Chapter 15. Spatial Trends in Employment in Foreign Firms in Ireland

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15.1 Introduction

In a country with a small domestic market such as Ireland's, the development of exports is the key to achieving high living standards. The Irish government has relied principally on inward investment by foreign firms as the principal means of achieving this since the late 1950s. Generous capital grants, tax incentives and the availability of suitable labour have been the principal means employed to attract inward investment.

This policy met with increasing success through the 1960s followed by a surge of investment following Ireland's accession to what was then called the European Economic Community (EEC) in 1973, as this meant that foreign firms could use Ireland as a low-cost base for serving the large EEC market. This was followed by a slowdown during most of the recessionary 1980s, during which many of the plants established in the previous two decades contracted or closed.

However, things picked up again in the late 1980s and, following a brief dip in the early 1990s, a further surge of inward investment commenced in 1993 which underpinned the "Celtic Tiger" phenomenon and saw employment in foreign firms increase by two thirds (to 164,000) by 2000. The great bulk of this new investment came from the USA which by 2000 accounted for two thirds of all employment in foreign firms operating in Ireland.

In the period 2000-2010, while the reported exports of foreign firms based in Ireland continued to grow strongly (by 56% in current prices), there was a sharp fall (of 22%) in employment. Furthermore, the spin-off effects of foreign firms also contracted: expenditure by foreign firms on wages/salaries, materials and services fell by 18% (in current terms) over the period. This apparent conflict between trends in exports, on the one hand, and employment and local expenditures, on the other, is an indication of the extent to which the Irish output data for foreign firms are being distorted by transfer price manipulation on the part of the firms in question in order to exploit Ireland's tax advantages.

Over the last thirty years the IDA became increasingly selective in the types of investment it sought to attract to Ireland, focusing on sectors with long-term growth prospects for which an Irish location was suitable. In manufacturing, the main concentrations in the 1990s were in electronics (mainly office and computing machinery) and chemicals/pharmaceuticals. However, a more significant development was the rapid rise in investment in services activities capable of using information technology for conducting international transactions, especially software/computer services, financial services (whose growth primarily emanated from the establishment of the International Financial Services Centre in Dublin in 1987) and business services (especially back-office activities). By 2000, employment in foreign-owned services operations amounted to 46,000, 28% of all foreign-firm employment.

In the 2000s the electronics sector was heavily affected by, firstly, the dot.com crash in the early part of the decade and, secondly, by the emergence of China as a major global competitor in this sector. Foreign employment in the sector fell by one half between 2000-2010. Non-electronics manufacturing employment fell by 25%, but losses in chemicals/pharmaceuticals were at a much lower level (8%) while the medical devices sector did well over the decade. Employment in international services actually increased marginally over the period, so that its share of total employment in foreign firms rose to 36%.

15.2 EARLY SPATIAL POLICY AND PATTERNS

From the commencement of the inward investment policy, it was government policy to encourage a broad geographical dispersal of foreign-owned projects. This was designed to counter the existing pattern of industrial location, which was heavily concentrated in and around the main cities. This policy was formalised in the Regional Industrial Plans implemented by the IDA (which had been given responsibility for regional industrial development in 1969) during 1973-82, which pursued a very ambitious policy of industrial dispersal, underpinned by a major programme of "advance" factory construction. This included the allocation of 77 factory units to 57 towns and villages of less than 1,500 (i.e. officially "rural") with a further 63 units going to 35 small towns (population 1,500-5,000), located mainly in rural areas. Between them, these accounted for almost one quarter of all advance factory floorspace built.

With existing industry (mainly in urban locations) experiencing major contraction in the free trade conditions which accompanied EEC entry (exacerbated by international recession in the 1970s and early 1980s), this period witnessed a major shift in industrial location patterns in favour of less-developed and more rural regions. Thus, in 1981, the proportion of total manufacturing employment accounted for by foreign firms was around 50% in the northwest, west and midwest regions while it was much less in the east, northeast and southeast (Gillmor, 1985).

However, most of the employment in the firms in question was in unskilled and poorly-paid activities with a high female content, such as clothing, electronics assembly and packaging of pharmaceutical products. While this made it easy to attract the plants in question to more rural areas with little previous experience of industrialisation, it did little to raise skill levels (and thereby long-term development prospects) in the areas in question. These plants also developed few local roots, which rendered them vulnerable to contraction or closure in recessionary periods such as were experienced in the 1980s or in the face of rising wages and other costs such as occurred in Ireland in the 1990s. Few of the foreign plants established in Ireland in the 1970s continue in operation today.

The failure of the industrial dispersal policy of the 1960s/70s to create a sustainable base for rural development in Ireland was freely admitted by the (then) Department of Enterprise, Trade and Employment in its 2003 *Review of Industrial Policy*: "In many cases… the enterprises established in rural areas were heavily dependent on low labour costs and were not rooted in any more lasting sources of comparative advantage. While they gave a boost to their local economies during their time here, this did not offer a viable basis for long-term development" (p.167). Accordingly: "There is no longer a national strategy of dispersing industrial employment and it is becoming increasingly difficult to attract overseas industry to areas outside the major population centres" (Commins and Keane, 1994, p.195).

This became apparent with the new wave of inward investment which occurred in the 1990s and involved much higher levels of skill than had been the case with earlier investment phases. This had major implications for rural and small-town locations, as incoming firms were drawn to larger urban centres where pools of skilled workers were more likely to be found. This applied in particular to the rapidly-growing international services sector, which has a particular orientation towards the main cities, and especially Dublin. The fact that much of the new investment involved large-scale production units and office operations further reinforced the attractions of larger urban centres. The contraction of manufacturing employment among foreign firms in the 2000s has had further negative implications for more rural regions, as much of this involved the more routine forms of electronics production which had been more dispersed in its locational patterns.

15.3 METHODOLOGY

From information obtained from the annual Forfás survey of employment in firms which have received assistance from one of the Irish government's enterprise promotion agencies (IDA, Enterprise Ireland, Shannon Development, Údarás na Gaeltachta) - henceforth "agency-assisted" firms - it is possible to analyse spatial trends in employment in foreign firms in some detail for the period 2001-2011[1]. The spatial units used for this analysis are a set of 72 "local urban fields" (LUFs), representing the commuting hinterlands of all non-dormitory towns with at least 1,500 in-situ jobs in 2006. The population census for that year allowed the actual location of jobs (as distinct from the places of residence of workers) to be mapped using commuting data derived from the census.

In adopting this approach, the analysis here accepts the view advanced by Commins and Keane (1994) and also adopted by the European Spatial Development Perspective (1999) that it is not realistic to view the development of rural areas (i.e. those areas lying outside urban centres of 1,500+ population) in isolation from the local and regional urban centres within whose hinterlands these areas lie. This arises particularly from the decline of agriculture as a rural employment source and the increasing mobility of rural dwellers (of which rural-urban commuting is one dimension).

[1] Much of the data assembly and analysis involved was carried out by Dr Chris van Egeraat of the Department of Geography at NUI Maynooth and Dr. Declan Curran of the Dublin City University Business School, in conjunction with the current author.

Due to issues of small numbers and confidentiality, it has been necessary to combine most of the LUFs into 38 larger groupings. This has been done on the basis of contiguity, spatial coherence and the minimum necessary to overcome the small numbers and confidentiality issues. These have been analysed in terms of trends in employment in foreign firms, disaggregated into material production activities (mostly manufacturing) and services, over the two periods 2001-2006 and 2006-2011. In the following, "employment" refers to employment in foreign firms unless otherwise specified. While material production includes a small amount of non-manufacturing activity (e.g. agriculture and fishing) we refer to this sector as "manufacturing". Dublin includes adjacent areas in northwest Kildare and southeast Meath.

15.4 OVERALL EMPLOYMENT TRENDS 2001-2011

In 2001, foreign firms accounted for a slight majority (51%) of all employment in agency-assisted firms (Table 1). This was made up of a minority share (48%) of manufacturing employment (which in turn represented 73% of total employment) but a substantial majority (60%) of services employment. Between 2001-2006, overall employment in foreign firms fell very marginally (0.6%), compared with an increase of 7% in indigenous employment. However, this minor overall change masked a fall of 9% in manufacturing (mainly in electronics), and an increase of 18% in services. The corresponding figures for the indigenous sector were a fall of just 1% in manufacturing and a sharp rise (36%) in services. As a result, the foreign sector share fell to 46% in manufacturing and 56% in services.

Between 2006-2011 (Table 2), total foreign-firm employment fell by 9% compared to 11% for indigenous firms, leaving the foreign sector with a slight majority of total employment at the end of the period. Again, the overall rate of decline in foreign employment masked a severe fall in manufacturing employment (18%) and a significant further rise in services (7%). The corresponding figures for indigenous firms were a 20% fall in manufacturing and a 10.5% increase in services. As a result, the foreign share of manufacturing rose slightly and of services fell slightly.

Over the entire period, therefore, total employment in foreign firms fell by 9% compared with 5% for indigenous firms (Table14.3). Foreign manufacturing employment fell by 26% (21% for indigenous) while services employment rose by 26% (50% for indigenous). Within the foreign sector, the services share of total employment rose from 32% to 44% over the decade. Foreign firms which commenced production after 2006 employed 11,268 people in 2011 (7.0% of total foreign employment in that year). Of these "new" jobs, 84% were in services. This contrasting performance of the manufacturing and services sectors clearly will have had a substantial impact on spatial trends in employment, given the different locational patterns of the two sectors.

Table 15.1 Broad Employment Trends 2001 – 2006

	2001						2006								
	Tot Emp	%	Mfg	%	Services	%	Tot Emp	Ch%0106	%	Mfg	Ch%0106	%	Services	Ch%0106	%
Foreign	176545	51.4	120077	48.1	56468	60.3	175523	-0.6	49.6	109017	-9.2	46.0	66506	17.8	56.8
Indigenous	166623	48.6	129477	51.9	37146	39.7	178386	7.1	50.4	127870	-1.2	54.0	50516	36.0	43.2
Total	343168	100	249554	100	93614	100	353909	3.1	100	236887	-5.1	100.0	117022	25.0	100.0

Table 15.2 Broad Employment Trends 2006 – 2011

	2006						2011								
	Tot Emp	%	Mfg	%	Services	%	Tot Emp	Ch%0611	%	Mfg	Ch%0611	%	Services	Ch%0611	%
Foreign	175523	49.6	109017	46.0	66506	56.8	160461	-8.6	50.3	89221	-18.2	46.5	71240	7.1	56.1
Indigenous	178386	50.4	127870	54.0	50516	43.2	158293	-11.3	49.7	102485	-19.9	53.5	55808	10.5	43.9
Total	353909	100	236887	100.0	117022	100.0	318754	-9.9	100.0	191706	-19.1	100.0	127048	8.6	100.0

Table 15.3 Broad Employment Trends 2011 – 2011

	2001						2011								
	Tot Emp	%	Mfg	%	Services	%	Tot Emp	Ch%0611	%	Mfg	Ch%0611	%	Services	Ch%0611	%
Foreign	176545	51.4	120077	48.1	56468	60.3	160461	-9.1	50.3	89221	-25.7	46.5	71240	26.2	56.1
Indigenous	166623	48.6	129477	51.9	37146	39.7	158293	-5.0	49.7	102485	-20.8	53.5	55808	50.2	43.9
Total	343168	100	249554	100	93614	100	318754	-7.1	100.0	191706	-23.2	100.0	127048	35.7	100.0

15.5 SPATIAL DISTRIBUTION OF FOREIGN EMPLOYMENT IN 2001

Table 4 shows the proportion of total employment in agency-assisted firms by Local Employment Field (LUF) in 2001. This shows major spatial variation, ranging from Athlone at the top of the list (78%) to the Mallow group (Mallow/Mitchelstown/Charleville) of LUFs at the bottom (9%)[2]. Of the 38 LUFs, 17 have an above-average share of foreign employment. These include all five main cities although Dublin, interestingly, has the lowest share of this group. It is perhaps surprising to see Athlone at the top of the list, exceeding even Ennis/Shannon (given the historic role of Shannon as a specific target for the attraction of inward investment to Ireland).

Table 15.4 Foreign firm % share of total employment 2001, 2006, 2011

Year	2001	2006	2011
Arklow/Gorey	28.0	45.3	41.7
Athlone	78.4	64.0	76.0
Ballina	41.7	37.4	53.5
Ballinasloe/Loughrea	52.3	39.8	19.2
Bandon/Macroom	39.4	31.5	40.4
Bantry/Clonakilty/Skibbereen	10.3	11.9	13.7
Bray/Wicklow	48.2	42.1	43.5
Carlow	27.8	19.0	15.4
Carrick-on-Shannon/Longford/Roscommon	29.7	44.4	41.7
Castlebar/Westport	57.9	46.8	44.4
Cavan	20.8	17.0	18.3
Clonmel/Carrick-on-Suir	58.0	58.3	67.3
Cork City/Midleton	68.4	67.4	70.9
Donegal County	35.7	24.2	31.4
Drogheda	33.7	31.4	28.9
Droichead Nua	61.8	54.4	49.9
Dublin	55.9	56.2	56.3
Dundalk/Ardee	62.0	53.2	45.4
Dungarvan/Fermoy/Youghal	59.1	55.4	50.9
Ennis/Shannon	75.5	71.9	69.2
Galway/Tuam	56.7	60.0	61.9
Kilkenny	11.3	11.4	12.8
Killarney	67.2	45.9	51.8
Limerick City	67.0	60.5	54.4
Listowel/Newcastlewest	48.9	44.3	40.6

[2] In this and subsequent tables which show distributions for 2001, 2006 and 2011, the LUFs are listed in alphabetical order. References in the text to "top of the list/table" etc. refer to the highest values in the table rather than the actual placing of the LUFs in the table as presented.

Mallow/Mitchesltown/Charleville	8.8	23.0	21.8
Monaghan County	14.3	12.7	12.1
Mullingar	53.9	32.6	22.2
Naas	39.8	35.2	27.6
Navan/Trim	24.1	17.6	18.2
Nenagh/Birr/Roscrea	34.2	17.2	8.6
Portlaoise/Athy	33.8	29.3	26.6
Sligo	53.3	53.8	58.4
Thurles/Tipperary/Cashel	40.0	32.3	22.4
Tralee	30.0	23.3	17.5
Tullamore/Edenderry	52.3	38.3	30.0
Waterford City	58.8	52.9	47.4
Wexford/New Ross/Enniscorthy	36.8	34.0	35.1
Total	51.4	49.6	50.3

Table 4 tells us nothing about the absolute level of foreign employment in the different LUFs, nor indeed how this compares with that in indigenous employment. It may be, for example, that the IDA (part of whose remit is responsibility for regional industrial development) seeks to steer inward investment to areas where the presence of employment in indigenous firms is weak (and vice-versa). There are some hints at this in Table 4, in that many of the LUFs with the weakest relative foreign presence (the Mallow group, the Monaghan County group - Monaghan/ Castleblayney/Carrickmacross - and Cavan) have strong indigenous manufacturing sectors based mainly on food processing.

In order to explore this further, the simple device was used of expressing employment in both foreign and indigenous firms as a ratio of population, which provides a useful way of comparing the relative “density” of employment in both groups across LUFs. We have used the 2006 population for this census; using a single census provides a fixed baseline against which change over time can be assessed. The resultant density distributions are shown in Table 5 (indigenous firms) and Table 6 (foreign firms). Both tables show very high levels of internal variation in 2001. Monaghan County and the Mallow group have by far the highest densities of indigenous employment, more than five times that of Athlone and Killarney at the other end of Table 5. The relative gap between Ennis/Shannon and Waterford City (at the top of Table 6) and the Bantry group (Bantry/Clonakilty/Skibbereen), Kilkenny and the Mallow group (at the bottom) is even greater.

Table 15.5 Employment density and change, indigenous firms 2001, 2006, 2011

LUF	Pop06	Emp01	Emp/000	Emp06	Ch%0106	Emp/000	Emp11	Ch%0611	Emp/000
Arklow/Gorey	48417	1927	39.8	1420	-26.3	29.3	1070	-24.6	22.1
Athlone	41,757	751	18.0	1260	67.8	30.2	755	-40.1	18.1
Ballina	37,372	1444	38.6	1679	16.3	44.9	1056	-37.1	28.3
Ballinasloe/Loughrea	39026	921	23.6	1010	9.7	25.9	1088	7.7	27.9
Bandon/Macroom	39779	2129	53.5	2982	40.1	75.0	1872	-37.2	47.1
Bantry/Clonakilty/Skibbereen	48138	1892	39.3	2335	23.4	48.5	2425	3.9	50.4
Bray/Wicklow	87860	2755	31.4	2470	-10.3	28.1	1772	-28.3	20.2
Carlow	63,408	3471	54.7	3384	-2.5	53.4	3033	-10.4	47.8
Carrick-on-Shannon/Longford/Roscomon	92515	3643	39.4	3465	-4.9	37.5	2727	-21.3	29.5
Castlebar/Westport	84248	2516	29.9	2833	12.6	33.6	2885	1.8	34.2
Cavan	58,896	3627	61.6	4355	20.1	73.9	4398	1.0	74.7
Clonmel/Carrick-on-Suir	61452	2103	34.2	2150	2.2	35.0	1906	-11.3	31.0
Cork City/Midleton	308,091	8906	28.9	10437	17.2	33.9	9730	-6.8	31.6
Donegal County	140451	6551	46.6	6296	-3.9	44.8	4947	-21.4	35.2
Drogheda	93,447	3544	37.9	3445	-2.8	36.9	3150	-8.6	33.7
Droichead Nua	66,233	1673	25.3	2031	21.4	30.7	1883	-7.3	28.4
Dublin	1,260,167	53255	42.3	55636	4.5	44.1	52939	-4.8	42.0
Dundalk/Ardee	70,150	1770	25.2	2119	19.7	30.2	2005	-5.4	28.6
Dungarvan/Fermoy/Youghal	62,227	1751	28.1	1654	-5.5	26.6	1227	-25.8	19.7
Ennis/Shannon	88,140	2637	29.9	2793	5.9	31.7	2866	2.6	32.5
Galway/Tuam	197,184	8105	41.1	8191	1.1	41.5	7565	-7.6	38.4
Kilkenny	75,372	3650	48.4	4278	17.2	56.8	3416	-20.1	45.3
Killarney	45,578	715	15.7	845	18.2	18.5	748	-11.5	16.4
Limerick City	161,450	5156	31.9	6819	32.3	42.2	5429	-20.4	33.6

Listowel/Newcastlewest	43,207	1632	37.8	1625	-0.4	37.6	1129	-30.5	26.1
Mallow/Mitchelstown/Charleville	64,961	5478	84.3	4288	-21.7	66.0	3299	-23.1	50.8
Monaghan County	58,512	5494	93.9	6147	11.9	105.1	4599	-25.2	78.6
Mullingar	51,646	1096	21.2	1621	47.9	31.4	1521	-6.2	29.5
Naas	55,417	2356	42.5	2520	7.0	45.5	2257	-10.4	40.7
Navan/Trim	90,008	3428	38.1	3339	-2.6	37.1	3431	2.8	38.1
Nenagh/Birr/Roscrea	56,146	2572	45.8	3178	23.6	56.6	2603	-18.1	46.4
Portlaoise/Athy	73,761	1830	24.8	1860	1.6	25.2	1304	-29.9	17.7
Sligo	84,598	2840	33.6	2564	-9.7	30.3	1923	-25.0	22.7
Thurles/Tipperary/Cashel	58,980	1223	20.7	1354	10.7	23.0	978	-27.8	16.6
Tralee	83,591	4161	49.8	4182	0.5	50.0	3448	-17.6	41.2
Tullamore/Edenderry	58,608	1869	31.9	2386	27.7	40.7	2175	-8.8	37.1
Waterford City	79,539	4411	55.5	5393	22.3	67.8	4870	-9.7	61.2
Wexford/New Ross/Enniscorthy	109,516	3341	30.5	4042	21.0	36.9	3864	-4.4	35.3
Total	4239848	166623	39.3	178386	7.1	42.1	158293	-11.3	37.3

Table 15.6 Employment density and change, foreign firms 2001, 2006, 2011

LUF	Pop06	Emp01	Emp/000	Emp06	Ch%0611	Emp/000	Emp11	Ch%0611	Emp/000
Arklow/Gorey	48417	751	15.5	1177	56.7	24.3	765	-35.0	15.8
Athlone	41,757	2732	65.4	2238	-18.1	53.6	2396	7.1	57.4
Ballina	37,372	1031	27.6	1002	-2.8	26.8	1214	21.2	32.5
Ballinasloe/Loughrea	39026	1009	25.9	669	-33.7	17.1	259	-61.3	6.6
Bandon/Macroom	39779	1382	34.7	1373	-0.7	34.5	1267	-7.7	31.9
Bantry/Clonakilty/Skibbereen	48138	218	4.5	316	45.0	6.6	386	22.2	8.0
Bray/Wicklow	87860	2566	29.2	1794	-30.1	20.4	1365	-23.9	15.5
Carlow	63,408	1335	21.1	796	-40.4	12.6	554	-30.4	8.7
Carrick-on-Shannon/Longford/Roscommon	92515	1542	16.7	2772	79.8	30.0	1950	-29.7	21.1
Castlebar/Westport	84248	3459	41.1	2490	-28.0	29.6	2302	-7.6	27.3
Cavan	58,896	952	16.2	893	-6.2	15.2	983	10.1	16.7
Clonmel/Carrick-on-Suir	61452	2907	47.3	3012	3.6	49.0	3929	30.4	63.9
Cork City/Midleton	308,091	19251	62.5	21613	12.3	70.2	23712	9.7	77.0
Donegal County	140451	3633	25.9	2009	-44.7	14.3	2266	12.8	16.1
Drogheda	93,447	1805	19.3	1579	-12.5	16.9	1280	-18.9	13.7
Droichead Nua	66,233	2701	40.8	2421	-10.4	36.6	1872	-22.7	28.3
Dublin	1,260,167	67392	53.5	71452	6.0	56.7	68312	-4.4	54.2
Dundalk/Ardee	70,150	2888	41.2	2406	-16.7	34.3	1665	-30.8	23.7
Dungarvan/Fermoy/Youghal	62,227	2528	40.6	2052	-18.8	33.0	1272	-38.0	20.4
Ennis/Shannon	88,140	8134	92.3	7158	-12.0	81.2	6431	-10.2	73.0
Galway/Tuam	197,184	10597	53.7	12297	16.0	62.4	12289	-0.1	62.3
Kilkenny	75,372	463	6.1	551	19.0	7.3	501	-9.1	6.6
Killarney	45,578	1465	32.1	716	-51.1	15.7	805	12.4	17.7
Limerick City	161,450	10487	65.0	10437	-0.5	64.6	6468	-38.0	40.1

Listowel/Newcastlewest	43,207	1561	36.1	1293	-17.2	29.9	773	-40.2	17.9
Mallow/Mitchelstown/Charleville	64,961	531	8.2	1278	140.7	19.7	918	-28.2	14.1
Monaghan County	58,512	913	15.6	895	-2.0	15.3	633	-29.3	10.8
Mullingar	51,646	1279	24.8	785	-38.6	15.2	433	-44.8	8.4
Naas	55,417	1558	28.1	1366	-12.3	24.6	859	-37.1	15.5
Navan/Trim	90,008	1086	12.1	715	-34.2	7.9	764	6.9	8.5
Nenagh/Birr/Roscrea	56,146	1337	23.8	661	-50.6	11.8	245	-62.9	4.4
Portlaoise/Athy	73,761	934	12.7	769	-17.7	10.4	472	-38.6	6.4
Sligo	84,598	3240	38.3	2986	-7.8	35.3	2703	-9.5	32.0
Thurles/Tipperary/Cashel	58,980	814	13.8	645	-20.8	10.9	283	-56.1	4.8
Tralee	83,591	1784	21.3	1271	-28.8	15.2	729	-42.6	8.7
Tullamore/Edenderry	58,608	2046	34.9	1483	-27.5	25.3	930	-37.3	15.9
Waterford City	79,539	6289	79.1	6067	-3.5	76.3	4385	-27.7	55.1
Wexford/New Ross/Enniscorthy	109,516	1945	17.8	2086	7.2	19.0	2091	0.2	19.1
Total	4239848	176545	41.6	175523	-0.6	41.4	160461	-8.6	37.8

There is an obvious element of complementarity between the tables suggesting that there is a degree of “balancing out” between the distribution of indigenous and foreign employment. Thus, Monaghan County, the Mallow Group and Cavan, the top three LUFs in Table 5, are all towards the bottom of Table14.6 while Athlone, in 3rd position in Table 6, is second last in Table 5. However, a simple Pearsonian correlation between the two density variables, while predictably negative, was quite low (R = -0.278, indicating that less than 8% of variation in the distribution of foreign employment is explained by corresponding variation in indigenous employment).

Interestingly, eliminating the five main cities and Ennis/Shannon from the calculations yields a much stronger (although still relatively weak) R value of -0.449, suggesting that urban attraction is a strong locational influence operating independently of regional balance considerations. It may be noted that these six centres occupy six of the top seven places in Table 6 (foreign employment density). By contrast, these centres are widely distributed throughout Table 5, indicating a much more dispersed distribution pattern for indigenous employment. This is further indicated by the fact that no less than 30 of the 38 LUFs have a below-average density in foreign employment compared with 22 with respect to indigenous employment

The overall lack of complementarity between Tables 5 and 6 is shown in Table 7, which combines these tables and thus shows the employment density of all agency-assisted employment. While the degree of disparity between top and bottom is not as great as in Tables 5 & 6, is still very considerable, with Waterford City at the top (and thus the most favoured LUF according to this measure) portraying almost four times the density of the Thurles group (Thurles/Tipperary/Cashel) at the bottom. Ennis/Shannon and Monaghan County also do particularly well in this table, with Portlaoise/Athy only marginally better than the Thurles group at the other end of the scale. It may also be noted that the five main cities and Ennis/Shannon occupy six of the top eight places in Table 7 (the others being Monaghan County and the Mallow group).

Finally, given the contrasting performances of the manufacturing and services sectors in the 2000s, it is useful to look at the division between manufacturing and services employment among foreign firms by LUF in 2001 (Table 8). It might be that those LUFs with a strong existing base in services would be best placed to benefit from the sector’s subsequent growth (and vice-versa for manufacturing). It might usefully be reiterated here that not all sectors shared equally in the sharp decline in manufacturing employment which occurred between 2001 and 2011. The main casualty here was the electronics sector, and one might, therefore, expect those LUFs with a strong presence in this sector to portray a much poorer employment performance than LUFs with specialisms in manufacturing sectors with a stronger overall performance (as in the case of the Galway/Tuam LUF with respect to medical devices).

Table 8 shows that, in 2001, only four LUFs (Dublin, Ennis/Shannon, Drogheda, Bray/Wicklow) had a proportion of employment in services above the national average (32%). Of the 38 LUFs, 20 had less than 10% of their employment in services, with eight having no employment in services at all. There is no obvious spatial pattern in the distribution of these LUFs.

15.6 EMPLOYMENT TRENDS 2001-2006

On average, foreign firms in Ireland experienced an employment decline of 0.6% between 2001-2006; however, there was major variation around this average, with some LUFs actually expanding strongly but a larger group performing very poorly (Table 9). Eleven of the 38 LUFs had a better performance than the overall average, of which ten actually increased their employment level. This group of eleven included Galway City, Cork City, Dublin and Limerick of the main cities, but the standout performers were the Mallow group (141%), the Carrick-on-Shannon group comprising Carrick-on-Shannon, Longford and Roscommon (80%), Arklow/Gorey (57%) and the Bantry group (45%).

For the Mallow group, this was a particularly significant development, as this was the LUF with the lowest share, and third lowest density, of foreign employment in 2001. Indeed, its high growth rate between 2001-2006 is attributable to a considerable extent to the low initial foreign employment base in the LUF. This also applies to the Bantry group; however, while the latter's growth occurred entirely in services, the Mallow group's growth was all in manufacturing, and the LUF remained services-free at the end of the period. In the Carrick-on-Shannon group and Arklow/Gorey there was significant growth in both sectors, but with services predominating in both cases.

Of the other LUFs which achieved overall employment growth between 2001-2006, Galway/Tuam and Cork City/Midleton both experienced significant growth in both manufacturing and services, whereas there was manufacturing decline in Dublin. However, this was greatly outweighed by growth in services employment (in fact. Dublin alone accounted for 68% of all services employment growth nationally in the period). While the employment growth rate portrayed by Cork, Dublin and Galway was relatively modest, the absolute employment size of these centres and the fact that most LUFs experienced employment loss saw the combined share of total employment accounted for by these LUFs growing from 55% to 60%.

In both Kilkenny and the Wexford group, overall growth arose from strong expansion (albeit from small initial bases) in services more than counterbalancing significant contraction in the manufacturing base. Clonmel/Carrick-on-Suir's employment base remained almost entirely in manufacturing, but did well to register modest growth in the face of an overall loss of 9.3% in manufacturing employment in the period.

At the other end of the scale, there were 12 LUFs which experienced employment contraction exceeding 20% between 2001-2012. These were widely distributed, being located in counties Donegal, Mayo, Galway, Tipperary, Kerry, Offaly, Westmeath, Meath, Carlow and Wicklow. Ten of these LUFs experienced substantial erosion of their manufacturing base (>25% compared with the national average of 9.3%). The Thurles group experienced below-average manufacturing loss (8%) but major erosion (55%) of what was initially a significant services base (27% of total employment in 2001). Bray/Wicklow actually witnessed manufacturing employment growth but saw its substantial initial services base (39% of total employment) almost completed eliminated over the period. However, most of this involved a relocation by a single firm of employment to a nearby site in Dublin and may not have greatly affected the workers concerned.

Table 15.7 Employment density and change, all firms 2001, 2006,2011

LUF	Pop06	Emp01	Emp/000	Emp06	Ch%0106	Emp/000	Emp11	Ch%0611	Emp/000
Arklow/Gorey	48417	2678	55.3	2597	-3.0	53.6	1835	-29.3	37.9
Athlone	41,757	3483	83.4	3498	0.4	83.8	3151	-9.9	75.5
Ballina	37,372	2475	66.2	2681	8.3	71.7	2270	-15.3	60.7
Ballinasloe/Loughrea	39026	1930	49.5	1679	-13.0	43.0	1347	-19.8	34.5
Bandon/Macroom	39779	3511	88.3	4355	24.0	109.5	3139	-27.9	78.9
Bantry/Clonakilty/Skibbereen	48138	2110	43.8	2651	25.6	55.1	2811	6.0	58.4
Bray/Wicklow	87860	5321	60.6	4264	-19.9	48.5	3137	-26.4	35.7
Carlow	63,408	4806	75.8	4180	-13.0	65.9	3587	-14.2	56.6
Carrick-on-Shannon/Longford/Roscommon	92515	5185	56.0	6237	20.3	67.4	4677	-25.0	50.6
Castlebar/Westport	84248	5975	70.9	5323	-10.9	63.2	5187	-2.6	61.6
Cavan	58,896	4579	77.7	5248	14.6	89.1	5381	2.5	91.4
Clonmel/Carrick-on-Suir	61452	5010	81.5	5162	3.0	84.0	5835	13.0	95.0
Cork City/Midleton	308,091	28157	91.4	32050	13.8	104.0	33442	4.3	108.5
Donegal County	140451	10184	72.5	8305	-18.5	59.1	7213	-13.1	51.4
Drogheda	93,447	5349	57.2	5024	-6.1	53.8	4430	-11.8	47.4
Droichead Nua	66,233	4374	66.0	4452	1.8	67.2	3755	-15.7	56.7
Dublin	1,260,167	120647	95.7	127088	5.3	100.9	121251	-4.6	96.2
Dundalk/Ardee	70,150	4658	66.4	4525	-2.9	64.5	3670	-18.9	52.3
Dungarvan/Fermoy/Youghal	62,227	4279	68.8	3706	-13.4	59.6	2499	-32.6	40.2
Ennis/Shannon	88,140	10771	122.2	9951	-7.6	112.9	9297	-6.6	105.5
Galway/Tuam	197,184	18702	94.8	20488	9.5	103.9	19854	-3.1	100.7
Kilkenny	75,372	4113	54.6	4829	17.4	64.1	3917	-18.9	52.0
Killarney	45,578	2180	47.8	1561	-28.4	34.2	1553	-0.5	34.1
Limerick City	161,450	15643	96.9	17256	10.3	106.9	11897	-31.1	73.7

Listowel/Newcastlewest	43,207	3193	73.9	2918	-8.6	67.5	1902	-34.8	44.0
Mallow/Mitchesltown/Charleville	64,961	6009	92.5	5566	-7.4	85.7	4217	-24.2	64.9
Monaghan County	58,512	6407	109.5	7042	9.9	120.4	5232	-25.7	89.4
Mullingar	51,646	2375	46.0	2406	1.3	46.6	1954	-18.8	37.8
Naas	55,417	3914	70.6	3886	-0.7	70.1	3116	-19.8	56.2
Navan/Trim	90,008	4514	50.2	4054	-10.2	45.0	4195	3.5	46.6
Nenagh/Birr/Roscrea	56,146	3909	69.6	3839	-1.8	68.4	2848	-25.8	50.7
Portlaoise/Athy	73,761	2764	37.5	2629	-4.9	35.6	1776	-32.4	24.1
Sligo	84,598	6080	71.9	5550	-8.7	65.6	4626	-16.6	54.7
Thurles/Tipperary/Cashel	58,980	2037	34.5	1999	-1.9	33.9	1261	-36.9	21.4
Tralee	83,591	5945	71.1	5453	-8.3	65.2	4177	-23.4	50.0
Tullamore/Edenderry	58,608	3915	66.8	3869	-1.2	66.0	3105	-19.7	53.0
Waterford City	79,539	10700	134.5	11460	7.1	144.1	9255	-19.2	116.4
Wexford/New Ross/Enniscorthy	109,516	5286	48.3	6128	15.9	56.0	5955	-2.8	54.4
Total	4239848	343168	80.9	353909	3.1	83.5	318754	-9.9	75.2

Table 15.8 Services share of foreign employment 2001, 2006, 2011

LUF	Empl01	Services %	Emp06	Services%	Emp11	Services%
Arklow/Gorey	751	20.5	1177	33.7	765	33.1
Athlone	2732	24.8	2238	28.6	2396	43.8
Ballina	1031	17.9	1002	24.1	1214	20.8
Ballinasloe/Loughrea	1009	11.5	669	31.2	259	0.0
Bandon/Macroom	1382	0.4	1373	0.4	1267	0.0
Bantry/Clonakilty/Skibbereen	218	6.0	316	39.9	386	61.7
Bray/Wicklow	2566	39.4	1794	2.2	1365	0.1
Carlow	1335	0.0	796	0.0	554	11.9
Carrick-on-Shannon/Longford/Roscomon	1542	28.9	2772	35.8	1950	35.4
Castlebar/Westport	3459	7.5	2490	5.5	2302	5.4
Cavan	952	0.0	893	0.0	983	0.8
Clonmel/Carrick-on-Suir	2907	0.6	3012	0.2	3929	0.2
Cork City/Midleton	19251	22.3	21613	23.7	23712	30.0
Donegal County	3633	14.7	2009	57.3	2266	64.9
Drogheda	1805	39.8	1579	54.6	1280	64.5
Droichead Nua	2701	25.4	2421	16.5	1872	13.4
Dublin	67392	56.8	71452	63.3	68312	70.5
Dundalk/Ardee	2888	9.0	2406	25.7	1665	34.0
Dungarvan/Fermoy/Youghal	2528	0.0	2052	0.0	1272	0.0
Ennis/Shannon	8134	49.3	7158	56.9	6431	54.1
Galway/Tuam	10597	12.2	12297	12.4	12289	23.3
Kilkenny	463	20.5	551	55.0	501	87.4
Killarney	1465	5.0	716	0.0	805	0.0
Limerick City	10487	16.6	10437	19.5	6468	24.1

Listowel/Newcastlewest	1561	0.0	1293	0.0	773	0.0
Mallow/Mitchesltown/Charleville	531	0.0	1278	0.0	918	0.0
Monaghan County	913	3.3	895	3.1	633	6.5
Mullingar	1279	0.0	785	0.0	433	0.0
Naas	1558	10.3	1366	13.3	859	28.6
Navan/Trim	1086	24.0	715	41.0	764	46.7
Nenagh/Birr/Roscrea	1337	1.1	661	2.3	245	6.5
Portlaoise/Athy	934	0.0	769	0.0	472	0.0
Sligo	3240	0.0	2986	6.5	2703	2.1
Thurles/Tipperary/Cashel	814	27.3	645	15.2	283	29.0
Tralee	1784	9.0	1271	6.3	729	15.2
Tullamore/Edenderry	2046	2.1	1483	0.0	930	0.0
Waterford City	6289	8.8	6067	19.0	4385	12.7
Wexford/New Ross/Enniscorthy	1945	6.5	2086	19.1	2091	16.2
Total	176545	32.0	175523	37.9	160461	44.4

Table 15.9 Foreign Employment Change 2001-2011

LUF	Total 01	Mfg 01	Services 01	Total 06	Tot Ch%	Mfg 06	Mfg Ch%	Services 06	Serv Ch%	Tot11	TotCh%	Mfg11	MfgCh%	Ser11	
Arklow/Gorey	751	597	154	1177	56.7	780	30.7	397	157.8	765	-35.0	512	-34.4	253	-36.3
Athlone	2732	2054	678	2238	-18.1	1599	-22.2	639	-5.8	2396	7.1	1347	-15.8	1049	64.2
Ballina	1031	846	185	1002	-2.8	761	-10.0	241	30.3	1214	21.2	961	26.3	253	5.0
Ballinasloe/Loughrea	1009	893	116	669	-33.7	460	-48.5	209	80.2	259	-61.3	259	-43.7	0	-100.0
Bandon/Macroom	1382	1376	6	1373	-0.7	1368	-0.6	5	-16.7	1267	-7.7	1267	-7.4	0	-100.0
Bantry/Clonakilty/ Skibbereen	218	205	13	316	45.0	190	-7.3	126	869.2	386	22.2	148	-22.1	238	88.9
Bray/Wicklow	2566	1555	1011	1794	-30.1	1755	12.9	39	-96.1	1365	-23.9	1363	-22.3	2	-94.9
Carlow	1335	1335	0	796	-40.4	796	-40.4	0	NA	554	-30.4	488	-38.7	66	NA
Carrick-on-Shannon/ Longford/Roscommon	1542	1096	446	2772	79.8	1781	62.5	991	122.2	1950	-29.7	1259	-29.3	691	-30.3
Castlebar/Westport	3459	3198	261	2490	-28.0	2352	-26.5	138	-47.1	2302	-7.6	2177	-7.4	125	-9.4
Cavan	952	952	0	893	-6.2	893	-6.2	0	NA	983	10.1	975	9.2	8	NA
Clonmel/Carrick-on-Suir	2907	2891	16	3012	3.6	3005	3.9	7	-56.3	3929	30.4	3920	30.4	9	28.6
Cork City/Midleton	19251	14966	4285	21613	12.3	16501	10.3	5112	19.3	23712	9.7	16594	0.6	7118	39.2
Donegal County	3633	3100	533	2009	-44.7	857	-72.4	1152	116.1	2266	12.8	796	-7.1	1470	27.6
Drogheda	1805	1087	718	1579	-12.5	717	-34.0	862	20.1	1280	-18.9	455	-36.5	825	-4.3
Droichead Nua	2701	2014	687	2421	-10.4	2022	0.4	399	-41.9	1872	-22.7	1622	-19.8	250	-37.3
Dublin	67392	29083	38309	71452	6.0	26255	-9.7	45197	18.0	68312	-4.4	20146	-23.3	48166	6.6
Dundalk/Ardee	2888	2629	259	2406	-16.7	1788	-32.0	618	138.6	1665	-30.8	1099	-38.5	566	-8.4
Dungarvan/Fermoy /Youghal	2528	2528	0	2052	-18.8	2052	-18.8	0	NA	1272	-38.0	1272	-38.0	0	NA
Ennis/Shannon	8134	4122	4012	7158	-12.0	3082	-25.2	4076	1.6	6431	-10.2	2950	-4.3	3481	-14.6
Galway/Tuam	10597	9305	1292	12297	16.0	10778	15.8	1519	17.6	12289	-0.1	9420	-12.6	2869	88.9
Kilkenny	463	368	95	551	19.0	248	-32.6	303	218.9	501	-9.1	63	-74.6	438	44.6
Killarney	1465	1392	73	716	-51.1	716	-48.6	0	-100.0	805	12.4	805	12.4	0	NA

Limerick City	10487	8741	1746	10437	-0.5	8401	-3.9	2036	16.6	6468	-38.0	4909	-41.6	1559	-23.4
Listowel/Newcastlewest	1561	1561	0	1293	-17.2	1293	-17.2	0	NA	773	-40.2	773	-40.2	0	NA
Mallow/Mitchelstown/ Charleville	531	531	0	1278	140.7	1278	140.7	0	NA	918	-28.2	918	-28.2	0	NA
Monaghan County	913	883	30	895	-2.0	867	-1.8	28	-6.7	633	-29.3	592	-31.7	41	46.4
Mullingar	1279	1279	0	785	-38.6	785	-38.6	0	NA	433	-44.8	433	-44.8	0	NA
Naas	1558	1398	160	1366	-12.3	1185	-15.2	181	13.1	859	-37.1	613	-48.3	246	35.9
Navan/Trim	1086	825	261	715	-34.2	422	-48.8	293	12.3	764	6.9	407	-3.6	357	21.8
Nenagh/Birr/Roscrea	1337	1322	15	661	-50.6	646	-51.1	15	0.0	245	-62.9	229	-64.6	16	6.7
Portlaoise/Athy	934	934	0	769	-17.7	769	-17.7	0	NA	472	-38.6	472	-38.6	0	NA
Sligo	3240	3240	0	2986	-7.8	2793	-13.8	193	NA	2703	-9.5	2647	-5.2	56	-71.0
Thurles/Tipperary/Cashel	814	592	222	645	-20.8	547	-7.6	98	-55.9	283	-56.1	201	-63.3	82	-16.3
Tralee	1784	1623	161	1271	-28.8	1191	-26.6	80	-50.3	729	-42.6	618	-48.1	111	38.8
Tullamore/Edenderry	2046	2003	43	1483	-27.5	1483	-26.0	0	-100.0	930	-37.3	930	-37.3	0	NA
Waterford City	6289	5735	554	6067	-3.5	4914	-14.3	1153	108.1	4385	-27.7	3829	-22.1	556	-51.8
Wexford/New Ross /Enniscorthy	1945	1818	127	2086	7.2	1687	-7.2	399	214.2	2091	0.2	1752	3.9	339	-15.0
Total	176545	120077	56468	175523	-0.6	109017	-9.2	66506	17.8	160461	-8.6	89221	-18.2	71240	7.1

Seven of the twelve high-employment-loss LUFs had a minimal services presence (<10%) at the beginning of the period, and in all cases, there was little or no services growth to compensate for substantial losses in manufacturing employment. The only LUF in this group to portray significant services growth was that embracing County Donegal (Ballybofey/Buncrana/Donegal/Letterkenny). However, in this case strong growth (116%) of a significant initial services base was greatly outweighed by massive losses (72%) in the county's initially-strong (mainly textiles-based) manufacturing sector. As a result, the share of total employment taken by services jumped from 15% to 57%.

Of the intermediate LUFs in Table 9, the main feature was the strong growth in services which went much of the way to counterbalancing substantial manufacturing decline in Waterford City and (especially) Dundalk/Ardee; the significant employment loss (18%) experienced by Athlone, which had the highest share of foreign employment in 2001; the stability in services employment but substantial manufacturing loss at Ennis/Shannon; and the reverse experience of Droichead Nua, where manufacturing employment was stable but services declined significantly.

Overall, there was no discernible pattern in inter-LUF variation in foreign employment growth performance over the period. The possibility that those LUFs which already had a strong foreign employment base may have performed better was explored by calculating a correlation coefficient between foreign employment density in 2001 and growth rate 2001-2006. Contrary to expectation, the correlation coefficient was actually negative but, at -0.1767, very weak. A second possibility was that those LUFs with a strong indigenous employment base would show a weak foreign employment growth rate (based on the idea, advanced above, that the IDA would tend to steer inward investment away from such areas). While the correlation coefficient in this case was also negative (as expected) it was even weaker, at -0.116 (which means, effectively, no association between the variables at all).

As regards trends in the share of total employment taken by foreign firms, this is a function of the pattern of change in indigenous as well as foreign employment. Not only did indigenous employment grow significantly (by 7%) during 2001-2006 (while foreign employment declined slightly), but it was widely dispersed, with 27 LUFs experiencing growth (compared with just 10 for foreign employment)), of which 20 experienced above-average growth (Table 5). Athlone, which had the highest share of foreign employment in 2001, had the highest growth rate for indigenous employment (68%), while its foreign employment shrank by 18%. In general, there was virtually no correspondence between the inter-LUF growth performance in indigenous and foreign employment.

The overall impact of these differing growth trends in the indigenous and foreign services on the inter-LUF share of total employment accounted for by foreign firms is shown in Table 4. While the share of the foreign sector in total agency-assisted employment only fell very slightly (from 51.4% to 49.6%) between 2001-2006, there was very substantial movement at the LUF level, with 29 LUFs losing foreign share. Of these, eight experienced a loss in excess of ten percentage points, the worst-affected being Killarney, Mullingar and the Nenagh group (Nenagh/Roscrea/ Birr), followed by Athlone, Tullamore/Edenderry, Donegal County, Ballinasloe/ Loughrea and Castlebar/Westport. Interestingly, three of the main cities (Cork, Limerick and Waterford) also suffered falling share, as did Ennis/Shannon. Gaining in excess of ten percentage points were Arklow/Gorey, the Mallow group and the Carrick-on-Shannon group.

Finally, as regards the overall share of foreign employment accounted for by services, there was some improvements as regards spatial distribution, with 21 LUFs reporting an increase in their share (Table 8). However, in seven cases this was due more to manufacturing decline than services growth: apart from Sligo (which started from a zero base), 13 LUFs exceeded the overall growth rate of 18% for services employment., with eight experiencing growth rates of >100%. Of the latter, five had small services bases originally but the other three (the Carrick-on-Shannon group, Donegal County and Waterford City) did have a significant initial level of services employment.

Where there were only four LUFs with an above-average share of services employment in 2001, this grew to seven in 2006 (despite a significant increase in the average, from 32% to 38%), the additions being Donegal County, Kilkenny, Navan/Trim and the Bantry group (with Bray/Wicklow dropping out). However, those LUFs which started the period with little or no services employment were finding it difficult to attract employment in the sector. Of the 10 LUFs whose services share had fallen, seven had a share of <10% in 2001; there were still 17 LUFs whose services share was below 10% (compared with 20 in 2001); there were now nine LUFs with no services employment at all (compared with eight in 2001); and seven of the eight LUFs which had no services employment in 2001 remained in the same position in 2006 (the exception being Sligo).

15.7 EMPLOYMENT TRENDS 2006-2011

Overall, foreign firm employment fell by just under 9% between 2006-2011 (combining an 18% fall in manufacturing and a 7% rise in services). However, there was major variation around this overall average (Table 9). Ten LUFs actually experienced growth, led by Clonmel/Carrick-on-Suir followed by the Bantry group (whose initial foreign sector was quite small) and Ballina. In the cases of both Clonmel/Carrick and Ballina, most of the growth occurred in manufacturing. Three of the LUFs experiencing growth (Donegal County, Killarney and Navan/Trim) had experienced very substantial employment losses in 2001-2006. Donegal County's good performance was entirely driven by services growth (in the face of continued manufacturing decline), and a remarkable feature of the recent economic experience of this region has been the way it has been reinventing itself, following the collapse of its manufacturing base, as a successful centre for export services, mainly in the Letterkenny area. Cork/Midleton's and Athlone's growth has also been driven by strong services expansion, with Athlone reversing the significant decline experienced in 2001-2006.

At the other end of the scale, no less than 24 LUFs experienced a rate of decline in excess of the overall average. For 20 of these (including the Carrick-on-Shannon and Mallow groups and Arklow, the three star performers in the previous period) the rate of loss exceeded 20%. Of this 20, 17 had also experienced employment contraction in the previous period. For eight LUFs, it was the second period in a row of 20+% decline. The worst-hit LUF was the Nenagh group, which followed a 51% fall in 2001-2006 with a further 63% decline in 2006-2011. This adds up to an 82% contraction over the decade. The cumulative decline for Ballinasloe was 74% and for the Thurles group 65%.

Of the 20 LUFs which declined by more than 20%, 12 had little or no services employment at the beginning of the period. Not that possession of a strong services component provided a guarantee against employment decline: Waterford City, the Carrick-on-Shannon group and Limerick City all had a substantial services base in 2006, and all experienced substantial erosion of that base over the ensuing five years.

While the overall rate of decline in indigenous employment was greater than that for foreign employment (11% compared with 9%) its spatial impacts were not as severe (Table 5). While only six LUFs (headed by Waterford City) enjoyed positive growth (at very modest levels), only 16 contracted by 20+% while six LUFs experienced rates of decline in foreign employment which were greater than the worst decline rate in indigenous employment (40%). Three LUFs (the Bantry group, Cavan and Navan/Trim) managed to achieve growth in both foreign and indigenous employment; by contrast, 25 LUFs experienced declines in both. Of the latter, ten experienced declines in excess of 20% on both counts.

The upshot of all of these changes was that, while the overall share of total employment accounted for by foreign firms rose slightly (from 49.6% to 50.3%), there was not nearly as much movement in the pecking order as there had been in a previous period (Table 4). Athlone moved back to the top of the list, followed closely by Cork/Midleton, Ennis/Shannon and Clonmel/Carrick-on-Suir. At the other end, the Nenagh group's share now stood at a miniscule 8.6% (down from 34.2% in 2001). Just two LUFs (Athlone and Ballina) increased their shares by more than 10 percentage points while Ballinasloe/Loughrea, Mullingar and the Thurles group saw their shares fall by at least 10 percentage points.

The services sector's share of total foreign employment continued its inexorable rise, up from 38% in 2006 to 44% in 2011 (Table 8). At the same time, employment in the sector was being increasingly concentrated in a few LUFs. There were now six with a services share of over 50%, headed by Kilkenny with an extremely high share of over 87%. At the other end of the scale there were now 16 LUFs with less than 10% of their foreign employment in services, of which nine had no services employment at all.

15.8 SUMMARY

Over the entire period 2001-2011, foreign employment fell 9% while its share of total employment in agency-assisted firms fell by one percentage point to 50.3%. Foreign manufacturing employment fell by 26% while service employent rose by the same proportion, so that the share of the latter rose from 32% to 44%.

The picture of spatial change over the period depicted here is complex and highly variegated, with the fortunes of individual LUFs waxing and waning in terms of both indigenous and foreign employment. Changes in the latter have neither paralleled nor complemented changs in the former. Changes in services and manufacturing employment have equally shown little pattern.

Twelve LUFs actually experienced an increase in foreign employment over the period, led by the Bantry (77%) and Mallow (73%) groups (albeit from low initial bases in both cases), followed by Clonmel/Carrick-on-Suir (35%), the Carrick-on-Shannon group (27%) and Cork City/Midleton (23%). Most of those LUFs (the great majority) which lost foreign employment did so at a much higher rate than the overall average (9%), with eight losing over half of their 2001 employment, led by the Nenagh group (82%) and Ballinasloe (74%). A further 14 LUFs lost between 25-50% of their 2001 foreign employment. There is no discernible spatial pattern regarding employment gains or losses. Most LUFs also experienced a decline in the share of total employment taken by foreign firms, the most precipitous falls being experienced by Ballinasloe/Loughrea (down 33 percentage points to 19%), Mullingar (down 32 points to 22%), and the Nenagh group (down 26 points to just 9%).

The key spatial feature of the overall pattern of employment change over the period 2001-2011 is the increasing domination of national employment by three of the main cities, namely, Dublin, Cork and Galway. In terms of overall employment, these three cities, combined, increased their share from 55.1% to 65.1%. Dublin's share of manufacturing employment actually fell (from 24.2% to 22.6%) whereas the shares for Cork and Galway increased strongly (from 12.5% to 18.6% in the case of Cork and from 7.8% to 10.6% in the case of Galway). Overall, then, the combined share of the three cities rose from 42.5% to 51.8%.

It is in the services sector that the domination of the "big three" cities is most pronounced. Dublin actually experienced a slight decline in share (from 67.8% to 67.6%). However, this share in itself is three times its share of manufacturing employment, reflecting Dublin's continuing very dominant position in this sector. Neither Cork's nor Galway's performance in this sector was as strong in manufacturing, but in both cases it was still quite positive (from 7.6% to 10.0% in the case of Cork and from 2.3% to 4.0% in the case of Galway). Thus, the combined share of the three cities rose from 77.7% to 80.6%.

The performance of the other two main provincial cities (Limerick and Waterford) was much weaker. Both lost out significantly as regards overall employment share, manufacturing share and, perhaps most significant of all, services share. More worryingly for these two cities, services employment was stagnant in the case of Waterford and fell significantly in the case of Limerick.

Outside of these cities, some LUFs have done reasonably well, although the overall pattern has been rather negative. LUFs' fortunes have waxed and waned over time, depending on a combination of local circumstances, developments in particular firms which sometimes can have a dominant local effect at this level, and sectoral developments whose impacts are also very variable. However, two things are clear. The preference of foreign services firms for large urban locations has major implications for areas outside the main centres (which in Ireland essentially means Dublin and Cork in this case). Plus, without a critical mass of firms, individual localities will continue to be vulnerable to developments affecting individual firms which account for a large share of employment in these localities.

15.9 REFERENCES

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