Irish Economic Development
In International Perspective

John Bradley

[1] Introduction

In a remarkable comment on the state of the Irish economy today, Intel president Craig Barrett recently reflected on why his firm had come to Ireland. Speaking to Thomas Friedman, author of *The Lexus and the Olive Tree*, Barrett said:

> "We are there because Ireland is very pro-business, they have a very strong educational infrastructure, it is incredibly easy to move things in and out of the country, and it is incredibly easy to work with the government. I would invest in Ireland before Germany or France" (Friedman, 1999, page 188).

It was not always like this. Any Irish person born in the immediate aftermath of World War 2 has seen their country undergo an extraordinary transformation. Once upon a time we were an inward-looking, inefficient, economic basket case, haemorrhaging our population through emigration. Today, we attract the admiration of the nations and businesses of the developed and developing world. How did this come about, when as recently as 1988 the *Economist* magazine portrayed us as a beggar nation seeking alms (Figure 1)?

** Insert Figure 1 here

Today Ireland enjoys the many economic advantages that come with membership of the European Union. Among the chief of these is that Irish policy makers – in both the public and private sectors - are able to plan in a more stable environment, with the co-operation as well as with the active financial support of other member states, mediated through the European Commission. However, in today's increasingly internationalised economy, policy-making autonomy has been progressively ceded by small states to supranational organisations. The policy-making autonomy of any small country wishing to be part of this international economy is now heavily circumscribed and recognising this fact, and exploiting the consequences, is a wise exercise of national sovereignty. Since we belong to the euro zone, monetary policy, as well as the responsibilities for defending the euro against speculative attack, are decided in Frankfurt by the European Central Bank. Our task in Ireland is to embrace with enthusiasm whatever the outcome happens to be, and the outcome so far has been remarkably favourable.

Against this background I examine the Irish economy in an historical and international perspective. In doing so, there is a temptation to focus exclusively on the past decade of rapid growth and convergence and to attribute most of this improvement to EU Structural Funds. This, indeed, is an interesting story that has attracted considerable international attention. However, in this paper I wish to place the recent Irish experience in a wider context by comparisons that range across space, across time and across ideas. For example, the United Kingdom provided the encompassing economic context for Ireland until almost two decades after the end of the Second World War. Political independence (achieved in 1922) had only a modest impact on Irish economic development and the then Irish Free State (to become the Republic of Ireland in 1949) continued to function as a regional economy of the British Isles.

During the decade and a half after Ireland joined the then EEC in 1973, the small developed core European states became obvious touchstones of comparison, at a time when attempts were being made to diversify the economy away from excessive reliance on the United Kingdom towards wider European norms and standards. Later, the so called cohesion states (Greece, Ireland, Portugal and Spain) became standards of comparison during the 1980s and the 1990s, a period when substantial development aid was forthcoming to these countries from the EU under the enlarged Structural Fund programmes. Today Ireland has many (but not all) of the characteristics of a modern developed economy and its recent performance has itself become the object of international interest by less developed countries. For example, the Irish developmental model is closely studied by the newly liberalised states of Central and Eastern Europe as they make their transition from Communist autarky and central planning to full integration into an enlarged EU.

[2] The historical economic perspective

The 1960s represented a watershed in economic terms in Ireland. Policy actions taken from the late 1950s and early 1960s onwards launched the economy on a development path that differed radically from that pursued before and after independence. The core policy dilemma was not about whether the Irish economy should be open to trade and factor flows with the wider world economy, since Ireland already had a relatively open economy when compared to the other small European states in the late 1950s (Table 1). Rather, the issue was the nature of this involvement and whether there was to be a break with the heavy dependence on the UK market as the destination for exports of a very restricted variety of mainly agricultural products.

** Insert Table 1 here

We touch on only three key factors that served to condition economic performance prior to 1960. The first concerns demographics, emigration and the openness of the Irish labour market. The second concerns economic geography and the emergence of a North-South divide in the economy, with the industrialising North achieving a much higher degree of prosperity than the mainly agricultural South. The third concerns the manner in which the economy of the island of Ireland, and later the separate economy of the Irish Free State, came to be almost totally dominated by trade and other policy links with Britain, the difficulty in breaking free from this embrace, and the consequences of the British link for Irish policy making.

2.1: Demographics, emigration and decline

Two unique features of Irish demographics stand out clearly. First, of the ten European comparison countries used by Lars Mjøset in his seminal NESC report (Mjøset, 1992), Ireland was unique in that it experienced a major decline in population between 1840 and 1960. Second, if a comparison is made with the only three other European nations that displayed significant migration behaviour sometime during the period 1851-1960 (namely, Denmark, Norway and Sweden), only for a short period towards the end of the 19th century did emigration rates (i.e. emigration per thousand of the population) come anywhere near the persistently high Irish rates. The tradition of migration continued into more recent decades (Figure 2), and Ireland now has the most open labour market in the EU. Today, migration is net inwards, and this has served to reduce pressure on wages in a fast growing economy.

** Insert Figure 2 here

Historically, emigration was both a cause and an effect of slow growth originating from other wider failures in the economy. Causes and effects become circular, and the real challenge is to include emigration in a broader study of the Irish pattern of development. Mjøset introduces the notion of a *vicious circle* linking two key Irish characteristics: population decline via emigration, and a weak national system of innovation (Mjøset, 1992, pp.50-67). He suggests that in Ireland these two mechanisms reinforced each other negatively through the social structure: the pastoral bias of agrarian modernisation, paternalistic family structures, sluggish growth of the home market, and a further marginalisation through weak industrialisation. In a range of other small European states, *virtuous circles* tended to operate and promote development. Many of the elements in the weak national system of innovation arise in the context of the economic geography of 19th and early 20th century Ireland.

2.2: Economic geography and the island's North-South divide

A striking feature of economic growth is that it often occurs unpredictably and in forms that are highly concentrated spatially. The reasons behind the tendency towards concentration have been traditionally associated with the presence of increasing returns to scale and agglomeration economies that come from the more intense economic interactions that are encouraged by close proximity. Hence, it was not entirely surprising that when the Industrial Revolution came to Ireland in the latter half of the 19th century, it developed in a geographically concentrated form (Ó Gráda, 1994).

However, Ireland's industrialisation did not emulate Britain's more generalised economic and technological leap forward. Rather, it came to involve a few specific sectors (brewing, linen, shipbuilding) and selected locations (mainly Dublin and Belfast), and by-passed much of the rest of the island. The spatial theory of economic growth provides suggestive insights into the process whereby Belfast developed rapidly as the only region in Ireland that fully participated in the latter phases of the Industrial Revolution (Krugman, 1995; Ó Gráda, 1994). In fact, the greater Belfast region took on all the attributes of an "industrial district", a geographically defined productive system characterised by a large number of firms that were involved, at various stages and in various inter-related ways, in the production of relatively homogeneous products. More generally, the north-east region eclipsed the rest of the island and established a clear edge in terms of industrial dynamism and economic strength.

2.3: Relations with the rest of the world

The political incorporation of Ireland into the United Kingdom in 1801 eventually generated forces that led to comprehensive economic and trade integration as well. The full extent of this integration after more than one hundred years of Union is illustrated in Figure 3, which illustrates the UK-Irish trade position from just after partition to the year 1950. The proportion of Southern exports going to the UK showed a very small reduction from 98.6 per cent in 1924 to 92.7 per cent by 1950.

** Insert Figure 3 here

The failure of Ireland to diversify its economy away from an almost total dependence on the UK had serious consequences for its economic performance when compared to a range of other small European countries and has been the subject of research and comment.[1] The reluctance of the new Irish public administration to deviate too much from British policy norms has been well documented (Fanning, 1978). The nature of the difficulties faced by Irish policy makers in attempting to break free from the economic embrace of the UK were reflections of the wider behaviour of trade within the EU over the past thirty to forty years. Thomsen and Woolcock (1993) point out that the exports from individual countries to the rest of Europe are still highly concentrated in only a few markets. Export market proximity is a key factor, but market size, distance, common borders and similar languages strongly influence intra-industry trade and the pattern of overall trade in Europe.

Wijkman (1990) has extended the analysis of geographical factors by looking at what he calls "webs of dependency". He suggests that there are three sub-regional trade blocs in Europe. The first is the *North* periphery, consisting of the UK, Ireland and Scandinavia. The second is the *South* periphery, comprising the Iberian peninsula, Greece and

[1] Mjøset (1992) is a study of Irish economic under-performance that draws carefully from a wide European literature on social and economic development.

Turkey. The remaining countries are clustered around Germany and called *Core Europe*. Comparing the trade pattern of 1958 with that in 1987, Wijkman found that in many cases these clusters have become more, rather than less, clearly defined as a result of greater EU integration. However, Ireland's relationship with Britain, which had been among the very strongest webs of dependency prior to 1960, weakened considerably thereafter for very specific reasons.

It was hardly surprising that Ireland and Britain formed a particularly strong web of dependency, continuing from independence well into the 1960s. While policies and policy makers in Ireland may have been less assertive and innovative than might have been desired, in the absence of a competitive and export-oriented industrial sector there is probably very little that could have been achieved to accelerate an earlier economic decoupling from the UK. The consequences followed inexorably. In the words of Mjøset:

> "Ireland became a free rider on Britain's decline, while Austria and Switzerland were free riders on Germany's economic miracle" (Mjøset, 1992, p.9)

The strong web of dependency between Ireland and the UK only began to weaken after the shift to foreign direct investment and export-led growth that followed the various *Programmes for Economic Expansion* in the late 1950s and during the 1960s. Figure 4 shows the behaviour of the shares of Irish exports going to the UK, and Irish imports originating in the UK, for the period 1960-92, after which shares tended to stabilise. The forces that brought about this changed pattern of behaviour - mainly export-oriented foreign direct investment - are examined in the next section.

** Insert Figure 4 here

[3] Internationalisation and foreign direct investment

The early Industrial Revolutions of the 18th and late 19th centuries by-passed most of the island of Ireland, with the exception of the Belfast region of what is now Northern Ireland. Our modern economic age only dawned in the late 1950s. The successes and challenges that we face today are an extraordinary reversal of the failures and problems faced by policy makers at that time. In the words of Dr Ken Whitaker, the senior civil servant in the Irish Department of Finance, writing in the late 1950s, we had "plumbed the depths of hopelessness". Today, we bask in success.

The 1960s represented a watershed for the Irish economy. Policy changes made from the late 1950s and early 1960s onwards launched the economy on a development path that differed radically from that pursued before and after independence. The central policy dilemma was not whether the Irish economy should be open to trade and investment flows with the wider world economy, since - as we showed in Table 1 - Ireland already had a relatively open economy when compared to the other small European countries in the late 1950s. Rather, the issue was the nature of this involvement and whether there was to be a break with an almost total dependence on the British market as the destination for exports of a very restricted variety of mainly agricultural products.

The failure of the policy of industrialisation behind protective tariff barriers that was pursued from 1930 to 1960, became apparent during the economic crises of the 1950s (O'Malley, 1989; Kennedy, Giblin and McHugh, 1988). A case can be made that union within the United Kingdom - at a time when Britain was the dominant world economic superpower - had been economically beneficial to Ireland during most of the 19th century, except for the period of the Great Famine of 1847-49 and its immediate aftermath (Ó Gráda, 1994). But the problems that beset the much weakened UK economy in the straitened circumstances that followed World War II, the birth of the European community with the signing of the Treaty of Rome in 1956, as well as the fact that the United States was the new hegemonic economic power, were factors to which Irish strategic policy formulation was not indifferent.

To measure the extent to which Ireland lagged behind the other small European states in the late 1950s is a difficult task, since comparisons based on the simple conversion of domestic prices to a common currency are beset by problems. However, from the year 1960 we have standardised data that makes this comparison in terms of purchasing power parity (Table 2). Ignoring the special case of Luxembourg, the original six member states of the then EEC formed a relatively homogeneous group, with Germany leading (at 122 relative to the average of 100) and Italy lagging (at 87). In the case of Italy, the low average concealed the fact that the Northern sub-regions were well above the European average, while the Southern (or *Mezzogiorno*) sub-region was well below. The other nine future members of what is now the EU consisted at that time of five wealthy countries (Denmark, Austria, Finland, Sweden and the UK, ranging from a high of 124 (UK) to a low of 88 (Finland)) and four much poorer countries (Greece, Spain, Ireland and Portugal, ranging from a high of 57 (Spain) to a low of 43 (Greece)).

** Insert Table 2 here

At the time of the first enlargement in 1973, the Danish and Irish GDP per head figures had changed very little relative to the EU average, but the UK had declined in relative terms to about the EU average. Since Ireland was a heavily agricultural country even as late as 1973, debate on the wisdom of its entry into the then EEC focused attention on the likely benefits from higher prices of agricultural produce under the CAP rather than on regional policy. In the early years of its membership, the main benefits to Ireland came from the CAP in terms of greatly increased transfers under the price guarantee section (McAleese, 1975).

An aspect of modern Irish economic development that has attracted considerable attention internationally is the dynamic role played by foreign direct investment (FDI). Ireland is a case study of the effects on a small developing host economy of export-oriented FDI and this phenomenon has been the subject of much detailed research (O'Malley, 1989; Barry, Bradley and O'Malley, 1999). The economy emerged in the late 1950s from a heavily protectionist regime and the switch to openness was more dramatic than in the other European states and was implemented in terms of a vigorous industrial incentive package consisting of a very low corporate tax regime and generous capital and training grants. After a slow start in the 1960s, the foreign sector grew very rapidly during the 1980s and now accounts for about one half of Irish manufacturing employment and over two-thirds of gross manufacturing output (Barry and Bradley, 1997). Directly as well as indirectly, FDI has affected every corner of the Irish economy.

FDI inflows into Ireland did not go primarily into the more traditional sectors in which the economy had a comparative advantage (e.g., food processing, clothing, footwear) mainly because many indigenous manufacturing sectors are largely non-tradeable (i.e., directed mainly at serving the small local market), and the substantial high technology FDI inflows that came to Ireland turned out not to depend on local comparative advantage. Although the outward orientation occurred at a time when the concept of growth poles was universally popular as a spur to development (Buchanan, 1968), the normal processes of clustering and regional concentration in Ireland were impeded both by the branch-plant nature of the investment and by a public policy that encouraged geographical dispersal almost certainly at some expense to strict economic efficiency criteria. However, after more than three decades of exposure to foreign direct investment, Ireland eventually succeeded in attracting sufficient firms in the computer, instrument engineering, pharmaceutical and chemical sectors to merit a description of sectoral "agglomerations" or "clusters".

The long overdue switch to an outward orientation from the 1960s was an enlightened response to changes in the world economy. The engine of subsequent Irish growth was the manufacturing sector, and the engine of the manufacturing sector was the foreign-owned multinational subsector. Experience led to a better understanding of the role of small regions and small states in the increasingly integrated international economy, where:

> "In Adam Smith's day, economic activity took place on a landscape largely defined - and circumscribed - by the political borders of nation states: Ireland with its wool, Portugal with its wines. Now, by contrast, economic activity is what defines the landscape on which all other institutions, including political institutions, must operate" (Ohmae, 1995, p. 129)

On the global economic map, the lines that now mattered were rapidly becoming those defining "natural economic zones", where the defining issue is that each such zone possesses, in one or other combination, the key ingredients for successful participation in the international economy. Thus, the rise of the EEC, the development of the Pacific Rim and the progressive liberalisation of world trade under successive GATT rounds, presented both opportunities and threats to Ireland. But the eventual dominance of the

Irish manufacturing sector by foreign multinationals was unexpected and quite unique by OECD experience. With falling transportation and telecommunication costs, national economies were destined to become increasingly interdependent, and in the words of President Clinton's former Labour Secretary, Robert Reich:

> "the real economic challenge ... [of a country or region] ... is to increase the potential value of what its citizens can add to the global economy, by enhancing their skills and capacities and by improving their means of linking those skills and capacities to the world market." (Reich, 1993, p.8).

Perhaps the most striking consequence of foreign investment inflows was that it hastened the de-coupling of the Irish economy from its almost total dependence on the United Kingdom. Ireland’s development dilemma had always been that it could either stick closely to UK economic policy and institutional norms and be constrained by the erratic UK growth performance, with little prospect of rapid convergence to a higher standard of living. The alternative was to implement an economically beneficial and politically acceptable degree of local policy innovation that offered hope of a faster rate of growth than its dominant trading partner. The Irish economic policy-making environment during this period can be characterised as having shifted from one appropriate to a dependent state on the periphery of Europe to that of an region more fully integrated into an encompassing European economy. FDI renovated and boosted Irish productive capacity. The Single Market provided the primary source of demand. All that remained was for a big push on improvement in physical infrastructure, education and training, and this arrived in the form of a dramatic innovation in regional policy at the EU level.

[4] Facilitating Irish convergence: EU regional policy

In his 1975 paper examining the evidence for and against Ireland’s membership of the EEC, McAleese concluded that:

> At this stage, more than ever before, attention will have to focus on regional policy. Ireland, as one of the least developed regions of the Community, has a particular active interest in the evolution of such a policy. ….

> Paradoxically, therefore, the strongest long-run economic argument in favour of Ireland's joining the Community is based on a policy which does not yet exist" (McAleese, 1975).

The importance and emphasis given to regional policy within the EU has greatly increased since the late 1980s, a time when major policy reforms and extensions were introduced in the lead-up to the implementation of the Single Market and Economic and Monetary Union. After the turbulence of the 1970s and the 1980s, economic analysts tended to be more preoccupied with stabilisation (very much a national issue) rather than with growth (which usually has a regional dimension). It was not until the latter part of the 1980s, when inflation and unemployment disequilibria were brought more under control (nominal convergence), that a range of longer term issues (such as real convergence and regional policy) moved towards the top of the EU agenda.

4.1: The rise of EU regional policy

Three major driving forces of EU regional policy set the scene for public policy making in the lagging regional states of the EU.

(a) The progressive <u>enlargement</u> of the EU from its foundation in 1956 – when there had been a degree of homogeneity at the national level – brought about an ever increasing degree of socio-economic heterogeneity with the entry of Ireland, Greece, Portugal and Spain, the imminent entry of some low income states from Central Europe, as well as a growing desire to address regional disparities within nation states as well as between states.

(b) In addition to the simple aspect of enlargement, the <u>internal and external socio-economic challenges</u> faced by the member states and regions became more complex and forced EU policy makers to address the task of preparing weaker states and regions to handle such initiatives as the Single Market (SEM), Economic and Monetary Union (EMU) and more recently the need to prepare for the transition of economies of Central and Eastern Europe to EU membership.

(c) While nation states have always operated internal regional policies of various types, what is different about EU regional policy is that significant financial resources were made available by the wealthier member states to fund regional policy initiatives in a limited number of the poorer member states. The available EU budget was initially dominated by the need to support the Common Agricultural Policy (CAP), but there were major expansions in resources to fund the reformed Community Support Frameworks of 1989-93, 1994-99 and 2000-06.

If the original customs union of the Treaty of Rome had never deepened - in the sense of moving towards greater economic and monetary integration - the simple process of enlargement in itself would have required greater attention to be given to regional policy (see Table 2 above). After the entry of Ireland in 1993, the next two enlargements (Greece in 1982; Portugal and Spain in 1986) faced the EU with the danger of developing a two tier community. In 1986, a very pronounced gap existed between four states (Greece, Ireland, Portugal and Spain) and the other eight. At that time, and using the measure of GDP per head, Spain was the wealthiest in relative terms (at 70) and Portugal lagged most (at 54). Ireland (at 64) and Greece (at 61) lay between these extremes.

If living standards are more accurately measured by private consumption per capita, as shown in Table 3, relative living standards are found to have improved only modestly in all four peripheral member states between 1973 and 1991. Ireland, on this measure, lay much closer to the lower levels of Portugal and Greece than to the relatively high level of Spain. With respect to unemployment rates, only in the 1990s did the Irish rate start to fall and converge towards the lower rates in Greece and Portugal, leaving Spain as the high unemployment outlier. The early convergence experience is therefore a little ambiguous.

** Insert Table 3 here

4.2: Internal and external challenges and EU regional policy

It is well known that economic disparities tend to increase during recessions and to lessen when growth is high and pervasive. The economies of the EU were hit by two major world recessions in the aftermath of the oil price crises of 1973 and 1979. Not only did national growth rates decline and diverge, but the fortunes of regions of nation states also diverged. Thus, some of the UK regions (including Northern Ireland, Scotland and Wales) suffered badly relative to the more prosperous southern regions as traditional manufacturing declined precipitously. Although there was some response to the greater challenges faced by the EU, and regional policy was reformed and extended in various modest ways, the major reforms and extensions of EU regional policy were initiated only in the context of planning for the development of the Single Market that took place during the years 1985-88.

Progressive trade liberalisation within Europe was always likely to entail substantial industrial disruption in the periphery, either defined as the member states on the western and southern edge of the EU or as those sub-regions of member states that were located far from the centres of population and economic activity. Adjustment problems were therefore likely to be greater in the periphery.

A massive shake out of jobs in Irish and Spanish 'traditional' industry occurred as trade liberalisation progressed during the 1980s, even before the formal initiation of the Single Market. The low productivity sectors in Greece and Portugal also faced increasingly intense pressures. One of the potential difficulties faced by peripheral economies like Ireland in adjusting to EU membership was the possibility that as trade barriers fell, industries that had a high share of the plants that exhibit increasing returns to scale (i.e., plants where productivity increases with size) would be attracted away from the periphery towards the densely populated core markets. This process led to the decline of many traditional Irish indigenous industries. However the influx of multinational companies more than offset this decline. . Foreign firms locating in Ireland have tended to be in sectors where there are increasing returns to scale (IRS) at the industry level (computer equipment, pharmaceuticals, instrument engineering) but constant returns (CRS) at the plant level., so the share of Irish employment in IRS sectors has increased substantially.

The reform of EU regional aid programmes into the so-called *Community Support Framework* (CSF) in the late 1980s presented EU as well as national policy makers and analysts in countries like Ireland with major challenges. The political rationale behind the CSF came from the fear that not all EU member states were likely to benefit equally from the Single Market, whose purpose was to dismantle all remaining non-tariff barriers within the Union. In particular, the less advanced economies of the Southern and Western periphery (mainly Greece, Portugal, Spain and Ireland) were felt to be particularly vulnerable unless they received development aid (Cecchini, 1988).

What was special about the reformed regional policies was their goals, i.e., to design and implement policies with the explicit aim of transforming the underlying structure of the beneficiary economies in order to prepare them for exposure to the competitive forces about to be unleashed by the Single Market. Thus, CSF policies moved far beyond a conventional demand-side stabilisation role, being directed at the promotion of structural change, faster long-term growth, and real convergence through mainly supply-side processes.

4.3: Was Ireland a case study of successful EU regional policy?

By the time Ireland and Greece joined the European Union - in 1973 in the case of Ireland, and in 1982 in the case of Greece - the program that led to the completion of the Single European Market, had not yet begun. The then European Economic Community was effectively a customs union. It was evolving slowly, but it remained more or less a customs union. Portugal and Spain joined in 1986, just when serious consideration was being given to deepening the level of economic integration by means of the Single Market initiative, i.e. removing all the non-tariff barriers to trade (such as border controls, national-specific product standards, etc.). The larger wealthier countries feared that the four poorest member states in the EEC at that time - Greece, Ireland, Portugal, Spain - where development-lagged behind the average, might be vulnerable to the introduction of the Single European market. In effect, they feared that the industrial and service sectors of the poorer member states would not be able to withstand the competitive forces that would come from the larger richer core member states.

To help these poorer so-called “cohesion” countries, very generous development aid was made available, targeted at facilitating their participation in the Single Market, as well as accelerating their convergence towards EU average income per head. We have seen that in 1986, just before the structural funds were expanded, if you set an index of the European average GDP per capita at 100, Greece was at 61; Ireland was at 64; Portugal was at 54 and Spain was higher, at 70. These four countries had many other common characteristics in 1986. They had high actual and hidden unemployment and large agricultural sectors (in the case of Ireland, about 18% of the labor force and in the case of Greece and Portugal, much higher). They had underdeveloped physical infrastructure (in 1986 there were no motor ways in Ireland). The unfavorable structure of their manufacturing sectors left them with a preponderance of traditional products (such as food processing, clothing, textiles), and a lack of modern sectors (such as electronics, pharmaceuticals, etc.). They also had a greatly underdeveloped market service sector, in particular producer services (i.e., services to industry, rather than consumer services). From her entry into the European Union in 1973 until the year 1988, Ireland remained at 60% of the EU average GDP per head. The Irish level of income per head was about the same as Greece, a bit higher than Portugal, but somewhat lower than Spain.

With the advent of the Single Market, the European Union deepened in many different ways. For example, intra-EU trade grew and trade in intermediate goods (i.e., sales to firms by other firms) grew particularly quickly. In the late 1980s, Spain and Ireland had intermediate levels of this type of intra-industry or firm-to-firm trade. Portugal and Greece had very low levels. I suspect that Bulgaria also has low levels. However, this type of trade is a measure of the differing degree of the integration of these countries into the EU and wider global economy. It is a much better measure than simple trade data.

A gradual restructuring of European industry took place, with the evolution of strategic alliances in manufacturing and services between countries. From being a customs union, Europe evolved towards being a Single Market. A big shake-out of traditional industry had already taken place in Ireland and Spain prior to the advent of the Structural Funds in 1989. This shake-out is still underway in Portugal and Greece. In the case of Ireland it had catastrophic economic effects. The Irish unemployment rate rose to 20% in the mid 1980s. The debt-to-GDP ratio rose to 130%. Ireland at that time was in serious economic and social difficulties.

It was in this context that the reorganization and massive increase in the EU structural funds took place. The process started for the five years from 1989 to 1993 (in what was called the Delors I package, after Jacques Delors, then President of the Commission). The next round of Structural Funds (called Delors II), ran from 1994 to 1999. Each of the four main "cohesion" countries who were the recipients of most of the aid have had 10 years of sustained high development aid from the EU. In the case of Ireland, under the Delors I package this ran at some 3 to 4 per cent per annum of Irish GDP. In the second period the aid fell slightly as a share of GDP to some 2 to 3 per cent. By any standards, this was generous aid. Taken together with the domestic co-financing element, it allowed major investment schemes to go ahead.

The purpose of the Structural Funds was to generate permanent improvements in economic competitiveness and performance, rather than just impart a transitory stimulation that would vanish after the aid was cut off. There were three main channels through which the supply-side effects of the structural fund aid operated.

The first channel is to improve the physical infrastructure such as roads, rail, ports, telecoms. A country cannot communicate with the global economy unless these channels operate efficiently and effectively. The second channel is to improve the level of education and training, and to enhance the skills of the labor force. You cannot produce world class goods unless your labor force is well educated and trained. The third channel is to directly assist private sector firms by subsidizing investment, improving marketing and design skills, R&D, etc. A fourth channel (intra-national regional aid) did not apply to Ireland under Delors I and II since we were such a small and relatively homogeneous country. Portugal, Spain and Greece have poor regions that suffer relative to others, as does Southern Italy (the Mezzogiorno) and the former East Germany.

The goal of the Structural Funds was to transform the underlying structure of the beneficiary economies and to prepare them to face the competitive forces that were about to be unleashed by the Single market. The details and modalities of the implementation have been described elsewhere (Bradley *et al*, 1995), and the outcome was very interesting. Remember that in 1986, just before the Structural Funds were reformed and expanded, Greece was at 61 relative to a European average of 100. By 1999 it was at 69. There had been a modest, but quite significant, increase in living standards. Portugal started at 54 in 1986 and is now at 74. Spain started at 70 and is now at 80. But Ireland started at 64 and is now at a 111. Those figures flatter the Irish performance to some extent, but it represented a massive improvement. We summarise briefly a logical sequence of interconnected effects that brought about that impressive Irish result.

First, the Irish economy in the late 1970s and for the first half of the 1980s was seriously and massively destabilized – high unemployment, relatively high inflation, and the public finances almost out of control.

Second, there were the effects of the Structural Funds. These had demand and supply effects. As you actually build a road, it injects income and expenditure into your economy. But the long-lasting benefits of building a road come when it is available to connect your cities and to transport goods more efficiently into and out of your economy.

The third event was the beneficial effect of Ireland joining the European Monetary System (or EMS). This was the exchange rate mechanism that was instituted in 1979 and served as a precursor of Economic and Monetary Union (or EMU). But the credibility benefits of Ireland’s membership of the EMS were delayed by about a decade. To put it quite bluntly, the world’s financial markets did not believe that the Irish economy could be stabilized successfully and could perform within the constraints of the EMS. So, the lower Deutsche Mark interest rates did not become available to the Irish economy until the late 1980s when eventually credibility was established.

The fourth event was the massive inflow of mainly US foreign direct investment, most of it in high technology areas. This was in part a spin-off benefit of the Structural Funds, making use of the improved infrastructure and human capital. It was also due in part to Ireland’s access to EU markets for exports produced by multi-national companies located and producing in Ireland. Additionally, of course, one of the long-term elements of Irish policy was a low rate of corporate taxation, designed to attract inward investment.

The fifth event, producing a reinforcement of the fiscal stabilization benefits, came as a result of the Irish government strongly signaling its firm intention to join the EMU from the start-up in January this year, even in the absence of our largest trading partner, the United Kingdom, from EMU membership.

Finally, in Ireland there was an evolving social partnership (involving employers organizations, trades unions and government) that eased the distribution conflicts and disputes that come with recovery and rapid growth.

After a full decade of Structural Funds and the Single Market, how have the cohesion countries performed? In Table 4 we show the convergence experience of these four countries, where it is seen that some quite rapid convergence has taken place in recent years. Adaptation to the competitive rigors of the Single Market and efficient use of Structural Funds underpin the dramatic convergence of Ireland that coincided with the implementation of the new EU regional policies. One is tempted to suggest that the combination of openness and the use of Structural Funds were the primary forces driving Irish convergence, but of course the full picture is more complex. Nevertheless, it is the policy of openness and the use of Structural Funds that served to distinguish Ireland from, say, Greece, which had a similar development distance to travel but which has only recently set its wider policy framework in the context of embracing internationalisation. Portugal, on the other hand, is in the process of repeating Irish success. It remains to be seen if these countries can sustain their convergent behaviour in times of recession as well as in times of growth.

** Insert Table 4 here

[5] Conclusions

The opening of the economy and the removal of tariff barriers were necessary policy changes if we were to be kick-started from stagnation. Free trade with the UK - our dominant trading partner until the late 1960s– gave us our first opportunity of "testing the water" of outward orientation. Free trade with Europe came later when we joined the then EEC in 1973. The strategic orientation of Irish economic policy making over the past three decades has emphasised the need to face the consequences of the extreme openness of the economy, to encourage export orientation towards fast growing markets and products, and to align the economy with European initiatives. We joined the European Monetary System in 1979, breaking a long link with sterling and escaping from economic and psychological dependency on the United Kingdom. We embraced the Single Market of 1992, and most recently, Economic and Monetary Union from January 1999. Perhaps this is the main legacy bequeathed to us by the prescient policy-makers of the time of Taoiseach (Prime Minister) Seán Lemass. The enthusiastic embrace of openness provides the strong and enduring strategic backbone of our economic planning.

But Ireland was not a very attractive investment location in the early 1960s. It was remote, unknown, had little by way of natural resources, and had no industrial heritage. To offset these handicaps, the main inducement provided to inward investors was initially a zero rate of corporation tax on exports of manufactured goods. Under pressure from the EU, this was later replaced by a low ten per cent tax rate on all manufacturing profits. This tax policy, combined with aggressive and sophisticated marketing initiatives designed by the IDA to attract and aid inward investors, provided the main driving force for the modernisation of the economy through export-led growth.

However, the attractive tax rate and the absence of tariffs were only a start, and would not in themselves have made Ireland a major destination of high quality foreign direct investment. Other factors came together to reinforce Ireland's success and interacted to create a virtuous circle of superior performance that replaced the previous vicious circle of decades of under performance. Educational standards in the Irish work force had lagged behind the world. Policies were urgently needed to bring about a steady build-up of the quality, quantity and relevance of education and training, and this had been initiated by farseeing educational reforms starting in the 1960s. These reforms were extended by the emphasis given to scientific and technical skills through the use of generous EU Structural Funds from the late 1980s. Although issues of social inequality are still of concern, the general level of educational attainment in Ireland rivals that of other wealthier European countries.

Low taxes, bright people, but bad roads and unreliable phones are incomplete and unsatisfactory recipes for success. Here, Ireland was remarkably lucky that it was granted so-called Objective 1 status for EU regional policy aid. Because of a generally low standard of living in the late 1980s (less than two thirds of the EU average), as well as a peripheral location far away from the rich European markets, generous aid was made available to improve infrastructure, train young people and stimulate the business sector. Few would claim that everything is perfect today, and, indeed, growth itself has brought congestion in its wake. But dramatic improvements have taken place in the quality of roads, airports and telecommunications. A recent America consultancy report included Ireland among the highly desirable "broadband four" (USA, Canada, UK and Ireland), these being countries best prepared by infrastructure and deregulation to meet the challenges of the new age of e-commerce (Legg Mason, 2000).

These were the building blocks of the new Irish economy, and they brought success through their interaction and combination. The far-sighted targeting by the Irish Industrial Development Agency of inward investment in clusters of industries in computer equipment, software, pharmaceuticals was pursued with a degree of diligence and professionalism that became the envy of all aspirant developing countries. Such firms needed highly skilled workers, and these were available in ever increasing numbers from the universities as well as from the assertive and bustling Regional Technical Colleges. Business and knowledge spillovers from the initial clusters encouraged further growth in the high technology areas, and provided the basis for additional benefits, often in the older more traditional areas (such as food processing and clothing) that needed injections of new strategies and technologies.[2] The eponymous *Economist*, which had painted so damning a portrait of the Irish economy as recently as 1988, now - a mere nine years later - told a very different story (Figure 5).

** Insert Figure 5 here

[2] For example, a recent television programme on the Irish fashion industry showed computer-controlled knitting machines being used by native Irish speakers on Inishman to produce high quality, high value-added customised Aran Sweaters for export to fashion-conscious customers in the USA and Japan!

However, there are risks associated with the development path chosen by Ireland. First, the dynamic foreign manufacturing base is concentrated on a narrow range of technologies that can quickly move through maturity and into decline. Second, the policy initiatives that ensured that Ireland enjoyed an advantageous "first mover" status in the early 1960s are unlikely to benefit other smaller economies to the same extent.

Using a business (as distinct from an economic) research perspective, Michael Porter in his most recent work has returned to the sources of national and regional competitive advantage and places greater stress on the role of government policy than in his earlier work (Porter, 1990 and 1998). Porter examined national competitiveness analysis from a systematic integration of previous disaggregated analysis at the level of the individual firm and sector. In future national and regional planning, policy makers are going to have to think increasingly in this way rather than in aggregate macroeconomic terms. For example, cluster development in the Irish case was seeded and reinforced by foreign direct investment, mainly by an industrial policy that distorted competition in our favour. However, future clustering will need to focus on removing constraints to productivity growth in a far wider range of indigenous industries;

Dramatic economic changes always have serious social consequences. Young people, with their superior education, are easily absorbed by burgeoning high technology sunrise sectors and the spin-off professional and other services. Older people, however, are locked into traditional skills in sunset industries, and tend to lose out. During the 1980s the Irish unemployment rate soared to 20 per cent, threatening to tear apart the social fabric of the nation. Prompted by the terrible recession of the 1980s, employers, trades unions and government came together in the mid-1980s to design a consensual process of social partnership. They understood the urgent need to ensure that there would be as few losers as possible in the economic dislocation that accompanied modernisation. Unlike the United Kingdom - which had been wracked by violent class conflict during the 1980s - in Ireland the social democratic institutions of Sweden, Germany and the Netherlands were emulated and adapted to local conditions. In this way, Ireland became a remarkable and slightly exotic blend of American business efficiency and European social equity.

The path chosen by Ireland for its economic development is not without risks. The most dynamic part of our manufacturing is almost completely foreign owned and is concentrated in a narrow range of technologies that are fast moving towards maturity. For example, Ireland excels in making Personal Computers, but who knows what new devices will be used to surf the internet five years from now. Will they be made in Ireland? The policy initiatives that ensured Ireland had an advantageous head start in the early 1960s may not be sufficient to facilitate the inevitable switches to newer technologies since other countries have been learning by watching Ireland doing! Until recently, we could rely on an abundant supply of highly trained Irish workers. But birth rates fell dramatically in the 1980s, and if economic growth is to continue, we may have to rely on inward migration to supply the labour. We have long had a manufacturing sector dominated by multi-national firms. But how easily and gracefully will we make the transformation to a multi-national society?

Meanwhile, Irish businesses compete in a global economy and only the most innovative and efficient will survive and prosper. Global competition is organised today mainly by multinational firms and not by governments. Production tends to be modularised, with individual modules spread across the globe so as to exploit the comparative advantages of different regions. Hence, individual small countries like Ireland (as well as small regions like Northern Ireland, Scotland and Wales) have less power to influence their destinies than in earlier eras. Today, they must focus their economic policies on location factors, especially those which are relatively immobile between countries: skills, infrastructure, the efficient functioning of labour markets and superior economic and social governance.

In stark contrast to my time as an undergraduate in the 1960s, college students today no longer aspire to pensionable jobs in the public sector, but are more likely to be planning business ventures and dreaming of how stock market floatations will make their fortune. This is the very best time to be Irish, when our rapid economic progress has catapulted us from the role of poor laggard to successful Tiger. Our society is at once traditional and modern, and the tension between these forces serves to animate our thought and artistic expression. The Irish economy may be very small in size, but its policy experiences during the 20th century provide a rich source of information and guidance for other small countries that seek to develop and prosper.

References

Barro, R. and X. Sala-i-Martin (1990). *Economic Growth*, New York: McGraw Hill.

Barry, F., J. Bradley, A. Hannan, J. McCartan and S. Sosvilla-Rivera (1997): *Single Market Review 1996: Aggregate and regional aspects: the cases of Greece, Ireland, Portugal and Spain*, London: Kogan Page, in association with the Office for Official Publications of the European Communities, Luxembourg.

Barry, F. and Bradley, J. (1997). "FDI and trade: the Irish host-country experience", *Economic Journal*, 107 (445), 1798-1811

Barry, F., J. Bradley and E. O'Malley (1999). "Indigenous and Foreign Industry: Characteristics and Performance", in *Understanding Ireland's Economic Growth*, ed. F. Barry, London: Macmillan.

Bradley, J., N. O'Donnell, N. Sheridan and K. Whelan (1995). *Regional Aid and Convergence: Evaluating the impact of the Structural Funds on the European Periphery*, Aldershot: Avebury.

Buchanan, C. and Partners (1968). *Regional Studies in Ireland*, Report Commissioned by the United Nations on behalf of the Irish Government, Dublin: An Foras Forbatha.

Cecchini P. (1988). *The European Challenge 1992, The Benefits of a Single Market*, London: Wildwood House.

Fanning, R. (1978). *The Irish Department of Finance 1922-58*, Dublin: Institute of Public Administration.

Friedman, T. (1999). *The Lexus and the Olive Tree*, New York:Farrar Straus Giroux.

Fujita, M., P. Krugman and A. Venables (1999). *The Spatial Economy: Cities, Regions, and International Trade*, Massachusetts: The MIT Press.

Helpman, E. and P. Krugman (1985). *Market Structure and Foreign Trade: Increasing Returns, Imperfect Competition and the International Economy,* Cambridge, Massachusetts: MIT Press

Kennedy, K., T. Giblin and D. McHugh (1988). *The Economic Development of Ireland in the Twentieth Century*, London: Routledge.

Krugman, Paul (1987). "Economic Integration in Europe: Some Conceptual Issues", in *Efficiency, Stability and Equity*, (ed.) T. Padoa-Schioppa, Oxford, Oxford University Press.

Krugman, Paul (1995). *Development, Geography, and Economic Theory*, Cambridge, Massachusetts: The MIT Press.

Krugman, Paul (1997). “Good News from Ireland: A Geographical Perspective”, in A. Gray (ed.), *International Perspectives on the Irish Economy,* Dublin: Indecon Economic Consultants.

Legg Mason Precursor Group (2000). *The Building Blocks of Growth in the “New Economy”*, Philadelphia, Spring.

McAleese, D. (1975). “Ireland in the Enlarged EEC: Economic Consequences and Prospects”, in *Economic Sovereignty and Regional Policy*, ed. John Vaizey, Dublin: Gill and Macmillan.

Mjoset, Lars (1992). *The Irish Economy in a Comparative Institutional Perspective,* Report No. 93, Dublin: National Economic and Social Council.

Monti, Mario (1996). *The Single Market and Tomorrow’s Europe: a progress report from the European Commission,* London: Kogan Page.

Ó Grada, C. (1994). *Ireland: A New Economic History 1780-1939*, Oxford: Clarendon Press.

Ohmae, Kenichi (1995). "Putting Global Logic First", in *The Evolving Global Economy,* K. Ohmae (ed.), Harvard: Harvard Business Review Books, pp. 129-137.

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

O’Malley, E. (1992). “Industrial structure and economies of scale in the context of 1992”, in *The Role of the Structural Funds*, eds. J. Bradley *et al.*, Policy Research Series No. 13, Dublin: The Economic and Social Research Institute.

Porter, M. 1990., *The Competitive Advantage of Nations*, London: Macmillan Press.

Porter, M. 1998., *On Competition*, Massachusetts: HBR Press.

Reich, Robert (1993). *The Work of Nations: A Blueprint for the Future,* London: Simon and Schuster.

Rodrik, D. (1999). *The New Global Economy and Developing Countries: Making Openness Work,* Washington: Overseas Development Council.

Thomsen, S. and S. Woolcock (1993). *Direct Investment and European Integration,* London: Pinter Publishers.

Wijkman, P. (1990). “Patterns of production and trade”, in W. Wallace (ed.), *The Dynamics of European Integration*, London: Pinter Publishers.

Contacts for communications

The Economic and Social Research Institute,
4 Burlington Road, Dublin 4, Ireland

tel: (353-1) 667 1525 fax: (353-1) 668 6231
email: john.bradley@esri.ie

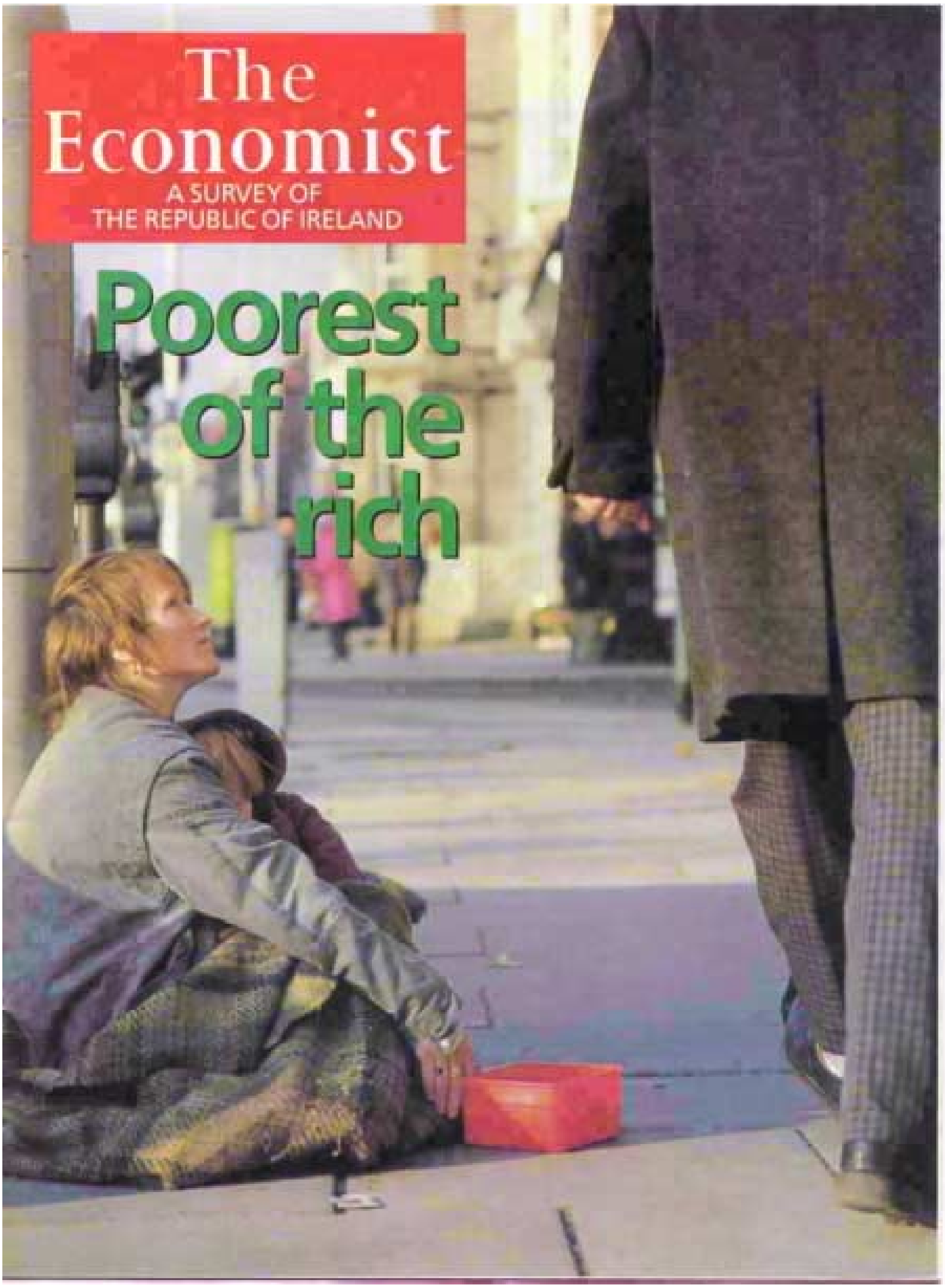

Figure 1: Cover of the *Economist* survey of Ireland, January 16th, 1988

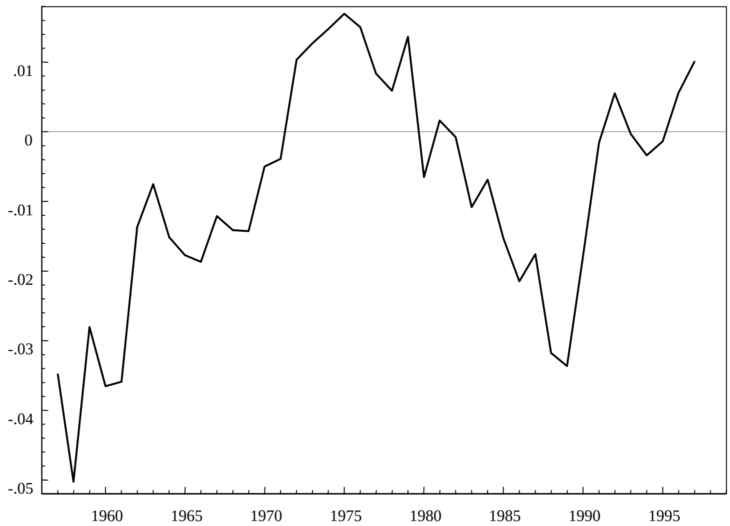

Figure 2: Recent migration in Ireland (expressed as fraction of total labour force) (negative sign indicates net outward flow)

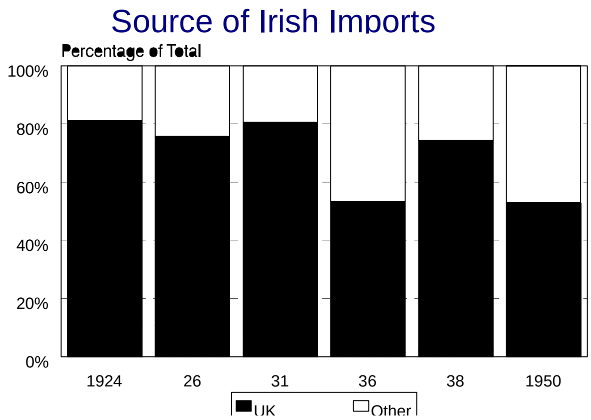

Figure 3: Southern trade shares with Britain and the North

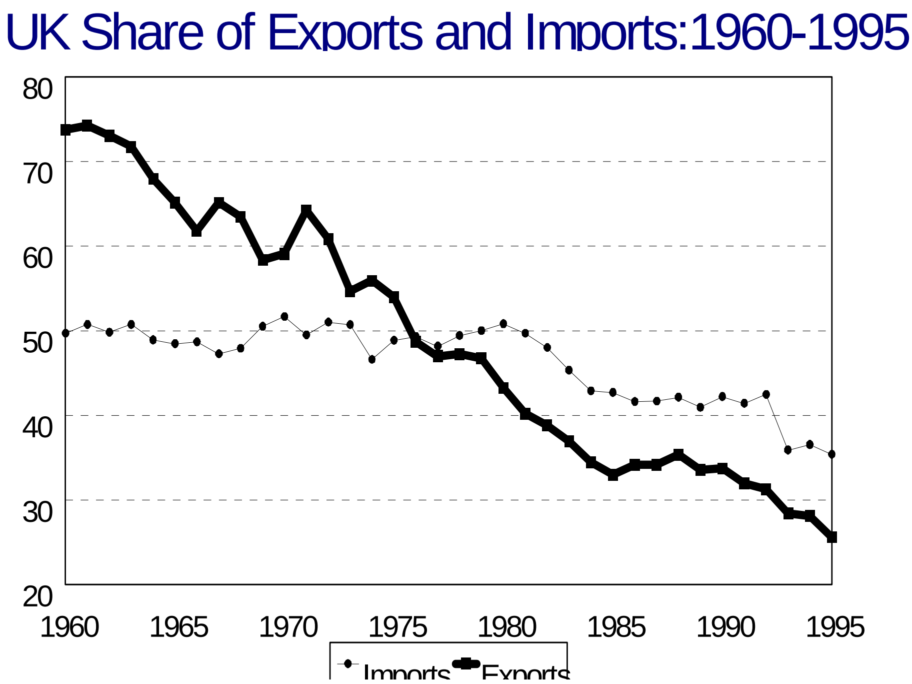

Figure 4: Southern trade with the UK: export and import shares 1960-92

Figure 5: Cover of the *Economist*, May 17th, 1997

Table 1: Small EU economies: measures of openness in 1960 (1999)

Country	**Exports of goods & services (% of GDP)**	**Imports of goods & services (% of GDP)**
Luxembourg	85.6 (93.6)	72.4 (80.8)
The Netherlands	45.7 (56.6)	44.2 (49.8)
Belgium	39.0 (73.8)	39.2 (69.1)
Denmark	32.7 (34.6)	34.5 (31.8)
Ireland	***30.4 (85.8)***	***35.5 (66.1)***
Austria	23.7 (46.2)	24.4 (45.8)
Sweden	22.7 (46.0)	23.3 (40.1)
Finland	22.5 (41.1)	23.2 (32.2)
Portugal	16.0 (33.2)	21.3 (40.3)
Greece	7.1 (16.0)	14.2 (23.3)

Source: *European Economy*, No. 66, 1998

Table 2: GDP per head of population: (PPS), EU-15 = 100

Country	**1960**	**1973**	**1986**	**1999**
Belgium	98.6	104.5	104.2	112.5
Germany	122.1	114.5	116.8	109.1
France	105.3	110.5	109.8	103.7
Italy	87.3	94.0	102.5	101.2
Luxembourg	168.7	153.1	138.8	165.9
The Netherlands	112.1	107.1	102.2	105.3
Denmark (73)	119.9	114.4	117.9	114.6
Ireland (73)	***60.8***	***58.9***	***63.7***	***111.0***
United Kingdom (73)	123.9	104.4	101.9	98.4
Greece (82)	***42.5***	***62.4***	***61.4***	***68.7***
Portugal (86)	***43.2***	***61.1***	***54.0***	***74.1***
Spain (86)	***56.9***	***74.8***	***69.7***	***80.2***
Austria (95)	94.8	98.5	105.4	110.9
Finland (95)	87.8	94.3	100.6	101.8
Sweden (95)	122.7	115.0	112.5	96.5

European Economy, 1998 pp. 80-81

Table 3: Economic indicators in the periphery

	Greece	Ireland	Portugal	Spain	EU-15
Unemployment Rate - Eurostat definition (%)					
1960	6.1	5.8	1.7	2.4	2.3
1973	2.0	6.2	2.6	2.6	2.6
1991	8.6	15.6	5.7	22.8	10.7
1999	9.1	7.4	5.1	17.2	10.2
Private Consumption/capita (PPS)					
1960	57	77	46	64	100
1973	70	65	62	81	100
1991	72	72	66	80	100
1999	78	83	74	79	100

Source: *European Economy*, No. 66, 1998

Table 4: Relative GDP per capita in purchasing power parity terms (EU15 = 100)

	1991	**1992**	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**	**1999**
Ireland	75.7	79.0	82.2	88.5	93.8	94.5	100.7	107.1	111.0
Spain	79.8	77.8	78.4	76.4	76.9	77.6	78.3	79.2	80.2
Greece	61.2	62.5	64.4	65.2	66.3	67.6	68.3	68.1	68.7
Portugal	64.7	65.4	68.3	70.0	70.7	70.3	71.3	72.7	74.1

Source: *European Economy*, No. 66, 1998.