8	79.2	86.0	84.7	81.1	77.6	80.0
Turkey	46.9	45.2	44.2	41.5	44.0	37.9	40.2	38.7	38.7	40.0
United Kingdom	78.1	77.4	64.4	60.1	59.5	71.2	71.1	65.1	55.1	52.3
United States	91.2	91.8	87.8	80.8	84.8	79.2	77.6	75.7	68.3	73.3
Venezuela	60.2	56.0	46.0	38.9	47.9	63.5	63.6	60.3	57.0	60.7

Source : Data provided by BERI

(or capital stake) to profit rates, size of markets, growth of markets, tariff rates, and some kind of trend and/or slope shifting variable. The cross sectional studies strongly support the hypothesis that US investment has been most directed to those countries in Europe with the fastest growth of GNP, with profitability and other variables, including tariffs, being a secondary consideration. The time series data lend support to the cross sectional data when the capital stake is taken as the dependent variable, although as US investment in Western Europe has become less import substituting and more rationalised specialisation in the 1970s, at least within the EEC, the characteristics of markets in the country of production (as opposed to those of the region as a whole) has become less important. One of the consequences of this shift in the form of investment is that investment et al incentives, and especially those offered by the less favoured regions of Europe have become more significant. This has been particularly the case in Ireland and Belgium where a very large proportion of inward investment has been aided by government assistance and of this a high proportion was in export oriented companies[1]. The statistical evidence is somewhat conflicting. In the case of Ireland, investment incentives (which apply irrespective of where the investment is made) has increased the share of new US investment in Europe going to Ireland, but not that going to the least favoured regions. In the case of Belgium, incentives are thought to have influenced the location of foreign investment within the country but not the total amount entering Belgium (Thoman 1973). What does, however, seem clear is that in all countries except Denmark, foreign affiliates play an important (and in the case of Ireland, Belgium and the Netherlands a crucial) role in the economies of favoured regions in these countries.

4.24 In addition to these general studies, there have been several attempts to evaluate the significance of specific factors affecting the location of foreign investment and production. These have been referred to in a previous paper by the author (Dunning 1973). Because of industry, country or time-specific factors, it is difficult to generalise from them; economic integration does appear to be a significant variable in influencing US investment in the EEC (Krause 1972); anti-trust legislation in the US provided part of the push

1 One estimate by the EEC suggests that 50 per cent of the increase in manufacturing output in the 1970s in the least developed regions of Ireland came from export oriented foreign companies (quoted in Hood and Young 1979).

for US investment in the late 1950s (Kreinin 1967), while differential costs have influenced the choice of US investors between investment sites in Europe (National Industrial Conference Board, 1961) and more latterly in South East Asia (Helleiner 1974).

4.25 Of the studies of foreign direct investment in particular countries, James Riedel (1975) found that the liberal policy of the Taiwanese government provided evidence that incentives in the form of tax concessions and the establishment of export processing zones and trade liberalisation, together with wages differences between the US and Taiwan, substantially explained the growth of US investment in Taiwan between 1955 and 1972, most of which was designed to produce manufactured goods. Riedel also argued that Government influence can "to some extent compensate for declining wage attractiveness in drawing foreign investment". Such he suggests have been the effects of the introduction of export processing zones in Hong Kong and Japan.

4.26 A study by Miller and Weigel (1972) used a two stage discriminant model to analyse the causes of US direct investment in Brazil between 1956 and 1961. In Stage 1 the authors concentrated on 'search' variables, e.g. importance of market, prior investment and tariff changes, to discriminate between investments which offered no prospects and those which might be worth investigating further. Stage 2 then took various economic variables which this paper earlier identified as ownership, internalisation and location variables (although the authors did not identify them in these terms), e.g. vertical integration, capital intensity, R and D intensity, capital intensity/vertical integration and capital intensity/R and D. The results showed that of the variables considered in Stage 1 the market size and prior investment provided a statistically significant discrimination when used separately in a multi-variable function only if the coefficient of prior investment was significantly different from zero. Of the Stage 2 variables, the ownership and internalisation theses were significant in explaining the structure of the investment, the (nominal) tariff[1] and market size variables[2] were not. One particularly interesting finding was that in

1 The authors quote from another study (Bergsman 1970) which suggests that this conclusion would hold if an effective tariff variable was used.

2 The authors suggest that this may be because the effect of market size is taken account of in the first stage discrimination.

non-research intensive industries the profitability of foreign investment in Brazil was higher the more capital intensive are the production processes, while research and development intensive industries tend to make investments abroad to exploit cheap labour.

4.27 The third study we might mention is that of Agodo (1978) in respect of US direct investment in manufacturing industry in 20 African countries over the period 1960-70. Agodo set out to test the validity of 12 propositions about the determinants of foreign direct investment. In most cases, he used bi-variate regression analysis to test these propositions, the results of which are reproduced in Table 4.10. The 5 per cent level of significance was adopted as a benchmark for acceptance or rejection of the null hypothesis $\beta = 0$. He also combined these variables in a multiple regression, which in spite of some multicollinearity among several of the variables, confirmed the findings of the simple equations. The overall R^2 was 0.789 (the degree of freedom was 11.8 and was significant at the 1 per cent level).

4.28 A fourth study was concerned with evaluating the determinants of annual changes in the book value of US capital stake in Australian manufacturing industry over the period 1951-67 (Ahlburg and Parry 1973). The basic hypothesis was that investment was a function of market size, market growth, barriers to trade, earnings and technological superiority of the investing c.f. indigenous firms. Using both stock and flow adjustment models the authors ran simple regressions and found that the market size variable was significant at 1 per cent and market growth at 5 per cent level of significance. Earnings and technology were significant at a 10 per cent level; the trade discriminating variables were not significant.

4.29 The failure of the trade discriminating variables to perform better is somewhat worrying as host Governments often use import controls to encourage inward investment. However, this may be due to specification of the equation in terms of the effect of trade barriers on the amount of inward investment rather than on the import/investment ratio. A study by Schmitz and Bieri (1972) showed that after the EEC was formed, US direct investment into the region significantly increased while the growth in exports from the US significantly decreased. They also showed that the tariff variables were significant in affecting the flow of US investment to Canada and Australia.

TABLE 4.10 : THE DETERMINANTS OF US DIRECT INVESTMENT IN AFRICA 1960 - 1970: SOME PROPOSITIONS TESTED [a]

Proposition	Independent Variable	B	Standard Error B	R^2	F Statistic	Significance	D.F.	Proposition Supported / Not supported
2A: US firms invest in Africa because of the sizes of the domestic markets of the host countries.	Gross Domestic Product	.031475	.0092734	.672735	10.4421	.005	1,18	Supported
2B: US firms invest in Africa because of the rates of growth of the domestic markets of the host countries.	Rate of growth of Gross Domestic Product	.64752	.00208	.37056	2.3728	.055	1,18	Not supported
3: US firms invest in African countries with relative high income per capita	GDP per Capita	.300718	.089243	.75307	8.5053	.009	1,18	Supported
4: The larger the population size of an African country the more US firms will invest there.	Population Size	66.6578	6.2781	.83027	88.0499	.000	1,18	Supported
5: US companies invest in Africa to take advantage of lower cost of African labour	Importance of low African wages	1.30348	.48535	.26212	2.62738	.076	1,18	Not supported
6: US firms invest in Africa because of the presence of necessary raw materials in the host countries.	Presence of raw materials	1.009628	.329408	.653219	5.8633	.012	1,18	Supported
7: Tax concessions offered by African governments are not effective for attracting US firms to invest in Africa	Tax concessions	1.55995	.512664	.310516	2.34795	.096	1,18	Supported
8: US firms invest in Africa to take advantage of protective tariffs offered by the host governments.	Protective tariffs	1.03146	.538768	.258664	2.2403	.137	1,18	Not supported
9: US firms invest in Africa because the host countries have relative political stability.	Political Stability	8.6754	1.9289	.83787	43.9279	.000	1,18	Supported
10: US firms invest in Africa because the host countries are able to meet the investors' business infrastructural needs	Primary Infrastructure	13.0462	2.6898	.71082	40.47002	.000	1,18	Supported

Proposition	Independent Variable	B	Standard Error B	R^2	F Statistic	Significance	D.F.	Proposition Supported/ Not supported
11: US firms invest in African countries that undertake development planning.	Development planning	5.1010	1.9786	.73820	46.93027	.000	1,18	Supported

Note : [a] Annual changes in capital stake

Source: Agolo (1978) The African countries were Zaire, Morocco, Ghana, Kenya, Sierra Leone, Nigeria, Algeria, Libya, UAR, Ivory Coast, Senegal, Tunisia, Rhodesia, Liberia Corgo-Brazaville, Cameroon, Somalia, Swaziland and Ethiopia.

Industrial structure studies

4.30 Finally, we must briefly mention a third group of studies which has looked at the question of determinants of foreign investment from the perspective of testing not where business men invest abroad but why they invest. Essentially these studies (which have been described by the author in another paper, Dunning 1979a) attempt to evaluate the significance of particular ownership and location specific variables in determining the extent of foreign (mainly US direct) investment in particular countries or groups of countries. Rather than to summarise these studies - which the Dunning paper attempts to do anyhow - we reproduce as Appendix III to this paper the relevant parts of the text. At this point, we reproduce, as Tables 4.11 and 4.12, the conclusions of the author's own empirical work contained in the above paper. This attempted to explain both the share of the total indigenous output accounted for by US manufacturing affiliates in 14 manufacturing industries and the US export/local production ratio in seven countries, viz Belgium-Luxembourg, France, West Germany, Canada, the UK, Mexico and Brazil, in 1970. We then related these to a whole set of ownership and location specific variables (some 12 in all). We extracted from the bi-variate relationships all those with a significance of 5 per cent or more. We then used these to construct a series of multivariate equations set out in Tables 4.11 and 4.12. As an explanation of US participation shares (DV1-DV3) the ratio of one location specific variable - market size - to one ownership specific variable - skilled labour - is consistently significant at the 1 per cent level. The other ownership specific variable significant at that level for DV1 and DV3 are the productivity index relative to sales per man and average hourly compensation (AHC). Two location variables, i.e. wage differentials (RW) and net income per sales (AVINS) are also significant for the same two dependent variables but only at the 5 per cent level. Because of data problems, a tariff variable was not included, but when the regressions were run again for the five advanced countries (i.e. excluding Mexico and Brazil) it became significant at the 1 per cent level. When the form of involvement (exports/local affiliate sales) was taken as the dependent variable, two independent variables - the export/import ratio (XMR) and net income to sales (AVINS) are consistently significant in the seven country case and explained nearly 60 per cent of the variation. In the five country exercise, when tariffs are included, in no case were these significant.

TABLE ....: DETERMINANTS OF PARTICIPATION RATIOS OF US MNCs IN SEVEN COUNTRIES, 1970

	Constant	AV NIS	RMS	SER	AHC	RW	RES	CGS	$R(R^2)$
1.	DV1 (AS + X/IS)								
1.1	0.060		-0.991 (4.058)**	1.133 (4.993)**					0.546 (0.298)
1.2	-0.068		-1.137 (4.831)**	1.007 (4.613)**			0.375 (3.422)**		0.613 (0.376)
1.3	-0.051		-1.219 (4.759)**	0.910 (3.652)**	0.027 (0.815)		0.279 (1.728)		0.617 (0.380)
1.4	0.002	-0.002 (2.474)**	-1.155 (4.635)**	0.732 (2.987)**	0.161 (2.603)*	-0.777 (2.615)*	0.494 (2.880)*		0.673 (0.452)
1.5	-0.028	-0.002 (2.365)*	-1.136 (4.519)**	0.809 (2.994)**	0.131 (1.735)	-0.648 (1.840)	0.480 (2.765)**	0.0065 (0.683)	0.675 (0.455)
2.	DV2 (AS/IS)								
2.1	0.018		-0.580 (3.459)**	0.497 (3.192)**					0.430 (0.185)
2.2	0.0026		-0.693 (3.829)**	0.374 (2.164)*	0.026 (1.585)				0.454 (0.206)
2.3	0.016	-0.0009 (1.151)	-0.717 (3.942)**	0.388 (2.129)*	0.025 (1.522)				0.466 (0.217)
2.4	0.028	-0.0010 (1.260)	-0.669 (3.545)**	0.295 (1.597)	0.084 (1.801)	-0.322 (1.438)	0.072 (0.599)		0.485 (0.235)
3.	DV3 (X/IS)								
3.1	0.078		-1.571 (4.372)**	1.631 (4.883)**					0.553 (0.306)
3.2	-0.079		-1.750 (4.957)**	1.476 (4.510)**			0.459 (2.792)**		0.599 (0.359)
3.3	0.022		-1.987 (5.265)**	1.177 (3.260)**	0.095 (2.803)**				0.599 (0.359)
3.4	0.030	-0.0038 (2.271)*	-1.824 (4.586)**	1.027 (2.780)**	0.245 (2.627)*	-1.098 (2.454)*	0.566 (2.190)*		0.657 (0.432)

Source: Dunning (1979a)

TABLE 4.12: DETERMINANTS OF EXPORT/LOCAL PRODUCTION RATIOS OF US MNEs IN SEVEN COUNTRIES, 1970

	Constant	XMR	AVNIS	RMS	SPM	GRSPM	$R(R^2)$
4.1	0.308	-0.101 (3.301)**	0.043 (7.256)**				0.601 (0.362)
4.2	0.042	-0.101 (3.353)**	0.043 (7.277)**			0.0085 (1.942)	0.622 (0.386)
4.3	0.103	-0.099 (3.210)**	0.042 (7.007)**	-0.561 (0.600)		0.0084 (1.896)	0.624 (0.389)
4.4	0.100	-0.100 (3.287)**	0.042 (7.101)**		-0.0000048 (0.441)	0.0090 (1.983)	0.623 (0.388)

Source: Dunning (1979a)

4.31 In the context of our present discussion, the significance of these findings is that to understand why business men invest in particular countries and industries both ownership and location variables have to be taken into account. The data on which the analysis is based also clearly show considerable differences in the structure of US investment in the host countries; hence, any attempt to theorise about the propensity of MNCs to invest in particular countries is not very meaningful without account being taken of the industrial composition of the investment.

CONCLUDING REMARKS

5.1 The reader of this report may be forgiven for a sense of frustration he may feel at this point. If he is an academic economist the frustration will probably be directed to the paucity of the data to accurately test alternative theories of foreign direct investment, and to a certain extent, to the inadequacy of the theories themselves. If he is a government official seeking a definitive listing and ranking of the factors determining why businesses invest in some countries rather than others, he will be disappointed that no definitive listing and/or ranking of countries is possible according to some criteria of attactiveness, except at a very superficial level (e.g. the BERI index). If he is a business man, his sense of frustration might be directed to the whole quest of seeking generalised answers at all. He,more than most,realises that what influences the choice of investment outlets will vary enormously according to groups of countries chosen for examination, the activity, industry or product, the size, character and degree of multinationality of enterprises, to the executives taking the decision and within the enterprises over time. The most he can hope for is a tool kit by which he is able to appraise at a given point in time alternative investment opportunities and an identification of the type of variables to which he ought to pay especial attention prior to making a final decision.

5.2 It is this latter approach we have chosen to adopt in this paper. We have distinguished between the three main forces making or not making for foreign direct investment. We have suggested that these will vary according to home and host country, industry, activity or function and enterprise-specific characteristics, each of which may vary over time, for example to

the stage of economic development of the host country, the degree of multinationality of companies and the position of the enterprise in the product cycle. We have suggested that foreign direct investment may be classified into six main groups - based essentially on the raison d'être for the investment (i.e. to produce products for the local market, to extract raw materials for export, to engage in rationalised production, etc). In the case of each of these, the role of country and particularly host country-specific characteristics, especially policy towards inward investment, will vary. In discussing the role of both home and host governments in influencing foreign investment, it is necessary to identify how sensitive such policies may be as influencing forces. This is why a two (or even a three stage) discriminant analysis of the Miller/ Weigel type is useful. Clearly, very rarely indeed are policy considerations the main factors determining foreign investment (except in a negative sense); local markets for import substituting investment, the availability of resources for resource based investment and low transfer costs for rationalised specialisation are clearly of dominant importance. But when the opportunities for these look potentially favourable then government policy may have a crucial role to play in allocating investment. In this case, policies which are either deliberately short term (e.g. tax, holidays) and those which clearly relate the political leanings of the government and may be changed with a new government, need to be distinguished from those which appear, to the investing firms at least, to be long lasting. It is not then surprising that the more footloose the investment the more such policies become important.

5.3 We have said nothing about the policies of home Governments, e.g. with respect to controls on outward investment, dividend remission and taxation of foreign profits. Some of these are outright controls on the activities of domestic MNCs; others affect the financing of foreign capital expenditure rather than the amount of foreign activity. The taxation question could be of some significance in affecting the level of outward investment (Bergsten, Horst and Moran), but much would depend on the level of profits, the alternative domestic opportunities for investment and the possibilities of counteracting the tax by one means or another.

5.4 Neither have we considered it to be in our brief to consider the effects of foreign direct investment on the home country and, in particular,

the extent to which it competes with domestic investment. If this were in fact the case then anything which was designed to increase foreign investment could have repercussions at home. On this matter, although the literature has formed no consensus, the balance of opinion seems to support the proposition that, except, perhaps, where the investing firm is in a strong monopolistic position, e.g. with respect to the ownership of advanced technology, international direct investment should be regarded as an integral part of a firm's competitive strategy in world markets. If such investment is reduced without there being a corresponding reduction in all investment by other firms, the firm's position may be weakened. The opposing argument is that domestic and foreign investment are substitutes for each other in home and host countries and that where there is unemployment in the home country, foreign investment should be curbed. Here, much rests upon the assumptions one makes about home government employment policy and the success of adjustment assistance (Bersten, Horst and Moran 1977).

5.5 In looking into the future of foreign investment, we again suggest the kind of approach suggested in this paper is a useful one. If host governments make it more attractive to conlude arms length contracts for the transfer of resources across national boundaries, direct investment may become a less important medium of investment. If they encourage their own enterprises to compete against MNCs the same result will occur. On the other hand, if they move towards more economic interdependence, then both outward and inward direct investment could increase, along with trade. All this, however, is a subject for another paper, although the analytical framework outlined in the above papers could be used for evaluating the likelihood and conditions under which the trend will be in one direction or the other.

5.6 Finally, we would like to repeat that the illustrations offered in this paper have been very selective, and, in no way, are intended to cover the vast breadth of research on this subject.

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APPENDIX I

FACTORS MOTIVATING UNITED KINGDOM DIRECT INVESTMENT IN DEVELOPING COUNTRIES *

A. INTRODUCTION

In this chapter some of the more important motives underlying the setting up of United Kingdom affiliates in the sample are described.

B. THE SURVEY : STATISTICAL RESULTS

In our approach to firms, we listed a number of factors often claimed to influence foreign direct investment and/or production, and asked firms to rank the importance of these for each of their major product lines using a scale of 1 to 5 (5 = most important). The overall results are presented in Table 4.3. The figures represent the unweighted arithmetic mean of the figures given by firms.

The table reveals fairly conclusively that the size and the character of the local market, and the attitudes of the host Government to inward direct investment are thought to be the key variables affecting the decision to invest. The prospects of economic growth and economic stability are also ranked high. Far less attention seems to be given to the size and character of markets outside the country in which the investment is made. This is mainly because most United Kingdom direct investment in developing countries is import substitution. The exceptions are processed foodstuffs, raw materials and some manufactured goods supplied to the international market.

The penultimate column of Table 4.3 gives separate details for the leading exporters among United Kingdom affiliates, defined for this purpose as affiliates which export 25 per cent or more of their output. Anticipated export markets rank equally with local market conditions as the dominating motives for investment, along with availability of natural resources. The price of labour is ranked at a higher level by exporting than by other affiliates as is the price of (local) loanable funds, tariff barriers, while other import control and transport costs are ranked about the same by the two groups of firms.

This general picture hides considerable difference of rankings between firms, industries and countries. Of the individual items quoted, only in five instances was the attitude of host government ranked 2 or less; and in only one case was the size of the local market thought to be unimportant[1]. Similarly, there was general agreement that the cost of loanable funds in the host country was an immaterial factor influencing investment.

In other cases, there was much more dispersion in the rankings of firms. There was, for example, a wide divergence of opinion among firms about the importance of tax and other fiscal incentives (though, in no case was a rank of 5 assigned to this variable); and even more so with tariffs, which the majority of firms either regarded as very significant or of no significance[2].

Further details are set out in Tables 4.4 and 4.5, which illustrate some differences in the importance attributed to particular determinants between industries and countries. Table 4.4 shows, for example, that tariffs are a more important than average factor influencing investment decisions in the engineering industry; while the size of the local market and the behaviour of competitors are less important factors than average in explaining investment by food, drink and tobacco firms[3]. Transport costs particularly favour local production (of exports) of batteries, cement and most chemicals, and the absence of economies of large production has the same effect on firms in the engineering industry. As far as availability of local inputs is concerned, the presence of skilled manpower is reckoned to be of above average consequence for chemicals and that of natural resources for the primary processing industries. The cost and availability of unskilled labour appears to be of least significance in the capital intensive industries, notably chemicals.

An activity classification of firms would show that those in the resource based industries attach more than average importance to the

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1 This latter firm was producing foodstuffs mainly for export.

2 Among the firms which regarded tariffs or other import controls as of fundamental importance were those producing pharmaceuticals, motor vehicles, beer and tobacco products.

3 Firms seem to differ in their reactions to competitors' policies. One UK firm producing surgical products tended to invest wherever its leading US competitor invested; another, producing heavy machinery, preferred to follow a policy of investing where its competitors did not.

availability of basic resources and to export markets; firms processing materials for sale to other firms in the same economy especially value the availability of local managerial skills, technology and labour; while host governments' attitudes to inward investment and tariff barriers are most important to firms producing consumer goods. The three affiliates which exported their output of manufactured goods to developed countries were drawn to their chosen country mainly by host government policies and lower labour costs.

Turning to differences between host countries, set out in Table 4.5, political and economic stability is ranked above average in African countries, as is availability and cost of unskilled labour. By contrast, in Asia (and particularly India) the attitude of host countries appears to be of critical relevance while the availability of management and skilled labour is quite material. India is also the only country in which the behaviour of competitors - indigenous or other foreign - or availability of loanable funds are thought of any consequence. Tariffs seem to be a more important than average factor in influencing United Kingdom affiliates to invest in Latin America, while resource availability was generally of less than average significance. In the Caribbean, the ranking of motives was very different. Among the most prominent were anticipated export markets and availability of basic resources.

C. TESTING THEORIES OF INTERNATIONAL PRODUCTION

What light do these data shed on the traditional explanations of direct foreign investment? To begin with, it is necessary to distinguish between import substituting and export generating investments and/or between resource and market (or trade) oriented investments. Many United Kingdom firms are attracted to particular resources which they may exploit for national or international markets. The particular advantage they possess over local firms is the capital and expertise to exploit these resources and, as often as not, access to international markets. The presence of such resources is the necessary pre-requisite for an investment; but other factors, both economic and non-economic, will determine whether or not the investment will be an attractive proposition.

A second group of affiliates has been set up primarily to supply the local market. Here, the comparable costs and benefits of servicing markets through local production or exports is the key factor, which will be influenced inter alia by tariffs, exchange rates, differential production costs, non-tariff barriers, of competitors, transport costs and so on. Their particular advantage over local firms is usually one of superior knowledge or management expertise; which is often protected by patents and control of trademarks.

A third group of firms consists of those which invest in countries as an export base for supplying third markets. Here, the relative costs and benefits of supplying third markets, both from home countries and from other developing countries becomes significant. It is here where competing tax and other incentives offered from Governments are likely to be of greatest relevance. In such cases, investments tend to orient towards low labour cost areas and are the most footloose of all investments.

Within these broad categories of investment, many sub-categories may be considered. Is the investment made to protect existing markets (defensive) or to forge new ones (aggressive)? How far does the market structure affect the decisions of firms to invest? Is the industry capital or labour intensive? How important is it to be near consumers not only to supply particular needs but because of non-tariff barriers to trade, e.g. Government sourcing policies, etc?

The conclusions of the survey are that, beyond broad generalisations, each investment must be considered separately. The received doctrine of foreign direct investment suggests that the motives to invest will be the most powerful where the overall market prospects are good; where the advantages of the investing firm over the local competitors (or potential local competitors) are the greatest; and where the alternative means of supplying the market are costly. As has already been suggested, there is some evidence to support this view; but the extent and the form of the barriers to local firms and alternative means of supplying markets will vary from case to case. Where there are important manufacturing or plant economies, exports tend to be favoured relative to local production; wage costs and labour efficiency are ranked important where the labour content of value added is high; the behaviour of competitors is ranked high where

competition is oligopolistic; transport costs are decisive for bulky type products; tariffs are significant in the more technically advanced industries where competitors tend to be other foreign firms.

We have already seen that much United Kingdom participation in the developing countries dates back to the period before 1939. In more recent years, it has been more concentrated in the processing industries. At the same time as more investment has been directed towards footloose industries, host government policies towards tariff barriers, competitor behaviour, etc, have become more important locational influences.

It would not appear the the degree to which there is foreign control over decision taking affects the locational decisions of United Kingdom firms, except in the case of those that are most highly integrated in their product and/or process structures and where transport costs assume more relevance. In no case would investment in one developing country seem to have been undertaken at the direct expense of an investment in another developing country, save in the most general sense that companies may be constrained in the amount of new investment they can handle over any given period of time. One firm did, however, indicate that subsequent to completing the questionnaire,it had made an investment in Malaysia to export transistor radios to the United Kingdom and that it had chosen Malaysia in preference to Singapore because of the more generous tax concessions granted by the government of Malaysia.

In the course of interviews, further details of factors influencing investment were mentioned by the parent companies of the sample firms. These varied enormously. One large producer of metal cans said the main reason for the establishment of its plant in developing countries was to supply the customers it had been supplying in the United Kingdom but who had now set up production units in developing countries. Government policy towards import substitution was regarded as the main factor influencing investment in India by three chemical companies; non-tariff barriers were listed as the most important determinant in influencing production in the developing countries by two pharmaceutical companies; another pharmaceutical company started producing in India mainly to protect itself from inroads into its market position by its competitors. A record producing company started local manufacturing to reduce transport and packaging costs and take advantage of

lower wage rates; the avoidance of high transport costs was among the chief reasons cited by firms producing cement, oxygen equipment and batteries. Several companies found the expanding local market made local production economic relative to exports. Many United Kingdom transnational corporations, particularly in resource based sectors, e.g. sugar, were specifically invited to set up production units by the host governments concerned.

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* Being Chapter IV of Dunning (1979b)

APPENDIX II

BERI COUNTRY RISK CRITERIA AND SUB-INDEXES

COUNTRY RISK CRITERIA

Weights

3 1. Political stability

Measures both the probability of unscheduled political change and the degree of impact on business operations.

1½ 2. Attitude : Foreign investors and profits

General acceptance of capitalistic principles in combination with the degree to which political systems place the cost of social benefits on private enterprise.

1½ 3. Nationalisation

The range between expropriation for no compensation and preferential treatment for nationals.

1½ 4. Monetary inflation

Impact of inflation measured partly by the rate and partly by the effectiveness of any system for lessening the effect on business.

1½ 5. Balance of payments

Performance on current and capital accounts, and trends which could affect the profitability for foreign investors.

1 6. Bureaucratic delays

Speed and efficiency of the civil service including processing customs clearances, foreign exchange remittances and similar applications.

2½ 7. Economic growth

Consistent real growth of GNP in ranges of up to 3 per cent, 3-6 per cent, 6-10 per cent and over 10 per cent.

2½ 8. Currency convertibility

The ease with which local currency can be converted to foreign exchange and any impact on operations of the currency's acceptance in monetary markets.

1½ 9. Enforceability of contracts

Relative degree to which contractual agreements are honoured and complications presented by language and mentality differences.

2 10. Labour cost/productivity

Unit cost measured by wages, net worker productivity after reflecting attitude, and company paid social benefits.

Weights

½	11.	Professional services and contractors The support a firm can receive in the fields of accounting, law, marketing, technology and construction contracting.
1	12.	Communications and transportation Facilities for and ease of communications between headquarters and the operation, and within the country. Also, transportation infrastructure assessment.
1	13.	Local management and partners Quality and quantity of nationals who can invest capital and contribute to top level decision making.
2	14.	Short term credit General availability of short term debt to operations with foreign ownership, and the variety of alternatives for cash managers.
2	15.	Long term loans and venture capital General availability and terms of long term capital in both equity and debit form.

SUB-INDEXES

		Political
6	1.	Political stability
5	2.	Attitude toward the foreign investor and profits
5	3.	Nationalisation
3	4.	Monetary inflation
3	5.	Balance of payments
3	6.	Bureaucratic delays
25		
		Financial
5	1.	Currency convertibility
5	2.	Short-term credit
5	3.	Long term loans/venture capital
3	4.	Monetary inflation
3	5.	Balance of payments
2	6.	Enforceability contracts
2	7.	Bureaucratic delays
25		
		Operations
5	1.	Economic growth
5	2.	Currency convertibility
4	3.	Enforceability of contracts
3	4.	Professional services and contractors
3	5.	Communications - telex, telephone, mail, air, local
3	6.	Labour cost/productivity
2	7.	Local management and partners
25		
		Nationalism
8	1.	Attitude : Foreign investor and profits
8	2.	Nationalisation
5	3.	Currency convertibility
4	4.	Bureaucracy
25		

Source: BERI

APPENDIX III

EXTRACT FROM 'TRADE, LOCATION OF ECONOMIC ACTIVITY AND THE MULTINATIONAL ENTERPRISE : SOME EMPIRICAL EVIDENCE' BY JOHN H DUNNING (TO BE PUBLISHED IN JOURNAL OF INTERNATIONAL BUSINESS STUDIES, AUTUMN 1979)

I

Broadly speaking there have been three approaches to testing the theory of international production.

The first has attempted to explain the causes of direct foreign investment by examining its industrial composition from the viewpoint of individual home countries (almost exclusively the US) and host countries (notably Canada, UK and Australia). The second approach has been to look more at the form of international economic involvement, by establishing conditions under which foreign markets are exploited by trade or non-trade routes. The third has combined the two approaches by examining both the level and composition of international involvement, in terms of its ownership and locational characteristics. Our own contribution is an extension of this last approach.

From both a technical and a motivational standpoint, each of these strands of research has much in common. Each uses, with varying degrees of sophistication, multiple regression analysis to test explanations about the relationship between various measures of international involvement and a variety of explanatory variables. Each too, is beset by the same kind of methodological and statistical problems, notably the establishment of operationally testable hypotheses, data limitations and multicollinearity between the individual variables. From a motivational standpoint, with one exception (Knickerbocker 1973), all the studies assume either that enterprises are profit maximisers or that their behaviour is not inconsistent with that which might be expected from a profit maximising firm.

II

1 THE CAUSES OF DIRECT INVESTMENT

The common thread running through all these studies is that they have sought to explain the pattern of foreign direct investment in terms of ownership advantages of MNEs. Caves puts it well in his 1974 paper (Caves 1974) when he refers to three groups of advantages of foreign owned firms which have been put forward to explain inter-industry variances in their share of domestic output (or sales) viz. (i) their access to superior intangible assets, (ii) their being

part of a multi-plant enterprise, (iii) their being able to draw upon under-utilised entrepreneurial resources.

Production for domestic or foreign markets

Although chronologically, the work of Tom Horst should be discussed first, from a conceptual viewpoint there is much to be said for beginning with that of Bernard Wolf (1973). For Wolf's model starts with the Penrosian assumption (Penrose 1958) that the pattern of growth of any enterprise is largely fashioned by the extent to which it has unutilised resource at its disposal. Wolf considers two particular ways in which such resources might be deployed. viz. (i) by seeking new markets for existing products or (ii) diversifying into new product lines. New geographical markets may be exploited by exports, licensing or foreign investment. Wolf argues that these choices should be considered as part of a co-ordinated strategy of firms.

Wolf calculates five ratios - viz. exports to total sales, foreign production to total sales, foreign production plus exports to total sales, a domestic industrial diversification propensity ratio and a combination of each of the above ratios - for a group of 95 manufacturing industries in 1963 - normalising each ratio by the average for all industry. He defines the industrial diversification propensity as "the percentage of sales of a particular industry accounted for sales of products classified to other industries". Using a least squares estimating technique, he then regresses each of these ratios on two ownership specific variables viz. average size of assets (as a proxy for the economies of firm size) and technical manpower (as a proxy for the technical capacity of an industry).

The results, summarised in Table A.1, show that as far as international propensities are concerned, the two ownership variables best explain the total i.e. trade plus non trade, involvement; the explained variation in the regression equation is 45.3% compared to 32.5% when the foreign production ratio is used as the dependent variable and 26.3% when the export ratio is used. This conclusion supports an eclectic theory of international involvement (Dunning 1976) as it demonstrates the cost of not considering other forms of

Table A1 - Multiple Regression Results: Diversification Propensities on Average Firm Size and Technical Manpower

95 Industry Observations

Dependent Variables (Propensities)	Intercept	Independent Variables:* Average Firm Size (S)	Independent Variables:* Technical Manpower (T)	R^2 adjusted and F-ratio**	Partial Coefficients*** Variables	Partial Coefficients*** R^2
X Export	-.073	.069 .062 (1.111)NS	.508 .108 (4.720)	R^2 = .263 F(2,92)= 17.741	NC	
F Foreign Production	-2.168	.497 .115 (4.301)	.570 .200 (2.846)	R^2 = .325 F(2,92)= 23.624	FS.T FT.S	.149 .070
X + F International-ization	-.151	.171 .057 (3.019)	.603 .098 (6.152)	R^2 .453 F(2,92)= 39.988	XFS.T XFT.S	.070 .276
D Domestic Industrial Diversifi-cation	-.135	.246 .058 (4.237)	.266 .101 (2.642)	R^2 = .309 F(2,92)= 21.986	DS.T DT.S	.145 .050
X + F + D Total Diversifi-cation	.319	.196 .040 (4.919)	.388 .064 (5.602)	R^2 = .513 F(2,92)= 50.480	DXFS.T DXFT.S	.192 .238

Source: Wolf (1973)

international involvement in explaining any one form. Both variables are statistically significant[1]. The partial co-efficients of determination suggest that technology is a more important variable than average firm size in explaining variations in export ratios, but that size is more strongly associated with international production and the sum total involvement ratio. This is consistent with the proposition that economies of size (which include those of a multi-plant variety) enhance the competitiveness of foreign affiliates more than access to technology (per se), and/or that there are locational advantages in producing abroad.[2] The regression co-efficients also suggest that an increase in firm size will have much less impact on internationalisation than an equivalent change in technical manpower.

A similar explanatory pattern is found for the domestic (i.e. product) diversification index; some 30.9% of the inter-industry variation is accounted for by size of firm and technology; again the former variable is the more important determinant than the latter. Taking all the indices together, 51.3% of the inter-industry variation is explained. Technology is now shown to be the more important variable, although size explains the total diversification ratio better than the individual diversification components.

The conclusion to be drawn from Wolf's studies is that two of the alleged advantages of firms do appear to be significant determinants of each of the main ways in which they may diversify their activities, and that each of the forms of diversification are, at least, partial substitutes in exploiting these advantages. On the other hand, technology plays a less important role in determining the form of market exploitation than is sometimes suggested.

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1 Except in explaining the export propensity, where only technical manpower is statistically significant.

2 Not considered in Wolf's model.

Production for foreign markets: home country data

Of the studies exclusively concerned with international economic involvement, those of Horst (1972a), Baumann (1974) and Caves (1974), deserve special mention.[1] There have been two main approaches, which have looked at the major influences of non-trade or trade from the viewpoint of the home and the host countries respectively. Tom Horst (1972) set himself the task of identifying both industry and enterprise characteristics of the involvement by US firms in the Canadian market and in multinational operations generally. His approach was a two stage one. The first was to describe the particular characteristics of home country firms which either serviced the Canadian or at least six other markets i.e. they were MNEs in the Vernon sense of the term.[2] He investigated some 1,191 US manufacturing corporations and found that, normalising for industry characteristics, the most important ownership advantage explaining both trade and foreign production was size of firm. In his own words:-

> "The conclusions I have come to after an exhaustive examination of the data is that once inter industry differences are washed out the only influence of any separate significance is firm size".

Horst also asserted that other commonly offered explanations of trade and foreign direct investment e.g. extent of vertical integration, technical expertise or capital intensity, advertising or research effort, product diversity and so on, were either industry specific or could be captured in size of firm. In his words:-

> "All of this suggests that with respect to intra-industry factors, theory of foreign investment behaviour may be structurally identical to an industrial organisation theory of domestic market shares ..... "

This is an interesting observation; it is also very relevant to our own argument if one interprets size of firm not as a size variable per se but as a composite measure of ownership specific advantages.[3]

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1 Other studies include those of Orr (1973).

2 i.e. those primarily engaged in manufacturing industry listed in the Fortune Largest 500 Industrial Corporations in 1963 and 1964 which had (or once had) 6 or more foreign subsidiaries outside Canada.

3 In a concluding paragraph (on p.264), Horst comes near to this by accepting that his analysis is deficient in the sense that nowhere is there a description of how the firm came to acquire its current attributes. Our suggestion is that the systemic theory provides such a description.

Horst's analysis is also consistent with that of Wolf's that ownership advantages are common to firms, independently of their form of diversification, but that, as they grow larger, the chances of their going overseas increases.

The second part of Horst's paper was concerned with explaining inter-industry differences in the extent of foreign involvement, given the size of firm. Taking as his dependent variable, the proportion of firms in different industries investing abroad (drawn from the Fortune largest '500') he considered one important ownership specific advantage viz. research and development (r and d) intensity, and two location specific advantages, viz. minimum efficient plant size (using Canadian data) and natural resource dependency, and regressed these on industry dummies. The result was that he got R^2s of 0.50 and 0.68 respectively.[1] Both size and r and d performed well in the multi-national case[2], with size of plant yielding the correct negative sign. In the Canadian case, all the variables were significant - r and d at a 1% level and size of plant at almost that level. The results are summarised in Table A.2.

Before passing to the next group of studies, brief mention must be made of more recent work done by Horst at the Brookings Institution. (Horst 1975). Here, although Horst's objective was to analyse the impact of foreign investment on domestic industry performance and economic power, his analysis is especially relevant to the eclectic thesis (Dunning 1977) in that he argued that much of the advantage of MNEs over their domestic competitors could be explained by their greater propensity to internalise activities, especially in the form of backward vertical integration of production and the spreading of joint costs.[3]

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1 In other equations he used a resource variable multiplied by a concentration ratio to take account of seller concentration. The co-efficients of correlation worked out at .49 and .72.

2 i.e. they were significant at the 5% level.

3 Other advantages include portfolio diversification and tax considerations.

TABLE A-2

(i) Determinants of Proportion of US Firms' Investing Outside US and in Canada

Multinational Case

1. C (Industry Dummy)' = .13 + 4.95 R+D + .05 Resource -.0058 Can Size
(2.1) (0.50) (-2.0)

R^2 = 0.50

Canadian Case

2. C (Industry Dummy) = .11 + 10.1 R+D + .17 Resource -.0076 Can Size
(4.9) (-2.4)

R^2 = 0.68

Source: Horst (1972)

(ii) Determinants of Share of Production of US Affiliates in Canada

1. SUS = -0.338 + 1.758 PROT + 0.716 FTD + 0.341 MULTI + 0.018 SIZUC
(-1.823) (3.007) (1.888) (2.288) (3.146)

$\bar{R}^2$ = 0.476

2. SUS = -0.270 + 2.121 PROT + 0.849 FTD + 0.416 CONC + 0.015 SIZUC
(-1.582) (4.074) (2.236) (2.504) (2.516)

$\bar{R}^2$ = 0.485

3. SUS = -0.339 + 1.766 PROT + 0.711 FTD + 0.342 MULTI + 0.018 SIZUC + 0.035 CRU
(-1.811) (2.981) (1.848) (2.274) (3.106) (0.135)

$\bar{R}^2$ = 0.468

4. SUS = -0.399 + 1.756 PROT + 0.723 FTD + 0.343 MULTI + 0.018 SIZUC + 0.424 WA
(-1.148) (2.979) (1.884) (2.279) (3.119) (0.206)

$\bar{R}^2$ = 0.468

5. SUS = -0.338 + 1.764 PROT + 0.720 FTD + 0.337 MULTI + 0.018 SIZUC + 0.193 SCA
(-1.805) (2.949) (1.857) (2.028) (3.011) (0.060)

$\bar{R}^2$ = 0.508

6. SUS = -0.331 + 1.838 PROT + 0.781 FTD + 0.325 MULTI + 0.017 SIZUC - 0.800 RISK
(1.768) (3.024) (1.947) (2.121) (2.978) (-0.524)

R^2 = 0.470

Source: Baumann (1973)

NB t-values appear in brackets: $\bar{R}^2$'s adjusted for degrees of freedom.

In this case, however, Horst's data on the foreign activities of manufacturing firms was obtained from the US Internal Revenue Service. More specifically, he used (as his dependent variable) the ratio of the foreign dividends and tax credits to the total assets of the US parents. Though subject to various qualifications,[1] the great advantage of this measure was that data could be disaggregated into 75 separate manufacturing groups.

Horst took, as his main independent variables, three ownership characteristics of firms, viz. advertising, technological intensity, and size, (expressed in logarithmic form). He worked with a non-linear regression equation, taking the square root of his dependent variable. For each year, between 1966 and 1971, he got extremely good results with R^2s ranging from 0.76 to 0.80. The advertising variable showed consistently positive and highly significant results; the value of the technological intensity and size variables declined over time - which, according to Horst, suggests that while these variables may be important in explaining the initial penetration of foreign markets, they are less so in explaining the growth of foreign affiliates.

Again it is worth drawing on Horst's own words -

> "Foreign investment did indeed seem to offer established, multinational firms substantial opportunities for backward integration to cheap labour and raw materials or forward integration to new markets, for spreading r and d, head-office and other overhead costs across a larger sales base, for portfolio diversification across national boundaries with its attendant opportunities for raising returns and reducing risks and, perhaps, for avoiding US taxes."

Production for foreign markets: host country data

Rather more attention has been directed to explaining inter-industry differences of a country's international involvement, using some measure of participation of its firms in foreign countries as the dependent variable. Here, emphasis switches from explaining the extent to which firms export or produce abroad relative to their total activities, to their share

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1 Yet correlating dividends and tax credits with assets of foreign affiliates yielded a Spearman rank correlation of more than 90%.

of the total sales or output of a particular industry of another country. Such studies have mostly concentrated on foreign production rather than trade. Of these, we will deal briefly with those of Baumann, Caves, and Buckley and Dunning.

(a) The Baumann paper (1974) is especially interesting as it extends the theory of mergers to the problem of foreign direct investment, and, in so doing, considers the ownership advantages of firms from the viewpoint of market structure and the property rights of firms. Baumann also attempts to isolate the branch plant effects of foreign production. Essentially, his thesis is that the extent and pattern of foreign direct investment measures the ownership advantages of the investing firm, which, in turn can be assessed by how much more they value these advantages (or any part of them) than firms who do not possess them. His analogy of the reasons for takovers is an apt one. Takeovers occur when -

> "the managers of the acquiring firm place a higher valuation on the acquired firm than the latter's own management, or the managers of the acquiring firm may recognise that the combined firm after the takeover has a higher present value than the two independent firms".

Substitute the words parent company for acquiring firm and foreign affiliate for acquired firm, and one has another interpretation of the systemic theory of foreign investment.

Baumann's model takes, as its dependent variable, the proportion of sales of US subsidiaries in Canada to all industry sales in 1967. His explanatory variables include a measure of technological intensity, firm economies of scale (measured in this case by a concentration index); the ratio of shipments originating in multi-plant firms to total shipments and the average age of products of the industry. In most cases, he uses US data.

Some of his results, based on least squares regression equation, are presented in Table A.2. In his first set of equations, he is able to explain about 50% of the variation in the dependent variable and all the variables

have the expected sign and are significant at a 5% or less level. He does, however, admit that it is not possible to distinguish between the various theories of foreign direct investment (e.g. those based on market structure, economic disturbance and property rights) and, to this extent, his analysis is less exciting than one might have hoped.

Baumann next considers some other variables put forward to explain foreign direct investment, some of which are location specific. He finds, for example, that cost factors, including tariff barriers, play little part in explaining US investment in Canada. Neither do plant economies of scale or transport costs. Even some of the more popular ownership advantages e.g. advertising intensity, show up weakly, and the risk variable behaves contrary to expectations.[1] Indeed, few new variables seem to much improve the explanatory power of the earlier hypotheses.

(b) The Caves study (Caves 1974) looks at three types of ownership advantages ascribed to foreign affiliates (cf. their indigenous competitors) viz. their access to superior intangible assets, their being part of multi-plant enterprises and their being able to draw upon superior entrepreneurial resources. His dependent variable is the share of all foreign owned firms in various Canadian and UK manufacturing industries. His independent variables are grouped into one or other of the above explanations of ownership advantages. R and d and advertising expenditure as a percentage of sales, and a series of barriers to entry measures serve as proxies for intangible assets. The percentage of shipments accounted for by multiplant enterprises are used as a proxy for the degree of multiplant operations; and the percentage of non production workers to all workers and two payroll indices as proxies for entrepreneurial resources. He also introduces two location specific variables - differences in payroll costs between parent company and affiliates and the rate of effective tariff protection of the host country. Most of the ratios are again derived from US data.

Caves acknowledges that a considerable amount of multicollinearity exists between the independent variables, but attempts to surmount this problem

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1 i.e. there is no support for the contention that US firms, because of their size and different attitudes towards risk, are less risk averse than Canadian firms.

by clustering his variables into sub-groups. The main results of the exercise[1] are that the technology and size variables are always significant in both countries and the advertising variable is sometimes; that the multiplant operations variable is always quite significant; but that there is not much support for the entrepreneurial resources theory. Most of the variables which seek to capture the route of servicing foreign markets are not helpful either. In his own words "other results leave the nul hypotheses more ascendant".[2] Some of the findings are set out in Table A.3.

Caves also looks at the inter-industry variance in producer and consumer good industries, taken separately, This division produces interesting and, in the case of the UK, dramatically different results. He finds that his equation explains as much as 89.5% of the variance of shares in consumer good industries in the UK, while in the case of producer good industries, the co-efficient of determination is actually negative.

There were some differences between the causes of foreign investment in the two countries. The multiplant thesis worked well for Canada but not for the UK, which Caves puts down to the geographical proximity of Canada to the source country of investment i.e. the US. He also concludes that, of the variables which might influence the choice between investment and licensing, only relative factor costs appear to be of any significance.

(c) The final study in this group also tried to explain the composition of US direct investment in UK manufacturing industry (Buckley and Dunning 1976). In particular, the authors sought to test two interrelated hypotheses.[3] These are:-

(i) US affiliates support a higher share of the total output

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1 Based on 1965-7 data for 64 Canadian industries, and 1963 data for 52 UK industries.

2 Caves p.284.

3 There was a third but this was an exercise in choice between exploiting the UK market by exports or foreign production. This is dealt with later in the paper.

TABLE A 3 - DETERMINANTS OF FOREIGN FIRMS' SHARES IN CANADIAN MANUFACTURING INDUSTRIES[a]

Equation	Constant	MP	AD	RD	LS	NP	PE	PP	EC	DS	EC/DS	RW	TR	$\bar{R}^2$
1	-0.215 (-1.53)	0.642 (3.78)	1.24 (0.958)	8.13 (2.89)						-0.006[b] (-0.065)	0.311 (0.368)	0.002 (1.20)		0.459
2	0.132 (1.45)		1.36 (1.03)	7.58 (2.57)	0.442 (3.41)					-0.064[b] (-0.704)	0.416 (0.482)	0.002 (1.19)		0.434
3	0.121 (0.804)			6.84 (2.33)	0.471 (3.62)	0.267 (1.11)		-0.025 (-0.365)						0.414
4	-0.229 (-1.24)	0.723 (4.50)		7.63 (2.88)			0.000 (.268)			-0.025 (0.661)				0.467
5	0.207 (2.17)		3.13 (2.31)		0.384 (2.56)				1.20 (1.52)				-0.003[c] (-1.39)	

[a] R^2 values are corrected for degrees of freedom; t-values appear in parentheses.

[b] The variable DS was inverted in this equation, making its expected sign positive.

[c] The Chand-Salley measure of effective protection was used in this equation; see statistical appendix.

Source: Caves (1974)

of a UK industry where their comparative advantage (or that of their parent companies) is greatest vis a vis UK firms.

(ii) US parent firms are better seekers of the most profitable and faster growing industries in the UK than are host country firms.

As regards the first hypothesis, it was argued that most of the advantages of US firms could be expressed in terms of barriers to entry to UK firms. In particular three barriers were considered viz. product differentiation, absolute costs and minimum scale of firm. Here, all data were derived from UK sources (cf. the Caves formulation which used US data). The precise variables used were similar to those used in the other models and the results exhibited consistency of sign and reasonable stability of co-efficients. The most successful of the equations contained advertising costs as a % of value added; r and d costs as a % of value added, a skilled labour ratio variable, an economies of scale variable and a market structure variable which between them gave an explained variance of 81%. However, with 22 observations, only the skilled labour and market structure proxies were statistically significant, although the advertising variable also became significant when the logarithmic form was used. In both this exercise, and in another containing 36 observations, the additive formulation performed better than the multiplicative one.

As regards the second hypothesis, the authors related a US sales concentration coefficient in UK industry[1] to profitability and growth variables. In each case the variable had the correct sign, but growth appeared to be a more significant influence of the distribution of sales than profits. This may be consistent with the hypothesis that traditional profit measures are not a good guide to profitability or that US firms pursue goals other than profit maximisation.

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1 The share of the output of a particular industry accounted for by US affiliates divided by their share of total manufacturing output.

III

2 SERVICING FOREIGN MARKETS BY ALTERNATIVE ROUTES

Most of the first group of studies concentrated on explaining either why some industries were more internationally oriented than others; or why some industries tend to be more serviced by foreign affiliates than others. The significance of both size of supplying firm and some measure of technological intensity seemed to be demonstrated by all studies.

The second group of studies are more interesting in explaining the method of sourcing foreign markets. Of these we shall give most attention to Hirsch (1974), Hawkins and Webbiner (1976), Buckley and Pearce (1976) and Parry (1976).

We have already referred to the Wolf paper which suggested that exports and foreign investment tend to be substitutes for each other. A different conclusion was reached by Horst (1972b), who, in explaining the composition of sales of US enterprises to Canada regressed exports by US parents on total US exports to Canada, (both deflated by US shipments) on a series of industry characteristics and on US subsidiary sales in the same industry and same market. The latter variable provided a significant positive coefficient. To quote from Horst -

> "over most of the relevant range, the complementarities between net sales by manufacturing affiliates abroad and exports of either the parent firms or all firms in the industry have tended to outweigh the substitutional effects. Only at comparatively large values of subsidiary net sales does the net effect seem to be substitutional instead of complementary."

The findings of Horst are generally supported by Lipsey and Weiss in their study of the pharmaceutical industry (Lipsey

and Weiss 1976a). In a series of regression experiments, US exports to foreign markets showed a positive relation with various proxies for foreign affiliate activity in those markets. Perhaps even more interesting is that the authors discovered a generally negative relationship between US exports and affiliate production by non-US firms, which suggests there is some substitutability between nationalities of supplying firms, but complementarity between the forms (export or affiliate production) of supply. This suggestion (which is generally supported by other cross sectional studies) implies an anti-classical view[1] of the effects of foreign direct investment. (Hufbauer and Adler 1968).

a) The Hirsch model

Seeve Hirsch (1976) uses the concept of ownership and location specific variables to distinguish between four sets of variables which might affect a country's dependence on foreign companies for sales. These are:-

i) production costs in home and foreign countries,
ii) the differential export-marketing cost of home country firms (i.e. the difference between their export and domestic marketing costs),
iii) international transfer costs,[2]

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1 The anti-classical view argues that foreign investment increases plant capacity abroad but has no affect on capital formation at home.

2 While (i) represents cost of moving goods and services internationally, (iii) is related to costs incurred in managing and co-ordinating internationally decentralised organisations.

iv) firm specific knowhow and other intangible proprietary assets.

The first three are location and the last ownership variables. Hirsch's research is devoted to explaining the share of host markets accounted for by five forms of supplies viz. imports from US by MNEs, imports from US by non MNEs, imports from other countries, sales of foreign affiliates and sales by domestic firms. He concludes that production by US affiliates tends to be import substituting but that it is complementary to that of domestic industry. Hirsch takes his data from US Tariff Commission report on the sourcing of markets in 14 industries in 8 countries in 1970 (US Tariff Commission 1973) and regresses the market share accounted for by each of the main suppliers on eight explanatory variables - three representing market size and five being direct or indirect proxies for the cost factors and ownership variables set out above.[1] After eliminating two of the size proxies, the remaining variables offered explanations of 45% in the case of affiliates of US MNEs but only between 19% and 23% for the other foreign suppliers. Details are set out in Table A4. Of the individual variables, wage costs are positively correlated and significantly different from zero in three equations.[2]

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1 Eg. relative average hourly wage rates and K/L ratio for (i); advertising/sales for (ii); non-production/all workers for (iv); average number of employees per manufacturing establishment for (iii). It will be observed that the proxies used for (ii) and (iii) turn out to be akin to ownership specific rather than location specific variables. The lack of consideration given to location specific variables such as tariffs and transfer costs is a considerable deficiency of this study.

2 The exception is the one which has imports from other countires as its dependent variable.

Table A4

Determinants of Foreign Sector Sales in Host Countries

(country and industry characteristics) (4)

Market share of	W_j	S_{ij}	C_i	M_i	K_i	N_i	constant	R^2
Imports from US by multinationals	4.558-3 (2.298)	-7.0-7 (1.056)	-6.479-4 (0.1601)	-5.976-3 (1.394)	2.690-1 (3.298)	2.32-5 (0.409)	-3.119-3	0.23
US MOFAS sales	2.623-2 (3.528)	-2.8-6 (1.101)	-2.691-4 (0.111)	-1.366-2 (0.850)	1.653-0 (5.705)	6.18-4 (2.903)	-9.207-2	0.45
Imports from US by multinationals	3.658-3 (1.539)	-9.0-7 (1.143)	-4.691-7 (0.604)	4.867-7 (0.095)	2.626-1 (2.686)	5.70-5 (0.837)	-1.275-2	0.19
Imports from other countries	-2.716-3 (3.635)	-4.8-6 (1.902)	2.313-3 (0.948)	1.119-2 (0.697)	4.799-1 (1.563)	-6.69-5 (0.313)	1.645-1	0.20

t values appear in brackets below the coefficients

Source: Hirsch (1974)

The capital labour ratio is insignificant; advertising costs perform weakly. The knowledge variable is positive and significant but more so for the MNE than others. The size variable is negative for non US suppliers but positive for US suppliers.

Hirsch's conclusion is that three US groups have similar characteristics which differ in magnitude.

> "Comparing the performance of the foreign sector as depicted by the four equations we note that the three US groups have similar characteristics which differ mainly in magnitude, though these differences are sometimes substantial. The shares of foreign affiliates vary more with hourly wage rate, skill intensity and average plant size than do the share of both multinational and non-multinational US based suppliers. These differences are consistent with the hypothesis that the "trade or invest" decision has a pro-investment bias when the decision concerns "down stream" markets. Rather unexpectedly, the data show that trade (or rather US trade) too has the same down stream bias, though this bias is definitely less pronounced. The data are also consisten with the hypothesis that US firms enjoy a competitive edge in knowledge intensive industries, and, furthermore, that this advantage is more pronounced in subsidiary production than in exports. The advantages of production over trade presumably derives from the absence of trade retarding effects of export marketing cost differentials which do not apply to MNEs sales.
> On the whole US and non-US suppliers appear to have complementary rather than competitive characteristics; the industry characteristics of the two groups tend to have different signs. Not surprisingly, the characteristics of the three US suppliers are more similar, and tend to vary in the same direction with their market shares."

b) The Hawkins Study

Hawkins (1976) uses the same data as Hirsch to examine determinants of change in market share of each of the main suppliers of a group of 12 foreign markets between 1966 and 1970. He finds that, in this period, US exports rose relative to sales of US affiliates and local suppliers in those markets, but fell relative to third country imports. Sales of US affiliates gained relative to those of local suppliers but lost to third country imports.From this, Hawkins concludes that US affiliates and exports tend to complement each other; while the fact that both lost ground suggests a strong defensive element in the expansion of US MNEs abroad. The relative gain in US exports was apparent for most industries, the only major exception being the non-electrical machinery.[1] The loss of both exports and local affiliate production in nine of twelve

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1 Hawkins estimates the net gain of US exports between 1966 and 1970 was $1 - $1½ billion; the loss of competitiveness to third country imports was put at $100-300 million. Sales of US affiliates lost to third country imports by $2 billion, but gained on local suppliers by $3.5 billion.

countries to imports from other countries and the gain to local suppliers was quite general across industry. US affiliates increased their share vis a vis local suppliers in eight of the twelve countries. Hawkins is now researching into the reason for these changes.

c) The Buckley/Pearce Study

A very different approach to the two studies just described is that of Buckley and Pearce (1977). Using data provided directly by 156 of the 800 largest world's industrial companies listed in Fortune, they examined the relationship between both the degree of multinationality of companies (using a percentage of sales produced abroad[1] criterion), and the form of servicing foreign markets, and three groups of variables viz. nationality of enterprise, industry and size.[2] Firms of eleven nationalities were included in the survey and these were classified in seventeen industrial groups.

The authors first related the degree of multinationality of enterprises to the explanatory variables. The findings, set out in Table A.5, are quite illuminating. Size, nationality and research intensity (in place of industry) are all significant factors. They next used the same independent variables to test the extent to which exports from the parent company are internal or external. Again the results were encouraging and support the internalisation thesis already mentioned. There are considerable nationality variations in the importance of internalised exports. Around an average of 41%, the ratio of internal to all exports, varied from 59% for Swedish and 55% for US companies to 8% for Japanese and 13% for French companies- and from 51% for research intensive industries to 18% for non-research intensive industries.

Finally, Buckley and Pearce looked at two sourcing ratios -

i) foreign production as a % of foreign production plus parent company's total exports,

ii) foreign production as a % of foreign production plus parent company's extra-group exports.

The results are also set out in Table A.5. Size is clearly a major

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1 Less imports of finished goods from their parent companies.

2 The industry and nationality variables being taken as dummies.

TABLE A5

Regression analysis of sourcing ratio of MNEs

Equation	Dependent Variable	Independent Variables	Significant Variables	R^2
1.	Sourcing Ratio $\frac{b}{b+d}$. Sales of foreign affiliates / Sales of foreign affiliates plus Exports	Size	Size*	
		Nationality dummies (10)	Japan (-)*	
			Germany (-)*	
			Sweden (-)*	
				0.5492
		Industry dummies (15)	Motor vehicles (-)*	
			Tobacco*	
			Aircraft (-)**	
			Iron and Steel (-)*	
2.	Sourcing Ratio	Size	Size**	
		Nationality dummies (10)	Japan (-)*	
			France (-)**	
			Germany (-)**	0.4373
			Canada (-)*	
		Research Intensity		

** indicates that the variable is significant at the 1% level
* " " " " " " " " 5% "

Source: Buckley and Pearce (1977)

influence on methods of marketing: so is the nationality of company; at the one extreme are Switzerland and US with a very high overseas production ratio;[1] at the other are Japan and France with very low ratios.[2] However, there appear fewer variations between research intensive and non-research intensive industries.[3] Clearly locational variables, not tested by the authors, are more relevant in explaining sourcing patterns.

d) An industry study

One of the most interesting studies on sourcing methods is that presented in a Ph.D. thesis by Tom Parry (Parry 1976). Parry looked at the factors influencing the ways in which a number of UK firms exploited the foreign market for pharmaceutical products. He found that the ratio of non-trade to trade sales of UK pharmaceuticals in 15 countries was most strongly related to size of the local market (this alone explained 67% of the inter country variation) and the growth of that market; and that while the tariff barriers to imports were significant at a 95% or 99% level, in relation to the market variables they explained only a small amount of variation.

More novel, perhaps, were Parry's efforts to distinguish between the two main forms of non-trade servicing viz. licensing and foreign production. He related the proportion of non-trade accounted for by licensing to the same independent variables as the total non-trade/trade ratio. Again various market measures turned out to be significant, which suggests, rather paradoxically, that larger markets attract a greater licensing commitment in any non-trade servicing. Some trade resistance variables were also significant; for example, there was an inverse relationship between tariffs and non-tariff barriers and licensing commitments. Indeed in one equation, non-tariff barriers accounted for 61% of inter-country variations. Parry concludes that non-tariff barriers not only discriminate against imports but against foreign affiliates as well.

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1. of 88.2%
2. of 12.4% and 20.8%
3. But within these categories there are such variations. Eg. the foreign production ratio varies from 9% in steel and 31% in motor vehicles to 71% in chemicals and 96% in food enterprises.

Finally, at an individual product level, Parry found that an age of product variable (defined as the number of years since the product was first commercially sold on the UK market) was significantly and positively related to the non-trade/trade ratio.[1]

Does trade substitute for investment

To conclude this brief survey of the literature, mention should also be made of the work of Lipsey and Weiss (1973 and 1976 (b)) and Cornell (1973) who have sought to establish the extent to which neo-factor theories of trade can be amended to incorporate the operations of MNEs, and, in particular, whether the Leontief paradox can be resolved.

Lipsey and Weiss argue that, once one accepts that ownership specific advantages, in the form of cheaper capital or superior technology, may be exported to countries scarce in these inputs but plentiful in complementary resources, it is quite possible that not only might the imports of that country from its foreign affiliates be more research and capital intensive than those from other firms, but also more than the output of competitors in the investing country. We have earlier argued (Dunning 1976) that two groups of products in which the internalised advantages of MNE firms are most to be seen are those which use high technology and capital intensive resource inputs. In the supply of both groups of products, MNEs are using factor proportions very differently than their non MNE competitors, in that they export low cost technology and low cost capital to labour or resource based countries and use these to import research or capital intensive products. In so doing, they help to combine the ownership advantages of one country's firms with the location advantages of another country's resources, and, are trade creating. (Kojima 1973).

In the Cornell study, comparisons were made between the trade patterns of US MNEs and other firms. Cornell concludes they are basically similar, and that the patterns of MNE trade reflect patterns of comparative advantage as measured by the characteristic contents of trade goods. He rather boldly asserts that "trade of MNEs is not an 'erosion' of US competitiveness in international trade but a validation of it".[2]

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1. For an attentive approach to examining the relationship between exports and foreign direct investment in pharmaceutical industy; see Lipsey & Weiss 1976 (a).
2. Cornell (1974) p.22.

Related to attempts to determine the share of foreign involvement through different routes, has been the interest in whether exports and foreign production complement, or substitute for, each other. The answer here has obvious policy implications and was originally the reason for the Reddaway enquiry in the UK (Reddaway 1968) and the Hufbauer/ Adler study in the US. (Hufbauer/Adler 1968) Both investigations were concerned with estimating the balance of payments effects of foreign direct investment from the viewpoint of the home country. Both concluded that, if one took the assumption that had not foreign investment been made by UK or US firms, some other country or domestic firm would have made it, then exports and investment are not substitutes for each other, in the sense that had not the investment been made there would have been no exports in any case.[1] If, however, one takes the view that no alternative investment would have been made in the host country, and exports fall as a result of foreign production, then the two servicing routes become substitutes for each other. A third view is that foreign investment leads to additional exports from the home country.

Various surveys have suggested no hard and fast conclusions can be drawn. There is evidence on all sides, which is not really surprising as different ' alternative positions' may be needed for different industries and countries (cf. computers with textiles, investment by the US in the UK with that of India).

Yet another study by Horst (Horst 1974) has attempted to shed more light on the matter. Using similar data to those of Hawkins but for 1966, he again used the expression of US exports to local affiliates sales and relates this to ownership and location specific variables. His conclusion is that the complementarity of non-trade and trade is a more plausible proposition than a substitutable relationship,[2] but that this varies according to the size of foreign production; above a certain value of affiliate sales, there is some evidence that the two means of sourcing are more substitutable for each other.

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1. The so called reverse classical assumption.

2. In a combined cross-industry and cross country analysis, he gets a positive r^2 of 0.31 between exports of MNEs and affiliates net sales (i.e. after deducting the imports from their own parents). When he separately regresses US exports and foreign affiliate sales (suitably normalised) on a group of ownership and location specific variables, his r^2s are very similar - 0.44 and 0.30 respectively. (cf. the Wolf results).

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Sherrine M. Thompson	July 26, 2023

UNITED NATIONS: OPEC Nations Endorse Proposal For New Global Negotiations Including Energy. The oil-producing countries are prepared to discuss all aspects of the world energy problem, including oil prices and supply, if western nations agree to a new round of "global" bargaining on North-South issues, an Arab source said yesterday. The source told AFP that members of OPEC fully endorse the proposal by the 120 developing countries of the Group of 77 to launch integrated and parallel talks next year on raw materials, energy, trade, development, money and finance. Asian officials meanwhile confirmed that differences over oil between Third World producer and consumer countries had been ironed out in frank talks at last May's Manila session of UNCTAD and in other bodies, including the just-ended Havana summit of non-aligned nations. Western delegates reacted very cautiously yesterday to the New Third World proposal, spelt out in a draft resolution introduced in the U.N. General Assembly's Committee of the Whole, set up in 1977 to oversee North-South economic relations. Japan, Australia, Canada, Switzerland, Finland and Sweden all to varying degrees voiced interest in the Group of 77 initiative, the first in two years to allow for international talks on energy. The most skeptical reaction came from Britain, whose delegate Mr. D. Gore-Booth questioned the wisdom of the proposal. Referring to the 1975-77 Conference on International Economic Cooperation (CIEC), he said: "The example of the Paris conference does not encourage me to think that an institutional grand design of this sort is the way to make genuine progress." Third World sources told AFP that the Group of 77 proposal, stemming from an original initiative by Algeria and Venezuela, was designed to help overcome the world economic crisis. They said that an increased flow in financial resources for development projects in Third World nations sought to give a boost to industrial development, which would in turn create increased demand for western investment goods and so help the developed countries to achieve faster growth. The Committee, which is due to end its session on Friday, is to hold a first round of discussions on details of the Group of 77 proposal tomorrow. (AFP)

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next month in Addis Ababa. (RWBS)

TOKYO: Sri Lanka Requesting German And Japanese Help In Mahaweli Program. Visiting Sri Lankan President Junius Jayewardene stressed the hope yesterday that Germany and Japan would help build two reservoirs as part of his country's huge Mahaweli irrigation program. He said work had already started with Swedish, British and Canadian help on three reservoirs and dams each costing $72 million, and two more were needed. The World Bank-aided project, if completed in six years as planned, will irrigate one million acres of land, create a million jobs and double the nation's hydroelectric generating capacity. A joint communique said Japanese Prime Minister Masayoshi Ohira was considering the request. (RWBS)

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BOARDS OF GOVERNORS • 1979 ANNUAL MEETINGS • BELGRADE, YUGOSLAVIA

J

INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT
INTERNATIONAL FINANCE CORPORATION
INTERNATIONAL DEVELOPMENT ASSOCIATION
INTERNATIONAL MONETARY FUND

Press Release No. 14

October 2, 1979

Report to the Boards of Governors of the Bank and Fund by the Hon. CESAR E. A. VIRATA, Chairman of the Joint Ministerial Committee of the Boards of Governors on the Transfer of Real Resources to Developing Countries (Devlopment Committee)

I have pleasure in making this report to the Boards of Governors on the work of the Development Committee. But before doing that, the Committee expresses its sincere appreciation to the Yugoslav Government for their most generous hospitality and for the excellent arrangements made in connection with their meeting.

Our Annual Report for the year ended June 30, 1979 has already been presented to you, so I will confine myself in these remarks in the main to the Committee's work since then.

The Committee met three days ago on September 30. Its discussions took place against the background of a serious and deteriorating economic situation. The current account deficits of the non-oil producing developing countries are increasing very sharply as a result of a significant deterioration in their terms of trade and in 1980 are likely to exceed $53 billion as compared with $21 billion in 1977. They are therefore faced with particularly serious problems of adjustment, and in many ways they are less able to deal with the situation than they were at the time of the economic crisis of 1974-75. The main focus of the Committee's discussion was therefore to examine how the international community could best assist them.

The Committee reached some important conclusions on this subject. First, the Committee was of the view that in dealing with the situation full use should be made of the existing international finance institutions and mechanisms and that the setting up of new institutions would not help the situation, at any rate at this stage. Members stressed the need to adapt the policies of the existing institutions to the new needs and to enlarge the resources at their disposal to the maximum extent possible. In this context, particular emphasis was placed on the speedy conclusion of legislative measures to effect the doubling of the capital of the World Bank, as well as the early implementation of the increase in quotas in the International Monetary Fund under the

Resolution on the Seventh General Review of Quotas, on increasing the capital resources of the regional development banks, and the early conclusion of negotiations for the Sixth Replenishment of the International Development Association at a level showing a substantial increase in real terms.

The Committee then considered a number of specific suggestions by the Bank and the Fund for improving the capacity of the two institutions to help developing countries in the present situation. Accordingly, they endorsed the suggestion that the World Bank should be requested to consider a substantial increase in its program and sector lending and that the regional banks should also examine their lending policies to meet the new circumstances. This expanded program and sector lending would usefully complement the assistance for balance of payments adjustment provided by the Fund. They also endorsed the suggestion for the maximum possible use of co-financing--that is, the association of private commercial loans with loans from the multilateral development institutions. On the IMF side, the Committee fully endorsed the suggestion that the Executive Board should be asked to examine the possibility of extending the repurchase period of the extended Fund facility from eight to ten years, and of developing ways and means of lowering the interest cost for drawings made under the supplementary financing facility. These are, I believe, very significant steps whose implementation could be of substantial benefit to the developing countries.

The Committee welcomed the second World Development Report from the World Bank focusing particularly on the problems of the middle-income countries. They took note of the very large external capital requirements of these countries over the next decade to support a tolerable rate of growth and recognized that the main source of these funds would have to be the private sector. Speakers therefore stressed the need for all countries to pursue sound economic and financial policies which are necessary to attract such flows, and they reiterated the need for countries to avoid protectionist trade measures that would adversely affect the exports of developing countries.

Inevitably in an economic recession such as we are experiencing today it is the low-income countries which fare the worst. They are not in the main able to borrow at commercial rates of interest and they are critically dependent for their external capital requirements on the availability of concessional capital flows--that is, official development assistance (ODA). The Committee noted with concern the continuing decline in ODA flows from OECD countries expressed as a percentage of GNP and regretted that despite encouraging efforts by a few donors only a very modest growth is projected over the next few years. The Committee, while recognizing the difficulties facing some donor countries, stressed the importance of increasing the volume of ODA flows, particularly from those countries whose ODA represents a relatively low percentage of their GNP. The Committee also called

for improvements in the quality of ODA, such as quick-disbursing assistance, the untying of aid, more local cost financing, and a greater concentration of ODA on the countries most in need.

The Committee gave further consideration to the problem of stabilizing earnings from the exports of developing countries. The recent improvements in the Fund's compensatory financing facility were unanimously welcomed, though a number of speakers considered that further measures such as a global STABEX scheme or a commodity window in the compensatory financing facility were desirable. Bearing in mind the difficulty of financing such measures, however, it was agreed to look at the problem again in a year's time in the light of the experience in operating the improved compensatory financing facility, the progress of negotiations on the setting up of a Common Fund for commodities, and a study of a complementary facility for export earnings stabilization which is to be undertaken in UNCTAD in cooperation with IMF staff.

A number of proposals were put forward for the Committee's future work, particularly in the light of the proposals by the Group of 24 endorsed by the Group of 77 for a Program of Action on International Monetary Reform. We shall be considering all these suggestions as a matter of urgency and I will then put some proposals to my colleagues in the Committee.

The Committee decided that, in view of the short period which had elapsed since the introduction in April of this year of new working arrangements, they would recommend that the review of the Committee which is due to be carried out in 1980 should be deferred to 1981. It should be understood, however, that the procedure for selecting the Chairman of the Committee in 1980 will not be disturbed by this deferment of the review. Draft Resolutions to this effect will be submitted to the Boards of Governors for their consideration.

As I have already said, the world economic situation is menacing and the outlook is somber. It is clear, however, that the problems of any one country or group of countries cannot be solved at the expense of other countries. The economic interdependence of developed and developing countries, of capital exporting and capital importing countries, and of primary producing and manufacturing countries is manifest and is increasing. It will go on increasing. Only by cooperative action, carefully worked out in international discussion with due regard to the interests of <u>all</u> nations, can we expect to make progress. I believe that the Development Committee is well placed to assist in this process and I believe that at its meeting on September 30 it took a number of useful steps, mostly related to the international financial institutions and the World Bank and the International Monetary in particular, which will be of considerable help to the developing countries. But this is only a start. In my view, the best strategy with which to tackle the present problems is a step-by-step approach, adapting the existing institutions and their policies to

meet the changing circumstances, and maximizing the resources which they have at their disposal. It is along this path that I see the work of the Development Committee progressing in the future. In this important task I am sure we can count on the support of all the member governments of these two institutions.

Finally, I would like to echo the thought which President Tito expressed during his inspiring address to us this morning. Development is an essential aspect of security. Peace cannot exist in a world torn by economic conflict and inequality. If only a small proportion of the vast resources that are used today for defense and security were to be diverted to economic and social development, the world would be a safer, more stable, more prosperous and just society.

ANNEX

THE PRINCIPLES OF THE TREATY OF ROME

"Article 92

1. Save as otherwise provided in this Treaty, any aid granted by a Member State or through State resources in any form whatsoever which distorts or threatens to distort competition by favoring certain undertakings or the production of certain goods shall, in so far as it affects trade between Member States, be incompatible with the common market.

2. The following shall be compatible with the common market:

(a) aid having a social character, granted to individual consumers, provided that such aid is granted without discrimination related to the origin of the products concerned;

(b) aid to make good the damage caused by natural disasters or other exceptional occurrences;

(c) aid granted to the economy of certain areas of the Federal Republic of Germany affected by the division of Germany, in so far as such aid is required in order to compensate for the economic disadvantages caused by that division.

3. The following may be considered to be compatible with the common market:

(a) aid to promote the economic development of areas where the standard of living is abnormally low or where there is serious underemployment;

(b) aid to promote the execution of an important project of common European interest or to remedy a serious disturbance in the economy of a Member State;

(c) aid to facilitate the development of certain economic activities or of certain economic areas, where such aid does not adversely affect trading conditions to an extent contrary to the common interest. However, the aids granted to shipbuilding as of January 1, 1957 shall, in so far as they serve only to compensate for the absence of customs protection, be progressively reduced under the same conditions as apply to the elimination of customs duties, subject to the provisions of this Treaty concerning common commercial policy towards third countries;

(d) such other categories of aid as may be specified by decision of the Council acting by a qualified majority on a proposal from the Commission."

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"Article 93

1. The Commission shall, in cooperation with Member States, keep under constant review all systems of aid existing in those States. It shall propose to the latter any appropriate measures required by the progressive development or by the functioning of the common market.

2. If, after giving notice to the parties concerned to submit their comments, the Commission finds that aid granted by a State or through State resources is not compatible with the common market having regard to Article 92, or that such aid is being misused, it shall decide that the State concerned shall abolish or alter such aid within a period of time to be determined by the Commission.

If the State concerned does not comply with this decision within the prescribed time, the Commission or any other interested State may, in derogation from the provisions of Articles 169 and 170, refer the matter to the Court of Justice direct.

On application by a Member State, the Council may, acting unanimously, decide that aid which that State is granting or intends to grant shall be considered to be compatible with the common market, in derogation from the provisions of Article 92 or from the regulations provided for in Article 94, if such a decision is justified by exceptional circumstances. If, as regards the aid in question, the Commission has already initiated the procedure provided for in the first sub-paragraph of this paragraph, the fact that the State concerned has made its application to the Council shall have the effect of suspending that procedure until the Council has made its attitude known.

If, however, the Council has not made its attitude known within three months of the said application being made, the Commission shall give its decision on the case.

3. The Commission shall be informed, in sufficient time to enable it to submit its comments, of any plans to grant or alter aid. If it considers that any such plan is not compatible with the common market having regard to Article 92, it shall without delay initiate the procedure provided for in paragraph 2. The Member State concerned shall not put its proposed measures into effect until this procedure has resulted in a final decision."

"Article 94

The Council may, acting by a qualified majority on a proposal from the Commission, make any appropriate regulations for the application of Articles 92 and 93 and may in particular determine the conditions in which Article 93(3) shall apply and the categories of aid exempted from this procedure."