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Tiger, Tiger, Burning Bright?¹ Industrial Policy Lessons from Ireland and East Asia for Small African Economies

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“... capitalism is not a system given to stasis. What works in one period is unlikely to work in the next; and even when it ‘works’, its distribution of costs and benefits is never socially equal. So when deciding which tiger to ride, it is worth remembering that the choice is only between tigers, and that if a safe ride is what you want, you would do well not to ride tigers at all”. (Coates, 2007; 193).

1. Introduction

The African economies, particularly those in Sub-Saharan Africa (SSA) stand today at an important crossroads. During the 1980s, for the average African country, GDP per capita fell at a rate of 0.5 percent per annum; in the 1990s it rose slightly at a rate of 0.3 percent per annum (see Table-1). However, in the last four years, the average growth rate of this variable has been a respectable 3 percent per annum. In 2007, per capita GDP growth rate in Africa was estimated to be 6 percent per annum, one of the highest rates recorded during any year over the last quarter century. Apart from indicating the recent recovery in African economic growth, the table also highlights the poor long term performance of the African economies relative to other developing countries. Over the entire 26 year period, 1981-2007, for which the data are presented in the table the per capita GDP in African countries rose only by 16 percent compared with more than a 100 percent rise for all developing countries. For the East and South Asian economies, the growth in GDP per capita has been spectacular, a rise of well over 300 percent.

¹ From a poem by William Blake (1757–1827).

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Table 1.**PER CAPITA GDP GROWTH BY REGION AND ECONOMIC GROUPING, 1981-2007**

(Per Cent)

	Average annual Growth			Overall growth
	1981-1989	1990-2002	2003-2007	1981-2007
World	1.4	1.2	2.3	41.4
Developed economies	2.5	1.8	2.08	67.5
Economies in transition	1.9	-4.0	7.3	-25.8
Developing economies	1.7	3.0	5.0	112.5
Of which:				
Africa	-0.5	0.3	3.0	16.4
America	-0.3	1.1	3.5	22.7
West Asia	-1.7	1.1	4.1	16.0
East and South Asia	5.1	5.3	6.3	317.5

Source: UNCTAD (2007).

It is very much a moot point whether this recent reversal of fortunes for the African countries has been due to the late success of structural adjustment programmes (SAPs) of the World Bank and the IMF, as is implicitly claimed by the two Brettonwoods institutions [World Bank (2007), IMF (2008)]. These programmes, which have been the dominant influences on Sub Saharan African economies during much of 1980s and all of 1990s have embodied the Washington Consensus and its aftermath. According to independent economists [UNCTAD (2005), and (2007), ILO (2007), Mickenley (2005), and Lall (2005)], although many countries implemented these programmes there has not been much success in enhancing their economic growth on a sustained basis. Indeed Thandika Mkandawire (2005), a leading scholar of African economies argues persuasively that the SAPs were in fact counterproductive and often led to the wrong kind of structural change which would hinder rather than help economic development.

The most plausible reason for the fast growth of African economies in the last four years would appear to be the huge increase in international commodity prices. Information provided by UNCTAD (2007) reveals how the prices of various commodities have changed over this period:

World Primary Commodity Prices, 2002-2006 (Percentage Change)	
Commodity group	2002-2006
Food and Tropical Beverages	48.4
Agricultural raw materials	62.3
Minerals, ores and metals	219.9
Crude petroleum	157.6

Source: UNCTAD Secretariat calculations, based on UNCTAD *Commodity Price Bulletin*, various issues, and UNSD, *Monthly Bulletin of Statistics*, various issues. Adapted from UNCTAD (2007).

The increased value of SSA exports as a result of the commodity price rise helped to relax the balance of payments constraint which in turn led to faster growth. The central issue is whether or not the African countries can translate this recent improved performance into sustained, fast, long term economic growth. Here the economic history of these countries in the last half century does not provide much ground for optimism. The good record of African economic growth between 1950 and 1973 when these economies expanded at a rate of nearly 5 percent per annum could not subsequently be sustained. Similarly, during the 1990s a number of countries were successively selected as the African success stories by the Brettonwoods institutions, none of which could maintain fast growth for more than more than 2-3 years (Mkwindaire, 2005). Such economic history invites skepticism about the ability of African countries to convert their recent favourable changes in the terms of trade into lasting progress. The case of the skeptics is straightforward. Apart from all the other handicaps, the African countries have been further debilitated by two decades of stagnation or worse; and are therefore unlikely to achieve fast long term growth.

There are however important counter arguments which are equally an essential part of the story. The African countries are today much better equipped for initiating and sustaining fast growth, with far greater endowment of human and material resources than they were 25 years ago.

- The educational level of Africa's citizens is much higher today than it was in the early 1970s. This is particularly notable at the tertiary level. There were for example only 7 university graduates in Tanzania in 1964 at the time of the country's independence from British colonial rule. Today, after independence there are literally thousands, as a result of the establishment of the University of Dar-e-Salam, a splendid institution of higher education.
- There is a network of science and research institutions, engineering colleges, throughout the continent. A number of business schools have also been established and there is close collaboration between the African and the best business schools in the US and the UK.
- There are signs of an emerging middle class in the African countries. There is evidence also of the evolution of entrepreneurship in these countries (Pfeffermann, 2008)

With the above background this paper considers the lessons which African countries can learn from Ireland and from the East and South Asian countries. Lessons from East and South Asia are clearly significant as many of the African countries at the time of

independence had economic structures and levels of income not all that different from each other. To illustrate, in the 1950s, Malaysia's economy was much like that of Ghana, based on exports of primary agricultural commodities, rubber in case of Malaysia and cocoa for the Ghanaian case. Today, the Malaysian per capita income is nearly 5000 USD at current exchange rates and 10,000USD at PPP rates, while the Ghanaian per capita income has risen very little over the same period. It is legitimate to ask how can one account for such difference in the evolution of the two economies. Was it for example simply due to the fact that the Ghanaian economy was subject to greater economic shocks than Malaysia's? There is little empirical support for this hypothesis. Moreover, a large number of other East and South Asian countries also did very well and outperformed most African countries. For these reasons the comparisons of African countries with East and South Asian countries promise to be very useful. However in this paper we give special attention to Ireland as a comparator and present the reasons for doing so.

The next section explains in general terms, but briefly why Ireland is an interesting comparison for African countries and why lessons from the Irish experience will be useful. Section 3 to 8 will discuss in much greater detail the role of industrial policy in a broad sense as well as other important factors in the development of the Irish economy, together with the lessons for African countries. Section 9 re-examines the case of East Asian countries as role models for economic development for African countries. Section 10 concludes.

2. Why is Ireland an Interesting Comparison?

When Ireland joined the then 'Common Market' in 1973, the economy was in many senses a small, poor, peripheral and agriculturally dominated economy with an overdependence on links to its former colonial master, the UK. Trade was limited given ongoing protectionism (the European Union (EU) in particular had yet to fully open up). In less than three decades, however, the Irish economy has evolved from that of one of the four cohesion countries of the EU to being considered an advanced high-tech enclave of the EU.

There are also other reasons for using the Irish example

- Ireland, like most African countries is a small economy. It has the geographical size of Sierra Leone as well as a similar population. Given its small size, clearly the membership of the EU has played a major role in the evolution of the Irish success story. Apart from providing a far bigger market for Irish products so as to be able to reap the economies of scale, EU has also provided Ireland with very large direct assistance for the development of its infrastructure. What could take the place of EU even in a limited sense in the present context of small African countries?. This issue will be taken up further below.
- Although Ireland is far from being a laissez-faire economy it is by no means as dirigiste as the East and the South Asian countries. It is more corporatist than the East Asian countries. The unions play a major role in the determination of wages and prices. Compared with the East Asian model it is therefore more

likely to be directly relevant to the African countries. East and South Asian pattern of development is heavily dependant on the outstanding qualities of the civil service. Such qualities are not simply inherited but are developed alongside the expansion of the economy (see further Chang (2006)). Nevertheless, the corporatist model makes comparatively less demands on administrative capacity.

- It is arguable that the African countries would have more to learn from the experience of the operation of industrial policies in Ireland than in the East and South Asian countries. The Irish industrial policy did not involve measures of coercion in the allocation of resources in the way it did in the case of East Asian countries during the prime of their industrial policy, for example, Japan between 1950 to 1973, and Korea between 1970 to 1990³. It will be recalled that in Japan during this period the government used the allocation of foreign exchange in coercive ways as a principal weapon to meet government's targets for specific firms and industries. Similarly in Korea during its main industrial policy period, there is evidence of coercion in the expansion and upgrading of country's exports by the large conglomerates which the government itself had created. Amsden (1989,1994), Amsden and Singh (1994), Singh (1995,1998), Chang (2006).
- It should not be forgotten that during the operation of industrial policy in a number of East Asian countries, industrial peace was ensured through the suppression of trade union rights. Some would argue that this alone makes the Irish example more suitable as a role model for African countries.

The following sections examine in more detail the operation of industrial and developmental policies in Ireland and their relevance for African countries.

3. SMEs in Ireland and in African Countries

The comparability of situations between the Irish case in the (not too distant) past and that of the small African states today warrants investigation to determine whether Ireland can be considered a useful case study, especially around the development of small and medium sized enterprises (SMEs) given their importance in both Ireland and small African states. Of relevance here, some characteristics of Irish SMEs can be noted:

- (1) Irish SMEs were focussed primarily upon their domestic market. Indeed, export oriented SMEs were a rare occurrence in the Ireland of the 1970s.
- (2) Ireland's small manufacturing firms in the past were mostly found in traditional industries (namely, food, beverages and tobacco, textiles and wood products) where productivity, skills and research and development (R&D) were low and/or insufficient.
- (3) Small firms in Ireland were then confronted with the same type of barriers as small firms in Africa today (albeit on a different scale), namely: (i) financial

³ These were the high growth periods for the two countries. In 1973 Japan was still more like a developing country than it has been since. See further Singh (1995).

barriers, particularly at the business start-up stage; (ii) unfavourable macroeconomic conditions; and (iii) adverse business environment or policies

On the latter point, several studies on the barriers encountered by small firms in Ireland have pointed to access to finance as being the single most critical issue (Forfás 1994; Goodbody Economic Consultants 2002; Global Entrepreneurship Monitor 2001). Very recent work on the Irish case shows that small businesses continue to experience difficulties in obtaining appropriate levels of finance for start-up and growth (Small Business Forum, 2006). This finding has been reiterated in recent work with regard to small firms in Africa (see below).

Until recently, there has also been no well-defined policy for support of SMEs in Ireland. As we shall see below, industrial policy in Ireland has mostly been geared towards FDI and it could reasonably be argued that this has been at the expense of indigenous companies. This has some similarities to Africa, where an adverse business environment, with little support from government agencies, the regulatory offices and the managers of state enterprises is an additional impediment for small firms.

Despite these apparent similarities, one key aspect missing in the African case is the benefit of European integration in the form of the single market. When Ireland joined the Common Market, there were very few fully developed common policies outside the Common Agricultural Policy (which at the time absorbed three quarters of the EC budget). Over time, though, there have been two major ways in which EU economic integration has brought substantial opportunities for small firms: First, through the *Acquis Communautaire* and, second, through the benefits arising from structural funding, in particular in terms of infrastructural development. The latter has brought significant benefit to Ireland. Beyond its costs (such as the regulatory burden), the *Acquis* can confer many advantages to small firms in the medium to long term. These firms will be able to benefit from the entire (completed) internal market of about 450 million consumers; this opens up many opportunities for those SMEs who are able to position themselves in critical market niches. The Single Market and deregulation in the EU facilitate cross border trade by small firms engaging in flexible specialisation. The Single Market can also be helpful in attracting market-seeking FDI, an element which is very much missing from the African case.

The EU is a unique project whose essential basis has been political, to avoid another war between Germany and France. From its beginnings in the European coal and steel community, it has evolved into an integrated single market of 450 million people. Many of its member states have also adopted a common currency and a common monetary policy together with many other measures of deep political integration. Such far reaching integration is clearly beyond the capacities of SSA countries. However, there are substantial benefits, economic as well as political even from the limited regional integration which some countries have attempted. There are also a few reasonably well functioning examples of integration in African countries, notably in Southern Africa. The emphasis in the more successful of these late integration projects has been less on trade integration but more on integration of transport as well as in other spheres of

infrastructure. Over time these countries may be able to cooperate on monetary matters as well as on trade and investment. The possibilities of African economies to be able to benefit from the kind of assistance which Ireland received from the EU may not appear to be a practical proposition for African countries. Yet it may not be entirely fanciful. Who is to say that to acknowledge the contribution of Afro-Americans to building up modern United States, let alone to right the historic wrongs, a President Obama, may not launch the equivalent of a Marshall Plan for African countries. Such a plan should encourage regional integration on the E.U. pattern, leading ultimately to deep integration. Even if such a grand vision does not materialise, the essential point is that ODA to African countries should be used to encourage regional integration to create a larger market for firms in participating countries as well as to provide funding for the development of regional infrastructure.

4. Viewing Development in the Round: The need for a Holistic Approach to Policy

Commonly adopted definitions of industrial policy are too narrow where the prime focus, particularly in the past, has been on subsidising firms and intervention with respect to particular sectors, even with a more recent focus on policies focused directly at the promotion of R&D and innovation and/or FDI and SMEs. We argue that good practice industrial policy is in fact much more 'holistic' in its approach and focuses *simultaneously* on both demand and supply side factors of industrial development; on micro economics as well as macro economics.⁴ Such an approach is in line with that suggested by the 'Culliton Report' (1992) in the context of Irish industrial policy. Culliton (1992) emphasised reform of the tax system; provision of infrastructural needs; a re-focusing of the education and training system; increased funding for science and technology (coupled with greater involvement by industry in steering the use of these funds); and a greater emphasis on technology acquisition. In so doing, the report stressed that the role of the industrial promotion agencies should be kept under review, and the desirability of fostering clusters of related industries building on 'leverage points' of national advantage was also highlighted.

As for indigenous industry, Culliton saw the widespread existence of grants as being often counterproductive (the argument being that it encourages a hand-out mentality). In this vein, more emphasis should be placed on: the increased use of equity finance as opposed to non-repayable cash grants; an emphasis on the need for the expansion of the indigenous sector; a reorganisation of grant awarding agencies into two main agencies, one of which would address the needs of foreign-owned industries, the other the needs of indigenous ones. Culliton was also at pains to stress that the Irish

⁴ Singh (1995) comments on the inter-relationship between industrial policy and macro economic stability with particular reference to the experience of East Asian countries.. To the extent that industrial policy was effective in Japan or the Republic of Korea in relieving the balance-of-payments constraint, it will also have aided macroeconomic stability. A current account balance at the desired growth rate can help to avoid the stop-go cycles which many economies experience. This, in turn, will lower the cost of capital since for a given savings rate in the economy, other things being equal, the more variable and unstable the economic performance, the higher the interest rate. Similarly, faster economic growth also leads to faster growth of real wages, and hence enhances social stability and the political legitimacy of the socio-economic order. Thus, macroeconomic stabilization and industrial policy interact with each other in a virtuous circle of cumulative causation.

Department of Industry and Commerce was overly focused on operational matters and needed to place industrial policy formulation and evaluation at the centre of its activities. We argue that a 'good practice' definition of industrial policy includes all of these but also needs to emphasise other factors such as well functioning labour and credit markets, an appropriate macro-environment, and attempts to build consensus over appropriate policy direction.

We broadly agree with Hitchens and Birnie (1992) in their commentary on evaluating the Culliton report that the real challenge is to try to weigh the importance of the above factors with regard to the overall 'competitiveness problem' (we would however be more inclined to see this as the industrial or economic development challenge). With reference to improving competitiveness (or in our case industrial or economic development) the authors correctly point out that there is little point calling for the need to improve competitiveness "...without any satisfactory definition that can be operationalised" (p. 29). They proceed to argue that "This lack of identification of its causes and hence effective solutions is an impediment to a satisfactory industrial development policy" (ibid). Therein of course lays the challenge for policymakers regardless of country.

Thinking back to Ireland's less favourable times, the preface to the Culliton report (1992) opens its narrative with the following comment: "over the past six months we have considered industrial policy bearing in mind the 260,000 people who are unemployed. We have concluded that there are no short term solutions, no quick fixes and no soft options left" (p. 7). In addition, it notes; "Ireland's economic problems are deep-rooted and persistent. Their resolution will require patience, determination and a fundamental re-appraisal of our strengths and weaknesses" (p. 7).

Following on from this broad and holistic view of what industrial policy should comprise, in the Irish case we can identify a range of factors which played a significant part in Ireland's recent 'catch up'. These include:

- (1) Currency devaluations in 1986 and 1993 which were then locked into the single currency; the Euro's post-2000 depreciation in turn benefited outward orientated states such as Ireland;
- (2) A series of corporatist social pacts from 1987 where trade unions limited wage increases in return for income tax cuts. These have allowed rapid growth without inflation rising too high and have also enabled rapid employment growth;
- (3) A rapid expansion in labour supply, in part through net in-migration.⁵ The demographic shifts Ireland has experienced are unique within the EU, with an even balance between natural growth and migration (Salt 2005: 49)⁶;
- (4) An interventionist industrial policy which has targeted certain sectors for FDI but has also recognised the limitations of FDI-based growth and somewhat belatedly

⁵ Ireland has the highest fertility rate in the EU, and between 1981 and 2001 experienced a population increase of 15 per cent, from 3.5 million to just over 4 million in 2004 (NESC 2005: 1).

⁶ UNCTAD (2007; 25) notes that monetary or non-monetary resource transfers by migrants to their home countries are increasingly recognized as an important source of financing for development in Africa, being the second largest source of development capital flows to developing countries.

has sought to better link foreign plants with domestic firms and has also tried to develop indigenous capabilities and improvements in entrepreneurship, labour skills and research and development.

This analysis has implications for the design of industrial and other policies in other small, open and peripheral economies. We suggest that whilst important lessons may be learned, they may not be those picked up by mainstream commentators such as Sapir et al (2003). Furthermore, it should be noted that a range of factors came together: some more by luck than by judgement, and that the Irish catch-up should have happened much earlier had it not been for previous policy mistakes, particularly at the macro-level.

Indeed, on the macroeconomic-side, stabilisation was an important part of finally 'getting things right' in Ireland. By the mid-1980s, the fiscal deficit in Ireland had grown to over 12% of GDP and the public debt ratio was approaching 120%. The recognition of the need to address these imbalances led to both the social pacts after 1986 and a process of fiscal consolidation achieved by the government reducing expenditure; over the two year period 1988-1989, the ratio of expenditure to GDP was reduced by 9% (see Bailey et al, 2007). The pain of adjustment was eased both by EU funding and an improved external environment with reduced interest rates and improving demand (Lynch, 2005).⁷ Of key relevance, the impact of EU structural funding assistance starting in 1988 should not be underestimated: one study suggests that the cumulative effects of funding may have been to raise the level of GDP by over 4 per cent (Schweiger and Wickham, 2005: 50). Another suggests at least approximately 0.5 of a percentage point to GNP growth during the 1990s (Barry et al, 2001: 549). In other words, external funding gave Ireland just enough room to stabilise its economy and to make investments (especially in infrastructure) designed to boost competitiveness; this maybe relevant for African economies in the context of overseas development assistance. Similarly, in the Africa case, UNCTAD (2005; 34) notes that overseas development assistance (ODA) could trigger such a "growth process if it is focussed on financing pro-growth public investment such as economic infrastructure".

In addition, in the Irish case, currency depreciations which took place in 1986 and 1993 assisted Irish competitiveness; the latter in particular was a 10% depreciation which was then locked into Euro entry. Whilst there was a revaluation of the Punt before Euro entry in 1998, the depreciation of the Euro after its launch delivered a further 20% boost to Irish competitiveness given its external-orientation in trade towards non-Euro zone economies. That this did not feed through into higher inflation is in part due to the corporatist social pacts.

Such corporatism has been a long-standing central feature of Irish economic policy, with the establishment of the National Economic and Social Council (NESCC) in 1973. As

⁷ Quite why the Irish economy prospered at this time when the state pursued a very restrictive fiscal policy has been the subject of much debate. The European Commission saw it as an "expansionary fiscal contraction" which led to improved confidence and greater consumption and investments (EC Commission 1991; McAleese 1990). Others have stressed the Lawson boom in Britain which raised demand for Irish products and fall of the oil-prices; "Irish policy makers were just lucky that their adjustment was carried out at a time when world growth became buoyant and world interest rates were falling" (Bradley et al. 1993). Kennedy (2001: 131-2) also suggests that growth in the US economy and the advent of the Single Market after 1993 were important factors.

noted, by the early 1980s, Ireland faced a 'crisis' as the government had embarked on deficit-financed expenditure programmes after the oil price rise of the early 1980s (and indeed the early 1970s). The existing development strategy based on attracting FDI was also criticised for its failure to support domestic industry (Telesis, 1982; Culliton, 1992). Trans-nationals responded to the crisis by cutting investment and repatriating profits, contributing to a deficit on the balance of payments amounting to around 10% of GNP. Meanwhile, unemployment rose to around 20% of the labour force.

At this crisis point, the major political parties recognised that an expansionary fiscal policy was no longer an option for Ireland as a small open economy. A social consensus for change emerged. Key to this was the proposal by the trade unions in 1984 for a coordinated approach involving restrictive income policies, or 'partnership agreements'. Indeed, Kennedy (2001: 135) argued that without partnership agreements, it is unlikely that unions would have tolerated a rise in the profit share of national income (see below). Developing a shared view of what needs to be done certainly seems to have been a key element in enabling the Irish catch-up.

Between 1988 and 2005 there were six social partnership agreements between government, unions and employers. The original programme was the Programme for National Recovery (PNR) which ran from 1987 to 1990.⁸ The PNR set out a strategy to raise competitiveness with four main components, which have been retained and developed over time in each of the subsequent partnership agreements with later agreements having broader coverage (including chapters on greater social inclusion, equality, enterprise culture, small business, agriculture, public service modernisation of and a commitment to support partnership at the enterprise level):

- A commitment to reduce the level of public debt and maintain the internal and external stability of the Irish currency. This has focused on creating low inflation and interest rates and a positive climate for investors. From the mid 1990s onwards this has tied into the EU's Maastricht Criteria and Stability and Growth Pact (SGP).
- Restraining wage rises in order to improve cost competitiveness. An incomes policy became an essential part of the 'new development strategy'. Through the pacts the government has compensated for wage restraint by lowering income taxes, although by 2003-2006 this had possibly reached the limits of what was achievable.
- To boost competitiveness, the pacts have included structural reforms in several areas such as industrial policy and taxation. The latter was seen as needing reform to encourage employment creation, being seen as biased towards capital and property.

⁸ The pattern applied in the PNR was followed in successive pacts. An NESC report evaluates past experience and lessons, and provides a focal point for negotiations. Social pacts provide a mechanism for monitoring implementation and evaluation of the programmes. The Central Review Committee (CRC) was established in the PNR for this purpose, and includes representatives of the Government and the social partners. The CRC is supplemented by working groups as well as informal contacts between government and the social partners. Successive social pacts have broadened stakeholders involved in the negotiation as well as the focus of agreements.

- Social justice has been seen as important and there have been improvements in welfare payments for the least well-off.

The Irish experience, then, would suggest the importance of strong institutional arrangements in fostering sound economic performance and social cohesion around development objectives. In addition to this, as Andreosso-O'Callaghan and Lenihan (2006) detail, a range of other factors came together to enable Ireland to catch up with other European economies, including:

- A modern telecommunications network: Movement towards a modern telecommunications network was greatly aided by the decrease in telecommunications costs which subsequently reduced the real costs associated with firm location in a peripheral economy such as Ireland.
- Human capital accumulation: In contrast to other peripheral host countries for foreign investment, Ireland had a relatively skilled (and English speaking) labour force. Yet it is worth noting that rapid economic growth in Ireland has taken place without much investment in innovation. By EU and international standards, and in spite of its relative current wealth, Ireland still suffers from a low R&D to GDP ratio (and/or R&D/GNP ratio). In contrast with one of the key lessons advocated by mainstream commentators, modern economic growth in Ireland does not owe much to innovation.
- Competition policy and deregulation: The introduction of competition policy and deregulation in the early 1990s was important in terms of delivering on cost competitiveness for firms using Ireland as an export platform (see Braunerhjelm et al., 2000).
- A shift in the type of products being traded internationally: Geographical disadvantage may not count as heavily anymore. As Krugman outlined: "...changes in both the nature of what nations trade and in how they carry out that trade has shifted the balance of geographical advantage in a way that is favourable to Ireland" (Krugman 1997, 44).

In referring to this well trodden ground regarding the Irish growth factors, we simply wish to highlight that there were many factors which contributed to the success of the Irish economy particularly from around 1994 onwards. The industrial policy approach adopted by the Irish government was only one feature in the myriad of factors which contributed to the Irish success story. Almost all of the factors alluded to above would have impacted to a very large extent on the Irish business environment at the time. We would still suggest (see below) that there may be potential for government intervention in the SME sector in small economies such as those in sub-Saharan Africa to lead to significant improvements in the key growth indicators of these countries.

5. A Key Role for Foreign Direct Investment

It is recognised that foreign direct investment (FDI) flows to Africa, although increasing, are "still too limited in geographical coverage and focused on extractive industries to have a significant effect on employment creation and poverty alleviation" (UNCTAD, 2007; 1). A key cause of this is the high degree of risk and poor business environment, which deters FDI. According to UNCTAD (2007; 46), these impediments include "(a) poor infrastructure, (b) high entry costs, (c) labour market constraints, (d) low investor protection, and (e) high taxes and a cumbersome tax system". On the tax front,

UNCTAD (ibid) notes that a typical firm in sub-Saharan Africa pays the equivalent of 71% of its profits in taxes, some 15% percent higher than the second-highest rate, paid in Europe and Central Asia.

In contrast, FDI, notably from the United States, has been a major trigger for economic growth in Ireland. Indeed, relative to the size of the economy, Ireland has one of the highest levels of FDI inflows in the world. Whilst successive Irish governments have welcomed FDI since the 1950s, from the early 1970s onwards the government approach shifted towards a greater emphasis on selectivity and careful targeting, with pharmaceutical and electronics especially targeted as possessing promising opportunities. These industries were ideal for peripheral locations in that they were characterised by relatively low transportation costs and high growth rates (Braunerhjelm et al. 2000). Furthermore, the US was targeted as the most probable market for such projects given the likely benefits that would accrue to US companies using Ireland as an export base within the EU. It is important to note that the promotion and assistance of particular sectors was well timed. For example, the extension by the Irish government of financial incentives to internationally traded services just as they were about to grow in importance was a particularly timely intervention. Later, during the 1990s, industrial clusters in such sectors began to develop which involved linkages, spillover and sub-supply relationships with SMEs (see below). There was also a demonstration effect in operation, whereby the positive experiences of foreign investors in Ireland stimulated further FDI. If strategic targeting and a more focused approach to FDI was a key part of the 'success' of FDI, this raises the question as to what sectors small African countries should be targeting?

Whilst the high levels of FDI were largely brought about by a corporate-friendly environment offering the lowest corporate tax rate in the EU, it should be noted that these tax breaks had existed for decades with limited impact on economic success; indeed the corporate tax rate on manufactured exports was zero from 1957 to 1981, then 10% and later 12.5%. Other European economies have had such rates without attracting such levels of US FDI – in part this may be because of the cultural links between Ireland and the US where many US citizens can trace their ancestry back to Ireland, a factor which cannot be replicated or seen as a 'lesson' for others. In a similar vein, House and McGrath (2004) note that the emphasis on education and training and the favourable corporate tax environments were both already in place before the mid-1980s when the economy was still stagnant (ibid.).

Of particular note was the recognition by the Irish government in the late 1970s and early 1980s that foreign transnationals were in effect branch plant operations and that the policy of heavily subsidising FDI was producing little in the way of wider spillovers for the economy. Because of this, policy began to adopt an even more selective approach to the FDI, focusing more on high-tech and higher value added firms. Transnational firms' motivations for FDI in Ireland shifted at this time, towards accessing the single market and access to skilled labour.

It should be noted that problems and challenges remain and that the picture of FDI-induced 'transformation' sits uneasily with the facts. As Honohan and Walsh (2002) noted: "the huge profits recorded by the Irish affiliates have very little to do with the manufacturing activities being conducted in Ireland. The low labor shares in value added should not be interpreted as truly implying high economic productivity of the labor and

physical capital employed by the enterprise in Ireland". A key 'lesson', as we shall see below in more detail, would actually be that spillovers from FDI are not generated automatically and that an industrial policy that targets and positions FDI is vital to ensure wider spillovers and to benefit the domestic sector. The case is not anti-FDI; indeed we recognise the value of high-quality FDI in assisting economic development. Rather, it needs to be stressed that this should not come at the expense of ignoring domestic firms. In a related vein, Buckley et al (2006) also argue that the contribution of transnationals to the Irish economy can also be overestimated by failing to take account of the following: the high level of imports (including payments for patents, royalties and other tangible inputs) and repatriated profits. Citing the work of Keating (2000), the authors show that "...sales amounted to €72 billion in 2004. However, when imports of €43 billion and profit repatriation of €19 billion are deducted the direct contribution to GNP is only 10 billion" (Buckley et al 2007: 2).

Attracting high-quality FDI and positioning it seems crucial. Here, lessons with FDI experiences in peripheral regions of the EU and take on board elements of 'good practice', for example in terms of targeting strategic sectors and linking FDI to cluster development, building trust with local managers in order to try to upgrade local plants, undertaking sector specific research on the strengths and weaknesses of local industry, providing aftercare support, targeting financial assistance at specific upgrading needs (e.g. investment in R&D rather than general support), and the monitoring of performance (see Amin and Tomaney, 1995; Bailey et al 1999). The Irish experience of selectively targeting FDI seems very relevant here and raises the issue more generally of using selective as well as horizontal industrial policy.⁹

The discussion of this section will be seriously incomplete without reference to the fact that in the practice of industrial policy in East Asia both Japan and South Korea discouraged FDI rather than to seek it. Singh (1995) noted that among developing countries the Republic of Korea was second only to India in its low reliance on FDI inflows. Foreign capital stocks totaled just 2.3 per cent of GNP in 1987 for the Republic of Korea, above the 0.5 per cent estimate for India, but far below the levels of 5.3 per cent for Taiwan Province of China, 17 per cent for Hong Kong, a massive 87 per cent for Singapore, 10 per cent for Brazil and 14 per cent for Mexico (UN, 1993). In the view of the World Bank economists, this discouragement was a self-imposed handicap, which was compensated for by the fact that both countries remained open to foreign technology through licensing and other means (East Asian Miracle, p.21). Singh noted that World Bank economists did not ask the question: if the governments of Japan and the Republic of Korea were as efficient and flexible in their economic policy as they themselves suggested (to account for their long-term, overall economic success), why did they persist with this apparently wrong-headed approach for so long?

An alternative interpretation is that the approach was perhaps not so wrong-headed. It was "functional" within the context of the overall industrial policies which the two countries were pursuing. First, it would have been difficult for MITI or the authorities of the Republic of Korea to use "administrative guidance" to the same degree with foreign

⁹ See Bailey and Cowling (2007) who note that industrial policy in the US and Japan has involved both vertical measures in targeting new technologies and emerging industries, and horizontal measures to support all industries, suggesting that the current focus in Britain and the EU with the horizontal aspects of industrial policy has been largely misplaced.

firms as they were able to do with domestic ones. Secondly, as UN (1993) rightly emphasized, there was a link between the national ownership of large firms and their levels of investment in research and development. The Republic of Korea had, in relative terms, by far the largest expenditure on R&D among developing countries: 1.9 per cent of GNP in 1988, compared with 1.2 per cent for Taiwan Province of China (1988), 0.9 per cent for India (1986) and Singapore (1987), 0.5 per cent for Argentina (1988), 0.6 per cent for Mexico (1984) and 0.4 per cent for Brazil (1985). Korea's performance in this area outstripped that of many developed countries- for example Belgium (1.7 per cent in 1987), Denmark (1.5 per cent in 1987) and Italy (1.2 per cent in 1987). It was, of course, still below that of industrial super-powers, Japan (2.8 per cent in 1987) and Germany (also 2.8 per cent in 1987).

Thirdly, Freeman (1989) stressed another important advantage of the policy of mainly rejecting foreign investment as a means of technology transfer. This, he argued, automatically placed on the enterprise the full responsibility for assimilating imported technology. This was far more likely to lead to total system improvements than the "turn-key plant" mode of import or the foreign subsidiary mode.

It is important to emphasize that Japan and South Korea's rejection of FDI did not mean that these countries are not interested in importing foreign technology. Quite the contrary. Japan after all has been attempting to obtain technology from abroad for a hundred years. The reason why it did not favour FDI as a source of technology was that it was *inter alia* comparatively much more expensive than licensing.

The above considerations may also be valid for at least some SSA countries who may also prefer to import technology through licensing rather than through the medium of FDI..

6. Indigenous Firms and Domestic Entrepreneurship

Bailey et al. (2007) have argued that the Irish government, on recognising the limitations of solely focusing on FDI as an engine of growth, also sought to develop indigenous small and medium sized enterprises (SMEs) and entrepreneurship more generally. Whilst acknowledging the merits of this opinion, we would also suggest that the focus on indigenous SMEs and entrepreneurship by Irish policymakers should have come much earlier. Despite the fact that as outlined by Andreosso-O'Callaghan and Lenihan (2006: 282) that "...even as far back as 1979, some 95 per cent of all manufacturing units could be classified as SMEs", it is nevertheless quite astonishing that there was no formal focus by the Irish government on the small firms sector *per se* until 1994 with the publication of 'The Task Force on Small Business Report' (1994). This was followed a year later by the European driven 'Small Business Operational Programme' (1995). The SME story in Ireland is an indigenous one as a majority of all indigenous firms in Ireland are classified as SMEs.

One could justifiably argue that the Irish government to a large degree overlooked the indigenous (largely SME sector) until the mid 1990s. As such, this represents a key policy 'failure' and should be avoided by small African states. Admittedly, in the Irish case there were grants available to indigenous firms to start-up and expand - but the focus on indigenous and SME firms was over-shadowed by the prime focus by the Irish government on FDI. This is echoed in comments from various reviews of industrial policy over the decades; most notably the 'Telesis Group' (1980), which highlighted an over-

emphasis on foreign industry. The Culliton report noted above also emphasised the need to expand the indigenous sector, noting that “the focus instead must shift decisively to indigenous companies. The view of... Porter and his colleagues...is that in Ireland the shift has been “too little too late” and that there has not been a full commitment to the slow process of developing a broader base of indigenous firms” (p. 67). However, it was not until the ‘Task Force on Small Business Report’ published in 1994 that the focus on the SME sector by Irish policy makers truly began in earnest.

Some of the problems facing small firms in Ireland are similar, albeit in a much more intense form, in Africa, most notably the issue of access to finance. As UNCTAD (2007; 15) notes, this is especially the case for the small domestic enterprises in the informal sector that represent the vast majority of firms. Indeed, it is thought that firms in sub-Saharan Africa fund between one half and three quarters of their new investments from their informal savings. In order to address this, microfinance systems have emerged in recent years in order to address some of the shortcomings of the financial system in Africa.

More generally, Acs *et al* (2007) suggest that entrepreneurs in Ireland are held in high esteem, and that this has been beneficial for the economy. This is questionable. Indeed, Culliton (1992) highlighted “...the negative attitude towards enterprise that is prevalent in this country” (p. 22) and proceeded to outline “...a deep-rooted prejudice against failure in business. The stigma that attached to a failed enterprise very often inhibits the individual from ever trying again” (p. 22). Perhaps it could be argued that such a negative attitude no longer exists. However, ten years later from Culliton, Goodbody Economic Consultants (2002), although acknowledging an improvement still noted that the “non-acceptance of ‘failure’, both on the part of financial institutions and the general public is still perceived to be an issue by Irish entrepreneurs” (p. iv). They do however, admit that “these attitudes are somewhat at variance with recent international studies which indicate that the general public’s attitude towards entrepreneurship in Ireland is now highly favourable” (p. iv).

7. Spillovers, Linkages and Clusters

There was a general belief, hope and anticipation in industrial policy circles that indigenous SMEs would ‘... grow from foreign firms through linkages and spillovers’ (Andreosso-O’Callaghan and Lenihan, 2006: 280). This spillover argument is often used by governments to justify subsidies for FDI, but such spillovers are not guaranteed. It is to this issue that we now turn, asking how successful (where they existed) were Irish Government policy interventions in achieving successful linkages and spillovers between incoming transnationals and indigenous (largely SME) firms? The prevailing literature tells us that spillovers from transnationals if present leads to increases in the productivity of domestic firms. This can happen via three main routes: (1) demonstration effects; (2) competition effects, and; (3) labour market effects. As noted, spillovers are not an automatic occurrence but are driven by the characteristics of the host economy including its degree of economic development, its ability to assimilate imported technology and generally its absorptive capacity (see for example, Blomström and Kokko, 1996 and Blomström *et al.* 2000).

In this section we briefly highlight the key evidence regarding the prevalence of linkages and spillovers in Ireland. Most notably, despite the rhetoric of FDI-led adjustment, there is significant evidence to suggest that the Irish economy operates according to a Lewis-type dualism "...with little relationship/interdependence between MNEs and (local enterprises) and each developing according to its own pattern" (Ugur and Ruane, 2004: 3). As such, each sector appears to have developed according to its own pattern.. Such problems of 'dualism' remain a major problem in many developing economies, for example UNCTAD (2007;6) notes that in Africa, FDI is "...relatively volatile and tends to focus on extractive industries with very few linkages to the domestic economy".

In the Irish case, there is evidence from some sectors at least of increased linkages over time, such as in electronics (see Görg and Ruane, 2000; 2001), even if foreign (particularly large) firms have lower linkages – perhaps due to the necessary scale needed to supply such firms (ibid.). Other authors (e.g., Kearns and Ruane, 2001) suggest that the level of R&D activity in a plant is a key determinant with regards to firstly, lengthening the duration over which that plant will stay in Ireland and secondly with respect to improving the quality of the employment generated in the plant. For high-technology sectors, the evidence of spillover effects is even more evident (Görg and Strobl, 2002; 2003; Barry and Van Egeraat, 2008). Here, there is evidence to suggest that the presence of transnationals in high-technology sectors has had a "life-enhancing" effect on indigenous plants in Ireland, improved indigenous entry rates, and has improved links between manufacturers and components suppliers in sectors such as IT.

Other contributions (e.g., from Heanue and Jacobson, 2003; Forfás 2004; Lenihan and Sugden, 2008) have also explored the issue of linkages in Ireland. Lenihan and Sugden (2008) argue that the National Linkages Programme introduced in 1985 was partly in response to criticism of an industrial policy approach by Irish government that relied on transnationals and was subsequently restructured by Enterprise Ireland with a focus surrounding the issue of the globalization of local supply industry. This approach resulted in a move towards the building of supply networks and chains as opposed to actual direct local company linkages. Forfás (2004) in analyzing the impact of the National Linkages Programme argued that it stopped short of reaching its potential, while Heanue and Jacobson (2003) argue that there was some success up to the 1990s but thereafter the impact was insignificant.

In terms of more traditional sectors, the Culliton Report (1992: 31) argued that only a small proportion of potential linkages between foreign and traditional firms were being realized; and that "[i]n general,.... policy to promote industrial linkages has not lived up to its expectations. It is only a mild exaggeration to say that most of the newer foreign firms operate here as essentially an industrial enclave" (ibid.). The overriding conclusion on the success or otherwise of linkages in Ireland is aptly summed up by Ruane (2001) when she concludes that "it is hard to either totally prove or disprove" whether linkage policies have been successful.

A more detailed example can be seen in the case of the IT sector. This is of particular importance in the Irish case, as software firms have been regularly cited by commentators within and outside Ireland as one of the most successful examples of FDI spillovers (see Andreosso-O'Callaghan and Lenihan, 2006). Buckley et al (2006) outline that the majority of foreign and domestic firms in the software industry in Ireland are located in the same region. Citing the work of Crone (2002), they outline that in excess of 70% of MNE subsidiaries and 87% of domestic firms are located in and around the greater Dublin area. They proceed to argue that such concentration of indigenous and

foreign software firms in one area is likely to facilitate increased technology transfer between the two sets of firms. Barry (1999) argued that software is an industry where one-third of all indigenous software firms have been started by ex-employees of transnationals. In a similar vein, in the case of the software industry in Ireland, evidence indicates that the vast majority of indigenous firms were founded by former employees of software and hardware transnationals (Buckley, 2005; Buckley et al., 2006). More precisely, these authors outline that 44% of new venture founders were employed in software and hardware transnationals immediately prior to establishing their own enterprises.

In explaining such trends, Buckley et al (2006) argue that a number of factors were likely to have contributed to the maximisation of productivity spillovers to the indigenous software industry in Ireland. These include: (1) the fact that transnationals choosing Ireland could be described as technologically superior (i.e. they employed high end technologies); (2) the transnational software sector in Ireland is almost entirely export focused; (3) former transnational employees who subsequently went on to establish their own new ventures were key knowledge transfer agents to the indigenous software firms; (4) the indigenous software firms demonstrated a high absorptive capacity, e.g. via a high degree of tertiary educated employees; (5) the clustering of indigenous and transnational firms; and (6) the indigenous software sector was enhanced by Irish government policies which focused on a reorientation of the education system in the 1980s with the objective of providing a pool of graduates for technology focused industries.

Related – and to a degree a necessary precursor - to the maximization of FDI spillovers and linkages is the development of industry clusters. One of the key reasons for the promotion of cluster policy is so that firms located in particular clusters will indeed engage in linkages and spillovers with each other. Accordingly, we now turn to the specific question of just how successful has the creation of clusters been in Ireland? A focus on creating sectoral and spatial clusters in Ireland really only began in earnest in the 1980s (Buckley and Ruane, 2006). Such efforts were focused around two key high technology sectors, namely, electronics and chemicals/pharmaceuticals. More specifically, four segments of the electronics sector were targeted: microprocessors, software, computer products and printers.

In line with this strategy, some of the key players in these sectors - namely, Intel and Microsoft, were attracted to establish operations in Ireland (ibid.). As such, with the location of such firms, and subsequently Hewlett Packard in printing, Ireland to all purposes had an “electronics hub” and the “spokes” were soon populated by dozens of smaller enterprises (ibid. 1620). As such, Ireland could be said to have been a significant beneficiary of the formation of clusters (Krugman, 1997); with the presence of the above-named firms contributing to the average share of US FDI in electronics to Ireland increasing to 27 per cent between 1994 and 2001 - compared to a rate of less than 12 per cent for Irish manufacturing as a whole (Buckley and Ruane, 2006). The two other key sectors where industrial clusters were created are: the chemicals and pharmaceutical sectors, with these firms clustering primarily in the Cork region of Ireland. However, unlike the case experienced in the electronics sector, where production linkages between firms developed this was not the case with the chemicals and pharmaceuticals clusters. Another cluster also developed in the medical devices sector. The latter predominates in the west of Ireland, with many of the firms in this area being attracted to locate there due to a favourable attractivity policy by the Irish government (primarily in the form of high subsidy inducements). This particular cluster is

however less concentrated (when compared to the other clusters in Ireland) and the average size of business operating in the medical device cluster is also relatively much smaller (Buckley and Ruane, 2006).

The empirical evidence regarding the impact of clusters in Ireland is, however, limited; with what evidence there is suggesting that there has been relatively little sectoral clustering between transnationals and local firms, at least in low-tech sectors and manufacturing overall (Gleeson et al, 2005; Buckley and Ruane (2006). As seen from the above discussion, there does however, appear to have been some clustering between transnationals and local firms in high-tech sectors. As such, in concluding this discussion of the success or otherwise of cluster policy in Ireland, it seems that the prevailing evidence (where it exists) is indeed mixed and inconclusive – and warrants further examination. The Irish government (Report of the Small Business Forum, 2006) has recognised, however, that as more low-value-added activities migrate to lower-cost countries, a greater proportion of GNP will have to be produced by indigenous firms (predominantly SMEs). Other reports commissioned by the Irish government (e.g. a study by Goodbody Economic Consultants, 2002) has also focussed on the importance of entrepreneurship and more specifically on eliminating the barriers to entrepreneurship in Ireland. Whilst welcoming this focus, we would argue that it should have come much earlier and we see this as an important ‘lesson’ for other states as they look for lessons to be learned in terms of industrial policy trajectory. This only serves to reiterate our point that a holistic industrial policy needs to account for the limitations and fragilities of FDI-led growth and hence also promote measures to grow domestic capacity.

It is true to say, though, that the limitations of FDI-led growth have been increasingly – if belatedly – recognised. Ireland is now vulnerable due to the downturn in the US economy, given its overwhelming reliance on US-based FDI. As such, at this critical period, Ireland faces increasing competition for FDI from emerging economies - and Ireland is no longer a cheap country in which to do business, due to rises in wages and raw material costs. Whilst this has been realised, a more holistic approach to policy development at the outset could have avoided some of the problems we identified above, thereby enhancing economic development, a point which small, peripheral economies elsewhere may wish to note.

The discussion of this section and the last will again be incomplete without reference to the role of large indigenous firms in the development process. In many countries, such firms which are large by developing countries standards but rather puny in international terms are the spearheads of spreading technical change and productivity growth. Amsden (1989) is the leading exponent of the critical role of large indigenous firms in late industrialization. What is, therefore, required in industrial policy for developing countries is the right balance between the promotion of large and small firms. To illustrate, the Indian industrial policy in the period 1950 to 1980 is an example of a policy which encouraged small firms at the expense of large firms in order primarily to safeguard employment. Despite its good economic rationale, this policy is generally regarded as being a failure as it stopped the growth of large firms and thwarted their role in the development process. See further Little (?), (Ahluwalia (?)) and Singh (forthcoming).

8. Policy Evaluation

In view of the types of market failures that are likely to arise in the SME sector noted above (e.g. the finance gap), a realistic route to help improve the efficiency of such markets is through the services provided by industrial development agencies. The extent to which the development agencies in Ireland have produced the expected effects is an issue of significant and ongoing debate. One key issue that emerged in discussions (particularly pertaining to the 1990s) is that of agency duplication of services provided. The Industrial Evaluation Unit (1999) found that in the region of 39 per cent of firms that received support from more than one agency availed of it within the same time period. The prime lesson to be learned in this regard is that the support environment provided by government to firms needs to be clearly targeted and focused in its delivery. A clear underlying rationale for a specific type of intervention should be provided in all cases.

One of the outcomes of EU funding in the case of Ireland is that over time there was increased pressure to engage in an evaluation of industrial policies (primarily to begin with for reasons of accountability). Indeed, guidelines from the European Commission (EC) as a result of Ireland being a Structural Fund beneficiary were definitely a key driving force behind the much greater emphasis placed on evaluation in Irish policy making circles from the early 1990s onwards. As outlined by Andreosso O' Callaghan and Lenihan (2006) in the context of the New EU Member States, but we argue here that the same issues are also pertinent to the small African states, a number of possible strategies can be adopted in the context of industrial policy evaluation (options 1-3 are not mutually exclusive and a mixed approach is possible):

1. Wait until pressure comes from outside (in Ireland's case this was from the EU. In the case of the African economies, the impetus may come from agencies providing overseas development aid) to evaluate. This was the stance largely adopted by Ireland from around 1993 onwards;
2. Familiarise themselves with 'best practice' or at least 'good practice' evaluative frameworks and methodologies adopted internationally (reflecting on the key issues learned) so that they are in a position to know 'how' (deciding on the methodological approach to be adopted is one of the key challenges for evaluators) to evaluate when requested to do so by external donors or organisations;
3. Look upon evaluation as a useful tool in its own right. This would involve adopting a proactive approach whereby evaluation would take place at the three stages of the industrial policy process: policy formulation (ex-ante evaluation focusing on the market failure argument as a rationale for intervention and fundamental economic principles such as opportunity cost); policy implementation and policy accountability (ex-post evaluation) (Rist 1995). Such an approach not only sees evaluation as something that must be undertaken due an external pressure (e.g. donor or funder) but rather sees evaluation as a worthwhile activity in terms of lessons to be learned that can subsequently be incorporated into future policy interventions. There is no doubt that many would regard evaluation as a 'luxury' in African economies where resources are already scarce. We would argue however, that if robust evaluations are carried out (which ask the right questions relating to issues such as deadweight, displacement¹⁰, multipliers and linkages) this may lead to improved future industrial policy interventions

¹⁰ For a discussion of the concepts and estimation of deadweight and displacement, in the context of Ireland, the interested reader should refer to Lenihan (1999 and 2004) and Lenihan and Hart (2004).

which in the long run could prove to be extremely cost effective and efficient. Clearly, this is an area that merits further investigation.

Ireland should certainly not be regarded as a role model in the context of industrial policy evaluation, having hovered around option 1 for most of the 1990s, although of late, it is certainly getting nearer to option 3. This is highlighted by Lenihan et al (2005; 14), who argue that “the methodological rigor of Irish industrial policy evaluations has been improving in recent years”. It was not until some pressure came from the European Commission that Irish policy makers and academics alike truly began take industrial policy evaluation seriously. This is somewhat difficult to comprehend given that an interventionist approach to industrial policy has been a feature of the industrial policy stance by successive governments in Ireland since the 1950s, with the first grant to firms actually being awarded as far back as 1952. The degree of subsidy intervention in the Irish case is aptly summed up by Lenihan et al (2005) when they show that over the period 1980-2003, in the region of €5.5 billion was provided by the four Irish development agencies in the form of grant payments and equity investments. The key point is that any policy intervention should bring about a level of ‘additionality’ in excess of what would have happened if no such intervention had taken place (i.e. explore the counter-factual, which involves trying to assess what would most likely have happened if no intervention had taken place). In this regard, Storey (2000) argues that a prerequisite to any evaluation is that clear objectives be specified. More precisely, he argues about the “...impossibility of conducting an evaluation in the absence of clearly specified objectives for the policy concerned” (p. 177). This calls for a clearly defined set of policy objectives from the outset, and to allow for ‘trail and error’ as an important part of policy development. As UNCTAD (2007; 87) notes, referring in particular to East Asian experience:

“A simple replication of the East Asian developmental State, even if there were such a thing, would not do. As a matter of fact, there is no such thing as the East Asian model of a developmental State that could be recommended to Africa. Indeed, the intrinsic differences among the Asian experiences underscore the importance of “trial and error” as an important ingredient of policy formulation and implementation in developmental States. This process should benefit from constant monitoring and the feeding of the lessons learnt from monitoring into new policies to overcome earlier shortcomings”.

Given some of the failures (as well as successes) of ‘traditional’ Japanese industrial policy (see Bailey and Sugden, 2007), some may conclude that Katz (1998) is correct in arguing that ‘development state’ policies should be avoided. However, in a sense economies are always in a state of ‘development’; for us, the key is to adapt and tailor policies holistically to that stage of development.

An additional challenge (as with all calls for evaluation) is who should actually carry out such evaluations. The follow-on question is who should evaluate the evaluators? Clearly, in the face of the level of corruption and lack of resources to carry out some evaluations in some of the African economies, this issue is particularly pertinent.

9. Reflections on the East Asia ‘developmental State’

Is there an East Asian model? This is a prior issue in considering the relevance

of the East Asian developmental State to African countries. In some academic circles, it has become customary to deny the existence of such a model and to argue that if it existed at all, it was not very successful. Yet businessmen and men of affairs have no hesitation in identifying the “Asian way of doing business”. See for example Alan Greenspan (1998). Singh (1999) suggested that there would be general agreement on the following characteristics of the East Asian model:-

1. The close relationship between the government and business where the government did not do anything without consulting business and vice versa.
2. Many interventions were carried out through a system of ‘administrative guidance’ rather than through formal legislation.
3. The relationship between the corporation and the financial system in countries like Japan and Korea was also very different from that of the US and the UK. The former countries followed, for example, the so-called main bank system which involved long-term relationships between the corporations and the main banks. This enabled Japanese or Korean managers to take a long-term view in their investment decisions. The managers were not constrained by the threat of hostile take-overs on stock markets as in the case in the Anglo-Saxon countries.
4. There were differences in the internal organisation of East Asian corporations compared with those of the US and the UK. The former involved co-operative relationships between management and labour, epitomised by the system of lifetime employment. This implied considerable imperfections in the labour market.
5. As for the competition in product markets, such competition was not regarded by the East Asian authorities as an unalloyed good. Unlike in countries like the US, economic philosophy in the east Asian countries did not accept the dictum that “the more competition the better”. The government in these countries were of the view that, from the perspective of promoting investment and technical change, the optimal degree of competition was not perfect or maximum competition. The governments had therefore purposefully managed and guided competition: it had been encouraged but also restricted in a number of ways.
6. Following this basic economic philosophy outlined above, the East Asian government sought not ‘close’ but what might be called ‘strategic’ integration with the world economy, i.e. they integrated up to the point where it was useful for them to do so. Thus during their high-growth development phase, Japan (between 1950 and 1973) and Korea (1970s and 1980s) integrated with the world economy in relation to exports but not imports; with respect to science and technology but not finance and multi-national investment. (See further Chakravarty and Singh (1988))

The above is a characterisation of the East Asian model as an ideal type. Not all countries, or even Japan and Korea, have followed the model exactly at all times in the post-war period. As far as the government- business relationships are concerned there is a continuum with the closest relationship to be found in Korea, and the least close in Thailand. Malaysia and Indonesia fall in between. Similarly, the main bank system worked differently in Korea compared with Japan. Unlike Japan, where the ‘main banks’ were by and large private entities, in Korea for much of the period these were directly state-controlled. Only in the recent period have they been privatised. Nevertheless, there is considerable truth in the view that the Asian way of doing business and the institutional structures it has generated are rather different from those of countries like the US and the UK. Greenspan (op. cit.), Summers (1998).

With respect to the application of the model to African countries, as noted earlier, UNCTAD (2007; 87) did not regard a simple replication as being very useful. However, in line with Chang (2006), it is the case that East Asian countries, with the exception of Hong Kong, have at different times used a wide range of industrial policy measures with considerable success. Pulling together this variety of experiences, Chang (2006) argues that the success of industrial policy critically depends on how it is designed and implemented, and he highlights five main points from East Asian experience:

1. The selection of target industries need to be realistic and related both to the country's technological capabilities and world market conditions. The success of East Asian countries "owe a lot to the fact that they did not attempt to make too big a step" (Chang, 2006; 126).
2. Industrial policy needs to be closely integrated with an export strategy, especially in small economies. For example, scale economies cannot be achieved without entering the export market early on. This in turn brings us back to the relevance of the Single Market for Ireland in providing a wider market.
3. The government needs to discipline the recipients of the rents it creates through the use of tariffs, subsidies etc in order to compensate for the loss of market discipline.
4. The implementing bureaucracy needs to be both competent and politically insulated. Chang stresses that East Asian bureaucracies "improved through continuous efforts, not because of some magical historical legacy that others cannot aspire to have".
5. Close interaction between the government and private sector is necessary without the former becoming hostage to the latter. On this, Chang refers to Evans' (1995) use of the term 'embedded autonomy' to reflect the needs for both roots in society but also its own will and power. In this vein, Bailey and Sugden (2006) suggest that where Japanese industrial policy started to 'go wrong' was when it was effectively captured by giant firms for their own benefit. Recognising and avoiding such dangers seems crucial to enable policy to function for a public rather than a private benefit.

10. Concluding thoughts

As outlined in this paper, there are indeed some interesting similarities and lessons to be learned (both good and bad) by the smaller African economies from the Irish industrial policy (and other) experiences. Key amongst these is the concern expressed in this paper that industrial policy should not be seen purely in narrow terms, that is with a sole focus on attracting FDI. We argue here that there is need for a more 'holistic' approach to economic development which *inter-alia* focuses on the development of domestic entrepreneurship and indigenous firm expansion more generally as well as emphasising the importance of other supply side factors (e.g. infrastructure; well functioning labour markets). This more all-encompassing view of industrial policy and economic development may, it could be argued take a longer time to materialise. This is a difficult position for the African economies to be faced with given the extremely high levels of poverty and deprivation witnessed in many of these small African economies. We do however, argue that such a 'holistic' growth trajectory could lead to a more sustainable industrial development path, in contrast to the current situation in Ireland whereby the

recent down turn in the US economy has sent shock waves through the Irish economy given its (over)dependence on US firms.¹¹

This paper has provided some novel insights by providing a comparison between Ireland and the small African economies. To our knowledge such a comparison has not been carried out heretofore. As acknowledged in this paper, when comparisons in terms of industrial policy lessons to be learned have taken place, it tends to be vis a vis the East Asian experience (which, as seen above, undoubtedly also provides interesting economic development insights but with certain caveats).

The paper suggests that a very important contribution of the Irish model is its emphasis on corporatism rather than simply state direction in the operation of industrial policy. The Irish model is also more democratic and protector of workers' rights during the development process than the highly dirigiste East Asia model. In relation to the small size of the African economies, the paper recommends regional integration and sufficient ODA for infrastructural development.

We conclude here by making the point that some immediate actions are needed for example with respect to the financial system in the African economies. A poorly functioning financial system will continue to keep investment at low levels.¹² It is also important to bear in mind that the various small African economies each face their own industrial and economic development challenges, therefore we do not suggest a 'one size fits all' approach. As outlined by UNCTAD (2007), referring to East-Asian experience, the path to sustainable growth and development is derived from "a pragmatic mix of markets and state action, taking into account the country-specific development challenges" (UNCTAD, 2007; 61). It concludes:

"The challenge for Africa (as for other developing countries), therefore, is not how to copy any model, but how to create "capitalisms" adaptable to the unique opportunities and development challenges in each country..." (UNCTAD, 2007; 88).

¹¹ Even as far back as 1989, there were 307 US companies located in Ireland. Ten years later in 1999, the number of US companies located in Ireland still stood at 288. Whereas, the most recent year for which data is available (2006) shows that the total number of US companies has increased to 470 (with these 470 companies employing 95,515 people). In fact, in 2001, the number of US companies reached a peak at 531. This information is derived from the combined sources of UNCTAD WID (2005) Country Profile Ireland and various Annual Report from IDA Ireland (various years).

¹²On the development of stock markets and banks in Africa, see further Singh (1999b) and Singh (forthcoming)

References (INCOMPLETE)

Acs, Z., O’Gorman, C., Szerb, L. and Terjesen, S. (2007) ‘Could the Irish Miracle be Repeated in Hungary?’ *Small Business Economics*, 28: 123-42.

Ahluwalia (?)

Amin, A., & Tomaney, J. (1995) The Regional Development Potential of Inward Investment in the Less Favoured Regions of the European Community, in: A. Amin & J. Tomaney (eds) *Behind the Myth of the European Union*, pp. 201–220 (London: Routledge).

Amsden, A. (1989), *Asia’s Next Giant: South Korea and Late Industrialization*. Oxford : Oxford University Press.

Amsden, A. (ed.). (1994). ‘Reviews of World Bank, 1993’, *World Development*, vol. 22, no.4.

Amsden ,A.H. and A.Singh (1994), “The optimal degree of competition and dynamic efficiency in Japan and Korea”, *European Economic Review*, Vol. 38, No.3/4 (April), pp. 941-951.

Andreosso-O’Callaghan, B. and Lenihan, H. (2006) ‘Is Ireland a Role Model for SME Development in the New Member States?’ *Journal of European Integration*, 28 (3): 277-303.

Barry, F. (Ed.) (1999) *Understanding Ireland’s Economic Growth*. Macmillan Press Ltd, Great Britain.

Barry, F., Van Egeraat, C. (2008) ‘The Decline of the Computer Hardware Sector: How Ireland Adjusted’ *Quarterly Economic Commentary*, Spring 2008, ESRI.

Barry, F., Bradley, J. and Hannan, A. (2001) ‘The Single Market, the Structural Funds and Ireland’s Recent Economic Growth’ *Journal of Common Market Studies*, 39 (3): 537-52.

Bailey, D, A de Ruyter and N Kavanagh. 2007. Lisbon, Sapir and Industrial Policy: Evaluating the Irish Experience, *International Review of Applied Economics*, Vo.21, Iss.3, 2007, 453-467.

Bailey, D and Roger Sugden. 2007. *Kūdōka*, Restructuring and Possibilities for Industrial Policy in Japan. In D.Bailey, D.Coffey and P.Tomlinson, (ed.s), *Crisis or Recovery in Japan? State and Industrial Economy*. Cheltenham: Edward Elgar.

Bailey, D.G., Thomas, R., & Sugden, R. (1998) Inward Investment in Central and Eastern Europe: the Compatibility of Objectives and the Need for an Industrial Strategy, in: M. Storper, S. Tomadakis, & L. Tsipouri (eds) *Industrial Policy for Latecomers in the Global Economy* (London: Routledge) pp. 299–322.

Bradley, J, J Wright and K Whelan. (1993) *Stabilization and Growth in the EC Periphery: A Study of the Irish Economy*. Aldershot: Avebury.

Blomström, M. & Kokko, A. (1996) Multinational Corporations and Spillovers. CEPR Discussion Paper 1365.

Blomström, M., Kokko, A., and Globerman S. (2000). ‘The Determinants of Host Country Spillovers from Foreign Direct Investment’, in Pain, N. (ed) *Inward Investment, Technological Change and Growth* pp 34-65.

Braunerhjelm, P., Faini, R., Norman, V., Ruane, F. & Seabright, P. (2000) *Integration and the Regions of Europe: How the Right Policies can Prevent Polarisation* (London: Centre of Economic Policy Research).

Buckley P.J., and Ruane F. (2006). 'Foreign Direct Investment in Ireland: Policy Implications for Emerging Economics' *The World Economy*, 29(11): 1611-1628.

Buckley, R. (2005), *Multinational Enterprises, Productivity Spillovers and the Growth and Development of the Irish Software Industry*, unpublished Ph.D thesis, Univeristy of Limerick, Ireland.

Buckley, R., Leddin, A. and Lenihan, H. (2006) "An assessment of the contribution of MNEs to the Irish Economy", *ILL Foro de Economía Regional*, FPRG Economico de la Rioja, Logrono, La Rioga, Spain, May 9th-11th.

Chakravarty and Singh (1988)

Coates, David. (2007). The Rise and Fall of Japan as a model of 'progressive capitalism' In D.Bailey, D.Coffey and P.Tomlinson, (ed.s), *Crisis or Recovery in Japan? State and Industrial Economy*. Cheltenham: Edward Elgar.

Chang, H-J. (2006) Industrial Policy in East Asia – Lessons for Europe, *EIB Papers*, 11(2): 106-133.

Culliton, J. (1992) *A Time for Change: Industrial Policy for the 1990s (Report of the Industrial Policy Review Group)*. Dublin: Stationery Office.

European Commission (1991) *The Regions in the 1990s* (Fourth Periodic Report on the Social and Economic Situation in the Regions of the Community). Brussels: Commission of the European Community.

Forfás (1994) *Technological Innovation in Irish Manufacturing Industry: Report for the Policy and Advisory Board for Industrial Development in Ireland* by A. Fitzgerald & M. Breathnach (Dublin).

Forfás (2004) *Innovation Networks*, Dublin, Forfás.

Gleeson, AM., Ruane, F., and Sutherland, J. (2005), Promoting Industrial Clusters: Evidence from Ireland' *Institute for International Integration Studies*, Discussion Paper No 89/Oct 2005.

Global Entrepreneurship Monitor (2001) *How Entrepreneurial is Ireland? The Irish Report*, Fitzsimons, P., O'Gorman, C. & Roche, F. (University College Dublin).

Goodbody Economic Consultants (2002) *Entrepreneurship in Ireland* (Dublin: Goodbody Economic Consultants).

Görg, H., and Ruane, F., (2001) 'Multinational Companies and Linkages: Panel-Data Evidence for the Irish Electronics Sector' *International Journal of the Economics of Business*, 8 (1): 1-18.

Görg, H., and Ruane, F., (2000) 'An Analysis of Backward Linkages in the Irish Electronics Sector' *The Economic and Social Review*, 31(3): 215-235.

Görg, H., and Strobl, E. (2002) 'Multinational Companies and Indigenous Development: An Empirical Analysis', *European Economic Review*, 46 (7): 1305-1322.

Görg, H., and Strobl, E., (2003) 'Multinational Companies, Technology Spillovers and Plant Survival', *Scandinavian Journal of Economics*, 105(4): 581-595.

Greenspan (op.cit).

Heanue, K., and Jacobson D. (2003) 'Low tech policy' *PILOT-Newsletter 1*, May, DCU Business School, Dublin City University, pp 9-18.

Hitchens, D., and Bernie, E (1992) 'Evaluating the Culliton Report', *The Irish Banking Review*, Summer, 28-40.

Honohan, P. and Walsh, B. (2002) 'Catching up with the leaders: the Irish hare' *Brookings Papers on Economic Activity*, 1: 1-77.

House, D. and McGrath, K. (2004) 'Innovative Governance and Development in the New Ireland' *Governance: An International Journal of Policy, Administration and Institutions*, 17(1): 29-58.

ILO (2007), *World Employment Report*, Geneva, ILO.

Industrial Development Authority (IDA) Ireland Annual Reports (various years).

Katz, R. 1998. *Japan. The System that Soured. The Rise and Fall of the Japanese Economic Miracle*. London: M E Sharpe.

Kearns A., and Ruane F. (2001) 'The tangible contribution of R&D spending foreign-owned plants to a host region: a plant level study of the Irish manufacturing sector (1980-1996)' *Research Policy* 30: 227-244

Kennedy, K. (2001) 'Reflections on the Process of Irish Economic Growth' *Journal of the Statistical and Social Inquiry Society of Ireland*, 30: 123-39.

Krugman, P.R. (1997) Good News from Ireland: A Geographical Perspective, in: A.W. Gray (ed.) *International Perspectives on the Irish Economy*, pp. 38-53 (Dublin: Indecon Economic Consultants).

Lall,S (2005) Is African Industry Competing? QEH Working paper series No.121, Queen Elizabeth House, Oxford University

Lall (2005)

Lenihan, H., and Sugden, R. (2008) 'Policy on Business Networking in Ireland: A Review, and Prospects for Evaluation' in Araguren, M., Iturrioz, C and J. Wilson (eds), *Networks, Governance and Economic Development: Bridging Disciplinary Frontiers*, Edward Elgar (*in press*).

Lenihan, H (2004) 'Estimating Irish Industrial Policy in terms of deadweight and displacement: A quantitative methodological approach', *Applied Economics* 36(3), 229-252.

Lenihan, H., and Hart, M (2004) 'The use of Counterfactual Scenarios as a means to Assess Policy Deadweight : an Irish Case Study' *Environment and Planning C: Government and Policy* 22(6), 817-839.

Lenihan, H., M. Hart and S. Roper (2005) 'Developing an Evaluative Framework for Industrial Policy in Ireland: Fulfilling the Audit Trail or an Aid to Policy Development?' *Quarterly Economic Commentary, The Economic and Social Research Institute, Ireland, Summer, June*, 69-85.

Lenihan, H (1999) 'An Evaluation of Regional Development Agency's Grants in Terms of Deadweight and Displacement', *Environment and Planning C: Government and Policy*, 17, 303-318.

Little (_____)

Lynch, C. (2005) Can we learn from Ireland's Experience? An Irishman's Perspective, *Policy Backgrounder*, No.6, June 2005.

Mickenley (2005)

Midelfart-Knarvik, K.H. & Overman, H.G. (2002) Delocation and European Integration: Is Structural Spending Justified? *Economic Policy*, 17(35), pp. 323-359.

McAleese, D (1990). Ireland's Economic Recovery, *Irish Banking Review*, Summer 1990, 18-32.

McKinley, T. (2005). Economic Alternatives for Sub-Saharan Africa: "Poverty Traps", MDG-based Strategie and Accelerated Capital Accumulation. UNDP draft paper for G-24 Meeting, 15-16 September 2005, New York.

Mkandawire, T. (2005). Maladjusted African Economies and Globalisation. Africa Development. Vol. XXX, Nos. 1 & 2, 2005, pp. 1-33.

National Economic and Social Council (NESC) (2005) 'Strategy 2006: *People, Productivity and Purpose*' Report No. 114. December 2005. Dublin. Available at:
http://www.nesc.ie/press/press_detail.asp?newsId=82&zoneId=4&catId=19

Pfeffermann, G (2008) Into Africa, available at www.elmg.org/globalfocus

Pfeffermann, G. (2008), African Business Schools, available at www.mercnetwork.org

Rist, R.C. (1995) *Policy Evaluation Linking Theory to Practice* (Cheltenham: Elgar Reference Collection).

Ruane, F., (2001) 'Reflections on linkage policy in Irish manufacturing-policy chasing a moving target', paper presented at the UNECE/ERBD Expert Meeting-Financing for Development, Geneva, www.unece.org/ead/ffd2001papers_new.htm

Salt, J (2005) *Current Trends in International Migration in Europe*, Council of Europe. CMJD.2005.2

Sapir, A., Aghion, P., Bertola, G., Hellwig, M., Pisani-Ferry, J., Rosati, D., Viñals, J. & Wallace, H. (2003) *An Agenda for a Growing Europe: Making the EU Economic*

Schweiger, C. and Wickham, J. (2005) 'Is the Tiger Eating Its Children? The Two Sides Of the Irish Employment Model' *Dynamics of National Employment Models (DYNAMO) Project*, Country Study (Draft). <http://iat-info.iatge.de/projekt/2005/dynamo/publications.html>

Singh,A. (1995). *The causes of Fast Economic Growth in East Asia*, UNCTAD Review 1995, pp. 91-127.

Singh, A. (1997) *Catching up with the West: A Perspective on Asian Economic Development into the XXI Century*. Washington, DC: Inter-American Development Bank.

Singh, A. (1998). *Savings, Investment and the Corporation in the East Asian Miracle*, Study 9, The Journal of Development Studies, vol. 34, no.6, August, pp. 112-37.

Singh,A. (1999a. *Asian Capitalism and the financial crisis*, In Jonathan Michie & John Grive-Smith, *Global Institutions*, Routledge, London, New York.

Singh,A. (1999b).

Singh (forthcoming)

System Deliver' Report for the President of the European Commission. Brussels: European Commission.

Small Business Forum . (2006) *Small business is big business: report of the Small Business Forum*. Dublin: Small Business Forum.

STOREY, D., 2000. "Six Steps to Heaven: evaluating the impact of public policies to support small business in developed countries", in D.L Sexton. and H. Landström, (eds.), *The Blackwell Handbook of Entrepreneurship*, Oxford : Blackwell.

Summers (1998)

Telesis Consultancy Group (1982) *A Review of Industrial Policy*, Report 64 (Dublin: National Economic and Social Council).

Ugur, A., and Ruane, F. (2004) 'Export Platform FDI and dualistic development', *Institute for International Integration Studies Discussion Paper*, No 28/July 2004.

United Nations Conference on Trade and Development (UNCTAD). 2007. *Economic Development in Africa: Reclaiming Policy Space. Domestic Resource Mobilization and Developmental States*. United Nations: New York.

United Nations Conference on Trade and Development (UNCTAD). 2005. *UNCTAD WID Country Profile Ireland*. United Nations: New York., September.

United Nations Conference on Trade and Development (UNCTAD). 2007; 87).

United Nations Conference on Trade and Development (UNCTAD). 2008.