The History of Economic Development in Ireland, North and South

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Introduction

COMPARATIVE DISCUSSION OF THE TWO ECONOMIES of Ireland is a very recent phenomenon.¹ Limited communication over the years between Northern and Southern researchers, as they drifted apart in intellectual space, led to a lack of shared knowledge about the different parts of the island. Northern researchers tended to look exclusively to Britain (Harris, 1991) while Southern researchers tended to be more preoccupied with European and world arenas (Bradley *et al.*, 1995).

However, a much longer time horizon is needed in order to understand the historical socio-economic processes that operated on the island and which led to the very different economic development experiences of North and South. The violence that escalated in the late 1960s did not take place in a vacuum. Rather, the unfolding of events was conditioned by political and socio-economic factors inherited from the past. It is for others to paint this wider picture. We merely sketch some narrower economic aspects of the island's development before and after partition.

Although we will focus mainly on economic issues, we are aware of the dangers of a simplistic claim that economic factors predetermine political choices (McGarry and O'Leary, 1995). What we wish to investigate, however, is the extent to which past economic developments in Ireland were influenced by such forces as technology, geography, factor endowments, demography, external economic and social events, etc. The predominantly

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¹ This paper draws on material from a report prepared for the Dublin-based Forum for Peace and Reconciliation (Bradley, 1996).

political-historical tradition of much research and writing on island developments has tended to down-play these economic aspects.²

We first present a schematic historical overview of the island economy for the period 1750–1960, i.e., from the time when the first aspects of a modern Irish economy emerged in the early stages of the British industrial revolution to just before the outbreak of Northern civil unrest in the late 1960s. The political consequences of this earlier period of demographic upheaval and regionally skewed economic development were enormous and facilitated the partition of the island economy in 1921.

We then narrow our focus to the 1960–96 period, during which both regions broke with past patterns of development that had their origins in the nineteenth century. Here we restrict our analysis to economic issues, having previously outlined the broader historical-economic setting of the preceding period. We go on to describe how industrial policy on the island was planned and executed in recent decades, at a time when economic cooperation between the two contiguous regions was difficult, if not impossible. We show that at times the emphasis of industrial and regional policy was very different within each of the two regions and argue that this may have led both to a sub-optimal outcome for the island as a whole and may also have been a contributing factor in the onset, duration and severity of the Northern civil unrest. We conclude with some observations on the recent dynamic growth performance of the South (the so-called 'Celtic tiger') as compared with the North.

The Origins of the Two Economies: 1750–1960

Key Historical Events

The Act of Union. Ireland was on the move in the latter half of the eighteenth century. Under a devolved parliament, however imperfect its structures, economic and social advances were being made at a time when the early effects of the industrial revolution in Britain were beginning to spill over into adjoining countries. From the start of the nineteenth century the Act of Union fundamentally changed the terms on which Ireland would relate to the global super-power on its doorstep. After the Union, policy making adjusted to control from London and there was no protection from the full rigours of competition with the hegemonic British economic giant.

² A recently published study of the period 1780–1939 gives central place to economic developments in Irish history (Ó Gráda, 1994). Economic aspects are also integrated into an historical narrative by Bardon (1992). However, the highly critical analysis of the 'failure' of Southern development in the twentieth century by Lee (1989) is itself open to criticism for its limited international comparisons and anachronistic economic perspective.

However, to claim that all economic progress stopped after the Union is grossly simplistic, and in recent years a number of historians have sought to correct the excesses of this ultra-nationalist view (Johnson and Kennedy, 1991; Ó Gráda, 1994). The classic statement of the Nationalist economic thesis was contained in the writings of George O'Brien (O'Brien, 1918; 1921), whose central claim was that the absence of political autonomy during the eighteenth and nineteenth centuries condemned Ireland to economic stagnation and decline.³ Johnson and Kennedy (1991) summarise O'Brien's thesis as follows:

- i. Considerable economic benefits had been conferred on Ireland during the brief period of legislative autonomy that occurred between 1782 and 1800;
- ii. The Act of Union was followed by a long period of economic decline which adversely affected public finance, agriculture and industry, the causes of which can be directly attributed to the provisions of the Act and the absence of any autonomous local legislative power;
- iii. The strong performance of the economy of the north-east region of the island, centred on Belfast, is explicable in terms of conditions of special advantage that only applied to Ulster;
- iv. The system of land tenure was a long-standing source of Irish economic weakness, but once again Ulster was in a privileged position relative to the rest of the country.

The revising historians challenge the factual basis for at least three of the above four claims. The first is held to be inconsistent with the fact that while in many regions of Ireland economic indicators did improve during the last two decades of the eighteenth century, they improved even more in the aftermath of the Union and up to the onset of the Great Famine in the mid-1840s. Indeed, the Irish parliament had opposed protectionism and favoured free trade. Johnson and Kennedy concluded that:

Expansion in agriculture and industry in the period 1750–1800 owed little to Irish parliamentary action. The dynamic of growth was supplied by the market, organisational and technological changes associated with the rise of urban, industrial capitalism in Britain. (1991: 16)

Neither is the second claim borne out by closer examination of the facts. The net contribution made by the Irish exchequer to Britain was considerably less of a burden when recycled Imperial expenditures undertaken in Ireland were included. The Act of Union ensured continued access

³ A related theme originates from the Marxist interpretative tradition, suggesting that Ireland's economic link with British capitalism has on occasion and in some sectors been malign (Munck, 1993). Crotty (1986) further develops the interpretation of Ireland as an example of capitalist colonisation.

for Irish agricultural goods to the expanding British market, and a sectorby-sector examination of the performance of Irish industry shows up the weakness of the nationalist case in blaming the Union. Nor does the success of the north-east region appear to have been built on a land tenure system which encouraged the accumulation of capital. Were it not for the advent of the Great Famine, Johnson and Kennedy's conclusion is difficult to fault on strictly economic grounds in the context of the nineteenthcentury environment:

Economic conditions for the exercise of autonomy in the first half of the nineteenth century were far less favourable (than in the second half). Being a region of the UK economy was then, perhaps, the optimal arrangement for Ireland. (1991: 28)

The Great Famine. The calamity of the Great Famine, the causes of which had been building up for decades, tore asunder the fragile social and economic fabric of the island and in particular exposed the economic weakness of the densely populated Western regions. In his examination of the causes of Ireland's poor economic performance in the nineteenth and twentieth centuries, Mjøset places the post-Famine population decline at the centre of a vicious circle, interacting with and exacerbating what he calls a weak 'national system of innovation' (Mjøset, 1992).⁴

By devastating the population through death and emigration, the Famine prevented the emergence of a dynamic home market for local industry. By bearing most heavily on the more agricultural South, it further accentuated separation from the North and by setting in train a tradition of emigration ('exit'), it dampened internal pressures for economic reform and innovation ('voice').

The main legacy of the Famine was a gross distortion of the evolution of Ireland's population after the middle of the nineteenth century and the creation of the conditions for a very uneven spread of the second Industrial Revolution to Ireland during the second half of that century. Ó Gráda has commented that: 'No other 19th century European society endured such an ecological jolt' (Ó Gráda, 1994: 235), and concludes that:

The Great Irish Famine is a grim reminder of how narrowly the benefits of the first Industrial Revolution had been spread by the 1840s. Nearly a half century of political and economic union had made little or no impression on the huge gap between Irish and British incomes, nor was it enough to shield Ireland from cataclysm. (Ibid.: 208)

⁴ A national system of innovation is defined by Mjøset as encompassing the institutions and economic structures which affect the rate and direction of innovative activities in the economy (Mjøset, 1992: 43–50).

Partition. There were strong elements of an economic rationale, seen from Belfast, for partition in the first two decades of this century, at a time when the economy of the north-east of Ireland, centred on that city, was at its zenith. A subsequent irony was that the strong and successful Northern industries—mainly linen, shipbuilding and associated heavy engineering—were the ones that suffered seriously in the aftermath of partition, except for a revival during the abnormal circumstances of the Second World War. However, partition was irrelevant to the long-term decline of these Northern sectors, since their pattern of decline was simply mirroring a wider British phenomenon.

The sundering of the engineering/industrial North from the agricultural/ food processing South destroyed any possibility, if there were such, of building intra-island synergies. The centrifugal bonds of identity, tradition and allegiance were simply too strong for the centripetal forces of economic rationality. After partition, official statistics show that North-South trade diminished, sources of supply adjusted, and economic planning on the island accommodated to partition, even if political rhetoric did not (Stationery Office, 1985).

The view has been often expressed that the partition of Ireland was an economic as well as a political disaster. It has been suggested that the loss of Belfast was a one-off event that exacerbated a post-colonial economic vicious circle, since the South was separated from the only surviving industrial centre on the island (Mjøset, 1992: 10). However, the dramatic post-First World War reversal in the fortunes of the North's two main industries (linen and shipbuilding) raises questions about how much they would have provided innovation and resources for the industrialisation needed in the mainly agricultural South. It is almost certain that the South's urgent need to construct its industrial sector from an almost zero base, at a time when the world was moving from *laissez faire* to protectionism, would have caused serious North-South policy disputes in any 32-county Ireland.⁵

Key Economic Issues

Socio-economic issues can sometimes be closely related to a single historical event: for example, the Famine dominates all other explanations of the unique pattern of Irish demographics. However, they are usually associated with a series of events, no one of which is dominant. We identify three such

⁵ Insight into tensions in the world economy between maintaining policies of *laissez faire* or retreating behind protectionism in the early 1930s is provided by Keynes' Finlay lecture, delivered at University College Dublin in 1932 (Keynes, 1933).

socio-economic events: demographics, emigration and decline; economic geography and the North-South divide; and economic relations of the island with the rest of the world.

Demographics, emigration and decline. Two defining features of Irish demographics stand out clearly. The first, concerning population growth, is illustrated in Figure 1, where a comparison is made with a range of other smaller European nations (data are taken from Mjøset, 1992). Of the ten comparison countries, only Ireland showed a decline in population between 1840 and 1910. In 1840 Ireland contained more people than Benelux, while by 1910 Benelux had three times as many as Ireland.

The second feature concerns the extent of Irish migration, where Figure 2 makes a comparison with a subset of the three other nations (Denmark, Norway and Sweden) that displayed non-trivial migration behaviour at least sometime during the period 1851 to 1960. Only for a short period towards the end of the nineteenth century did emigration rates (i.e., emigration per thousand of the population) come anywhere near the high Irish rates.

However, there can be no simple explanation for Ireland's poor economic performance in terms of emigration, particularly in the twentieth century, since this is both a cause and an effect of slow growth originating from other failures in the economy. Explanations become circular, and the real challenge is to include emigration in a broader study of the Irish pattern of development.

Mjøset uses the notion of a vicious circle linking two key Irish characteristics: population decline via emigration, and a weak national



Figure 1. Irish population growth in an international context. **1840**, **1910**. IR = Ireland, BE = Belgium, DK = Denmark, FI = Finland, NL = Netherlands, NO = Norway, SW = Sweden, CH = Switzerland, PO = Poland.



Norway

20

15



0

5

2

Yearly emigration per 1,000

Ireland

20

15

2

Yearly emigration per 1,000

ŝ

0

system of innovation (Mjøset, 1992: 50–67). These two mechanisms reinforce each other negatively through the social structure: the pastoral bias of agrarian modernisation, paternalistic family structures, sluggish growth of the home market and a further marginalisation through weak industrialisation. Many of the elements in the weak national system of innovation arise in the context of the economic geography of nineteenth-century Ireland, to which we now turn.

Economic geography and the North-South divide. A striking feature of the geography of economic activity is that it often occurs in forms that are highly concentrated spatially because of the presence of increasing returns to scale and agglomeration economies that come from the more intense economic interactions that proximity encourages (Krugman, 1991). Continental Europe has a manufacturing triangle containing the Ruhr, Northern France and Belgium. Within Britain, the first stage of the Industrial Revolution concentrated in specific areas: Lancashire for cotton, the Clydeside and Liverpool for shipbuilding, Birmingham for engineering and manufacturing. Hence, it was not entirely surprising that when the Industrial Revolution came to Ireland in the latter half of the nineteenth century, it developed in a geographically concentrated form.

However, Ireland's industrialisation was never to emulate Britain's generalised economic and technological leap forward. Rather, it was to involve a few specific sectors (brewing, linen, shipbuilding), and selected locations (mainly Belfast and Dublin), and by-passed much of the rest of the country. What is of interest is that the concentration of the key sectors, linen and shipbuilding, came to be located almost exclusively in the north-east corner of the island. The fortunes of sectors such as cotton, linen, wool, shipbuilding and distilling during the first half of the nineteenth century have been documented (Ó Gráda, 1994: 273–313). Factors influencing the success or failure included access to energy resources (mostly imported coal), the role of entrepreneurship (where the importation of techniques, finance capital, capital goods and skilled workmen played a crucial role, North and South), the possible deterrent role played by crime and civil unrest, and the price of labour (where lower Irish wages were offset by lower productivity).

Recent advances in economic growth theory and economic geography provide compelling insights into how the area centred on Belfast developed rapidly as the only region in Ireland that fully participated in the latter phases of the Industrial Revolution (Krugman, 1991). The greater Belfast region took on all the attributes of an 'industrial district', i.e., a geographically defined productive system characterised by a large number of firms that are involved at various stages and in various ways, in the production of closely interrelated products.⁶ Most strikingly, a decline in population of almost 55 per cent occurred during the years 1841 and 1951 in the area that was eventually to become the Republic of Ireland, compared with a decline of only 17 per cent in the area that was to become Northern Ireland (Mjøset, 1992: 222). Population actually grew in the area around Belfast, to the extent that by the year 1911 the population of the Belfast area (386,947) had greatly outstripped that of Dublin (304,802).

Economic relations of the island with the rest of the world. The political incorporation of Ireland into the United Kingdom in 1801 generated forces that also led to a comprehensive economic and trade integration. The full extent of this integration after more than one hundred years of Union is illustrated in Figure 3 for the case of the South. This figure shows the UK-Irish trade position from just after partition to the year 1950. The proportion of Southern exports going to the UK showed only a very small reduction from 99 per cent in 1924 to 93 per cent by 1950.

The failure of the South to diversify away from an almost total export dependence on the UK had serious consequences for its economic performance when compared to a range of other small European countries.⁷ The reluctance of the new Southern administration to deviate too much from British policy norms is well documented (Fanning, 1978). The inability of the new Northern administration to deviate in any significant way at all from UK-wide policy simply reflected the extremely limited scope for local autonomy that was provided for in the 1920 Government of Ireland Act under which its local parliament (Stormont) functioned.

Starting from a position of almost full economic integration within the UK, it is hard not to be sympathetic with Southern policy makers as they considered their limited options. The eventual break with *laissez faire* that came with the first change of administration in 1932 was not, in fact, such a dramatic step, since protection had been creeping into the international economy during the 1920s and the world financial system that had supported free trade was being rocked to its foundations.⁸

The difficulties faced by the South in breaking free from the economic embrace of the UK can be understood using the concept of 'webs of dependency' (Wijkman, 1990). It was hardly surprising that these islands

⁶ Bardon (1982) provides an account of the political, social and economic aspects of the rise of linen and ship-building in mid- and late nineteenth century Belfast.

⁷ Mjøset (1992) is a seminal study of Southern economic under-performance that draws carefully from a wide European literature on social and economic development. Lee (1989) is more discursive political-historical narrative.

⁸ See Keynes (1933) for contemporary reflections on free trade and protection. Kenwood and Lougheed (1992) analyse the impact of the First World War on the workings of the international economy and its subsequent collapse during the 1930s.



formed a particularly strong web of dependency, continuing from Southern independence well into the 1960s. While Southern policy makers may have been less assertive and innovative than was desirable, in the absence of a robust industrial sector there is probably very little that could have been achieved to accelerate an earlier economic decoupling of the South from Britain. The consequences for the South followed inexorably. In the words of Mjøset:

Ireland became a free rider on Britain's decline, while Austria and Switzerland were free riders on Germany's economic miracle. Even Belfast specialised in lines of production which fitted into the general British orientation: textiles and shipbuilding. (Mjøset, 1992: 9)

The strong web of dependency between the South and the UK only began to weaken after the shift to foreign direct investment and export-led growth that followed the various 'Programmes for Economic Expansion' in the late 1950s and during the 1960s. Figure 4 shows the behaviour of the shares of Southern exports going to the UK, and Southern imports originating in the UK, for the period 1960 to 1992. The forces that brought about this changed pattern of behaviour are further explored below.

Legacy: the Two Economies in the 1960s

The South embarked on a path of political independence with an economy that was without significant industrialisation, but was dependent on mainly agricultural exports to the British market. The North achieved a degree of



Figure 4. Southern trade with the UK: export and import shares 1960–92. — Export share, ---- Import share.

regional autonomy within the UK at a stage when the perilous state of its strong industrial base was still hidden in the aftermath of the economic boom created by the First World War.

Between 1921 and the early 1960s there were many changes in the North and South, but few of major significance compared with the legacy of the pre-1922 period.⁹ The South attempted to construct an industrial base behind a protective barrier of high tariffs. The North's staple industrial specialisations continued to decline, with a temporary period of growth during and immediately after the Second World War. Both regions entered the 1960s in a state where major policy changes were needed, even in a situation where the North had been moderately successful during the 1950s in attracting British investment in the area of textiles, artificial fibres and other petroleum-based products. What was not anticipated was that the outbreak of civil unrest would make this transformation much more prolonged and difficult than it would have been in a period of peaceful economic transition.

Some important insights can be learned from the economic history of the island over the last century and a half. First, the modern features of the island economy were clearly present from the middle of the nineteenth century. These included a weak island industrial base, other than in the north-east corner of the island; the interaction of population growth with weak economic performance that was to appear as a mixture of unemployment/under-employment and emigration; a vicious circle of interaction between emigration and a weak ability to create a national system of innovation; and an almost complete integration into and dependence on the British economy. Only after a period of national crisis was a sustained effort made in the South to address these problems with the publication of The First Programme for Economic Expansion in 1958 (Government of Ireland, 1958). Parallel efforts made in the North during the 1950s and 1960s produced a rate of Northern industrial-based growth that for a short while exceeded that of Britain (Farley, 1995). However, subsequent efforts may have been hampered by a lack of appropriate regional policy instruments and by the effects of the outbreak and persistence of the Troubles from the late 1960s.

The Two Economies During the Troubles: 1960–90

Although North and South share many economic characteristics and problems, the published literature contains few attempts to place analysis

⁹ We return to developments in the period between 1930 and 1960 later in the context of regional policy. See also Kennedy, Giblin and McHugh, 1988.

within a common regional economic framework. Rather, the North is usually discussed in the context of the eleven sub-regions of the United Kingdom (Harris, 1991) and the South in the context of small peripheral member states of the EU (Bradley, Herce and Modesto, 1995).

In this section we examine four aspects of economic performance North and South during the period of the Northern 'Troubles'. The first issue concerns the central role played by manufacturing, where behaviour in both regions was strikingly different. The evolution of the public sector is then discussed, where again there are major differences in behaviour. We then examine labour market performance, where there are many similarities between North and South. Finally, we discuss public and private sector financial balances that are at the centre of regional economic governance.

The Manufacturing Sector

Over the period 1932 to 1960 there had been rapid growth of indigenous industry in the South, protected from international competition by high tariff barriers. By the late 1950s it was clear that protectionism had long outlived its usefulness and that few of the so-called infant industries had matured and become sufficiently competitive to generate much in the way of exports (O'Malley, 1989).

The changes forced on Irish policy-makers by economic collapse in the late 1950s were fundamental and far-reaching. The *Control of Manufactures Act*, which prohibited foreign ownership, was abolished and replaced by a policy that systematically cultivated FDI through a zero corporate profits tax on manufactured exports (replaced in 1980 by a flat rate of 10 per cent on all manufacturing), attractive investment grants and a complete dismantling of most tariff barriers within less than a decade.

Much of the performance of the Southern Irish economy during the following three decades can be explained in terms of the quite phenomenal growth of export-oriented FDI in manufacturing, from a zero base in the late 1950s to a situation in 1993 where almost 60 per cent of gross output and 45 per cent of employment in manufacturing is in foreign-owned export-oriented firms (Barry and Bradley, 1997).

Northern Ireland, of course, always functioned in a regime of free trade, with full access to the large British and Commonwealth markets. British policy as applied in the North included a regional employment premium scheme of wage subsidies, as well as other subsidy and grant-based policies. However, as we have seen, its main industrial sectors were in decline, and the region failed to attract sufficient FDI to offset the job losses. Since both regional Irish home markets were so small, the domestic manufacturing sectors, North and South, simply could not efficiently supply all their different needs through import substitution. Rather, they needed to specialise in a narrow range of products, sell in highly competitive export markets, and import the goods not produced at home. As they moved to such specialisation, the two most striking aspects of manufacturing activity on the island over the last three decades are that total employment has remained almost unchanged (359,000 in 1960 compared with 343,000 in 1990), while a dramatic shift in favour of the South was taking place (Figure 5). Thus, the island industrial development in recent decades came to resemble a type of zero-sum game.

The evolution since the 1960s of aggregate Northern and Southern manufacturing employment is shown in Figure 6. While Northern manufacturing employment stagnated and declined, Southern employment rose steadily. The decline of Northern manufacturing (admittedly from a very high base) had serious consequences for the wider Northern economy. However, despite a strong growth in output, the performance of Southern manufacturing employment was not impressive until very recently.

What caused the Northern manufacturing decline? There is a certain amount of research on the economic effects of civil unrest, but no very convincing conclusions (see Harris, 1991). Even so, the inability of the North to attract inward investment to anything like the extent of the South can probably be blamed on the uncertainty and disruption of the Troubles as well as on world economic conditions. However, the fact that the



Figure 5. Changing size of Northern and Southern manufacturing employment.



Figure 6. The evolution of manufacturing employment: North, South and UK. ---- South, — North, — UK. Index: Base 1963=1.0

Troubles coincided with a serious crisis in Northern industrial policy suggests that it is useless to attempt to pin the subsequent decline on the Troubles alone (Munck, 1993: 60–4). The performance of the Southern manufacturing sector, on the other hand, may look flattering in comparison with the North, but contains a disturbing difference between the inability of the Southern indigenous sector to grow and compete internationally, and a more rapid growth of the less employment intensive foreign-owned sector (NESC, 1992).

Concerning the possible role of policy flexibility, comparison of Northern employment performance with aggregate UK performance shows that Northern Ireland was merely tracking a wider UK manufacturing decline (Figure 6), without the parallel strong growth of private services that occurred in the more prosperous core British regions. The North, together with other relatively poorer peripheral British regions, appears to have been unable to arrest this decline with the limited range of policy instruments and the level of support available (NIEC, 1992: 21), and comparisons with Scotland tend to reinforce this finding (Ibid.: 38–43).

The Public Sector

Employment in the public sector (i.e., public administration, defence, health and education) grew rapidly in both North and South from the

mid-1960s to the late 1980s. In Figure 7 we show public sector employment as a fraction of private sector employment (i.e., manufacturing, market services and agriculture). This is a measure of the 'burden' carried by a region's private sector to the extent that regional tax revenue supports public activities.¹⁰

What Figure 7 illustrates is that the Northern public sector, relative to the size of the private sector, is dramatically larger than its Southern counterpart. The relationship between the exposed manufacturing sector (which is forced to match world prices and is driven mainly by external demand) and the public sector is a particularly interesting one. In the South the need to finance public sector expansion by immediate or deferred taxation (i.e., debt creation) drives a 'wedge' between wage costs borne by employers in manufacturing and the value of take-home pay spent by employees. Hence, public sector expansion can crowd out employment in the exposed manufacturing sector through loss of competitiveness as unions drive up nominal wages to restore their members' real standard of living. This tended to happen in the South during the 1980s and was a cause of serious loss of manufacturing jobs (Barry and Bradley, 1991).

In the North, on the other hand, there is now no direct link between the size of the public sector and the need to finance it exclusively from Northern Ireland tax resources. Part of the explanation of the behaviour of the public/private employment ratio can be attributed to the need for the North to catch up with the higher British levels of public services. However, the increase in the size of the public sector can still crowd out the exposed manufacturing sector through the effect of the lower rate of regional unemployment in driving up wage rates.

Labour Market Problems

A shared feature of the two labour markets over the past three decades has been an enduring high rate of unemployment. In Figure 8 we show unemployment rates for North, South and Britain. Figures 9(a) and (b) show the annual change in the working-age population superimposed on net migration from each region.

The common pattern of behaviour of unemployment is striking. During the 1980s, both Irish regions suffered much higher rises in unemployment rates than occurred in Britain. However, the patterns of labour migration and population growth are quite dissimilar in the two Irish regions. In the

¹⁰ A special factor driving up the numbers employed in the Northern public sector over the past 25 years has been the need to increase the size of the security forces.



Figure 7. Public/private sector employment ratio: North and South. ---- NI.



Figure 8. Unemployment rates: North, South and UK. ---- ROI, ---- NI, ---- UK.

case of the South, migration was net outward during the 1960s, became strongly net inward during the expansionary 1970s, and reverted to net outward for most of the 1980s. In the last few years net-outward migration has ceased, due to relative improvements in the Irish market and in Social Welfare entitlements. In the case of the North, migration was more modest



Figure 9(a). Migration and net working-age population change: North. — Migration, ---- Population change.



Figure 9(b). Migration and net population change: South. — Migration, –––- Population change.

and steady, other than during the years 1971–72, a period of serious civil unrest.¹¹

A further characteristic of Northern and Southern labour markets is that the fraction of those who are long-term unemployed (defined as greater than one year) has become very high (Figures 10[a]) and [b]). Furthermore, in the North this has been associated with pockets of long-term unemployment in

¹¹ Ó Gráda and Walsh (1995: 273–4) touch on another aspect of emigration from the North, namely the traditionally higher rate of emigration by Catholics compared to that of other religious groups, and the reversal of this pattern in the period 1971 to 1991.



Figure 10. Long-term unemployment rates, North and South.

areas that have suffered most from violence, shown in the grouping of regions on the right of the histogram (Figure 11[a]). The regional variation in unemployment rates was not so pronounced in the South (Figure 11[b]), at least not at the level of regional subdivision shown in the graph.

In summary, the deterioration of the Northern labour market from the late 1970s and throughout the 1980s was replicated in the South, where over-shooting of employment growth after the fiscal expansions of the late 1970s was unsustainable. In both regions a serious problem of structural or long-term unemployment emerged. Economic studies in the South indicate that unemployment rose initially as a result of world recession, higher taxes and population growth pressure (Barry and Bradley, 1991). Sociological studies show that a key characteristic of long-term unemployment is low skill levels, and that working class marginalisation arises from the rapid and uneven nature of class transformation in Ireland and changing patterns of emigration (Breen *et al.*, 1990). These factors clearly operated in the North as well, but were overlaid by 'community' and 'location' issues whose interpretation has been an area of great controversy in Northern socio-economic research (McGarry and O'Leary, 1995).

Paying the Bills: Regional Balance Sheets

After the introduction of direct rule in 1972, any attempt to maintain even an approximate link between tax revenues and public expenditures in the North was broken and public spending since then has been related to need, defined by British standards and unconstrained by local revenue-raising powers. If a regional balanced budget had continued to be required, as it had been to some extent during previous decades, Canning *et al.* (1987) suggest that some 50,000 fewer public sector jobs would have been sustainable, with less induced market sector employment as a consequence.

There is no disputing that the Northern economy is now a financial



(a) North

(b) South

Regional distribution of unemployment South (1979 and 1993)



Figure 11. Regional unemployment rates, North and South. 1979, 1993.

burden on the British government and the region has lost its previous selfsustaining capacity.¹² Northern industry, the main source of wealth creation, stagnated and the public sector is now financed through largescale subsidies from Britain.¹³ Estimates of this burden vary, but the regional public sector deficit appears to have climbed to over 25 per cent of regional GDP by the early 1990s (Bradley, 1996: 50–5).¹⁴

Whereas the link between tax revenue and public expenditure in the North, considered as a separate region, has been broken, policy makers and tax payers in the South enjoy no such luxury. For as long as British tax payers accept the current system of financing the Northern deficit, the deficit is only a residual item of limited economic consequence within the UK (McGregor et al., 1995). On the other hand, deficit-financing in the South represents a very real constraint on public policy initiatives. Prior to 1980, public expenditure in the South grew rapidly, driven mainly by an increase in public sector employment. The ratio of public to private sector employment has however been consistently lower than in the North (see Figure 7). Even as Southern tax rates were raised, the PSBR grew, reaching almost 16 per cent of GNP in 1981. The ratio of national debt to GNP peaked at about 130 per cent in the mid-1980s. Since an increasing portion of debt was denominated in foreign currencies, interest payments were an outflow from the economy and devaluations of the Irish pound within the EMS during the first half of the 1980s further increased the debt burden. Driven in large part by the PSBR, the current account of the balance of payments also moved into serious deficit.

During the early 1980s tax rates were raised sharply and public capital expenditure curtailed. However, further adjustment was inevitable since the South had run up against the budget constraint that the North has never had to face. The fiscal adjustment, when it came after 1987, was extraordinarily and unexpectedly severe. Public expenditure fell, even measured in nominal terms, between 1987 and 1988. A combination of buoyant world demand, falling interest rates, and a devaluation of the Irish pound (£IR) against sterling within the EMS, boosted Southern growth and

¹² The limited data available indicate that Scotland and Wales are also in receipt of net transfers from London, albeit smaller ones on a per capita basis than in the case of the North (Blake, 1995). Data for the UK regional current account balance of payments are not available.

¹³ In a recent study of the Northern public sector, Smyth (1993) states that: 'Expansion of the public sector of Northern Ireland has been a surrogate for autonomous growth, a buttress against political instability and remains the dominant feature of the region's economy'.

¹⁴ The Northern estimates are based on an approximate attribution of UK indirect taxes to Northern Ireland, and assume that receipts are confined to revenue generated from the North's own economic activity (Bradley, 1990).

enabled the debt/GNP ratio to be cut significantly. More recently, the disciplines of the EMS (particularly prior to the broadening of the currency bands in August 1993) and the explicit commitments in the Maastricht Treaty now constrain the Southern government from moving away, even temporarily, from fiscal rectitude.

Surprisingly, far from depressing Southern GNP, as might have been predicted by Keynesian analysis, the economy grew strongly in the years after the 1987 adjustment and the current account moved strongly into surplus. Giavazzi and Pagano (1991) claimed that causation underlay this correlation and argued that the South's experience during the years 1987 to 1990 was a case of 'expansionary fiscal contraction'.¹⁵ However, this view is controversial.¹⁶

Industrial and Regional Development in Ireland

We turn now to a more detailed exploration of industrial activity. Our first theme concerns enterprise and industrial organisation, where there is widespread recognition of the centrality of the manufacturing sector and the fact that past Irish performance in this area left much to be desired. We have seen that the North suffered from a serious problem of deindustrialisation that was part of a wider British pattern of decline. Problems in the South concerned mainly the weakness of the indigenous sector and overdependence on inward foreign direct investment.

Our second theme concerns geographical and sectoral organisation of the island economy, an issue that was relevant to the manner in which the island developed in the nineteenth century and to how it came to be politically partitioned in the early twentieth century. Successful emulation by Ireland of rapid growth regions elsewhere in the world is likely to need appropriate supporting domestic policies, and recent Northern and Southern industrial policy studies have indeed begun to draw similar lessons from the new literature of industrial organisation (Stationery Office, 1992; NIGC, 1995).

¹⁵ In an expansionary fiscal contraction (EFC), public expenditure cuts will reduce the need for future high taxes. This will be foreseen by a rational, optimising private sector which will immediately increase consumption and investment, possibly more than offsetting the contractionary effects of the cuts.

¹⁶ Bradley and Whelan (1997) incorporated forward-looking expectations into a Southern macro-model and found that the strong performance of private consumption could not be accounted for convincingly by expectational effects related to personal income and consumption. Their preferred explanation focuses on the unexpectedly strong growth in the world economy which occurred during the adjustment.

Enterprise and Industrial Development

Present-day industrial policy, both North and South, could be very crudely characterised as a process whereby national and regional agencies (the IDA in the South and the IDB in the North), using a wide range of incentives, bid for subcontracting roles from global multinational firms and then attempt to influence the allocation of these activities over their respective regions in order to satisfy conflicting mixtures of economic, social and political criteria. However, the very success of inward investment to the island has tended to conceal rapid changes that are taking place in the international marketplace, many of which have served to return the focus of attention to regions as natural units of production (Sabel, 1989). Discussions of industrial policy have begun to take account of how the environment within which firms operate has been changing rapidly, with important consequences for the growth of successful clusters of modern innovative firms (Porter, 1990; Best, 1990).

Public policy can be invoked to influence an otherwise poor regional competitiveness position. The most extreme forms of intervention consist of import quotas and/or tariffs, methods that were used in the South during the protectionist period from the 1930s to the early 1960s. The preferred approach in recent decades involves subsidies to labour and capital combined with lower rates of corporate taxation in the South. Indeed, a striking similarity between North and South is the vigour with which state intervention is directed to enhance otherwise mediocre levels of international cost competitiveness, mainly through low corporate taxation in the South. Analysis indicates that while the effective exchequer cost of the North. Analysis indicates that while the effective exchequer cost of the Northern and Southern incentive packages are quite similar (NIEC, 1995), the South's tax-based measures may be more efficient in economic terms (i.e., lower 'deadweight' costs) than the Northern subsidy-based measures.

The economies of North and South are individually small, with populations of about 1.6 and 3.6 million respectively. Northern Ireland is not only separated geographically from Britain, but also appears to be very weakly integrated into the supply side of the British economy, even if demand for Northern output is dominated by the British market. This lack of supply-side integration with Britain is due in part to the problems created by the past 25 years of the Troubles. Improvements in access transport and the stability that peace may bring will probably alleviate this situation over time, but is unlikely to ever place the North on a par with the rest of the British economy, at least from the supply-side perspective. Rather, it is likely to remain the case that the North will always be geographically as well as economically peripheral to Britain. The situation in the South relative to the countries that provide the bulk of Southern foreign direct investment (i.e., the US, Britain and the rest of the EU) has strong analogues with the North. For example, the Southern economy is not central to the strategic planning of US-based firms, other than as a highly profitable location for production of products mainly designed, developed and tested elsewhere, and a location where a very high quality labour force is available. The branch plant nature of foreign firms located in the South tends not to encourage the building of strong performance on the Porter 'diamond'.¹⁷ Dependence purely on external investment is unlikely to generate the type of cumulative self-sustaining growth that is a characteristic of successful international growth poles.

Spatial Issues: Infrastructure, Clusters and Regional Development

Pre-1960 Irish experience. The protectionist policy regime in the South also ensured that the natural growth of inter-firm cooperation within given local specialisations would never happen, and that firms would be unlikely to survive when tariff barriers were dismantled in the 1960s (Ó Gráda, 1994: 398). Inter-firm cooperation and industrial 'districts' failed to develop from the 1930s to the 1950s, largely as a result of an industrial policy that minimised the likelihood of geographic clustering in a not very successful effort to spread employment more evenly throughout the regions. It is not surprising that the resulting weak indigenous sector performed so poorly when faced with stiff international competition in the 1960s after tariff barriers were lowered.

We have already seen that the situation in the North was very different. Here, the size of crucial sectors such as shipbuilding (Belfast) and linen (Dungannon-Newry-Belfast) ensured the existence of considerable scale economies. The extraordinary success of the north-east region, centred on Belfast, meant that this was the only Irish region that fully participated in the latter stages of Britain's industrial revolution.

However, after partition, Northern Ireland's problem became one of stagnant or declining world demand for its main products, combined with a failure to restructure into newer product areas. The negative effects on Belfast's satellite towns were serious as the growth pole process went into reverse. By the 1950s much of Northern indigenous industry suffered from the problems of its Southern counterpart: dispersal, small size and inward orientation.

¹⁷ The Porter competitiveness 'diamond' consists of factor conditions, demand conditions, supporting industries and firm structure/strategy (Porter, 1990).

Post-1960 Southern experience. While the north-east growth pole centred on Belfast had arisen during the nineteenth century in an era of *laissez faire*, the debate on concentration versus dispersal in the South was revived in the 1950s and 1960s in the context of public policy initiatives designed to tilt the balance predominantly in one direction or another. The Buchanan Report was a comprehensive statement of the key issues for the South, while the Matthew report was an earlier statement of issues in the North (Buchanan, 1969; Matthew, 1963). The subsequent public debate, North and South, is illuminating and decisions taken in the early 1970s still largely shape both economies.

The first suggestion of a switch to a more spatially selective industrial policy in the South appeared in the year 1958 in *Economic Development*, the background document from which the *First Programme for Economic Expansion* drew its inspiration. The debate on growth centres versus dispersal flourished during the early- to mid-1960s, culminating with the commissioning of the Buchanan Report in 1966. Buchanan proposed a new policy orientation that embodied the growth centre idea, namely that 75 per cent of new industrial employment over a twenty-year period should be concentrated into a limited number of urban areas. In particular, the development of two national growth centres at Cork (in the south) and Limerick (in the south-west) was intended to enable them to attain a sufficient size to compete effectively with Dublin (in the east).

These proposals generated a vigorous and sometimes acrimonious debate, with the government reluctant to implement them, opting essentially for a continuation of the previous policy of dispersal. The formal rejection of the policy of concentration was eventually embodied in the first five-year plan of the Industrial Development Authority (IDA), published in 1972, and formal growth centre policy was quietly dropped.

A major economic argument against the promotion of growth poles made by the IDA was that improvements in transport and communications had greatly increased the locational flexibility of industry and that this was reflected in the ability of the weaker regions, outside the proposed Buchanan growth centres, to attract and support foreign direct investment. IDA policy was formulated in terms of systematic regional dispersal, accompanied by a comprehensive programme of fully serviced industrial sites and advance factories, and greater locational variability in grants made available.

To the extent that IDA policy was indeed targeted at a redistribution of manufacturing employment more evenly throughout the country, it was quite successful. By the late 1970s the earlier bias in favour of Dublin had been largely removed and all the other regions had improved their position. The success in dispersing new manufacturing employment to the regions was accompanied by a more modest, but nevertheless significant, convergence in regional per capita incomes in the South.

Such an equitable regional outcome might suggest that concentration was not necessary to ensure both strong national and regional growth. However, a different, less benign interpretation can be made based on specific features of the Southern experience of foreign direct investment, which was the main source of post-1960 industrial growth. Re-reading Buchanan today with hindsight forces one to reconsider his rather unsettling questions in the context of subsequent developments.

The foreign-owned industries locating in the South were originally, and largely remained, branch plants, seldom becoming involved in the core stages of product design and development, these activities remaining abroad with the foreign parent company. Rather they were involved in relatively routine assembly and manufacturing processes, often at the standardised stage of the product cycle. However, most small nations start by importing their technology, and the most common way to do this is to encourage foreign direct investment and to train the labour force in the servicing of this investment, simultaneously working to try to increase the level of indigenous competence.

Did these branch plants, against a background of spatial dispersal, begin to interact with each other, gradually taking on increasingly complex tasks and moving towards the earlier stages of the product cycle (i.e., 'maturing' products or, eventually, 'new' products)? The Irish evidence here is difficult to interpret, with international commentators tending to be more optimistic than domestic analysts. For example, Castells and Hall (1994) in their analysis of 'technopoles' comment that:

New countries and regions emerge as successful locales of the new wave of innovation and investment, sometimes emerging from deep agricultural torpor, sometimes in idyllic corners of the world that acquire sudden dynamism. Thus, Silicon Valley and Orange County in California; . . . Silicon Glen in Scotland; the electronics agglomeration in Ireland. . . .

One interpretation of the Southern experience could be that, far from being a late-comer, the South, after executing an extraordinary policy *volte face* in the 1960s, was among the early countries to benefit from the production, transportation and communication advances that first generated internationally mobile investment flows on a large scale in the late 1950s.¹⁸ With an early start, a comprehensive range of incentives and a high level of human capital, the IDA succeeded in attracting an impressive share of this investment. Since these branch plants required little in the way

¹⁸ O'Malley (1989) develops the 'late-comer' thesis as an explanation of the poor Southern manufacturing performance since Independence.

of interaction with the local economy, they could be dispersed among different regions.

While the policy of dispersal had little effect on multinational branch plants, which were relatively self-sufficient and sourced only a small fraction of their inputs in Ireland, any anticipated synergies between foreign firms and between foreign and indigenous firms, were probably very seriously impeded.¹⁹ Given the complexities of the Irish industrialisation process, it is difficult to make an absolutely convincing case that the policy of dispersion of multinational branch plants definitely did impede the development of synergies between foreign and indigenous firms. However, there are many direct and indirect indications that what synergies did come about were at best weak. For example, although industrial output and exports grew rapidly in the key areas where foreign-owned multinational firms dominated (e.g., chemicals, pharmaceuticals, computers, instrument engineering), the employment response was attenuated both in these key sectors themselves and in the industrial and service sectors that would be expected to benefit from synergies (NESC, 1995). Furthermore, IDA work on targeting foreign-indigenous synergies (e.g., the National Linkage Programme) is designed to strengthen what are admitted to be weak linkages.

Geographic dispersion was obviously not the only issue at the root of the problem of weak foreign-indigenous synergies.²⁰ In addition, the gulf that existed between the new high technology foreign-owned firms and existing largely traditional indigenous industries was probably too large to bridge satisfactorily during the first decades of the export-led growth strategy. Although the inter-firm synergies may have been weak, there were direct benefits to the Southern economy in terms of conventional income multiplier effects. A further important benefit came through human capital and labour market externalities, as the expansion of the Southern education system after the mid-1960s interacted with the demand of the foreign sector for an increasingly skilled labour force. After three decades of large-scale inward investment, the position in the South is now transformed and these are the kind of factors underlying more recent strong growth performance.

¹⁹ The main incentive for attracting inward investment, i.e., the low corporate tax regime, was itself an obstacle to linkage development within Ireland. The transfer pricing activity which it encourages is most easily operated where branch plants in Ireland maintain their major supply links with affiliate plants located abroad.

²⁰ In the eighteenth and nineteenth centuries industries needed to cluster close to sources of energy (coal, water, etc.) and at transport hubs near large centres of population. However, in the latter part of the twentieth century the concept of geographical distance has been diluted and redefined by dramatic improvements and cost reductions in communications technologies.

Post-1960 Northern experience. Policy on sub-regional development within the North was relatively weak and passive from the immediate post-war period until the mid-1960s, tending to accommodate to a focus on expanding the north-east sub-region around Belfast. As late as 1962 the Hall report on the economy of Northern Ireland devoted little attention to regional imbalances or to the active use of public policy to redress these imbalances, even in light of the serious unemployment in areas west of the Bann (Derry, Enniskillen, Strabane), and to the south of Belfast (Newry, Dungannon) (Hall, 1962).

However, the Belfast Regional Survey and Plan was the first of a series that began to focus on sub-regional imbalances (Matthew, 1963). Unlike the South, where physical planning tended to follow behind economic planning, economic plans for the North up to the mid-1970s accepted the essentials of the physical strategy as put forward in the Matthew Report. The growth centres as designated by Matthew had a clear concentration on the eastern sub-region.

The Wilson Report further promoted the concept of growth centres, and worked on the assumption that successful regional development would be accompanied by internal migration: people moving to jobs, rather than jobs moving to people (Wilson, 1965). A major change in regional policy was heralded by the Quigley Report in 1976. An acknowledgement of the segmentation of Northern labour markets and the relatively low rate of internal migration led to the conclusion that:

It is simply a fact that no regional policy (whatever its success in promoting investment or raising GDP or reducing unemployment) will be judged satisfactory which fails to remove the unemployment black spots.²¹ (Quigley, 1976: 17)

From the mid-1970s, it could be said that regional policies in both North and South eschewed any narrow focus on growth centres and became a pragmatic blend of concentration and dispersal that attempted to bring spatial equity to the island, with as little loss of economic efficiency as possible.

A final aspect of the Northern sub-regional policy debate concerns its implications for the spatial distribution of Government sponsored employment in relation to the religious composition of the population (Bradley *et al.*, 1986). Contrasting with the scattered nature of the Catholic majority areas, the non-Catholic community forms a reasonably solid contiguous group in the east-central region of Northern Ireland. Any economic policy

²¹ The failure of Craigavon, a 'new' Northern town, to generate self-sustaining growth is an aspect of migrational difficulties within the North (Bardon, 1992: 717).

that facilitated further concentration on the east-central region, either passively or actively, could not avoid the relative neglect of the large areas with Catholic majorities. Figure 12 shows manufacturing 'location' ratios for the entire period 1949 to 1981, together with two sub-periods: the passive policy period 1949 to 1963, and the active policy period, 1964 to 1981.²²

Although there is no overall difference for the entire period, there is a marked difference between the two sub-periods, with Catholic majority areas faring better during the later 'active' policy period than during the earlier 'passive' period. Had the situation been reversed, and had the relatively deprived areas with Catholic majorities benefited more in both employment and housing during the first period rather than the second, then perhaps some of the underlying causes of the outbreak of civil unrest in the late 1960s might have been alleviated.

Summary. Our brief examination of the previous and the present stance of industrial policy, both North and South, suggests that the normal processes of clustering and regional concentration eventually were impeded both by the branch-plant nature of the investment and by a public policy of geographical dispersal. The only example of an Irish self-sustaining 'industrial district', i.e., Belfast during the period from the mid-nineteenth century to the early decades of the twentieth, declined thereafter. More recent policy has deliberately promoted regional dispersal, almost certainly at some expense to strict economic efficiency criteria.

However, after more than three decades of exposure to foreign direct investment, the South has succeeded in attracting sufficient firms in the computer, instrument engineering, pharmaceutical and chemical sectors to constitute sectoral 'agglomerations' or 'clusters'.²³ The incentives used in the South to attract and hold these firms were tax breaks, grants and a well educated and trained work-force. With the exception of tax-based incentives, similar policies were used in the North to attract inward investment, albeit in a climate dominated by negative factors associated with the Troubles.

Conclusions

We have described how the island of Ireland has experienced a variety of radically different political regimes since the first phases of the British

²² Location ratios measure how a region's share of total national employment in any sector compares with its share of national population.

²³ At present the Southern agglomerations and clusters are of a rather weak variety and are quite unlike the dynamic clusters in regions like Silicon Valley and Route 128 in the US. Nevertheless, Ireland has become an attractive location for certain high-technology activities simply because of the presence of other similar industries.



Figure 12. Northern location ratios: 1949–63 and 1964–81. Catholic majority, non-Catholic majority.

Industrial revolution: colonisation with a limited form of self-government prior to 1800; full incorporation into the United Kingdom between 1800 and 1920; and then partition into two parts, with Northern Ireland remaining within the UK (but with a local parliament and limited policy autonomy) and the rest of the island achieving full independence. Economic development, policy-making institutions and performance in the island have reflected these different regimes and have been largely shaped by them.

We suggested that economic preconditions for the political partition of the island were in place at least three decades before the end of the last century and we surveyed the key economic issues of this crucial period in history: the abnormal demographics of the island; the economic geography of the North-South divide; and the almost total economic dependence of the island on the British economy.

Radical transformations have taken place during the past three decades in both economies of Ireland, introducing dramatic differences in the relative performance of North and South. Overlaying these differences is the civil unrest (or so-called 'Troubles') that casts a shadow over the recent economic development of Northern Ireland. A detailed discussion of the reasons for the stronger performance of the South relative to the North in the last decade would require a separate paper.²⁴ Basically five key factors

 $^{^{24}}$ For a full treatment of the recent Southern growth experience, see Bradley *et al.*, 1997. Using certain measures (e.g., GDP per capita), the South has even surpassed the UK, although the welfare implications of such comparisons are complex.

are involved in the South's dynamic performance: the changing demographic structure and the role of inward migration in preventing skill shortages; the steady build-up of human capital after the educational reforms in the 1960s; the major improvements in physical infrastructure, particularly since 1989 as a result of the EU Community Support Framework; the extreme openness of the economy, export orientation to fast growing markets and products, together with benefits stemming from the completion of the Single European Market (1992) and from massive FDI inflows;²⁵ and the stable domestic macroeconomic policy environment.

The role played by large-scale British financial support in sustaining the standard of living in the North has perhaps served to mask the true nature of the differences in performance between North and South. The situation in the North would appear to be rather less advantageous than in the South for each of the above five factors. Northern demographic trends remain out of line with the European norms to which the South has converged. The problems associated with the selectivity of the Northern education system are treated elsewhere in this volume. Economic openness is less beneficial to the North than is the case in the South, since the North's export orientation is mainly to the slower growing British markets and to more traditional products. The overhang of the large financial subvention and fears about its possible reduction has introduced uncertainty to Northern medium-term economic planning. In fact the only exception where the relative position of the North is better than the South is in the state of physical infrastructure, and this is changing rapidly.

Adverting to the uneasy relationship between economics and politics mentioned at the start of this essay, the *Economist* recently posed the following question: might success and self confidence (in the South) bring the island closer to an even greater prize—peace in the North? The conclusion drawn was unusually optimistic:

As prosperity lightens the burdens of history, Britain and the Republic should develop a more relaxed relationship, based on shared economic interests and unforced mutual respect. With time, the border between North and South could come to seem unimportant, reconciling Northern nationalists to its existence and Northern unionists to closer links with the South. Miracles do happen, you know: look at the Irish economy. (*Economist*, 17 May 1997)

²⁵ An examination of the impact of *1992* on the Greek, Irish, Portuguese and Spanish economies is available in Barry *et al.*, 1997.

References

- Bardon, J. (1982) Belfast: An Illustrated History, Belfast: The Blackstaff Press.
- Bardon, J. (1992) A History of Ulster, Belfast: The Blackstaff Press.
- Barry, F. and Bradley, J. (1991) 'On the Causes of Ireland's Unemployment', *Economic and Social Review*, 22(4): 253-86.
- Barry, F. and Bradley, J. (1997) 'FDI and Trade: the Irish Host-Country Experience', *The Economic Journal*, 107: 1798–1811.
- Barry, F., Bradley, J., Hannan, A., McCartan, J. and Sosvilla-Rivero, S. (1997) Single Market Review 1996: Aggregate and Regional Aspects—the Cases of Greece, Ireland, Portugal and Spain, London: Kogan Page.
- Best, M. (1990) *The New Competition: Institutions of Industrial Restructuring*, Cambridge: The Polity Press.
- Blake, N. (1995) 'The Regional Implications of Macroeconomic Policy', Oxford Review of Economic Policy, 11(2): 145–64.
- Bradley, J., Hewitt, V. and Jefferson, C. (1986) Industrial Location Policy and Equality of Opportunity in Assisted Employment in Northern Ireland 1949–1981, Belfast: Fair Employment Agency.
- Bradley, J. (1990) 'The Irish Economies: Some Comparisons and Contrasts', in R. Harris, C. Jefferson, and J. Spencer (eds), *The Northern Ireland Economy*, London: Longmans.
- Bradley, John (1996) An Island Economy: Exploring Long-Term Economic and Social Consequences of Peace and Reconciliation in the Island of Ireland, Dublin: Stationery Office.
- Bradley, John and Whelan, K. (1997) 'The Irish Expansionary Fiscal Contraction: A Tale from One Small European Economy', *Economic Modelling*, 14(2): 175–201.
- Bradley, John, Herce, J-A. and Modesto, L. (1995) 'Modelling in the EU Periphery: the HERMIN project', *Economic Modelling*, 12(3): 219–333.
- Bradley, John, Fitz Gerald, J., Honohan, P. and Kearney, I. (1997) 'Interpreting the Recent Irish Growth Experience', in D. Duffy, J. Fitz Gerald, I. Kearney and F. Shortall (eds), *Medium-Term Review: 1997–2003*, Dublin: The Economic and Social Research Institute.
- Breen, R., Hannan, D., Rottman, D. and Whelan, C. (1990) Understanding Contemporary Ireland, Dublin: Gill and Macmillan.
- Buchanan, C. (1969) Regional Studies in Ireland, Dublin: An Foras Forbartha.
- Canning, D., Moore, B. and Rhodes, J. (1987) 'Economic Growth in Northern Ireland: Problems and Prospects', in P. Teague (ed.), *Beyond the Rhetoric*, London: Lawrence and Wishart.
- Castells, M. and Hall, P. (1994) Technopoles of the World: The Making of 21st Century Industrial Complexes, London: Routledge.
- Crotty, R. (1986) Ireland in Crisis: A Study of Capitalist Colonial Underdevelopment, Dingle: Brandon Book Publishers.
- Fanning, R. (1978) *The Irish Department of Finance 1922–58*, Dublin: The Institute of Public Administration.
- Farley, N. (1995) 'A Comparative Analysis of the Performance of the Manufacturing Sectors, North and South: 1960–1991', in J. Bradley (ed.), *The Two Economies of Ireland*, Dublin: Oak Tree Press.

- Giavazzi, F. and Pagano, M. (1991) 'Can Severe Fiscal Contractions be Expansionary? Tales of Two Small European Countries', in *The NBER Macro*economics Annual 1991, Cambridge: The MIT Press.
- Government of Ireland (1958) Economic Development, Dublin: Stationery Office.
- Hall, R. (1962) Report of the Joint Working Party on the Economy of Northern Ireland, London: HMSO.
- Harris, R. (1991) Regional Economic Policy in Northern Ireland 1945–1988, Aldershot: Avebury.
- Johnson, D. S. and Kennedy, L. (1991) 'Nationalist Historiography and the Decline of the Irish Economy: George O'Brien Revisited', in S. Hutton and P. Stewart (eds), *Ireland's Histories: Aspects of State, Society and Ideology*, London: Routledge.
- Kennedy, K., Giblin, T. and McHugh, D. (1988) *The Economic Development of Ireland in the Twentieth Century*, London: Routledge.
- Kenwood, A. and Lougheed, A. (1992) The Growth of the International Economy 1820–1990, London: Routledge.
- Keynes, J. M. (1933) 'National Self-Sufficiency', Studies, 22: 177-93.
- Krugman, P. (1991) Geography and Trade, Cambridge: The MIT Press.
- Lee, J. J. (1989) Ireland 1912–1985: Politics and Society, Cambridge: Cambridge University Press.
- Matthew, R. (1963) The Belfast Regional Survey and Plan, London: HMSO.
- McGarry, J. and O'Leary, B. (1995) *Explaining Northern Ireland: Broken Images*, Oxford: Blackwell.
- McGregor, P., Swales, K. and Ying, Y. P. (1995) 'Regional Public-Sector and Current-Account Deficits: Do They Matter?', in J. Bradley (ed.), *The Two Economies of Ireland*, Dublin: Oak Tree Press.
- Mjøset, L. (1992) *The Irish Economy in a Comparative Institutional Perspective*, Report No. 93, National Economic and Social Council, Dublin: The Stationery Office.
- Munck, R. (1993) The Irish Economy: Results and Prospects, London: Pluto Press.
- National Economic and Social Council (NESC) (1992) The Association Between Economic Growth and Employment Growth in Ireland, Report No. 94, Dublin: The Stationery Office.
- National Economic and Social Council (NESC) (1995) The Determinants of Competitive Advantage in Selected Irish Sectors, Dublin: The Stationery Office.
- Northern Ireland Economic Council (NIEC) (1992) Inward Investment in Northern Ireland, Belfast: Northern Ireland Economic Council.
- Northern Ireland Economic Council (NIEC) (1995) *The Economic Implications of Peace and Political Stability for Northern Ireland*, Belfast: Northern Ireland Economic Council.
- Northern Ireland Growth Challenge (NIGC) (1995) Northern Ireland Growth Challenge: Interim Summary of Progress, Belfast.
- O'Brien, G. (1918) The Economic History of Ireland in the Eighteenth Century, London: Maunsel.
- O'Brien, G. (1921) *The Economic History of Ireland from the Union to the Famine*, London: Longmans.

- Ó Gráda, C. (1994) *Ireland: A New Economic History 1780–1939*, Oxford: Clarendon Press.
- Ó Gráda, C., and Walsh, B. (1995) 'Fertility and Population in Ireland, North and South', *Population Studies*, 49: 129–37.
- O'Malley, E. (1989) Industry and Economic Development: The Challenge for the Latecomer, Dublin: Gill and Macmillan.
- Porter, M. (1990) The Competitive Advantage of Nations, London: Macmillan.
- Quigley, G. (1976) *Economic and Industrial Strategy for Northern Ireland: Report by the Review Team*, Belfast: HMSO.
- Sabel, C. (1989) 'Flexible Specialisation and the Re-emergence of Regional Economies', in P. Hirst and J. Zeitlin (eds), *Reversing Industrial Decline*, Oxford: Berg Publishers.
- Smyth, M. (1993) 'The Public Sector in the Economy', in P. Teague (ed.), *The Economy of Northern Ireland*, London: Lawrence and Wishart.
- Stationery Office (1985) The Economic Consequences of the Division of Ireland Since 1920, New Ireland Forum, Dublin: The Stationery Office.
- Stationery Office (1992) A Time for Change: Industrial Policy for the 1990s, Dublin: The Stationery Office.
- Wijkman, P. (1990) 'Patterns of Production and Trade', in W. Wallace (ed.), *The Dynamics of European Integration*, London: Pinter.
- Wilson, T. (1965) 'The Report of the Economic Consultant', in *Economic Development in Northern Ireland*, Cmd. 479, Belfast: HMSO.