

Article

The Empirical Evidence on the Location Determinants of FDI and South Africa's Industrial Development Strategy

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Introduction

The research underpinning this article was stimulated by the approach to foreign direct investment (FDI) in the Growth, Employment and Redistribution Programme (GEAR), which, despite criticism, continues to be used as the starting point for development policy. FDI emerges from this strategy as a saviour. This implies that the success of South Africa's development plan rests heavily upon an assumption that large inflows of FDI will be forthcoming. The reliance on FDI as a catalyst for development raises the following questions. What, according to government's development vision, are the most important determinants of FDI and what policies can be relied upon to attract FDI into South Africa? What does the empirical work on the location determinants of FDI in developing countries in general and in South Africa in particular, suggest about the credibility of this approach to FDI determinants? Should we expect South Africa's current location advantages to generate a surge in inward FDI? What kind of research is needed to enhance our understanding of FDI determinants in South Africa and improve FDI policy design? The aim of our article is to offer some tentative answers to these questions.

The article is divided into five sections. Section one defines FDI and explains why it is so difficult to understand the factors influencing it. It then looks at the GEAR projections for new FDI in the light of official data on recent FDI inflows. Section two has two parts. The first describes the role of FDI in the GEAR strategy and the type of FDI being courted. The second derives the understanding of FDI determinants implicit and explicit in the new industrial development strategy. Section three develops an eclectic paradigm of FDI. Section four uses the empirical literature on the location determinants of FDI to address the questions set out above. The conclusion pulls the argument together.

Conceptualisation and measurement problems and GEAR's FDI projections against recent FDI into South Africa

...it is in the nature of FDI that statistical information on it cannot be comprehensive enough to allow fine analytical experiments. (Agarwal 1980:763)

FDI has traditionally been seen to be carried by Multinational Corporations (MNCs). The MNC is an enterprise which controls and manages assets in at least two countries (Helleiner 1989:1442). MNCs can be divided into three types. One turns out essentially the same lines of goods or services from each facility in several locations, and is called the horizontally integrated MNC. Another, the vertically integrated MNC, produces outputs in some facilities which serve as inputs into other facilities located across national boundaries. The third is the internationally diversified MNC whose plants' outputs are neither vertically nor horizontally related (Teece 1985:233, Caves 1996:2).

There seems to be no common understanding of what FDI is. Within the literature that has emerged from research into MNCs and FDI, the problem of subjectivity in understanding is particularly pervasive. The boundaries between portfolio investment, FDI, joint ventures and licensing are fluid. Some still view FDI in the traditional way; they only classify an investment as FDI (rather than a joint venture) when it involves a MNC with headquarters in country A setting up a wholly owned subsidiary in country B or buying all of the equity in a firm in country B. Others see FDI if there is a substantial equity investment in country B by a firm in country A. Then there are those that lump joint ventures between independent firms involving the transfer of technology¹ and capital across international borders together with transfers which take place between firms in which there is an ownership relationship, and call this FDI. When trying to specify the distinguishing characteristic of FDI, Markusen et al (1995:394) take the opinion that 'direct foreign investment involves ownership and/or control of a business enterprise abroad'. They define it 'as an investment in which the investor acquires a substantial controlling interest in a foreign firm or sets up a subsidiary in a foreign country'.

Whilst there is no common understanding of what FDI is, and no one definition of FDI, there is one which is relied upon by most policy-makers, researchers and institutions compiling FDI statistics. This is the definition set out in the IMF's *Balance of Payments Manual* (1993:86). It says that:

Direct investment is the category of international investment that reflects the objective of obtaining a lasting interest by a resident entity in one economy in an enterprise resident in another economy ... (it) ... comprises

not only the initial transaction ... but also all subsequent transactions between the ... affiliated enterprises.

According to this definition, FDI is comprised of equity capital, reinvested earnings, and other capital associated with inter-company debt transactions. FDI is distinguished from portfolio investment by 'the significant influence that gives the (direct) investor an effective voice in management' (1993:86). Foreign investors are seen to have acquired control if they obtain 10 per cent or more of the voting stock of the direct investment enterprise. There are three problems associated with conceptualising FDI in this way and using it to measure and analyse FDI.

First, it is difficult to define 'control'. Second, the definition implies that FDI always involves international transfer of money capital when the capital used by an investor to buy control over the direct investment enterprise can be raised in the host country. Third, the definition restricts FDI to money capital flows. This is its most bizarre and problematic feature. FDI involves not only cross border ownership and control but more importantly, the international transfer of assets. The process of setting up a wholly owned subsidiary or buying a controlling stake in a company in a foreign country, usually involves an immediate flow of technology (both embodied and disembodied) and pecuniary and physical capital from the home to the host country. Particularly in the case of FDI by a vertically integrated MNC, it also promotes subsequent increases in the volume of trade in goods and services between the two countries. In the words of Kojima (1973:1), 'the essence of FDI is the transmission to the host country of a package of capital, managerial skills and technical knowledge'. Moreover, FDI is not wanted in developing countries only because it produces a once off improvement in the capital account. The benefits of FDI for a country like South Africa are seen as flowing mainly from externalities generated by technology transfer. (See amongst others South African Government 1996, Rosenberg and Frischtak 1985, De Mello 1998, and Kumar and Siddharthan 1998.) This means that:

- it is not useful to think about FDI in the narrow sense implied by the IMF definition;
- we need to make it explicit that when studying the determinants of FDI we are interested in what influences the flow of money capital, physical capital and technology, not only the former; and
- we should not rely only upon analysis of the official data when trying to uncover FDI determinants.

For the purposes of this article, FDI is defined as 'a packaged transfer of

capital, technology, management and other skills, which takes place internally within MNCs' (Buckley and Brooke 1992:249).

Before proceeding to our analysis, it would be useful to present data which compares GEAR projections for the various elements in the FDI package against actual transfers of assets that have taken place within MNCs in recent years. This information is not easily accessible, hence our reliance on official data from the South African Reserve Bank (which uses the IMF definition of FDI) to gain an initial impression about whether government's expectations are too ambitious. This implies that our knowledge about South Africa's success in attracting the quantity of FDI required by its new development strategy, will remain very incomplete.

Table I: GEAR's Integrated Scenario Projections for inward FDI

Year	1996	1997	1998	1999	2000
Additional FDI (\$ millions)	155	365	504	716	804

Source: South African Government, 1996:7.

Table II: SARB data on the inward direct investment component of private capital movements, 1990-1996, R and \$ millions

Foreign direct invest liabilities (inward FDI)	1990	1991	1992	1993	1994	1995	1996
R millions	-236	586	-119	-63	1201	3558	3267
\$ millions	-91	212	-42	-19	338	980	760

Notes

a) The data is quoted in millions of rands in the SARB document. To facilitate comparison with the GEAR data, we have converted it to millions of US dollars. For this conversion we used the middle exchange rates calculated by the SARB for the various years and provided on S-104 of the December 1998 *Quarterly Bulletin*.

b) The definition of FDI used by the SARB is the IMF definition given in the text above.

c) A positive amount indicates an increase in foreign liabilities/inward FDI.

Source: SARB *Quarterly Bulletin*, December 1998, compiled from S-89 and 104.

The SARB data reflects a surge in inward FDI since the democratic elections. Whilst the SARB has not yet released figures for 1997, other sources reveal that 1997 continued to witness this favourable turnaround in inward FDI (IMF, December 1997:630-631, Craig 1998, Hirsch and Hanival 1998:12). This is not surprising as the second quarter of 1997 saw the completion of the first privatisation transaction involving foreign participation. This involved the sale of 30 per cent equity interest in Telkom to a consortium of non-resident (USA and Malaysian) companies. According to DTI estimates (Hirsch and Hanival 1998:12), 'total FDI for the year was over R12 billion (12 000 million)'.² Investment Southern Africa (ISA) estimates that 955 MNCs now own stakes in 2 050 entities in SA which manage 380 000 employees and control about \$44.8 billion in assets (Craig 1998:20-21). If one simply looks at the GEAR projections for inward FDI in the light of the SARB and the DTI's data on inward FDI, then, it seems as if government's expectations about how much FDI South Africa is capable of attracting, may be credible. In fact, it appears as if government may be underestimating the quantity of FDI South Africa can expect to attract in the near future. However, three considerations should caution us from concluding that GEAR's targets for FDI are realistic and that prospects for a continued surge in inward FDI are good.

First the SARB data includes reinvested earnings in its measure of inward FDI flows. The GEAR projections do not. This means that part of the reason why recent inflows of FDI look favourable relative to the GEAR projections is because of the differences in measurement. Second, the immediate surge in FDI following the demise of economic sanctions and South Africa's first democratic elections is not surprising. South Africa's location advantages were hardly exploited during the 1980s and early 1990s, so that the post-apartheid economy had a latent potential to attract FDI. The increase thus probably says little about the impact of any change in economic policy and other new location advantages and more about the return of investors that disinvested due to sanctions.³ Third, the Telkom privatisation programme artificially inflated the data on FDI inflows. Hence, although the economy may have thus far been more than able to attract the quantity of FDI demanded by GEAR, this does not imply that the GEAR projections for 1998-2000 are within reach. This is also the view of the former Governor of the SARB, Chris Stals, who warned in the March (1998:2) *Quarterly Economic Review* that: 'policy makers should not rely too heavily on large quantities of new FDI because foreign direct investors

... still seem somewhat hesitant to commit large amounts of capital, probably due to uncertainty over exchange rate movements, a mismatch between productivity and remuneration levels and concerns over violent crime'.

Having explained that the nature of FDI makes it difficult to identify the factors influencing it, and having pointed out that the official data on FDI suggests little about the extent to which GEAR's FDI projections can be met, we move on to uncover the role and determinants of FDI in South Africa's new industrial development strategy. This then would enable us to consider what the empirical evidence suggests about the understanding of FDI determinants implicit and explicit in this strategy, and the extent to which we should expect South Africa to attract FDI.

The role and determinants of FDI in South Africa's industrial development strategy and the plan to attract FDI

FDI: A provider of savings and foreign exchange earner

As has been explained many times (Nattrass 1996, Adelzadeh 1996, Standing et al 1996) the GEAR growth target of six per cent by the year 2000 is dependent upon a rapid expansion of non-gold exports and a large increase in (particularly private sector) investment. Yet inward FDI is also a crucial facilitator of growth in our development strategy. As is explained in more detail below, inward FDI has a three fold purpose in the new macroeconomic and industrial development strategies: to help fill the savings gap, to ease the immediate foreign exchange constraint, and to assist domestic firms in improving the performance of the current account.

In the GEAR growth strategy, gross domestic saving has to rise from 18 per cent to 22 per cent of GDP while gross domestic investment has to increase from 20 per cent to nearly 26 per cent of GDP by the year 2000 (South African Government 1996:5-6). 'This requires capital inflows equivalent to almost 4 per cent of GDP' (1996:6) and, as revealed in Table I above, the inward FDI needs to rise by more than five times the 1994 level. GEAR views the balance of payments as a constraint on growth and highlights the lack of FDI as the core reason why policy makers have had to resort to high interest rates. Direct rather than portfolio investment is favoured as the primary foreign exchange earner on the capital account because reduced dependence on portfolio investment will help create an environment in which domestic interest rates can be lowered. It will also reduce the uncertainty associated with erratic capital outflows. As suggested

above, FDI is however, not only desired as a provider of savings and for its capacity to have a once off positive effect on the capital account. Government is particularly keen on attracting export-oriented manufacturing FDI (South African Government 1996: Appendix 12, South African Government 1998) because it also hopes that by generating technology spillovers and enhancing competition in domestic markets, investment by MNCs will help build technological capabilities in domestic firms and improve their export performance (South African Government 1996:6 and Appendix 12, Donaldson 1997:455).

The elements in the strategy to attract FDI and what they imply about FDI determinants

There are three elements in the government's strategy to lure MNCs towards a South African investment location. The first is a commitment to a specific form of macroeconomic policy. This is supposed to stimulate FDI by operating on investor sentiment. The second involves promises to subject the economy to further doses of domestic market deregulation, international investment, and trade liberalisation. This is intended to increase FDI by stimulating investor sentiment through lower production costs. The third element comprises a collection of supply side measures aimed at attracting FDI by raising the productivity of factors and lowering the cost of factors and inputs. These measures are linked to the new industrial and technology policies.

Implicit in the GEAR strategy is the assumption that investors see 'sound' as 'austere' macroeconomic policy. The deficit is thus targeted at three per cent of GDP by 2000 (South African Government 1996:7-8) and monetary policy is to maintain an inflation rate of seven per cent (South African Government 1996:10 and Appendix 12). Other hallmarks of the GEAR strategy include deregulation and liberalisation (reducing exchange controls, relaxing direct investors' access to domestic credit, and further tariff reductions), privatisation, enhancing labour market flexibility, integration of the SADC economies, and limiting government investment in the economy to public goods.⁴

The supply side measures to attract FDI are a product of the shift in industrial policy away from subsidies and tariffs that give investors protected markets, towards a greater reliance on market-led support measures (Hirsch 1996:7, South African Government 1996:11). They include tariff reductions, tax holidays and depreciation allowances intended to reduce investors' input costs, and technology and human resource development

incentives designed to raise the value of factors (Hirsch 1997:8-9, Cargill 1997:35-37).⁵ The package of supply side incentives that Investment South Africa (ISA) is marketing and government is hoping will entice MNCs into South Africa, has been influenced by the Spatial Development Initiatives (SDI), Industrial Development Zones (IDZ), and Cluster Studies (CS). The CS aim to identify complementary investments in specific sectors in the hope they will stimulate external economies (DTI 1998:3). The SDI are '...aimed at generating internationally competitive growth and development and at restructuring the apartheid space economy' (cited in Lewis and Bloch 1997:14). The principal mechanism underpinning the SDI is private investment which is to be 'crowded-in' through public sector financial support for infrastructural and anchor projects. The IDZ aim to encourage export oriented manufacturing FDI (and local investment) by giving investors duty free status for imported raw materials, tax incentives, easy access to an airport or port, world class infrastructure and services, the latest information technology, and first class IDZ management (South African Government 1997:1). IDZ, otherwise known as EPZ, are usually a device for bundling together concessions from the host country's prevailing taxes, tariffs and labour market regulations. It is not yet clear how South Africa's 'IDZ' will differ from the typical 'EPZ' used in other developing countries. Government has stressed that exemption from labour market legislation is not being contemplated (Lewis and Bloch 1997:15).

Two particular features of the industrial and FDI strategy need to be highlighted. The first is the limited level of government investment envisaged in the strategy. According to the DTI (1998:5), 'the cost of the cluster is usually shared between industry players although some supply-side measures in the DTI support cluster activities'. The success of the SDI and IDZ is also largely being left up to private investors. While government has been involved in deciding on anchor projects and investing in some infrastructure, the target ratio of government to private investment is only 10:90 for the SDIs (Hirsch 1997:8, Lewis and Bloch 1997:14). This once again highlights the extent to which outside knowledge and capital, to be delivered by MNCs, are being relied upon to build location and competitive advantages in South Africa. The second is the limited allocative role for government currently implied in the strategy. At present, the industrial policy is largely neo-liberal in nature. The supply side interventions are primarily functional and there is no long term vision outlining how government plans to co-ordinate, encourage and steer investment into

particular skills, technologies and industries in order to build new location advantages and enhance South Africa's ability to export increasingly higher value added goods.⁶ According to the Science and Technology White Paper (1996) and the DTI (Hirsch and Hanival 1998:47), once the results of the foresight and cluster studies have become available, the industrial policy will become more explicitly selective. The innovation and human resource development subsidies and tax and trade related investment incentives will start to be allocated in line with the criteria derived from the results of these studies. The move towards more selective support for foreign and domestic private investors is partly due to the realisation that the scarcity of government resources necessarily implies selectivity when allocating funding. It is also due to the realisation that the externalities associated with investment in particular technologies and industries are probably higher than in others. The aim of the foresight and cluster studies is thus to identify these technologies and industries.

To summarise, the 'right' policies are seen as necessary for a surge in inward FDI. These have to date, been largely neo-liberal in nature, favourable investment expectations have been linked to austere macroeconomic policy and a minimalist allocative role for the state. The story about location advantages and how to attract FDI into SA seems to go as follows: as long as government remains committed to austere macroeconomic policies, invests a little (and encourages private agents to invest a lot) in the infrastructure, skills and technologies required for successful clusters and IDZs, and aggressively markets South Africa as an attractive location (making it clear that it will not interfere in MNCs investment decisions), the necessary factors and supply side incentives (particularly trade and tax incentives) will attract MNCs. This initial response of MNCs and domestic firms to the incentive programme will then attract more FDI because it will enhance factor productivity and generate booming industrial districts (primarily within the IDZs).

Policy makers seem to see two core determinants of inward FDI in South Africa, favourable investor sentiment and low unit production costs. Demand variables are seen as unimportant. A faith in the neo-liberal wisdom on FDI determinants (see World Bank 1997) is implicit in the industrial development strategy.

Without even looking at the empirical evidence on the determinants of FDI, the implicit certainty about how foreign direct investors will respond to neo-liberal policies is disconcerting. Surely the subjectivism behind

investment expectations makes them difficult to understand and impossible to predict (see Schackle 1989)? Moreover, there is no consensus over the type of policies required for FDI and industrialisation.⁷ Although neo-liberal ideas are still dominant in economics, they have been coming under attack. The counter-revolution in economics on the role of the state in development has ensured that the revisionist argument is challenging the supremacy of the current conventional wisdom. Now, it seems that speedy development may rest upon an efficient state acting as an entrepreneur, institution builder and investor, and implementing an integrated set of industrial and technology policies based on a vision of current location advantages and how they need to be upgraded.

The deterministic way in which inward FDI enters the GEAR growth model and the focus on cost variables as determinants of FDI implicit in the new industrial strategy, is also odd when considered in conjunction with Appendix 12 of GEAR. This emphasises growth 'as a powerful stimulus of FDI' (reversing the causal link between FDI and growth which an initial reading of GEAR provides) and tells us that we know very little about the range of factors that might persuade investors to set up production facilities in South Africa:

Increasing FDI requires paying attention to the fundamental determinants of international investment decisions and the underlying macroeconomic expectations which may be relevant. These, might include: political and economic stability, including macroeconomic stability and clarity about economic policy; sustained high rates of economic growth; labour market stability and flexibility; investment incentives; the tariff regime; protection of property rights; and various determinants of expected investment returns. (South African Government 1996: Appendix 12)

To conclude, implicit in South Africa's industrial development strategy is the view that favourable investor sentiment (which requires austere macro policy), productive factors and low unit production costs (which are linked to supply side incentives and industrial districts) are the most important determinants of FDI in South Africa. What also emerges from the deterministic stance of GEAR and heavy reliance on FDI for industrial development is the story that South Africa does have the necessary factors, available at the 'right' price, to attract a large quantity of FDI. Do the insights that emerge from the empirical work on FDI determinants lead us to the same conclusion? Before addressing this we need to develop the eclectic paradigm on the firm's choice between licensing, FDI and exports.

This is important because it constitutes the general theoretical framework within which economists are currently developing formal models aimed at shedding more light on this choice. It is also important, however, to have the eclectic paradigm in our minds when we consider what the empirical work on FDI determinants suggests about FDI prospects, policy and research needs in South Africa.

Development and description of the eclectic paradigm used to consider the MNCs investment decision

Classical theory had nothing to say about FDI. Neither did the early neoclassical trade theory. This is because the former made factors internationally immobile and the latter used the paradigm of perfect competition when building models of trade in goods and factors. FDI implies that the investing firm from the home country has a production function advantage over firms in the same industry in the host country. Such an advantage is ruled out by the assumptions underpinning the perfectly competitive framework in which early neoclassical economists studied international trade. Hence, in the perfectly competitive models of early trade theory, FDI by definition, could not exist (Hirsch 1976:258-9). All international capital flows had to be reduced to portfolio flows. Dunning and Rugman (1985:228) offer an elegant account of how early economic theory failed to deal with FDI:

The explanation of international capital movements relied exclusively upon the neoclassical financial theory of portfolio flows... Capital was assumed to be transacted between independent buyers and sellers ... there was no role for the MNC ... and no separate theory of FDI. The work did not even ask ... why is there FDI?

The core ideas of the eclectic paradigm of FDI can be traced back to the industrial organisation theory of the MNC and its investment decision, which began to emerge in the 1960s. Hymer was the first to try to understand the reasons for FDI using industrial organisation theory. Hence he is seen as the innovator of the eclectic theory of FDI. In his PhD thesis, Hymer explained why understanding the rationale behind the MNC and FDI required a paradigm shift, away from perfect competition and the portfolio theory of capital movements, towards the use of industrial organisation theory in a world of imperfect competition. Hymer's primary contribution – aside from focusing attention on the MNC – was to develop the notion of 'ownership advantage(s)' as a necessary condition for FDI. The significance of Hymer's thesis flowed from the simple proposition that

in order to compete with indigenous firms which possess innate strengths such as knowledge of the local environment, foreign entrants must have some compensating advantage. Such advantages enable foreign firms to overcome the disadvantages associated with investing in a foreign country (Buckley and Brooke 1992:55-56). After Hymer's thesis, economic theory began to accept that FDI is primarily about transfers of non-financial and ownership specific intangible assets by MNCs, which need to appropriate and control the use of their internalised advantages (Dunning and Rugman 1985:228). Hymer's ownership advantages included scale economies, access to distribution networks, knowledge and imperfections in input markets (Tece 1985:234, Dunning and Rugman 1985:229).

Imperfect competition and ownership advantages are necessary to explain FDI, but are not sufficient. One needs to explain why a firm will choose to exploit an ownership advantage by FDI rather than exports or licensing. What the eclectic theory has provided us with is a description of the set of sufficient conditions influencing this choice. Because two of Hymer's insights regarding these conditions are reflected in the eclectic theory, we need to say something about his views on this matter. For Hymer, the decision to favour FDI over licensing or exports was influenced more by oligopolists' desires to defend market share and undermine competition, than by cost considerations. He did however, mention in his thesis that tariffs may tilt the balance away from exports towards FDI and that failures in the firm's intermediate markets (particularly for technology) may cause FDI to be favoured over licensing (Buckley and Brooke 1992:56-57, Agarwal 1980:747-8). It is these two suggestions that, aside from the concept of ownership advantages, are found in the eclectic paradigm.

After Hymer's thesis, a lot of empirical work was conducted which aimed to uncover what the most significant ownership advantages behind FDI were (see for example Kindleberger 1969, Aliber 1970, Caves 1971 and Johnson 1970 and 1985, cited in Agarwal 1980). Also, Vernon (1966 and 1979) and Hirsch (1976) developed models focused on analysing the factors influencing the choice between FDI and exports. However, our aim is not to outline all developments in the modern theory of FDI but instead, to draw out only those that were used by Dunning to build the eclectic theory of FDI.

Aside from Hymer's work, Dunning's eclectic paradigm draws on one other major development in the modern theory of FDI. This is the internalisation literature that resulted from the application of Coase and

Williamson's theory of the firm to international markets (see Dunning 1973 and 1981a, Casson 1985, Rugman 1980, and Cave 1996). The internalisation theory revolved around the notion that firms can replace or augment the market, and that exchange within the firm carries benefits which, up until some point, exceed the costs of market transactions. Thus the MNC and FDI came to be regarded as the results of transaction costs and internalisation advantages that make trade and licensing uneconomic relative to FDI. In the internalisation perspective:

FDI occurs in consequence of transaction costs, risks and uncertainties in arm's-length markets, and the potential for increased control, improved deployment of market power, reduced uncertainty, scale and scope economies, and advantageous transfer pricing in internalised systems. Internalisation...is a means of overcoming market imperfections -- generated by national boundaries, informational deficiencies, and the like -- and, via the creation of internal markets, contributes to world-wide efficiency. (Helleiner 1989:1452)

According to the internalisation theorists, Hymer had relied too heavily on structural imperfections to explain FDI and too little on the role of transaction costs (Dunning and Rugman 1985:229). Rugman (1980:376) maintains that the internalisation story offers a general theory of FDI.⁸

While Dunning was active in the development of the internalisation theory of FDI and accepts its usefulness, he saw a need to pay more attention to the role of location factors in the international production decision, classify the determinants behind FDI into three categories, and integrate the theoretical insights that had emerged by the 1970s into a general theory of FDI, licensing and exports. It was for these reasons that he developed the 'eclectic paradigm of FDI' which he presented for the first time in 1976.

The eclectic theory is simple. It says that a firm will engage in FDI when three conditions are satisfied:

- the firm has some ownership advantages⁹ in operating in particular foreign markets that allow it to compete in those markets vis-a-vis other, and in particular indigenous firms;
- the firm believes that these ownership advantages can be best exploited internally rather than transacted directly through spot markets or offered to other firms by means of non-equity arrangements, eg licensing agreements or management contracts;
- there are location attractions of a foreign as compared to a domestic production base in the manufacture of all or part of the product(s) of the firm. This ensures that the enterprise will be encouraged to utilise these

advantages in conjunction with at least some factor inputs outside its home country; otherwise foreign markets would be served by exports (Norman and Dunning 1984:523).¹⁰

Table III: Alternative Routes of Servicing Foreign Markets

Route of servicing market	Advantages		
	ownership	Internalisation	location
FDI	yes	Yes	yes
Exports	yes	Yes	no
Licensing	yes	No	no

Source: Dunning 1981b:33

All that Dunning's eclectic/OLI theory tells us, is that we need to conduct further analysis of these three different sets of determinants to shed light on the factors influencing FDI. More particularly, we need to develop models of the firm's investment decision which explain in more detail the factors that we can expect to influence the choice between licensing, FDI and exports. Alternatively, we need to look at what the empirical work suggests about which location, internalisation and ownership determinants are significant in any country. Recently, a literature has begun to emerge, whose purpose is to use the insights on the determinants of FDI derived from the industrial organisation/business strategy approach outlined above together with the new trade theory, to construct models of the MNCs investment decision. Most of these models focus on the location factors influencing the choice between exports and FDI. Markusen and Venables (1996) and Brainard (1993) are the pioneers of this new literature. Instead of looking at what their models can tell us about FDI determinants, policy, prospects and research needs in South Africa, we have chosen to search the empirical literature for implications relating to these issues. The results of this search are presented in the fourth section below. Because we are concerned with what the South African government can do to attract more FDI, we focus on the results of studies aimed at highlighting the significant location determinants in developing countries in general and in South Africa in particular. Consideration of the implications flowing from the new theoretical models will have to wait until another paper as will a consideration of the evidence on ownership and internalisation determinants of FDI.

Empirical evidence on the location determinants of FDI: implications for government's understanding of FDI determinants, FDI prospects, policy and research in South Africa

...excessive trade liberalisation by developing countries may prompt MNEs to export to them rather than produce locally as liberalisation dilutes the intensity of the main location advantage, i.e. the protection accorded to local industries by host governments ... FDI inflows have been highly concentrated in a handful of countries and have been determined ... by market size, growth rates, prosperity, urbanisation, and quality of infrastructure ... more than by the host country incentives and other policies. (Kumur and Siddharthan 1997:11-12)

Five insights relevant to the questions identified at the beginning of this article emerge from the studies aimed at giving empirical content to the location component in the eclectic paradigm.

The first is that it is not useful to think about 'the' determinants of FDI.¹¹ 'The' Ownership-Location-Internalisation determinants behind FDI vary across industries and countries and according to which MNC is investing (Dunning 1981a and b, 1995 and 1998, Caves 1996). Empirical work has made it clear that while a couple of location determinants are generic (see below), the relative importance of the various location factors is country and industry-specific. This has two implications. First, the policies to attract FDI must be tailored to industry-specific location determinants. Second, the industry specific studies of the factors undermining (facilitating) inward FDI in South Africa are needed to direct FDI policy design.

While the literature does suggest that it is dangerous to aggregate, it classifies FDI into four types – efficiency, market, natural resource and strategic asset seeking. This classification is based on how motives and location determinants of FDI vary across types. Efficiency seeking FDI refers to that aimed at increasing the efficiency of the MNC by integrating assets, production and markets. It is often lumped together with resource seeking FDI and called 'cost' or 'export seeking' FDI. Asset seeking FDI refers to that which is driven by the attempt to acquire resources and capabilities that an investing firm believes will sustain or enhance its core competencies in regional or global markets. These assets may range from technological capabilities and organisational structures to accessing foreign distribution channels and a better appreciation of the needs of consumers in unfamiliar markets.

The empirical work on the determinants of FDI in developing countries suggests that location determinants differ across types (see Reuber 1973, Agarwal 1980, Majumdar 1980, Dunning 1981a and 1998, Moran and contributors 1986, Jeon 1992, United Nations 1993, Meyer and Qu 1995, and Caves 1996). Market seeking FDI, which is predominantly import-substituting and carried out by horizontally integrated MNCs, is influenced primarily by the following factors: size, structure and growth of local and common markets, economies of scale, host government policy towards imports, transport costs, and political and economic stability in the potential host country relative to other similar countries in close proximity. Resource and efficiency seeking FDI, on the other hand, is affected more by the following location factors: availability and cost of natural resources and labour; the productivity and skills of labour; technology capability and infrastructure; the efficiency of government institutions; external economies generated by industrial districts; the value of the exchange rate; proximity to leading export markets; the extent to which trade (including trade in intermediary products) is free between home and host countries, and between host countries in which foreign affiliates of MNCs are located (ie cost of imported inputs) and perhaps, taxes and other incentives. Finally asset seeking FDI move towards specific technology capabilities in particular industries and countries.

What do we know about the type(s) of FDI South Africa has traditionally and more recently attracted? What are the location determinants underpinning it? Unfortunately, until recently, researchers and policy makers have not been interested in monitoring and studying FDI flows in South Africa. This is probably because after the imposition of sanctions in the 1980s, South Africa saw very little inward FDI and relied on licensing for technology transfer. However, researchers and government affiliated institutions have recently begun gathering data on, and conducting research into the factors behind FDI. The most useful source of data is BusinessMap's database on new FDI commitments in South Africa since 1994. Aside from this, there are three other studies offering insight into this question (IDC IS2/96, Mbekeani 1997, Draper 1998).

According to the data of BusinessMap, 72 per cent of the FDI attracted into South Africa between April 1994 and June 1997 was concentrated in five sectors: telecommunications (22.2 per cent); energy and oil (15.6 per cent); motor and components (14.4 per cent); food and beverages (13 per cent); and hotel, leisure and gaming (6.8 per cent). The top ten foreign

companies that invested during this period, their country of origin, and value of their planned investments, are listed in Table IV.

Table IV

Company	Country	Planned investment in Rands
SBC Communication	USA	3,320
Telekom Malaysia	Malaysia	2,200
Coca Cola	USA	2,070
Petronas	Malaysia	1,900
Caltex	USA	1,200
BMW	Germany	1,100
Nestle	Switzerland	600
Goodyear	USA	568
British Petroleum	UK	500
Shell	UK	850

Source: BusinessMap, 1997:9

The data thus suggests that most of the recent FDI has been of the market and resource seeking variety and that foreign investors are not yet interested in using South Africa as a platform for manufactured exports. This is supported by Mbekeani's (1997) and Draper's (1998) research. In an attempt to identify the location determinants behind inward FDI in South Africa, Malaysia and Mexico, Mbekeani applies cointegration and error correction models on a forecasting system using data for the years 1970-1995. According to the regression results, 'the size of the economy, its growth rates, and manufacturing profitability are the most important determinants' (Mbekeani 1997:i). For South Africa, however, manufacturing profitability emerges as a relatively unimportant determinant and in addition to the demand variables, political factors – instability and sanctions – appear particularly significant. Interestingly, the fit of the cointegrating vector suggests that the fiscal deficit has no effect in influencing FDI (Mbekeani 1997:13). Draper's (1998) case study of Japanese FDI in South Africa, suggests that these investors remain largely interested in natural resource extraction, and do not pay much attention to manufacturing industry investment' (Draper 1998:31).

It is not surprising that the sketchy empirical evidence available suggests that South Africa has traditionally attracted market and resource seeking FDI. This seems logical in the light of South Africa's natural resource

blessing and the inward oriented trade strategy pursued by the previous government. The above discussion has four implications for government's understanding of the determinants of FDI and its strategy for generating favourable economic prospects in South Africa.

First, it suggests that natural resources and the domestic market have been, and still are, the most important location advantages in South Africa. Second, it implies that the understanding of FDI determinants implicit in GEAR and the new industrial policy give too little attention to the role of domestic demand as a factor influencing FDI. The importance of demand as a determinant of FDI, which is seen in appendix 12 of GEAR, should have found its way into the design of the GEAR growth model and been acknowledged in the new industrial strategy. Third, it implies that commitment to austere macroeconomic policy and trade and investment liberalisation, offering supply side incentives to investors and encouraging private investors to create booming industrial districts, may not be sufficient to attract inward FDI. South Africa does not currently seem to have the 'right' factors, at the 'right' price, to attract export-oriented manufacturing FDI. Fourth, it implies that there is an urgent need for research to investigate exactly why investors do not find it profitable to invest on a large scale in manufacturing. Is it because of high factor costs? Is it that tariffs and infrastructure costs make input costs too high? Is it more due to the lack of technological capabilities and/or efficient institutions and/or the perception that South Africa is politically unstable and has a militant labour force? If the political variable is important, then why has South Africa attracted market seeking FDI and investment related to privatisation? There is also a need to investigate the extent to which the market seeking FDI has generated exports. Is there a clear divide between market seeking FDI by horizontally integrated MNCs oriented towards selling in the local market and FDI by vertically integrated MNCs aimed at international (including SADC) markets?

What are the policy implications of this need to distinguish between the location determinants of the different types of FDI and the data's suggestion that we have not yet been attracting the type of FDI government is courting? First, the importance of domestic demand as a determinant of FDI implies that there may be a need to think carefully about the impact of further tariff reductions on the capital account. Second, the fact that South Africa is not yet able to attract much asset and efficiency seeking FDI implies that policy makers must consider the opportunity cost in terms of

lost market-seeking FDI when slashing the budget deficit. Third, and perhaps most important, policy-makers need to recognise that improving the prospects for South Africa to attract efficiency and asset seeking FDI in manufacturing will depend on government taking a more active role in deciding what location advantages have to be upgraded, in which industries, and investing in them. This again suggests a need to move away from an austere macroeconomic policy if FDI is to be relied upon for rapid industrial development.

Government's failure at the FDI policy level is linked to distortions in its view of the determinants of FDI. While government's understanding of the determinants of export oriented FDI is correct in its identification of production costs as the core location determinant, its emphasis on the need to use austere fiscal policy and neo-liberal industrial policy to create favourable investment expectations seems misplaced and the deterministic view of the link between these types of policy and export seeking FDI in manufacturing is clearly incorrect. Dornbusch summarises the nature of the flaw inherent in government's vision of FDI determinants and hence, in its FDI strategy (that have emerged so far):

the importance of opportunities, prosperity and complementary investments in creating a setting in which FDI will flourish, implies that we should be far more cautious in advancing the view that the right policies can make any place a place in the sun. (1992:275)

The second insight that emerges from the empirical evidence is that the relative importance of FDI types and location determinants has been changing over the last few decades. A review of the studies trying to identify the most important location advantages in developing countries between 1950 and 1970 leads to the conclusion that demand variables were most important and that tax incentives and production costs were relatively unimportant. In summarising the survey results available by the early 1970s, Dunning (1973:295) concludes that they stress market growth prospects as a determinant and that only a minority of firms appear to have been enticed abroad by lower production costs. In their discriminant analysis of inward manufacturing FDI in 70 developing countries using data for the period 1966-1970, Root and Ahmed (1979) discovered only six essential discriminants. Their results supported the following hypotheses:

- the higher per capita GDP the more attractive the country;
- comparatively high corporate tax levels deter FDI;
- the higher the import/export ratio, the greater inward FDI;

- more urbanised countries attract more FDI;
- the greater the volume of its commerce, transport and communication, the greater inward FDI; and
- frequent government changes deter FDI.

Regarding incentives, they conclude that 'tax incentives fail to differentiate between the countries... Of the six policy variables ... only corporate taxation was a significant discriminator... Attitudes toward joint ventures, local content requirements, and limitations on foreign personnel failed to distinguish these groups' (Root and Ahmed 1979:86). By the 1970s a common theme had begun to emerge from the empirical literature; namely, that the primary attraction of developing countries is a large domestic market typically protected by trade policies and that FDI in developing countries could largely be explained by protection-hopping investment and scale economies. This story stuck, even though a priori it is doubtful that access to a large domestic market is important to investors wanting to produce for export (Lucas 1993:391).

More recent empirical work challenges this story. It suggests that while production costs, relatively open trade policies, and the other location advantages associated with efficiency seeking FDI, were unimportant in the days of traditional import substitution policies, since the 1980s these location determinants and those attracting asset seeking FDI, have taken on more significance (Dunning 1995 and 1998, Lucas 1993, United Nations 1993). In testing his model of FDI using data on inward FDI in East and South East Asia for 1960-1987, Lucas found that while inward FDI had not been elastic with respect to the cost of capital (including taxes), it had been to wages, and that it was more elastic with respect to aggregate demand in export rather than domestic markets. He attributes this to the dominance of export oriented FDI in the region.

Dunning (1995 and 1998) has been vociferous in arguing that since the 1980s, asset seeking FDI has become increasingly important (particularly, but not only from developed countries), and that efficiency seeking FDI has been increasing relative to other types of FDI in developing countries. He maintains that technological capabilities and inter-firm linkages with firms showing special research and development capacity have become more important location factors in developed countries and inter-firm linkages (eg with suppliers), clusters, and IDZs together with the other location advantages associated with efficiency seeking FDI, have become crucial in developing countries. These emerging trends in FDI types and

location advantages, can be explained by the information technology and communications (ITC) revolution, the economic and political policies ushered in by the neo-liberal counterrevolution, and increasing importance of innovation and inter-firm networks as sources of competition as the lean production system has been changing the organisation of global competition (Freeman and Perez 1998, Dunning 1995 and 1998, Lipsey 1997). In an increasingly globalised world in which technology and innovation have become crucial for competitive advantage, ITCs are generic and most new technologies are complex and expensive, firms are increasingly having to focus on core technologies and competencies and tap into other firms' technology and learning experiences. This explains the increase in asset seeking FDI and assists in explaining why investors are looking for clusters and IDZs. The increase in efficiency seeking FDI has been driven by the need for MNCs to rationalise manufacturing operations to compete successfully in a globalised world and the impact of neo-liberalism on policy formulation in developing countries. According to Dunning (1998:53), aside from clusters, efficiency seeking investors are looking for the following in developing countries, cost-effective semi-skilled or skilled labour, good physical infrastructure, minimal distance related costs and government policies which are market friendly. Note the absence of tax incentives. There is still a consensus that while tax incentives are more important for efficiency than market and resource seeking FDI, and that developing countries without strong location advantages need to match average incentives, tax incentives cannot compensate for lack of other location advantages.

What are the implications of this global trend in the relative importance of the various types of FDI and different location determinants for FDI policy for economic prospects in South Africa? We have already established that South Africa's inward FDI pattern has not yet begun to reflect an increasing role for efficiency relative to market seeking FDI. We can say nothing about how much FDI has been pulled in by specific technological capabilities. This requires further research. The important point that we see emerging from this global trend is one we have already made. This is that if South Africa wants to improve her prospects for attracting the two types of FDI that are becoming increasingly important in a globalised world, research will have to be conducted to provide policy makers with a better idea of what location (dis)advantages are behind the current pattern of inward FDI so that they can begin to devise a more selective and active plan

to create the necessary location advantages. As explained earlier, this research will have to be industry specific.

The third insight to emerge from the evidence is that we do not know much about how political factors affect FDI. Koechlin (1992) analysed the location determinants behind outward manufacturing FDI from the United States (1966-1985). He tested three models: two contained only economic criteria (the 'cost' and 'demand' models); the other a 'hybrid economic' model, included social and political variables (measures of the host country's political stability, overall attitude toward FDI, dependence and political ties with the US, and dominant language). Koechlin found that the hybrid model best explained the distribution of outward FDI (Meyer and Qu 1995:7-8). Schneider and Frey (1985) also found that a model with both political and economic information explains the distribution of FDI more adequately. Nankani (1979) found aggregate FDI in manufacturing to show a weak positive relationship to political stability and negative relationships to a hostile investment climate and ideological orientation toward socialism.¹² In contrast, Reuber et al (1973) found political instability to be relatively unimportant in the total distribution of FDI across developing countries. Their evidence also suggested that political instability poses less uncertainty for export-oriented FDI (Agarwal 1980:760, Caves 1996:216). In an analysis of the ASEAN countries, Situmeang (1978) concluded that political instability was statistically unrelated to the flow of FDI in all sectors. The empirical evidence on the impact of political (in)stability and political orientation of the government on inward FDI, rests on vague definitions. All that it suggests is that firstly, although political factors matter and together with infrastructure, productivity, skills and technological capability may be a generic location determinant, little is known about exactly how much political instability deters inward FDI, or how the political orientation of governments affects investor sentiment (Agarwal 1980:760). Secondly, for countries with a strong portfolio of location advantages, the political factor is less significant than for those with a weak set of location advantages. Thus, the only implication for South Africa is that even if political stability is good for FDI prospects, it is insufficient. Policy makers should concentrate more on uncovering the economic factors behind South Africa's apparent lack of ability in attracting export oriented FDI in manufacturing and on improving location advantages in those industries in which they are particularly keen to see FDI, than on changing any perceptions about South Africa's political situation.

The fourth insight to emerge is that the empirical evidence is largely silent on how macroeconomic policy variables affect FDI. An interesting study is Rodrik (1996) which, although not distinguishing direct from portfolio investment, concludes that at present donor behaviour appears to be used by private agents as a perverse signal, IMF agreements actually appear to reduce private capital flows (cited in Collier et al 1997). Does austere fiscal policy undermine inward FDI by stifling market seeking FDI and undermining efficiency seeking FDI through the creation of uncertainty and negative business sentiment? Or, in South Africa, would a less austere macroeconomic policy be even worse because it would frighten away all investors, even the market and resource seeking MNCs that we are currently attracting? This is a crucial question to address, particularly because we have been suggesting that more government investment may be a prerequisite for more export-oriented FDI. Unfortunately, until research is conducted on how macroeconomic policy, growth, inflation, and the government budget deficit affect investor sentiment across the different types of FDI, all we can say is that austere fiscal policy is probably containing market seeking FDI in South Africa, and that because of the importance of infrastructure, technological capability and skills for all types of FDI, a certain amount of government expenditure to upgrade these advantages is crucial for a developing country like South Africa.

Finally, we have already argued that the empirical evidence leads us to question the idea that a minimalist allocative role for the state is sufficient to attract FDI. In the same way as we do not know whether austere macroeconomic policy is necessary for South Africa to become a favoured location for MNCs, we also do not know whether commitment to the current conventional wisdom on industrial policy, is, in the minds of investors, a necessary condition for South Africa to receive more FDI. This is probably not the case. There is no logical reason why, if the quality and price of factors of production and inputs are such that managers of MNCs see more profits in combining their ownership advantages with location advantages in South Africa than in selling these advantages to South African firms, they should be frightened into the latter by an industrial policy in which the state plays a more active yet selective role. Moreover, the recent geography of FDI in the developing world – see Table V below – contradicts the story that neo-liberal industrial policy attracts FDI while a more active industrial policy undermines it because investors are frightened of exploiting location advantages in countries where developmental states

are trying to direct and speed up the factor upgrading process. Some of the outstanding performers in attracting FDI across both periods – namely Singapore, China and Malaysia – are countries which, together with Taiwan and South Korea, have convincingly been used by revisionists to show how selective industrial and technology policies and strategic management of foreign resource inflows by efficient developmental states, can lead to remarkable industrial export diversification, growth and development.¹³

Table V: The largest developing country (DgC) recipients of inward FDI 1975-1980 and 1990-94 (annual averages, \$m)

Country	1975-80	% of all DgC FDI	Country	1990-9	% of all DgC FDI
Brazil	1835.8	24.4	China	16064.8	27.9
Mexico	1023.5	13.5	Singapore	6384.4	11.1
Malaysia	524.3	7.0	Mexico	4332.0	7.5
Singapore	502.0	6.7	Malaysia	4243.8	7.4
Egypt	371.6	5.0	Argentina	3191.8	5.5
Iran	315.5	4.2	Thailand	2197.8	3.8
Indonesia	289.9	3.8	Indonesia	1871.2	3.2
Hong Kong	241.1	3.2	Hong Kong	1596.8	2.8
Top 8	5108.2	67.8	Top 8	39882.6	69.2
All	7539	100.0	All	57623.8	100.0

Source: Dunning 1998:50

Conclusions

This article began by describing government's new industrial development strategy, and uncovering the explicit and implicit FDI determinants within it. It was argued that the government is relying on market deregulation, austere macroeconomic policy, and a variety of supply side support measures to improve investor confidence and reduce unit costs of inputs. This is expected to encourage a large amount of specifically export-oriented FDI in the manufacturing sector. It was also argued that while government is correct in seeing production costs as the core determinant of efficiency seeking FDI, it failed to recognise different determinants for different types of inward FDI, it downplayed the role of domestic demand as a location determinant of inward FDI in South Africa, and it incorrectly linked investor confidence to austere macroeconomic and neo-liberal industrial policies.

A review of the scanty evidence available on recent FDI into South Africa suggested that despite the implementation of the new FDI strategy,

South Africa has not yet acquired the location advantages needed to attract a lot of asset and efficiency seeking investment into the manufacturing sector. This implies that government is relying on location advantages that do not exist in the minds of foreign investors to facilitate industrial development. Either South Africa does not have the right factors, available at the right price in manufacturing, or political instability and crime are blocking the flow of this type of FDI. Since the rate of inflow of market seeking FDI and investment attendant on privatisation signal that the latter is not the case, it follows that the austere macroeconomic policy/liberalisation route will probably prove insufficient for attracting FDI. Moreover, the implementation of these sorts of measures in an economy struggling to generate growth threatens to undermine inflows of market seeking FDI, while financial and ideological/institutional pressures on the new industrial strategy contain the factor upgrading process necessary to attract efficiency and asset seeking FDI. Finally, it was argued that economic logic and past experience question the story that austere fiscal policy and commitment to a minimalist state are necessary for South Africa to attract FDI. The insights from the empirical evidence on the determinants of FDI in developing countries cast a great deal of doubt over the efficacy of GEAR and the new industrial strategies.

Four important implications emerge for FDI policy makers:

- the need for microeconomic research to uncover why foreign direct investors do not find it profitable to use the South African manufacturing sector as an export platform and measure the level of exports attendant on recent inward FDI;
- the need for a less austere macroeconomic strategy and more active industrial strategy if FDI is to play its role in facilitating rapid industrial development in South Africa;
- the need for research on whether a more active role for the state in attracting FDI and promoting industrial development will be compatible with the multi-lateral investment rules on the agenda for the next round of WTO negotiations;
- South Africa's new industrial development strategy runs the risk of being undermined by its own determinism. And, unfortunately, any industrial development strategy built on the idea that FDI will flow in – even one that allows the state to play a more active role in asset formation – could be setting itself up for disappointment. This is because of our inability to understand the mind of the investor.

Notes

1. 'The term "technology" refers to both a collection of physical processes that transforms inputs into outputs and knowledge and skills that structure the activities involved in carrying out these transformations. That is, technology is the practical application of knowledge and skills to the establishment, operation, improvement, and expansion of facilities for such transformation and to the designing and improvements of outputs therefrom' (Kim 1997:4).
2. The DTI has also presented estimates of inward FDI for the years 1994-1996. These can be found in the South African Government's (1998) *Trade Policy Review*. According to these estimates, the amount of inward FDI that has flowed in since 1994 is larger than the amount recorded by the SARB: 'FDI into South Africa amounted to R4 900 million in 1994, 5 500 million in 1995 and R8 200 million in 1996' (1998:12). We chose to use the SARB data rather than these estimates because the report does not explain how the figures were calculated or FDI was defined. Whilst this data does suggest that the figures in the text may slightly underestimate the amount of inward FDI that South Africa has managed to attract since 1994, it does not call for any changes to the conclusions that we draw from the consideration of GEAR's projections for inward FDI in the light of the data on 'actual' FDI inflows.
3. BusinessMap data on FDI into SA post April 1994, supports this assertion. American MNCs disinvested most in the 1980s. The USA emerges as the largest direct investor in SA since 1994. A large proportion of the new investment by US firms is reinvestment (*BusinessMap* 1997:7).
4. Even here, 'private sector involvement is to be as extensive as possible, due to the commitment to reducing government dissaving and the realisation that the capacity of the civil service is extremely limited' (Cargill 1997:36).
5. The new set of supply side measures is broad in scope. A list which details the nature of the various supply side industrial support measures can be obtained from either the DTI or ISA. The WTO's *Trade Policy Review of South Africa* presents this list of measures. The Science and Technology White Paper (1996) offers the most comprehensive description of the measures being put in place to build human resources and new technological capabilities.
6. For the distinction between functional and selective intervention, definition of neo-liberal industrial policy and a critique of this strategy, see Lall (various), Amsden (1994) and Chang and Rowthorn (1995).
7. '...There is no wisdom on economic development, and there are no wise men...Economists do not all "know" the same things. What is "known" to be true by most (the orthodoxy of the moment) has moved a lot in one century: from anti-protectionist, sound money tenets before the 1930s, to enthusiasm for planning and import substitution, and back again, to support for foreign investment and the free market' (Krugman 1995:717,732).

8. 'The process of internalization explains most (and probably all) of the reasons for FDI. Previous writers on the motives for FDI have tended to identify one or more of the imperfections in...markets, or have noticed a response by the MNE to government induced imperfections such as tariffs...All of these imperfections serve to stimulate one sort of MNE or another. The MNE is in the business of internalizing externalities. It is now time to recognize that internalization is a general theory of FDI' (Rugman 1980:376).
9. As Markusen et al (1995:395) point out, the nature of this ownership advantage can be classified broadly as either emanating from superior technology or lower costs due to scale economies.
10. As Markusen et al (1995:396) suggest, tariffs, quotas, transport costs, and cheap factor prices are the most obvious sources of location advantages. But, more intangible factors, such as customer access, can also be important.
11. Thus, Helleiner argues that 'there is a need to deal separately with the determinants of FDI oriented to export, local and common markets and that if the determinants of FDI are influenced by industry and country specific factors, it may be productive to consider transnational activity as taking place in a variety of different markets for it' (1989:1447). And, Dunning (1981b:33) explains that although the eclectic model is a general theory in so far as it provides an analytical framework for explaining all forms of such production this is not to assert that all types are to be explained by the same OLI characteristics
12. If the latter is true, then how does one explain the recent surge of FDI into China? See Table IV and the argument below on how non-liberal industrial policy and authoritarian or socialist regimes do not seem to scare away direct investors.
13. For evidence on how Singapore's government used industrial policy to build new competitive advantages and managed to attract large quantities of FDI to use in this process, see Lall (various) and Lim (1995). The most recent edition of Dornbusch and Fischer's (1997:71-72) *Macroeconomics* notes how Alwyn Young has drawn attention to the role of Singapore's government in controlling the allocation of resources and pushing the rate of growth in the economy together with its ability to steer large quantities of FDI into high tech industries. For an overview of how developmental states used industrial policy in East Asia to raise domestic investment and build new competitive advantages, see Amsden (1994) and Lall (various). For Malaysia, see Zainuddin (1993). On China, see White (1996).

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