Journal of the Statistical and Social Inquiry Society of Ireland.
Vol XXVI, Part IV

REAL CONVERGENCE, THE EUROPEAN COMMUNITY AND IRELAND *

KIERAN A. KENNEDY
Economic and Social Research Institute

(Read before the Society, 14 May 1992)

1. INTRODUCTION

As is well known, average living standards in Ireland are much lower than in most of our EC partners. It is of considerable interest to Ireland whether, and in what way, its living standards will catch up or fall further behind as Europe becomes more integrated. The issue is understandably at the heart of the government's strategy towards the EC, and was at the forefront of its diplomatic efforts to secure assurances on economic and social cohesion at the Maastricht summit last December. The issue has also been the subject of a number of valuable studies (see especially Bradley et al., 1992; NESC, 1989; O'Donnell, 1991). Yet I believe that we need to think a great deal more about this issue, both at the levels of analysis and of policy. My address will have served its purpose if it gives an impetus to such thinking.

It is necessary at the outset to say a word on terminology. In line with a common usage in the international economic literature, I shall use the term convergence to denote a tendency for poor countries to catch up with rich countries in terms of living standards (as measured by average income per capita, or related measures, such as productivity - although later I shall raise

* I wish to acknowledge the helpful comments received on an earlier draft of this paper from the following, none of whom is responsible for the views expressed or for any errors in the paper: M. Casey, J. Fitz Gerald, P. Honohan, F. Kennedy, P. Lynch, D. McAleese, B. Nolan, T. O Cofaigh, T. O'Connell, R. O'Connor, R. O'Donnell, F. Strain, T. K. Whitaker and A. Wren.

some questions about the primacy to be attached in current Irish circumstances to convergence measured in this way). In EC parlance this kind of 'real convergence' is regarded as a key dimension of 'economic and social cohesion', and the term 'convergence' is usually limited to 'nominal convergence', namely a tendency towards a uniform macroeconomic position on inflation, interest rates, and budget balance. In this paper, I shall have nothing significant to say on nominal convergence, and the term convergence is to be understood throughout to refer to real convergence.

The subject of convergence, in the sense of the term used here, is part of the general question of what determines the wealth of nations - a topic as old as the discipline of economics itself, but one in which interest has waxed and waned over time. In the last few years, there has been an enormous revival of interest in the subject in economic literature. For example, a special issue of the *Journal of Political Economy,* October 1990, was devoted to the new family of endogenous growth models, while the May 1991 issue of *The Quarterly Journal of Economics* was entirely given over to a set of papers, theoretical and empirical, on economic growth. I begin my address, therefore, with a short review of recent theoretical developments in Section 1 and of empirical findings in Section 2. The level and trend of convergence in the EC is examined in Section 3, while the specific case of Ireland is dealt with in Section 4. Policy issues arising from the preceding analysis are taken up in Sections 5 and 6, Section 5 dealing with policy at EC level and Section 6 with policy at national level in Ireland. Section 7 highlights the main conclusion.

2. THEORETICAL CONSIDERATIONS

Up to quite recently, mainstream economic growth theory implied a strong tendency towards convergence across countries. Standard growth models ruled out economies of scale and assumed diminishing returns to extra injections of capital. With all countries seen as facing the same production functions, investment in poor countries (with low capital/labour ratios) would give rise to faster growth of labour productivity than in rich countries (with high capital/labour ratios). Given that full employment was assumed, convergence in per capita income levels across countries was therefore inevitable even in a world of closed economies. In the long run, with population growth and technological change treated as exogenous and no special role accorded to human capital or government policy, the per capita growth rates themselves would converge on a common steady-state value determined by the exogenous rate of technological progress.

In a world of open economies, additional factors would come into play which would bring about convergence even more rapidly. Theory would predict that,

with free mobility of capital across countries, investment would move towards the poorer countries where, because of their low capital/labour ratio, higher marginal returns on capital could be earned. Equally, migration of labour from the poor to the rich countries would operate to speed up the process of convergence. Technology flows would give the poorer countries further opportunities for catching up rapidly by drawing on the pool of technology already developed in the more advanced countries.

It would be wrong, however, to suggest that this view was left unchallenged by other economists. Some followed Kuznets (1966) who insisted that it was premature to propose any theory of economic growth that could be called scientific until much more evidence was accumulated and the processes involved were better understood. Others such as Myrdal (1957) and Kaldor (1970) proposed theories of economic divergence rather than convergence. They insisted that, in the real world, market imperfections were the rule rather that the exception; that these imperfections did not spring merely from arbitrary government interference; and that the pervasiveness of economies of scale and external economies could give rise to cumulative patterns of advantage and disadvantage leading to divergence rather than convergence. Various streams of development economics, Marxist and non-Marxist, incorporated into their models 'political' variables, such as dependency and exploitation, to account for what they saw as a world in which the poor became poorer, while the rich became richer.

The mounting evidence (discussed in the next section) that the benign prediction of rapid convergence across countries in per capita income was not borne out empirically has, in the last few years, stimulated mainstream neoclassical theorists to develop new models to account better for the diverse experience of the real world. These models treat as endogenous one or more of the key variables which were taken as exogenous in the standard neoclassical growth model: population growth, human capital formation, technological change, and the role of government. Furthermore increasing returns, external economies and market power now figure in some of these models. Whether such models can any longer be called neoclassical is a moot point. Certainly the thinking underlying some of them is radically different from the standard neoclassical approach which has tended to be a-historical, a-spatial and deterministic. Becker et al (1990), for instance, note in introducing their model that 'history and luck are critical determinants of a country's growth experience'. This line of thinking is very similar to that emerging from the work of the Sante Fe Institute where exploration of the impact of increasing returns has led to the conclusion that, in accounting for growth experience, history matters, space matters and small, accidental, initial differences may lead to large long-term divergences (see Arthur, 1986, 1989).

It is beyond the scope of this paper to discuss the rapidly increasing number of endogenous growth models[1]. It suffices here to mention the broad conclusions of this work and its implications for policy. While convergence is not ruled out, it is no longer assured. Multiple equilibria abound, and even in the long run per capita income levels may continue to depend on initial conditions, such as the initial endowments of human and physical capital and fertility rates. Endogenous growth models generally place considerable emphasis on human capital, either as a direct input or through its impact on innovation. Once human capital is admitted as important, international migration may no longer lead to convergence if labour outflows from poor countries possess above-average levels of human capital.

A feature of all endogenous growth models is that policy choices and preferences can influence long-run growth rates: this was not so in the standard neoclassical model where the long-run growth rate essentially depended only on technological progress which was exogenously determined. The policies most likely to foster growth, derived from endogenous growth models and associated empirical work, have been listed by Barro and Romer (1990) as follows: 'Support for education; incentives for investment in physical capital; protection of intellectual property rights; support for R & D; international trade policies that encourage the production and worldwide transmission of ideas; and the avoidance of large government-induced distortions in the market'. None of this is new, nor is it sufficiently disaggregated to be useful for policy other than as a general guide: the really important policy questions are what types of education, or R & D etc. are most conducive to growth. The practical significance of the work lies rather in the fact that it confers a certain legitimacy and respectability on the more mundane detailed exploration of factors that were always known to be important.

The insights developed in the new growth theory broadly complement those arising from the reformulation of international trade theory over the past decade to take account of such factors as intra-industry trade, imperfect competition, economies of scale, external economies etc. Excellent non-technical reviews of these developments are given in Krugman (1987) and NESC (1989, Chap. 2). Broadly speaking, the new theory of international trade suggests that the overall gains from the freeing of trade and from economic integration may be much greater than those suggested by traditional theory, but that under certain circumstances the gains may be divided very unequally among countries. In particular plausible models have been devised in which the larger and stronger centres in an integrated area may, initially at least, attract the bulk of the industries with static and dynamic economies of scale while the weaker, peripheral, areas would be left with traditional, less dynamic activities (see Krugman and Venables, 1990 and Krugman, 1991). In such circum-

stances, labour outflows from the weaker areas may only reinforce their scale disadvantage while enhancing the advantage of the centre. The new theory, therefore, does not exclude the risk that integration could lead to cumulative divergence rather than convergence, even though the poor areas would generally be better off in *absolute* terms as a result of integration.

To sum up, mainstream economic theories now provide no assurance that convergence is the rule. Neither, for that matter, do they justify outright pessimism that divergence is inevitable. Rather, what they suggest is that international differences in income per capita can be quite persistent, and that in certain circumstances economic integration can cause these differences to widen further rather than narrow. Even if this is an inconclusive position, it does at least represent a more realistic view than formerly of the complexity of the actual world, to which we now turn.

3. GENERAL EMPIRICAL FINDINGS

If there were a general tendency towards convergence then we should expect that, when we examine a sample of countries over time, there would be a negative correlation between the growth rates and initial levels of income per capita. Alternatively we might test the convergence hypothesis by examining the dispersion of per capita income across countries at different points in time, and if there is convergence the dispersion should fall over time[2]. In the last five years or so, several important studies have applied these measures to various samples of countries over various time periods to see whether convergence was taking place.

Early studies working with small samples of industrialised countries over a period of a century or more did indeed find evidence of a strong convergence in productivity levels, though the pace of convergence varied widely in different periods (see Abramovitz, 1986 and Baumol, 1986). As de Long (1988) pointed out, however, the use of an *ex post* sample of countries that are now rich tends to bias the result in favour of convergence, in that other countries which might be expected *ex ante* to converge are excluded from the analysis precisely because they remained, or became, relatively poor. When some of the less successful nations are added, convergence is no longer found to be universal.

The common pattern emerging from several subsequent studies[3] using much larger samples of countries, for which data are available only since 1950, is that while convergence has taken place among the better-off countries, this does not apply to lower income countries (Baumol and Wolff, 1988; Dowrick and Nguyen, 1989; Barro and Sala-i-Martin, 1990; Zind, 1991 and Baumol et

al. 1991). Thus the international evidence points to the existence of a 'convergence club' which countries join once they have achieved a certain level of development, but below which there is no convergence, perhaps even divergence. Baumol and Wolff (1988) venture the suggestion that membership of the club is attained at about the median level of income per capita in their sample of 72 countries. If so, this would be reassuring for Ireland, given that its income per capita was 50 per cent above this level.

Barro and Sala-i-Martin (1990, 1991) test the convergence hypothesis with data for the states of the United States, for which data are available since 1840. They rightly point out that 'for studying the determinants of economic growth, the experience of the US states represents a vastly underutilised resource', and it might be added, one that is particularly interesting in relation to member states of the EC. Chart 1 plots the standard deviation of the log of income per capita at various dates from 1880 to 1988, the data relating to state personal income (excluding transfers)[4]. The long-term position is clearly one of convergence, though not at an even rate. Some periods were in fact characterised by divergence (e.g. 1920-30 and also 1840-80, not shown on the chart). Indeed, as a result of renewed divergence during the 1980s, the dispersion in 1988 was exactly the same as it had been 25 years earlier. Furthermore, the slow rate at which convergence has taken place in the US is irreconcilable with neoclassical growth theory and the associated empirical estimates of the parameters.

This mixed pattern of results can be rationalised tentatively as follows. Inherent in the hypothesis of convergence is the idea that being backward (in terms of productivity) creates a potential for catching-up, notably through absorbing and exploiting the backlog of technology already developed in more advanced countries. Whether or not this potential is realised, however, depends on many other factors. Clearly important is the maintenance of a high level of investment, not merely to bring about convergence in capital/labour ratios, but more important to secure the favourable interactions between capital accumulation and technological progress (e.g. embodiment and vintage effects, learning-by-doing etc.). The analysis in Wolff (1991) suggests that this factor alone suffices to explain most of the convergence between the highly industrialised nations in the postwar period.

At lower stages of development, however, there are major societal inhibitions, associated with backwardness, that have to be overcome before the catch up potential can be realised. Abramovitz (1986) has proposed a good name for these characteristics, namely 'social capability', but admits that 'no one knows just what it means or how to measure it'! It could potentially include a vast range of factors such as social attitudes and institutions, population

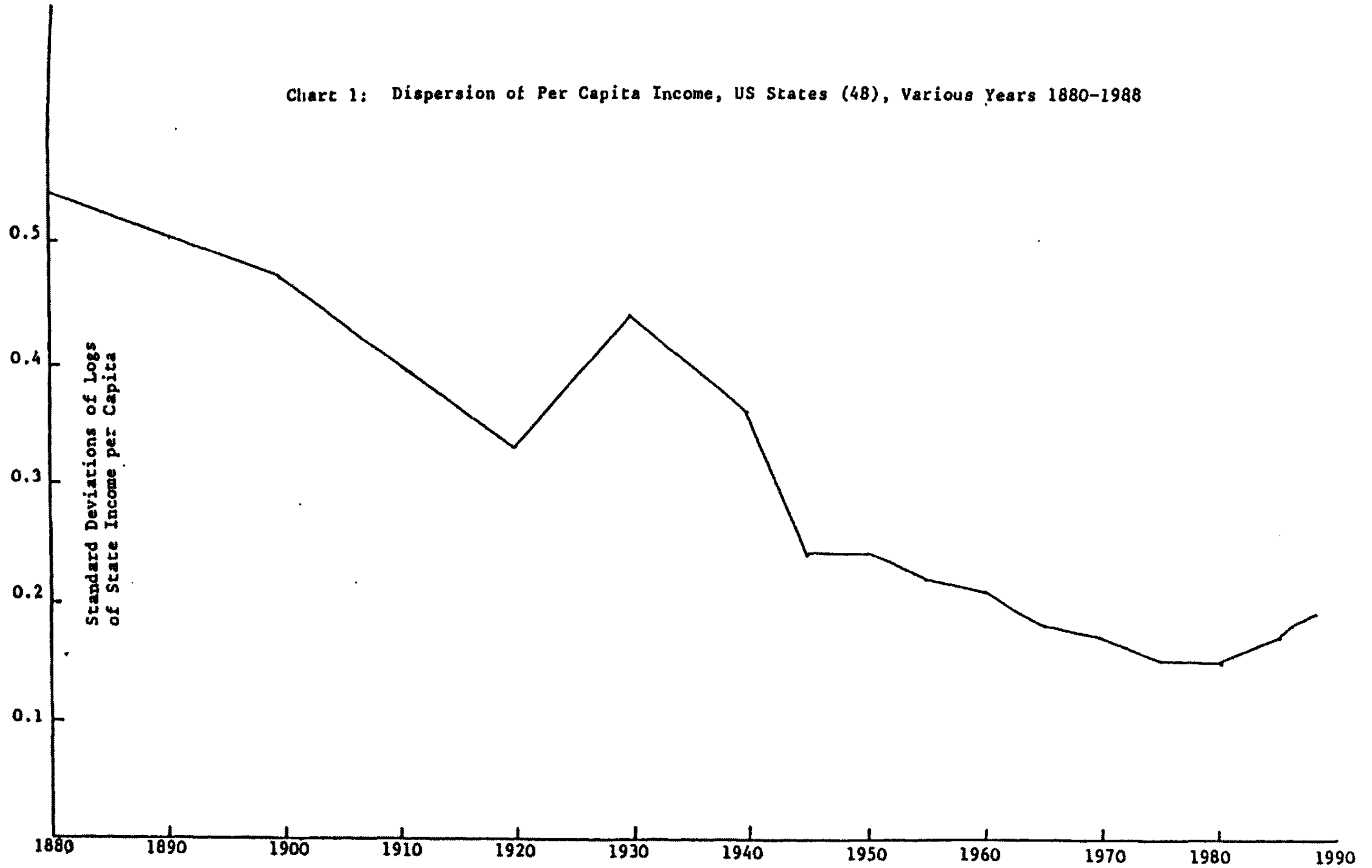

Chart 1: Dispersion of Per Capita Income, US States (48), Various Years 1880-1988

SOURCE: Barro and Sala-i-Martin (1990)

pressures, education levels, product mix, extent of trade with advanced countries etc. - indeed all the factors which those involved in economic development have long wrestled with and for which the level of income per capita is only a rough proxy measure. Moreover, even where a country has satisfied the initial conditions for admission to the 'convergence club', the pace at which convergence takes place can be affected by subsequent shocks, either to the domestic or world economy. It is scarcely accidental - and I shall return to the point again - that convergence among industrialised nations was most pronounced in the buoyant world conditions after World War II up to the first oil shock in 1973.

Some empirical flesh is put on the foregoing speculative bones in the work of Barro and Sala-i-Martin (1990, 1991), who test a modified hypothesis, namely that there is a consistent tendency to convergence but it can be offset by other factors, which must therefore be held constant in order to identify the convergence coefficient. In the case of the US over the period 1840-88, for instance, they find that the shock of the Civil War and its adverse impact on the southern states overrode the convergence tendency. Equally, they found that states which happened to be concentrated in sectors that were doing well nationally in any given time period tended to experience relatively rapid growth regardless of whether their initial level of per capita income was high or low - a factor which accounts for the very poor performance of the low income agricultural states in the 1920s when agricultural prices collapsed. Putting such factors together systematically in a regression analysis, they establish a reasonably stable convergence coefficient of about 2-2½ per cent per annum. What this means is that the convergence tendency, unless upset by other factors, proceeds at a rate that would halve the gap between the initial and steady state values of income per capita over a period of 27 years. At the international level, a similar convergence coefficient was found once a range of variables was held constant, the most important of which were as follows: the initial level of human capital as measured by primary and secondary school enrolment rates (a positive influence on growth); government consumption (negatively related to growth); political stability (a positive influence); and distortions in investment-goods prices (a negative factor). That we are still far from a comprehensive understanding of social capability, however, is clear from the fact that these variables fail to explain a good deal of the poor growth performance in sub-Saharan Africa and Latin America[5] (Barro, 1991).

In the discussion so far, it has been implicitly assumed that the interactions between leaders and followers are mutually beneficial, or at worst neutral: leaders have created opportunities for followers to catch up, and followers, once they develop the necessary social capability, can catch up without damaging leaders. In Ireland of all places we ought to be wary of such an assumption.

In fact, Abramovitz (1986) specifically cites nineteenth century Irish experience as an example where growth in a follower (Ireland) was impeded by close proximity to a leader (Britain). Correspondingly, if one is to give any weight to the widespread fears of Japanese competition in the US and Europe, the catch up process may not always take place without negative implications for leaders. It would be unwise, therefore, to rule out the possibility that the interaction between leaders and followers includes adverse, as well as, benign elements, and the latter may not always outweigh the former.

To date, most of the research on convergence has been highly aggregative, and there has been little work on convergence in different sectors. An exception is Dollar and Wolff (1988) who examined convergence in labour productivity in manufacturing industries in 13 industrialised countries over the period 1963-82. They found that while some convergence took place in virtually all industries, the degree of convergence was stronger for total manufacturing than for the individual industries even though changes in employment mixes among countries were not an important source of convergence in the total. Forthcoming research by Rowthorn (1992) examining a 4-sector breakdown of GDP (agriculture, manufacturing, government and community services, and the rest) in 12 OECD countries in the period 1970-85 also found that convergence is weaker at sectoral level. This is surprising in the context of an explanation of convergence based on technological catch up, since, as Rowthorn points out, 'technological diffusion should depend more on conditions in a particular sector than in the economy at large'. Clearly in order to understand the processes involved, there is need for much further empirical work at a disaggregated level, as well as for the development of less macro theories along the lines of Dosi et al. (1988).

To sum up, what the empirical analyses reviewed have shown is that there is no inexorable law of convergence which overrides all other forces. It would surely be unreasonable to expect such, given the multidimensional nature of the economic growth process. There is, however, evidence of a broad tendency towards convergence once a certain level of development is attained, but even then the tendency can be either accentuated or offset by a range of other influences. Moreover, the tendency towards convergence is much slower than the empirical estimates of the parameters of traditional models would suggest. The message we can draw from the international evidence for a country at Ireland's stage of development is that convergence is in principle feasible in the longer-term, but in no way assured. Furthermore, we should keep in mind that when our interest shifts from the general to the case of a particular country, there may be specific factors (including domestic policies and actions) which would modify, positively or negatively, any general tendency towards convergence.

4. CONVERGENCE IN THE EUROPEAN COMMUNITY

I now turn to the dispersion of income per capita among member states and regions of the EC, how this has evolved over time and what the future holds. How great are income divergences within the EC? Table 1, drawn from Boltho (1989), provides summary measures of the regional distribution of GDP per capita within the EC, the US and the five largest member states of the EC in the same year (1983)[6]. Since there is no uniquely satisfactory measure of variation, three different measures are shown - the Gini coefficient, the standard deviation and the ratio of the top to bottom decile. Whether we compare the EC member states (12) with the US census regions (9), or the EC regions (59) with the US states (48)[7], all measures suggest that the variation is much greater in the EC.

Table 1: Regional Income Differentials 1983

	(GDP/CAP)			
	No. of Regions	Gini Coefficient	Standard Deviation (Average Income = 100)	Ratio Top to Bottom Decile
US (census regions)	9	0.051	0.099	-
EC (countries)	12	0.093	0.245	-
US (states)	48	0.072	0.160	1.50
EC (regions)	59	0.131	0.277	2.44
France "	21	0.114	0.151	1.80
Germany "	31	0.101	0.205	1.82
Italy "	20	0.130	0.246	1.90
UK "	35	0.082	0.118	1.77
Spain "	19	0.106	0.205	1.72

Source: Boltho (1989), p.106.

This conclusion may seem unsurprising, given that the US has been an integrated area for much longer than the EC, with complete freedom of trade, a single currency, a high degree of labour and capital mobility and a federal fiscal system[8]. The explanation, however, may not be as obvious as it appears. Table 1 also shows that regional inequalities may well be greater within the large individual member states of the EC than in the US, although most of these have been integrated for even longer than the US, and have more elaborate fiscal transfer systems[9]. Furthermore, while *geographical* mobility is undoubtedly much greater in the US than in any of the large member states of the EC, Barro and Sala-i-Martin (1991) found that net migration played only a minor role in promoting convergence among US states - though this is disputed by Blanchard (1991) - and serious doubts have also been cast on whether the US enjoys exceptionally high rates of *social* mobility compared with older European societies (Erikson and Goldthorpe, 1992). Certainly an important part of the process in the US seems to have been product mobility to states with cheap wages and low government regulation. We cannot therefore rule out the possibility that the US absence of federal fiscal transfers on a scale comparable to European countries actually encouraged convergence, though many other explanations (e.g. the much lower degree of unionisation in the US) also suggest themselves. There is obvious scope for further research to throw light on this issue[10].

Trend Over Time

In regard to the experience of convergence over time within the EC, it is interesting to look first at the original member states. In Table 2, it will be seen that from the start the original members were reasonably homogeneous in average income levels, except Luxembourg which was 50 per cent above the average. The poorest, Italy, was only 17 per cent below the EC-6 average, and the Italian situation arose from its own regional problem in the South rather than from general underdevelopment. The fact that at its establishment divergences *between* the member states of the EC were much less pronounced than the divergences *within* some of the member states, probably goes a long way to explain why Community regional policy was so slow to develop and why, even yet, it largely comprises national policies part-funded by the Community. Over the 30 years or so since the establishment of the EC the dispersion among the original member states has become even narrower, with no country now more than about 5 per cent below the overall average for the six[11].

Table 2: Relative GDP Per Capita in Original EC Countries

	1960	1991
	EC-6 = 100	
Luxembourg	151	159
Netherlands	114	96
Germany	113	106
France	101	100
Belgium	91	95
Italy	83	95

Source: EC Annual Economic Report 1991-92, European Economy, No. 50, Special Edition, December 1991.

For Luxembourg, I have used gross national disposable income per capita to take account of its relatively vast net factor income from abroad: even so, the figures may still be problematic, although there is no doubt that Luxembourg is a prosperous state.

The entry of three new countries in 1973 did not violate this homogeneity significantly. The UK and Denmark had income levels close to the overall average and while Ireland's income level was only three-fifths of the EC average, its population was a tiny fraction of the total. Consequently it is only in the last decade, with the entry of Greece in 1981 and Spain and Portugal in 1986 that the Community has been faced with large divergences in living standards among member states with sizeable populations. Taken together, the four poorer member states - Ireland, Spain, Greece and Portugal - account for 35 per cent of the area of the EC, 19 per cent of the population, but only 13 per cent of the GDP. If Southern Italy and East Germany are added then the population of the poorer periphery of the EC amounts to 100 million, or nearly 30 per cent of the total EC population.

What has been the experience of the four poorer member states on convergence towards the EC average over the last 30 years, bearing in mind of course that none of the four was a member for the entire period? As may be seen from Table 3, prior to 1973, when the whole western world experienced rapid growth, there was rapid convergence for all of these countries except Ireland[12]. Even Ireland is not a clear-cut exception since its living standards were converging towards those of the United Kingdom (UK), the country with which it was then most closely linked. After 1973, as EC growth slackened

convergence largely ceased, but with the pick-up in EC growth in the latter half of the 1980s there was a relative improvement for all except Greece. There is some evidence of a slowing-down in convergence again in 1991 and 1992 with the general reduction in economic growth (EC Annual Economic Report, 1991/92), though perhaps too much should not be made of short-term movements.

Table 3: Relative GDP per Capita in Poorer EC Countries (Eur 12 = 100)

	1960	1973	1985	1990
Ireland	61	59	65	69
Spain	60	79	73	78
Greece	39	57	57	53
Portugal	39	56	52	56
Mean	50	63	62	64
	1960-73	1973-85	1985-90	
EC-12 real GDP growth rates (% p.a.)	4.7	2.0	3.1	

Source: EC Annual Economic Report 1991/92

Although many other factors (including domestic policies) also played a role, there are plausible theoretical reasons for attributing this pattern of experience primarily to a causal relationship between the rate of growth of Europe as a whole and convergence. When there is general economic buoyancy and the strong centres are pressing on the limits of capacity, forces enter in which give the periphery a chance to outpace the centre. The law of comparative advantage presupposes full employment and, when such conditions apply to the centre, the less developed areas are likely to enjoy greater scope to exploit their comparative advantage. The core regions begin to experience labour and skill shortages, congestion intensifies, house prices soar and environmental problems arise - thereby enhancing the attractions of the periphery as a location for mobile investment. Given the many reasons for expecting complementarity between capital accumulation and technological progress, the technology gap in the periphery is likely to be closed more rapidly in a period of high investment. There is a further point which is relevant to regional policy: not only does general buoyancy favour the catching-up process through market forces, but it also mobilises wider support for regional policy interven-

tions, whereas in times of general slack even the most advanced areas tend to step up efforts to compete in attracting mobile international investment. If in fact there is a strong positive influence from overall EC economic growth to convergence, then the peripheral member states have a vital common interest in co-ordinated growth-oriented macroeconomic policies at Community level.

Regional divergences within the EC can be examined not only in terms of divergences between member states, but also in terms of divergences between regions into which the member states may be divided. Research by the EC Commission indicates that these regional divergences overall are about twice as great as the divergences between member states and that there has been no convergence over the last 20 years or so (Commission of the European Communities, 1991). It is also worth making a point here about the household distribution of income. As is only to be expected, the dispersion of household income in the EC is very much greater than the regional dispersion: for the countries shown in Table 1 the average of the within-country Gini coefficients for the distribution of household income (even after tax) is nearly four times greater than the average of the regional (pre-tax) Gini coefficients shown in the table (Boltho, 1989). Or to make a similar point in a different way: in no member state of the EC, and only in a very small number of the 174 level 2 regions, is average income more than 50 per cent below the EC average, whereas 15 per cent of the households throughout the Community are below that level[13] and only 37 per cent of these households are located in the four poorer member states (ISSAS, 1991). The point is of more than statistical interest given that regional policy defined as such accounts for only a minor part of the total redistribution process between rich and poor regions in nearly all unitary states and federations (MacDougall, 1977).

Future Prospects

What is the prognosis for the future in relation to convergence, given the major steps now in train to deepen and widen European integration? The benefits arising from the single European market were subject to a major analysis in the Cecchini Report (Commission of the European Communities, 1988), but the Report touched only in a cursory way on how these benefits might be distributed regionally. Some subsequent studies, however, have sought to evaluate the regional response to the single market. The study by Buigues et al. (1990) examined the impact on the industrial sector of member states. Of the four peripheral member states, the findings suggested that Ireland was possibly best placed to benefit, but this conclusion is subject to the qualifications discussed in Section 4 following. Spain was also seen as well placed to benefit. Portugal and Greece, however, faced greater challenges, which were most severe in the case of Greece because of its inward-looking

and distorted economy. A broadly similar view of the prospects for the three poor southern states emerges from Bliss and de Macedo (1990) and Larre and Torres (1991).

The EC Commission study, *One Market, One Money* (Commission of the European Communities, 1990) devoted a chapter to the spatial aspects of EMU. It did not come to any clear conclusion on the prospects for convergence, but seemed to place the major responsibility for bringing this about on national policies, which would call for a comprehensive 'regime change' in the poorer member states. (Further consideration will be given to EC policy on cohesion following Maastricht in Section 5 below). The Commission's latest periodic report on the regions (Commission of the European Communities, 1991) took the view that 'even on the assumption of a continuation of recent positive developments, the convergence of the weaker member states and of the least prosperous regions on the Community average will be a very long-term process' (p.21).

Not only is there a considerable deepening of the Community in prospect but a widening (enlargement) as well. East Germany has already been added; applications from several West European countries are either tabled or in prospect; while Eastern Europe and the former Soviet Union have been dramatically transformed in a way that still leaves great uncertainty as to how they will evolve or what precise relationships they will establish with the EC. Any widening to include the West European countries will not significantly affect the degree of divergence in the Community since all potential applicants are close to or somewhat above the average EC level of income per capita. This would not be so in the case of the East European countries, but it is unlikely that any of them will be admitted for some considerable time to come.

Nevertheless, the opening-up of the economies of East Europe has significant negative and positive implications for the peripheral EC countries. On the negative side, the East European countries will be potentially major competitors for mobile foreign investment and for development aid from the EC, as well as being low-cost competitors in agriculture and low-tech products. Furthermore, the investment resources needed to rebuild the economies of Eastern Europe, when added to other investment needs, could maintain upward pressure on real interest rates in Europe. On the positive side, developments in East Europe could benefit the peripheral member states in the medium to longer term through increased demand and higher EC growth. It is difficult to say with any assurance whether the positive or negative influences will dominate, especially since the outcome depends on whether the restructuring of the East European economies can proceed without major disruptions, which

it is not possible to predict. Barring major disruptions, however, one could reasonably expect that the negative influences, which are short term, would eventually be offset by the positive factors.

5. THE IRISH SITUATION

So far, we have been concerned with the issue of convergence as a general phenomenon. What matters most to Ireland, however, is its own particular experience and prospects. Ireland has had longer experience than most countries of being part of a monetary and/or economic union with a larger, richer area. The Act of Union of 1800 established, inter alia, an economic and monetary union with Great Britain. With Partition in the early 1920s, Northern Ireland remained part of the UK, but even in the South monetary union effectively continued up to 1979 when the Republic joined the EMS.

How did Ireland fare as regards convergence in this situation? The data for the nineteenth century are not very reliable, but there is a good deal of evidence suggesting that Ireland experienced considerable convergence with Great Britain in terms of income per capita - at least following the Great Famine (Kennedy et al. 1988). However, this convergence was achieved in the context of a massive decline in population through emigration: in the area now known as the Republic, the population almost halved between 1841 and 1921. This kind of convergence can hardly be looked on as satisfactory, and should serve as a sharp reminder that the way in which convergence is achieved can be as important as the fact of convergence. In other words, income per head of population alone is an inadequate measure because population itself is also a relevant variable.

Since the 1920s, there has been little in the way of convergence in income per capita with Great Britain in either the Republic or Northern Ireland over the period as a whole, though the population decline was eventually arrested and reversed. True income per capita in the Republic did appear to be catching up steadily after 1960, but this improvement was not maintained in the 1980s. Northern Ireland made substantial progress in catching up with Great Britain only during World War 2; otherwise it managed, at best, merely to keep pace with the UK as a whole. The experience of both the Republic and Northern Ireland would be less disappointing if the UK had been a star performer. But in fact the UK had the worst growth record in Europe this century, so that in merely keeping pace with Britain, Ireland's position deteriorated considerably relative to continental west European countries.

In Table 3 earlier, data using the conventional measure of GDP per capita, suggested that Ireland has experienced a moderate degree of convergence

towards the EC average since it first joined in 1973. I now want to take a closer look at this experience using other measures given in Table 4 which throw light on it. The first of these measures is GDP per worker, which is a measure of productivity. Taking this measure at face value, Ireland has made striking progress since 1973 in reducing the productivity gap, and is now little more than 10 per cent below the EC average. Indeed, on this measure our productivity is now higher than in Denmark[14] and not much below the UK!

Table 4: Productivity and Income in Ireland Relative to EC 12, Various Years 1960-90

	1960	1973	1980	1985	1990
			EC 12 = 100		
GDP per worker	73	69	75	83	89
GNP per worker	75	69	73	74	80
GNP per head of population	62	59	62	58	62
GNDI per head of population	64	61	65	61	66

Note: GNP comprises GDP and net factor payments abroad, while GNDI (gross national disposable income) comprises GNP and net foreign transfers.

Source: EC Annual Economic Report 1991/92; OECD Labour Force Statistics, various issues; and OECD National Accounts: Main Aggregates, 1960-1990, Vol. 1.

Unfortunately this measure cannot be taken at face value, no more than the earlier measure of GDP per capita. There is more than a suspicion that Irish GDP is artificially inflated to a significant but unknown degree by transfer pricing on the part of multinationals, and that the degree of overstatement has risen over time with the increasing volume of foreign enterprise. Perhaps even more important is the fact that GDP does not translate into higher national income because of the way it has been generated. Since 1973 the growth of GDP has depended heavily on government spending financed by foreign borrowing and on foreign direct investment. Both of these have given rise to huge outflows of interest on foreign debt and profit repatriations, respectively, which have substantially reduced the benefit of higher GDP. For that reason GNP, which takes account of net external factor flows, is a truer measure of the income impact in Ireland. As may be seen from Table 4, the degree of convergence in GNP per worker towards the EC level is more muted, but has still been taking place steadily.

Unfortunately again convergence in income per worker has not been matched by convergence in income per capita (i.e. per head of population). As Table 4 shows, the gap in GNP per capita between Ireland and the EC average is much wider than in GNP per worker, it has converged only slightly since we joined the EC, and is in fact no closer now than it was 30 years ago. The reason is the relatively small and declining proportion of the population at work in Ireland, which is now the lowest in the EC at 31 per cent. The employment ratio is influenced by demographic factors and to some degree Ireland's low ratio reflects individual preferences for high fertility and spouses remaining on home duties. The major explanation of the low employment ratio, however, lies in the poor labour market conditions, manifest particularly in the high unemployment rate (now the highest in the EC) but which also influences the participation rate and the age structure through emigration (Kennedy 1991). The low employment ratio means, for example, that in Ireland every 10 workers have to support, on average, 22 dependants whereas in Denmark at the other extreme, every 10 workers have to support only 9 dependants.

Finally, for completeness, Table 4 provides a measure - gross national disposable income per capita (GNDI) - which takes into account not only the foregoing considerations but also the beneficial impact of EC transfers. These transfers go only a small way towards closing the gap with the EC average, but since they have tended to increase over time, they have contributed to the marginal convergence that has taken place in GNDI per capita since we joined the EC. The one encouraging feature of the table is that from 1985 to 1990, when we began to adopt more sensible economic strategies, all four measures exhibited convergence, though not at the same rate. With the sharp deterioration in unemployment since early in 1991, however, this favourable position has not been maintained.

The dual divergence in Ireland between production and income, and between income per worker and income per capita, is quite unique in the European Community. It raises fundamental questions about Ireland's approach to economic development which will be taken up again in Section 6.

Impact of New EC Developments

The Irish economy could be significantly affected by four major developments now in train in the EC: the single market (1992), the Community Support Framework (CSF), the reform of the Common Agricultural Policy (CAP), and economic and monetary union (EMU). We referred briefly already to the study by Buigues et al. (1990) on the impact of 1992 on European industry. This study set out to evaluate the strengths and weaknesses in each EC country of what it called 'sensitive industries' i.e. those likely to be significantly affected,

for good or ill, as a result of the single market. O'Malley (1990), who carried out the Irish part of this study, found that these industries accounted for nearly half of all manufacturing employment in Ireland, and that those in a strong competitive position greatly outweighed those that might be vulnerable. Most of the strong sensitive industries in Ireland, however, were dominated by foreign firms, whereas most of the vulnerable industries were largely made up of indigenous firms.

A subsequent study by O'Malley (1992) extended this work to take explicit account of economies of scale. He found that very little of Irish indigenous industry is engaged in activities with substantial economies of scale, so that it is not in a position to gain or lose much from growing economies of scale in the single market. On the other hand, the foreign companies in Ireland are heavily engaged in such activities and, given their past success, have considerable potential to benefit. The findings of both these studies suggest, therefore, that Ireland's potential to gain from the single market is likely to depend, even more than in the past, on its ability to attract and retain foreign enterprise - at least until it has developed a more dynamic indigenous sector, which is likely to take time and which the studies suggest may be even more difficult in the single market.

The recently published paper by Bradley et al. (1992) represents the most comprehensive study of the future macroeconomic impact on Ireland of EC developments. Table 5 summarises the authors' findings on the overall impact of 1992 and the CSF on Ireland. The figures relate to the estimated amount by which the specified variables (GNP etc.) will differ by the year 2000 from what they would have been had 1992 and the CSF never taken place. The estimated impact of the single market on its own would be to raise GNP per

Table 5: Projected Impact of 1992 and CSF on Ireland

	Impact by Year 2000 (%)		
	1992	CSF	Combined Impact
GNP	5.1	2.7	7.8
GNP/Cap.	3.0	0.8	3.8
Employment	3.6	2.6	6.3
Unemployment Rate	-1.3	-0.9	-2.1

Source: Bradley et al. (1992)

capita in the year 2000 by 3 per cent above the benchmark level. This is slightly less than the impact estimated for the EC as a whole in the Cecchini Report, implying that 1992 would make for a slight divergence in Irish income per capita. When, however, the CSF is taken into account, the combined impact of 1992 and the CSF is estimated at close to 4 per cent of GNP per capita, or virtually identical with the overall picture in Cecchini[15]. This implies that Ireland would share *pro rata* in the benefits, but that the process would do nothing to advance convergence in income per capita. It is important to add, however, that Ireland would be better off in terms of population and numbers employed as a result of the combined impact of 1992 and the CSF, which would bring about an estimated fall of 2 percentage points in unemployment.

The analysis of the impact of CAP reform and EMU is necessarily more speculative given that the precise nature and timing of these developments are still uncertain. The authors estimate that, while the losses resulting from CAP reform would be most serious for the farm community, other sectors would also suffer. The final long-term effect on the economy could be a reduction of between 1 and $1\frac{1}{2}$ per cent of GNP. As regards EMU, given that Ireland has already incurred the costs of adjusting to EMS, that its exchange rate policy is to keep the punt firm and stable in the system, and that the adjustment costs of the single market are counted in the assessment of 1992, the extra step of EMU would not involve significant further adjustment costs for Ireland. On the positive side, EMU holds out the prospect that the introduction of irrevocably fixed exchange rates and a common currency should largely eliminate the interest rate differential between Ireland and Germany. This would have a dramatic impact on the debt/GNP ratio. Alternatively, the savings could be used to cut taxes or increase government spending in ways designed to encourage economic growth. The authors' simulations suggest that a 1 per cent fall in domestic real interest rates, with associated cuts in direct taxation, could increase GNP by $1\frac{1}{4}$ per cent after 5 years and by 2 per cent in the long-term, with a significant increase in employment.

Overall, the findings in Bradley et al. (1992) do not suggest that the major EC developments now in train are likely to significantly accelerate convergence in income per capita, but they could bring a welcome boost to employment. If the latter benefit is in fact achieved, then as I shall argue later it could be even more important for Community and domestic cohesion than convergence in income per capita. The achievement of the employment gain would be jeopardised if deepening integration were to result in the higher wage levels in the richer member states being added to the reference group taken into account in formulating domestic wage claims[16].

6. POLICY AT EC LEVEL

The analysis in the previous sections suggests that there is no assurance from economic theory, general historic experience, Ireland's past performance or future projections of the impact of EC developments, that Ireland is well established on a course towards convergence with its richer partners in the EC. Neither, for that matter, does our review give support to alarmist views that Ireland will diverge further. What is certain is that if convergence is to take place, Ireland will have to improve considerably both on its past record and on its current prospective performance relative to most other EC member states. This raises the question as to what policies could help to bring this about, and at what level these policies might operate.

The CSF can be regarded as the most visible sign of EC commitment to the poor regions. The reform of the Structural Funds in 1988 involved, inter alia, an enlargement of these funds and enhanced concentration on the least favoured areas, but the amounts involved are still much too small in themselves to bring about significant convergence. Portugal, Greece and Ireland are the major beneficiaries, but the average annual sums over the period 1989-93, as a proportion of national GDP, amount to 3.9 per cent, 2.9 per cent and 2.3 per cent, respectively (Commission of the European Communities, 1990, p.232). The Commission itself would not expect that these funds alone could make a substantial contribution to convergence: rather they are looked on as compensation for the possible dislocation caused by the single market, and also as a stimulus to releasing the indigenous potential of the relevant areas. Can Community policy be expected to play a greater role in future?

The principle of subsidiarity has been invoked in the EC as a guide to the division of responsibilities between the Community and the member countries. This principle, now enshrined in the Maastricht Treaty, implies that functions should be discharged at the lowest level of authority capable of performing them effectively. While few would disagree with the general principle, its interpretation can give rise to vast disagreement. Indeed, there is a strong suspicion that the principle is used in a negative way to keep awkward issues off the agenda of the Community - without much regard to whether or not they can be carried out effectively at a lower level. The principle could equally validly be interpreted in a positive light to place the onus on the higher authority to tackle those issues which can reasonably be shown to be beyond the capability of a lower authority.

Ireland would obviously like Community policies affecting convergence to be approached in that spirit. Indeed, regardless of our own interests there are compelling reasons why, in the overall interests of the Community, the issue

should figure more prominently on the Community's agenda. The core of the matter is well stated by Bliss (1990) when he argues that 'an enduring disparity of living standards among the twelve member states would threaten mutual political responsiveness'. This could impede both the deepening of integration within the Community and its openness to the rest of the world, to the detriment of the whole Community. These issues have been thoroughly explored in NESC (1989) and I need not go over the ground again here.

Obstacles

The fact that this line of argument accords so obviously with our own interest should not deter us from advancing it persistently. We must approach the task, however, with a realistic appreciation of why other member states do not share our enthusiasm.

(i) Insofar as the Community treats real convergence as a major objective, it places the emphasis on 'economic and social cohesion', and the two are not quite the same. Economic and social cohesion is essentially a political concept, which means many different things to different people, but may be broadly defined as the degree of economic and social equality needed for the Community to function and develop satisfactorily. It is unquestionably an important concept, but elusive in that it is inherently unquantifiable, may depend as much on perception as on objective fact, and may shift considerably with changing attitudes. Convergence is, no doubt, an important aspect of cohesion but may be neither a necessary nor a sufficient condition for cohesion. Thus, although the Title on cohesion added by the *Single European Act 1987* gave special mention to the objective of 'reducing disparities between the various regions and the backwardness of the least favoured regions', the Community is unlikely to be persuaded to set itself clearly-defined targets for convergence.

(ii) Convergence is only one of a vast list of vital concerns on the EC agenda, and must therefore compete for attention with international issues - such as the situation in East Europe, the breakdown of the former Soviet Union, relations with the US and Japan, EC responsibility in relation to the Third World - as well as the plethora of internal problems to be solved on the path towards closer integration. Major forward moves by the Community tend to come in fits and starts, centred on some dominant theme. The next dominant theme, once the Maastricht arrangements are consolidated, may well centre on widening rather than deepening, and the UK presidency in the second half of this year may take a major initiative in that regard. There is a general belief that widening and deepening are in conflict. This is not necessarily so, and is not altogether supported by the Community's past experience, where

widening has sometimes created pressures for further deepening. Nevertheless, widening could for a time postpone concentration on further deepening.

(iii) Large member states concerned with their sovereignty are reluctant to entertain a substantial Community budget, while rich members are unwilling to subsidise poor members except to a limited extent. All member states have long-standing regional divergences *within* their own countries and even greater divergences at household level. This does nothing to encourage the governments of the richer member states to give high priority to eliminating divergences *among* member states. In this regard, Germany, the biggest net contributor to the EC budget, has assumed a vast new burden in relation to East Germany, which is likely to require a diversion of internal regional transfers from poorer regions in West Germany.

(iv) Even if the EC was convinced that it should give high priority to the goal of convergence, the difficulties in devising and implementing satisfactory development policies should not be underestimated. There is no general agreement about the ultimate impact of interventionist development policies. In this regard attitudes have hardened considerably since the mid-1970s. Even those who were not affected by the universal swing to the right in economic philosophy, and who can readily accept the prevalence of market failure, are now much less optimistic about the ability of government - at whatever level - to counteract market failures. Furthermore many would argue that integration itself, while it might damage some regions, would on the whole be a powerful means of promoting convergence.

(v) The foregoing scepticism about interventionist policies is held even more forcefully in relation to regional redistribution policies as distinct from development policies. There are deep-seated fears that large-scale transfers could give rise to a permanent dependency syndrome in poorer areas. I mentioned already in Section 3 that regional development measures in most countries constitute only a small part of internal fiscal redistribution to poorer regions. In unitary states the greater part of interregional redistribution is automatic and invisible, much of it is aimed directly or indirectly at households or individuals, and the net transfers involve large gross inflows and outflows between regions. Decentralised federal states achieve relatively big redistributive results with a smaller federal budget by avoiding large two-way flows. A much higher proportion of the net flows is explicitly negotiated on a geographical basis through a great variety of revenue-sharing and grant mechanisms designed to enable poorer regions to maintain reasonable standards of public services, particularly health, education, welfare and housing. All of this requires political homogeneity of a degree which is unlikely to be achieved in the European Community for a long time to come.

(vi) Finally, it should be noted that redistribution mechanisms in all countries, insofar as they have a geographical orientation, are not simply provided out of goodness of heart or even to promote interregional solidarity. They are also designed to limit socially inefficient migration of the type seen in Germany after the Berlin Wall came down, which strains the absorptive capacity of the richer regions as well as denuding the poorer regions of key skills and resources. This factor was very much in mind in the MacDougall (1977) report which concluded that a Community budget, excluding defence spending, of 5-7 per cent of community GDP would be the minimum necessary to support a viable monetary union, and that such a budget would need to be concentrated particularly on the weaker regions. The Community is now more complacent about this danger in the light of EC experience since then. During the 1980s there was no convergence by the poorer regions while many of them suffered a serious absolute and relative deterioration in unemployment: yet this did not give rise to migration on a scale that would disrupt the Community.

Maastricht and Beyond

In the face of these formidable obstacles, it must be recognised that the progress made at Maastricht on Community policy relating to cohesion is impressive - at least in providing a framework for further development. Following are the more important measures

- for the first time the cohesion objective is mentioned in the Common Provisions of the treaty and in Articles 2 and 3 which define the tasks of the Community
- the formulation, as well as the implementation, of all common policies, must take account of the cohesion objective and contribute to its achievement
- the Commission must report every three years on progress towards cohesion accompanied, if necessary, by appropriate proposals
- new or extended competences are provided to formulate common policies in a number of areas of considerable importance to poorer countries (e.g. education, health promotion, industry, energy, tourism etc.)
- structural funds are to be maintained with greater flexibility in their use
- a new Cohesion Fund is to be established to finance projects in the four poorer member states relating to the environment and trans-European transport networks
- the basis of the EC budget is to be reformed to ensure that it is not regressive.

The Maastricht Agreement has been followed up by the Delors II package containing the Commission's priorities and budget proposals for the period 1993-97. In announcing the package President Delors lists economic and social cohesion as one of the three 'super-priorities' of the Community, along with external actions and competitiveness. The package envisages something like a doubling by 1997 of the total funds specifically devoted to cohesion. This package, and its allocation, will of course be the subject of very hard bargaining before being settled, hopefully, at the Lisbon summit in June.

Sceptics can argue, no doubt, that structural funds (including the new Cohesion Fund) will continue to be the main instrument of EC policy for the poorer areas, and that even a doubling of these funds by 1997 will not in itself go far towards accelerating convergence. They may further argue that convergence calls for much more broadly-based policies on cohesion at EC level. Nevertheless, the Maastricht Treaty does provide, in embryonic form, the basis for developing wider policies. Obviously, the poorer member states have an important role to play in developing such policies and in ensuring that they be effective. Grandiose schemes that are badly designed or badly implemented could discredit the whole process. Since well-designed programmes inevitably take time to develop, the poorer states may be better served in the long run by steady progress than by a quick fix.

In particular the poorer member states need to define more clearly and convincingly those areas of policy, in addition to structural funds, which are essential to convergence and which can only be handled at Community level. Perhaps I might mention a few important examples.

(a) Reform of the CAP: This issue, which clearly can only be handled at Community level, is of considerable importance in the context of convergence, since all of the poorer peripheral member states are characterised by a relatively high share of the labour force engaged in agriculture, where average incomes invariably tend to be low. In Section 2, I already cited the unsurprising finding in the US that the poorer states heavily concentrated in agriculture experienced divergence in the 1920s when agriculture prices generally collapsed. The key criterion for Ireland in evaluating CAP reform should be the national interest rather than the special interest of any one group, such as farmers.

(b) Community Macroeconomic Policy: Earlier in Section 3, I gave reasons, with supporting evidence, why the poorer member states would find it difficult to catch up unless the Community as a whole were buoyant. No single member state, and certainly none of the poorer ones, can do much about this on its own: it requires action at Community level in regard to macro-economic policy. One of the concerns about EMU in this regard is that, while it provides

convincing institutional arrangements for Community monetary policy, there is no fiscal authority of comparable weight, let alone an institutional counterpart responsible for the economic development of the Community. The outcome could be a macro-economic policy that would weight the balance excessively towards price stability at the expense of employment and output. This is a highly contentious issue, on which the economics profession itself is sharply divided. I find it hard, however, to accept the propositions that the level of aggregate demand in an area as large as the Community does not matter for employment and output, or that Community aggregate demand will not be significantly affected by the combined fiscal stance of its member states.

(c) Competition Policy: Probably the single most important issue under this heading relates to national industrial subsidies. These are used extensively in all member states and, measured in relation to industrial employment, are often much higher in the richer countries than in the poorer countries. In total they amount to about 8-10 times the level of CSF support for the poorer countries. Some of these subsidies in the rich member states (e.g. to indigenous mining) may not adversely affect the poorer members: indeed they may reduce the competitiveness of the richer members. But others, such as support for mobile international firms, substantially negate the development efforts of the poorer member states. Moreover they involve a huge windfall transfer to mobile international companies, since the competing subsidies probably have more influence on the location than on the volume of such investment. Only at Community level would it be possible to rationalise this position.

In general the poorer member states would be better advised to focus on EC policies that will augment their own development efforts rather than on redistributive policies *per se*. If the poorer states can converge through development, then the need for redistributive policies at EC level would be greatly diminished. At present, elaborate interstate redistribution, of the kind envisaged in fiscal federalism, is simply a nonstarter. This is not to say that the issue will not come to the fore in future as integration proceeds, especially if no convergence has been achieved. Economic union inevitably creates competitive pressures forcing a certain degree of harmonisation in taxation. Such alignment in tax rates in itself can strain the ability of governments in poorer countries to raise enough revenue to finance the existing level of public expenditure. In addition, measures designed to encourage political cohesion (such as the concept of European citizenship or the Social Charter) create social pressures for closing the gap in state benefits and services. In such circumstances a poorer member state would find it impossible to balance its budget, as is amply demonstrated by the historical experience of Northern Ireland in relation to the United Kingdom. Furthermore, future experience of

EMU may demonstrate the need for mechanisms to cushion the impact of asymmetric shocks[17]. It is possible, therefore, that in time considerations of long-term redistribution and short-term stabilisation will both call for some degree of fiscal federalism.

Fiscal federalism would not be an unmixed blessing for the poorer member states. Whether or not it would facilitate the realisation of their development potential would depend on the impact of the particular arrangements involved on their competitive position. Different policy programs embody different incentive and disincentive effects: as a broad rule, federal support for ensuring comparable levels of public services in education and health would be preferable from a development viewpoint to income transfers or unemployment insurance schemes. There are major issues here that require further exploration, about which much could be learned from examination of the different experiences of the US and Canada, already referred to in Section 3.

Ireland's Role

The Irish government and administration can take justifiable pride in the degree to which its efforts contributed to shaping the Maastricht provisions on economic and social cohesion. It is true that these provisions in themselves do little to broaden Community policy on cohesion, but they open the way to a significant development of such policy which could not otherwise have been even attempted. If Ireland is to help to shape this development, it will call for still greater efforts in the future.

I believe that our efforts to shape Community policy are handicapped by the absence of a long-term strategic view on the issues that matter to us in Europe. If tomorrow morning, the EC came to us like a fairy godmother offering to give us everything we needed over the next 20 years *provided* we could show that this would ensure a permanent convergence of Irish living standards to those of the EC, I doubt if we would be in a position to provide a convincing response. We will not, of course, be given everything we need, but we ought at least to be clear about what are our most important needs. And since convergence is a long-term process, this requires that we try to assess the matter in a long-term framework.

In advocating this approach, I am not at all saying that it should be at the expense of our short-term and medium-term efforts to influence EC policy. In the short term, Ireland must participate in the major battle about the scale and distribution of the Delors II package. In the medium term, it must apply itself to giving practical substance to the cohesion provisions of the Maastricht Treaty in other areas of policy. Inevitably, the bulk of our resources must

focus on these challenging tasks. What I *am* advocating is that we should complement these efforts by devoting some key personnel resources to thinking about the longer-term future[18]. This would give more shape and coherence to our current efforts to influence EC policy, as well as preparing us in good time for future developments. Experience of the operation of EC policy formation suggests that the earlier one can present well-designed proposals, the better is the chance of influencing the ultimate outcome. Ireland does not have sufficient manpower resources of the required calibre to do this across the full range of EC policy, so that it must in good time make a strategic selection of the key issues on which it would hope to make an impact.

Given the very considerable influence of the NESC (1989) report in shaping the Irish government's approach to Maastricht, one is tempted to call for a NESC Mark 2 to address Ireland's long-term strategy on EC policy. There can be no doubt that such a report would be very helpful. But the task is an on-going one that cannot be met solely by a once-off report, no matter how comprehensive. The issues require continuing interaction between government, the political parties, the social partners and the research community. Furthermore the issues need to be widely debated, and in this regard two new institutions - the Institute of European Affairs and the proposed Oireachtas Committee on Foreign Affairs - could play a prominent role.

While it is vital to make our best endeavours to influence EC policy on cohesion, we must not, however, get so carried away as to think it will relieve us of the main responsibility for convergence. Notwithstanding all the rhetoric about cohesion, the *EC Annual Economic Report 1991-92* expresses what I take to be the more realistic view that 'responsibility for rapid economic and social convergence lies for the most part in the least favoured countries themselves'.

7. POLICY AT NATIONAL LEVEL

The tenor of the preceding argument leads me to conclude that whether or not Ireland converges with the rest of the EC will depend primarily on its own national efforts. These national efforts are not to be taken as synonymous merely with the efforts of government, given that there are severe limits to what governments can do in the absence of an adequate response from the rest of the nation. Nevertheless, since government policies can set the right environment and provide appropriate incentives, it is important to consider what policies might best be followed. What I want to do here is, not to attempt to specify appropriate policies but rather, to say something about the choice of objectives and the process of policy formation.

In Section 4, I drew attention to Ireland's unusual pattern of development which involves convergence in product and income per worker towards European levels but not in income per capita. This is associated particularly with the relatively small and declining share of the population at work in Ireland. The most visible sign of the inadequate employment performance is high unemployment, but it also results in low labour force participation, net emigration averaging 25,000 a year from 1982-90, and a rising proportion in relative poverty. We are in process of intensifying an unhealthy dualism in our economy and society, in which an increasing minority is left further behind in terms of access to jobs, income and education, with the attendant risk that similar multiple deprivation will be transmitted inter-generationally to the children of this marginalised minority.

This cannot be regarded as a satisfactory form of economic development. Protracted unemployment is a highly visible form of deprivation which poses a more severe threat to the cohesion of our own society, and to our role in the EC, than the gap in average income between Ireland and the EC. Thus even if convergence in income per capita were achieved, it would be a hollow achievement if unemployment and emigration continued at high levels. Apart altogether from the human misery for those directly involved, which is much more far-reaching than the loss of income (see Whelan et al, 1991), unemployment and its consequences impose a huge economic and social cost on the rest of the community. This cost must be met partly through high taxation for which there is no return in the form of goods and services. Furthermore, the sustained pressure on government and state agencies to be seen to be doing something about the problem puts a premium on short-term expedients and makes it difficult to be patient with policies where the fruits can only be expected to mature slowly (e.g. developing indigenous industry). It is highly unlikely, therefore, that Ireland could converge to EC income levels for its population as long as it carries such a high level of unemployment and associated dependency.

To what extent can we hope that national policy will ensure a better outcome in the future? The NESC (1990) report, *A Strategy for the Nineties,* classified the range of key policies needed for a consistent policy framework under three heads: macroeconomic policy designed to maximise the long-term growth potential of the economy; an income determination system to resolve distributional conflict in a peaceful way and to ensure improvement in competitiveness; and development policy to promote structural adjustment and enterprise. The NESC felt that while Ireland had in recent years put in place credible and consistent macroeconomic and incomes policies, this was not yet true in the case of development policy, a deficiency which the implementation of the Culliton Report (1992) could go some way to remedying. The NESC

recognised, however, that during the nineties these policies would be unlikely to make much impact on unemployment, and that they should therefore be supported by greatly enhanced manpower policies. The NESC accepted that such manpower policies would be costly and stipulated that the funds would have to come from reductions in public expenditure in other areas. But public expenditure is already under severe pressure to make room for tax cuts and to meet the cost of high public sector pay increases. There is little evidence of a willingness on the part of Irish society to reallocate resources to fund the 'radical approach to the problem of long-term unemployment', which the NESC held to be necessary.

The NESC report is by far the most thorough and comprehensive recent attempt to define Irish economic policy. If, however, the foregoing assessment is a fair one, then we need to get back to the drawing board again. No amount of tinkering at the edges is likely to produce a much better outcome. It will be necessary to take a more fundamental look at the constraints on the policies that can be implemented and how these constraints might be modified. The challenge is greatest during the 1990s because of the rapid rate of natural increase in the labour force, averaging 23,000 per annum. In the subsequent decade the rate of increase will fall rapidly and will be down to 7,000 by the year 2006 (Sexton et al., 1991). If, therefore, we could begin to make even modest progress in reducing unemployment in the 1990s, we would enter the next decade in a credible position to effect a much greater impact.

Underlying Failings

An influential cross-country study some years ago (Therborn, 1986) tried to identify what important relevant factors were shared by, and special to, the small group of countries which had managed to keep unemployment at a very low level - Austria, Japan, Norway, Sweden and Switzerland. The study concluded that the single most important common factor was the existence in all these countries of a long-standing social consensus to treat unemployment as an unacceptable feature of the economy. This strongly-held consensus enabled them to develop policies and institutions, differing greatly from one country to the other, to preserve full employment even in a world of high unemployment. Perhaps the overriding obstacle to developing an adequate strategy in Ireland is the absence of a similar deeply-held consensus, accentuated by a prevailing view that those unable to find work at home can emigrate.

Even if a genuine consensus to treat unemployment as an unacceptable feature already exists, or can be established, we still have to find ways of translating it into effective action. While social attitudes set limits to the pace and character of economic development, they do not guarantee that the available potential

will be fully realised. We also need to learn to correct any major failings emerging from our past experience. In a study of Irish economic development since independence along with two ESRI colleagues (Kennedy et al., 1988), I suggested that there were three key weaknesses underlying Ireland's mediocre performance.

The first has been our inability to come to terms with the implications of small size of country. For the first 40 years we acted as though economic prosperity depended almost exclusively on what happened in Ireland (Meenan, 1970). Subsequently, with the opening up of the economy, there was a swing to the view that our fate is largely determined by what happens abroad. In fact, neither view is appropriate. Rather the more fruitful perspective is that, notwithstanding the impact of forces emanating from abroad on our now very open economy, the outcome will be determined by an interaction between these international economic forces and the structure and behavioural response of the Irish economy and society[19]. It is true that our capacity to shape the characteristics of the world economy are severely limited, but our success or failure in grasping the opportunities that are always available internationally lies to a great extent in our own hands. Moreover, these opportunities are never there just for the taking: they must be identified through intelligent foresight and grasped and developed, often in the face of fierce competition. In this connection, it is heartening to read the call of the Chairman of the Industrial Policy Review Group, Jim Culliton, in the preface to the Group's Report (1992), that 'we need to foster a spirit of self-reliance and a determination to take charge of our future'. That is how we can best *exercise* our national sovereignty, instead of bemoaning its supposed curtailment in the EC[20].

The second basic weakness was the absence of a long-term perspective. This feature is explainable in terms of Ireland's turbulent history preceding independence, but we have done too little to change it since assuming responsibility for our own destiny. One can sympathise with the political imperative to be seen to be dealing with the incessant pressure of excess labour supply, but the very absence of an adequate long-term perspective serves only to intensify these short-term pressures. The biblical proverb that 'where there is no vision, the people perish' (Prov. 29.18) is as true of economic, as of other, areas of life. Take, for instance, the issue of achieving an appropriate balance between efficiency and equity. The conflict is at its sharpest in the short term, whereas in the medium term the trade-off is less acute, and in the long term there is a strong measure of complementarity between efficiency and equity. But unless realistic hope for the long-term can be provided, it becomes impossible in the short term to weight the balance sufficiently in favour of efficiency to secure satisfactory progress[21].

The third major weakness was neglect of the human resource dimension. I in no way wish to deny the remarkable success achieved in raising the educational levels of the majority of the population, but we have not built adequately on this strength: witness, for instance, the insignificant amounts spent on training by private industry, or the anti-competitive practices characteristic of many trades and professions in the non-traded sector[22]. Moreover, we cannot claim that we are addressing the human resource dimension satisfactorily as long as we have the highest unemployment rate in the EC, and a sizeable minority who not only drop out of education without qualifications but who are totally alienated from the education system (Hannan and Shortall, 1991). At the ESRI, through studies on poverty, the labour market, health and education, we have consistently tried to draw attention to the fact that neither our economy, nor our society, can develop properly if it leaves behind a substantial marginalised minority, involving a huge drain on the rest of the community. The ESRI has been criticised for voicing this concern as though we were soft in the head as well as in the heart. But we believe that we are being entirely hard-headed in insisting that distributional and development issues cannot be separated. Baumol et al. (1991) have put the matter well in the context of the US educational scene: 'Thus, it may be that those of us who are affected only indirectly by the educational handicaps of underprivileged groups will nevertheless end up paying dearly if we do not provide the thought, the planning, the effort, and the resources to deal effectively with those educational problems' (p. 209).

Options

I would emphasise that the best response to the plight of the underprivileged is not an unthinking application of more welfare payments or the artificial creation of useless jobs. Jobs are indeed fundamental since ESRI research shows how pervasive unemployment is as the chief source of poverty and many other social ills. But why should we have to create useless jobs when there is so much worthwhile work to be done? As to the welfare system, it will always be needed to cushion temporary hazards to which everyone's life is prone, to moderate disparities in income and wealth, and to support those who cannot support themselves. But we are using the welfare system to maintain, in a state of chronic dependence and inactivity, large numbers who are only too anxious to be independent. As I see it then, the real challenge may be stated as follows: can we mobilise the imagination, ingenuity and creativity of the Irish people to find ways of gradually transforming this debilitating situation into one which enables everybody to participate in, and contribute to, the development of our country?

One might begin to structure a response to such a question by specifying

the range of possibilities, and then going on to explore their feasibility and desirability compared to our current prospects. As an indication of the scope of the issues we need to address, I might list some key features of the three main possible outcomes that would represent an improvement on our current prospects.

1. The first, which I term the Korean style, would be to aim for a much higher growth of output in the reasonable expectation that this would also generate faster employment growth. In fact this is the only course by which we could simultaneously achieve the objectives of convergence in income per capita and reduced unemployment and emigration. Growth at such a pace for a sustained period, however, would be hard to achieve in a sluggishly-growing EC economy. Moreover it would impose considerable social costs: for example, it would make enormous demands on the flexibility and speed of adaptation of the whole society.

2. The second, which I call the American style, would be to aim, within the current prospective growth of output[23], for a higher growth of employment in the market sector (i.e. a slower growth of productivity) through encouragement of more low-wage labour intensive activities. An inevitable corollary would be a slower growth in the pre-tax incomes of workers generally. There would also be a need for much greater flexibility in relative wages, and probably for a reduction in welfare benefits. The approach would not initially advance convergence in income per capita, but would leave us much better placed to do so once the enormous overhang of unemployment had been reduced.

3. The third, which I call the Scandinavian style, would be to accept that the present prospective output growth will continue to be accompanied by high productivity growth in the market sector, but to siphon off more of the gain to finance employment in useful public service and community activities. This is similar to what the NESC had in mind in calling for a radically enhanced and integrated manpower policy[24], except that the NESC did not come quite clean in failing to proclaim that, realistically, this would call for higher taxation and reduced post-tax incomes, and that it would not be viable in the face of public sector pay increases on the scale applying in recent years. Furthermore, the strategy makes enormous demands on organisational and managerial skills to ensure that the activities involved are really worthwhile and not just 'make work'.

While there are different variants within each of these three approaches, they still encompass the range of possible outcomes that need to be explored if we want to improve on current prospects[25]. The approaches are not in all respects

mutually exclusive. Nevertheless each has its own logic, and each requires a coherent and compatible set of instruments that rule out other instruments. In other words, whatever mix of strategy is determined necessitates very hard choices which will conflict with established interests: otherwise the result is a hodgepodge. These choices are of such a nature that in a democratic society like ours, they can only be made - if they can be made at all - following wide-ranging public discussion and debate of the options.

A National Forum

Such debate is precisely what I would see as the prime role of a National Forum on Unemployment, about which we have heard many views in recent months. The overwhelming clamour has been for a Forum that would take 'real action' and that would not 'degenerate into a mere talking-shop'. The reality in Ireland is that action agencies are as thick on the ground as blackberries, and with every short-term crisis we add to their number. It is not at all clear that we need more, perhaps we need less. What we do desperately need is to stand back from all this welter of attempted action to talk, and think, about what precisely the action agencies are trying to achieve and why they appear to be less successful than we want. In other words, we badly need a structured 'talking-shop'.

Such a Forum would not be a substitute for other action: there is no reason why anyone should down tools while the talking proceeds. Let the various action agencies, task forces etc. go on with their business with all urgency, but let the Forum try to perform a different role. For this purpose it should be made clear that the Forum itself would not be expected to create a single job. Instead its role would be to generate a sense of national purpose in regard to what all profess to be our most serious economic and social problem, by educating the public at large in relation to the longer-term options open to us and what is required of the whole community (and not just the government), now as well as in the future, if we were to successfully pursue any chosen option. Moreover, since institutions are so important as a bridge between the present and the future, an important role of the Forum would be to explore the adequacy of the planning framework in our key political, economic and social institutions.

As with the New Ireland Forum, necessary ingredients of this process would be independent chairmanship and public questioning of the major relevant interests, including of course the political parties. In Ireland we have the habit of setting up too many institutions with too little thought or preparation. A National Forum should only be launched with adequate pre-planning, which would define clearly what the Forum was, and was not, expected to achieve.

It remains to be seen whether the proposed new Oireachtas Committee on Employment will constitute an effective Forum.

My paper has dealt almost exclusively with the Republic of Ireland. But Northern Ireland shares our most fundamental economic problems - high unemployment, below average incomes, peripherality, difficulty in developing indigenous industry etc. Moreover, both areas of Ireland are part of a European Community where economic borders will soon be entirely eliminated. Recently, Quigley (1992) has spelled out imaginatively the mutual advantages that would accrue from intensified economic co-operation divorced from any political agenda. Is it too much to hope that the kind of Forum I have spoken of could operate on an all-Ireland basis, so that we might pool our talents in talking and thinking together about how best to tackle our common economic problems[26]?

8. CONCLUSION

Since my paper is already much longer than a Presidential address ought to be, I will not prolong it further by retracing the same ground again in a detailed summary. I have written at such length to support one central message, namely, that our place in the EC and our domestic needs coalesce in demanding a longer-term perspective than we have engaged in up to now. Such a perspective is not a substitute for short-term action, but rather a means of determining and sustaining *appropriate* short-term action - by fostering a national sense of direction which will give vision and hope for the future, clarify the priorities among competing objectives, lift some of the constraints that inhibit necessary but unpalatable decisions, and mitigate impatience about progress on aspirations, like convergence, that can only be attained in the long run. Without such a perspective we are liable to continue to flounder in the face of immediate pressures and to be blown off course by every short-term crisis. As Viner (1958) aptly put it, 'No matter how refined and how elaborate the analysis, if it rests solely on the short view, it will still be ... a structure built on shifting sands.'

Footnotes

1. An excellent, up-to-date, review is given in Bradley and Whelan (1992).

2. For the sake of precision, it should be explained that the two measures address somewhat different concepts of convergence - what Barro and Sala-i-Martin (1990 and 1991) call beta convergence and sigma convergence, respectively. The former relates to whether poor countries tend to grow faster than rich countries, while the latter relates to whether there is a general tendency in all countries towards the same level of income per capita. The second is the stronger hypothesis: the existence of sigma convergence necessarily implies that there is also beta convergence, but the reverse is not true. Since we are interested here primarily in whether poor countries tend to catch up (beta convergence), we can therefore ignore the distinction inasmuch as a positive test with either measure provides evidence of beta convergence.

3. An excellent review of the recent literature on convergence and its relevance to Ireland is given in O'Connell (1992).

4. Data on state GDP (the most generally used measure, though GNP would be better) are available only since 1963. The main difference concerns income from capital generated in one state (GDP) and paid to owners in other states (personal income).

5. A subsequent paper by Roubini and Sala-i-Martin (1991) claims to account for the Latin American experience in terms of the negative impact of distortionary policies in the trade and financial sectors.

6. Spain and Portugal joined the EC only in 1986, but they are nevertheless included in the figures here.

7. It is important to make the comparison at a roughly similar level of disaggregation, since in any given area variation tends to increase with the number of regions into which the area is subdivided, and the measures of variation are not normalised for this.

8. While the measure of income used (GDP) excludes transfers, nevertheless the existence of a federal fiscal system could act to reduce disparities in GDP (or indeed in GNP) in many ways, such as the public purchases of goods and services, location of defence and other facilities, and the local multiplier impact of taxes and transfers.

9. The MacDougall (1977) report showed that central government interventions reduced regional gaps in personal income much more in Britain, France and Germany than in the US.

10. Canadian experience is also worthy of closer study in this context. Canada has devoted much greater policy effort and larger inter-provincial transfers to encourage convergence than the US. In the event, there has been much less convergence in earned incomes in Canada, although provincial living standards (in terms of personal disposable income) have converged (Strain, 1992). It is important, however, not to downplay unduly the extent of interstate redistribution flows in the US: although the latter are only about one-half those in Canada, nevertheless it has been estimated that the US 'federal fiscal system reduces long-term income differentials by 22 cents out of every dollar, which is considerably larger than the amounts involved in the EC Structural Funds program' (Bayoumi and Masson, 1992)

11. This process is documented fully in Ben-David (1991) who attributes the causation to trade liberalization. It remains unclear, however, why free trade has had less impact in reducing regional differences within some European countries.

12. In this period the Italian Mezzogiorno also experienced a catching-up towards the higher income level of Northern Italy. Catching-up ceased after the first oil shock in 1973 and up to the late 1980s the income gap relative to Northern Italy widened again (Commission of the European Communities, 1990, p.220).

13. The household data here are based on household expenditure, and therefore substantially understate the proportion of households below the average EC income level before taxes and transfers.

14. The measure is inadequate, however, for comparing labour productivity in Ireland and Denmark because of the much higher proportion of the employed labour force in Denmark working part-time (mainly married women). Thus, GDP per person-hour remains higher in Denmark.

15. In making the calculations, the authors assumed that the CSF would continue unchanged in real terms beyond 1993. To the extent that the funds are increased further, as contemplated in the Delors II package, the impact would be somewhat greater.

16. For a prescient analysis of this and other aspects of the possible impact of monetary union on peripheral member states, see Williamson (1975).

17. Some US scholars have expressed concern at EC moves to irrevocably fixed exchange rates between member states without providing satisfactory insurance against selective shocks to their income. Sala-i-Martin and Sachs (1991) note that in the US a one-dollar reduction in the per capita personal income of a region triggers a fall of 34 cents in federal

taxes paid and an increase in federal transfers of 6 cents - so that about two-fifths of the initial shock is automatically offset. See also Eichengreen (1990), and Bayoumi and Masson (1992). The EC Commission's response is that (i) few shocks are likely to be co-terminous with the territory of a single member state, (ii) shocks affecting a sector or region within a member state will continue to be cushioned by that state's own fiscal mechanism, and (iii) member states will be no worse off anyway under EMU than formerly, since the policy tools they have sacrificed (notably exchange rate variations) would generally be inappropriate in adjusting to asymmetric shocks. This response is not wholly convincing.

18. In this connection, we might take a leaf out of the Commission's own method of operation. In 1990, at the instigation of President Delors, the Cellule de Prospective (Forward Studies Unit) was established, reporting directly to the President's Chef de Cabinet. The first major study now in progress aims to move the focus of Community thinking beyond current programmes to the themes, issues and policies likely to be important between now and 2010. It would be facile to denigrate this work as stargazing, since it could be important in conditioning thinking on the future shape of Community policy, especially given the authority of some of the national agencies participating in the work, including the French Commissariat General du Plan. The Irish part of the project is being directed by Dr Rory O'Donnell of the ESRI.

19. For more on the significance of this 'interactive vision', see O'Donnell (1992).

20. At a recent conference in Brussels I heard a scholar from Luxembourg - a country with one-tenth of the Irish population and a member of the EC since its inception - document the claim that Luxembourg owed its prosperity primarily to the intelligent use it had made of its national sovereignty (Allegrezza, 1992). What intrigued me was not whether the claim was right or wrong, but that it was capable of being made at all.

21. Because of the absence of any widely-accepted framework within which to address issues that can only be solved over a long period, we witness the demands each year prior to the budget that substantial progress should be made in eliminating poverty in a single budget - something which is patently impossible and the attempted achievement of which would make matters worse for everyone.

22. On the importance of the occupational allocation of talent for economic growth, see Murphy et al., 1991.

23. Purely to simplify presentation of outcomes 1 and 2, I am assuming that the growth rate of output would remain unchanged in the face of

attempts to increase its employment content. In practice, of course, the resulting output growth rate could be higher or lower depending on the measures used.

24. The Scandinavian approach is characterised not only by active manpower policy but also by large numbers in public employment on community services.

25. A fourth approach sometimes advocated is that Ireland should not only tolerate emigration but welcome and encourage it. I think I have said enough earlier on migration to indicate why I believe that this approach would only serve to legitimise our traditional mediocrity and reduce the Irish economy to - in Doyle's (1988) graphic phrase - 'the Appalachia of Western Europe'.

26. As a step in this direction, I am pleased to say that, later this year, the ESRI and its counterpart in Northern Ireland (the Northern Ireland Economic Research Centre) will initiate jointly a multi-annual research programme on the two economies of Ireland in an EC context. Funding for the programme is being provided by the International Fund for Ireland and private businesses in both parts of Ireland, as well as by the two institutes themselves.

References

Abramovitz, M., 1986. "Catching up, forging ahead, and falling behind", *Journal of Economic History,* Vol. XLVI, No. 2, June, pp. 385-406.

Allegrezza, S., 1992. *"Facteurs influencant les strategies des enterprises de la CE dans la periode apres 1992: Le cas du Grand-Duche de Luxembourg",* paper delivered at EC Forward Studies Unit Conference Shaping Factors in the Post-1992 Period, Brussels, January 23-24.

Arthur, W. B., 1986. *"Industry location patterns and the importance of history",* seminar paper delivered at The Economic and Social Research Institute, Dublin, August.

Arthur, W. B., 1989. "Competing technologies, increasing returns and lock-in by historical events", *Economic Journal,* Vol. 99, No. 394, March, pp. 116-131.

Barro, R. J. and Romer, P. M., 1990. "Economic growth", *NBER Reporter,* Fall.

Barro, R. J. and Sala-i-Martin, P. M., 1990. "Economic growth and convergence across the United States", *National Bureau of Economic Research,* Working Paper No. 3419, August.

Barro, R. J., 1991. "Economic growth in a cross section of countries", *Quarterly Journal of Economics,* Vol. CVI, No. 2, May, pp. 407-443.

Barro, R. J. and Sala-i-Martin, X., 1991. "Convergence across states and regions", *Brookings Papers on Economic Activity,* No. 1, pp. 107-158 .

Baumol, W. J., 1986. "Productivity growth, convergence and welfare: what the long-run data show", *American Economic Review,* Vol. 76, No. 5, December, pp. 1072-1085.

Baumol, W. J., and Wolff, E. N., 1988. "Productivity growth, convergence and welfare: reply", *American Economic Review,* Vol. 78, No. 5, December, pp. 1155-1159.

Baumol, W. J., Blackman, S. A. B. and Wolff, E. N., 1991. *Productivity and American Leadership: The Long-View,* Cambridge, Mass.: MIT Press.

Bayoumi, T. and Masson, P. R., 1992. "Fiscal flows in the United States and Canada: Lessons for monetary union in Europe", mimeo, *International Monetary Fund,* February.

Becker, G. S., Murphy, K. M. and Tamura, R., 1990. "Human capital, fertility and economic growth", *Journal of Political Economy,* Vol. 98, No. 5, Pt. 2, October, Special Issue, pp. 12-37.

Ben-David, D., 1991. "Equalizing exchange: a study of the effects of trade liberalization", *National Bureau of Economic Research,* Working Paper No. 3706, May.

Blanchard, O. J., 1991. "Comment" on Barro and Sala-i-Martin, *Brookings Papers on Economic Activity,* No. 1, pp. 159-174.

Bliss, C. and de Macedo, J. B., (Eds), 1990. *Unity with Diversity in the European Community: The Community's Southern Frontier.* Cambridge University Press for Centre for Economic Policy Research.

Boltho, A., 1989. "European and United States regional differentials: a note", *Oxford Review of Economic Policy,* Vol. 5, No. 2, Summer, pp. 105-15.

Bradley, J., FitzGerald, J. and Kearney, I., 1992. "The role of the Structural Funds: Analysis of consequences for Ireland in the context of 1992" in The Role of the Structural Funds: Analysis of Consequences for Ireland in the Context of 1992, *Policy Research* Series No. 13. Dublin: ESRI

Bradley, J. and Whelan, K., 1992. *Neoclassical growth theory and economic convergence,* ESRI Seminar paper, February.

Buigues, P., Ilzkovitz, F., and Lebrun, J-F., 1990. "The impact of the internal market by industrial sector: the challenge for the member states", *European Economy/Social Europe,* Special Edition, pp. 19-113.

Commission of the European Communities, 1988. "The Economics of 1992", *(Cecchini Report) European Economy,* No. 35, March.

Commission of the European Communities, 1990. "One Market, One Money", *European Economy,* No. 44, October.

Commission of the European Communities, 1991. *The Regions in the 1990s,* (Fourth periodic report on the social and economic situation and development of the regions of the Community), Brussels.

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

de Long, J. B., 1988. "Productivity growth, convergence and welfare: a comment" *American Economic Review,* Vol. 78, No. 5, December, pp. 1138-1154.

Dollar, D. and Wolff, E. N., 1988. "Convergence of industry labor productivity among advanced economies 1963-1982", *The Review of Economics and Statistics,* Vol. LXX, No. 4, Nov. pp. 549-558.

Dosi, G., Freeman, C., Nelson, R., Silverberg, G. and Soete, L., 1988. *Technical Change and Economic Theory,* London: Pinter.

Dowrick, S. and Duc-Tho Nguyen, 1989. "OECD comparative economic growth 1950-85: catch-up and convergence", *American Economic Review,* Vol. 79, No. 5, December, pp. 1010-1030.

Doyle, M., 1988. "A European currency and a European Central Bank - an Irish view", *Central Bank of Ireland Annual Report,* No. 1, Spring, pp. 66-76.

Eichengreen, B., 1990. "One Money for Europe? Lessons from the US Currency Union", *Economic Policy: A European Forum,* No. 10, April, pp. 118-187.

Erikson, R. and Goldthorpe, J. W., 1992. *The Constant Flux: A Study of Class Mobility in Industrial Societies,* Oxford: Clarendon Press.

Hannan, D. F. and Shortall, S., 1991. *The Quality of their Education: School Leavers' Views of Educational Objectives and Outcomes,* ESRI General Research Series, No. 153, Dublin.

Institute of Social Studies Advisory Service (ISSAS), 1991. Poverty in Figures: Europe in the Early 1980s, *Eurostat,* Luxembourg.

Kaldor, N., 1970. "The case for regional policies", *Scottish Journal of Political Economy,* Vol. XVII, No. 3, pp. 337-348.

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

Kennedy, K. A., 1991 "Employment" in J. W. O'Hagan (ed.). *The Economy of Ireland: Policy and Performance,* sixth edition, Dublin: Irish Management Institute, pp. 250-285.

Krugman, P., 1987 "Economic integration in Europe: some conceptual issues", Annexe A in Padoa-Schioppa, T., *Efficiency, Stability and Equity: A Strategy for the Evolution of the Economic System of the European Community,* Oxford University Press.

Krugman, P. and Venables, A. J., 1990. "Integration and the competitiveness of peripheral industry" in C. Bliss and de Macedo, J. B. (eds.), 1990. *Unity with Diversity in the European Community: The Community's Southern Frontier,* Cambridge University Press for Centre for Economic Policy Research.

Krugman, P., 1991. "Increasing returns and economic geography", *Journal of Political Economy,* Vol. 99, No. 3, June, pp. 483-499.

Kuznets, S., 1966. "Towards a theory of economic growth" *in Economic Growth and Structure: Selected Essays,* London: Heinemann.

Larre, B. and Torres, R., 1991. "Is convergence a spontaneous process? The experience of Spain, Portugal and Greece", *OECD Economic Studies,* No. 16, Spring, pp. 169-198.

MacDougall, D., 1977. *Report of the Study Group on the Role of Public Finance in European Integration,* Vol. 1, General Report (Brussels, Commission of the European Communities).

Meenan, J., 1970. *The Irish Economy Since 1922,* Liverpool: Liverpool University Press.

Murphy, K. M., Shleifer, A. and Vishny, R. W., 1991. "The allocation of talent: implications for growth", *Quarterly Journal of Economics,* Vol. CVI, No. 2, May, pp. 503-530.

Myrdal, G., 1957. *Rich Lands and Poor,* New York: Harper and Row.

National Economic and Social Council, 1989. *Ireland in the European Community: Performance, Prospects and Strategy.* NESC Report, No. 88, Dublin.

National Economic and Social Council, 1990. *A Strategy for the Nineties,* NESC Report, No. 89, Dublin.

O'Connell, T., 1992. "Do regions naturally converge or diverge in an economic and monetary union?" *Central Bank of Ireland Quarterly Bulletin,* No. 1, Spring, pp. 51-66.

O'Donnell, R., 1991. "The regional issue" in R. O'Donnell (ed.) *Economic and Monetary Union, Studies in European Union,* No. 2, Institute of European Affairs, Dublin.

O'Donnell, R., 1992. *Shaping factors and business strategies in the post-1992 period in the European Community:* Ireland, ESRI seminar paper, February 27.

O'Malley, E., 1990. "Ireland" in "The Impact of the Internal Market by Industrial Sector. The Challenge for the Member States", *European Economy/Social Europe,* Special Edition, pp. 247-261.

O'Malley, E., 1992. "Industrial structure and economies of scale in the context of 1992", in *The Role of the Structural Funds: Analysis of Consequences for Ireland in the Context of 1992,* Policy Research Series, No. 13, ESRI, Dublin.

Quigley, W. G. H., 1992. *"Ireland - an island economy",* paper delivered at Confederation of Irish Industry Annual Conference, Dublin, February 28

Roubini, N. and Sala-i-Martin, X., 1991. *Financial development, the trade regime and economic growth,* NBER Working Paper, No. 3876, October.

Rowthorn, R. E., 1992. "Productivity and American leadership", *Review of Income and Wealth,* September (forthcoming).

Sala-i-Martin, X. and Sachs, J. D., 1991. *Fiscal federalism and optimum currency areas: evidence for Europe from the United States,* NBER Working Paper, No. 3855, October.

Sexton, J. J., Walsh, B. M., Hannan, D. F. and McMahon, D., 1991. *The Economic and Social Implications of Emigration,* NESC Report, No. 90, Dublin.

Strain, J. F., 1992. *Cohesion and the European Community: lessons from Canada,* mimeo, The Economic and Social Research Institute

Therborn, G., 1986. *Why Some People are More Unemployed than Others,* London: Verso.

Viner, J., 1958. *The Long View and the Short,* Glencoe, Free Press.

Whelan, C. T., Hannan, D. F. and Creighton, S., 1991. *Unemployment, Poverty and Psychological Distress,* ESRI General Research Series No. 150, Dublin.

Williamson, J., 1975. "The implications of European monetary integration for the peripheral areas" in Vaizey, J. (ed.) *Economic Sovereignty and Regional Policy,* Gill and Macmillan, Dublin.

Wolff, E. N., 1991. "Capital formation and productivity convergence over the long term", *American Economic Review,* Vol. 81, No. 3, June, pp. 565-579.

Zind, R. G., 1991. "Income convergence and divergence within and between LDC Groups", *World Development,* Vol. 19, No. 6, June, pp. 719-27.

DISCUSSION

T.K. Whitaker: We have been privileged to hear a paper of the highest quality in thought and expression. Congratulations are due to our President, Professor Kieran Kennedy, for his orderly and clear discussion of a theme of prime interest and importance. Indeed, the Society itself is also to be congratulated for devoting this and its preceding session (on the Culliton Report) to issues of supreme relevance to Ireland's economic and social future.

The President's opening summary of theoretical and empirical findings performs the same useful function for the less well-read amongst us as the late George O'Brien's papers to this Society. A commendable tradition is being maintained.

Professor Kennedy defines real convergence as a tendency to catch up in living standards. A tendency can be slow, fast or moderate and it is interesting to speculate as to the rate of catching up which would satisfy the Irish people. A persistent upward leverage may be presumed from our history of emigration, viewed as a way of achieving higher standards all round than all could gain at home. It would seem, however, that we might be content with a slow to moderate rate of catching up, perhaps because of various benefits of living in Ireland not included in economic measurements. It would be interesting to hear more from Professor Kennedy on this.

It is, in any case, clear that even a moderate rate of real convergence will require a high and sustained growth rate of the economy if employment is to increase significantly. The virtually automatic rise in productivity we have experienced for many years has slowed down employment expansion in Ireland. In an era when the life expectancy of human beings has been greatly extended, that of machines and equipment has been contracting. Gone are the days of the imperishable sewing machine: nowadays the need for frequent renewals and replacements ensures general application of the latest technological aids to the production of goods and services.

Having stressed that progress will remain primarily the responsibility of national administrations, Professor Kennedy, when he comes to policy at national level, avoids an exclusive choice in favour of any of the three models - Korean, American and Scandinavian - preferring to focus on the fundamental importance of community attitudes. This seems wise. The Korean model could set an unsustainably fast pace; the American is unlikely to work in our circumstances, while the Scandinavian, which might work, could be trusted only if efficiency and value for money were the governing criteria.

As to attitudes, social cohesion is more probable in a buffeted lifeboat than in an uphill scramble for position. What would greatly help would be a shared conviction of a worthwhile goal achievable within a finite period. This would be stimulated by focusing on the easement in prospect in the decade after this, when the numbers of young people in search of work will fall dramatically. A vista of ever widening social disparities could only generate despondency. I would also expect a political settlement in Northern Ireland to be a strong stimulus to enterprise and investment through the island.

As a means of building greater social cohesion, particularly in the context of reducing unemployment, Professor Kennedy relies on the National Forum idea. The efficacy of such a Forum would, I think depend on its having to observe certain disciplines, particularly that of conducting its discussions and forming its judgements on the basis of prior study and analysis by small groups of experts.

My final comment relates to the sovereignty issue. I believe that resource transfers to less favoured member countries will take place on a scale adequate to local development and social needs only if these countries retain sufficient independence (or nuisance potential) to make their voices influential at the Community table: they will in the end have surrendered all the usual instruments - fiscal and monetary - of national policy. The principle of subsidiarity must prevail, with Professor Kennedy's corollary of an obligation on the higher authority to tackle issues beyond the capacity of the lower authority. Professor Kennedy has pointed out that income divergences within States are much greater than such divergences between States. There will, therefore, always be a need to arouse awareness, compassion and political backing for the disadvantaged in society.

I have great pleasure in proposing a vote of thanks to our President for an outstanding paper.

Vani K. Borooah: In speaking to his theme of "Real Convergence, the European Community and Ireland" Professor Kennedy has addressed the central question that most nations - particularly of the peripheral kind - have in mind when they join a larger economic club namely, what's in it for us? In drawing out the many possible answers to such a question (and indeed the many possible variants to the question itself) Professor Kennedy has taken us on a masterly tour of issues that are of immense relevance to our well-being and, yet, whose implications are not fully understood. Indeed we owe the speaker a substantial debt of gratitude for a scholarly, comprehensive, well-structured and sharply focused discussion of matters that lie at the heart of the European Community and its member states. Professor Kennedy has touched upon so many issues

that it is difficult for a discussant to know where to begin: I propose to resolve this difficulty by picking selectively from his large menu of topics, the self-indulgent basis for my choice being that such topics coincide with some of my own interests.

In the first section of his talk Professor Kennedy spoke of the change that had occurred in the thinking of macroeconomists towards economic convergence. Earlier such convergence was seen as an almost natural corollary of the passage of time; today it is believed that "history and luck" might be the critical determinants of a country's growth and that international differences in income might prove to be quite prevalent. Indeed, under certain circumstances, such differences might even be exacerbated by economic integration. In reading this section and the next section on general empirical findings on convergence I was struck by two thoughts: the first related to the rise of certain countries and the decline of others; the second related to the importance of manufacturing.

The last forty years have, arguably, seen no economic event more remarkable than the rise - out of the ashes of the Second World War - of Japan, Germany and France and the parallel decline of the economies of the UK and the USA. One can quantify these changes by noting that, in 1950, gross domestic product (GDP) per person in Japan was slightly over a fourth that of the UK, Germany's was less than two-thirds that of the UK and France's was less than three-fourths. By 1987 Japan, Germany and France all had GDP per person higher (respectively 6, 9 and 3 per cent higher) than that in the UK. Although the USA maintains its position as the richest country in the world the gap between it and its competitors has narrowed considerably - in 1950 Japan's GDP per head was only 17 per cent of the USA's; by 1987 Japan had come to within 72 per cent of the US.

The engine for these reversals of fortune has, of course, been manufacturing - the decline of the UK and US economies has, in large measure, been due to a failure of their manufacturing sector to hold its own against that of Japan and Germany. Again the disparity of performance in manufacturing between the two sets of countries may be quantified: in 1950, the UK's share of world manufacturing exports was 25 per cent, Germany's was 7 per cent and Japan's was 3 per cent; by 1988 the UK share had fallen to 8 per cent and the German and Japanese shares had risen to, respectively, 20 and 18 per cent. To put the matter differently, in 1950, half of UK employment was in industry; by 1987, this had fallen to 30 per cent. These trends appear even more dramatic when one narrows the focus to Northern Ireland: manufacturing employment in the Province has fallen almost continuously from a post-war peak of 185,000 to 105,000 in 1990; less than a fifth of total employment in Northern Ireland is,

today, provided by its manufacturing sector and, were it not for the safety net of the public sector (which provides 40 per cent of total employment), the unemployment figures for Northern Ireland would be horrendous. By way of irony, the success of Mrs. Thatcher's economic policies - the "Thatcher miracle" - lies precisely in the fact that productivity growth in manufacturing in the UK exceeded Japanese levels.

How does one explain these events? Why should a group of countries, preeminent both economically and politically in the aftermath of World War II lose, within the space of four decades, their economic superiority? Conversely how did it come about that another group of countries, whose economies were destroyed by the war, were able, over the same period, to become so economically successful? Professor Kennedy mentioned, in his lecture, many possible answers to a similar, if not to the same question: research and development, incentives for investment, better education and training. He was quite right to note that none of these answers were new or indeed possessed any cutting edge in terms of policy and that what was needed was a clear identification of what types of R & D, or investment or education and perhaps also - and here I am conscious that I am going beyond the boundaries of the lecture - the types of economic activities in which a country should be involved and, by corollary, not be involved.

When I combine this very sound observation with his equally sound observation that what was needed for Ireland (and I would like to extend that to include most countries) was a longer-term perspective to economic problems I am struck by the great deal of co-operation that would be required form the main economic actors - government, unions, industry, consumers - in order to bring this about. I would interpret Professor Kennedy's proposal for a National Forum as a means for establishing a considered and reasoned national consensus on the nature of (and solutions to) Ireland's economic problems and, on such an interpretation, I cannot think of a more valuable suggestion.

Economists and policy makers are divided in their attitudes towards the relative seriousness of market versus regulatory failure. This has led to two different models of capitalism: an Anglo-American model and a Japanese-German model. The first model is based on the belief that the path of the real economy follows that charted in economics textbooks: the role of government is to clear this path by removing market imperfections and not to make it impassable through misguided attempts at regulation. The second model places emphasis on all the factors that the market is likely to ignore: the importance of social and private welfare requires the creation of regulatory systems that would bring harmony between social needs and private desires. There can be little doubt as to which economic model has, at least over the

past half-century, enjoyed more success and I hope I do not seriously misrepresent Professor Kennedy when I welcome his proposal as a step towards establishing such a model. Within the context of "social market" capitalism, social welfare policies are regarded as being of as much importance to economic development, as say, investment policies.

This leads me to the last topic in Professor Kennedy's speech that I would like to discuss and that is inequality and poverty. Indeed it is fitting that I should conclude with this topic both because some of the most internationally distinguished work on deprivation and related matters emanates from Professor Kennedy's Institute and also because, in Ireland, the ESRI is the only source of research in these areas. I cannot agree more when Professor Kennedy insists that distributional and developmental issues are inseparable. It may be that, in a purely static context, there is a certain tension between equity and efficiency but in a dynamic setting one can surely not have one without the other. Nothing, in my view, has dramatised this more than recent events in Los Angeles; nothing, in my view, is more dangerous than the smug sense of satisfaction - at least in the British media - in the belief that "it couldn't happen here".

The belief that the dispossessed may rise and burn down the fruits of our labours is perhaps one reason why we should do something about their welfare. Another reason may lie in incentives. When we usually think about incentives we think of captains of industry working less hard because tax rates have gone up; we rarely think of the disincentive effects of, say, low pay on workers. Yet Scandinavian countries have built flourishing economies - with highly competitive trading sectors - by compressing wage differentials: the gain in efficiency at the bottom has more than compensated for any loss of incentives at the top. So what should we do about social policy? Professor Kennedy has rightly pointed out that it is not a matter of throwing money at the problem. The solution lies in meaningful long-term jobs. To create such jobs requires a long term perspective on economic problems and policy. That, to me, was the central message of Professor Kennedy's lecture. It was a most valuable message, expressed with the care of a distinguished scholar through the use of cogent argument and lucid language. It is my sincere hope that the ideas inherent in this message will take root and germinate among policy makers in Ireland.

Brendan M. Walsh: I would like to join in the praise that has been extended to Professor Kennedy for his very useful review of the literature on the topic of economic convergence. There are two strands in this literature. The first is the attempt to establish whether countries, or regions within countries, have come closer together in terms of economic welfare over time. This is primarily

a descriptive exercise, in which the main problems are those of definition and measurement. The other strand concerns the testing of some hypothesis such as "Has closer economic integration led to accelerated growth?" Clearly these two strands are intertwined. Tables such as Table 3 and 4 in tonight's paper are relevant both to the description of what has been happening to relative living standards and to the question of the impact of EC membership on economic performance.

Turning first to the measurement issue, I would like to query the emphasis on convergence in the sense of *catching up*. Surely what matters is whether living standards in the poor countries have risen more rapidly as a consequence of EC membership. The gap between the rich and poor is of secondary importance. In the same vein, it seems more important to try to establish whether participation in the EMU will increase the Irish growth rate than whether it will lead to a narrowing of the gap between Ireland and the rich countries of the Community. The issue can be crystallised by asking whether we would favour "catching up" if it involved a levelling down of income through slower growth in the richer countries and no acceleration in growth in the poorer countries. The danger of using a convergence criterion such as the narrowing of the gap in GDP per person between rich and poor countries is that it logically points towards an ideal in which all incomes are equalised. This is as meaningless a goal internationally as it is within countries.

In connection with the measurement of economic performance, I would sound a note of warning about the data in Table 3, which come from the special edition of the *European Economy* and have been widely used to analyse the performance of the economies of the EC. The data for real GDP in Ireland in this source differ to a disturbing extent from those published in our Central Statistics Office's *National Income and Expenditure 1990*. Over the period 1960-1990 the annual average growth rate implied by the data in the EC publication is 0.2 per cent higher than that implied by the data in the CSO publication, cumulatively, this implies 5 per cent more growth - enough to affect inferences about the amount of convergence that has occurred. In some years the growth rates differ quite markedly. The EC data show real GDP growing by 14.3 per cent over the period 1973-75, compared with only 10.3 per cent in the CSO data. The period is obviously important in an assessment of the impact of the EC on the performance of the Irish economy. When one growth rate is regressed on the other the R^2 is only 0.77: not very reassuring for two series that purport to measure the same phenomenon!

On the question of the impact of economic integration on performance, the author does not directly address the effect of EC membership on the *absolute* performance of the economies of the poorer countries. The discussion in

sections three and four of the paper looks at the growth rate of individual countries before and after the formation of the EC. It is not clear what can be concluded regarding the effects of membership of the EC from the evidence in Table 3. It is clear in the case of Spain, for example, that substantial catching up occurred *before* entry to the EC. The author does not seem to believe that membership of the EC *per se* contributed anything to the convergence process. He states that

there are plausible theoretical reasons for attributing this pattern of experience primarily to a causal relationship between the rate of growth of Europe as a whole and convergence.

He believes that catching-up is more marked during periods of "general buoyancy". It would be interesting to test this hypothesis explicitly. It would not be supported by the apparent widening of disparities between regions and income groups *within* Britain and the US during the 1980s. But this hypothesis is tangential to the central issue of assessing the effect of membership of the EC or the ERM on either the absolute or relative performance of the poorer countries. Sceptics are given ammunition by the contrast between the lack of quantification of the historical effects of EC membership in the paper and the precision with which the *projected* impact of the Community Support Framework over the years 1992 to 2000 is shown in Table 5.

How might we try to quantify the impact of membership of the EC on the performance of the Irish economy? A simple approach is to regress the growth rate of Irish GDP on that of GDP in the OECD over a long period and then test whether this relationship changed as a result of EC membership. I have explored the relationship between the series on Irish GDP published by the CSO since 1960 and OECD data for OECD GDP to see if membership of the EC altered Irish growth in a manner that cannot be explained by the behaviour of OECD GDP[1]. A representative selection of the results obtained is given across

These results imply that the growth of Irish GDP is strongly influenced by the growth of output in the OECD[2] and that entry to EC increased the "autonomous" growth of Irish output by over one per cent a year and a further one per cent since 1988. The cumulative effect of the EC variable is in the region of 25 per cent of the 1990 level of GDP. This is evidence of a very significant impact of membership on the performance of the Irish economy. These results require further development, but I would like to suggest that the approach taken is useful as a way of clarifying one possible interpretation of the concept of convergence.

$$Y_t = -0.79 + 0.54X_t + 0.95X_{t-1} + 1.47EC$$

(0.6) (2.5) (3.7) (2.3)

$$R^2 = 0.36 \quad Rbar^2 = 0.28 \quad D.W. = 1.37$$

and

$$Y_t = -1.01 + 0.55X_t + 0.78X_{t-1} - 73Y_{t-1} + 1.24EC$$

(0.79) (2.60) (2.80) (3.86) (2.3)

$$R^2 = 0.49 \quad Rbar^2 = 0.40 \quad D.W. = 1.77$$

Where Y = the growth rate in the volume of Irish GDP,
X = the growth rate in the volume of OECD GDP
EC = the EC dummy variable described above.
and t-ratios are shown in brackets.

Footnotes

1. The EC variable was specified variously as zero before 1970, increasing to one in 1973 and two in 1988 or simply zero up to 1973 and one thereafter. The results were not sensitive to these variations, nor to the inclusion of a linear time trend, which was not significant. An interactive variable between EC and the OECD growth rate was also used, again without affecting the results materially.

2. The coefficients on current and lagged OECD GDP sum almost to unity, implying that Irish GDP fully responds to faster growth in world output, although with a lag. The Dickey Fuller test rejects the hypothesis of non-cointegration between Irish and OECD GDP. Both series are stationary.

J. Markham: added that he too wished to be associated with the vote on the President's paper which he had found both interesting and stimulating. He wished to make three brief comments:

- He found himself in agreement with Professor Walsh's measurement queries. He was particularly concerned at the use of a "per capita" indicator both for international comparisons and for those over a period

of time. In fairness Professor Kennedy had drawn attention in the section of his paper dealing with the national issues to the demographic, migratory and other problems with the Irish measure. In using such comparative indicators we must always bear in mind that a ratio such as GDP per capita is made up of two rather crude estimates. The denominator in the Irish case is atypical in the EUR12 context and demographic/migratory changes here in recent decades would suggest the need for care. Perhaps there is a need to research this area (e.g. some form of standardisation, multi-variate rather than single variate (already noted in the paper)).

- Second, Professor Kennedy highlights the disparities in EUR12 at the regional level but also within the bigger Member States. The lack of convergence and social/economic cohesion policies within our own Member State should also be a source of concern. We would appear to have no regional policy worthy of the name; at best, regional policy can be labelled "dispersed". An opportunity was lost in the sixties when we did not accept Buchanan's growth centre recommendations. Such a policy would have resulted in more cost-effective services both between and within the centres (transport, electricity, telecoms, water, sewage, etc.). The President's central message relates to the need for "a longer-term perspective". Hopefully we will see our way to develop a pragmatic regional policy within Ireland as part of that perspective.

- Thirdly, the present transfers in the form of Structural Funds are largely targeted at transport measures to reduce our peripherality. Mr. Markham expressed surprise at the absence of any mention of transport in the paper.

Finally, I congratulate you and the Society on another successful session. I always find those meetings which I can attend well worth the time and effort and most enjoyable. The President's paper and subsequent discussion was historic in content and I was pleased to be present.

Reply by Professor Kennedy: I am most grateful to all the speakers for their generous comments on my paper. I am particularly grateful to the two discussants, Dr. Whitaker and Professor Borooah who, in different but equally cogent ways, have developed and enhanced the ideas I put forward. I would also like to thank Professor Black, a distinguished past President of this Society, for gracing the chair once more tonight.

Some people have asked why in Section 6, on national policies, I confined myself to proposing options rather than articulating one preferred strategy.

The latter course was the one adopted in the Conniffe and Kennedy (1984) study, the main ideas of which Professor Conniffe and I presented afterwards at innumerable seminars and meetings around the country. We found, however, that when people were confronted with a single strategy, they focused unduly on the unpleasant features, without adverting to the fact that any alternative would also have unpleasant features which might be even more unpalatable. That experience convinced me that even the most expert audiences are likely to weight any one approach fairly *only* if they are presented with the merits and demerits of other available options. In economic strategy one is often forced to choose 'the course of least disadvantage' - to quote the classic phrase used by Dr. Whitaker on another occasion. It is for that reason also that I supported the idea of a National Forum on Unemployment, the purpose of which is well summarised by Professor Borooah 'as a means of establishing a considered and reasoned national consensus on the nature of (and solution to) Ireland's economic problems ...'.

The emphasis on catching-up is queried by Professor Walsh. Essentially what he is saying is that the absolute level of income matters more than the relative. This debate is now rather 'old hat': the modern consensus is that the absolute and relative both matter, and the emphasis to be placed on one more than the other depends on the context. For example, from the perspective of public finance, the relative income position of countries seeking closer economic union is of major consequence. Deepening integration creates pressures to harmonise tax and benefit rates, which could give rise to intolerable strain on the exchequers of poorer member states.

Professor Walsh's warning about the data in Table 3 is misplaced. The EC data he refers to are those in Table 10 of the Statistical Annex to the *EC Annual Report* 1991-92, but my Table 3 does not use these data for Ireland: rather, I used the purchasing power parity data in Table 9 of the EC source, which do not appear in Irish national income sources. The warning is misleading as well as misplaced, since he has also overlooked the fact that the data he uses from *National Income and Expenditure* 1990 are averages of the expenditure and output estimates. The two methods can, and do, give significantly different estimates of growth rates, especially in the short run. The growth rates in Table 10 of the EC source are based on the expenditure method, and are in fact *identical* with the corresponding growth rates given in *National Income and Expenditure* 1989. (There were significant revisions in the Irish growth rates between *NIE* 1989 and *NIE* 1990). Mr. Markham, in his comments, is quite right to point out that, while even the best data available are crude, this is no excuse for careless use of the data.

In an attempt to quantify the impact of EC membership on Ireland, Professor

Walsh proposes an equation which purports to account for Irish economic growth solely in terms of OECD growth and an EC dummy. No mention is made of wage cost competitiveness, nor of the non-wage dimensions of competitiveness, nor of exchange rates, nor of any role for domestic policy: the EC impact is to be measured in this vacuum. The resulting equation is open to so many different interpretations as to be unworthy of serious consideration. A more fruitful approach along econometric lines would be to adapt the methodology developed in Bradley, FitzGerald and Kearney (1992); or, alternatively, the problem might be tackled through detailed investigation of the main forces involved, as exemplified in the work of O'Malley (1990 and 1992).

In conclusion, I would like to thank you for listening so patiently to my lengthy address. I hope it will contribute to a wider debate on the long-term options facing Ireland, and that such a debate will help to develop a vision capable of mobilising and sustaining a sense of national purpose in meeting the economic and social challenges now faced, especially in regard to employment.

References

Bradley, J., FitzGerald, J. and Kearney, I., 1992. "The role of the Structural Funds: Analysis of consequences for Ireland in the context of 1992" in The Role of the Structural Funds: Analysis of Consequences for Ireland in the Context of 1992, *Policy Research Series No. 13,* Dublin: ESRI, pp. 1-122.

Conniffe, D. and Kennedy, K.A., (eds.) 1984. *Employment and Unemployment Policy for Ireland,* Dublin: Economic and Social Research Institute.

O'Malley, E., 1990. "Ireland" in "The Impact of the Internal Market by Industrial Sector. The Challenge for the Member States", *European Economy/Social Europe,* Special Edition, pp. 247-261.

O'Malley, E., 1992. "Industrial structure and economies of scale in the context of 1992", in The Role of the Structural Funds: Analysis of Consequences for Ireland in the Context of 1992, *Policy Research Series No. 13,* Dublin: ESRI, pp. 203-248.