*The Economic and Social Review, Vol. 24, No. 2, January, 1993, pp. 169-197*

# Global Competition, Europe and Irish Peripherality

DENIS O'HEARN*
*University of Wisconsin-Madison*

*Abstract:* This paper challenges the assumption that European integration can reduce core-periphery inequality within Europe. Global competition will force associated European firms and states to pursue strategies that impede regional equalisation. Particular attention is given to regional participation in "leading sectors" during future global expansions and how this will affect Irish employment. Integration will not significantly increase employment in US subsidiaries or indigenous firms, while it will decrease the probability of major investments in Ireland from the European core. In addition, European transfers used for training, infrastructure and technology programmes cannot be the basis for Ireland's transformation into a "core" European economy.

## I INTRODUCTION

Irish discussions of European integration usually assume that membership of the European Community can be an advantage to peripheral regions like Ireland if only the right policies are pursued. Economic discussions analyse the effects of the single market and structural transfers on the Irish economy, concentrating on economic variables such as market size,

*This paper was originally prepared for the 1992 Annual Conference of the Sociological Association of Ireland, Cork, May 1992. I would like to thank participants in the conference for their invaluable comments and suggestions. I am also thankful to the anonymous reviewers of *The Economic and Social Review* for their helpful criticisms and comments. Funding for the research was provided by the Graduate School of the University of Wisconsin-Madison. Office and research facilities in Ireland were graciously provided by the Sociology Department, University College Dublin. The Industrial Development Authority of Ireland provided access to data from their surveys of employment and components of sales of firms operating in Ireland. The author invites comments and criticisms addressed to him at the Department of Sociology, University of Wisconsin, Madison, WI 53706.

demand, economic structure, transactions costs and economies of scale. Even studies which recognise the importance of Irish peripherality tend to pose "periphery" merely as a geographical concept which increases economic costs (e.g., Bradley, Fitz Gerald and Kearney, 1992). This paper introduces sociological and political power variables to the analyses of European integration and Irish economic change. I argue that the hierarchical structure of Europe and the global economy is the major blockage to favourable economic change in Ireland.

There are two broad positions about European integration and regional inequality. One holds that Europe is moving away from the historical colonial model which promoted, or at least allowed, extreme inequalities between the "developed" and "less-developed" countries. John Hume of the Social and Democratic Labour Party, for example, insists that "the imperialists have learned their lesson". Instead of exploitation, European unity will bring prosperity to all of its regions, including all of Ireland, from the Bogside to Ballyhaunis. From this point of view, a stable and prosperous Europe requires prosperous regions, which will be achieved through the progressive equalisation of levels of development throughout the community. The term *cohesion* was coined to capture this concept. Rather than questioning or testing the motives of powerful core European actors, this argument assumes that "social and economic cohesion" really *is* a major European policy goal — rather than just a stated goal — and that all European regions have a "commonality of interests towards ... an external environment" (CEC, 1992, pp. 10-11).

I explore a second view, which holds that the current transition is not systemic. It is another repetition of a form of global crisis and conflict that has appeared with some regularity since the world capitalist system was established. As Chase-Dunn (1989) puts it, the "deep structure" of global capitalism, whereby capitals from spatially restricted core regions strive to maximise and dominate global accumulation, has not changed. Emerging strategies in the United States, Japan and Europe are attempts to compete successfully within the system. This may require domination of the system, but not its transformation. In other words, the global hierarchy of core, semi-peripheral, and peripheral zones, each with a clearly defined position in a global division of labour and a position of relative power or subordination in the interstate political economic regime, will remain in place even while the major core powers compete (for a review of arguments on the reproduction of the core-periphery hierarchy, see Chase-Dunn, 1989, pp. 228-255). Only Italy and Japan have achieved upward mobility into the core in our time. What is at stake for countries of the European periphery is whether their association with the European core in a political and economic union will hasten their

upward mobility from semi-periphery to core, or whether internal European political and economic structures will reproduce or even solidify the European core-periphery hierarchy.

## II THEORIES OF GLOBAL COMPETITION AND ECONOMIC CHANGE

Several approaches link the structural development of capitalism with a process of economic and political competition, including regional competition, which creates and reproduces uneven development. Historical political economy, beginning with Marx but found also in the conservative tradition of Schumpeter and in contemporary business history, explains why capitals must compete over innovation and competitive advantages in "leading sectors" or face destruction. For Marx (1967), this involves an incessant competition over sources of surplus profits, including new techniques or production relations, new markets, and sources of raw materials. Schumpeter (1939) analyses a similar process of innovation as a discontinuous process of improvement in productive technique or process ("innovative response"), followed by competitive responses from other capitals ("adaptive response"). Economic evolution moves in "waves" during which the most innovative capitals and regions dominate, while those who fail to respond adequately are destroyed. Competition builds up during a period of recovery after each innovative wave is played out and leads to a further wave of innovation around new leading sectors. Chandler (1977, 1990) demonstrates the importance to competitive advantage of innovation in the social organisation of production, particularly aspects of the large capitalist firm that increase "economies of speed" or "throughput" by reducing unit costs of production. Landes (1968) argues that state support of innovation is a crucial determinant of which regions dominate the world economy and which regions "fail". States provide support for infrastructure, including skill-formation, but also must protect and support firms during the early stages of competitive innovation. All of these approaches are based on the central principles that firms must engage in the struggle to competitively dominate the sectors in which they operate, and that firms and regions "succeed" or "fail" according to their ability to dominate leading core sectors of the global economy.

Such models of capitalist innovation and accumulation have been placed in a global context by theories of international regimes and hegemony. Studies of international regimes, or interstate systems, examine the degree to which core states in the world-system attempt to create and maintain global order by instituting supra-national regimes to regulate economic, political and military affairs (Krasner, 1976). Many authors propose that global stability, which is necessary for economic prosperity and global economic expansion,

requires the establishment of *hegemony* — the economic, political, and military domination of the world-system by a single core state (Bornschier and Suter, 1992; Keohane, 1984; Gilpin, 1987). Some theorists identify a "hegemonic cycle", which is associated with the long economic cycle of global production. Intra-core competition over competitive advantage in the "leading sectors", which drives waves of global economic expansion, they claim, inevitably leads to a power conflict among coalitions of core capitals and states. Each participant in this "hegemonic conflict" attempts to assure its global competitiveness by establishing a *dominant* position relative to other core competitors (for the relevant literature, see Chase-Dunn, 1989, and Bornschier, 1992).

The hegemonic cycle contains two central dynamic movements: a pattern of conflict and a pattern of economic dominance of the eventual hegemon. Goldstein (1988) documents a pattern of hegemonic contention where, after a period of economic competition, a challenger (B) makes war on the declining hegemon (A). (A) makes an alliance with another contender (C), and together they win the war. But (A) is unable to re-establish hegemony and (C) emerges as the new hegemon. The Dutch, British, and US hegemonic regimes were all established in this pattern, through warfare, leading Goldstein to predict a "window of vulnerability" to warfare early in the twenty-first century. While the perceived horrors of nuclear destruction may stop future contenders short of global war, it is hardly wise to bank on such common sense. Nor would the absence of global war reduce the probability or viciousness of localised conflicts over spheres of influence.

During the cold war, the inability of Japan and Germany to build global political and military power excluded them from contending for hegemony. Yet US economic decline also led some experts (e.g., Bergsten, 1987) to propose a possible US/Japanese hegemonic alliance, or *bigemony*, welding Japanese economic power with US political and military power. The fall of Soviet power, the rise of nationalism, the initial steps of the Western European Union (WEU) to play a regional rôle of peacekeeper *independent of NATO*, and the Franco-German creation of a "European Corps" may increase Europe's ability to contend for hegemony and not just economic competitiveness. Some critical Irish writers, therefore, worry about the implications of European integration for Irish neutrality and the country's future participation in regional wars (Maguire and Noonan, 1992). This, however, is beyond the scope of the present paper, which concentrates on the implications of European integration for change of the economic core-periphery hierarchy within Europe.

With regard to the pattern of economic dominance, Wallerstein (1984) shows that past hegemons have gone through three stages of ascent and

decline. They first gain a competitive advantage in consumer goods, which penetrate the markets of competing core regions. Then they dominate the production and export of capital goods. Finally, they export financial services and perform central functions for the world economy. This pattern is associated with the Schumpeterian "leading sector" concept because the most dynamic consumer and capital goods sectors in the hegemonic economy are also where technological innovation and market expansion are concentrated. The emergence of service exports is an indicator of hegemonic decline or crisis, because the hegemon no longer commands clear competitive advantages in key productive sectors. Historically, the United Provinces of The Netherlands established competitive advantages in herring fisheries and then shipbuilding (Maddison, 1982; Wallerstein, 1980); Britain in cotton textiles and then in the production and export of machinery, railroads and steamships; and the United States in automobiles, electrical appliances, and then electrical machinery. From this point of view, the next phase of global economic expansion, and the next opportunity for hegemony, will be based on the new technologies in microelectronics, communications technologies, robotics, and biotechnologies.

## III WORLD SYSTEM COMPETITION AND EUROPEAN INTEGRATION

Global competition is unstable, sectorally and regionally, because each competitor attempts to establish a clear advantage over the others. Success (or avoidance of failure) can ultimately be assured only by establishing clear competitive advantages, which must be continually re-established as innovation proceeds. If we accept models of hegemony, the very act of economic competition in the world system forces associated states and capitals to contend for hegemony because failure to do so may allow others to dominate (Keohane, 1984; Gilpin, 1987; Bornschier and Suter, 1992).

The importance of political security, at home and abroad, necessitates the creation of stable state and interstate systems, not only because economic actors (e.g., firms) require them but for other social and political goals. Although state policies are not crudely determined by the requirements of powerful economic elites, global competition requires an alliance of leading state and economic elites and state policies that enable key firms to compete. European political integration thus has important economic consequences for the ability of major firms to compete globally.

Bornschier (1992, p. 4) refers to the "world market for protection" or social order, which is a territorially-bounded public utility and an element of the national economic production function. A state will be strongest, he argues, when it combines moderate taxing with favourable support for innovation and

investment. A capitalist firm will be more competitive when it is situated in a national or transnational network of economic transactions that are effectively protected at a low cost. The capitalist state that "reconciles the capitalist profit logic with the claims for legitimacy from citizens" is most favourable for economic success. States, then, are producers of economic goods (security) and European political union is intended to increase European efficiency in "producing" security. As Sandholtz and Zysman (1989, p. 102) point out, under the conditions of US hegemony and economic expansion, *national* strategies for growth, development and employment within the European Community sufficed. After US political and economic domination declined in the 1970s, the global context forced a *regional* "rethinking" of political entrepreneurship.

Whether or not economic competition is inevitably associated with hegemonic competition, capitalist accumulation requires firms from a given region to compete in the innovative process or fall behind, as was feared in the case of *"Eurosclerosis"*. In this respect, it is irrelevant whether integration is designed to enable Europe to dominate the world economy, or simply to avoid economic decline in the face of Japanese and US competition. In either case, European core firms must fully engage in global competition with Japanese and US firms or fall further and further behind. The timing of the latest wave of integration is explained by the combination of reaction to the Europessimism of the 1970s and the opportunities and challenges presented by the hegemonic decline of the US and economic ascent of Japan. Since the decline of US hegemony in the 1970s, the "new Europe" is no longer a US project, but a project of the European core within a fragmented world system. As was the case in the US in the 1930s and 1940s, a number of influential people at the core of Europe began to realise that its best hope of recovery from the recession of the 1970s was to increase the coordination of regional trade and production. Influential studies, such as Albert and Ball's (1983) European Parliament working paper, specifically compared European performance to the US and Japan, and set successful global competition as the primary goal of European integration.

A key set of European business leaders and political entrepreneurs aspires to "outcompete" the US and Japan, and possibly to become the next hegemon of the world economy. As a top executive of Fiat declared, "the final goal of the European 'dream' is to transform Europe into an integrated economic continent with its specific rôle, weight and responsibility on the European scenario *vis-à-vis* the US and Japan" (quoted in Sandholtz and Zysman, 1989, p. 95). German Chancellor Kohl asserts that Europe, not the US or Japan, will be the dominant global force of the coming decade, while the French President of the European Bank for Reconstruction and Development foresees

that day when Europe will be the "heart of the world economy" (quoted in Bornschier, 1992, p. 7). Jacques Delors proposes that Europe must combine its dynamic economic power with a "great political power" or become "mere spectators of history" (Bornschier, 1992, p. 7). Influential economic observers like Thurow (1992) assert that the European project is a "head to head" global confrontation with the US and Japan. And, as Sandholtz and Zysman (1989) persuasively argue, the project of economic and political unification is, at least at its inception, a project of elites, or "a complex web of intergovernmental bargains and accommodations among the various national business elites." The terms of this "complex web" of bargains is set predominantly by *core* European governments and business elites.

This is not to say that the project is fully coherent. The history of European social democracy has created powerful interests in the welfare state, and the legitimacy of a new Europe would be challenged if there were significant erosion of social welfare programmes. Peripheral members increasingly view "cohesion" as a strong basis for their participation in the project. This creates a tension or contradiction between the requirements of competition through "lean production" and the "lean state", on the one hand, and the demands of non-business social forces on the other (Bornschier, 1992).

Given the association between economic integration and European competitiveness, a key question is the consequences of intra-core competition on regional uneven development within the European Community. Will the struggle for economic competitiveness allow the equalisation of peripheral incomes and standards of living relative to the core? Or, as I will argue here, will the conditions of intra-core competition in the global capitalist system intensify and concretise regional inequalities, leaving Ireland in an increasingly peripheral situation relative to the European and North American cores?

If global competition is at the centre of the European core agenda, the predominant concern of integration must be the competitiveness of firms from the European core, who must dominate emerging key productive sectors if Europe is to survive as a dynamic entity. Analysts like Albert and Ball were particularly concerned that intra-European protection impeded the ability of the European core to compete in the new leading sectors such as information technology, biotechnology, and energy. This central concern is repeated over and over again in EC documents, such as a series of EC Commission studies of information technologies which cite the danger of Japanese domination unless the European market is unified and product development and production is concentrated in the European core (Freeman and Soete, 1991; Gerstenberger, 1991; others cited in Bornschier, 1992, pp. 15-16). Increasingly, the key nexus of core-periphery conflict within Europe is and will be

centred around whether the requirements of Euro-core accumulation (which is necessary for European competitive success in the global system) can coexist with the aspirations of European peripheries to achieve upward mobility in the world-system (from semi-periphery to core). Unfortunately for the periphery, the discourse around these aspirations has so far centred on the diversionary subject of the size of core-periphery transfers under the programme of "cohesion".

*Eliminating the Alternatives*

To analyse conflict within Europe, it is necessary first to consider the relative strengths of periphery and core. From the perspective of the core, I would argue, the most important achievement of the period of US hegemony after World War II was the elimination of alternatives from peripheral discourses about imperialism and global capitalism. In Ireland, for the first time since its forcible incorporation under British colonialism in the seventeenth century, a core crisis has not been accompanied by a serious attempt to change the economic regime and disengage from the world-system. Core crises encouraged the seventeenth century attempt by settler landowners to industrialise in wool, the late eighteenth century local parliament and cotton-led industrialisation, late nineteenth century peasant struggles for land, and the early twentieth century withdrawal from colonialism and erection of import-substitution industrialisation in the Irish Free State. In contrast, the Irish reacted to the present conjunction of severe economic crisis and global economic conflict by accepting the intensification of their incorporation under European control. This requires explanation.

During the long crisis of 1914-1945 and the first decade of US hegemony, many peripheral countries, including the Irish Free State, were able to attempt strategies of import-substituting industrialisation (ISI). Unlike previous periods, when the colonial powers forcibly ended protectionist experiments in their infancy, some of these experiments lasted for a considerable time. Indeed, they lasted until they were beset by problems of insufficient foreign exchange and lack of access to capital equipment and technology. Ireland's experiment lasted some twenty years, despite regional economic hardships and British sanctions. It officially ended after it was blamed for the severe recession of the mid-1950s, although it began to be dismantled when Ireland joined the Marshall Plan in 1947. Peripheral ISI experiments were doomed to fail because of the core's monopoly of the most advanced techniques and, therefore, its ability to dominate key markets. Yet, in the time-honoured tradition of blaming the victim, the collapse of ISI was usually blamed on the failure of peripheral people to "become modern", their lack of respect for free market forces (especially, the "free" movement of core

commodities and investments) and their affinity to "outdated" ideas like nationalism and protection.

Core institutions and states promoted the modernisationist ideology, that peripheries could industrialise only by adopting "western" ideals of free enterprise and free trade. Many peripheral people resisted, because they recognised that free trade worked mainly in the interests of the core and brought little prosperity to peripheral regions. In Ireland, modernisationism was more successful because the state and its public relations agencies — the Industrial Development Authority (IDA) and, to a smaller extent, the northern Irish development agencies — were very adept at publicising each new foreign investment, with inflated promises of employment. Massive failures in indigenous industry were either ignored or blamed on the inherent inability of Irish entrepreneurs to "become modern". Prospective southern capitalists were said, in Lee's (1990) words, to be wedded to a "possession ethic" rather than a "performance ethic". Even worse, it was quite respectable to claim that the northern Irish were "bogged down in tribal warfare".

More powerful than the modernisationist ideology was the creation of a material reality where there was "no alternative" to subordinate participation in the US-dominated world-system. Even in the 1950s, the operative phrase in southern departmental and ministerial discussions about European free trade was not, "freer access to the European market will bring jobs and prosperity". Although such phrases appeared in public propaganda of the time, many experts privately agreed that free trade would decimate Irish industry and create massive unemployment. Rather, the ultimate winning argument was, "if we fail to agree we will be forced to leave the European organisation, European countries will probably refuse to trade with us, and the US will isolate us" (on these discussions, see O'Hearn, 1989).

Forty years later, the state's most effective plea for acceptance of the single European market is that "staying out could only be devastating, for us and for future generations". The effectiveness of the "no alternative" scenario is underscored by the inability of many on the left, including the Labour Party and the Democratic Left, to generate a concrete position on integration. Even the trade unions reluctantly call for Irish acceptance of European integration on the grounds that refusal "could lead to economic isolation with a devastating effect on the Irish economy". The major change from the1950s is that Europe and the Irish state are confident enough of the threat of isolation that they can risk subjecting European integration to public referenda.

The elimination of any real alternatives to global incorporation, which was begun in the 1950s and completed by the vilification of nationalism and Republicanism in the 1970s and 1980s, is a crucial historic change for Ireland. By all accounts, the recession of 1955-1957 and the publication of

census returns in 1957 "so rapidly reversed" public attitudes on protection and free trade that "those who had an interest in maintaining industrial protection ... found it impossible to resist this movement of opinion" (Fitzgerald, 1968, p. 55). The recession of 1981-87 was much deeper and more prolonged — the volume of emigration was higher and the unemployment rate doubled to twenty per cent in three years (three times the 1957 level). Yet this recession brought no significant anti-systemic outcry, much less systemic change. The years between 1957 and 1992 have also seen the income gap between the European core and Ireland increase. It may now be considered that, regardless of the levels of economic stagnation, unemployment, and regional inequality experienced by Ireland, there will be no massive outcry against the failures of free trade, free enterprise, and European integration to match the outcry in the 1950s against nationalism and protection. The mobilisation of effective movement for change awaits the successful elaboration and dissemination of an alternative programme to full incorporation in the capitalist world-system.

Irish policymakers, weakened by the failure to elaborate alternatives, are constrained by the rules of the present system. Their ability to use a series of economic policy instruments has been progressively stripped away — not just since accession to the EEC in 1972, or the consolidation of the liberal export-led industrialisation model in the late 1950s, but since the Free State's participation in the Marshall Plan and the Organisation for European Economic Development in the late 1940s. Within the liberalised rules of the new Europe, there is little real possibility of inducing indigenous economic growth, especially in the high-tech "leading sectors" that are at the centre of global economic expansion. The south of Ireland has little choice but to pursue two main sources of economic change — foreign industrial investments and European transfers — although the efficacy of each of these sources has been obviously lacking over the past twenty years (the north is even more restricted to dependence on transfers from Britain). An analysis of future Irish economic change, therefore, must consider the effects of Europe's global economic competition on these sources of growth.

*Industrial Investment*

For thirty-five years, the attraction of foreign capital has been the central strategy for Irish prosperity. Despite common agreement that indigenous sectors should be the main basis of future industrial growth, and despite an upgrading of policies aimed at indigenous industry following the Telesis and Culliton Reports (NESC, 1982 and Review Group, 1992), the proportion of state industrial grants to local industry has hardly risen and indigenous manufacturing continues to stagnate. During the limited upsurge of

industrial activity between 1988 and 1991, for example, indigenous industry accounted for only 2,405 of the 12,359 net jobs created in industry, or just under one-fifth (IDA, 1992). The profitability of Irish firms remains remarkably low. According to unpublished IDA data, indigenous firms averaged a profit rate of just 2.99 per cent of total sales during 1983-90. Most disturbingly, profit rates of indigenous firms in the leading sectors — chemicals, metals and miscellaneous manufactures — averaged 0.20 per cent during the same period. The possibility of achieving a vibrant domestic presence in the leading economic sectors remains highly questionable so long as core regions monopolise key technologies and European peripheral states are subject to EC restrictions on trade and industrial policies that might promote indigenous growth (such as Korean-style selective protection, exchange-rate controls, and sanctions for poor performance).

How will the competitive conflict among the core powers of the global economy affect the expansion of foreign firms into Ireland? Global crisis and competition generate two important impulses to the outward expansion of core investments. First, capitalist crisis is associated with falling rates of profit, or at least with increasing difficulties in realising profits on the expanded level of commodity output which follows a long expansionary phase. If firms hope to survive the crisis, they must intensively seek new markets, cheaper ways of producing, and cheaper materials. Cyclical expansions of foreign investment thus accompany crises, and are not necessarily indicators of global prosperity (Gordon, 1988). The other major source of outward expansion is the effort by the core firms and states to dominate the new technologies that will lead accumulation during the next upswing. Success requires the domination of the newest technologies, of markets, and of sources of raw materials. To the extent that new labour-saving technologies are generalised throughout core industrial sectors, they may decrease the attractiveness of cheap peripheral labour for the core. Ireland's attractiveness may therefore continue to stem from its position as a point of entry into European markets, and this will be confined to US and Asian rather than European investments.

The attraction of foreign investments is often considered to be the success story of the Irish export-led regime. Regardless of the island's overall economic performance, experts lavished praise on the IDA's ability to attract inward investment. As early as 1957, Irish experts noted the importance of the island's position as a gateway for US capital attempting to gain access to the European market (Carter, 1957). Ironically, Ireland's attractiveness to US capital was postponed until it joined the EEC in 1972. At that time, it was under conditions of crisis, rather than expansion, that US capital arrived in large quantities.

The pattern of US investments in Ireland appears to be consistent with Wallerstein's findings about the rise and decline of hegemony — the first firms to seek new markets under crisis should be in the consumer goods sectors that drove the first stage of economic ascent, followed by capital goods sectors and, finally, services. After a decline of investments in basic products, the IDA targeted US electronics firms in the late seventies, and then introduced the international services programme during the stagnant years of the mid-1980s (IDA, 1978). The earliest US investments — concentrated in basic manufactures such as metal articles, consumer durables, food, textiles, and wood — passed their peak by the mid-1970s (see Table 1). Annual new employment generated in these sectors between 1975 and 1985, averaged only about 10 per cent of their 1975 employment level (*net* new employment was considerably less, even negative in some sectors). Investments in capital goods, however, increased into the 1980s. New employment in US TransNational Corporations (TNCs) in machinery and leading high-tech sectors continued at about 25 per cent of their 1975 employment levels between 1975 and 1985, peaking in about 1980-83. Finally, a wave of US investments in international services only became significant in the mid-1980s, after investments in the other sectors had severely stagnated. The service sector was the largest source of new employment between 1988 and 1991, when 3,657 new jobs were created in services compared to 2,542 in computers and office machinery. During that time, employment in services rose by 2,381 and computers by only 420.

Although other explanations are possible, I would suggest that the severe investment crisis of the mid-1980s marked the end of a phase of outward expansion by US TNCs that began during the 1960s, toward the end of the post-war period of US domination of the global economy. This phase reached its peak in Ireland under the conditions of economic (and hegemonic) crisis, which induced US firms to seek entry into European markets as an adaptive response. By the mid-1980s, this crisis-induced migration of capital was practically over and the Irish state could no longer depend on it as a source of employment. This helps explain the state's openness to changes proposed by the Telesis and Culliton reports, which suggested a stronger rôle for indigenous firms and a reduction of the programme of capital grants. It also explains why influential elites and observers embraced 1992, Maastricht, and the concept of "cohesion" as Ireland's only hope for the future.

In the event, however, the new competitive forces that were embodied in the programme for European union led to a revival of US investments in 1988 that was, I would argue, logically distinct from the earlier investments. The rise in US investments after 1988 were an innovative response to the per ceived opportunities of the unified European market, but were also concen-

Table 1: *New Employment in Subsidiaries of US TNCs, by Sector, End of Year 1976-1991**

| *Year* | *Food* | *Text.* | *Wood* | *Chem.* | *Metal Arts* | *Mach.* | *Cons Durable* | *Misc.* | *Leading Sectors* | *Serv.* | *Total* |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1976 | 213 | 336 | 114 | 196 | 392 | 270 | 331 | 488 | 1,230 | 185 | 3,758 |
| 1977 | 328 | 516 | 109 | 355 | 432 | 288 | 331 | 416 | 1,589 | 407 | 4,774 |
| 1978 | 186 | 648 | 77 | 214 | 312 | 275 | 330 | 177 | 1,934 | 210 | 4,379 |
| 1979 | 513 | 1,211 | 126 | 702 | 486 | 318 | 255 | 385 | 1,802 | 93 | 5,705 |
| 1980 | 55 | 601 | 226 | 302 | 51 | 192 | 264 | 247 | 2,226 | 120 | 4,299 |
| 1981 | 77 | 455 | 187 | 246 | 209 | 163 | 446 | 460 | 1,962 | 116 | 4,339 |
| 1982 | 72 | 174 | 170 | 81 | 102 | 322 | 173 | 416 | 1,957 | 107 | 3,574 |
| 1983 | 114 | 229 | 275 | 62 | 163 | 284 | 239 | 345 | 2,012 | 201 | 3,959 |
| 1984 | 69 | 173 | 247 | 495 | 257 | 338 | 162 | 365 | 1,695 | 204 | 4,010 |
| 1985 | 50 | 428 | 114 | 47 | 222 | 319 | 322 | 214 | 1,168 | 406 | 3,279 |
| 1986 | 72 | 290 | 79 | 151 | 148 | 175 | 373 | 246 | 1,336 | 472 | 3,341 |
| 1987 | 52 | 203 | 169 | 57 | 220 | 102 | 287 | 237 | 1,148 | 532 | 2,996 |
| 1988 | 57 | 608 | 175 | 105 | 236 | 258 | 368 | 330 | 1,515 | 750 | 4,389 |
| 1989 | 29 | 608 | 214 | 213 | 230 | 349 | 230 | 296 | 1,475 | 805 | 4,454 |
| 1990 | 136 | 560 | 87 | 72 | 147 | 199 | 258 | 194 | 2,174 | 915 | 4,742 |
| 1991 | 82 | 46 | 73 | 205 | 121 | 163 | 229 | 303 | 2,101 | 790 | 4,203 |
| 1988-1991 | 1,304 | 1,822 | 549 | 595 | 734 | 969 | 1,085 | 1,123 | 7,265 | 3,260 | 17,788 |
| (%) | 1.7 | 10.2 | 3.0 | 3.3 | 4.1 | 5.4 | 6.1 | 6.3 | 40.8 | 18.3 | 100.0 |
| 1976 Employment Levels: | 1,764 | 2,476 | 1,315 | 1,133 | 2,106 | 1,126 | 2,667 | 1,133 | 7,598 | 402 | 21,790 |

*1976-1981 figures are from surveys taken in January of the following year; 1982-1991 surveys were taken in November of the given year.

*Source:* Unpublished IDA Employment Surveys, 1992.

*Note:* "food" includes drink and tobacco; "text." is textiles and clothing; "wood" is wooden manufactures, paper and printing, and non-metallic minerals; "chem." is chemicals; "metal arts" is miscellaneous basic metal manufactures; "mach." is machinery except machine tools, computers and office machinery; "cons. durable" is automobiles, automobile parts, electrical appliances, and shipbuilding; "misc." is miscellaneous products not in other categories; "leading sectors" includes pharmaceuticals, machine tools, computers and office machinery, electrical engineering, telecommunications equipment, aerospace equipment, instrument engineering, healthcare products, diagnostic medical apparatus, and TV and radio equipment; "serv." is services.

concentrated among firms in the innovative "leading sectors" that hope to lead the next expansion of the global economy. These leading sectors — biotechnologies, robotics, microelectronics and information technologies — are contained in the following NACE product groups: pharmaceuticals, machine tools, computers and office machinery, electronic engineering, telecommunications equipment, television and radio, aerospace equipment, instrument engineering, healthcare products, and diagnostic medical apparatus. These product groups also contain "non-leading" products, including some that led the post-WWII expansion, yet they correspond roughly to what Schumpeter had in mind when he spoke of the leading sector and its closely-linked products which are at the centre of the long expansion. While the "leading sectors" and services made up only about one-third of new employment in US subsidiaries in the 1970s, they were responsible for six of every ten new jobs in the US-owned sector during 1988-91 (two-thirds in 1990-91). The sectoral dispersion of US investments has thus decreased significantly over time, and Ireland is increasingly dependent on a few leading sectors as a source of new foreign investments.

There are several crucial implications of the intensified Irish dependence on US investments in the leading sectors. First, US subsidiaries in Ireland will not necessarily expand further in response to the unified market. Chemical and electronics subsidiaries in Ireland, for instance, are significantly smaller on average than comparable establishments in core EC countries. O'Malley (1992, p. 240) interprets this to mean that these subsidiaries do not need to be as large as EC firms in order to be competitive in the unified market. While this is true, it is because the stages of production that will most likely expand as a result of EC liberalisation are located outside of Ireland. US TNCs do not have to substantially increase their *scale* of operations in Ireland in order to increase the flow of their products into Europe. A rough indicator of the degree to which firms can increase exports without substantially increasing their scale of operations is sales per employee. Unpublished IDA data reveal that US subsidiaries in the leading sectors produce about 165,000 dollars of commodities per employee, while other TNCs produce about 95,000 dollars and Irish firms about 90,000 dollars per employee. The wave of investments associated with 1992 already appears to have been a short "bubble", which played itself out much more quickly than earlier cycles. Employment in US-owned subsidiaries began to recover in 1988 and was already falling seriously in 1991 and 1992 (the *net* employment rise fell below 1,000 in 1991).

Second, even if TNC subsidiaries in Ireland expand in order to increase their supply of commodities to European markets, they are not likely to increase their use of labour to the same extent, if at all. US investments are

increasingly in capital-intensive sectors which provide limited relief to the island's employment crisis. Although the value of US investments reportedly reached record levels during 1988-90, the employment generated by these investments was no higher than levels achieved during the late 1970s and early 1980s (see Table 1). Capital intensity in these sectors may be expected to rise even further with the introduction of new production techniques related to robotics and microprocessing.

Third, it remains sadly true that the market-oriented investments of US TNCs create the fewest linkages of any source of investments, and the levels of linkage are falling as leading sectors such as computers and electronics increase their share of US investments. As Table 2 shows, during 1983-1990 backward linkages in US-owned subsidiaries in the leading sectors (here defined as pharmaceuticals, computers, and electrical engineering) averaged about 15 per cent of sales, only half of the average linkages in other TNCs (about 32 per cent) and a quarter of backward linkages in indigenous firms (about 55 per cent). Wages accounted for less than 10 per cent of sales in the US subsidiaries, compared to 18 per cent in other TNCs and 17 per cent in Irish firms. US subsidiaries in the leading sectors created practically no forward linkages because they exported all of their product, while other TNCs had average forward linkage rates of about 30 per cent and Irish firms 60 per cent (of course, the TNC-based model assumes that the compensating advantages of exports offset the losses from the absence of forward linkages).

Table 2: *Linkages and Profit Rates in US-owned "Leading Sectors", Other TNCs, and Irish Indigenous Manufacturers, 1983-90 (as % of Sales).*

| | *Backward Linkages* | | | *Forward Linkages* | | | *Profit Rate* | | |
|---|---|---|---|---|---|---|---|---|---|
| *Year* | *US Leading* | *Other TNC* | *Irish* | *US Leading* | *Other TNC* | *Irish* | *US Leading* | *Other TNC* | *Irish* |
| 1983 | 17.24 | 31.52 | 60.91 | 0.95 | 34.75 | 61.02 | 27.85 | 10.53 | 0.20 |
| 1984 | 15.86 | 31.55 | 56.36 | 1.36 | 30.96 | 59.15 | 34.73 | 12.35 | 2.07 |
| 1985 | 14.55 | 30.72 | 56.73 | 1.14 | 29.67 | 62.51 | 32.43 | 11.58 | 1.91 |
| 1986 | 15.13 | 30.84 | 56.05 | 1.33 | 29.27 | 59.63 | 32.32 | 12.65 | 2.53 |
| 1987 | 15.44 | 32.64 | 56.45 | 1.29 | 29.08 | 62.65 | 31.81 | 16.31 | 3.10 |
| 1988 | 14.00 | 34.10 | 54.16 | 1.58 | 28.73 | 62.18 | 32.58 | 15.79 | 4.57 |
| 1989 | 16.80 | 31.67 | 54.68 | 1.51 | 25.15 | 62.41 | 31.14 | 16.15 | 4.43 |
| 1990 | 17.74 | 33.05 | 54.62 | 4.37 | 30.75 | 64.42 | 36.82 | 14.72 | 3.89 |

*Source:* Unpublished IDA "components of sales" surveys, 1983-1990.

*Notes:* "Leading sectors" include pharmaceuticals, computers and office machinery, and electrical engineering.
"Backward linkages" refer to Irish materials and service purchases as percentage of total sales.
"Forward linkages" refer to non-exported sales as percentage of total sales.
"Profit rate" refers to profits as a percentage of sales.

Finally, because TNCs pay little tax and generally repatriate their profits into the infamous "black hole", they create few fiscal linkages (given the cost of attracting foreign investments, fiscal linkages may be negative). In short, even if the flow of US investments expands, the experience of more than two decades demonstrates that these investments will do little to promote generalised prosperity in Ireland. They may moderately improve the country's export and GDP-growth performance, but will have far less effect on the growth of GNP, the growth of other sectors, or the creation of employment.

Finally, if there is a connection between economic and political integration, on the one hand, and European competitiveness on the other, liberalisation will be primarily aimed at improving the opportunities of European core capitals to dominate leading sectors in the competitive struggle with Japan and the US. For this reason, the expansion of US investment in Europe's periphery may be increasingly viewed as a threat by the European core. If US (or Japanese) capital continues to succeed at penetrating European core markets, there will be increasing pressure to modify European trade regulations to close the door to firms from competing core regions. This could take the form of a response to US protectionism, which already seems more likely after new tariffs on steel and other products in the first days of the Clinton administration.

This leaves the question of whether European integration will induce more indigenous growth or European investments in the future. The most important developments in this regard will be new forms of economic integration, aimed at heightening European-core competitiveness in the leading sectors. The reduction of non-tariff barriers to intra-European trade and economic and monetary union are clearly intended to produce a leaner and meaner European capitalism which is better able to compete globally. This will involve the rationalisation of current European production and trade, as well as the creation of new productive capacities in leading core sectors. Less competitive firms will be shaken out, while remaining firms increase their competitiveness. The opening up of state procurements, for example, is intended to shake out "inefficient" producers who cannot survive without the protection of guaranteed state purchases, while opening new markets for more efficient capitals. These "most efficient" capitals, of course, are from the core of Europe. Rationalisation will be particularly important in the European struggle to compete in the leading sectors, and characteristics of these sectors will affect the availability of core capital for peripheral investments. The future shape of European economic expansion is therefore related to two questions: (1) which capitals are best positioned to take advantage of economic liberalisation in Europe, and (2) which sectors are most likely to expand and to the benefit of which regions.

The sectors that will be most affected by trade liberalisation are those that presently have non-tariff barriers to trade. When these barriers are removed, economies of scale and technological barriers to entry will form the most important bases for dominating effected sectors. Some authors (O'Donnell, 1989) see innovation and economies of scale as contradictory, on the basis that innovation is encouraged by competition, while economies of scale encourage oligopoly. This contradiction is only apparent if one accepts the neo-classical definition of competition, which requires many firms each with limited market power. If we accept a more realistic definition, however, there is no necessary conflict between oligopoly and competition (Semmler 1982). Competition, leading to innovation, is more likely to take place in large firms that can benefit from economies of speed and scale than in a neo-classical sector with infinite small firms. In fact, competition among a few massive core firms, each taking advantage of economies of scale while attempting to monopolise innovative technologies, is a characteristic organisational form of modern capitalism (Lazonick, 1991, Jenkins, 1989). In the liberalised new Europe, success in competition will be primarily restricted to the strongest existing firms, which are mainly core TNCs from Europe, the US and Japan. Smith and Venables (1988), for example, find that EC market integration will tend to benefit firms with initial economies of scale, which means that core-based firms will expand at the expense of peripheral firms (or prospective peripheral entrants). This may be good news for US TNCs in Ireland, but hardly for indigenous firms.

O'Malley (1992) ultimately indicates a similar result. Although he concludes that Irish industry looks to be in a "relatively favourable position" to face freer European trade, he actually demonstrates that indigenous Irish industry has very little prospect of expanding. Very few indigenous firms (less than 10 per cent) produce commodities that are easily transportable, have substantial economies of scale, and are sensitive to further trade liberalisation. In other words, hardly any indigenous firms are in what I have described as "leading" or "core" sectors. The few Irish firms that are in these sectors are actually small producers in narrow "niche" markets that have little prospect to expand. Thus, Irish firms "do not stand to gain much" from economies of scale in the enlarged EC market and "are likely to miss out on one of the major expected benefits of market integration for the EC as a whole" (1992, p. 234). In the long run, economies of scale will create barriers to entry in the key sectors, which will make it especially difficult for Irish firms to gain entry. It is hardly comforting to note that, since the largest sections of indigenous industry were already destroyed by free trade in the 1970s, the remaining firms are not in strong danger from further liberalisation. The same findings would hold for the North, whose few indigenous

firms in the leading sectors are only kept alive by massive British subventions.

The only firms already located in Ireland that are poised to take advantage of the new opportunities presented by liberalisation are the subsidiaries of US-based TNCs in what I have defined here as the "leading sectors". Some of the limitations of US investments as an engine of generalised economic change have been discussed above. Even with the recent spurt of US investments in preparation for the unified market, employment generated in US subsidiaries has been insufficient to make much of an impact on Irish unemployment. But how will Europe's participation in global competition in the leading sectors affect the flow of European capital and technologies to peripheral regions?

On the demand side, the periphery of the "new Europe" is many times larger than the periphery of the Europe which Ireland joined in 1972. As each peripheral state becomes more dependent on capital transfers from the core, the level of competition for external investments will increase. On the supply side, although new technologies allow for arm's length control of decentralised structures of production, there are stronger forces for the centralisation of production in core areas. The capital-intensity of production involving the new technologies will reduce the advantages of peripheral labour. At the same time, the new technologies will require highly-educated flexible labour, which tends to agglomerate around core centres. There will be advantages to the concentration of research and development facilities in centres. And, most importantly, the fact that non-labour costs will be decisive for competitiveness reduces the attractiveness of peripheral regions. Tulder and Junne (1988), for example, find that the high cost of inventories has led TNCs to rely on new flexible logistics that allow just-in-time production and delivery of components. These logistics are enhanced if subcontractors or in-house suppliers are located nearby. This trend is already seen in the expansion of third-world-type subcontracting in emigrant communities of core cities such as Los Angeles. TNCs may spread their activities over a number of regions worldwide, but within each region research and production will become more spatially concentrated.

These logistics are particularly crucial to the question of diffusion of European investments and technologies to the European periphery. With regard to information and communication technologies (ICT), the rationale of European economic union is to provide a market that is large enough to improve the competitiveness of a few large producers. According to one EC Commission report, modern digital communication systems are so complex that a company must capture 8 per cent of the world market to cover its development costs, while no single state within Europe represents even 7 per

cent of the world market. Even with a unified market, the minimum efficient scale in these sectors will not allow diffusion among many competitors (Bornschier, 1992, p. 15). In a logic that has worrying consequences for the periphery, Gerstenberger (1991), emphasising the lack of European companies big enough to compete in global ICT markets, concludes that "mainly the jobs in Japan and East Asia would profit from a strategy of enforced ICT diffusion in Europe".

The result for peripheral regions like Ireland has already been felt. While US-owned high-technology investments recovered at the end of the 1980s, European-owned TNCs showed no signs of expanding to the periphery. As Table 3 shows, annual levels of new employment created in subsidiaries of companies from the European core (here defined as Germany, France, The Netherlands and Italy), which were already low in the mid-1970s, never rose above 2,000 since 1978. New employment in Euro-core firms in the leading sectors never reached 300 after 1980. European investments in Ireland have fallen rapidly over the past fifteen years, but investments by European firms

Table 3: *New Employment and Net Employment Change in Subsidiaries of Corporations from the European Core, End-1976 to End-1991**

| | *New Employment* | | *Net Employment Change* | |
|---|---|---|---|---|
| *Year* | *Leading Sectors* | *Total* | *Leading Sectors* | *Total* |
| 1976 | 358 | 2,701 | 295 | 1,350 |
| 1977 | 288 | 2,014 | 122 | –808 |
| 1978 | 497 | 2,201 | 482 | 1,229 |
| 1979 | 188 | 1,673 | –29 | 152 |
| 1980 | 368 | 1,558 | 162 | –263 |
| 1981 | 122 | 1,281 | –108 | –860 |
| 1982 | 250 | 1,151 | 67 | –898 |
| 1983 | 129 | 917 | –141 | –1,792 |
| 1884 | 172 | 1,367 | –141 | –733 |
| 1985 | 260 | 1,502 | 235 | –194 |
| 1986 | 146 | 1,234 | 63 | –111 |
| 1987 | 113 | 950 | 19 | –72 |
| 1988 | 284 | 1,255 | 201 | 412 |
| 1989 | 170 | 1,672 | 36 | 1,044 |
| 1990 | 257 | 1,782 | –207 | 547 |
| 1991 | 236 | 1,340 | 185 | 237 |

*Source:* Same as Table 1.

*Note:* * "European Core" is Germany, France, The Netherlands and Italy. "Leading sectors" include pharmaceuticals, machine tools, computers and office machinery, electrical engineering, telecommunications equipment, aerospace equipment, instrument engineering, healthcare products, diagnostic medical apparatus, and TV and radio equipment.

in the leading sectors have fallen particularly rapidly, indicating a trend toward concentration of leading European firms in the European core. The figures with regard to net employment are even worse. Since 1980, Euro-core firms in the leading sectors have created net employment averaging only 19 jobs per year. During the same period, 2,683 net jobs were lost in Euro-core investments in all sectors. If global competition leads European capitals to concentrate more in the European core — as experts and EC studies cited above predict and recent Euro-core investment patterns indicate — and especially if European core capitals compete more avidly against non-European capitals perhaps using barriers to non-European competitors, the prospects for new foreign investments may become even less promising.

The decline of outward investments from the European core to the periphery has important implications. Ireland is being more closely incorporated into a Europe that is industrially dominated by its own core. In the long run, especially if US investments fail to materialise in much greater numbers than they have already, Ireland will require new European investments. Recent trends are discouraging.

Thus, Ireland has in the "new Europe" the worst of possible worlds: dependency without significant foreign investment. Its indigenous productive capabilities were dominated in the 1970s by the liberal regime that was necessary to attract foreign capital, but too little foreign capital has been forthcoming to maintain acceptable employment levels. In Bornschier's (1980) terminology, Ireland is suffering the negative results of a historically bloated stock of past foreign investment, while receiving little of the offsetting benefits of a continuing flow of incoming foreign investment. It is testimony to the strength of the capitalist world system that it has created an alternative scenario — Cuban-style economic stagnation and political isolation — that is even worse than the present European regime of uneven development.

*Economic Transfers*

Because there is little hope that industrial expansion will reduce regional inequality, the prevailing core ideology to promote peripheral incorporation is "cohesion". Cohesion proposes that regional uneven development can be overcome through fiscal transfers from the European core to the periphery. While positive arguments for Irish accession to the EEC in the 1970s emphasised the attractiveness of European market access to foreign investors, the prevailing argument for integration in the 1990s is that it will bring economic transfers to Ireland. Even this is often put in a negative context: that failure to agree to incorporation will provoke the loss of transfers. The current argument for peripheral incorporation boils down to the fact that a semi-peripheral global position — even in permanent dependence on welfare from

the centre of Europe — is better than the poverty and isolation of a peripheral global position. One cannot help but be struck by the comparison with past liberal arguments for partition, which claimed that dependence on welfare from Britain was preferable to the poverty and isolation of an Irish Republic.

How does the recognition of global competition affect our understanding of the levels and efficacy of transfers? Three principles are paramount here. First, the levels of transfers will not be allowed to threaten European core accumulation. Second, certain "core functions" will be kept under core control and will not be transferred to the European peripheries. Third, there will be constant core pressures to reformulate the programmes funded by transfers in ways that will benefit European core accumulation.

Heretofore, core-periphery transfers under the Community Support Framework (CSF) have been quite small. The entire community budget amounts to about 1 per cent of Europe's combined GNP and, even after the planned rise of CSF funds is completed in 1993, they will comprise only a quarter of the EC budget, or one-quarter of 1 per cent of Europe's combined GNP. Structural and cohesion funds are not likely to rise much further. Germany and Britain have stated their unwillingness to expand their cohesion contributions if the Maastricht Treaty is approved, suggesting that the core has effectively hit a ceiling in its transfers to the periphery. To complicate matters, the European periphery is becoming much larger, and no one can predict the long-term effects of the fall of the Soviet bloc on the shape of Europe. To the extent that Eastern Europe is incorporated in the European sphere of influence, the level of peripheral demands for transfers will increase, adding further pressure on structural funds. These pressures would increase if the European core, in a drive for global hegemony, adds new regions of the third world to its zone of influence. All of these factors combine to make peripheral hopes regarding substantial rises in the levels of transfers seem unrealistic.

It is one thing to say that core-periphery transfers will remain small. A more important issue is what effect transfers will have on the core-periphery hierarchy. The question arises whether transfers, at any level, could significantly affect core-periphery inequality. This goes to the heart of a dispute that has exercised critical development theory for some decades: can exchange-related reforms possibly challenge present patterns of uneven development without more fundamental changes in relations of production and the ownership or control of "core" technologies in leading sectors? This question can be answered only by analysing the uses to which transfers will be put.

According to Bradley, Fitz Gerald and Kearney (1992, p. 56) CSF expenditures are distributed in the following proportions. Forty-two per cent of

expenditures go to human resources, or education and training programmes. These include specific training programmes for industry and marketing services, second-level vocational training and apprenticeship schemes, and various other training schemes. Twenty-seven per cent is spent on improvements to physical infrastructure (mainly ports, roads, water and sewerage). Eighteen per cent goes to farm income supports and agricultural investment schemes. Fourteen per cent goes to other uses, including grants to industry (about half) and marketing and R&D.

By far the largest component of CSF (nearly half) funds educational programmes to enhance the skills of Irish labour. Partly because of a lack of any other plausible strategies for growth, programmes to "improve human capital" will probably become even more central to future Irish state policies (see Review Group, 1992). Such programmes are also important because they take thousands of workers out of the labour market at any given time, reducing the official unemployment rate. It is claimed that training and educational programmes, by improving the potential productivity of Irish labour, will change the structure of the economy, making it more competitive internationally.

A recent report by the ESRI, for instance, uses the European-designed HERMES econometric programme to generate a model of the likely effects of EC-funded "human capital" programmes (Bradley, Fitz Gerald and Kearney, 1992). As with any econometric model, the results are highly dependent on its assumptions, which can be highly unrealistic. In this case, the use of structural funds for educational purposes (the enhancement of "human capital") is assumed to have a 7.5 per cent long-run rate of return, on the basis of one study of "human capital" programmes in the United States. The 7.5 per cent rate of return is also convenient because it provides a "reasonable margin of risk over and above the expected medium-term real rate of interest" (p. 82). Yet there is no realistic basis, apart from wishful thinking, for assuming this rate of return. The experience of a core economy which participates fully in the industrial processes of the global economy and, furthermore, has no problem of emigration of educated labour, cannot be assumed in a peripheral region like Ireland.

Indeed, research indicates that Irish "human capital" programmes have been highly ineffective, particularly with respect to the prospect of finding jobs for trainees (without which there will be no return to expenditures). Breen (1991) finds that participation in state programmes by school-leavers does not affect their probability of being employed one year after they leave the programme. There is no empirical or logical reason to expect any new programmes to fare better and, indeed, the likelihood is that such "human capital" programmes will primarily serve the function of providing excess

skilled labour for the core economies of Europe, as previous Irish emigration provided vital labour supplies for US and British industrialisation. Clearly, programmes that increase the skills and education of a population are "good", and I am not arguing against them, but only against assumptions that simplify the relationship between skill-formation and economic growth. The main structural blockage to Irish participation in high-tech production is in the control of technologies and markets by core states and firms, and not the lack of skilled Irish labour.

The second largest component of CSF is designated by the EC as "measures to offset the effects of peripherality". These funds are spent on improvements to physical infrastructure, particularly transport and communications. This concept of "peripherality" — which is completely defined by spatial remoteness — is deliberately deceptive. Peripherality is a logical, not just a spatial, characteristic, which refers to the concentration in certain regions of particular kinds of production, such as the export-platform, which ultimately benefit accumulation in core regions. "Core" economic activities employ more advanced technologies, are more capital intensive, pay higher wages, expand more rapidly, and ultimately receive higher returns to labour expended in production. Cores have always attempted to improve the infrastructure of peripheries — bringing them spatially "closer" to the productive centres — by investing in roads, ports, railroads, and so on. Rather than decreasing peripherality, however, these expenditures enable the core to operate more profitably in the periphery. Infrastructural expenditures *peripheralise* regions in the world-system, rather than decreasing their peripherality. Likewise, infrastructural improvements in Ireland, while bringing obvious (though mixed) benefits to the local populations, are most notable for their impact on facilitating the operations of foreign producers on the island.

One transfer programme, on the surface, might appear to have more promise of affecting the core-periphery hierarchy. A small proportion of transfers finances programmes for research and technical development in the peripheries. If a major cause of uneven development is the core monopoly of profitable technologies, it would seem that programmes to increase the technological capabilities of the periphery would reduce long-term regional inequality. Instead, EC technology programmes are designed to concretise uneven regional access to technology. First, technological programmes for the peripheries are puny relative to those in the core. Second, they are defined in such a way as to improve the technological infrastructures necessary to encourage new external investments, rather than actually enhancing the abilities of peripheral regions to compete in core industries. Third, the European core insists on retaining the largest and most important techno-

logical programmes, while allowing the periphery to participate only in less crucial technologies. And fourth, the most important technologies which enable capitalist firms to achieve competitive advantage are privately owned or controlled, not part of public technology programmes. At the very least, the technologies being advanced by EC programmes will require complementary private capabilities that will remain beyond peripheral firms.

There is a hierarchy of access to technologies, with the core regions and firms having complete access to the most profitable technologies while peripheries participate in smaller and less crucial programmes. A recent evaluation of the EC Framework Programme, while attempting to paint the best possible picture on the rôle of core-periphery transfers of technology, admits that "some projects ... can only be created once for the whole Community" and in these cases "the Less Favoured Regions may not be the best location for such installations." Peripheral regions, according to the report, are only satisfactory for inclusion in "small-scale" technology programmes where a large number of research facilities can be established "and thus be located in a number of regions, including Less Favoured Regions." The requirements of European global competitiveness clearly predominates in the selection process for EC technological projects. Thus, "there are, of course, other limits to the allocation of substantial resources to Less Favoured Regions", specifically "the need for resources to be allocated to the most dynamic partners who are pushing forward the industrial competitiveness of Europe" (CEC, 1992, pp. 8-9). It is clear that the requirements of global competition will reinforce, rather than reduce, uneven development among regions of Europe. Peripheral regions like Ireland stand to become further peripheralised in technological and economic terms.

## IV CONCLUSIONS

Models that assume convergence between European core and peripheral zones ignore the aspirations of core firms and states to attain or maintain economic power and the importance of regional inequalities to the acquisition and retention of power. They especially fail to consider the contradictions between social goals, such as core-periphery equality and enhanced social welfare, and economic goals such as the maximisation of the European core's ability to compete in the global system.

I have painted a bleak picture for peripheral regions in Europe. Yet, if the deep structure of global capitalism has not changed, peripheral and semi-peripheral regions in Europe and elsewhere must recognise the implications of their participation in a hierarchical structure that provides limited possibilities for upward mobility. Far from providing an impetus to regional

equalisation, European integration may be expected to reinforce regional inequalities.

Supposed within-system alternatives like niche-development or "endowment based" industrialisation cannot provide solutions, because they reinforce the existing productive hierarchy where the core dominates the most profitable sectors while the periphery is relegated to the "leftovers". This is the basis of uneven development today. Far from being new, such "alternatives" were the basis of Irish agrarian-based development since the seventeenth century. They later became the basis of theories of comparative advantage, which are among the most important ideological justifications of the core-periphery hierarchy.

Some people hope that European integration will gain a momentum that will turn monetary union into fiscal union. This, they argue, would provide peripheral European citizens with the full range of social welfare benefits enjoyed in the core and, thereby, reduce the level of regional income inequality. While this momentum may exist, one must consider whether the extension of equal social benefits to the periphery would be such an economic burden on core resources as to effectively ensure their defeat in global economic competition. Furthermore, core-periphery inequality is not primarily a continuous stratification of regional income levels, but a productive hierarchy. While the extension of social welfare to the periphery is a good thing if it reduces poverty and deprivation, it will not touch the essential hierarchy of regional uneven development. This can only be effected by systemic change which allows peripheral regions to fully participate in all aspects of global production and innovation.

Debate about alternatives must have two components: a strategic debate and a debate about substance. The strategic debate asks whether the interstate structures of Europe can be utilised as an arena of struggle for peripheral interests. Europe, unlike the US, has an immediacy for its peripheries because many of them participate as member states and European "citizens". The concept of a "community project", however sham it may ultimately be, gives peripheral citizens and states a moral authority to pursue issues of social justice. But these issues go beyond the European periphery because the European project also affects peripheral and semi-peripheral regions throughout the world. It is, therefore, not enough for semi-peripheral regions to strive for core status or upward mobility within Europe, because that would simply turn them into part of the problem — they would participate in the subordination of other non-European regions that remain peripheral.

Beyond the strategic question, however, is the question of structural alternatives to the present system. While this is not the place to attempt to

articulate such alternatives, they will surely require the removal of the bases of structural inequality. I have argued that firms and states in the European core and other cores maintain their position by controlling the technologies and related markets which are the bases of rapid accumulation. They maintain these properties because the rules of capitalism confer ownership, and because the core inter-state system has power to enforce those rules. In short, global capitalism is a class-like system, where "class" is based on the monopoly ownership or non-ownership of specific kinds of property: the most profitable production processes and technologies. Changing the hierarchy requires changing the rules of property ownership on which the hierarchy is based.

Worthwhile alternatives will require new forms of economic decision making, based on the needs of people and the usefulness of products and services and not their profitability; the destruction of irrational economic calculuses that devalue ecological processes such as the reproduction of the earth's resources; the revaluation of devalued work in the home, voluntary work, and "informal" work. Some of these issues require coalition with other peripheral regions, on the basis of a similarity of their location in the global hierarchies of uneven development. Others require solidarity across world-system hierarchies, because they affect subordinate classes and groups of people in all zones of the system.

If peripheral countries can play a progressive rôle by being in Europe, and the efficacy of European membership is still an open question, it will be through an adversarial relationship which continually raises issues of uneven development and irrationality, including the need for all people to participate in useful labour. Membership would be used to undermine the hierarchical structures that give rise to these things and to encourage more equal and rational structures. This, of course, is the opposite of Irish government strategies in Europe to date. Semi-peripheral regions like Ireland, which are *in* the core but not *of* the core, have a strategic intermediate position in the world system which can make a bridge between peripheral nations and change-oriented movements in the core. The first requirement to be effective in this regard is to turn the different peripheral regions' similarities of economic situation into real political solidarity, on the island of Ireland, in the European peripheries, and throughout the peripheral regions of the globe.

*REFERENCES*

ALBERT, M., and B.J. BALL, 1983. *Towards European Economic Recovery in the 1980s*, European Parliament Working Document, Luxembourg.

BERGSTEN, C. FRED, 1987. "Economic Imbalances and World Politics", *Foreign Affairs*, Vol. 65 (Spring), pp. 770-794.

BORNSCHIER, VOLKER, 1980. "Multinational Corporations and Economic Growth: a Cross National Test of the Decapitalisation Thesis", *Journal of Development Economics*, Vol. 7, pp. 191-210.

BORNSCHIER, VOLKER, 1992. "The European Community's Uprising. Grasping Toward Hegemony or Therapy against National Decline in the World Political Economy?", Paper presented at the First European Conference of Sociology, Vienna, August 26-29, 1992.

BORNSCHIER, VOLKER, and CHRISTIAN SUTER, 1992. "Long Waves in the World System", in Volker Bornschier and Peter Lengyel (eds.), *Waves, Formations and Values in the World System*, New Brunswick, N.J.: Transaction.

BRADLEY, JOHN, *et al.* 1992. *The Role of the Structural Funds*, Policy Research Series Paper No. 13, Dublin: The Economic and Social Research Institute.

BRADLEY, JOHN, JOHN FITZ GERALD AND IDE KEARNEY, 1992. "The Role of the Structural Funds: Analysis of Consequences for Ireland in the Context of 1992", in Bradley, *et al. The Role of Structural Funds*, Dublin: The Economic and Social Research Institute, pp. 1-122.

BREEN, RICHARD, 1991. *Education, Employment and Training in the Youth Labour Market*, General Research Series Paper No. 152, Dublin: The Economic and Social Research Institute.

CARTER, C.F., 1957. "The Irish Economy Viewed from Without", *Studies*, Vol. 46, No. 182 (Summer), pp. 137-143.

CEC, 1992. *Evaluation of the Effects of the EC Framework Programme for Research and Technological Development on Economic and Social Cohesion in the Community*, Commission of the European Communities Report No. 48, Luxembourg: OPEC.

CHANDLER, ALFRED, 1977. *The Visible Hand: the Managerial Revolution in American Business*, Cambridge, MA: Belknap.

CHANDLER, ALFRED, 1990. *Scale and Scope*, Cambridge, MA: Belknap.

CHASE-DUNN, CHRIS, 1989. *Global Formation*, London: Basil Blackwell.

FITZGERALD, GARRET, 1968. *Planning in Ireland*, Dublin: Institute for Public Administration.

FREEMAN, CHRIS, and LUC SOETE, 1991. *Macro-economic and Sectoral Analysis of Future Employment and Training Perspectives in the New Information Technologies in the European Community: Synthesis Report*, Study for the EC Commission, presented at the EC Conference, Brussels, 17-18 October 1991.

GERSTENBERGER, WOLFGANG, 1991. *Impact of Information Technologies on Future Employment in the European Community: Executive Summary*, Study for the EC Commission, presented at the EC Conference, Brussels, 17-18 October 1991.

GILPIN, ROBERT, 1987. *The Political Economy of International Relations*, Princeton: Princeton University.

GOLDSTEIN, JOSHUA, 1988. *Long Cycles: Prosperity and War in the Modern Age*, New Haven: Yale.

GORDON, DAVID, 1988. "The Global Economy: New Edifice or Crumbling Foundations", *New Left Review*, No. 168, pp. 24-64.

IDA, 1978. *IDA Industrial Plan 1977-80*, Dublin: Industrial Development Authority.

IDA, 1992. *Employment Survey* (unpublished Industrial Development Authority survey data).

JENKINS, RHYS, 1987. *Transnational Corporations and Uneven Development*, London: Methuen.

KRASNER, STEPHEN D., 1976. "State Power and the Structure of International Trade", *World Politics*, Vol. 28, No. 3, pp. 317-347.

KEOHANE, ROBERT, 1984. *After Hegemony: Cooperation and Discord in the World Political Economy*, Princeton: Princeton University.

LANDES, DAVID, 1968. *The Unbound Promethius*, Cambridge; Cambridge University Press.

LAZONICK, WILLIAM, 1991. *Business Organization and the Myth of the Market*, Cambridge: Cambridge University Press.

LEE, JOSEPH, 1990. *Ireland 1912-1985: Politics and Society*, Cambridge: Cambridge University Press.

MADDISON, ANGUS, 1982. *Phases of Capitalist Development*, New York: Oxford University Press.

MAGUIRE, JOHN, and JOE NOONAN, 1992. *Maastricht and Neutrality*, Dublin: People First/Meitheal.

MARX, KARL, 1967. *Capital*, Vol. 3, New York: International Publishers.

NATIONAL ECONOMIC AND SOCIAL COUNCIL, 1982. *A Review of Industrial Policy: a Report Prepared by the Telesis Consultancy Group*, Report No. 64, Dublin: National Economic and Social Council.

NATIONAL ECONOMIC AND SOCIAL COUNCIL, 1989. *Ireland in the European Community: Performance, Prospects and Strategy*, Report No. 88, Dublin: National Economic and Social Council.

O'DONNELL, RORY, 1989. "Manufacturing", in John Bradley *et al.*, *The Economics of 1992: a Symposium on Sectoral Issues*, Policy Research Series Paper No. 10, Dublin: The Economic and Social Research Institute, pp. 5-41.

O'HEARN, DENIS, 1989. "The Road from Import-Substitution to Export-Led Industrialization in Ireland: Who Mixed the Asphalt, Who Drove the Machinery, and Who Kept Making Them Change Directions", *Politics and Society*, Vol. 18, No. 1 (March), pp. 1-38.

O'MALLEY, EOIN, 1992. "Industrial Structure and Economies of Scale in the Context of 1992, in Bradley *et al.*, *The Role of Structural Funds*, Policy Research Series Paper No. 13, Dublin: The Economic and Social Research Institute, pp. 203-249.

REVIEW GROUP, 1992. *A Time for Change: Industrial Policy for the 1990s*. Report of the Industrial Policy Review Group, Dublin: Stationery Office.

SANDHOLTZ, WAYNE, and JOHN ZYSMAN, 1989. "1992: Recasting the European Bargain", *World Politics*, Vol. 42, No. 1 (October), pp. 95-128.

SCHUMPETER, JOSEPH, 1939. *Business Cycles*, New York: McGraw-Hill.

SEMMLER, WILLI, 1982. "Competition, Monopoly, and Differentials of Profit Rates: Theoretical Considerations and Empirical Evidence", *Review of Radical Political Economy*, Vol. 132, No. 4, pp. 39-52.

SMITH, ALASDAIR, and ANTHONY VENABLES, 1988. *The Costs of Non-Europe: an Assessment Based on a Formal Model of Imperfect Competition and Economies of*

*Scale*, Economic Papers No. 70, Brussels: Commission of the European Communities.

THUROW, LESTER, 1992. *Head to Head: the Coming Economic Battle Among Japan, Europe, and America*, New York: Morrow.

VAN TULDER, ROB, and GERD JUNNE, 1988. *European Multinationals in Core Technologies*, New York: John Wiley & Sons.

WALLERSTEIN, IMMANUEL, 1980. *The Modern World System II: Mercantilism and the Consolidation of the European World-Economy in the Sixteenth Century*. New York: Academic Press.

WALLERSTEIN, IMMANUEL, 1984. "The Three Instances of Hegemony in the History of the Capitalist World-Economy", in Gerhard Lenski (ed.), *Current Issues and Research in Macrosociology, International Studies in Sociology and Social Anthropology*, Vol. 37, Leiden: E.J. Brill, pp. 100-108.