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Foreign Direct Investment in Ireland: Policy Implications for Emerging Economies

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#### Abstract

The increasingly important role of multinational enterprises (MNEs) in the global economy is linked to questions of how the foreign direct investment (FDI) they control impacts on overall economic activity in the recipient countries. Of specific interest is the policy context in which such FDI flows into the developing country and how a government can influence the impact of those flows. This paper reviews some of the literature in two key contextual areas, namely, when the host country policy regime promotes FDI selectively, and secondly, where it promotes the creation of industrial clusters. It explores the insights of this literature for the development of the strong MNE sector in the Irish economy and draws lessons from the Irish experience for emerging economies.

# FOREIGN DIRECT INVESTMENT IN IRELAND: POLICY IMPLICATIONS FOR EMERGING ECONOMIES

#### 1. Introduction

The increasingly important role of multinational enterprises (MNEs) in the global economy is linked to questions of how the foreign direct investment (FDI) they control impacts on overall economic activity in the recipient countries. Of specific interest is the policy context in which such FDI flows into the developing country and how a government can influence the impact of those flows. This paper reviews some of the literature in two key contextual areas, namely, when the host country policy regime promotes FDI selectively, and secondly, where it promotes the creation of industrial clusters. It explores the insights of this literature for the development of the strong MNE sector in the Irish economy and draws lessons from the Irish experience for emerging economies.

Ireland is unusual in the extent to which it has consistently promoted export-platform inward investment into the manufacturing sector for over four decades. Starting in the 1970s, it promoted MNEs selectively, and from the mid-1980s, it has sought to develop strong industrial clusters based on MNE investments in key high-tech sectors. MNEs now account for almost 50 percent of manufacturing employment and are at the centre of the spatial and sectoral restructuring of the Irish manufacturing sector over the past twenty years.

It is appropriate that the analysis of an open economy should be included in a special issue honouring Jagdish Bhagwati's 70<sup>th</sup> birthday. Bhagwati's consistent championing of openness (Bhagwati 1988) includes policy prescriptions to free closed economies (Bhagwati 1993) and this extends to the liberalisation of inward and outward foreign investment. (Bhagwati 2004). Openness to flows of foreign investment is thus a significant part of Bhagwati's extensive and profound <u>oeuvre</u>.

Section 2 examines the literature, which underpins the selective promotion of MNEs, i.e., which places MNE behaviour at the centre of theorising about FDI. It then examines how such policy activity has promoted MNEs on a selective basis in Ireland. Section 3 provides an overview of the literature on clustering and examines how Ireland has attempted to establish industrial clusters in manufacturing. Section 4 draws out some specific policy implications for emerging economies from the Irish policy experience.

#### 2. Selective promotion of MNE investment

There is a long tradition of analysis of international capital flows in trade theory. Since much of the theory until the 1970s was based on the Heckscher Ohlin (H-O) model, which implied free mobility of capital across sectors, analysis of capital flows into an economy ultimately amounted to analysing the implications of augmenting/reducing the capital stock in an economy. In a seminal article published in 1966, Vernon used the H-O model as a base to develop his product cycle model which set out to explain the foreign activities of MNEs. His starting point was that, in addition to immobile natural endowments and human resources, the propensity of countries to engage in trade also depended on their capability to upgrade these assets or to create new ones, notably technological capacity (Dunning, 1992). The inflow of capital to less-developed or semi-developed countries makes more investment

capital available and thus speeds up development, providing as a by- product badly needed foreign exchange. Moreover, by providing a bundle of well tried and tested managerial skills and technology, FDI enables the host country to exploit its comparative advantages more efficiently. The most important effect on FDI recipient countries, according to this perspective, is that FDI is trade enhancing, in that FDI will enhance production and export capacity. Moreover, the product cycle theory predicts that MNEs assist recipient countries in getting access to international markets, as MNEs help these countries to overcome the significant barrier to entry faced by mature products.

The "Internalisation School" provided a strong link between MNEs and development. In essence, it argued that, since markets for intermediate products such as technology, capital and supporting services do not function well in many developing countries, FDI may assist developing countries through: the provision of capital, the inflow of technology, the inflow of managerial know-how, and their impact on the creation of efficient markets (Buckley, 1985). All these effects derive essentially from the fact that MNEs provide resources that would not otherwise be available in developing host countries (Blomström, 1991; Blomström and Kokko, 1996a). Since MNEs often have privileged access to capital from the international banking sector (Lipsey, 1999), they can give developing countries access to additional capital that would not otherwise have been available. By providing developing countries with an inflow of investment capital and foreign exchange, MNEs may help adjusting some of the macro economic imbalances that frequently are major impediments to growth in developing countries.

One of the most frequently cited intangible competencies transferred through FDI is technology (Blomström, Zejan et al., 1992; Blomström and Kokko, 1996b). Technology transfer can trigger and speed up economic development, for instance, by facilitating the production of goods with higher value added content, by increasing exports and improving efficiency. MNEs possess the bulk of all patents worldwide, most of the world's R&D takes place within MNEs, and MNEs possess many of the technologies that are pivotal to economic and industrial development. Often these technological competencies cannot be obtained in the market place (e.g. via licensing) and FDI may therefore be the fastest, most efficient, and sometimes only way for developing countries to get access to these competencies. MNEs can also play a central role in the transfer of know-how, knowledge, and experience to the local workforce through its employment of indigenous professionals and managers (Blomström, Kokko et al., 1994).

MNEs as organisations are characterised by a high degree of managerial efficiency arising from training, higher standards of recruitment, effective communication with the parent company and other subsidiaries, and a more global outlook. By virtue of these characteristics, they are able to think strategically on a global scale and to organise complex integrated production networks. The integration into this transnational production network can give developing countries advantages (Blomström, Kokko et al., 2000). MNEs bring with them improvements in storage, logistics and marketing arrangements leading to cheaper delivery, better quality of products, and better information about products to consumers. More importantly, developing countries will be able to use the worldwide marketing outlets of MNEs, selling products where huge marketing investments would otherwise have been required. Hence, the presence of MNEs may assist developing countries in penetrating foreign markets. In the mid 1950s, Ireland began a process of moving from a longstanding autarchic policy, consisting of high rates of tariff protection and prohibition of foreign direct investment (FDI) towards a policy of free trade and direct encouragement of investments by multinational enterprises.1 MNEs were incentivised to locate in Ireland through the provision of generous financial supports primarily for capital investment, based on the scale of their incremental export activities, and by giving a tax holiday (up to 15-20 years) on the incremental profits generated by export sales.2 While the tax holiday was automatically earned once the enterprise exported, the financial supports were discretionary up to certain maxima. However, supports operated effectively as automatic capital grants until the end of the 1960s.

#### Development of Policy in Ireland

Ireland benefited from the increased scale of global FDI in the 1960s, by having established a more fiscally- and financially-welcoming environment than other countries in Europe. While intra-EU FDI has been important,3 Ireland's entry into the European Community in the 1970s enhanced its attractiveness to extra-EU investors, and particularly US investors seeking production bases within the Common External Tariff area. This attractiveness was consolidated in the early 1990s with the creation of the Single Market.4 In effect, Ireland benefited from Vernon's (1966) product cycle in becoming a low cost manufacturing base within Europe for maturing US enterprises, which were already exporting new products to the growing European market. In such an environment Ireland has been an attractive base, with its original tax-holiday incentives designed to make it an export platform.

In the early 1970s policy towards FDI became increasingly more selective, encouraging a pattern of investment into the production of modern high technology (high tech) goods, leaving Irish entrepreneurs to operate in the traditional sectors.5 This selectivity was achieved by proactively seeking out investors in high-tech sectors, namely electronics and pharmaceuticals, and by providing higher rates of financial assistance to enterprises in the "promoted sectors".6 Despite having no tradition in these high-tech sectors, policy makers believed that, with its relatively well-educated population, Ireland could be a competitive production base for MNEs as their low per-unit-value transportation costs made them readily suited to exporting from an island economy.7 Furthermore, MNEs in these sectors had no domestic competitors and hence there was no opposition to their increasing employment share in these sectors.

<sup>1</sup> It began by announcing its intentions to move progressively towards free trade, starting with the Anglo Irish Free Trade Agreement in 1965, and culminating in the process of joining the European Community in 1973

<sup>2</sup> The standard tax on income from export sales was around 50 percent prior to the introduction of the tax holiday, and this rate continued to apply to profits on all domestic sales and pre-incentive export sales levels.

<sup>3</sup> German FDI was especially important in the 1960s and 1970s as shortages of labour in Germany in the late 1960s were leading to rising unit wage costs.

<sup>4</sup> The reduction in non-tariff barriers was particularly important in sector like pharmaceuticals as it allowed consolidation of production in the EU, which has hitherto been prevented by country-specific regulations.

<sup>5</sup> For example, see Bradley (2004).

<sup>6</sup> This amounted to recognition that the food-processing sector, which used the outputs of the large agricultural sector, would not be a key growth sector in the economy.

<sup>7</sup> These products are often referred to as "weightless products".

As financial aids became increasingly selective, all individual investments were subjected to systematic project appraisal. This reflected a Hymer-type enterprise approach to FDI on the part of policy makers,8 and resulted in increased flexibility in the scale and type of assistance given. Because of its enterprise approach, Irish policy, uniquely in Europe and perhaps globally, recognised the diversity of MNEs from the outset of its openness strategy. Irish policy makers adopted a sophisticated system of selectivity for influencing the pattern of MNE investment, comprising fourstages: (i) finding niche high value/volume product markets with European growth potential; (ii) identifying enterprises in these markets, which were already exporting large volumes into Europe likely, in terms of the product cycle, to consider a European production base; (iii) persuading these enterprises to consider Ireland as an investment base; and (iv) agreeing an incentives package which would both secure the investment and ensure maximum benefit to Ireland as a host country. This projectbased rather than sectoral approach meant that Irish policy makers recognised the heterogeneity of MNEs and their different potentialities. It also laid the ground for the development of a clustering policy in the 1980s, (discussed Section 3).

Irish policy has continued to evolve since the 1980s, in response both to the evolving MNEs and to limitations set by the EU on the use of incentives to attract industry. These limitations led to the replacement of the original tax holiday and grants policy by a low corporate tax rate on all manufacturing profits, and ultimately all profits, and by providing grants which were trade-neutral. More recently, grants in most areas of the country are now limited to training and R&D expenditure. Furthermore, as suggested by Dunning and Narula (1996), the presence of significant MNEs in Ireland had a positive influence on its economic policies in terms of their being rational and pro-competitive.9 For example, to avoid factor bias, grant maxima were established in terms of both capital and labour, with repayments required if promised targets were not met.10 Cost-benefit analysis, albeit in a crude form initially, was used systematically to help avoid the worst policy disasters, in terms of both corruption and bad projects.11 Project appraisal methods have evolved in the last decade to reflect the dramatic change in Ireland from being a high-unemployment to a full-employment economy.

#### A parallel with China

China is an attractive location for FDI both because of its rapidly growing domestic market and as a low cost export platform (Buckley and Meng 2005). Here we briefly review the export platform issues. Like the early experience of Ireland, the coastal clustering of export orientated FDI in China exacerbates an already existing regional imbalance. (Wei 2004). This is placing severe strains on infrastructure and human capital requirements – even in labour-rich China, there are many skills already in short supply. There is considerable evidence of positive spillovers to the local economy although these are greater from lower-tech FDI from "overseas Chinese"

<sup>8</sup> Hymer (1960) had noted that "FDI involved the transfer of a package of resources, such as technology, managements, skills, entrepreneurship and not just capital".

<sup>&</sup>lt;sup>9</sup> An example of this is the telecoms markets in the 1990s. The Irish government sought and got a twoyear derogation from deregulating the market, but it deregulated earlier because of pressure from MNEs in the electronics and software sectors.

<sup>&</sup>lt;sup>10</sup> This took some time to happen but has been fully in operation in the past ten years.

<sup>&</sup>lt;sup>11</sup> For example, Ireland turned the DeLorean car project which the UK government financed with huge losses in Belfast.

than from "Western" MNEs (Buckley, Clegg and Wang 2002). There is also a convincing argument that FDI is a response to capital market imperfections in the host country (Buckley and Casson 1976). These imperfections inhibit local private companies from accessing capital and thus choking off domestic entrepreneurs from export markets (Huang 2003). A further effect is to encourage FDI rather than licensing into China and to bias technology transfer into an MNE internalised route within the, rather than by the, market through licensing to local Chinese (exporting) firms (Buckley 2004). Capital market liberalisation and extension in China is likely (paradoxically) to both raise domestic firms' exports and to reduce FDI (in favour in inward licensing).

#### **3.** Development of clusters

There have been numerous context-specific theories of the siting of particular value added activities of enterprises and of geographical distribution of FDI. They include the location component of Vernon's product cycle theory (1966), Knickerbocker's "follow my leader" theory (1973), which was one of the earliest approaches to analysing the clustering or bunching effect of FDI, and Rugman's risk diversification theory, which suggested that MNEs normally prefer a geographic spread of FDI to having all their eggs in the same basket (1975, 1979). However, researchers extended, rather than replaced, standard theories of location to encompass cross-border valueadded activities. In particular, they embraced new location advantages, such as exchange rates, political risks, inter-country cultural differences, and placed a different value on a variety of variables common to both domestic and international location choices, such as wage levels, demand patterns, policy related variables, supply capacity and infrastructure. These add-on or re-valued variables could be easily accommodated within the existing analytical theories (Dicken, 1998). This marks off older explanations of the location specific advantage of nations from those of the ownership specific advantages of enterprises. (For a complete review see Buckley and De Beule 2005).

The growth of the knowledge-based global economy and asset-augmenting FDI has led to the emergence of a more dynamic approach to both the logistics of the siting of corporate activities, and to the competitive advantages of nations and regions (Dunning, 1998). Enterprises need to take account not only of the presence and cost of traditional factor endowments, of transport costs, of current demand levels and patterns, and of Marshallian types of agglomerative economies; but also of distance related transaction costs (Storper and Scott, 1987), of dynamic externalities, knowledge accumulation, and interactive learning (Enright, 1990, 1998, 2000; Florida, 1995; Malmberg, Sölvell et al., 1996), of spatially related innovation and technological standards (Antonelli, 1998; Sölvell and Zander, 1998; Frost, 1998), of the increasing dispersion of created assets, and of the need to conclude cross border augmenting and asset exploiting alliances (Dunning, 1995, 1998). As such, since 1990, location has been taken up in explaining the stickiness of certain locations in an increasingly slippery world (Markusen, 1994). Theories suggest that enterprises may be drawn to the same locations because proximity generates positive externalities or agglomeration effects. Economists have proposed agglomeration effects in the form of both static (pecuniary) and dynamic (technological) externalities to explain industry localisation (Baptista, 1998). Theoretical attempts to formalise agglomeration effects have focused on three mechanisms that would yield such positive feedback loops: inter-enterprise technological spillovers, specialised labour, and intermediate inputs (Marshall, 1890).

A distinction should be made between two broad types of agglomeration economies. One relates to general economies of regional and urban concentration that apply to all enterprises and industries in a particular location. Such external economies lead to the emergence of manufacturing belts or metropolitan regions (Porter and Sölvell, 1997). These urbanisation economies do not consist of increased efficiency of the enterprises themselves but of reduced transport and search costs for the customers and, therefore, lead to more customers than the individual enterprise would have been able to attract (Pedersen, 1997). A second type of agglomeration refers to localisation economies. As advances in transportation and information obliterate distance, cities and regions face a tougher time attracting and anchoring income-generating activities (Markusen, 1996). Economists, geographers, and economic development planners have sought for more than a decade for alternative models of development in which activities are sustained or transformed in ways that maintain relatively high wage levels, social contributions, and quality of life. They have searched for "sticky places" in "slippery space" (Markusen, 1996), examining the structure and operation of these geographic concentrations of interconnected enterprises and institutions.

One extensively researched formulation is that of the flexibly specialised industrial district. In the original formulation of the industrial district Marshall (1890) envisioned a region where the business structure is comprised of small, locally owned enterprises that make investment and production decisions locally. Scale economies are minimal, forestalling the rise of large enterprises. Within the district, substantial trade is transacted between many small enterprises buying and selling from each other for eventual export from the region. What makes the industrial district so special and vibrant, in Marshall's account, is the existence of a pooled market for workers with specialised skills, the provision of specialised inputs from suppliers and service providers, the relatively rapid flow of business-related knowledge between enterprises, which result in what are now called technological spillovers.

All of these factors are covered by the notion of agglomeration, which suggests that the stickiness of a place resides not in the individual location calculus of enterprises or workers, but in the external economies available to each enterprise from its spatial conjunction with other enterprises and suppliers of services. In Marshall's formulation, it was not necessary that any of these actors should be consciously cooperating with each other, in order for the district to exist and operate as such. But in a more recent adaptation (Piore and Sabel, 1984), based on the phenomenon of successful expansion of mature industries in the so-called "Third Italy" (Goodman and Bamford, 1989), and extended to other venues in Europe and the United States (Scott, 1988; Storper, 1989; Paniccia, 1998), researchers have argued that concerted to co-operate among district members to improve district-wide efforts competitiveness can increase the stickiness of the district. While agglomeration economies signal external economies passively obtained by enterprises located close to each other, collective efficiency (Schmitz, 1989; Pedersen, 1994) indicates advantages, which enterprises may achieve through active collaboration. Localised information flows, technological spillovers, and specialised pools of knowledge and skills will ensure the revitalisation of these seedbeds of innovation in these clusters. Clusters are considered as networks of production of strongly interdependent enterprises, knowledge producing agents and customers, linked to each other in a value adding production chain (OECD, 1999).

However, many of the faster-growing regions of the world are not created by small, locally owned, vertically or horizontally specialised enterprises. There exist regions where a number of key enterprises or facilities act as anchors or hubs to the regional economy. These clusters are dominated by one or several large, locally headquartered enterprises, in one or more sectors, surrounded by smaller and less powerful suppliers. These hub-and-spoke districts thrive on market power and strategy rather than on networking (Gray, Golob et al., 1996; Markusen, 1996). Yet a third variant of rapidly growing industrial districts may be termed satellite platforms (Markusen, 1996), a congregation of branch plant facilities of externally based enterprises. Tenants of satellite platforms may range from routine assembly functions to relatively sophisticated research. They stand alone, and are detachable spatially from either up-or downstream operations within the same enterprise or from agglomerations of competitors and external suppliers or customers (Glasmeier, 1988).

Another way of discerning different clusters is based on the origin of the industry in a specific location: indigenous or transplanted. Some industries grew up as indigenous industries and were afterwards exposed to a globalising economy of increasing levels of international trade and investment. In the beginning, indigenous (hub-and-spoke) clusters are characterised by tightly linked local enterprises and relatively small numbers of foreign owned subsidiaries. Over time, the number of foreign subsidiaries in indigenous industries increases because of the globalising economy. More specifically, successful industries attract multinationals that set up or acquire local enterprises to have access to the available strategic assets. Other industries originate as a direct result of the increasing levels of international trade and investment between countries and regions. These transplanted (satellite platform) industries are originally characterised by a limited number of local enterprises and by (relatively many) foreign branch plants that are rather weakly embedded in the local economy. Transplanted industries are likely to continue to rely on their parent company or network members for key supplies or core technologies for some time, and will only slowly develop strong "local" ties, set up R&D units, and grow to become clusters. Alternatively, the virtuous circle of economic development by embedding foreign plants in the local economy does not materialise and the agglomeration of enterprises remains a satellite district. One would expect to find the relatively high value-adding subsidiaries in industry cluster locations, because they are attractive locations for foreign owned subsidiaries, both in terms of the opportunities for learning and knowledge transfer and in terms of the specialised inputs and labour they provide. They can be seen as "tapping into" the sources of knowledge and ideas, and scientific and technical talent which are embedded in cutting-edge regional innovation complexes (Florida, 1995). There will obviously also be foreign subsidiaries in noncluster locations, but they are more likely to be of the market-seeking type or resource seeking type (cheap factors of production), rather than the higher value-adding subsidiaries in industry clusters.

These contemporary economic events suggest that the nature and composition of a country or region's comparative advantage, which has always been based on the possession of a unique set of immobile natural resources and capabilities, is now more geared to a distinctive and non-imitable set of location bound created assets and the presence of strong indigenous enterprises with which foreign MNEs can form alliances to exploit or complement their own core competencies (Dunning, 1996). Research (Porter, 1996; Rosecrance, 1996; UNCTAD, 1997) is suggesting that nation states are not only becoming increasingly dependent on the cross-border activities of their own and foreign based corporations for their economic prosperity, but that the

competitiveness of these corporations is increasingly becoming fashioned by the institutional framework in which they operate. In particular, both nation states and sub-national authorities are recognising the need to provide the appropriate and, where necessary, customised factor inputs, both for their own enterprises to generate the ownership specific assets consistent with the demands of world markets, and for foreign subsidiaries to engage in the kind of value adding activities which advances both the technological efficiency and dynamic comparative advantage of the immobile assets within their jurisdiction (Porter, 1994; Peck, 1996; Dunning, 1998).

While there was always a spatial dimension to Irish industrial policy, with financial inducements to MNEs to locate in areas of high unemployment and depopulation, the attempt to build sectoral and spatial clusters only began seriously in the 1980s, and was centred in the two key high-tech sectors, namely, electronics and chemicals/pharmaceuticals. In terms of the electronics sector, the development of clusters was a natural extension of the policy of sectoral selectivity described above; it built on Ireland's reputation for being pro-MNE and on its existing network of relationships with MNEs. The strategy was to build the MNE electronics sector both vertically and horizontally, so that it would generate agglomeration economies through shared input (especially skilled labour) markets and product linkages, which were increasingly based on tailored inputs.12 Since the domestic market was not important, Ireland was effectively building an electronics cluster to service the European market (O'Donnellan, 1994). 13

The approach taken in the electronics sector policy was to attract some key investments into Ireland and then leveraging further MNEs to locate on the basis that these key enterprises had chosen Ireland as a base in Europe. In the 1980s four key segments were identified: microprocessors, software, computer products and printers.14 Ireland succeeded in attracting the two key global enterprises in microprocessors and software, namely Intel and Microsoft, both of which were dominant in their respective market segments. The computer products segment was much less concentrated internationally and Ireland set out to attract a range of companies in that segment of the market, the most significant of which were Dell, Compaq and Gateway.15 With the location of Intel and Microsoft, and subsequently Hewlett Packard in the printing sector, Ireland effectively had an electronics hub and the spokes were quickly populated by dozens of smaller electronics and software enterprises, all of which wanted to interconnect with these key industrial leaders.16

As Krugman (1997) pointed out, the Irish economy is a significant beneficiary from the process of clustering, and also of some good luck. But part of this luck was "made", in the consistency and enterprise-centred approach going back over 25 years previously, and the management of the process of rapid cluster building by policy makers. For example, policy has been highly active in addressing skill needs (including specialised skills) and in managing a good HR environment for incoming

<sup>&</sup>lt;sup>12</sup> The development of individually specified personal computers in the late 1990s strengthened these clustering effects.

<sup>&</sup>lt;sup>13</sup> Undoubtedly, Ireland came to benefit from Knickerbocker's (1973) "follow my leader" theory as US investment piled into Europe in advance of the Single European Market.

<sup>&</sup>lt;sup>14</sup> As networking became increasingly important in the late 1990s, Ireland attracted two of the key players in that sector, namely, Cisco and Lucent.

<sup>15</sup> It was recognised that some of these would not survive as this part of the industry consolidated and a large Gateway plant closed in the early part of this decade.

<sup>&</sup>lt;sup>16</sup> Had Ireland not won these projects, it would be an entirely different economy today!

investors.17 Irish education and training policy was also coordinated to ensure that a supply of skilled labour suited to the sector, so that labour costs remained competitive. Several studies have shown the extent of linkages between different enterprises in this sector, which are clustered primarily in two locations: the greater Dublin area and Limerick.18 The success of winning Microsoft, Intel and Dell was evident in that the average share of US FDI in Electronics going to Ireland rose to 27 percent between 1994 and 2001,19 compared with a rate of less than 12 percent for Irish manufacturing as a whole.20

There are two other sectors in which industrial clusters have been created. The first is the chemicals and pharmaceuticals sector, which now has plants from most of the world's largest enterprises in this sector. Because of their environmental and resource requirements, enterprises in this sector are much less footloose than those in the electronics sector, and hence the growth of a spatial cluster grew naturally out of the original location of a small number of key plants in the Cork area in the 1970s. In contrast to the electronics sector, there is little evidence of production linkages between the enterprises, and the cluster's development is centred on the natural and built environment, which makes production cost efficient in that area. The other sector is medical devices, which is spatially centred in the west of Ireland (where significant grants can still be awarded under EU law). This differs from electronics and chemicals/pharmaceuticals in that it is a less concentrated sector and the average enterprise size is much smaller. The skilled labour requirements of the sector match Irish supply, and IDA Ireland (Ireland's FDI promotion agency) has pursued the same leverage approach as it pursued in electronics.

Gleeson, Ruane and Sutherland (2005), analysing the sectoral specialisation and spatial concentration of MNEs in Ireland, argue that since spatial choice is driven entirely by production considerations, MNEs are likely to respond positively to location incentives. Their entropy indices for enterprises and employment for 1985-2001 indicate that both sectoral specialisation and spatial concentration have increased, particularly in the high tech sectors, which is consistent with MNEs beginning to cluster. They find high correlation coefficients for spatial concentration and low and falling coefficients for sectoral specialisation between MNEs and LEs at county level, suggesting little evidence of MNE-LE clustering to-date. This may reflect the limited incentives for export-driven MNEs to interact with LEs in manufacturing, especially as sub-supply markets increasingly globalise.21 Thus MNE clusters do not necessarily generate a local LE cluster. These results are broadly consistent with those of Barrios, Görg and Strobl (2002), but less so with Barrios,

<sup>&</sup>lt;sup>17</sup> The state agency involved in MNE promotion, IDA Ireland, helps new entrants to recruit a good mixture of new and experience staff, so that no existing enterprise is at risk of losing all its key players to a new arrival.

<sup>&</sup>lt;sup>18</sup> See for example, Görg and Ruane (2000, 2001)

<sup>19</sup> Source: US Department of Commerce, Bureau of Economic Analysis "U.S. Direct Investment Abroad: Balance of Payments and Direct Investment Position Data". Data available from <a href="http://www.bea.doc.gov/bea/di/dilusdbal.htm">http://www.bea.doc.gov/bea/di/dilusdbal.htm</a>

<sup>&</sup>lt;sup>20</sup> A recent paper, Görg (2000) analyses direct foreign investment flows between Ireland and the US, and finds that outward investment from Ireland is primarily in the non-traded sector in contrast with inward investment which is in the traded sectors.

<sup>&</sup>lt;sup>21</sup> The globalisation of sub-supply markets has significant implications for traditional Hirschman-type linkages.

Bertinelli and Strobl (2003) who find that MNEs have had an impact on the location choices of LEs.22

#### <u>A parallel with India</u>

India is a diverse country. Its pattern of inward FDI reflects this diversity (Balasubramanyam and Mahambare 2004). Like Ireland, India had a switch from a protectionist (and dirigiste) regime to a more open one, this process beginning with the Indian reforms of 1991. The most celebrated FDI centered cluster in India is the software cluster in Bangalore, containing a quarter of the whole Indian software industry (Balasubramanyam and Balasubramanyam 2000). The Bangalore software cluster conforms to expectations on the rationale for clusters – external (to the firm) economies are present in the creation and circulation of human capital. The cluster has the support of specialist public institutions such as universities and colleges and social capital exists in the form of publically available amenities centred on the needs of executives in the industry. This attracts both expatriates and returning Indian migrants to augment the pool of available skilled labour and creates a locationally fixed endowment into which MNEs can participate through FDI or contract based modes of entry. The role of education policies has been central to the creation of the cluster and it demonstrates the type of endogenous endowment which emerging countries can establish. The very distinctiveness of the Bangalore cluster suggests that its replication is not easy. Barriers to such clusters in other emerging countries (and indeed in the rest of India) include the need for infrastructural support, reductions in red tape, corruption and exessive bureaucracy, lack of an indigenous skill pool, psychic barriers (including local business practices) and open entry and access The case of Ireland demonstrates the need for continuity and consistency of government policy to support and nurture clusters and emerging clusters.

#### 4. Implications for FDI Policy in Emerging Economies

There are some very strong similarities between the situation of the some of the emerging economies today and Ireland's situation in the late 1960s and early 1970s. Although it was unpopular to say so at the time, Ireland was in fact a semi-developed economy in the early 1970s, exhibiting the characteristics of both developed and less-developed economies. Membership of the EC immediately propelled the economy into a situation where the dominant thrust was the "developed economy" one, and without a doubt, the inflow of MNE investment (especially from the USA) played a crucial role in Ireland's "catch-up" with the rest of its EC partners.23 The Single European Market (SEM) consolidated Ireland's role as a manufacturing base for high-tech, low-weight products within the EU to grow rapidly.

For emerging economies that have no strategic power in trade, Ireland's strategy has some potential relevance. If such economies can accept the lesser control that being "open" implies, can see the potential benefits of MNEs, and can plausibly create export platform bases, Ireland's portfolio approach, a mixture of sectoral concentration and diversification, has much to commend it. And it also points to recognising that industrial restructuring in continuous and not once-off as Vernon's product cycle model means that production bases will change over time. The fact that

<sup>&</sup>lt;sup>22</sup> This difference may be accounted for by differences in time period covered.

<sup>&</sup>lt;sup>23</sup> See, for example, Gray (1997), Braunerhjelm et al., 2000.

Ireland is a winner of certain types of investment at one point in time does not guarantee its being a winner for this type of investment in the long term.

Ireland's exceptional success in attracting MNE investment in the past decade is at least in part due to its consistently positive stance towards MNEs over four decades. This was possible because of political consensus regarding the benefits of FDI, and by MNEs not generally competing with LEs on the domestic market. This consensus is now under threat for the first time because (a) Ireland corporate tax rate strategy is under more pressure in the EU context; (b) with the economy close to full employment, the appropriateness of the current rate of corporate tax (12.5 percent) is being debated, and (c) two new political parties (Green Party and Sinn Fein) have indicated that they would favour higher tax rates 24

Ireland's strategy of developing a long-term business relationship with MNEs means that they see government as assisting rather than constraining them. For example, Enterprise Ireland is now supporting the development of a globally focussed sub-supply industry, recognising that "local outsourcing" by MNEs is much less realistic today than it was for Ireland in the 1960s and 1970s.25 The Irish experience suggests that it takes time for MNEs to acquire local suppliers and active policy that can reduce the "learning phase" about local supply may increase the speed at which linkages occur and assist in building up LEs. Support of supply networks of LEs (which has only recently become a part of Irish policy) would also clearly have potential; however, this is costly in terms of time and effort.26

This analysis of Ireland's experience with FDI suggests several implications for policy lessons for emerging economies.

• Host countries can never stop being pro-active.

MNEs and their FDI policies are constantly evolving and are capable of a rapid response to changing conditions anywhere in the global economy. There can be no room for complacency in host country policy which must evolve both with the changing strategies of MNEs and location specific advantages, which must be nurtured.

• A package of incentives is superior to a single incentive

In general, surveys of MNEs show that they do not rate single incentives highly, even the most generous tax breaks. What is crucial is the whole package of incentives and environment that constitutes the host country "offer". Wider aspects such as the ease of doing business are more important than single incentives.

<sup>&</sup>lt;sup>24</sup> Their approach is ideologically rather than economically based and, if in a coalition context, either could add to pressure to raise the corporate tax rate.

<sup>&</sup>lt;sup>25</sup> This is becoming easier today than in the past through web technology –and investment in a good system of information provision would seem to have considerable potential as part of any linkage strategy over the coming years.

<sup>&</sup>lt;sup>26</sup> It is often discussed in the Irish case but progress has been slow. This may reflect the historically low manufacturing base. See Cooke, 1998, O'Doherty, 1998

• Host countries should adopt an enterprise-centered approach.

It is essential that host country policy markers understand the strategies of MNEs, not just local and regional, but also global. There is a great danger that the offer will be based on what the host country has, rather than what the MNE needs. Host countries need to focus on what immobile resources they can offer which combine with the MNE's mobile resources to achieve synergy.

• Sectoral direction requires project selectivity

Many emerging countries are insufficiently selective in attempting to attract MNEs. The example of Ireland shows that succesful strategies based on clustering and export platform require sectoral selectivity which in turn requires some degree of project selectivity.

- Project selectivity in turn requires:
  - A careful cost-benefit analysis
  - Strategic bargaining
  - Strong governance to avoid corruption

There are dangers of corruption in selectivity. A transparent cost benefit analysis is required to minimise this danger. There will inevitably be bargaining between the host country and the MNE and again strong governance of this process is crucial.

• Policy consistency matters to investors – thus policy should evolve systematically and not add to uncertainty

It is the certainty of policy as much as its effect that attracts inward FDI. Rapid switches and changes of direction are harmful. A long term reputation as a secure base is the fundamental necessity in attracting FDI.

• Performance-based incentives, both fiscal and financial, can combine well.

In attracting FDI it is essential that both the host country and the MNE perform well. This is best secured by incentives to the MNE designed to ensure that the outcome benefits the host country. Fiscal and financial incentives together need to be designed in line with projected benefits to the host country be they technology, output or export related.

• Projects need to be monitored.

The corollary of performance based incentives is that outcomes must be monitored. Clear and transparent goals are required and reporting requirements need to be carefully specified well in advance.

• Limitations of local linkage potential in global production chains.

A presumption that successful MNE clusters will inevitably lead to linkages with local enterprises cannot be presumed, especially as production supply chains become increasingly global

### References

Antonelli, C. (1998). "The Dynamics of Localized Technological Changes. The Interaction between Factor Costs Inducement, Demand Pull and Schumpeterian Rivalry." <u>Economics of Innovation and New Technology</u> 6(2-3): 97-120.

Balasubramanyam, V. N. and Ahalya Balasubramanyam (2000). "The software cluster in Bangalore" in John H. Dunning (ed) <u>Regions, Globalization and the Knowledge-Based Economy</u>. Oxford: Oxford University Press.

Balasubramanyam, V. N. and Vidya Mahambare (2004). "Foreign Direct Investment in India" in Wei, Yingqi Annie and V. N. Balasubramanyam (eds) <u>Foreign Direct Investment – Six Country Case</u> <u>Studies</u>. Cheltenham: Edward Elgar.

Baptista, R. (1998). Clusters, Innovation, and Growth. In P. Swann, M. Prevezer and D. Stout. <u>The Dynamics of Industrial Clustering: International Comparisons in Computing and Biotechnology</u>. Oxford, Oxford University Press: 13-51.

Barrios S, L Bertinelli and E Strobl (2003). "Multinationals and Local Indigenous Development" *CORE Discussion Paper 2003/05*.

Barrios S, H Görg and E Strobl (2002). "Multinationals' Location Choice, Agglomeration Economies and Public Incentives", *GEP Research Paper 02/33*.

Benito, G.R.G. and Welch, L.S. (1997) "De-internationalization". <u>Management International Review</u> 37(2): 7-25.

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

Bhagwati, Jagdish N. (1993) India in transition: freeing the economy, Oxford: Oxford University Press.

Bhagwati, Jagdish N. (2004) In defence of globalisation, Oxford: Oxford University Press.

Blomström, M. and A. Kokko (1996a). The impact of foreign investment on host countries: A review of the empirical evidence. Washington, D.C., Worldbank.

Blomström, M. and A. Kokko (1996b). <u>Multinational Corporations and Spillovers</u>. London, Centre for Economic Policy Research.

Blomström, Magnus and Kokko, Ari, 1998. "Multinational Corporations and Spillovers", Journal of Economic Surveys, Vol. 12, pp. 247-277.

Braunerhjelm, P, Faini, R., Norman, V., Ruane, F. and P. Seabright <u>Integration and the Regions of</u> <u>Europe : How the Right Policies can Prevent Polarisation</u>, Centre of Economic Policy Research, London, March 2000, 115 pp. (with).

Bradley, John (2004). "Changing the Rules: How the Failures of the 1950s Forced a Transition in Economic Policy-making", <u>Administration</u>, Vol .52, No 1, pp 92-107.

Buckley, P. J. (1996). "The Role of Management in International Business Theory: A Meta-Analysis and Integration of the Literature on International Business and International Management." <u>Management International Review</u>, Vol. 36, No 1, pp 7-54.

Buckley, P. J. (2004) "The role of China in the global strategy of multinational enterprises" <u>Journal of</u> <u>Chinese Economic and Business Studies</u>, Vol. 2, No. 1, January, pp 1-25.

Buckley, P. J., Jeremy Clegg, and C. Wang (2002) "The impact of inward FDI on the performance of Chinese manufacturing firms", Journal of International Business Studies Vol. 33, No. 4, pp 637-655.

Buckley, P. J and F. De Beule (2005) "The research agenda in international business: past, present and future" in Ludo Cuyvers and Filip De Beule (eds) <u>Transnational Corporations and Economic</u> <u>Development: from Internationalisation to Globalisation</u>. Palgrave, London.

Buckley, P. J. and C. Meng (2005)"The strategy of foreign invested manufacturing enterprises in China: Export orientated and market orientated FDI revisited", <u>Journal of Chinese Economic and Business Studies</u>. Vol. 3, No. 2 May.

Cooke, Philip, 1998. "Enterprise Support Policies in Dynamic European Regions: Policy Implications for Ireland", in National Economic and Social Council (ed.), <u>Sustaining Competitive Advantage:</u> <u>Proceedings of NESC Seminar</u>, Dublin: NESC, pp. 68-88.

Crowley, Martin, 1996. <u>National Linkage Programme: Final Evaluation Report</u>, Dublin: Industry Evaluation Unit.

Dicken, P. (1998). Global shift: Transforming the world economy. London, Paul Chapman.

Dunning, J. H. (1988). Explaining international production. London, Unwin Hyman.

Dunning, J. H. (1995). "The Role of Foreign Direct Investment in a Globalizing Economy." <u>Banca</u> <u>Nazionale del Lavoro Quarterly Review</u> **48**(193): 125-44.

Dunning, J. H. (1996). "The Geographical Sources of the Competitiveness of Firms: Some Results of a New Survey." <u>Transnational Corporations</u> **5**(3): 1-29.

Dunning, J. H. (1998). Globalization, Technological Change and the Spatial Organization of Economic Activity. In A. D. Chandler, Jr., P. Hagström and Ö. Sölvell. <u>The dynamic firm: The role of technology, strategy, organisation and regions</u>. Oxford, Oxford University Press.

Dunning, J. H. and R. Narula (1996). <u>Foreign direct investment and governments: Catalysts for</u> economic restructuring. London and New York, Routledge.

Enright, M. (1990). <u>Geographic Concentration and Industrial Organization</u>. Cambridge, MA, Harvard University Press.

Enright, M. J. (1998). Regional Clusters and Firm Strategy. In A. Chandler, P. Hagström and Ö. Sölvell. <u>The dynamic firm: The role of technology, strategy, organization and regions</u>. Oxford, Oxford University Press.

Enright, M. J. (2000). The Globalization of Competition and the Localization of Competitive Advantage: Policies towards Regional Clustering. In N. Hood and S. Young. <u>The globalization of multinational enterprise activity and economic development</u>. London, Macmillan.

Florida, R. (1995). "Toward the learning region." <u>Futures</u> 27(5): 527-536.

Frost, T. S. (1998). The geographic sources of innovation in the multinational enterprise: US subsidiaries and host country spillovers: 1980-1990. <u>Sloan School of Management</u>. Cambridge, MA, Massachusetts Institute of Technology.

Glasmeier, A. (1988). "Factors Governing the Development of High Tech Industry Agglomerations: A Tale of Three Cities." <u>Regional Studies</u> **22**(4): 287-301.

Goodman, E. and J. Bamford (1989). <u>Small firms and industrial districts in Italy</u>. London and New York, Routledge.

Gleeson, AM, F Ruane and J Sutherland (2005) "Successfully Promoting Industrial Clusters: Evidence from Ireland" Paper presented to Workshiop in Oporto on <u>Workshop Multinational, Clusters, and Innovation: Does Public Policy Matter?</u> April 2005.

Görg, Holger (2000) "Outward direct investment form Ireland ot the US: Evidence and Further Issues" Journal of the Statistical and Social Inquiry Society of Ireland Vol 30, pp 33-52.

Görg, Holger and Ruane, Frances, 2000 "An Analysis of Backward Linkages in the Irish Electronics Sector". <u>Economic and Social Review</u>, Vol. 31, pp 215-235.

Görg, Holger and Ruane, Frances, 2001 "Multinational Companies and Linkages: Panel-data Evidence for the Irish electronics sector". <u>International Journal of the Economics of Business</u>, Vol. 18, pp 1-18, 2001.

Gray, Alan W. (1997) (ed)., International Perspectives on the Irish Economy. Dublin: Indecon,

Gray, M., E. Golob, et al. (1996). "Big Firms, Long Arms, Wide Shoulders: The 'Hub-and-Spoke' Industrial District in the Seattle Region." <u>Regional Studies</u> **30**(7): 651-66.

Hirschman, Albert O., (1958). <u>The Strategy of Economic Development</u>. New Haven: Yale University Press.

Huang Yasheng (2003). <u>Selling China: Foreign Direct Investment during the Reform Era</u>. Cambridge: Cambridge University Press.

Kennedy, Kieran A., 1991. "Linkages and Overseas Industry", in A. Foley and D. McAleese (eds.) *Overseas Industry in Ireland*, Dublin: Gill and Macmillan, pp. 82-105.

Knickerbocker, F. T. (1973). <u>Oligopolistic Reaction and the Multinational Enterprise</u>. Cambridge, MA, Harvard University Press.

Krugman, Paul R., (1997) "Good News from Ireland: A Geographical Perspective", in Alan W. Gray, ed., <u>International Perspectives on the Irish Economy</u>. Dublin: Indecon, pp. 38-53.

McAleese, Dermot, 1977. A Profile of Grant-Aided Industry in Ireland, Dublin: Industrial Development Authority.

McAleese, Dermot and McDonald, Donogh, 1978. "Employment Growth and the Development of Linkages in Foreign-Owned and Domestic Manufacturing Enterprises", *Oxford Bulletin of Economics and Statistics*, Vol. 40, No. 4, pp. 321-339.

Malmberg, A., Ö. Sölvell, et al. (1996). "Spatial clustering, local accumulation of knowledge and firm competitiveness." <u>Geografiska Annaler</u> **78**(2): 85-97.

Markusen, A. (1994). "Studying regions by studying firms." The Professional Geographer 46: 477-90.

Markusen, A. (1996). "Sticky Places in Slippery Space: A Typology of Industrial Districts." <u>Economic</u> <u>Geography</u> **72**(3): 293-313.

Markusen, James R. and Venables, Anthony J., 1999. "Foreign Direct Investment as a Catalyst for Industrial Development", *European Economic Review*, Vol. 43, pp. 335-356.

Marshall, A. (1890). Principles of Economics. London, Macmillan.

O'Doherty, Dermot, 1998. "Networking in Ireland – Policy Responses", in National Economic and Social Council (ed.), *Sustaining Competitive Advantage: Proceedings of NESC Seminar*, Dublin: NESC, pp. 89-115.

OECD (1999). Boosting innovation: The cluster approach, Paris, OECD.

O'Farrell, P.N. and O'Loughlin, Brian, 1980. An Analysis of New Industry Linkages in Ireland, Dublin: Industrial Development Authority.

O'Malley, Eoin, 1989. *Industry and Economic Development: The Challenge for the Latecomer*, Dublin: Gill and Macmillan.

Paniccia, I. (1998). "One, a Hundred, Thousands of Industrial Districts. Organizational Variety in Local Networks of Small and Medium-sized Enterprises." <u>Organization Studies</u> **19**(4): 667-700.

Peck, F. W. (1996). "Regional Development and the Production of Space: The Role of Infrastructure in the Attraction of New Inward Investment." <u>Environment and Planning A</u> **28**(2): 327-39.

Pedersen, P. O. (1994). Clusters of enterprises within systems of production and distribution: Collective efficiency, transaction costs and the economies of agglomeration. Copenhagen, Centre for Development Research.

Pedersen, P. O. (1997). Clusters of enterprises within systems of production and distribution: Collective efficiency, transaction costs and the economies of agglomeration. In M. P. Van Dijk and R. Rabellotti. Enterprise clusters and networks in developing countries. London, CASS.

Piore, M. J. and C. F. Sabel (1984). The Second Industrial Divide. New York, Basic Books.

Porter, M. E. (1994). "The Role of Location in Competition." Journal of the Economics of Business 1(1): 35-39.

Porter, M. E. (1996). "Competitive Advantage, Agglomeration Economies, and Regional Policy." International Regional Science Review **19**(1-2): 85-94.

Porter, M. E. and Ö. Sölvell (1997). The role of geography in the process of innovation and the sustainable competitive advantage of firms. In A. D. Chandler, Jr., P. Hagström and Ö. Sölvell. <u>The Dynamic Firm: The Role of Technology, Strategy, Organizations, and Regions</u>. Oxford, Oxford University Press.

Rosecrance, R. (1996). "The Rise of the Virtual State." Foreign Affairs 75(4): 45-61.

Ruane F. and J. Sutherland (2002). "Globalization, Europeanization and Trade in the 1990s: Export Responses to of Foreign and Indigenous Companies" in H.Kierzkowski *Europe and Globalization*, Palgrave Macmillan.

Ruane, F. and J .Sutherland (2005) "Export Characteristics of Irish Manufacturing Industry" forthcoming in <u>The World Economy</u>.

Ruane, F and A Ugur (2005a) "Trade and Foreign Direct Investment in Manufacturing and Services", in Newman, C. & O'Hagan, J. <u>The Economy of Ireland: National and Sectoral Policy Issues</u>, Dublin: Gill and Macmillan, pp 162-187.

Ruane, F and A Ugur (2005b) "Export Platform FDI and Dualistic Development". Forthcoming in <u>Transnational Corporations</u>,

Rugman, A. M. (1975). "Motives for foreign investment: the market imperfections and risk diversification hypothesis." Journal of World Trade Law. 9(September-October): 567-73.

Rugman, A.M. (1979) <u>International Diversification and the Multinational Enterprise</u>. Lexington, MA: Lexington Books.

Schmitz, H. (1989). Flexible specialization. A new paradigm of small-scale industrialization. Sussex, Institute of Development Studies.

Scott, A. J. (1988). "Flexible production systems and regional development: The rise of new industrial space in North America and Western Europe." <u>International Journal of Urban and Regional Research</u> **12**: 171-86.

Sölvell, Ö. and I. Zander (1998). International Diffusion of Knowledge: Isolating Mechanisms and the Role of the MNE. In A. D. Chandler, Jr., P. Hagström and Ö. Sölvell. <u>The dynamic firm: The role of technology, strategy, organization and regions</u>. Oxford, Oxford University Press.

Stewart, J.C. (1976): "Linkages and Foreign Direct Investment". <u>Regional Studies</u>. Vol. 10. No. 2. pp. 245-258.

Storper, M. (1989). "The Transition to Flexible Specialisation in the U.S. Film Industry: External Economies, the Division of Labour, and the Crossing of Industrial Divides." <u>Cambridge Journal of Economics</u> **13**(2): 273-305.

Storper, M. and A. Scott (1987). "The wealth of regions. Market forces and policy imperatives in local and global context." <u>Futures</u> **27**(5): 505-26.

UNCTAD (1997). World investment report, 1997: Transnational corporations, market structure and competition policy. Geneva, United Nations.

Vernon, R. (1966). "International investment and international trade in the product cycle." <u>Quarterly</u> journal of economics(80): 190-207.

Wei, Yingqi Annie (2004). "Foreign direct investment in China" in Wei, Yingqi Annie and V. N. Balasubramanyam (eds) <u>Foreign Direct Investment – Six Country Case Studies</u>. Cheltenham: Edward Elgar.



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## Foreign Direct Investment in Ireland:Policy Implications for Emerging Economies

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#### FOREIGN DIRECT INVESTMENT IN IRELAND: POLICY IMPLICATIONS FOR EMERGING ECONOMIES

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#### Abstract

The increasingly important role of multinational enterprises (MNEs) in the global economy is linked to questions of how the foreign direct investment (FDI) they control impacts on overall economic activity in the recipient countries. Of specific interest is the policy context in which such FDI flows into the developing country and how a government can influence the impact of those flows. This paper reviews some of the literature in two key contextual areas, namely, when the host country policy regime promotes FDI selectively, and secondly, where it promotes the creation of industrial clusters. It explores the insights of this literature for the development of the strong MNE sector in the Irish economy and draws lessons from the Irish experience for emerging economies.

# FOREIGN DIRECT INVESTMENT IN IRELAND: POLICY IMPLICATIONS FOR EMERGING ECONOMIES

#### 1. Introduction

The increasingly important role of multinational enterprises (MNEs) in the global economy is linked to questions of how the foreign direct investment (FDI) they control impacts on overall economic activity in the recipient countries. Of specific interest is the policy context in which such FDI flows into the developing country and how a government can influence the impact of those flows. This paper reviews some of the literature in two key contextual areas, namely, when the host country policy regime promotes FDI selectively, and secondly, where it promotes the creation of industrial clusters. It explores the insights of this literature for the development of the strong MNE sector in the Irish economy and draws lessons from the Irish experience for emerging economies.

Ireland is unusual in the extent to which it has consistently promoted export-platform inward investment into the manufacturing sector for over four decades. Starting in the 1970s, it promoted MNEs selectively, and from the mid-1980s, it has sought to develop strong industrial clusters based on MNE investments in key high-tech sectors. MNEs now account for almost 50 percent of manufacturing employment and are at the centre of the spatial and sectoral restructuring of the Irish manufacturing sector over the past twenty years.

It is appropriate that the analysis of an open economy should be included in a special issue honouring Jagdish Bhagwati's 70<sup>th</sup> birthday. Bhagwati's consistent championing of openness (Bhagwati 1988) includes policy prescriptions to free closed economies (Bhagwati 1993) and this extends to the liberalisation of inward and outward foreign investment. (Bhagwati 2004). Openness to flows of foreign investment is thus a significant part of Bhagwati's extensive and profound <u>oeuvre</u>.

Section 2 examines the literature, which underpins the selective promotion of MNEs, i.e., which places MNE behaviour at the centre of theorising about FDI. It then examines how such policy activity has promoted MNEs on a selective basis in Ireland. Section 3 provides an overview of the literature on clustering and examines how Ireland has attempted to establish industrial clusters in manufacturing. Section 4 draws out some specific policy implications for emerging economies from the Irish policy experience.

#### 2. Selective promotion of MNE investment

There is a long tradition of analysis of international capital flows in trade theory. Since much of the theory until the 1970s was based on the Heckscher Ohlin (H-O) model, which implied free mobility of capital across sectors, analysis of capital flows into an economy ultimately amounted to analysing the implications of augmenting/reducing the capital stock in an economy. In a seminal article published in 1966, Vernon used the H-O model as a base to develop his product cycle model which set out to explain the foreign activities of MNEs. His starting point was that, in addition to immobile natural endowments and human resources, the propensity of countries to engage in trade also depended on their capability to upgrade these assets or to create new ones, notably technological capacity (Dunning, 1992). The inflow of capital to less-developed or semi-developed countries makes more investment

capital available and thus speeds up development, providing as a by- product badly needed foreign exchange. Moreover, by providing a bundle of well tried and tested managerial skills and technology, FDI enables the host country to exploit its comparative advantages more efficiently. The most important effect on FDI recipient countries, according to this perspective, is that FDI is trade enhancing, in that FDI will enhance production and export capacity. Moreover, the product cycle theory predicts that MNEs assist recipient countries in getting access to international markets, as MNEs help these countries to overcome the significant barrier to entry faced by mature products.

The "Internalisation School" provided a strong link between MNEs and development. In essence, it argued that, since markets for intermediate products such as technology, capital and supporting services do not function well in many developing countries, FDI may assist developing countries through: the provision of capital, the inflow of technology, the inflow of managerial know-how, and their impact on the creation of efficient markets (Buckley, 1985). All these effects derive essentially from the fact that MNEs provide resources that would not otherwise be available in developing host countries (Blomström, 1991; Blomström and Kokko, 1996a). Since MNEs often have privileged access to capital from the international banking sector (Lipsey, 1999), they can give developing countries access to additional capital that would not otherwise have been available. By providing developing countries with an inflow of investment capital and foreign exchange, MNEs may help adjusting some of the macro economic imbalances that frequently are major impediments to growth in developing countries.

One of the most frequently cited intangible competencies transferred through FDI is technology (Blomström, Zejan et al., 1992; Blomström and Kokko, 1996b). Technology transfer can trigger and speed up economic development, for instance, by facilitating the production of goods with higher value added content, by increasing exports and improving efficiency. MNEs possess the bulk of all patents worldwide, most of the world's R&D takes place within MNEs, and MNEs possess many of the technologies that are pivotal to economic and industrial development. Often these technological competencies cannot be obtained in the market place (e.g. via licensing) and FDI may therefore be the fastest, most efficient, and sometimes only way for developing countries to get access to these competencies. MNEs can also play a central role in the transfer of know-how, knowledge, and experience to the local workforce through its employment of indigenous professionals and managers (Blomström, Kokko et al., 1994).

MNEs as organisations are characterised by a high degree of managerial efficiency arising from training, higher standards of recruitment, effective communication with the parent company and other subsidiaries, and a more global outlook. By virtue of these characteristics, they are able to think strategically on a global scale and to organise complex integrated production networks. The integration into this transnational production network can give developing countries advantages (Blomström, Kokko et al., 2000). MNEs bring with them improvements in storage, logistics and marketing arrangements leading to cheaper delivery, better quality of products, and better information about products to consumers. More importantly, developing countries will be able to use the worldwide marketing outlets of MNEs, selling products where huge marketing investments would otherwise have been required. Hence, the presence of MNEs may assist developing countries in penetrating foreign markets. In the mid 1950s, Ireland began a process of moving from a longstanding autarchic policy, consisting of high rates of tariff protection and prohibition of foreign direct investment (FDI) towards a policy of free trade and direct encouragement of investments by multinational enterprises.1 MNEs were incentivised to locate in Ireland through the provision of generous financial supports primarily for capital investment, based on the scale of their incremental export activities, and by giving a tax holiday (up to 15-20 years) on the incremental profits generated by export sales.2 While the tax holiday was automatically earned once the enterprise exported, the financial supports were discretionary up to certain maxima. However, supports operated effectively as automatic capital grants until the end of the 1960s.

#### Development of Policy in Ireland

Ireland benefited from the increased scale of global FDI in the 1960s, by having established a more fiscally- and financially-welcoming environment than other countries in Europe. While intra-EU FDI has been important,3 Ireland's entry into the European Community in the 1970s enhanced its attractiveness to extra-EU investors, and particularly US investors seeking production bases within the Common External Tariff area. This attractiveness was consolidated in the early 1990s with the creation of the Single Market.4 In effect, Ireland benefited from Vernon's (1966) product cycle in becoming a low cost manufacturing base within Europe for maturing US enterprises, which were already exporting new products to the growing European market. In such an environment Ireland has been an attractive base, with its original tax-holiday incentives designed to make it an export platform.

In the early 1970s policy towards FDI became increasingly more selective, encouraging a pattern of investment into the production of modern high technology (high tech) goods, leaving Irish entrepreneurs to operate in the traditional sectors.5 This selectivity was achieved by proactively seeking out investors in high-tech sectors, namely electronics and pharmaceuticals, and by providing higher rates of financial assistance to enterprises in the "promoted sectors".6 Despite having no tradition in these high-tech sectors, policy makers believed that, with its relatively well-educated population, Ireland could be a competitive production base for MNEs as their low per-unit-value transportation costs made them readily suited to exporting from an island economy.7 Furthermore, MNEs in these sectors had no domestic competitors and hence there was no opposition to their increasing employment share in these sectors.

<sup>1</sup> It began by announcing its intentions to move progressively towards free trade, starting with the Anglo Irish Free Trade Agreement in 1965, and culminating in the process of joining the European Community in 1973

<sup>2</sup> The standard tax on income from export sales was around 50 percent prior to the introduction of the tax holiday, and this rate continued to apply to profits on all domestic sales and pre-incentive export sales levels.

<sup>3</sup> German FDI was especially important in the 1960s and 1970s as shortages of labour in Germany in the late 1960s were leading to rising unit wage costs.

<sup>4</sup> The reduction in non-tariff barriers was particularly important in sector like pharmaceuticals as it allowed consolidation of production in the EU, which has hitherto been prevented by country-specific regulations.

<sup>5</sup> For example, see Bradley (2004).

<sup>6</sup> This amounted to recognition that the food-processing sector, which used the outputs of the large agricultural sector, would not be a key growth sector in the economy.

<sup>7</sup> These products are often referred to as "weightless products".

As financial aids became increasingly selective, all individual investments were subjected to systematic project appraisal. This reflected a Hymer-type enterprise approach to FDI on the part of policy makers,8 and resulted in increased flexibility in the scale and type of assistance given. Because of its enterprise approach, Irish policy, uniquely in Europe and perhaps globally, recognised the diversity of MNEs from the outset of its openness strategy. Irish policy makers adopted a sophisticated system of selectivity for influencing the pattern of MNE investment, comprising fourstages: (i) finding niche high value/volume product markets with European growth potential; (ii) identifying enterprises in these markets, which were already exporting large volumes into Europe likely, in terms of the product cycle, to consider a European production base; (iii) persuading these enterprises to consider Ireland as an investment base; and (iv) agreeing an incentives package which would both secure the investment and ensure maximum benefit to Ireland as a host country. This projectbased rather than sectoral approach meant that Irish policy makers recognised the heterogeneity of MNEs and their different potentialities. It also laid the ground for the development of a clustering policy in the 1980s, (discussed Section 3).

Irish policy has continued to evolve since the 1980s, in response both to the evolving MNEs and to limitations set by the EU on the use of incentives to attract industry. These limitations led to the replacement of the original tax holiday and grants policy by a low corporate tax rate on all manufacturing profits, and ultimately all profits, and by providing grants which were trade-neutral. More recently, grants in most areas of the country are now limited to training and R&D expenditure. Furthermore, as suggested by Dunning and Narula (1996), the presence of significant MNEs in Ireland had a positive influence on its economic policies in terms of their being rational and pro-competitive.9 For example, to avoid factor bias, grant maxima were established in terms of both capital and labour, with repayments required if promised targets were not met.10 Cost-benefit analysis, albeit in a crude form initially, was used systematically to help avoid the worst policy disasters, in terms of both corruption and bad projects.11 Project appraisal methods have evolved in the last decade to reflect the dramatic change in Ireland from being a high-unemployment to a full-employment economy.

#### A parallel with China

China is an attractive location for FDI both because of its rapidly growing domestic market and as a low cost export platform (Buckley and Meng 2005). Here we briefly review the export platform issues. Like the early experience of Ireland, the coastal clustering of export orientated FDI in China exacerbates an already existing regional imbalance. (Wei 2004). This is placing severe strains on infrastructure and human capital requirements – even in labour-rich China, there are many skills already in short supply. There is considerable evidence of positive spillovers to the local economy although these are greater from lower-tech FDI from "overseas Chinese"

<sup>8</sup> Hymer (1960) had noted that "FDI involved the transfer of a package of resources, such as technology, managements, skills, entrepreneurship and not just capital".

<sup>&</sup>lt;sup>9</sup> An example of this is the telecoms markets in the 1990s. The Irish government sought and got a twoyear derogation from deregulating the market, but it deregulated earlier because of pressure from MNEs in the electronics and software sectors.

<sup>&</sup>lt;sup>10</sup> This took some time to happen but has been fully in operation in the past ten years.

<sup>&</sup>lt;sup>11</sup> For example, Ireland turned the DeLorean car project which the UK government financed with huge losses in Belfast.

than from "Western" MNEs (Buckley, Clegg and Wang 2002). There is also a convincing argument that FDI is a response to capital market imperfections in the host country (Buckley and Casson 1976). These imperfections inhibit local private companies from accessing capital and thus choking off domestic entrepreneurs from export markets (Huang 2003). A further effect is to encourage FDI rather than licensing into China and to bias technology transfer into an MNE internalised route within the, rather than by the, market through licensing to local Chinese (exporting) firms (Buckley 2004). Capital market liberalisation and extension in China is likely (paradoxically) to both raise domestic firms' exports and to reduce FDI (in favour in inward licensing).

#### **3.** Development of clusters

There have been numerous context-specific theories of the siting of particular value added activities of enterprises and of geographical distribution of FDI. They include the location component of Vernon's product cycle theory (1966), Knickerbocker's "follow my leader" theory (1973), which was one of the earliest approaches to analysing the clustering or bunching effect of FDI, and Rugman's risk diversification theory, which suggested that MNEs normally prefer a geographic spread of FDI to having all their eggs in the same basket (1975, 1979). However, researchers extended, rather than replaced, standard theories of location to encompass cross-border valueadded activities. In particular, they embraced new location advantages, such as exchange rates, political risks, inter-country cultural differences, and placed a different value on a variety of variables common to both domestic and international location choices, such as wage levels, demand patterns, policy related variables, supply capacity and infrastructure. These add-on or re-valued variables could be easily accommodated within the existing analytical theories (Dicken, 1998). This marks off older explanations of the location specific advantage of nations from those of the ownership specific advantages of enterprises. (For a complete review see Buckley and De Beule 2005).

The growth of the knowledge-based global economy and asset-augmenting FDI has led to the emergence of a more dynamic approach to both the logistics of the siting of corporate activities, and to the competitive advantages of nations and regions (Dunning, 1998). Enterprises need to take account not only of the presence and cost of traditional factor endowments, of transport costs, of current demand levels and patterns, and of Marshallian types of agglomerative economies; but also of distance related transaction costs (Storper and Scott, 1987), of dynamic externalities, knowledge accumulation, and interactive learning (Enright, 1990, 1998, 2000; Florida, 1995; Malmberg, Sölvell et al., 1996), of spatially related innovation and technological standards (Antonelli, 1998; Sölvell and Zander, 1998; Frost, 1998), of the increasing dispersion of created assets, and of the need to conclude cross border augmenting and asset exploiting alliances (Dunning, 1995, 1998). As such, since 1990, location has been taken up in explaining the stickiness of certain locations in an increasingly slippery world (Markusen, 1994). Theories suggest that enterprises may be drawn to the same locations because proximity generates positive externalities or agglomeration effects. Economists have proposed agglomeration effects in the form of both static (pecuniary) and dynamic (technological) externalities to explain industry localisation (Baptista, 1998). Theoretical attempts to formalise agglomeration effects have focused on three mechanisms that would yield such positive feedback loops: inter-enterprise technological spillovers, specialised labour, and intermediate inputs (Marshall, 1890).

A distinction should be made between two broad types of agglomeration economies. One relates to general economies of regional and urban concentration that apply to all enterprises and industries in a particular location. Such external economies lead to the emergence of manufacturing belts or metropolitan regions (Porter and Sölvell, 1997). These urbanisation economies do not consist of increased efficiency of the enterprises themselves but of reduced transport and search costs for the customers and, therefore, lead to more customers than the individual enterprise would have been able to attract (Pedersen, 1997). A second type of agglomeration refers to localisation economies. As advances in transportation and information obliterate distance, cities and regions face a tougher time attracting and anchoring income-generating activities (Markusen, 1996). Economists, geographers, and economic development planners have sought for more than a decade for alternative models of development in which activities are sustained or transformed in ways that maintain relatively high wage levels, social contributions, and quality of life. They have searched for "sticky places" in "slippery space" (Markusen, 1996), examining the structure and operation of these geographic concentrations of interconnected enterprises and institutions.

One extensively researched formulation is that of the flexibly specialised industrial district. In the original formulation of the industrial district Marshall (1890) envisioned a region where the business structure is comprised of small, locally owned enterprises that make investment and production decisions locally. Scale economies are minimal, forestalling the rise of large enterprises. Within the district, substantial trade is transacted between many small enterprises buying and selling from each other for eventual export from the region. What makes the industrial district so special and vibrant, in Marshall's account, is the existence of a pooled market for workers with specialised skills, the provision of specialised inputs from suppliers and service providers, the relatively rapid flow of business-related knowledge between enterprises, which result in what are now called technological spillovers.

All of these factors are covered by the notion of agglomeration, which suggests that the stickiness of a place resides not in the individual location calculus of enterprises or workers, but in the external economies available to each enterprise from its spatial conjunction with other enterprises and suppliers of services. In Marshall's formulation, it was not necessary that any of these actors should be consciously cooperating with each other, in order for the district to exist and operate as such. But in a more recent adaptation (Piore and Sabel, 1984), based on the phenomenon of successful expansion of mature industries in the so-called "Third Italy" (Goodman and Bamford, 1989), and extended to other venues in Europe and the United States (Scott, 1988; Storper, 1989; Paniccia, 1998), researchers have argued that concerted to co-operate among district members to improve district-wide efforts competitiveness can increase the stickiness of the district. While agglomeration economies signal external economies passively obtained by enterprises located close to each other, collective efficiency (Schmitz, 1989; Pedersen, 1994) indicates advantages, which enterprises may achieve through active collaboration. Localised information flows, technological spillovers, and specialised pools of knowledge and skills will ensure the revitalisation of these seedbeds of innovation in these clusters. Clusters are considered as networks of production of strongly interdependent enterprises, knowledge producing agents and customers, linked to each other in a value adding production chain (OECD, 1999).

However, many of the faster-growing regions of the world are not created by small, locally owned, vertically or horizontally specialised enterprises. There exist regions where a number of key enterprises or facilities act as anchors or hubs to the regional economy. These clusters are dominated by one or several large, locally headquartered enterprises, in one or more sectors, surrounded by smaller and less powerful suppliers. These hub-and-spoke districts thrive on market power and strategy rather than on networking (Gray, Golob et al., 1996; Markusen, 1996). Yet a third variant of rapidly growing industrial districts may be termed satellite platforms (Markusen, 1996), a congregation of branch plant facilities of externally based enterprises. Tenants of satellite platforms may range from routine assembly functions to relatively sophisticated research. They stand alone, and are detachable spatially from either up-or downstream operations within the same enterprise or from agglomerations of competitors and external suppliers or customers (Glasmeier, 1988).

Another way of discerning different clusters is based on the origin of the industry in a specific location: indigenous or transplanted. Some industries grew up as indigenous industries and were afterwards exposed to a globalising economy of increasing levels of international trade and investment. In the beginning, indigenous (hub-and-spoke) clusters are characterised by tightly linked local enterprises and relatively small numbers of foreign owned subsidiaries. Over time, the number of foreign subsidiaries in indigenous industries increases because of the globalising economy. More specifically, successful industries attract multinationals that set up or acquire local enterprises to have access to the available strategic assets. Other industries originate as a direct result of the increasing levels of international trade and investment between countries and regions. These transplanted (satellite platform) industries are originally characterised by a limited number of local enterprises and by (relatively many) foreign branch plants that are rather weakly embedded in the local economy. Transplanted industries are likely to continue to rely on their parent company or network members for key supplies or core technologies for some time, and will only slowly develop strong "local" ties, set up R&D units, and grow to become clusters. Alternatively, the virtuous circle of economic development by embedding foreign plants in the local economy does not materialise and the agglomeration of enterprises remains a satellite district. One would expect to find the relatively high value-adding subsidiaries in industry cluster locations, because they are attractive locations for foreign owned subsidiaries, both in terms of the opportunities for learning and knowledge transfer and in terms of the specialised inputs and labour they provide. They can be seen as "tapping into" the sources of knowledge and ideas, and scientific and technical talent which are embedded in cutting-edge regional innovation complexes (Florida, 1995). There will obviously also be foreign subsidiaries in noncluster locations, but they are more likely to be of the market-seeking type or resource seeking type (cheap factors of production), rather than the higher value-adding subsidiaries in industry clusters.

These contemporary economic events suggest that the nature and composition of a country or region's comparative advantage, which has always been based on the possession of a unique set of immobile natural resources and capabilities, is now more geared to a distinctive and non-imitable set of location bound created assets and the presence of strong indigenous enterprises with which foreign MNEs can form alliances to exploit or complement their own core competencies (Dunning, 1996). Research (Porter, 1996; Rosecrance, 1996; UNCTAD, 1997) is suggesting that nation states are not only becoming increasingly dependent on the cross-border activities of their own and foreign based corporations for their economic prosperity, but that the

competitiveness of these corporations is increasingly becoming fashioned by the institutional framework in which they operate. In particular, both nation states and sub-national authorities are recognising the need to provide the appropriate and, where necessary, customised factor inputs, both for their own enterprises to generate the ownership specific assets consistent with the demands of world markets, and for foreign subsidiaries to engage in the kind of value adding activities which advances both the technological efficiency and dynamic comparative advantage of the immobile assets within their jurisdiction (Porter, 1994; Peck, 1996; Dunning, 1998).

While there was always a spatial dimension to Irish industrial policy, with financial inducements to MNEs to locate in areas of high unemployment and depopulation, the attempt to build sectoral and spatial clusters only began seriously in the 1980s, and was centred in the two key high-tech sectors, namely, electronics and chemicals/pharmaceuticals. In terms of the electronics sector, the development of clusters was a natural extension of the policy of sectoral selectivity described above; it built on Ireland's reputation for being pro-MNE and on its existing network of relationships with MNEs. The strategy was to build the MNE electronics sector both vertically and horizontally, so that it would generate agglomeration economies through shared input (especially skilled labour) markets and product linkages, which were increasingly based on tailored inputs.12 Since the domestic market was not important, Ireland was effectively building an electronics cluster to service the European market (O'Donnellan, 1994). 13

The approach taken in the electronics sector policy was to attract some key investments into Ireland and then leveraging further MNEs to locate on the basis that these key enterprises had chosen Ireland as a base in Europe. In the 1980s four key segments were identified: microprocessors, software, computer products and printers.14 Ireland succeeded in attracting the two key global enterprises in microprocessors and software, namely Intel and Microsoft, both of which were dominant in their respective market segments. The computer products segment was much less concentrated internationally and Ireland set out to attract a range of companies in that segment of the market, the most significant of which were Dell, Compaq and Gateway.15 With the location of Intel and Microsoft, and subsequently Hewlett Packard in the printing sector, Ireland effectively had an electronics hub and the spokes were quickly populated by dozens of smaller electronics and software enterprises, all of which wanted to interconnect with these key industrial leaders.16

As Krugman (1997) pointed out, the Irish economy is a significant beneficiary from the process of clustering, and also of some good luck. But part of this luck was "made", in the consistency and enterprise-centred approach going back over 25 years previously, and the management of the process of rapid cluster building by policy makers. For example, policy has been highly active in addressing skill needs (including specialised skills) and in managing a good HR environment for incoming

<sup>&</sup>lt;sup>12</sup> The development of individually specified personal computers in the late 1990s strengthened these clustering effects.

<sup>&</sup>lt;sup>13</sup> Undoubtedly, Ireland came to benefit from Knickerbocker's (1973) "follow my leader" theory as US investment piled into Europe in advance of the Single European Market.

<sup>&</sup>lt;sup>14</sup> As networking became increasingly important in the late 1990s, Ireland attracted two of the key players in that sector, namely, Cisco and Lucent.

<sup>15</sup> It was recognised that some of these would not survive as this part of the industry consolidated and a large Gateway plant closed in the early part of this decade.

<sup>&</sup>lt;sup>16</sup> Had Ireland not won these projects, it would be an entirely different economy today!

investors.17 Irish education and training policy was also coordinated to ensure that a supply of skilled labour suited to the sector, so that labour costs remained competitive. Several studies have shown the extent of linkages between different enterprises in this sector, which are clustered primarily in two locations: the greater Dublin area and Limerick.18 The success of winning Microsoft, Intel and Dell was evident in that the average share of US FDI in Electronics going to Ireland rose to 27 percent between 1994 and 2001,19 compared with a rate of less than 12 percent for Irish manufacturing as a whole.20

There are two other sectors in which industrial clusters have been created. The first is the chemicals and pharmaceuticals sector, which now has plants from most of the world's largest enterprises in this sector. Because of their environmental and resource requirements, enterprises in this sector are much less footloose than those in the electronics sector, and hence the growth of a spatial cluster grew naturally out of the original location of a small number of key plants in the Cork area in the 1970s. In contrast to the electronics sector, there is little evidence of production linkages between the enterprises, and the cluster's development is centred on the natural and built environment, which makes production cost efficient in that area. The other sector is medical devices, which is spatially centred in the west of Ireland (where significant grants can still be awarded under EU law). This differs from electronics and chemicals/pharmaceuticals in that it is a less concentrated sector and the average enterprise size is much smaller. The skilled labour requirements of the sector match Irish supply, and IDA Ireland (Ireland's FDI promotion agency) has pursued the same leverage approach as it pursued in electronics.

Gleeson, Ruane and Sutherland (2005), analysing the sectoral specialisation and spatial concentration of MNEs in Ireland, argue that since spatial choice is driven entirely by production considerations, MNEs are likely to respond positively to location incentives. Their entropy indices for enterprises and employment for 1985-2001 indicate that both sectoral specialisation and spatial concentration have increased, particularly in the high tech sectors, which is consistent with MNEs beginning to cluster. They find high correlation coefficients for spatial concentration and low and falling coefficients for sectoral specialisation between MNEs and LEs at county level, suggesting little evidence of MNE-LE clustering to-date. This may reflect the limited incentives for export-driven MNEs to interact with LEs in manufacturing, especially as sub-supply markets increasingly globalise.21 Thus MNE clusters do not necessarily generate a local LE cluster. These results are broadly consistent with those of Barrios, Görg and Strobl (2002), but less so with Barrios,

<sup>&</sup>lt;sup>17</sup> The state agency involved in MNE promotion, IDA Ireland, helps new entrants to recruit a good mixture of new and experience staff, so that no existing enterprise is at risk of losing all its key players to a new arrival.

<sup>&</sup>lt;sup>18</sup> See for example, Görg and Ruane (2000, 2001)

<sup>19</sup> Source: US Department of Commerce, Bureau of Economic Analysis "U.S. Direct Investment Abroad: Balance of Payments and Direct Investment Position Data". Data available from <a href="http://www.bea.doc.gov/bea/di/dilusdbal.htm">http://www.bea.doc.gov/bea/di/dilusdbal.htm</a>

<sup>&</sup>lt;sup>20</sup> A recent paper, Görg (2000) analyses direct foreign investment flows between Ireland and the US, and finds that outward investment from Ireland is primarily in the non-traded sector in contrast with inward investment which is in the traded sectors.

<sup>&</sup>lt;sup>21</sup> The globalisation of sub-supply markets has significant implications for traditional Hirschman-type linkages.

Bertinelli and Strobl (2003) who find that MNEs have had an impact on the location choices of LEs.22

#### <u>A parallel with India</u>

India is a diverse country. Its pattern of inward FDI reflects this diversity (Balasubramanyam and Mahambare 2004). Like Ireland, India had a switch from a protectionist (and dirigiste) regime to a more open one, this process beginning with the Indian reforms of 1991. The most celebrated FDI centered cluster in India is the software cluster in Bangalore, containing a quarter of the whole Indian software industry (Balasubramanyam and Balasubramanyam 2000). The Bangalore software cluster conforms to expectations on the rationale for clusters – external (to the firm) economies are present in the creation and circulation of human capital. The cluster has the support of specialist public institutions such as universities and colleges and social capital exists in the form of publically available amenities centred on the needs of executives in the industry. This attracts both expatriates and returning Indian migrants to augment the pool of available skilled labour and creates a locationally fixed endowment into which MNEs can participate through FDI or contract based modes of entry. The role of education policies has been central to the creation of the cluster and it demonstrates the type of endogenous endowment which emerging countries can establish. The very distinctiveness of the Bangalore cluster suggests that its replication is not easy. Barriers to such clusters in other emerging countries (and indeed in the rest of India) include the need for infrastructural support, reductions in red tape, corruption and exessive bureaucracy, lack of an indigenous skill pool, psychic barriers (including local business practices) and open entry and access The case of Ireland demonstrates the need for continuity and consistency of government policy to support and nurture clusters and emerging clusters.

#### 4. Implications for FDI Policy in Emerging Economies

There are some very strong similarities between the situation of the some of the emerging economies today and Ireland's situation in the late 1960s and early 1970s. Although it was unpopular to say so at the time, Ireland was in fact a semi-developed economy in the early 1970s, exhibiting the characteristics of both developed and less-developed economies. Membership of the EC immediately propelled the economy into a situation where the dominant thrust was the "developed economy" one, and without a doubt, the inflow of MNE investment (especially from the USA) played a crucial role in Ireland's "catch-up" with the rest of its EC partners.23 The Single European Market (SEM) consolidated Ireland's role as a manufacturing base for high-tech, low-weight products within the EU to grow rapidly.

For emerging economies that have no strategic power in trade, Ireland's strategy has some potential relevance. If such economies can accept the lesser control that being "open" implies, can see the potential benefits of MNEs, and can plausibly create export platform bases, Ireland's portfolio approach, a mixture of sectoral concentration and diversification, has much to commend it. And it also points to recognising that industrial restructuring in continuous and not once-off as Vernon's product cycle model means that production bases will change over time. The fact that

<sup>&</sup>lt;sup>22</sup> This difference may be accounted for by differences in time period covered.

<sup>&</sup>lt;sup>23</sup> See, for example, Gray (1997), Braunerhjelm et al., 2000.

Ireland is a winner of certain types of investment at one point in time does not guarantee its being a winner for this type of investment in the long term.

Ireland's exceptional success in attracting MNE investment in the past decade is at least in part due to its consistently positive stance towards MNEs over four decades. This was possible because of political consensus regarding the benefits of FDI, and by MNEs not generally competing with LEs on the domestic market. This consensus is now under threat for the first time because (a) Ireland corporate tax rate strategy is under more pressure in the EU context; (b) with the economy close to full employment, the appropriateness of the current rate of corporate tax (12.5 percent) is being debated, and (c) two new political parties (Green Party and Sinn Fein) have indicated that they would favour higher tax rates 24

Ireland's strategy of developing a long-term business relationship with MNEs means that they see government as assisting rather than constraining them. For example, Enterprise Ireland is now supporting the development of a globally focussed sub-supply industry, recognising that "local outsourcing" by MNEs is much less realistic today than it was for Ireland in the 1960s and 1970s.25 The Irish experience suggests that it takes time for MNEs to acquire local suppliers and active policy that can reduce the "learning phase" about local supply may increase the speed at which linkages occur and assist in building up LEs. Support of supply networks of LEs (which has only recently become a part of Irish policy) would also clearly have potential; however, this is costly in terms of time and effort.26

This analysis of Ireland's experience with FDI suggests several implications for policy lessons for emerging economies.

• Host countries can never stop being pro-active.

MNEs and their FDI policies are constantly evolving and are capable of a rapid response to changing conditions anywhere in the global economy. There can be no room for complacency in host country policy which must evolve both with the changing strategies of MNEs and location specific advantages, which must be nurtured.

• A package of incentives is superior to a single incentive

In general, surveys of MNEs show that they do not rate single incentives highly, even the most generous tax breaks. What is crucial is the whole package of incentives and environment that constitutes the host country "offer". Wider aspects such as the ease of doing business are more important than single incentives.

<sup>&</sup>lt;sup>24</sup> Their approach is ideologically rather than economically based and, if in a coalition context, either could add to pressure to raise the corporate tax rate.

<sup>&</sup>lt;sup>25</sup> This is becoming easier today than in the past through web technology –and investment in a good system of information provision would seem to have considerable potential as part of any linkage strategy over the coming years.

<sup>&</sup>lt;sup>26</sup> It is often discussed in the Irish case but progress has been slow. This may reflect the historically low manufacturing base. See Cooke, 1998, O'Doherty, 1998

• Host countries should adopt an enterprise-centered approach.

It is essential that host country policy markers understand the strategies of MNEs, not just local and regional, but also global. There is a great danger that the offer will be based on what the host country has, rather than what the MNE needs. Host countries need to focus on what immobile resources they can offer which combine with the MNE's mobile resources to achieve synergy.

• Sectoral direction requires project selectivity

Many emerging countries are insufficiently selective in attempting to attract MNEs. The example of Ireland shows that succesful strategies based on clustering and export platform require sectoral selectivity which in turn requires some degree of project selectivity.

- Project selectivity in turn requires:
  - A careful cost-benefit analysis
  - Strategic bargaining
  - Strong governance to avoid corruption

There are dangers of corruption in selectivity. A transparent cost benefit analysis is required to minimise this danger. There will inevitably be bargaining between the host country and the MNE and again strong governance of this process is crucial.

• Policy consistency matters to investors – thus policy should evolve systematically and not add to uncertainty

It is the certainty of policy as much as its effect that attracts inward FDI. Rapid switches and changes of direction are harmful. A long term reputation as a secure base is the fundamental necessity in attracting FDI.

• Performance-based incentives, both fiscal and financial, can combine well.

In attracting FDI it is essential that both the host country and the MNE perform well. This is best secured by incentives to the MNE designed to ensure that the outcome benefits the host country. Fiscal and financial incentives together need to be designed in line with projected benefits to the host country be they technology, output or export related.

• Projects need to be monitored.

The corollary of performance based incentives is that outcomes must be monitored. Clear and transparent goals are required and reporting requirements need to be carefully specified well in advance.

• Limitations of local linkage potential in global production chains.

A presumption that successful MNE clusters will inevitably lead to linkages with local enterprises cannot be presumed, especially as production supply chains become increasingly global

### References

Antonelli, C. (1998). "The Dynamics of Localized Technological Changes. The Interaction between Factor Costs Inducement, Demand Pull and Schumpeterian Rivalry." <u>Economics of Innovation and New Technology</u> 6(2-3): 97-120.

Balasubramanyam, V. N. and Ahalya Balasubramanyam (2000). "The software cluster in Bangalore" in John H. Dunning (ed) <u>Regions, Globalization and the Knowledge-Based Economy</u>. Oxford: Oxford University Press.

Balasubramanyam, V. N. and Vidya Mahambare (2004). "Foreign Direct Investment in India" in Wei, Yingqi Annie and V. N. Balasubramanyam (eds) <u>Foreign Direct Investment – Six Country Case</u> <u>Studies</u>. Cheltenham: Edward Elgar.

Baptista, R. (1998). Clusters, Innovation, and Growth. In P. Swann, M. Prevezer and D. Stout. <u>The Dynamics of Industrial Clustering: International Comparisons in Computing and Biotechnology</u>. Oxford, Oxford University Press: 13-51.

Barrios S, L Bertinelli and E Strobl (2003). "Multinationals and Local Indigenous Development" *CORE Discussion Paper 2003/05*.

Barrios S, H Görg and E Strobl (2002). "Multinationals' Location Choice, Agglomeration Economies and Public Incentives", *GEP Research Paper 02/33*.

Benito, G.R.G. and Welch, L.S. (1997) "De-internationalization". <u>Management International Review</u> 37(2): 7-25.

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

Bhagwati, Jagdish N. (1993) India in transition: freeing the economy, Oxford: Oxford University Press.

Bhagwati, Jagdish N. (2004) In defence of globalisation, Oxford: Oxford University Press.

Blomström, M. and A. Kokko (1996a). The impact of foreign investment on host countries: A review of the empirical evidence. Washington, D.C., Worldbank.

Blomström, M. and A. Kokko (1996b). <u>Multinational Corporations and Spillovers</u>. London, Centre for Economic Policy Research.

Blomström, Magnus and Kokko, Ari, 1998. "Multinational Corporations and Spillovers", Journal of Economic Surveys, Vol. 12, pp. 247-277.

Braunerhjelm, P, Faini, R., Norman, V., Ruane, F. and P. Seabright <u>Integration and the Regions of</u> <u>Europe : How the Right Policies can Prevent Polarisation</u>, Centre of Economic Policy Research, London, March 2000, 115 pp. (with).

Bradley, John (2004). "Changing the Rules: How the Failures of the 1950s Forced a Transition in Economic Policy-making", <u>Administration</u>, Vol .52, No 1, pp 92-107.

Buckley, P. J. (1996). "The Role of Management in International Business Theory: A Meta-Analysis and Integration of the Literature on International Business and International Management." <u>Management International Review</u>, Vol. 36, No 1, pp 7-54.

Buckley, P. J. (2004) "The role of China in the global strategy of multinational enterprises" <u>Journal of</u> <u>Chinese Economic and Business Studies</u>, Vol. 2, No. 1, January, pp 1-25.

Buckley, P. J., Jeremy Clegg, and C. Wang (2002) "The impact of inward FDI on the performance of Chinese manufacturing firms", Journal of International Business Studies Vol. 33, No. 4, pp 637-655.

Buckley, P. J and F. De Beule (2005) "The research agenda in international business: past, present and future" in Ludo Cuyvers and Filip De Beule (eds) <u>Transnational Corporations and Economic</u> <u>Development: from Internationalisation to Globalisation</u>. Palgrave, London.

Buckley, P. J. and C. Meng (2005)"The strategy of foreign invested manufacturing enterprises in China: Export orientated and market orientated FDI revisited", <u>Journal of Chinese Economic and Business Studies</u>. Vol. 3, No. 2 May.

Cooke, Philip, 1998. "Enterprise Support Policies in Dynamic European Regions: Policy Implications for Ireland", in National Economic and Social Council (ed.), <u>Sustaining Competitive Advantage:</u> <u>Proceedings of NESC Seminar</u>, Dublin: NESC, pp. 68-88.

Crowley, Martin, 1996. <u>National Linkage Programme: Final Evaluation Report</u>, Dublin: Industry Evaluation Unit.

Dicken, P. (1998). Global shift: Transforming the world economy. London, Paul Chapman.

Dunning, J. H. (1988). Explaining international production. London, Unwin Hyman.

Dunning, J. H. (1995). "The Role of Foreign Direct Investment in a Globalizing Economy." <u>Banca</u> <u>Nazionale del Lavoro Quarterly Review</u> **48**(193): 125-44.

Dunning, J. H. (1996). "The Geographical Sources of the Competitiveness of Firms: Some Results of a New Survey." <u>Transnational Corporations</u> **5**(3): 1-29.

Dunning, J. H. (1998). Globalization, Technological Change and the Spatial Organization of Economic Activity. In A. D. Chandler, Jr., P. Hagström and Ö. Sölvell. <u>The dynamic firm: The role of technology, strategy, organisation and regions</u>. Oxford, Oxford University Press.

Dunning, J. H. and R. Narula (1996). <u>Foreign direct investment and governments: Catalysts for</u> economic restructuring. London and New York, Routledge.

Enright, M. (1990). <u>Geographic Concentration and Industrial Organization</u>. Cambridge, MA, Harvard University Press.

Enright, M. J. (1998). Regional Clusters and Firm Strategy. In A. Chandler, P. Hagström and Ö. Sölvell. <u>The dynamic firm: The role of technology, strategy, organization and regions</u>. Oxford, Oxford University Press.

Enright, M. J. (2000). The Globalization of Competition and the Localization of Competitive Advantage: Policies towards Regional Clustering. In N. Hood and S. Young. <u>The globalization of multinational enterprise activity and economic development</u>. London, Macmillan.

Florida, R. (1995). "Toward the learning region." <u>Futures</u> 27(5): 527-536.

Frost, T. S. (1998). The geographic sources of innovation in the multinational enterprise: US subsidiaries and host country spillovers: 1980-1990. <u>Sloan School of Management</u>. Cambridge, MA, Massachusetts Institute of Technology.

Glasmeier, A. (1988). "Factors Governing the Development of High Tech Industry Agglomerations: A Tale of Three Cities." <u>Regional Studies</u> **22**(4): 287-301.

Goodman, E. and J. Bamford (1989). <u>Small firms and industrial districts in Italy</u>. London and New York, Routledge.

Gleeson, AM, F Ruane and J Sutherland (2005) "Successfully Promoting Industrial Clusters: Evidence from Ireland" Paper presented to Workshiop in Oporto on <u>Workshop Multinational, Clusters, and Innovation: Does Public Policy Matter?</u> April 2005.

Görg, Holger (2000) "Outward direct investment form Ireland ot the US: Evidence and Further Issues" Journal of the Statistical and Social Inquiry Society of Ireland Vol 30, pp 33-52.

Görg, Holger and Ruane, Frances, 2000 "An Analysis of Backward Linkages in the Irish Electronics Sector". <u>Economic and Social Review</u>, Vol. 31, pp 215-235.

Görg, Holger and Ruane, Frances, 2001 "Multinational Companies and Linkages: Panel-data Evidence for the Irish electronics sector". <u>International Journal of the Economics of Business</u>, Vol. 18, pp 1-18, 2001.

Gray, Alan W. (1997) (ed)., International Perspectives on the Irish Economy. Dublin: Indecon,

Gray, M., E. Golob, et al. (1996). "Big Firms, Long Arms, Wide Shoulders: The 'Hub-and-Spoke' Industrial District in the Seattle Region." <u>Regional Studies</u> **30**(7): 651-66.

Hirschman, Albert O., (1958). <u>The Strategy of Economic Development</u>. New Haven: Yale University Press.

Huang Yasheng (2003). <u>Selling China: Foreign Direct Investment during the Reform Era</u>. Cambridge: Cambridge University Press.

Kennedy, Kieran A., 1991. "Linkages and Overseas Industry", in A. Foley and D. McAleese (eds.) *Overseas Industry in Ireland*, Dublin: Gill and Macmillan, pp. 82-105.

Knickerbocker, F. T. (1973). <u>Oligopolistic Reaction and the Multinational Enterprise</u>. Cambridge, MA, Harvard University Press.

Krugman, Paul R., (1997) "Good News from Ireland: A Geographical Perspective", in Alan W. Gray, ed., <u>International Perspectives on the Irish Economy</u>. Dublin: Indecon, pp. 38-53.

McAleese, Dermot, 1977. A Profile of Grant-Aided Industry in Ireland, Dublin: Industrial Development Authority.

McAleese, Dermot and McDonald, Donogh, 1978. "Employment Growth and the Development of Linkages in Foreign-Owned and Domestic Manufacturing Enterprises", *Oxford Bulletin of Economics and Statistics*, Vol. 40, No. 4, pp. 321-339.

Malmberg, A., Ö. Sölvell, et al. (1996). "Spatial clustering, local accumulation of knowledge and firm competitiveness." <u>Geografiska Annaler</u> **78**(2): 85-97.

Markusen, A. (1994). "Studying regions by studying firms." The Professional Geographer 46: 477-90.

Markusen, A. (1996). "Sticky Places in Slippery Space: A Typology of Industrial Districts." <u>Economic</u> <u>Geography</u> **72**(3): 293-313.

Markusen, James R. and Venables, Anthony J., 1999. "Foreign Direct Investment as a Catalyst for Industrial Development", *European Economic Review*, Vol. 43, pp. 335-356.

Marshall, A. (1890). Principles of Economics. London, Macmillan.

O'Doherty, Dermot, 1998. "Networking in Ireland – Policy Responses", in National Economic and Social Council (ed.), *Sustaining Competitive Advantage: Proceedings of NESC Seminar*, Dublin: NESC, pp. 89-115.

OECD (1999). Boosting innovation: The cluster approach, Paris, OECD.

O'Farrell, P.N. and O'Loughlin, Brian, 1980. An Analysis of New Industry Linkages in Ireland, Dublin: Industrial Development Authority.

O'Malley, Eoin, 1989. *Industry and Economic Development: The Challenge for the Latecomer*, Dublin: Gill and Macmillan.

Paniccia, I. (1998). "One, a Hundred, Thousands of Industrial Districts. Organizational Variety in Local Networks of Small and Medium-sized Enterprises." <u>Organization Studies</u> **19**(4): 667-700.

Peck, F. W. (1996). "Regional Development and the Production of Space: The Role of Infrastructure in the Attraction of New Inward Investment." <u>Environment and Planning A</u> **28**(2): 327-39.

Pedersen, P. O. (1994). Clusters of enterprises within systems of production and distribution: Collective efficiency, transaction costs and the economies of agglomeration. Copenhagen, Centre for Development Research.

Pedersen, P. O. (1997). Clusters of enterprises within systems of production and distribution: Collective efficiency, transaction costs and the economies of agglomeration. In M. P. Van Dijk and R. Rabellotti. Enterprise clusters and networks in developing countries. London, CASS.

Piore, M. J. and C. F. Sabel (1984). The Second Industrial Divide. New York, Basic Books.

Porter, M. E. (1994). "The Role of Location in Competition." Journal of the Economics of Business 1(1): 35-39.

Porter, M. E. (1996). "Competitive Advantage, Agglomeration Economies, and Regional Policy." International Regional Science Review **19**(1-2): 85-94.

Porter, M. E. and Ö. Sölvell (1997). The role of geography in the process of innovation and the sustainable competitive advantage of firms. In A. D. Chandler, Jr., P. Hagström and Ö. Sölvell. <u>The Dynamic Firm: The Role of Technology, Strategy, Organizations, and Regions</u>. Oxford, Oxford University Press.

Rosecrance, R. (1996). "The Rise of the Virtual State." Foreign Affairs 75(4): 45-61.

Ruane F. and J. Sutherland (2002). "Globalization, Europeanization and Trade in the 1990s: Export Responses to of Foreign and Indigenous Companies" in H.Kierzkowski *Europe and Globalization*, Palgrave Macmillan.

Ruane, F. and J .Sutherland (2005) "Export Characteristics of Irish Manufacturing Industry" forthcoming in <u>The World Economy</u>.

Ruane, F and A Ugur (2005a) "Trade and Foreign Direct Investment in Manufacturing and Services", in Newman, C. & O'Hagan, J. <u>The Economy of Ireland: National and Sectoral Policy Issues</u>, Dublin: Gill and Macmillan, pp 162-187.

Ruane, F and A Ugur (2005b) "Export Platform FDI and Dualistic Development". Forthcoming in <u>Transnational Corporations</u>,

Rugman, A. M. (1975). "Motives for foreign investment: the market imperfections and risk diversification hypothesis." Journal of World Trade Law. 9(September-October): 567-73.

Rugman, A.M. (1979) <u>International Diversification and the Multinational Enterprise</u>. Lexington, MA: Lexington Books.

Schmitz, H. (1989). Flexible specialization. A new paradigm of small-scale industrialization. Sussex, Institute of Development Studies.

Scott, A. J. (1988). "Flexible production systems and regional development: The rise of new industrial space in North America and Western Europe." <u>International Journal of Urban and Regional Research</u> **12**: 171-86.

Sölvell, Ö. and I. Zander (1998). International Diffusion of Knowledge: Isolating Mechanisms and the Role of the MNE. In A. D. Chandler, Jr., P. Hagström and Ö. Sölvell. <u>The dynamic firm: The role of technology, strategy, organization and regions</u>. Oxford, Oxford University Press.

Stewart, J.C. (1976): "Linkages and Foreign Direct Investment". <u>Regional Studies</u>. Vol. 10. No. 2. pp. 245-258.

Storper, M. (1989). "The Transition to Flexible Specialisation in the U.S. Film Industry: External Economies, the Division of Labour, and the Crossing of Industrial Divides." <u>Cambridge Journal of Economics</u> **13**(2): 273-305.

Storper, M. and A. Scott (1987). "The wealth of regions. Market forces and policy imperatives in local and global context." <u>Futures</u> **27**(5): 505-26.

UNCTAD (1997). World investment report, 1997: Transnational corporations, market structure and competition policy. Geneva, United Nations.

Vernon, R. (1966). "International investment and international trade in the product cycle." <u>Quarterly</u> journal of economics(80): 190-207.

Wei, Yingqi Annie (2004). "Foreign direct investment in China" in Wei, Yingqi Annie and V. N. Balasubramanyam (eds) <u>Foreign Direct Investment – Six Country Case Studies</u>. Cheltenham: Edward Elgar.





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