Job Generation and New and Small Firms: Some Evidence from the Late 1980s

Mark Hart
Eric Hanvey

ABSTRACT. This paper adopts a components of employment change methodology and examines the process of job generation in the late 1980s for three contrasting regions of the United Kingdom. The emphasis in the analysis is on the contribution of new and small firms to regional manufacturing employment growth. The results indicate the important role of new and small indigenous firms in the job generation process, particularly in Northern Ireland, in the period 1986–90. However, the level of displacement associated with these job creations is sufficiently high to cause concern about the long-term sustainability of these trends. The paper concludes by arguing that policies designed to stimulate new firm formation and small firm growth are not in themselves sufficient to promote growth.

KEY WORDS. Job generation, new and small firms, Northern Ireland

1. Introduction

The late 1980s in the UK can best be summarised as one of rapid economic growth for the three years to 1989 followed in late 1989 and 1990 with the initial signs of the end of the long cyclical upswing which had lasted since the recession of 1980–81 (NIERC, 1990; 1992). In this general period of economic growth it is the objective of this paper to investigate the contribution of new and small firms to the job generation process in the manufacturing sector. The importance of the indigenous manufacturing sector to economic regeneration and growth has been repeatedly argued over recent years (eg. Storey and Johnson, 1987) and it is thus once again timely to review some recent evidence on the ability of both new and small indigenously-owned firms to perform this vital role.

Without doubt the 1980s in the United Kingdom were a highly favourable decade for enterprise and the small firm sector in particular. The renaissance of the small business sector over this period has been widely documented with a great deal of attention being paid to the rapid rise in the numbers of self-employed and in the numbers of firms registering for VAT. Whilst an increase in the numbers involved in small-scale economic activities is an important dimension to economic growth, of greater significance in the longer term is the growth performance of both new and existing small firms. Over the last decade it has been clearly established that small firms account for a substantial, and growing, proportion of total employment in the United Kingdom. However, what is also emerging is that between 1987–89 smaller firms (ie. those employing less than 10 persons), across all sectors, have accounted for a disproportionately large share of total job creation in relation to their overall share of employment (Daly *et al.*, 1992). However, such national-level analyses can mask important regional differences in the importance of new and small firms.

As Storey and Johnson (1990) have argued, the growing importance of small firms in terms of employment may be due to a combination of factors ranging from higher birth rates of small firms, the decline of large firms to the growth performance of surviving small firms. To unravel the relative importance of these factors it is necessary

Final version accepted on November 15, 1994

Mark Hart
Department of Applied Economics
University of Ulster
Newtownabbey, BT37 0QB
Northern Ireland

and

Eric Hanvey
Northern Ireland Economic Research Centre
46–48 University Road
Belfast, BT7 1NJ
Northern Ireland

to undertake a components of change analysis which disaggregates net employment change into gross job gains and losses. These gains and losses can be examined further in terms of size, sector, ownership and region.

The analysis reported in this paper adopts such a components of change approach and will focus on three comparative areas in the UK for the period 1986–1990. These areas comprise the three contrasting regions of Northern Ireland, Leicestershire and Wearside. The comparative components of change analysis contained in this paper extends the work previously reported for the period 1973–1986 with the exception that Wearside is included for the first time (Gudgin *et al.*, 1989). As in the earlier study the analysis is dependent upon specially created industrial databases held by the NIERC which contain details on virtually all manufacturing establishments in each of the three study areas.

The methodology adopted for this analysis permits the comparison of three mutually exclusive and complete components of change in manufacturing employment. These are:

- Growth and decline of established indigenous firms (large and small) and branch plants
- Inward moving companies and branch plants
- Formation of new indigenous companies.

The analysis presented in this paper will focus primarily on the contribution of existing small firms and surviving new firms to manufacturing employment change. The earlier NIERC study, in line with similar job generation studies in the UK in the 1980s, demonstrated the particularly high contributions to employment made by new firms. Furthermore, according to most criteria, it is small firms as a whole that have been creating jobs in the UK at a time when net job losses have occurred in the large firm sector. The extent to which these trends have continued in the late 1980s will be addressed in the discussion that follows.

2. Comparative study areas

The three regions chosen differ in terms of geographical location, industrial structure, the traditional role of small firms and the availability of public sector assistance to economic development. The purpose of this section is to present brief regional profiles of the three study areas and to focus on some key economic indicators over the period 1986–90. It is important to identify the key aspects of regional economic change over this period in order to provide a context for the subsequent analysis of the various components of manufacturing change.

Northern Ireland and Wearside have both experienced a mix of economic and social problems in the last two decades due to a combination of factors which can be summarised as, a peripheral location within the UK economy, the structural decline of traditional industrial sectors, and in the case of Northern Ireland political unrest. Consequently, both areas have traditionally been recipients of public sector industrial development assistance designed to offset the effects of decline and to form the basis for future economic regeneration. Arguably, Wearside may have a slight advantage of being less isolated and having an east coast location which provides potential access to EC and Scandinavian markets. In both regions operating costs are low by national standards.

In the case of Northern Ireland, for mainly political reasons, the level of assistance provided to large and small firms is considerably larger than that available elsewhere in the UK. For example, the Local Enterprise Development Unit (LEDU), which is the government agency charged with the responsibility of strengthening and developing the small firm sector in Northern Ireland, spent an average of £20 million each year (at 1991 prices) during the late-1980s to encourage job creation in small firms. Total expenditure on industrial development and support in Northern Ireland by the Industrial Development Board (IDB), LEDU and other government departments stood at just under £200 million in the financial year 1988–89. Northern Ireland also benefits from granted Objective 1 status in the UK under the EC's Structural Fund allocations.

Wearside, situated in the Northern region, has long been eligible for some of the highest levels of regional aid available in mainland Britain. Government (DTI) regional policy remains in operation, though substantially reduced through revisions in 1984 and 1988. The automatic subsidies have gone with the emphasis now upon selectivity, aiding smaller firms and inward investment

projects from overseas (eg, Nissan's car plant at Washington). In 1988–89 the Northern region as a whole received £133.7 million in regional preferential assistance. As in the whole of the UK companies in the region may also receive support for consultancy services and innovation under the DTI's "Enterprise Initiative", which operates at preferential rates in the Assisted Areas.

While the late 1980s has seen the decline in importance of regional policy, both financially and politically, urban and local policy has become much more prominent. The Urban Programme, which includes the local authority of Wearside, together with the European Community, has helped maintain and expand economic development policy. Indeed, most of the region, including Wearside, is eligible for assistance under Objective 2 of the Structural Fund allocations. The region has a considerable number of local enterprise agencies supported by local and/or central government and our study area – Wearside – the Tyne and Wear Enterprise Trust is in operation. The role of the private sector in local economic development has increasingly been promoted in the locality with the promotion of an Urban Development Corporation (UDC) to cover the riverside areas of the Tyne and the Wear, and more recently with the introduction of the Training and Enterprise Councils (TECs) and the creation of a private sector led organisation called "The Wearside Opportunity".

The third study area included in the survey was the county of Leicestershire in the East Midlands region. It was deliberately chosen to provide a contrast to the more peripheral localities of Northern Ireland and Wearside. It is also a county with a long and vibrant tradition of small firm activity in a wide range of industries. Its industrial orientation tends to be towards traditional (i.e. textile and clothing) rather than high-technology industries. Leicestershire is an area which is more central to British markets and, apart from a small area in the north west of the county (ie, Hinckley), lies outside the DTI's list of defined areas for regional assistance. Nevertheless, the county is well served by a network of economic development agencies and programmes operating within the public, private and voluntary sectors. For example, the city of Leicester is designated an Inner Urban area under the Urban Programme funded by central government, while in 1988 a City Action Team (CAT) was formally established in the region which included Leicester. The CAT co-ordinates the multi-million pound inner city programmes of the Departments of Trade and Industry, Environment and Employment.

There are a number of local enterprise agencies (LEAs) in the East Midlands region which offer advice and other support for new and growing businesses and the most prominent one in our study area is the Leicestershire Business Venture. It is financed in partnership by the local authority and the private sector. More recently, the creation of seven TECs in the region as a whole has provided a role for the private sector in local economic development.

Finally, in the late 1980s the local authority in Leicestershire has become more active in mainstream economic development activities. These include, the provision of financial assistance to start-ups, managed workspace, selective training initiatives and industrial promotion. Overall, it would be true to say that the main characteristic of the range of economic development policies available in Leicestershire is their private-sector oriented approach which stands in marked contrast to the situation in the other two study areas of Northern Ireland and Wearside.

With respect to the performance of the three areas it is important to distinguish the 1986–89 years from the events of 1990. From Table I it is clear that there was a marked divergence in the economic fortunes of the regions in which the study areas were situated. Between 1986–89 GDP grew almost twice as fast in the East Midlands (Leicestershire) and the North (Wearside) than in Northern Ireland. Over the same period GDP in manufacturing grew considerably faster in the East Midlands and the North compared to Northern Ireland. The impact of these trends was to reduce regional growth differentials in the late 1980s but the evidence from Northern Ireland would tend to indicate that these redistributional effects did not seriously impact upon the most peripheral regions.

In 1990, by contrast, while GDP continued to grow at twice the UK average in the East Midlands (2.3 per cent), the other two regions experienced negligible or declining GDP growth. However, this regional pattern does not hold for GDP in manu-

TABLE I
Economic trends in areas 1986–90

Area	GDP*		MFG GDP*		MFG EMP	
	1986–89	1990	1986–89	1990	1986–89	1990
Northern Ireland	2.8	–0.1	3.6	1.7	0.7	–0.7
Leicestershire	5.9	2.3	6.6	0.8	0.9	–1.7
Wearside	5.1	0.6	8.7	–2.5	1.1	–1.4
UK	4.6	1.1	5.5	–0.5	0.5	–1.6

Source: NIERC (1992)
Note: * per cent per annum

facturing, which while declining nationally in 1990 (–0.5 per cent), exhibited modest growth in Northern Ireland and the East Midlands compared to a decline which was faster than the national average in the North.

Table I also shows that the study areas recorded an above average growth in manufacturing employment over the period 1986–89. However, in 1990 the slow-down in growth was beginning to express itself in declining employment levels. In relative terms the manufacturing sector in Northern Ireland fared better in 1990 than the other regions but the region had not fully benefitted from the effects of the economic boom since 1986.

Unemployment rates for the three study areas are presented in Table II. Unemployment has been reduced everywhere in the period 1986–89, albeit at different rates. Wearside had experienced the largest fall in the rate of unemployment (8 percentage points) followed by Leicestershire (5 pp) and finally Northern Ireland (2.6 pp). With unemployment falling to 5.8 per cent nationally by 1989, Northern Ireland and Wearside still recorded unemployment rates around two and half times the national average. However, in 1990, while unemployment rates continued to fall in Northern Ireland and Wearside the position in Leicestershire began to reflect the early signs of the end of the economic up-swing with unemployment rates remaining static in Leicestershire.

TABLE II
Unemployment rates in areas 1986–90 (annual %)

Area	1986	1987	1988	1989	1990
Leicestershire	9.3	7.6	5.8	4.2	4.2
Northern Ireland	17.2	17.0	15.6	14.6	13.4
Wearside	20.8	19.0	15.6	12.8	10.8
UK Average	11.1			5.8	5.8

Sources: Local Authorities; NIERC

The strength of the manufacturing sector in employment terms varies greatly between each of the study areas. Using Census of Employment data for 1991 the proportion of employees in the manufacturing sector ranges from just under one-fifth in Northern Ireland (19.2 per cent) to nearly one-third in Leicestershire (32.7 per cent). Wearside fell between these two extremes with 25.5 per cent of total employment recorded in the manufacturing sector. The focus on 1991 will have reduced the differences in these figures as a result of the growth advantage of the northern areas associated with the virtual absence of recession in Northern Ireland and to a lesser extent Wearside.

3. Components of change in manufacturing employment, 1986–90

Using the NIERC industrial databases for the period 1986–90 it emerges that there was a clear disparity in the performance of the manufacturing sector in each of the three regions (Table III). While manufacturing employment fell by 6.4 per cent in Leicestershire there was an increase of 2.5 per cent and 5.9 per cent in Northern Ireland and Wearside respectively. These figures tend to confirm the overall general tendency for northern areas to do better in manufacturing. For example, of the 25 best performing UK counties over the period 1987–91,[1] in terms of employment growth, 17 were in northern England, Scotland, Wales or

TABLE III
Components of change in manufacturing employment 1986–90

		Northern Ireland	Leicestershire	Wearside
A.	Companies established in 1986			
	Pre 1986 inward moves	–2,520 (–7.4)#		
	Other externally owned	–1,046 (–10.6)	–3,364 (–5.5)	–543 (–3.4)
*	Indigenously owned	973 (1.5)	–12,659 (–14.7)	116 (1.6)
	Net change	2,593 (–2.4)	–16,023 (–10.9)	–427 (–1.8)
B.	New inward moving firms and branch plants	1,247 (1.2)	1,372 (0.9)	1,401 (6.0)
C.	New indigenous firms	3,984 (3.7)	5,203 (3.5)	398 (1.7)
	Total change	2,638 (2.4)	–9,448 (–6.4)	1,372 (5.9)

Source: NIERC industrial databases
Notes: * includes Harland & Wolff and Short Bros.
percentage of base year employment in each category

Northern Ireland. Of the 20 worst performing counties 14 were in southern England. The three study areas considered in this paper represent the full range of growth performance. Wearside was the 4th fastest growing of 65 UK counties in terms of manufacturing employment, Northern Ireland was 9th and Leicestershire was in 54th position.

Disaggregating these net employment changes into the various components of industrial change the nature of the difference in employment performance between the three regions is revealed. These components of change for each of the three regions are also shown in Table III. The overall conclusion to emerge is that while each of the areas experienced a contraction among its established firms there were sufficient offsetting gains in Northern Ireland and Wearside through the mechanism of new indigenous firms and branches. New indigenous firms in Northern Ireland and Leicestershire have been an important source of new jobs in the late 1980s, while in the case of Wearside it was the impact of new branches, and in particular the location of the large Nissan car assembly plant at Washington in the late 1980s, which greatly assisted its performance. Furthermore, it is immediately clear that the better performance in Northern Ireland and Wearside compared with Leicestershire lies in a significantly lower level of job losses within existing indigenous firms (Table III).

It should be noted that in Northern Ireland a small net increase of 1.5 per cent in established indigenous firms included a loss of 2,500 jobs in the Belfast shipyard of Harland and Wolff, which at the beginning of the study period was classified as an indigenously-owned company. Thus, if Harland and Wolff was excluded from the analysis the established indigenous sector would have registered a larger net increase. This conclusion contrasts markedly with that of the earlier study period (1973–86) when the established indigenous sector in Leicestershire out-performed its Northern Ireland counterpart (Gudgin *et al.*, 1989; Hart, 1993). The main conclusion to emerge from the 1973–86 study was that the growth performance of surviving indigenous firms in Northern Ireland, especially small firms employing less than 50 persons, was unable to offset job losses through indigenous firm closures. As a result job creations through new indigenous firm formation could *not* be seen as truly net additional to the Northern Ireland economy unlike the situation in Leicestershire. This reversal in the fortunes of the indigenous sector in Northern Ireland over the 1986–90 period will be examined in greater detail below. A key question will be to what extent these differences in employment performance can be related to the overall trends in regional economic performance in the late 1980s.

Before completing this general overview of the individual components of change it is important to stress the range of possible interrelationships between each of them. In essence, they should not be regarded as insular processes of employment change. Three examples will suffice to illustrate this point. First, the scale of job loss in established firms in any region may directly influence the

rate of new firm formation as redundant workers choose to move into self-employment. Second, it is possible that the creation of new indigenous firms may adversely affect the performance of existing businesses, especially small firms, as a result of increasing competition in domestic regional markets. Third, the arrival of new inward moving firms and branches to a region may provide opportunities for existing local firms (small and large) as well as new firms to operate as suppliers or sub-contractors.

Therefore, although the focus in this paper is on the labour market impact of new and small firms the above examples clearly illustrate the complex nature of the regional economy. Despite the sometimes exaggerated claims of the small business lobby in the UK new indigenously-owned firms and existing small firms do not exist in a regional economic vacuum and should be seen as one part of the overall process of economic change which involves a range of business organisations. The value of a components of change approach to the study of employment change is that it facilitates an investigation of broad categories of firms.

4. Indigenous established firms

This section examines in detail the performance of indigenous established firms across the three study areas. From Table III it emerged that in aggregate these firms performed better in Northern Ireland and Wearside than in Leicestershire. In an attempt to understand the nature of this difference small firms (ie. less than 50 employees in 1986) are analysed separately from larger firms.

4.1. *Larger indigenous firms*

In aggregate larger indigenous firms in Northern Ireland performed better than in Wearside and Leicestershire (Table IV). This difference is further accentuated if, as noted above, the Harland and Wolff shipyard is excluded from the analysis. Compared to the earlier 1973–86 period this marked both an absolute and relative reversal in the fortunes of Northern Ireland's larger indigenous firms. As a measure of the influence of the mix of industries an 'expected' employment change was calculated by applying Leicestershire rates of change in each sector to base year employment in each of Northern Ireland's sectors (Table V). The results show that Northern Ireland's larger indigenous firms performed 17 per cent better than expected using Leicestershire's growth rates. Thus, the better performance of Northern Ireland's larger indigenous firms can not simply be attributed to a more favourable mix of industries. Repeating the analysis for Wearside a similar conclusion emerges albeit at a lesser magnitude.

Alternative explanations of these differences in employment performance may rest with the rela-

TABLE IV
Employment change within indigenous established firms, 1986–90

	Northern Ireland	Leicestershire	Wearside
	%	%	%
Small firms (<50 empl)	11.5	–2.0	18.3
Large firms	–5.1	–22.1	–15.8
All firms	1.5	–14.7	1.6

Source: NIERC industrial databases
Notes: Percentage of base year employment in categories

TABLE V
Actual and expected employment change 1986–90; larger indigenous companies

Area	Emp in 1986	Emp Change		Expected Emp Change		Actual Less Expected	
			%		%		%
Northern Ireland	38407	–1958	–5.1	–8542	–22.2	6584	17.1
Wearside	3601	–569	–15.8	–728	–20.2	159	4.4
Leicestershire	54464	–12034	–22.1	–12034	–22.1	0	0.0

Source: NIERC industrial data bases

tively better performance of the Northern Ireland and Wearside economies in the period, especially since 1989, coupled with the intensive policy assistance available to the indigenous sector in Northern Ireland. However, the growth of local markets would not normally be expected to impact upon larger firms since their market orientation would usually be outside the regional economy. Furthermore, a recent report has argued that grant-aid in 1988 was subject to a high degree of dead-weight which meant that grants either subsidised existing activities or helped finance activities which would have been undertaken without grant-aid, thereby increasing the firms profitability without a corresponding increase in output (Roper, 1993). Indeed, the higher than expected profit rates in Northern Ireland firms relative to GB was largely attributed to government grants and subsidies. Roper (1993) also confirmed the earlier conclusion by Gudgin *et al.* (1989) that the competitive position of larger indigenous firms was weak. Clearly, the growth in aggregate employment within Northern Ireland's larger indigenous firms in the period 1986–90 requires more detailed investigation than is possible in this paper.

4.2. *Small indigenous firms*

There is a sharp contrast between Northern Ireland, Wearside and Leicestershire in the net employment performance of small firms (Table IV). In Northern Ireland and Wearside the cohorts of small firms in 1986 had expanded their total employment by 1990 (11 per cent and 18 per cent respectively) while the cohort of small firms in Leicestershire had shed 2 per cent of its employment by 1990. Thus, as Table VI illustrates, surviving small firms in Northern Ireland and Wearside expanded sufficiently to offset job losses through closures. The closure rate for Northern Ireland small firms was lower than in the other two regions.

Those small firms which survived from 1986 to 1990 grew nearly two and a half times faster in Wearside than in Leicestershire, and one and a half times faster than in Northern Ireland. In turn Northern Ireland's surviving small firms grew almost one and a half times faster than those in Leicestershire. These patterns were also repeated in most individual sectors.

As a consequence of these trends it can be seen that the jobs created in new indigenous firms in both Northern Ireland and Wearside over the period 1986–90 (see Table III) can all be considered net additions to small firm employment. In other words older cohorts of small firms expanded and are further augmented by new small firms.

In Table VII the importance of the mix of industries to an explanation of these differences is examined. Once again 'expected' employment changes have been calculated in the same way as in Table V above. The results show that 'expected' change was most favourable in Wearside followed by Northern Ireland. This indicates that both areas had favourable mixes of industries compared with Leicestershire. That is, those industries which declined fastest in Leicestershire were less important in both Northern Ireland's and Wearside's industrial structure than in Leicestershire's. Allowing for variations in industrial structure between areas does not, therefore, account for the observed differences in small firm performance.

The growth performance of surviving small firms in association with a lower closure rate in the 1986–90 period demonstrates a remarkable transformation in the fortunes of the small firm sector in Northern Ireland compared to 1973–86 (Table VIII). The conclusion from the earlier study

TABLE VI
Mode of employment change, 1986–90: small indigenous firms

	Northern Ireland		Leicestershire		Wearside	
		%		%		%
All Established	2931	11.5	–625	–2.0	685	18.3
Survivors	6330	28.5	4999	19.1	1389	45.7
Closures	–3399	–13.3	–5624	–17.7	–704	–18.8

Source: NIERC industrial databases

TABLE VII
Actual and expected employment change 1986–90; small indigenous companies

Area	Emp in 1986	Emp Change		Expected Emp Change		Actual Less Expected	
			%		%		%
Northern Ireland	25598	2931	11.5	−262	−1.0	3193	12.4
Wearside	3744	685	18.3	−7	−0.2	692	18.4
Leicestershire	31760	−625	−2.0	−625	−1.9	0	0.0

Source: NIERC industrial bases

TABLE VIII
Annual employment change in surviving small firms

Area	% per annum 1973–86	% per annum 1986–90
Northern Ireland	2.9	6.8
Leicestershire	4.9	4.5
Wearside	–	9.9

Source: NIERC industrial databases

was that small firms in Northern Ireland were lagging behind their counterparts in Leicestershire as a result of an over-reliance on local markets combined with a lack of competitiveness. The work of Hitchens and O'Farrell in the late 1980s provided substantial verification of the poor competitiveness position, in terms of price and quality, of Northern Ireland small firms relative to their counterparts in GB (Hitchens and O'Farrell, 1987; 1988a; 1988b).

In attempting to account for this reversal of trends in the Northern Ireland small firm sector since 1986 a number of factors need to be examined. First, it must be acknowledged that the resurgence of the small firm sector could have commenced before 1986 but was not identified by the previous study because it spanned the 13 years from 1973 to 1986 without any intervening data points. Second, the widespread and perhaps convenient use of the Hitchens and O'Farrell work to "explain" the poor performance of the small firm sector in Northern Ireland in the period 1973–86 was perhaps overstated. Their research was undertaken during the 1986–90 period when as outlined above the *full population* of small firms in Northern Ireland was performing relatively well in terms of growth of survivors and the overall cohort survival rate. Thus, it has been proven to be rather erroneous to generalise their results to be indicative of the small firm sector as a whole. This experience further underlines the importance of undertaking regular monitoring exercises of the small firm sector using full population information.

Third, it must be acknowledged that the activities of LEDU, the Northern Ireland small business agency, have intensified substantially since the mid-1980s and this has undoubtedly had an effect upon the small firm sector. Indeed, in a recent evaluation of the impact of government financial assistance provided by LEDU, Hart *et al.* (1993) concluded that LEDU-assisted firms outperformed average companies in all of the comparator areas used in the analysis (ie. Wearside, Leicestershire and the Republic of Ireland). The relatively slower growth of the Northern Ireland economy in the period provided fewer market opportunities to local firms than that in say Leicestershire. The easier availability of labour, premises and finance together with other LEDU assistance seem likely to be among the factors allowing these firms to grow much faster. Northern Ireland assisted firms may also have taken advantage of external markets.

Fourth, part of the reason for the improvement in the relative performance of the Northern Ireland small firm sector can be found within the Leicestershire small firm sector. Leicestershire's small surviving firms expanded their employment by close to 5 per cent per annum in the late-1980s, as they had in the earlier 1973–86 period, despite a marked improvement in general economic conditions in the period 1986–89. This may indicate the existence of shortages of labour and premises acting as a constraint on faster growth in the boom conditions of the late-1980s.

Irrespective of the precise explanation for the

reversal of trends in small firm employment in Northern Ireland during the late-1980s the fact remains that the 1986 cohort of small firms has been able to create sufficient employment (6,330 jobs) to offset employment lost through closures (3,399 jobs). This is a vital ingredient of any strategy designed to regenerate the regional economy and is a very welcome conclusion to be drawn from this job generation analysis.

5. New indigenous firms

Northern Ireland produced 554 new independent indigenous manufacturing firms in the 1986–90 period which had survived, and by 1990 they employed 3,984 persons (Table IX). New firm formation is clearly an important source of job generation to the region and has created just over three times as many jobs as inward investment by externally-owned companies. Furthermore, as outlined in the previous section these 3,984 jobs can be viewed as truly *net additional* to the Northern Ireland economy in that the 1986 cohort of small firms had expanded.

In Leicestershire 321 new indigenous firms were created in the 1986–90 period which had survived to employ 5,203 persons in 1990. Although inward investment has traditionally been of lesser importance in the Leicestershire economy it is interesting to note that as in Northern Ireland job creation through new firm formation was over three times as important as jobs created by inward moving branches and firms. For the first time in many decades, however, these job creations were having to offset a declining cohort of small firms. New firm formation in Wearside took place at a more modest level over the 1986–90 period with only 48 surviving new indigenous firms created which employed 398 persons in 1990. To aid comparison Table IX expresses the employment created in surviving new firms as a percentage of manufacturing employment in 1986. The result clearly indicates that Northern Ireland fared slightly better than Leicestershire with almost 4 per cent of 1986 employment, while both these regions outperformed Wearside which had only 1.7 per cent of its 1986 employment level in surviving new firms. Table IX also indicates that surviving new firms in Leicestershire are on average twice the size of their counterparts in Northern Ireland and Wearside. The precise reasons for these larger new firms do not lie with the perhaps obvious interpretation that they are to be found in high growth sectors. An examination of the sectoral distribution reveals that if anything surviving new firms in Leicestershire are more likely to be found in the more traditional sectors of clothing, textiles, mechanical engineering and paper and printing. The reason may simply be the opportunities for fast growth after start-up in a local economy which exhibited a relatively greater increase in local demand in the late 1980s (especially 1986–89) compared to the other two regions.

The great majority of new firms in the study areas remain small although this is less true for new firms in Leicestershire (Tables X–XII). In Northern Ireland and Wearside approximately three-quarters of all new firms employed under 11 persons in 1990. However, even these firms accounted for nearly two-fifths of total new firm employment in 1990. The comparable figure for Leicestershire was just under one-fifth. Although it has been repeatedly argued by Storey (1993) that most jobs in new firms are generated by the few high flyers, the evidence presented here would tend to question the contention that the majority of jobs are generated by a small minority of new

TABLE IX
Employment in 1990 in new firms formed 1986–90

Area	Number of Firms	Average Employment	Total	Employment % of base year manufacturing
Northern Ireland	554	7.2	3984	3.7
Leicestershire	321	16.2	5203	3.5
Wearside	48	8.3	398	1.7

Sources: NIERC industrial databases

TABLE X
New independent companies surviving to 1990 in Northern Ireland

Size Band	Number of Firms	Percentage	Employment	Percentage
1–4	345	62.3	684	17.2
5–10	123	22.2	839	21.1
11–24	54	9.7	826	20.7
25–49	18	3.2	572	14.4
50–99	11	2.0	618	15.5
100+	3	0.5	445	11.2
Total	554	100.0	3984	100.0

Source: NIERC industrial databases

TABLE XI
New independent companies surviving to 1990 in Leicestershire

Size Band	Number of Firms	Percentage	Employment	Percentage
1–4	83	25.9	213	4.1
5–10	100	31.2	685	13.2
11–24	68	21.2	1087	20.9
25–49	46	14.3	1448	27.8
50–99	20	6.2	1203	23.1
100+	4	1.2	567	10.9
Total	321	100.0	5203	100.0

Source: NIERC industrial databases

TABLE XII
New independent companies surviving to 1990 in Wearside

Size Band	Number of Firms	Percentage	Employment	Percentage
1–4	22	45.8	54	13.6
5–10	14	29.2	89	22.4
11–24	8	16.7	121	30.4
25–49	4	8.3	134	33.7
50–99	0	0.0	0	0.0
100+	0	0.0	0	0.0
Total	48	100.0	398	100.0

Source: NIERC industrial databases

firms employing over 50 persons. Taking Northern Ireland as an example, while the 14 largest firms with over 50 employees each, employed 1,063 people by 1990, the medium sized companies employed 1,529 people. Nevertheless, this small number of fast-growth new firms (2 per cent) are important and account for around one-quarter of all the jobs in surviving new firms.

The comparative performance of the three study areas is further examined in Table XIII which presents data on formation rates. Calculation of a formation rate is not straightforward since there is no single unambiguous choice for denominator. The conventional measures reflect the stock of potential entrepreneurs and use employment in the relevant sectors. Conventionally this is base year employment in manufacturing. However, since some founders originate from non-manufacturing

TABLE XIII
Net formation rates for new firms 1986–90

Area	Number of Firms	Formation Rates (A)	(B)
		%	%
Northern Ireland	554	5.1	3.6
Leicestershire	321	2.2	1.8
Wearside	48	2.1	1.5

Source: NIERC industrial databases
Notes: (A) Manufacturing employment in 1986
(B) Manufacturing employment plus 12% of non-manufacturing in 1986

backgrounds it is advantageous to include some non-manufacturing employees in the denominator. A range of survey evidence has led us to include 12 per cent of non-manufacturing employment. Formation rates are shown in Table XIII both with and without this addition of non-manufacturing employees.

Irrespective of the measure used Northern Ireland's formation rate is significantly higher than in the other two areas and, superficially at least, represents one of the few positive features of the regional economy. Furthermore, this finding would tend to reinforce the evidence emerging from a regional analysis of VAT registrations for the production sector in the UK (Hart *et al.*, 1993; Hart, 1993). Over the period 1980–90 Northern Ireland's gross formation rate was the sixth highest out of the eleven standard regions and was the only exception in the broad 'north-south' pattern that emerged which saw the southern regions achieve the highest formation rates. In terms of net formation, which is normally viewed as a measure of surviving new firms and thus more directly comparable to the data in Table XIII, Northern Ireland's rank position moves to fourth. The Northern region (including Wearside) was ranked 11th and 8th respectively, while the East Midlands (including Leicestershire) was ranked just ahead of Northern Ireland in terms of gross formations (fourth) and just behind Northern Ireland with respect to net formations (fifth). Therefore, contrary to the accepted wisdom within economic policy debates in Northern Ireland the new firm formation rate in Northern Ireland is higher than perceived and is in fact around the UK average.

Table XIV compares the standardised formation rates between Northern Ireland and Leicestershire in the two study periods 1973–86 and 1986–90. The appropriate data for Wearside was not available for the earlier period. In terms of a net formation rate, expressed in terms of the number of new firms per 1,000 employees, Northern Ireland has moved from a position of just lagging behind that of Leicestershire in the 1973–86 period to one where the formation rate is more than double. Although the formation rate has actually fallen in Leicestershire there has been a significant increase in the Northern Ireland rate since the earlier study. Table XIV also presents comparative time period data on the contribution of new firms in terms of the percentage of base year employment. To allow

TABLE XIV
Comparative new firm formation rates

Area	1973–86 New Firm Formation Rate		(1) Actual Employment %	(2) Standardised Employment %	1986–90 New Firm Formation Rate		(1) Actual Employment %	(2) Standardised Employment %
	13 year	per annum			4 year	per annum		
Northern Ireland	9.0	0.69	9.8	7.5	3.7	0.92	3.8	9.7
Leicestershire	9.9	0.76	11.6	8.9	1.8	0.45	3.5	8.7

Source: NIERC industrial databases

Notes: (1) Percentage Actual Employment = $\frac{\text{Total Employment in New Firms in Final Year}}{\text{Total Employment in Base Year}}$

(2) Standardised Employment relates to a 10 year period : a simple ratio was used

for the differences in the number of years the data is standardised to a ten year period by using a simple ratio. The overall trend remains the same with Northern Ireland moving ahead of Leicestershire as a result of new firms in Northern Ireland making a greater contribution to employment than their counterparts in Leicestershire. This increase in Northern Ireland can not, however, be attributed to the rapid decline in manufacturing employment in the 1986–90 period.

Hart *et al.* (1993) sought to isolate the influence of LEDU in the raising of the formation rate in Northern Ireland. Concentrating on the 1986–90 period the overall conclusion was that the availability of government assistance in Northern Ireland may have boosted the gross formation rate of new manufacturing firms by around 16 per cent, or 200 firms. Of these only a proportion will have survived to 1990. The number of additional surviving new firms is indeterminate, but the evidence suggests that at least some, and perhaps as many as 100, may have survived to 1990 as a result of government assistance.

6. Conclusions

The results of the comparative components of change analysis has clearly highlighted the important role of new and small firms in the job generation process in the late 1980s. This was particularly the case in Northern Ireland where together they created 10,314 jobs in the period 1986–90. Overall, the 1986 cohort of small firms expanded by 11 per cent with the 6,330 job gains through the growth of surviving small firms offsetting the 3,399 jobs lost through closures. Thus, the 3,984 jobs created by new indigenous firms can be viewed as truly net additional to the Northern Ireland economy.

A comparison of the 1986–90 and 1973–86 periods demonstrated that the 'components' of net employment change in the two periods have changed quite dramatically. The conclusion to the 1973–86 study highlighted the poor performance of the indigenous sector in Northern Ireland, especially the small firm sector, as a key element in the region's inability to generate jobs on a comparable scale to other more successful regions in the UK. This conclusion, however, can no longer be substantiated for the late 1980s as there has been a clear reversal in the fortunes of the small firm sector. One consequence of this is that Hitchens and O'Farrell's research into the comparative performance of small firms, which highlighted the weak competitive position of Northern Ireland small firms, needs to be interpreted with some caution. Clearly, the conclusion reached by Hitchens and O'Farrell is not supported when the comparative performance of the small firm sector is considered in aggregate. Thus, the value of continually monitoring the individual components of employment change using databases containing *populations* of firms cannot be overstated in a region where small firm policy is an important element of an overall industrial strategy.

The components of employment change methodology does not in itself provide an explanation of the performance of particular groups of firms. It is purely a job accounting framework which allows the researcher to focus on job gains and losses associated with firm size, industrial sector or ownership. How then do we account for the improved performance of the small firm sector in Northern Ireland in the late 1980s?

Part of the explanation may be attributed to the modest growth in manufacturing GDP that was recorded in Northern Ireland in the final year of the study period (see Table I). Whilst not fully benefitting from the effects of the economic boom since 1986 Northern Ireland did not experience the rapid economic downturn towards the end of 1989 and throughout 1990.

The activities of LEDU in Northern Ireland have had a clear impact on the job generation process (Hart *et al.*, 1993). In particular, LEDU assistance has increased the rate of new firm formation and enhanced the growth performance of surviving small firms. However, as Hart *et al.* (1993) point out these positive effects of public policy on the small firm sector need to be set against the fact that there was a significant level of displacement (40 per cent) associated with LEDU assistance over the financial years 1984/85 to 1988/89. The level of displacement was calculated primarily on the basis that the vast majority of small firms in Northern Ireland were selling their output into the local regional market. Therefore, although the late 1980s have witnessed an expanding small firm sector in Northern Ireland this high level of displacement may prevent the

sustainability of these trends. For example, the creation of new indigenous firms and the expansion of existing small firms may eventually accelerate the closure or restrict the expansion of other small firms in the region unless a greater dependence upon external markets can be fostered.

Finally, the evidence from the analysis in this paper demonstrates that irrespective of the performance of the small firm sector the key determinant of employment growth or decline are the activities of larger firms, whether indigenously or externally owned. For example, in Northern Ireland the loss of 2,500 jobs in the shipbuilding industry coupled with a net decline of 3,571 jobs in externally controlled branches more than cancels out any gains through new firm formation between 1986 and 1990. Indeed, one could argue that the fortunes of the small firm sector are intrinsically linked to those of larger firms (Hart, 1993). Therefore, any regional or national industrial strategy must seek to increase the competitive position of *all* firms. The notion that policies designed to increase new firm formation rates or stimulate small firm growth will on their own generate sustainable economic growth is too simplistic.

Note

[1] Unfortunately data are not available from the Census of Employment for the study period 1986–90.

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