# EXPLORING THE 'CELTIC TIGER' PHENOMENON:
## CAUSES AND CONSEQUENCES OF IRELAND'S ECONOMIC MIRACLE

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## Abstract

The economy of the Republic of Ireland has experienced continuously high growth rates in the 1990s, after a period of severe difficulty in the previous decade. As a result, Ireland is now within sight of exceeding average EU living standards, a situation which would reverse Ireland's traditional status as a peripheral European economy. The main purpose of this article is to examine the factors which have contributed to this apparent economic miracle, which has earned Ireland the 'Celtic Tiger' appellation. Particular importance is attached to the role of inward investment, which has grown in quantity and changed in quality in the last decade. These changes are attributed to general developments in the locational behaviour of transnational corporations, especially the need for access to skilled workers in an increasingly high-tech age. Such workers have become readily available in Ireland due to demographic change and state investment in education. However, while foreign branch plants have been upgrading their skill levels and their range of functions, they generally lack strategic responsibilities and independent decision-making powers.

Additional contributors to Ireland's economic growth have been macroeconomic stabilization, EU funding, and expansion of tourism and indigenous industry. However, growth has not been shared equally, but has been accompanied by increasing social polarization between those in skilled employment and those who have unskilled jobs or no jobs at all. This polarization could threaten the system of moderate national wage agreements which has played an important role in promoting peaceful industrial relations and in holding inflation to very low levels. There has also been growing spatial polarization, with the great bulk of the recent growth being concentrated in the main cities, especially Dublin. The current growth phase is expected to continue at least for the medium-term future, but could come under pressure from the emergence of competing pools of skilled labour in other parts of Europe.

## Introduction

In 1987, the per capita gross domestic product (GDP) of the Republic of Ireland stood at just 63 percent of the overall average for the European Union (EU). This was much the same proportion as when Ireland first joined the EU in 1973. By 1996, after a decade of annual per capita GDP growth of almost three times the EU norm, Ireland's per capita GDP had risen to 97 per cent of the EU average, and well above the other traditionally poorer EU economies of Spain, Greece and Portugal (Table 1). Perhaps more important, historically and symbolically, in 1996 Ireland's per capita GDP surpassed that of the United Kingdom, formerly Ireland's economic and political overlord. These high and sustained growth rates have led many commentators to compare Ireland's recent economic performance to that of the dynamic 'tiger' economies of East Asia – hence the application to Ireland of the appellation the 'Celtic Tiger'. Furthermore, official forecasts expect the Irish economy to grow faster than the EU economy at large at least until the year 2010, by which time Irish living standards should be significantly above the EU average.

**Table 1** Per capita GDP as % of EU average

| | 1987 | 1996 |
|---|---|---|
| Ireland | 63 | 97 |
| Spain | 71 | 76 |
| Portugal | 60 | 67 |
| Greece | 56 | 65 |
| UK | 102 | 96 |

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The closing of the economic gap between Ireland and the core European countries is all the more remarkable given Ireland's historical status as a structurally peripheral economy within the international division of labour (Breathnach, 1995). This article outlines, first of all, the historical background to the recent surge in the fortunes of the Irish economy, before moving on to examine a number of developments which have been advanced as explanatory factors in relation to this surge. The article then considers some social and spatial implications of the 'Celtic Tiger' phenomenon, and concludes with a brief exploration of the future outlook for the Irish economy.[1]

## Historical background

What is now the Republic of Ireland was established in 1922, when 26 of the 32 counties of Ireland became politically independent of the United Kingdom, with the remaining 6 counties (Northern Ireland) remaining under British rule. The Act of Union of 1800 had incorporated all of Ireland as an integral part of the United Kingdom of Britain and Ireland. The free trade conditions which followed from the Act of Union ushered in a process of deindustrialization in most of Ireland, due mainly to the inability of Irish industry to compete with the new mechanized factories which had been established in Britain from the late 18th century. The exception was the northeast corner of the island (around the Belfast region) where, due to specific historical conditions, an industrial region similar to those in Britain became established, thereby providing the economic and political basis for subsequent partition (Breathnach, 1988).

As a result of deindustrialization, most of Ireland was reduced to an agricultural adjunct of the British industrial economy, providing Britain with food in exchange for industrial products. The limited base of the Irish economy, added to the proximity of the rapidly growing British and American economies, generated a growing wave of outmigration which saw the population of what is now the Republic of Ireland contracting from 6.5m in 1841 to under 3m in 1961. When Ireland achieved independence in 1922, over half the workforce was engaged in agriculture, most of them in small, uneconomic farms. An experiment with protectionism and import-substituting industrialization, introduced in the 1930s, petered out in the 1950s, following which the Irish government opted instead for export-oriented industrialization based on the attraction of inward investment. This ushered in substantial industrial and urban expansion in the 1960s and 1970s, during which the average annual growth rate of GDP was of the order of 4 percent. However, the branch plants established by foreign firms generally involved low-wage assembly and packaging work, with few local economic linkages. As a result, Ireland remained a dependent, peripheral and 'extraverted' (in Amin's [1974] terminology) economy within the international division of labour (Breathnach, 1995), with income levels well below those of the more advanced core economies.

The severe international recession of the early 1980s saw Ireland's annual GDP growth rate drop to less than half of 1 percent. Ireland's recent economic performance is all the more surprising given the poor condition of the national economy in the mid-1980s, just prior to the onset of the recent growth surge. In addition to low overall growth rates, total employment was falling and, despite the re-emergence of substantial net emigration (after a brief period of influx in the 1970s), the unemployment rate reached 17 percent in 1985 (compared with an EU average of 9 percent). Despite falling from a high point of 20 percent in 1981, inflation rates were also well above the EU average, while the public finances were in disarray with the public debt/GDP ratio soaring from 70 percent in 1980 to almost 120 percent in 1987, and the annual deficit in public spending reaching 10 percent of GDP in 1986.

However, after 1985 the economy experienced a remarkable recovery, with annual GDP growth averaging 5 percent between 1986 and 1996, reaching a peak of 10 percent in 1995 and continuing at 8 percent in 1996 and 1997. Between 1986 and 1996, the total number employed grew by 26 percent compared with just 7 percent for the EU at large. By contrast with the general experience of developed economies, Ireland has experienced strong employment growth in the manufacturing as well as the services sector. Between 1987 and 1996, manufacturing employment increased by almost

14 percent, compared with a 17 percent decline in the UK and a decline of almost 30 percent in Germany. Despite the resumption of net immigration from abroad in 1992, the unemployment rate fell below the EU average in 1997. The inflation rate has averaged 2.5 percent in the period 1991–6 (falling to just 1.2 percent in 1997), the public debt/GDP ratio dropped back to 66 percent by 1997 and central government borrowing as a proportion of GNP has dropped from an average of 13 percent in 1981–5 to just 2 percent in 1991–5; indeed, in 1997, the government's current spending deficit was eliminated entirely. Meanwhile, the balance of merchandise trade, which had been strongly negative in the 1970s, became positive to the extent of 15 percent of GDP by the mid-1990s, with the overall balance of payments also moving into surplus.

## Explaining the Celtic Tiger: the role of human capital

In a major report on the rapid recent turnaround of the Irish economy and its future prospects, the state-funded Economic and Social Research Institute attributed particular explanatory significance to human capital theory (Becker, 1964; Mackay, 1993):

> Modern growth theory stresses the key role of the stock of human capital and the rate of human capital accumulation in the production process. . . . The rate of human capital accumulation is defined by both demographic trends and the level of investment in education and training.
>
> (Duffy et al., 1997: 46)

The stock of human capital in any economy is a combination of the number of people available to work and their average productivity, which in turn tends to be strongly related to education levels. In Ireland, up to recently, the size of the workforce was limited by high unemployment, recurring net emigration, low adult female participation rates and a high proportion of the population in the school-going age cohorts. The stock of human capital was further constrained by the low average education level of the Irish labour force by comparison with the more developed European economies. The resulting combination of low productivity and a high economic dependency ratio ensured that Irish average living standards were well below the EU average.

However, in recent years there has been a very marked improvement in Ireland's stock of human capital. The 'baby boom' of the 1970s (when Ireland experienced unprecedented net immigration, principally arising from the economic surge which followed EU accession in 1973) generated a growing influx into the labour force in the late 1980s and into the 1990s. The reappearance of net immigration in the 1990s added further to the available labour force, as did rising female participation rates (the result of rising education levels, expanding employment opportunities and changing social attitudes). The rise in education levels may be attributed to measures mainly introduced in the 1960s designed to expand access to both second and third-level education. By the mid-1990s, of those leaving the education system, over 80 percent had completed secondary education and 50 percent had experienced third-level education. This compares with figures of 33 percent and 10 percent, respectively, for those leaving education around 1950.

With employment, female participation rates and education levels rising, and both the unemployment rate and the school-going population falling, Ireland's economic dependency ratio and average living standard have improved markedly vis a vis the EU in the 1990s. Irish per capita GNP, which stood at two-thirds of the EU average in 1990, is expected to exceed that average by the year 2005 if current trends continue. However, the dramatic improvement in Ireland's human capital stock which has occurred in the last decade is not, of itself, an adequate explanation for the resurgence of the national economy in this period. In the past, an increase in Ireland's labour supply was generally followed not by an increase in employment but by higher emigration levels, due to the continuing inability of the Irish economy to generate sufficient employment opportunities for its population – itself a reflection of Ireland's structurally peripheral position within the international division of labour (Breathnach and Jackson, 1991).

The improvement in education levels in the 1980s did little to offset this historical trend; indeed, a distinctive feature of the large-scale net emigration which resumed in this decade was that it contained a high proportion of the well-educated young people who were now emerging from Ireland's schools and colleges (King and Shuttleworth, 1995). Thus, the proportion of third-level graduates who were working a year after graduation and who were living outside Ireland jumped from 10 percent in 1982 to 32 percent in 1988 (Walsh, 1992). After this, the proportion began to fall, as job opportunities within Ireland began to expand and net emigration disappeared (McHugh and Walsh, 1995). It is clear, therefore, that this expansion of job opportunities was a response not to the availability of a growing flow of well-educated labour per se, but to additional factors which helped create, within Ireland, a demand for this labour at this particular point in time.

## The role of inward investment

### *Recent trends in inward investment*

Both O'Hearn (1997) and Murphy (1997) have pointed to inward investment as the main driver of the Celtic Tiger phenomenon. Of course, the attraction of such investment has been a key element of Irish economic policy since the late 1950s, with low corporation tax rates (currently 10 percent), generous capital grants and the availability of relatively inexpensive labour acting as the main incentives. Up to the late 1980s, foreign investment in Ireland was generally associated with low-skill assembly and packaging operations, embracing a wide range of industrial sectors, with limited local linkages and a high level of profit repatriation (Telesis Consultancy Group, 1982). This profile is typical of peripheral branch-plant economies within the so-called new international division of labour which emerged in the 1960s (Fröbel et al., 1980; Breathnach, 1988).

While initially quite successful in terms of direct employment creation, the limits of this policy appeared to be reached during the 1980s when a pattern of jobless growth emerged, so that in 1990, employment among foreign firms was much the same as it had been in 1980, despite the fact that output had more than doubled in the meantime. This, to a considerable extent, reflected growing automation of industrial processes, to which the types of activities in which many foreign branch plants were engaged were particularly susceptible. However, in the 1990s a new surge in inward investment has emerged (reflected in output growth, in real terms, of almost 20 percent per annum among IDA-supported firms between 1991 and 1996), accompanied by significant employment growth (up 16 percent among foreign manufacturing plants in the period 1992–6). This most recent growth phase would appear to have been crucial to the overall performance of the Irish economy in this period: Murphy (1997) has calculated that exports from the five high-tech sectors in which foreign investment is concentrated (computers, computer software, chemicals, pharmaceuticals and soft-drink concentrates) have accounted for almost 60 percent of total GDP growth between 1990 and 1996.

### *Explaining the inward investment surge*

Murphy (1997) has attributed particular significance to the role of Ireland's low corporation tax regime (and the opportunities it presents to foreign firms to manipulate transfer prices in their own interests) in attracting inward investment and therefore driving the Celtic Tiger phenomenon (which he suggests would be more appropriately described as the 'US High-Tech Tiger with the Celtic Face'). However, the current tax regime has been in place in its current form since 1981, and therefore cannot, of itself, explain the most recent growth surge in inward investment during which Ireland, with less than 2 percent of the EU population, has been attracting 12 percent of all foreign direct investment in the EU. Most of this recent investment has been coming from the USA: by the mid-1990s, Ireland was attracting one quarter of all US investment in the EU and was just behind the UK as the most favoured European destination of American firms (Sweeney, 1998). As a consequence, foreign firms now dominate the Irish industrial economy, accounting in 1995 for almost half of manufacturing employment, two-thirds of manufacturing output and three-quarters of non-food manufactured exports.

Nor can recent inward investment growth be attributed to the establishment, in 1992, of the

Single European Market (SEM). While Ireland clearly benefited from the general pre-SEM acceleration of inward investment into the EU (Ramsay, 1995), in Ireland's case this investment continued to grow rapidly after 1992 whereas elsewhere the general trend was towards restructuring and rationalization (Young and Hood, 1995). It is argued here that a key element in recent inward investment growth in Ireland has been significant policy changes introduced in the late 1980s by the Industrial Development Agency (IDA), the state agency responsible for attracting foreign investment. These changes included a more selective sectoral approach, with the main emphasis being placed on more technically sophisticated activities within the electronics, pharmaceuticals and health-care sectors (which were seen as possessing long-term growth potential); more aggressive targeting of major international players in these sectors; and the pursuit of new investments in internationally traded services, especially in the areas of financial services, computer software and back-office activities. In marketing Ireland, the IDA was able to point not only to the growing availability of high-quality skilled labour in Ireland but also to the low and declining cost of this labour: due to productivity growth, wage moderation and stable exchange rates, Ireland's unit wage costs fell by 40 percent relative to its main trading partners between 1986 and 1996, and are now only about half those in Germany and France. The IDA has also been able to avail itself of significant improvements in transportation facilities and particularly of a major programme, begun in the 1980s, of upgrading Ireland's telecommunications infrastructure.

The success of these initiatives on the part of the IDA has, in turn, been predicated on corresponding changes in the locational behaviour of transnational corporations (TNCs). These derive from the growing importance of flexible specialization, automation, customization and batch production, quality control, logistics and research and development (R&D) in modern high-tech industry. As a consequence, the availability of skilled technical workers has grown relative to that of unskilled labour as a factor in the location of production units. However, the choice of locations for such units continues to be constrained by the availability of advanced telecommunications, information technology (IT) and transport infrastructures, especially in the case of internationally integrated production systems. Thus, a 1992 Netherlands Economic Institute study, quoted in Young et al. (1994), found that, for many project types, the quality of these infrastructures, along with the quality and availability of labour and the quality of life (a factor in which Ireland also tends to score well) now rival market proximity as a key location factor.

In the case of Ireland, it is clear that there has been a growing intake of skilled workers by inward investors, and that this has played a key role in the absorption of the growing output of qualified graduates from the education system. In the early 1980s, a growing proportion of technical and professional workers (as against routine production operatives) was already becoming apparent in the electronics industry (Wickham and Murray, 1987). More recently, Amin and Tomaney (1995) report a distinctive growth in the number of technical and management workers among foreign branch plants, associated with a widening and deepening of the functions of these plants. While this process refers to the upgrading of existing plants, it is also clear that new incoming greenfield projects are also employing much higher proportions of skilled workers than was typical of earlier generations of foreign branch plants. Thus, in 1997, nine new investment projects (in the health-care, electronics, software and teleservices sectors), with a total projected job content of 10,300, indicated that almost 57 percent of their combined employees would be third-level (university and technical college) graduates. These included large-scale projects from such 'blue-chip' firms as IBM, Hewlett-Packard, Dell, 3COM, Motorola and Compaq.

The IDA has also enjoyed considerable success in targeting mobile projects in the services sector, where there has been particularly strong growth in international investment in recent years (Dicken, 1992). Three main sectors have been involved: international financial services, software and teleservices (i.e. the provision of services such as sales, reservations, information provision, technical support and banking to remote customers by means of telephone). The development of these activities has been heavily contingent on the availability of advanced telecommunications facilities with the cheapest rates in Europe for international freephone calls. All told, employment in foreign-owned internationally traded service activities in Ireland grew from 3600 in 1987 to 18,400 in 1996. While this employment includes a considerable level of skilled graduate-level work (in the region of 50 percent in the case of both software and teleservices), there is also much routine work requiring lower skill levels (Coe, 1997; Breathnach, forthcoming).

In attracting a disproportionate share of new inward investment of growing quality, Ireland has departed markedly from the expected experience of the EU's peripheral regions following the introduction of the SEM in 1992. The general expectation had been that these regions would lose out from the expected post-SEM rationalization of operations by TNCs and from the periphery's inability to satisfy the TNCs' growing skill and IT requirements (Young et al., 1994; Begg, 1995). Indeed, as recently as 1992, the Economic and Social Research Institute expected that Ireland would lose out relative to the EU core as a result of the SEM (Bradley et al., 1992). On a broader front, Castells (1993) has argued that most of those countries around the world which have pursued a policy of export-oriented industrialization based on cheap labour will fail to make the transition to self-sustaining growth and will become increasingly peripheral to what Knox (1995) has termed the 'fast' world which has fully embraced the new information technology crucial to survival in the global economy. Only a small group of formerly peripheral countries which have managed to invest heavily in upgrading their human capital resources and their communications and information technology infrastructures will succeed in making the transition to this fast world. While Castells had in mind here the high-growth Asian economies, his argument would appear to apply equally to the case of Ireland.

## *The embeddedness of Irish branch plants*

However, it remains to be seen whether Ireland will eventually succeed in making this transition which depends, in large part, on the extent to which externally owned branch plants become embedded within the Irish economy, in the sense of drawing on their own resources and on local economic and social networks rather than external relationships for their commercial life-blood (Dicken et al., 1994). We have already noted a tendency among Irish branch plants to move beyond their typical initial status as pure production units to embracing a wider range of functions, particularly R&D. They have also been purchasing a growing proportion of their material and service inputs from within the Irish economy, although this proportion remains low: between 1990 and 1996, Irish purchases of materials and services as a proportion of sales grew from 18.3 percent to 25.5 percent. These burgeoning backward linkages, combined with growing corporation tax payments and the consumer spending of their increasingly skilled and well-paid workers, mean that the local multiplier effects of branch plants have been expanding significantly: O'Malley (1995) estimated that, in 1992, every 100 direct jobs in overseas manufacturing firms were responsible for about another 125 indirect and induced jobs elsewhere in the Irish economy and that this ratio was growing.

Nevertheless, the fact remains that, with some notable exceptions, the range of functions within Irish branch plants remains limited and their decision-making autonomy – a key influence on the extent to which such plants become locally embedded – remains quite restricted (Amin and Tomaney, 1995). Thus, control over investment, procurement and marketing remains largely absent and R&D functions, while growing, are mainly process-oriented. The prospects for developing backward local linkages also remain fundamentally constrained by the need of Irish branch plants to maintain input/output links with affiliates located abroad in order to maximize the tax benefits of transfer-price manipulation – an activity which is carried out on a large scale by these plants (Murphy, 1997). Irish branch plants, therefore, for the most part occupy an intermediate position between the traditional 'export platform' branch plant which simply implements centrally decided policies, with limited links with the local economy, and the 'performance' or 'developmental' plant which possesses a high level of functional autonomy and generates substantial local spin-offs (Young et al., 1994; Amin and Tomaney, 1995). With local Irish management and the Industrial Development Agency both pressing continuously for the upgrading of branch-plant functions, one can foresee an increasing trend towards local embeddedness, although limits to this trend are likely to be set by the narrow economic base of what remains, essentially, a peripheral economy. Ultimately, it is unlikely, as Porter (1990) among others has argued, that long-term competitive advantage can be achieved via an over-reliance on inward investment.

## Additional growth factors

The main argument of this article, then, is that the high economic growth rates recorded by the Irish economy in the 1990s have derived primarily from a new surge of mainly high-quality inward investment, attracted to a considerable extent by the availability within Ireland of a significant reservoir of well-educated skilled labour. However, this is by no means the entire picture, and this section of the article identifies a number of additional factors which have also contributed significantly to the Celtic Tiger phenomenon.

### *Macroeconomic stabilization*

In the late 1980s, a number of measures were taken by the Irish government in order to tackle the growing imbalance in the public finances and high inflation rates. These included severe expenditure cuts which reversed the growth in the public debt/GDP ratio and greatly reduced the deficit in current public spending. These cuts did not have the expected recessionary impact, partly because of their effect in restoring business confidence (Walsh, 1997) and partly because they coincided with the expansionary impact of buoyant international markets and declining global interest rates (Duffy et al., 1997; Leddin and Walsh, 1997). In addition, a system of centralized national pay bargaining was introduced which has provided for moderate general wage increases. This, along with low inflation in Ireland's main trading partners, played an important role in reducing inflation to today's very low levels.

Wage moderation was made possible partly by the 'disciplining' of the Irish workforce by the rapid rise in unemployment in the first half of the 1980s and the fact that the real wages of those in employment fell in the same period. This prompted the trade unions to accept moderate pay increases and greater flexibility in work practices, while containing the militancy of their members. The resulting combination of low inflation and a favourable industrial relations environment have been significant additional factors in boosting investor confidence, including that of inward investors.

### *EU funding*

There has been a tendency in some quarters to attribute Ireland's recent growth performance one-dimensionally to the effects of funding from the EU. While Ireland undoubtedly has been a substantial beneficiary of such funding since joining the EU in 1973, in fact the relative contribution of this funding to the Irish economy has declined in recent years, from a peak of 7 percent of GDP in 1991 to 4 percent in 1996. Thus, in current expenditure terms, EU funding clearly has not contributed to the accelerated growth of the Irish economy in this period. It is likely that the role of EU funding has been more important in terms of its long-term contribution to expanding the Irish economy's productive capacity than in terms of the direct employment created by the spending of the funding concerned. It has been estimated that the long-run impact of the enhanced structural funding introduced in conjunction with the SEM (ironically, in the Irish case, in order to compensate peripheral regions for the expected negative impact of the SEM) will be to raise Irish GNP by about two percentage points above the level it would have been without it (Duffy et al., 1997). It is also worth noting that other EU member states which have been in receipt of substantial EU funding have come nowhere near matching Ireland's growth rate.

### *Expansion of indigenous industry*

Indigenous Irish manufacturing industry, typically characterized by small size, limited technology and a strong orientation towards the domestic market (which accounted for two-thirds of total sales in

1990), experienced continuing contraction as the Irish economy was progressively opened up to external competition from the late 1950s onwards. Between 1973 and 1987, employment in Irish firms declined by almost a quarter. More recently, however, there has been a significant recovery in both employment and output in Irish-owned industry: employment grew by 12 percent between 1987 and 1995, while output (in real terms) grew by 19 percent between 1988 and 1994. Clearly, much of this growth is attributable to the demands generated, directly and indirectly, by foreign-owned branch plants. At the same time, the increasingly competitive environment which has prevailed over the last 35 years has meant that those indigenous industrial firms which operate today tend to be much more efficient and competitive. In many cases, these firms have been penetrating export markets and, in particular, have been responding positively to the expanded market opportunities made available by the SEM; as a result, Irish indigenous industry has shown a small but significant increase in its export-orientation in the 1990s.

The Irish construction industry has also been expanding rapidly: constuction output grew by almost 50 percent between 1994 and 1996 alone. Obviously, growth in the construction industry is an induced effect of expansion in other, more basic, economic sectors. At the same time, given its large relative size (15 percent of GDP in 1996), the industry's recent rapid growth has itself been acting as an important stimulus to other sectors of the economy, especially since (unlike manufacturing industry) the great bulk of the inputs to the construction industry are sourced from within the Irish economy.

### *Tourism*

The contribution of tourism to recent economic, and especially employment, growth in Ireland has been overlooked by most commentators on the Celtic Tiger phenomenon. However, the last decade has seen a major upsurge in the number of overseas visitors to Ireland, from 2.4m in 1986 to 4.7m in 1996. There has also been a qualitative shift in the nature of these visitors, towards higher-spending business travellers and middle-class professionals, especially from Europe and from among recent Irish emigrants living in Great Britain and the USA (Gillmor, 1994). Overall, the contribution of tourism to Ireland's GNP rose from 4.8 percent in 1986 to 6.4 percent in 1993 (Tansey, Webster & Associates, 1995). However, given its labour-intensive nature, tourism's contribution to recent employment growth has been even more significant: full-time-equivalent employment attributable to tourism (direct, indirect and induced) grew by 53 percent between 1988 and 1995, to 8.4 percent of total national employment; perhaps more importantly, tourism accounted for a quarter of all additional employment in the state in this period.

## Social and spatial consequences of the Tiger Economy

Irish society is only now coming to terms with the recent phase of national prosperity and the likelihood that it will continue for quite some time to come. Already there is much talk of a flourishing of national self-confidence, reflected in such areas of culture as music, dance, literature, film, fashion and sport. For many, Ireland is now passing out of its 'post-colonial' phase and moving into a new era and a new role. The exciting and innovative presidency of Mary Robinson may be seen as reflecting the profound period of change through which Ireland has just moved; Robinson's progress to the position of United Nations Commissioner on Human Rights may in turn reflect Ireland's new role. However, while a mood of celebration is palpable, there has also been an amount of critical analysis of the changes currently occurring in Ireland.

### *Social polarization*

Much concern has been expressed at the unequal social distribution of the benefits of recent economic growth. While the average household income rose by 30 percent in real terms between 1987 and 1994, the proportion of households in receipt of less than half this average income has increased, indicating growing income disparities (Callan et al., 1996).

Low average incomes are particularly prevalent among the elderly, large families, single-adult (especially female) households, and households whose head is unemployed. However, even among those in employment, growing polarization is evident, with the share of earnings taken by the top decile of earners growing significantly between 1987 and 1994 (Barrett et al., 1997). Indeed, measured in terms of the ratio between the top and bottom deciles, Ireland had the most unequal earnings distribution of 16 OECD countries in 1994.

This suggests that Ireland is reproducing the general pattern of employment polarization which has been observed elsewhere in the new era of flexible accumulation, i.e. that between a 'core' of skilled, well-paid workers and a 'periphery' of unskilled, poorly paid and frequently part-time, temporary or seasonal workers (Allen, 1988). In Ireland, as elsewhere, the consumer demands generated by a new 'class' of high-income professionals and business people have generated a parallel expansion of employment in such areas as catering, retailing and entertainment, where much of the employment is unskilled and poorly paid. These characteristics are particularly typical of the tourism industry whose growth, as noted earlier, has made a major contribution to recent employment growth in Ireland (Breathnach, 1994).

Given the rapidly rising educational levels of the Irish workforce, and the virtual unemployability of a large proportion of those out of work (especially middle-aged, male manual workers who are unwanted in both the unskilled service and skilled manufacturing and service sectors), there is now a limited reservoir of people available to take up the growing number of unskilled job openings which are becoming available in the Irish economy. This is leading to growing labour shortages in these areas which, in turn, are leading to increasing immigration to meet these shortages. An official from Ireland's main general trade union has recently claimed that several thousand jobs in Dublin's catering industry are now being filled by foreign labour, much of it illegal, thereby creating a 'new sub-culture of exploited labour' (*The Irish Times*, 5 September 1997). This unprecedented influx of frequently ethnically distinct immigrants taking up inferior types of employment, while quite familiar in other countries, is likely to place pressure on racial attitudes in a country whose degree of ethnic homogeneity has hitherto been unique among West European countries.

## *Spatial polarization*

Apart from social differentiation, internal spatial polarization has been another consequence of the recent Irish growth experience. While Dublin – like all metropolitan regions – has a disproportionate share of higher-level service occupations, this had been to an extent counterbalanced by a regional industrial planning policy in the 1960s and 1970s which produced a high degree of regional dispersal of manufacturing plants, especially on the part of foreign firms (Breathnach, 1982).

However, this trend has been sharply reversed in recent years. Partly because of their large size and their demand for large numbers of skilled workers, more recent foreign manufacturing projects have tended to avoid smaller centres and to insist instead on a location in Dublin and the main provincial centres of Cork, Limerick and Galway. In addition, as a consequence of the more selective sectoral policy being pursued by the IDA, it is no longer targeting low-tech sectors such as clothing and consumer goods which had previously played a leading role in the spatial dispersal of foreign firms (O'Malley, 1994). Thus, in the period 1993–6, 64 percent of new jobs in foreign-owned firms have been located in the East region (embracing Dublin), which accounts for 38 percent of the national population. For services projects the proportion is over 90 percent. Since employment in foreign firms has accounted for almost three-quarters of manufacturing employment growth over the last decade, this has had a significant impact on the regional distribution of such employment. The East region, which experienced a continuous decline of its share of national manufacturing employment, relative to its population share, throughout the period 1960–90, saw a significant reversal of this decline in the 1990s, with all other regions losing out.

The IDA has responded to this trend with renewed efforts to get inward investment projects to locate outside the East region. In this, they have been assisted by growing labour shortages in the latter region. As a result, the share of projected employment in new projects going to the Greater

Dublin region fell from 62 percent in 1996 to 35 percent in 1997. However, the main beneficiaries have been the next three largest cities in the urban system (Cork, Limerick and Galway) which, with a combined share of the national population of just 13 percent, secured 38 percent of new projected employment in 1997. The rest of the country, with 56 percent of the population (and 46 percent of existing IDA jobs), managed to attract only 27 percent of projected new jobs. Politically, the IDA is now paying the price of the raised expectations created by its success in dispersing industrial projects to smaller towns around the country in previous decades. While it is now devising measures to improve the flow of new projects away from the main cities, it is likely that the smaller centres, and their rural hinterlands, are going to have to look increasingly to their own resources (in terms of locally based manufacturing and service enterprises) in order to secure their economic futures.

## Future outlook

Duffy et al. (1997) expect Irish GNP to grow at double the EU average at least up to the year 2010. This forecast is mainly predicated on a continuing relative improvement in Ireland's stock of human capital and a declining economic dependency rate (when it will be static or rising elsewhere). It is also strongly dependent on Ireland's continued ability to attract investment inflows in order to avail itself of this stock of human capital.

For many economists, the leading threat to Ireland's future economic well-being is likely to come from an inability to maintain cost competitiveness. With exchange rate movements ceasing to be a factor in inflation following the introduction of European Monetary Union in 1999 (with Ireland likely to be among the first group of countries to join), the key factors in containing costs are likely to be wage moderation, and especially a continuation of the system of national pay bargaining which has worked so well in the recent past. However, this could come under threat from at least two sources. The first of these is labour shortages, which have already been referred to in relation to unskilled service employment, but which are also becoming apparent now in skilled sectors such as software, teleservices and some areas of manufacturing. The second is the possible reaction of less well-paid workers to the growing earnings disparities reported earlier, and in particular the potential emergence of a feeling that waged and salaried employees are not getting a fair share of the rapidly growing 'national cake', with the benefits being mainly siphoned off by the more lucrative self-employed and business sectors.

Ireland is also likely to experience a substantial cutback in EU structural funding after 1999 due to the loss of Objective 1 status (confined to regions whose per capita GDP is below 75 percent of the EU average). Hitherto, all of the Republic of Ireland has been treated as a single region for EU funding purposes; it is likely that the Irish government will now seek at least a twofold division, in order to maximize the flow of funds to the less developed parts of the country (particularly in the Northwest). However, it is unlikely that even these areas will be below the Objective 1 threshold in the year 2000. Hence, the Irish government has been arguing that per capita GDP is an inappropriate measurement of Objective 1 status in the Irish case since, unlike other EU countries, Ireland's GDP is substantially larger (by about 15 percent) than GNP, which is a more accurate indicator of real living standards in an economy. The main reason for this difference is large-scale repatriation by TNCs of profits which are, in large measure, reported as arising in Ireland through transfer price manipulation.

## Conclusion

The main argument of this article has been that the remarkable growth performance of the Irish economy in the 1990s can be attributed mainly to an influx of foreign investment attracted increasingly, not by the traditional incentives of tax concessions and cheap labour, but by the availability of skilled workers and an advanced information technology and telecommunications infrastructure. Additional contributory factors have included macroeconomic stabilization, EU funding, and the expansion of tourism and indigenous industry. Economic growth, however, has been accompanied by a pattern of increasing social and spatial polarization within Irish society.

Ultimately, the continued well-being of the Irish economy depends on its ability to retain and extend its inward investment base. However, the attachment of this base to its Irish location remains somewhat tenuous and contingent on the investment decisions of externally based corporations. The foreign-owned sector would appear to be more secure than in the past, due to a higher level of local backward linkages, larger sunk investments and increased dependence on skilled labour which is in short supply worldwide. Nevertheless, the firms in question, for the most part, do not locate the key elements of their operations in Ireland; rather, their plants are located there in order to exploit advantages which are either artificial (and therefore subject to change) or can be reproduced elsewhere. Already, the Irish government is under pressure from the EU Commission to alter its 10 percent tax regime which applies only to manufacturing industry and international services. The government has responded with a proposal to introduce a standard tax rate of 12.5 percent for all enterprises when the current regime expires in 2001. Meanwhile, there is growing concern at the possibility of some East European countries both creating competing reservoirs of skilled, but much cheaper, labour *and* securing EU entry early in the coming millenium. While this concern may be exaggerated, it does highlight the inherent instability of the economic base upon which the Celtic Tiger economy has been constructed.

## Notes

[1] Most of the data in this article are taken from a wide variety of official publications and reports. In the interests of brevity and clarity of presentation, these sources are generally not cited, although further information may be obtained from the author.

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