



WDC CEDRA RESEARCH REPORT

Section 3 Chapter 4

Rural Commuting, Gateways and Foreign Direct Investment

Western Development Commission

December 2013

WDC CEDRA RESEARCH REPORT**Section 3 Chapter 4 Rural Commuting, Gateways and Foreign Direct Investment****Deirdre Frost, Western Development Commission, December 2013****Introduction**

Much of the employment nationally is located in cities, with the five principal cities accounting for 45 per cent of all job locations in the country¹. Recent direct employment growth supported by the state agencies has also been concentrated in the larger cities². While part of the role of the gateways is to accommodate and attract foreign investment, the evidence³ indicates that an increasing concentration of foreign direct investment is in the very large centres especially Dublin and Cork. There is a perception in many regional and more rural areas that this source of employment creation, which is often well paid and highly skilled, is beyond reach. The policy priority is to secure inward investment for Ireland in the first instance and the need to ensure a more balanced spatial distribution is relegated as a policy objective. Other reasons offered for this concentration of investment are that the scale of the investment can only be reasonably accommodated in the largest cities, particularly because of labour supply issues and infrastructural capacity⁴.

It is not clear that agency assisted employment should be so concentrated. For example, industrial policy in the 1970s/80s involved a policy of dispersed investment with the construction of over 130 'advance' factory units in small population centres of up to 5,000 and including many centres of population of 1,500 – 5,000. Employment in foreign firms was widely dispersed⁵.

While it is clear that not everywhere can (or should aspire to) host large enterprises, the issue of scale has been largely absent from the debate. Smaller companies or sites within companies can and do successfully operate and export from smaller locations. Examples of smaller centres which have been successful in increasing foreign agency assisted employment over the last decade include Bantry/Clonakilty, Carrick-on-Shannon, Clonmel/Carrick-on-Suir, Mallow/Mitchelstown⁶. There are many examples of smaller companies operating and exporting successfully from outside the large centres and some from quite small centres. Many of these cite the available labour supply as a positive attribute of their more rural location, as staff turnover tends to be lower⁷. There are

¹ J. Gleeson, Irish Times, 15th December 2012

² Breathnach, P, *Spatial trends in employment in foreign firms in Ireland*, 2013.

³ For example, Chris van Egeraat, Proinnsias Breathnach & Declan Curran. *Gateways, hubs and regional specialisation in the National Spatial Strategy*, Administration, Vol 60, No.3 2013 and Breathnach, P, *Spatial trends in employment in Foreign Firms in Ireland*, CEDRA Research Paper, 2013

⁴ For example, transport infrastructure such as international airports, good telecommunications and energy infrastructure or more likely a combination of these factors.

⁵ While there were many reasons why this employment was not sustainable over the longer term, it is not clear that the rural or regional location in and of itself was a reason p, 2, 3 Breathnach, P, *Spatial trends in employment in foreign firms in Ireland*, 2013

⁶ Breathnach, P, *Spatial trends in employment in foreign firms in Ireland*, 2013

⁷ A few examples available include CMS Peripherals in Kiltimagh, Co. Mayo, E&I Engineering, Burnfoot, Co. Donegal, Merenda Ltd, Manorhamilton Co. Leitrim, Lionbridge Technologies, Ballina, Co. Mayo (Telecommunications), McHale Engineering Limited, Ballinrobe, Co. Mayo, MeteoGroup, Ennis, Co. Clare (Software), Ansamed Limited, Boyle (Medical Devices). MBNA/Bank of America in Carrick-on Shannon is an

examples too of companies locating in smaller centres but within commuting distance of a larger labour pool with similar skills base e.g. medical devices companies in Gort and Loughrea Co. Galway accessing the labour supply within the Galway city catchment⁸.

It could also be suggested that with the success of Dublin in particular, in attracting foreign direct investment and employment, and with consequent concerns now being expressed regarding commercial property availability, increasing rents and housing shortages in certain areas in the capital, other cities and towns without these constraints should now be in a position to benefit from investment. These other towns and cities have the same regulatory and tax regime and many now have much improved infrastructure such as transport links and broadband.

Labour is mobile and people follow jobs as the current and previous high rates of emigration attest. Previous economic growth periods have also demonstrated that when employment opportunities are available, people return from overseas or from urban centres to more rural and regional areas to take up positions. The skills set needed is often available in regional and rural locations or will move there, both for the employment opportunities and for lifestyle factors⁹. For example some companies have not chosen city locations but moved to smaller locations to tap into the labour market that was resident there e.g a pharmaceutical company established in Loughrea, Co. Galway to access the skills available there. Unum, a software services company moved to Carlow to avail of the locally available workforce, some of whom would have previously commuted to Dublin¹⁰. These examples illustrate that jobs can follow people rather than the traditional pattern of people following jobs.

The particular focus of this paper is on those rural dwellers who commute to work in the nine National Spatial Strategy (NSS) gateways. The extent to which rural dwellers commute to work in gateways and the profile of these workers is set out. The importance of rural dwellers to the labour supply of gateways is examined as well as the importance of gateway employment to many rural dwellers. Three case studies of rural dwellers commuting to IDA business parks in the gateways of Galway, Sligo and Waterford are presented. Rural dwellers who commute to work in other towns are examined in Chapter Two, *Rural Commuting and Employment in Towns*, WDC, 2013.

2. Rural dwellers and gateway employment

example of a large employer successfully sourcing labour supply from a relatively small town and wider hinterland. Many of the companies cite the good labour supply and strong work ethic as benefits of more rural locations. See www.wdc.ie and www.lookwest.ie

⁸ Previous analysis of travel to work data has shown that the Galway city Travel to Work Area (TTWA) or labour catchment extends to the County Galway boundary and beyond. WDC *Travel to Work and Labour Catchments in the Western Region; A Profile of Seven Town Labour Catchments*. 2009

⁹ There are many examples of people moving to the West of Ireland for employment opportunities and lifestyle reasons, documented on www.lookwest.ie

¹⁰ Ms. Kathy Owen, Chief Information Officer & Senior Vice-President, Unum US was quoted in the press release; *We are also very aware of the trend whereby many people working in and around Dublin live in Counties Carlow, Kildare, Kilkenny, Laois and Wexford and we see potential to recruit skilled and experienced people from among this group – allowing them to work far closer to home without sacrificing their careers.* <http://www.idaireland.com/news-media/press-releases/unum-establishing-software/>

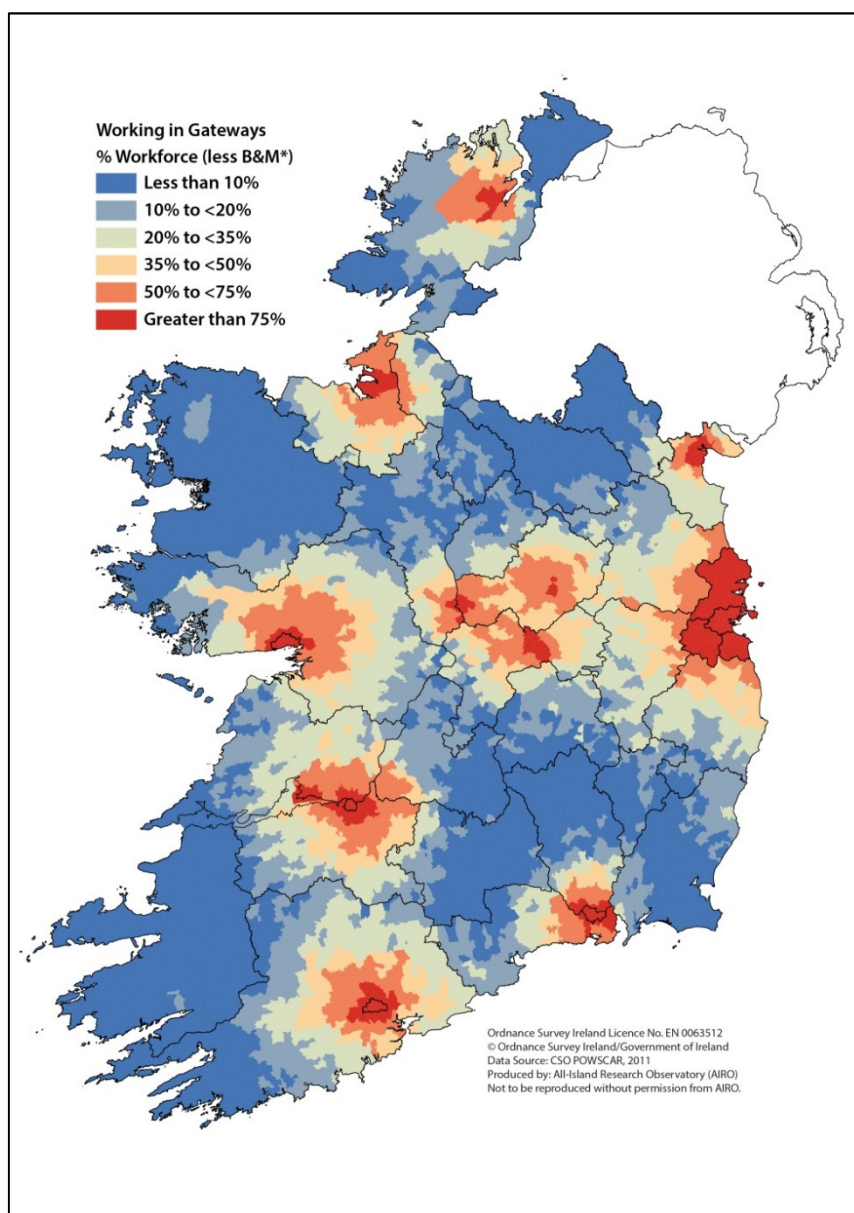
The following section examines the extent to which rural dwellers commute to and avail of employment in gateways. Some of their key labour market characteristics are examined including their industrial sector and socio-economic profile as well as personal characteristics such as age, gender and education levels. The subsequent section will look in more detail at three gateways, Galway, Sligo and Waterford and the labour supply commuting to IDA business parks within these gateways.

The geography of gateways is defined as the legally defined boundaries of the gateways plus all electoral divisions (EDs) which adjoin these boundaries¹¹. This is more extensive than the normal gateway definition (of town plus environs) and will capture enterprises located on the outskirts of gateways. Larger employers and foreign direct investment often locate adjacent to urban centres rather than within city centres as they often seek large greenfield sites but with access to various utilities such as water, energy, and telecommunications infrastructure as well as space and access to a large labour supply.

Map 1 shows the percentage of the workforce¹² (both rural and urban dwellers) who work in the gateways. The red areas indicate that greater than three quarters of the workforce is employed in gateways. The dark blue areas are those where less than 10% work in a gateway, these are generally either the more remote areas such as the coastal areas along the west coast as well as inland areas such as Cavan/Monaghan and Tipperary, Kilkenny and Wexford. The pattern in the South East also reflects the strong agricultural economy there.

¹¹ This is also the definition used in the paper by Chris van Egeraat, Proinnsias Breathnach & Declan Curran, *Gateways, hubs and regional specialisation in the National Spatial Strategy, IPA Vol. 60, no.3 (2013)*. Those rural dwellers originally classified as rural but living within the gateway are reclassified as urban dwellers. The same reclassification occurs for place of work which if located in rural EDs within the definition of gateways are recoded to gateway places of work.

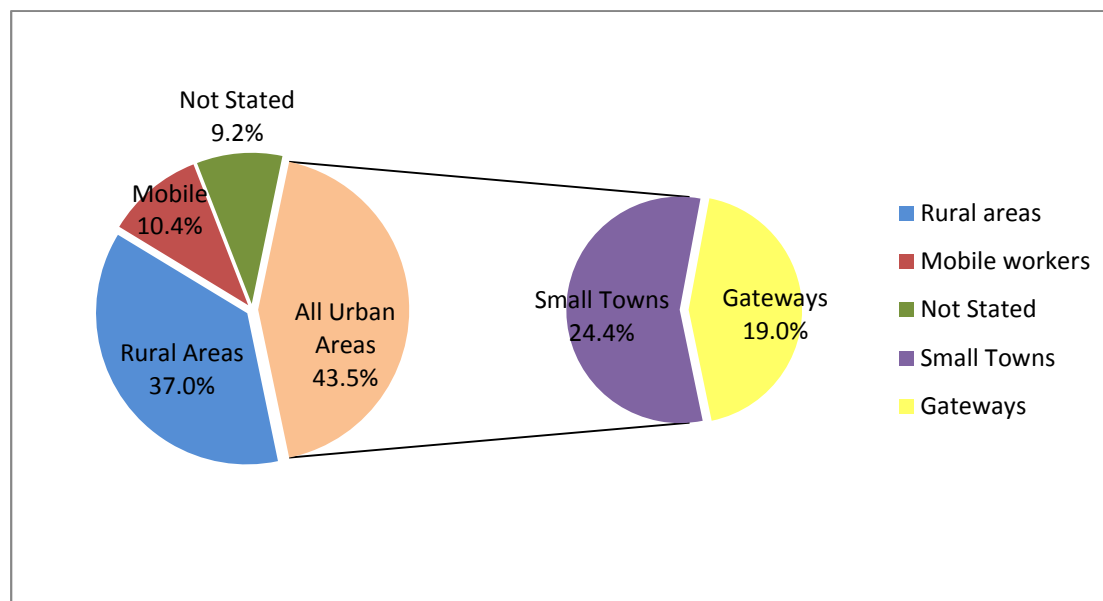
¹² The data excludes those who indicated that their place of work was mobile or 'blank'.

Map 1. Who works in the Gateways, (All Dwellers) 2011

Rural Dwellers Place of Work

In 2011, there were 629,382 persons at work, living in rural areas (outside centres of 1,500 or more). Figure 1 shows rural dwellers by place of work. The most significant employment destination for workers living in rural areas is urban areas with 43.5% (273,503) commuting to work in urban areas. Of these 153,747 (24.4%) commute to towns and 119,756 (19%) commute to gateways, indicating the importance of towns as employment centres for rural dwellers. Over a third of all rural dwellers (37% - 232,587) worked in rural areas¹³. The classification is discussed further in the methodology section in the Appendix.

¹³ The remainder is accounted for by the categories of mobile workers (10.4% = 65,515) and uncodeable or blanks (9.2% = 57,777) both of which are proportionately more prevalent in the rural residential population compared to those resident in urban areas. Among the urban resident population 7.8% (89,474) were categorised as blank and 7.2% (82,662) as mobile workers.

Figure 1 Rural Dwellers by Place of Work, 2011

Rural dwellers working in gateways

The focus of this paper is those 19% (119,756) of rural dwellers who commute to work in gateways. Rural dwellers are an important source of labour supply for the gateways. In fact rural dwellers account for 14.7% of all workers in the gateways.

Travel time to gateway locations

It is likely that many rural dwellers who work in gateways are living close by. Examining the journey time of those rural dwellers who commute to work in a gateway provides some indication of the extent of that gateway's sphere of influence and the extent to which it impacts on its rural hinterland. Journey times are also a way to measure travel to work areas or labour catchments which is useful in measuring the potential labour supply available to a new enterprise. The geographic extent of travel to work areas and the various 'containment ratios' of labour catchments have been examined in previous research by the WDC¹⁴.

The question of what can be considered a daily commutable distance also arises and the mode of transport and quality of transport infrastructure as well as transport costs are relevant here. For example, the Croke Park Agreement between the Government and public sector unions considered a distance of 45 kilometres acceptable¹⁵. Elsewhere a distance of 60km has been used to measure the labour supply catchment for foreign direct investment¹⁶. An important feature of shorter distance commuting is exurbanisation, where rural communities are located in fairly close proximity to gateways. Some of these rural residents have moved from gateways and in some cases suburban employment can be as accessible to rural dwellers as to urban dwellers.

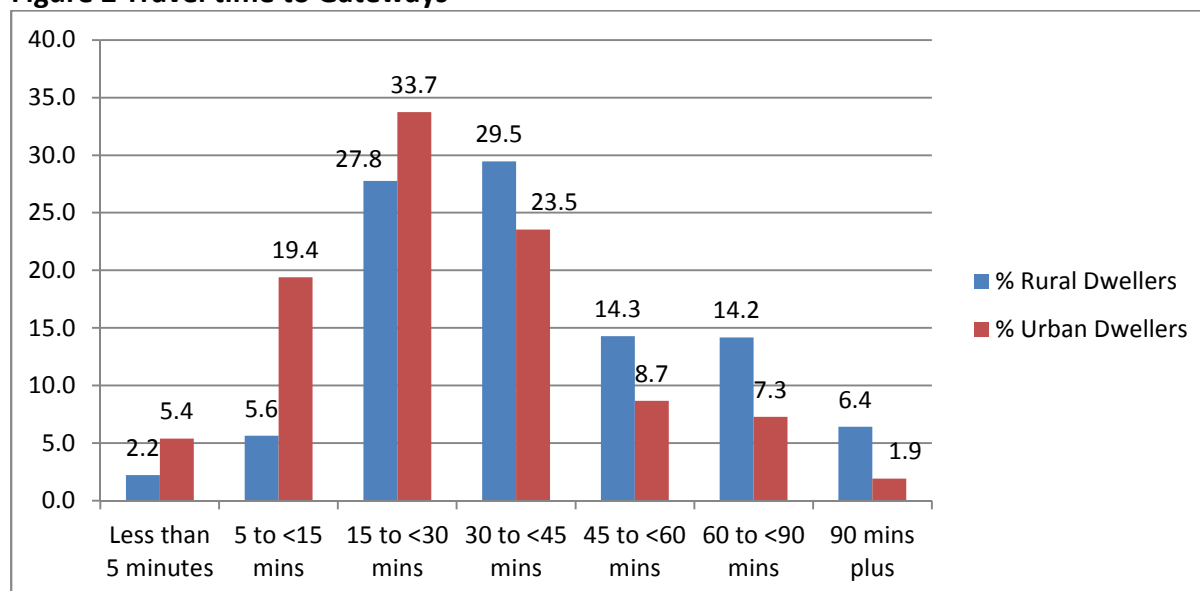
¹⁴ p.18 Travel to Work and Labour Catchments in the Western Region. WDC, 2009

¹⁵ <http://per.gov.ie/wp-content/uploads/Public-Service-Agreement-2010-2014-Final-for-print-June-2010.pdf>

¹⁶ IDA presentation to SPACEial North West Data Workshop, November 2012.

Figure 2 below charts the travel time of rural and urban dwellers who work in gateway locations. A greater proportion of rural dwellers travel for 30 minutes or more and the difference between rural and urban dwellers increases as journey time increases.

Figure 2 Travel time to Gateways



The most common travel time for rural dwellers working in gateway locations is 30-45 minutes (29.5%). Just over 14% of rural dwellers travel between 45-60 minutes and 14.2% of rural dwellers travel between 60-90 minutes. Only 6.4% of rural dwellers travel 90 minutes or more suggesting that generally the extent of the catchment of a gateway is within a 90 minute drive time. Of course this will vary for specific gateways and the quality of transport services and degree of traffic congestion in each gateway are also likely to be factors.

Close to 35% of rural dwellers working in gateways have journey times in excess of 45 minutes, suggesting that many live some distance from their place of work. Many of these are possibly living in the blue and light blue areas depicted on Map 1 and commuting to a gateway up to an hour and more away.

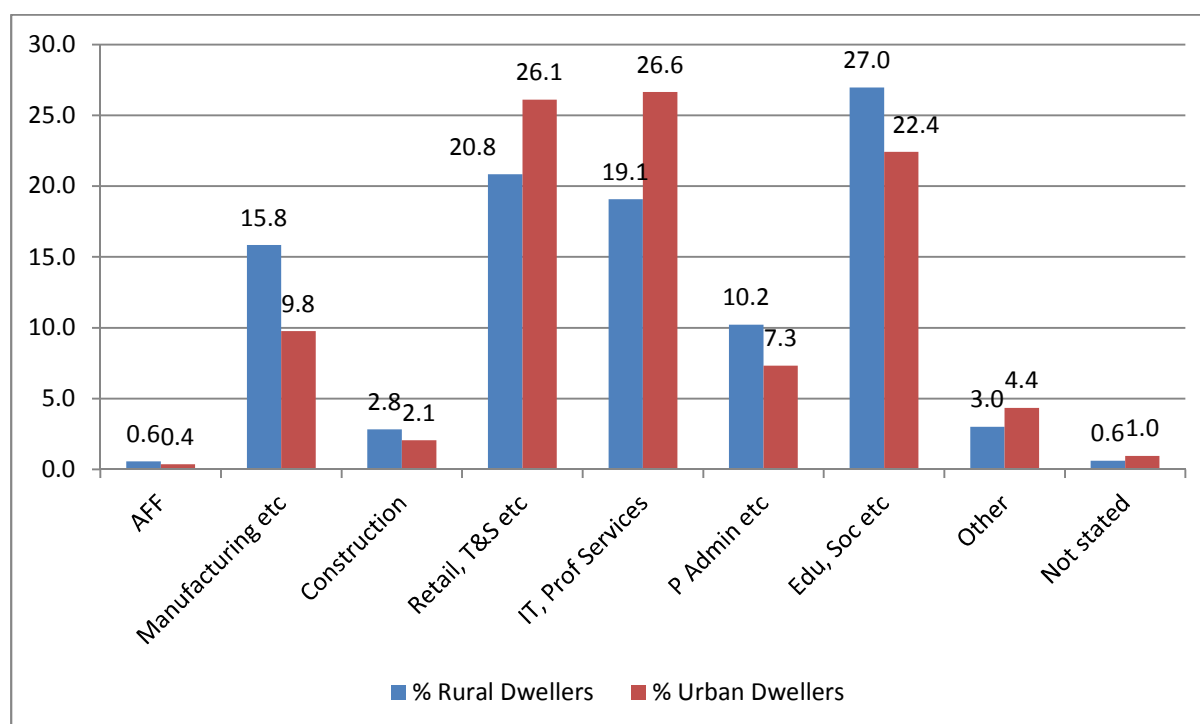
The areas beyond a 90 minute drive time could be considered remote rural, areas where distance, journey times and transport infrastructure mean that they are beyond reasonable commuting distance to gateways and gateway employment. Of course these areas are often within the catchment of towns of varying sizes which are more important employment locations for rural dwellers, discussed in Chapter Two, *Rural Commuting and Employment in Towns, WDC, 2013*.

Industrial profile of rural dwellers working in gateways

Examining those rural dwellers working in gateways, they are generally employed across five industrial sectors (Figure 3). The sector of Education, Human Health and Social Work Activities accounts for 27% of those rural dwellers working in gateways. The next most important employment sector is the broad sector of Wholesale, Retail Trade, Transportation and Storage, Accommodation and Food Service Activities in which a fifth (20.8%) of all rural dwellers who commute to gateways for work are engaged in. The third most important

sector is Information and Communication, Financial, Real Estate, Professional, Administration and Support Service activities in which another fifth (19.1%) of rural dwellers commuting to gateways are employed. The sector of Manufacturing, Mining and Quarrying, Electricity, Gas, Water supply and Waste Management accounts for 15.8% of all rural commuters working in gateways and Public Administration and Defence accounts for 10.2% of employment in gateways by rural dwellers.

Figure 3 Rural and urban dwellers working in gateways by Industry



Compared to urban dwellers employed in gateways, rural dwellers working there are overrepresented in the public sector dominated sectors and Manufacturing highlighting their significance for rural dwellers commuting to work in gateways. These sectors often provide relatively stable, well paid and full-time employment. Rural dwellers are underrepresented in knowledge and local services. In some cases local services may be relatively lower paid and part-time and therefore it may not be worthwhile for rural dwellers to commute to. It may also be that these employment opportunities are also available closer to home, unlike some other positions for example in ICT, positions which are more likely to be located in gateways.

Socio-economic group

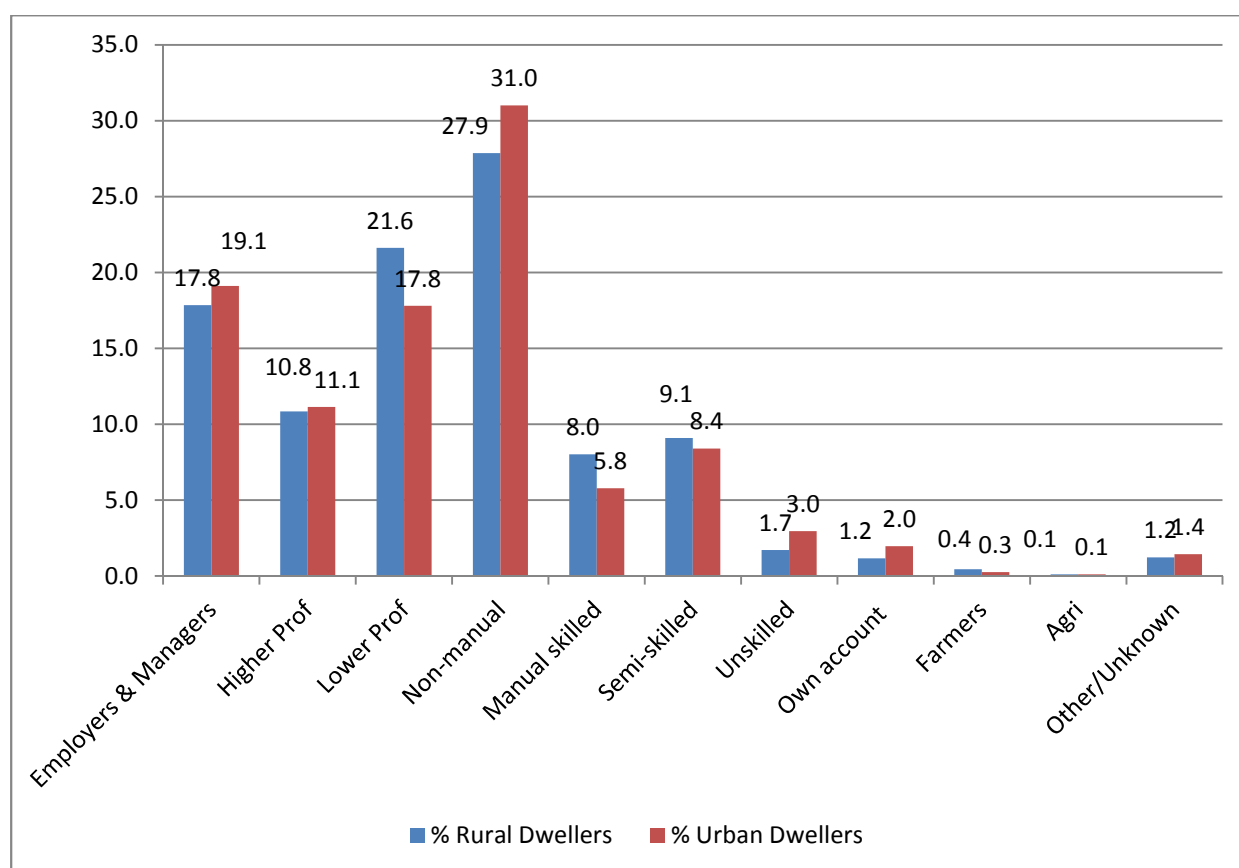
The socio-economic group is determined by occupation and employment status and aims to classify on the basis of comparable skill and educational levels¹⁷. This is also a useful indicator of the type of employment and skills available.

¹⁷ The socio-economic group is reported here in place of the occupational classification which was not included in the POWSCAR dataset for confidentiality reasons.

Considering those rural dwellers who commute to work in gateways by socio-economic group (Figure 4), the largest group is non-manual occupations accounting for 27.9% of the total. The next most significant are lower professionals (21.6%) followed by employers and managers (17.8%). One tenth (10.8%) of rural dwellers working in gateways categorise themselves as higher professionals.

A notable difference between rural dwellers and urban dwellers engaged in gateway employment is that a lower proportion of rural dwellers are classified as non-manual and as employers and managers. There are a higher proportion of rural dwellers classed as lower professional, which is likely to be influenced by the relatively high participation in public sector employment and Industry. There are also higher proportions of rural dwellers classed as semi-skilled and manual skilled.

Figure 4 Rural and urban dwellers working in gateways by Socio-economic group



Gender profile of rural dwellers commuting to gateways

The gender pattern of rural dwellers commuting to gateways is less marked than for those commuting to towns¹⁸ but nonetheless a majority of those rural dwellers commuting to work in gateways are female (53.3% N=63,807). This compares with 51.6% of urban dwellers working in gateways. In both gateways and towns, female rural dwellers significantly outnumber their male counterparts indicating the importance of urban employment to female workers living in rural areas. The role of farming and to a lesser extent construction

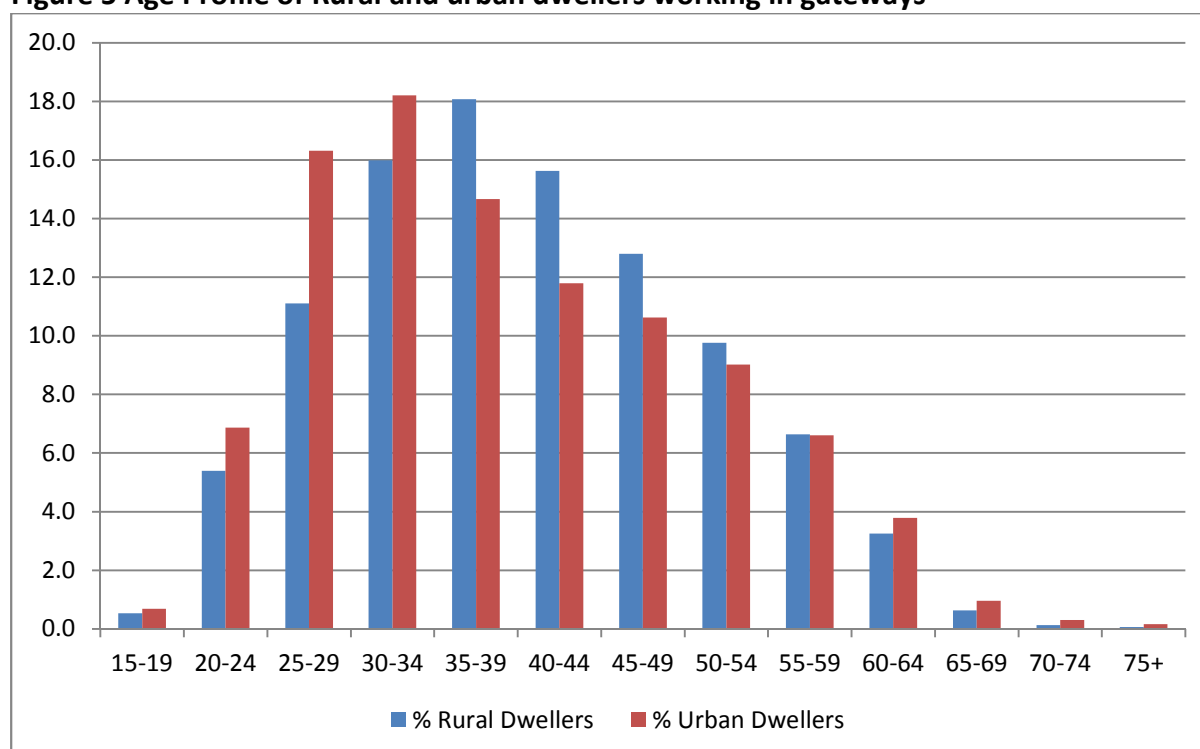
¹⁸ Chapter Two, *Rural Commuting and Employment in Towns*, WDC, 2013

in rural male employment is a key factor. The lower share of women commuting to gateways compared with the share commuting to towns may in part reflect longer commuting distances coupled with childcare responsibilities.

Age

The largest age cohort of rural dwellers commuting to gateways is the 35-39 age group comprising 18.1%. The largest age cohort among the urban population employed in gateways is younger, 18.2% are aged between 30-34 years. Comparing rural dwellers and urban dwellers, there is a higher proportion of rural dwellers working in gateways aged 40-49 years. Between the ages of 50 – 55 years there is a roughly similar age distribution between the two groups of workers. For the age group of 60 years and above there is a higher share of urban dwellers working in gateways.

Figure 5 Age Profile of Rural and urban dwellers working in gateways



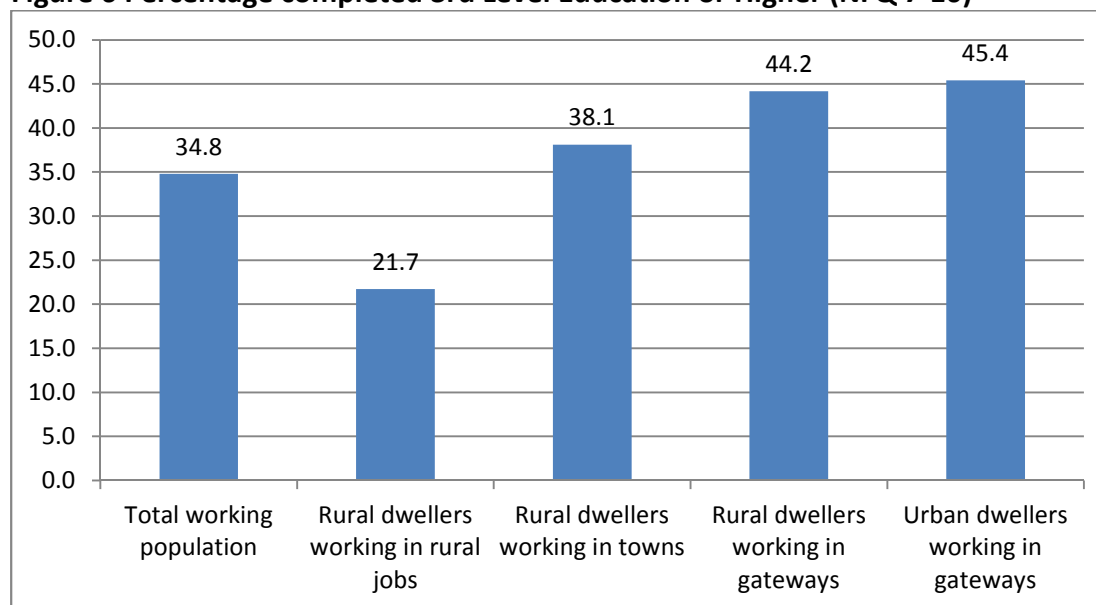
At the younger age spectrum there is a higher share of urban dwellers to the age of 34 years working in the gateways compared to rural dwellers. This is likely to reflect the proximity of the urban dwellers to gateway employment opportunities. It may also reflect the higher rate of third level participation among rural dwellers. Other factors may include lifecycle choices where younger workers choose to live in cities but as they age then sometimes choose to live in more rural locations when rearing a family.

Education

Just over a third (34.8%) of the total working population have completed third level education or higher (Figure 6). However just 27.3 per cent of rural dwellers have completed third level or higher. An even lower share of rural dwellers employed in rural areas has third level education (21.7%). However, of those rural dwellers commuting to work in gateways

the share with a third level education rises to 44.2%, much higher than the national average (34.8%).

Figure 6 Percentage completed 3rd Level Education or Higher (NFQ 7-10)



There is a strong degree of similarity in educational levels whether workers are rural or urban dwellers. 44.2% of rural dwellers in gateway jobs have a third level education or higher, while the figure for urban dwellers are 45.4%. This suggests that from an enterprise perspective, the qualification and educational levels of the labour supply is critical regardless of from where it originates.

The educational profile of workers employed in towns is lower than that of the gateways, 33.4% of rural dwellers commuting to work in towns have a third level education or higher, a slightly lower percentage (32.9%) of urban dwellers working in towns have a third level education or higher. This indicates that the employment profile and opportunities in gateways, to which rural dwellers commute to (and urban dwellers), require higher educational levels than the employment in towns. This may be in part due to the greater prevalence of certain elements of public sector employment and foreign direct investment in the gateways, many of which employ a very high proportion of graduates. Rural dwellers who are employed within the foreign direct investment sector are the focus of the next section.

Rural dwellers and Foreign Direct Investment: Three Case studies

Introduction

This section examines commuting patterns to three gateways; Galway, Sligo and Waterford, focussing on the labour supply to IDA business parks within these gateways. Rural dwellers who commute to work in these business parks, which generally host large multinational companies, are profiled and the extent to which rural dwellers form part of the labour supply for foreign direct investment is examined.

Foreign agency assisted employment, usually IDA assisted employment was chosen as the focus for three main reasons. Firstly, insight into the extent to which rural dwellers avail of this type of employment is important in understanding the rural-urban relationship. Secondly, IDA assisted employment growth has been strong in recent years, especially compared to other sectors. Thirdly, spatially identifying IDA sites as employment locations is often easier than the locations of indigenous agency assisted employment or indigenous employment generally, as the former are quite geographically localised (in IDA business parks) while the latter are more diffuse.

The three case studies were chosen because they are located in different regions of Ireland (West, South and North West), but also because these are some of the smaller gateways each located within a large rural hinterland. Some of the larger gateways, such as those on the East coast (Dublin, Dundalk) are likely to have more urban based commuters, whereas these smaller gateways may have a greater impact on their rural hinterland.

The IDA/industrial zones chosen have been digitised and have been checked to include all major employers assisted by the IDA in each case study business park. The extent of rural dwellers commuting to work in these sites is outlined along with their general labour market characteristics.

journey time of between 45 minutes and an hour, while 10.7% have a journey time longer than 1 hour. Comparing rural dwellers commuting to the business parks with those commuting to work in the Galway gateway generally, a greater share of those working in the gateway overall have longer journey times with 14.3% travelling for 1 hour or more. One factor may be the location of the businesses in the IDA case study which are located on the east of the city. For those commuting from the east to other large employment centres within Galway, (schools, university and University College Hospital), longer journey times into the city on more congested routes is required.

Industrial profile

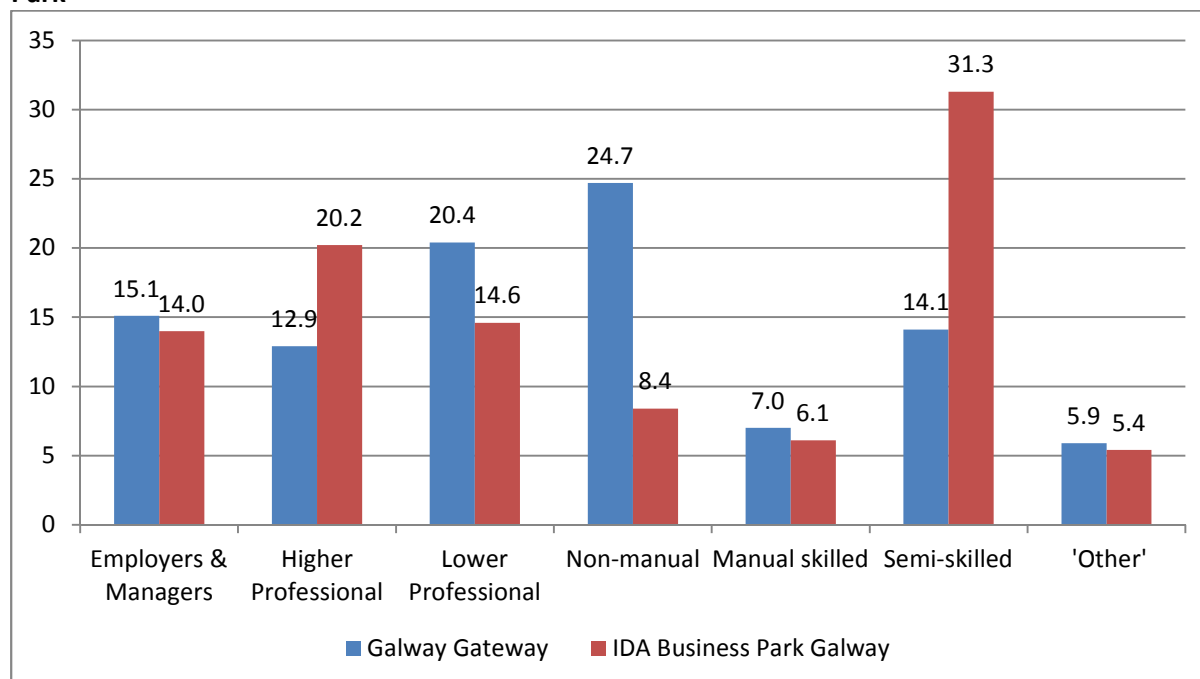
The industrial profile of the IDA business parks is predominantly manufacturing activity¹⁹ accounting for (69.2%) of all rural dwellers, followed by information and communications activity (15.4%). Wholesale and Retail trade is the third most popular activity in the IDA business park accounting for 10% of employment of rural dwellers. The industrial profile of rural dwellers working in IDA business parks is much more concentrated than in Galway generally. This is not surprising given the sectoral focus of IDA activity.

Socio-economic profile

Four socio-economic groups are important among rural dwellers working in the IDA business parks, as shown in Figure 7; the most significant socio-economic group is semi-skilled workers accounting for nearly a third of all rural dwellers employed in the IDA business parks and these are likely to be engaged in production within the various manufacturing plants, (31.3%). The next largest group are higher professionals accounting for a fifth of rural dwellers commuting to the business parks (20.2%). Lower professionals (14.6%) and Employers and managers (14.0%) are the next most significant socio-economic groups of rural dwellers working in IDA business parks.

Elsewhere within the Galway gateway rural dwellers are spread across a broader range of socio-economic groups of which the most important are; Non-manual occupations (24.7%), Lower professional (20.4%), Employers and managers (15.1%), Semi-skilled (14.1%) and Higher professional occupations (12.9%). It is clear that employment within the IDA business parks is concentrated in the semi-skilled and higher professional categories and this contrasts with the broader range of socio-economic groups in which rural dwellers are employed in the gateway generally.

¹⁹ See appendix for the full detail of each industry sector. The 'Other' category includes Unskilled, Own account workers, Farmers and Unknown.

Figure 7 Socio economic profile of rural dwellers working in Galway Gateway and IDA Business Park

The 'other' category includes Unskilled, Own account workers, Farmers, Agricultural workers and All others gainfully occupied and unknown.

Gender

The gender profile of those working in the Galway gateway and in the IDA business park case study highlights some interesting differences. In Galway, there are more male rural dwellers (61.8%) employed in the IDA business parks (compared to male rural dwellers employed elsewhere in the gateway (44.7%). Gateway employment (outside of the business parks) is much more important for female rural dwellers commuting to work, who account for 55.3% of all rural dwellers working there. The pattern is reversed when examining those rural dwellers engaged in IDA business parks where 47.6 % are female.

Further analysis of the socio-economic and gender profile of rural dwellers working in gateways and the IDA business parks provides some interesting findings with different gender patterns in both locations.

Within the Gateway, where a majority of the rural dwellers are female (55%), they are particularly concentrated in just two sectors accounting for nearly 60% of all female rural dwellers; Non-manual (35%) and Lower professional employment (24.9%). Non-manual employment is likely to be particularly concentrated in the retail sector. Other important socio-economic groups for female rural dwellers are semi-skilled (13.2%), employers and managers (11.8%) and the higher professional socio-economic group (11.8%). Male rural dwellers working in the Galway gateway are more widely distributed across the range of socio-economic groups.

Examining the gender profile of employment in the Galway IDA case study, male rural dwellers (52.3%) outnumber female rural dwellers (47.6%). Once again male employment is spread more widely across a range of socio-economic groups of which

the most important are semi-skilled (25%), higher professional (20.3%), lower professional (17.1%), employers and managers (16.0%) and manual skilled socio-economic groups (10.5%).

Female rural dwellers working in the Galway IDA case study are employed in the same socio-economic groups as in the Gateway generally, but in significantly different levels. In the Galway IDA case study, the most important socio-economic group is semi-skilled employment accounting for 38.2% of all female employment, much higher than the male share of 25%. The next most important group for female rural dwellers is higher professional employment accounting for 20% of all female employment in the Galway IDA case study. This is double the share of female higher professional employment in Galway generally (and also double the share of female rural dwellers engaged in higher professional employment in either of the other IDA case studies of Waterford and Sligo).

Three other socio economic groups account for a similar share of female rural dwellers employed in the IDA case study; Employers and managers account for 11.9%, similar to the share in the gateway generally and a little less than the male share engaged in this socio-economic group in the gateway (16%). Lower professionals account for 11.8% of all female rural dwellers employed in the IDA case study and non-manual employment accounts for 11.9% of all female rural dwellers.

Female rural dwellers in the Galway IDA case study are disproportionately employed in semi-skilled (38.2%) and non-manual (11.9%) socio-economic groups. The non-manual employment share is less striking as it is a particular socio-economic group that females generally work in – such as retail.

The most striking feature of employment in the Galway IDA case-study is the extent to which female employment is concentrated in two socio-economic groups; the semi-skilled category (38.2%) and the higher professional category (20%). Both shares are greater in Galway than either Waterford or Sligo. There is a particularly high share of female rural dwellers employed in higher professional occupations, double the share in either the gateway of Galway generally or in other gateways and IDA case studies. This indicates a particularly large cohort of female rural dwellers engaged in higher professional employment in Galway. This may be partly a scale issue where there are greater opportunities in Galway given the relatively higher numbers engaged in the IDA case study. It may also reflect particularly strong female gender patterns within some companies or sectors but this detail is not available from the data.

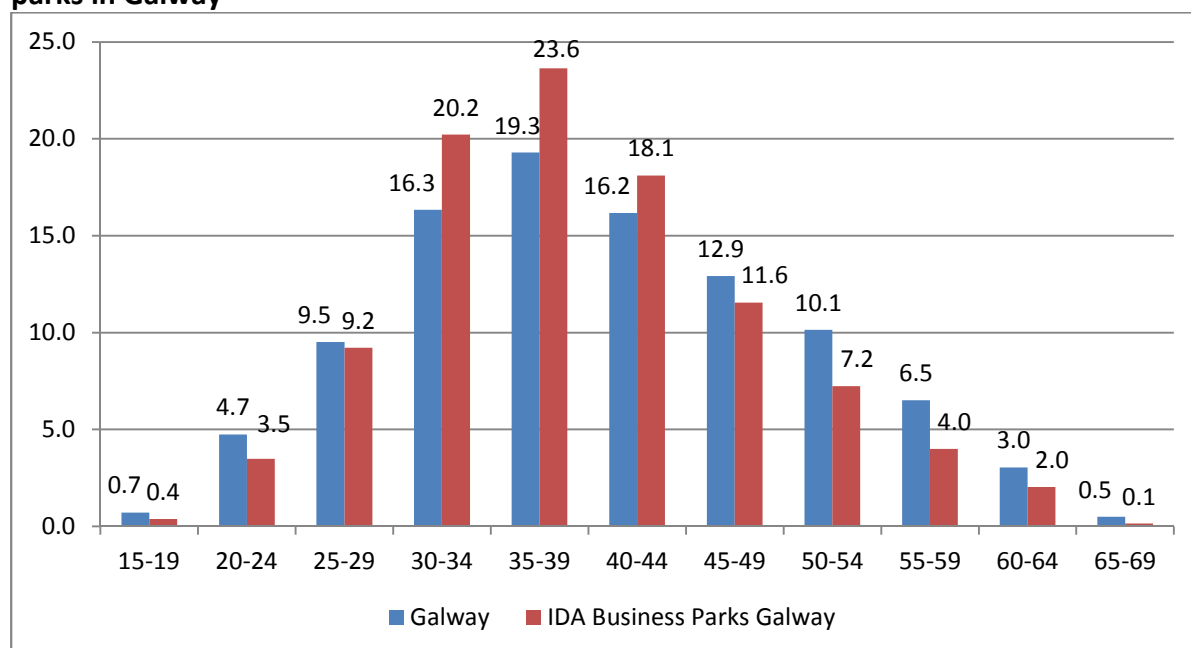
Education

Those rural dwellers who commute to work in the IDA business parks are slightly less likely to have completed third level education (40.3%) compared to those rural dwellers who work elsewhere in the gateway (44%). This reflects the high level of manufacturing employment in the IDA business parks and the semi-skilled occupations within the medical devices sector in particular. Elsewhere in the gateway much of the Education and Human Health sectors are likely to employ third level graduates.

Age

The age profile of rural dwellers working in the IDA business parks is concentrated in the 30-44 years age bracket, accounting for 61.9% of all rural dwellers employed there and illustrated in Figure 8 below. In contrast the age profile of those rural dwellers working elsewhere in the gateway is more widely distributed, for example 51.8% are within the 30-44 years age bracket and over one fifth (20.2%) are aged over 50 years. Within the IDA business parks those aged over 50 years account for 13.3% of all rural dwellers. At the younger age spectrum there are also proportionately more aged less than 30 years employed in the gateway generally compared to the IDA business parks (14.9% and 13.1% respectively). Therefore the age profile of multinational employment generally is not as broad as employment in Galway generally.

Figure 8 Age profile of rural dwellers working in Galway gateway and IDA business parks in Galway

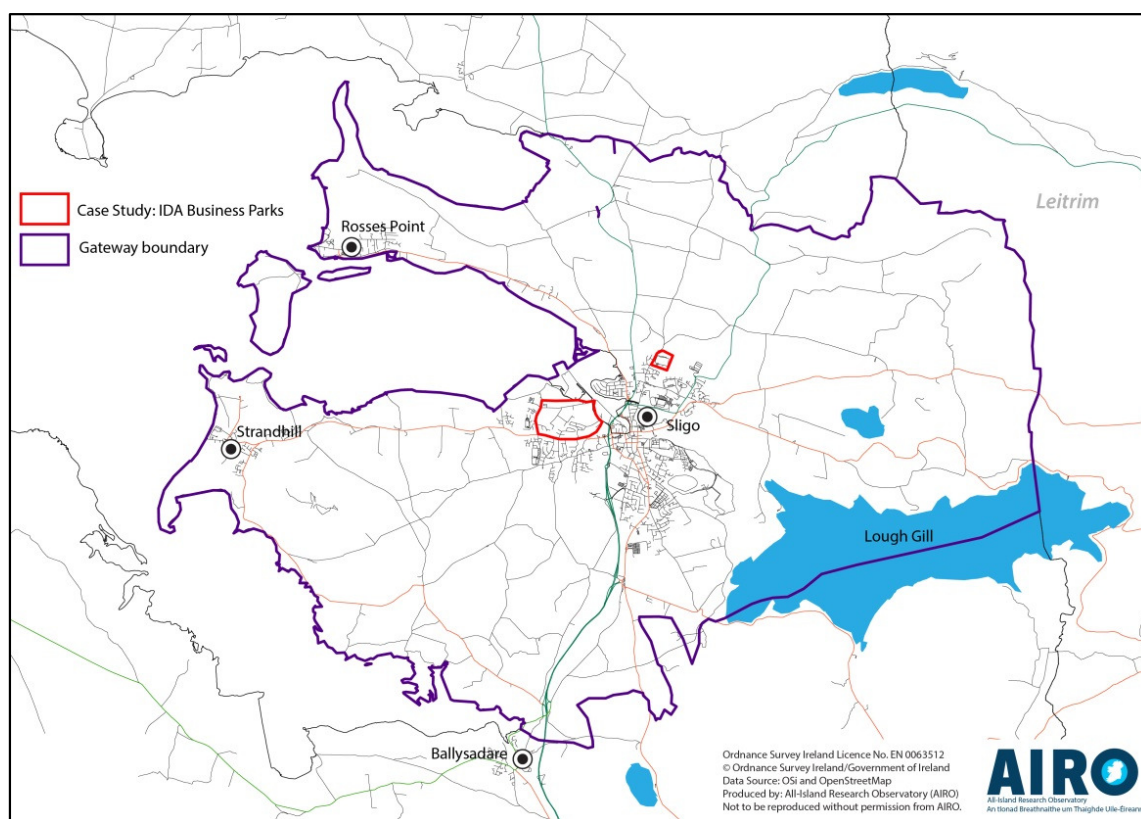


Sligo

Map 3 below illustrates the Sligo case study area. Sligo has a dual location to include the Abbott site to the north of the town. The 42 hectare Finisklin Business & Technology Park is located just west of Sligo town centre and includes Rathemond. Large multinationals including Abbott, Bruss, Stieffel (A GSK Company) and Elanco (an ELY Lilly Company) are located here. There are some other employers such as Enterprise Ireland assisted companies as well as some small retail units located within the study area but the majority of the workforce is in IDA assisted companies.

There are 6,760 rural dwellers commuting to work within the gateway of Sligo. Of these 18.6% (1,260) work in the IDA business parks both on the West and East of the town centres, delineated in red, see Map 3 below. The share of rural dwellers working in the case study IDA business parks in Sligo is much less than in Waterford or Galway, indicating the proportionately lower level of IDA employment there. So while the numbers of rural dwellers commuting to the respective cities of Waterford and Sligo are broadly similar,²⁰ the share going to work in IDA business parks is much less in Sligo.

Map 3 Case study IDA business parks, Sligo



²⁰ There were 6,621 rural dwellers commuting to work in Waterford and 1,655 of these commuted to the IDA case study area, which accounts for 24.9% of all rural dwellers commuting to work in Waterford. In Galway, rural dwellers working in the IDA case study area comprised 25.6% of the total.

Travel time

Over 83% of rural dwellers commuting to work in Sligo have a travel time of less than 45 minutes. Of those rural dwellers working in the IDA business parks, a slightly higher share – 84.6% are within a 45 min drive time. Just under half of those commuting to work in the IDA business parks have a journey time of between 15 and 30 minutes indicating they live in fairly close proximity. Comparing rural dwellers commuting to business parks with those commuting to work in the gateway generally, a greater share of those working in the gateway have longer journey times with 17% of rural dwellers have journey times of 45 minutes or more, compared to 15.4% of those travelling to work in the IDA business parks. One factor may be the location of the businesses in the case study which are located on the east and west of the town centre and may be more proximate to residential areas than employment in the town centre itself.

Industrial profile

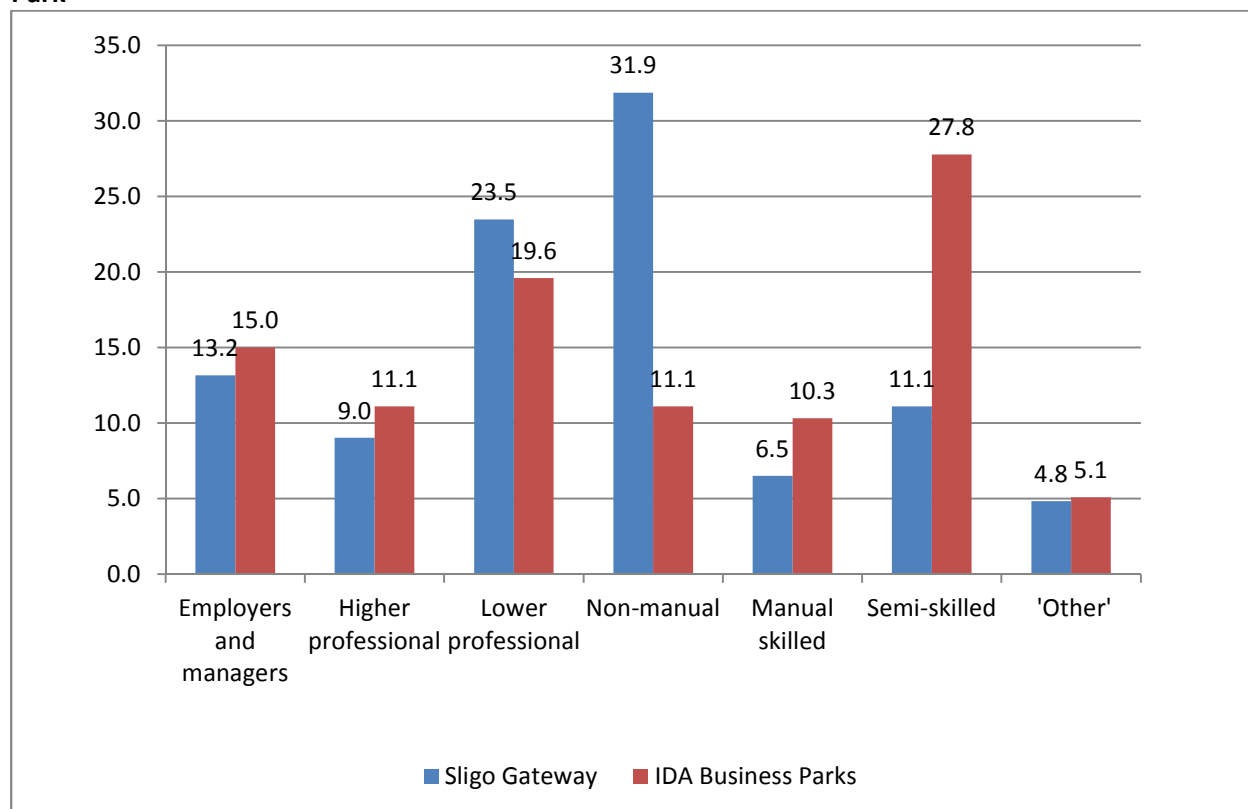
The industrial profile of the IDA business parks is predominantly manufacturing activity²¹ accounting for (68.5%) of all rural dwellers employed in the business parks, followed by information and communications activity (13.9%), both of which are slightly lower shares than that in Galway. Wholesale and Retail trade is the third most popular activity in the IDA business park accounting for 9.6% of employment of rural dwellers. The industrial profile of rural dwellers working in IDA business parks is much more concentrated than in Sligo generally. This is not surprising given the sectoral focus of IDA activity. The most important employment sector for rural dwellers working in Sligo is the Education, Human Health and Social Work sector accounting for over a third (34.1%) of employment of rural dwellers. This is much higher than the share employed in that sector in Galway (27.0%) or in Waterford (30.9%).

Socio-economic profile

Four socio-economic groups are important among rural dwellers working in the IDA business parks, in Sligo as shown in Figure 9. The most significant socio-economic group is semi-skilled workers accounting for 27.8% of all rural dwellers employed in the IDA business parks and these are likely to be engaged in production within the various manufacturing plants. This is somewhat lower than the share in Galway business parks where over a third (31.3%) of rural dwellers are engaged in semi-skilled activity. The next largest group are lower professionals accounting for a fifth of rural dwellers commuting to the business parks (19.6%). This is in contrast to Galway where the higher professional category is the second most important group. Employers and managers account for 15.0% of rural dwellers working in IDA business parks, followed by those in higher professional socio-economic groups and non manual occupations, both of which account for (11.1%) of rural dwellers working in IDA business parks.

Elsewhere within the gateway of Sligo generally rural dwellers are spread across socio-economic groups of which the most important are; Non-manual occupations (31.9%), Lower professional (23.5%), Employers and managers (13.2%), Semi-skilled (11.1%) and higher professional occupations (9.0%).

²¹ Please refer to the appendix for the full detail of each industry sector.

Figure 9 Socio economic profile of rural dwellers working in Sligo Gateway and IDA Business Park

The 'other' category includes Unskilled, Own account workers, Farmers, Agricultural workers and All others gainfully occupied and unknown.

In contrast to Galway, employment within the IDA business parks is more dispersed across the range of socio-economic groups, which perhaps indicates the degree of concentration of economic activity in Galway, especially given the relative levels of employment involved. There is also a higher share engaged as employers and managers and higher professionals in the Sligo IDA parks, compared to those employed in Sligo generally.

Gender

Of those rural dwellers who work in the Sligo gateway, 61.1% are female. As in the case of Galway, the gender pattern is reversed when examining the profile of those working in IDA business parks so that a majority (55%) in the Sligo business parks are male. This gender pattern is more pronounced than in Galway (52.3% male) but less pronounced than in the Waterford IDA case study where 61.7% of rural dwellers are male.

Further analysis of the socio-economic and gender profile of rural dwellers working in gateways and IDA business parks provides some interesting findings with different gender patterns in both locations.

Within the Gateway, where 61% of rural dwellers are female, they are particularly concentrated in just two sectors; Non-manual (41.1%) and Lower professional employment (28.4%), accounting for close to 70% (69.5%) of all female rural dwellers, which is higher than in Galway. Non-manual employment is likely to be particularly

concentrated in the retail sector. Other important socio-economic groups for female rural dwellers in the Sligo gateway are employers and managers (9.9%), semi-skilled (9.6%), and the higher professional socio-economic group (7.9%). Though these three categories are important, they are not as large as in Galway. This may be explained by the particularly high concentrations in the non-manual and lower professional categories in Sligo. The male rural dwellers working in the Galway gateway are more widely distributed across the range of socio-economic groups.

Examining the gender profile of employment in the Sligo IDA case study, male rural dwellers (55.3%) outnumber female rural dwellers (44.6%). Once again male employment is spread more broadly across a range of socio-economic groups, of which the most important are semi-skilled (26.8%), lower professional (17.2%), employers and managers (17.1%), manual skilled socio-economic groups (16.1%) and higher professional (11.3%). Compared to Galway, in the Sligo gateway, there is a lower share of higher professionals and higher share of manual skilled employment among male rural dwellers.

Female rural dwellers working in the Sligo IDA case study are employed in the same socio-economic groups as in the Gateway generally, but in significantly different levels and are more broadly distributed. In the Sligo IDA case study, the most important socio-economic group is semi-skilled employment accounting for 29% of all female employment, higher than the male share of 26.8%, but less than in Galway (38.2%). The next most important group for female rural dwellers is lower professional employment accounting for 22.6% of all female employment in the Sligo IDA case study. This is less than the share of females in lower professional groups in Sligo generally (28.4%).

The third most significant employment category for female rural dwellers working in the Sligo IDA case study is the non-manual socio-economic group (17.6%), followed by employers and managers (12.4%) and higher professionals (10.8%). Compared to their male counterparts, female rural dwellers in the Sligo IDA case study are disproportionately employed in non-manual (17.6% and 5.9% respectively) and lower professional employment (22.6% and 17.2% respectively).

Female employment in the Sligo IDA case-study is much more broadly distributed than in the Galway IDA case study. Much less are employed in the higher professional category (10.8% compared to 20%) and proportionately much more are engaged in the lower professional category (22.6% and 11.8% respectively). There are much less female rural dwellers engaged in semi-skilled activity than in Galway (29% compared to 38.2%), while the share of non-manual activity is higher in the Sligo IDA case study, (17.6% compared to 11.9%).

The reasons for this difference are likely to be in part down to the particular sectoral concentrations of firms' activity in each location. The rate of female professional employment in the Galway IDA case study is unusually high compared to Waterford and Sligo. This may be partly a scale issue with fewer opportunities in Sligo and Waterford given the relatively small numbers engaged in the IDA case study. It may also reflect greater opportunities at the higher professional levels in Galway.

Education

Examining the education profile of those rural dwellers working in the gateway to those working specifically in IDA business parks, 41.6% have completed 3rd level or higher compared to 40.7% of those working in Sligo IDA business parks. This is similar to the pattern in Galway though there is a higher share of third level graduates working in Galway city than Sligo. The similar share of rural dwellers with third level education in both the Sligo IDA case study and the rest of Sligo suggest a similar occupational base. It is worth noting though, that there is a particularly high concentration of rural dwellers engaged in lower professional and non manual employment in Sligo compared to that in Galway and Waterford.

Age

The age profile of rural dwellers working in the Sligo IDA business parks is concentrated in the 30-44 years age bracket, accounting for 57.2% of all rural dwellers employed there. This is a slightly lower proportion than in Galway with 61.9% in this age bracket indicating a slightly broader age profile employed in IDA business parks in Sligo. In Waterford the share within the age cohort is comparable to Sligo (56.9%).

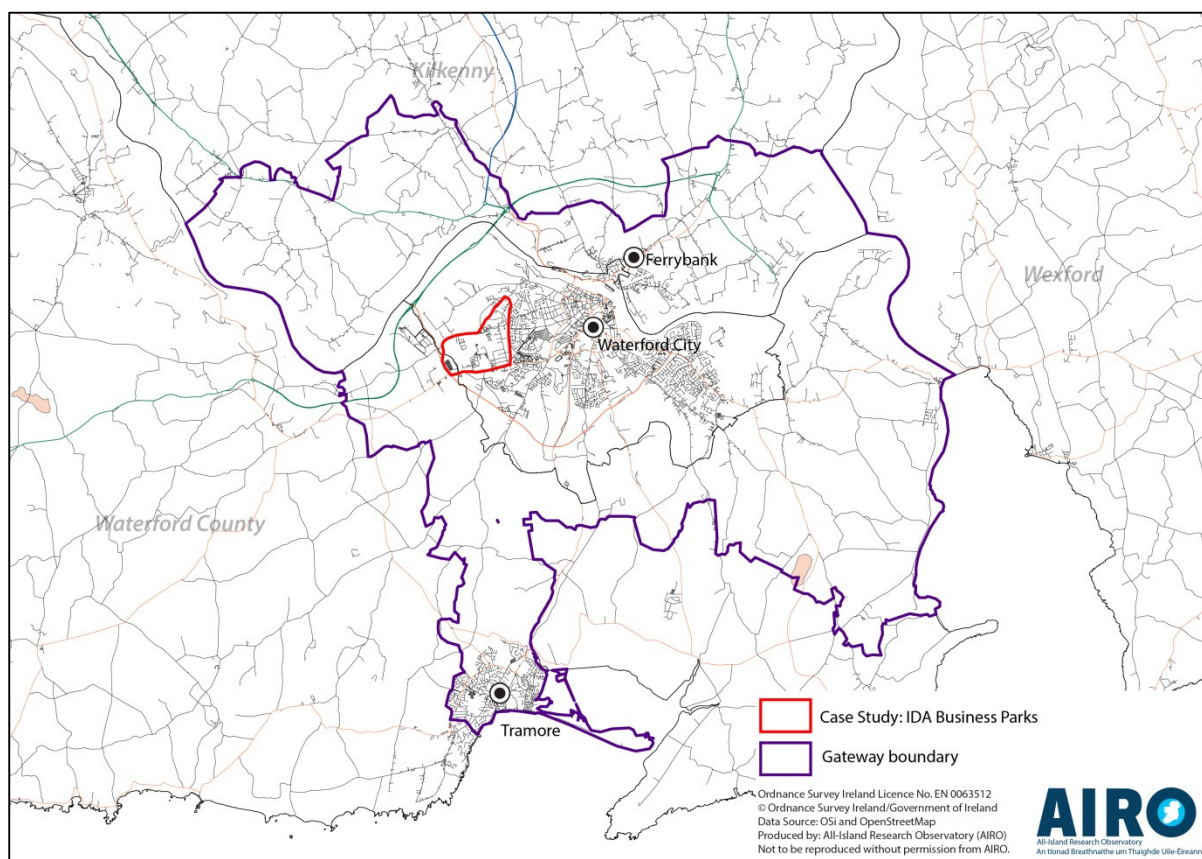
In contrast the age profile of those rural dwellers working elsewhere in the gateway is more widely distributed, for example less than half 49.6% are within the 30-44 years age bracket and over one fifth (21.3%) are aged over 50 years. Within the IDA business parks those aged over 50 years account for 19.1%, less than in the Sligo gateway generally but somewhat higher than in Galway with just 13.3% of all rural dwellers aged over 50 years and working in IDA business parks.

At the younger age spectrum there are also proportionately more aged 30 years and younger employed in the gateway generally compared to the Sligo IDA business parks (16.7% and 12.9% respectively). Therefore the age profile of multinational employment is not as widely distributed as employment generally. At the younger age level, this may reflect the education and skill levels required in the industry sectors as well as mobility factors such as car access/ownership which may not be as available to the younger age group. At the older age spectrum, retirement age within the multinational sector may be younger than the typical age across other sectors.

Waterford

Map 4 below illustrates the Waterford case study area. The Waterford IDA business park case study area is located to the west of the city centre and includes large multinationals including Genzyme. There some other employers such as Enterprise Ireland assisted companies as well as some small retail units located within the study area but the majority of the workforce is in IDA assisted companies.

Map 4 Case study IDA business parks, Waterford



Travel time

Over 6,600 (6,621) rural dwellers commute to work in Waterford, of which a quarter (24.9% or 1,655) rural dwellers commute to work in the IDA business parks depicted in Map 4 above. The share of rural dwellers working in the case study IDA business parks in Waterford is comparable to Galway, but greater than the share in Sligo. So while the numbers of rural dwellers commuting to the respective cities of Waterford and Sligo are broadly similar²², the share going to work in IDA business parks is much greater in Waterford.

Over 76% of these rural dwellers commuting to work in Waterford have a travel time of less than 45 min. Of those working in the IDA business parks 78.1% are within a 45

²² There were 6,621 rural dwellers commuting to work in Waterford and 1,655 of these commuted to the IDA case study area, which accounts for 24.9% of all rural dwellers commuting to work in Waterford. In Galway, rural dwellers working in the IDA case study area comprised 25.6% of the total. In Sligo there are 6,760 rural dwellers commuting to work within the gateway of Sligo and of these 18.6% (1,260) work in the IDA business parks.

minute drive time. Over 43% of those commuting to work in the IDA business parks have a journey time of between 15 and 30 minutes indicating that they live in fairly close proximity. A slightly higher proportion of rural dwellers have long journey times to work in Waterford generally than in the IDA business parks; 23.4% of rural dwellers have journey times of 45 minutes or more, compared to 22% of those travelling to work in the IDA business parks. These are higher proportions than in the case of Sligo indicating the larger geographic labour catchment in Waterford. The share of rural dwellers commuting in excess of 45 minutes to either Waterford or the Waterford IDA business park case study is less than Galway indicating that Galway has the largest labour catchment of the three case studies.

Over 11% of rural dwellers commuting to Waterford generally and to the IDA business park have a journey time greater than an hour, which is comparable to that in Galway but greater than the share in Sligo.

Industrial profile

The industrial profile of the IDA business park is predominantly Manufacturing²³ (60.2%), followed by Information and Communications activity (19.6%), a higher share than either Galway or Sligo. The third most significant sector, accounting for just 8.5% of employment in the IDA business park, is within the Wholesale, Retail, Transportation and Storage industry sector.

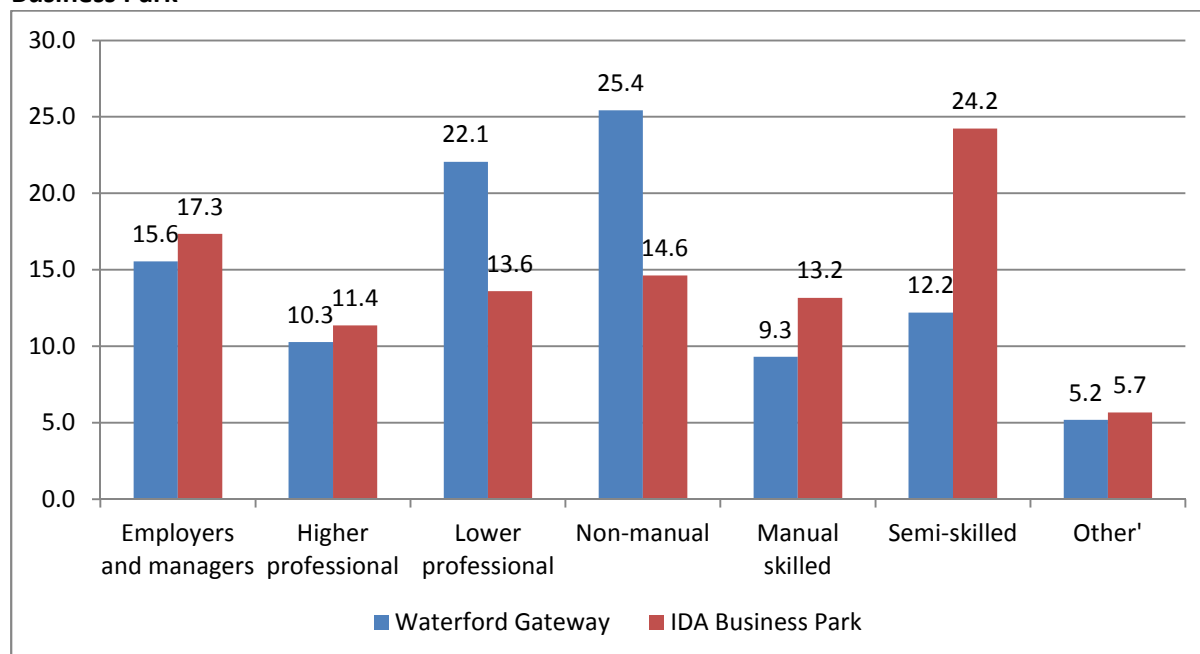
The industrial profile of rural dwellers working in IDA business parks is much more concentrated than in Waterford generally. This is not surprising given the sectoral focus of IDA activity. The most important employment sector for rural dwellers working in Waterford is the Education, Human Health and Social Work sector accounting for 30.9% of employment of rural dwellers. This is higher than in Galway (27%) but lower than in Sligo (34.1%).

Socio-economic profile

Six socio-economic groups are important among rural dwellers working in the IDA business parks as shown in Figure 10 Semi-skilled workers (24.2%), Employers and managers (17.3%) Non-manual (14.6%), Lower professional (13.6%), Manual skilled (13.2%) and Higher professional (11.4%). This is considerably more diverse than Galway and Sligo, where four groups predominate. In the Waterford IDA business park case study the categories of Non-manual and Manual skilled are more significant while the higher professional category is underrepresented compared to employment in the IDA Business Park case study in Galway.

Within the gateway of Waterford rural dwellers are primarily engaged in the same six socio-economic groups, though there are some differences. For example there is a much lower share engaged in Semi-skilled (12.2%) and Manual skilled (9.3%) employment than within the IDA business park. Within the gateway there is a higher share of rural dwellers engaged in Non-manual (25.4%) and Lower professional (22.1%) employment than in the IDA business park.

²³ Please refer to the appendix for the full detail of each industry sector.

Figure 10 Socio economic profile of rural dwellers working in Waterford Gateway and IDA Business Park

The 'other' category includes Unskilled, Own account workers, Farmers, Agricultural workers and All others gainfully occupied and unknown.

Gender

There are more male rural dwellers (61.8%) employed in the IDA business parks (compared to male rural dwellers employed elsewhere in the gateway - 45%). As with Galway and Sligo, when examining the gender profile there are significantly more females employed in the gateway generally than in the Waterford IDA case study where 55% and 38% respectively are female indicating that Gateway employment (outside of the business parks) is much more important for female rural dwellers than opportunities in the IDA business parks.

Further analysis of the socio-economic and gender profile of rural dwellers working in gateways and IDA business parks provides some interesting findings with different gender patterns in both locations.

Gender and Socio-economic group

Within the Waterford gateway, 55% of rural dwellers are female and these are particularly concentrated in just two sectors; Non-manual (36.6%) and Lower professional employment (29.3%), accounting for 65.9% of all female rural dwellers, a pattern similar to Sligo. Other important socio-economic groups for female rural dwellers in the Waterford gateway are employers and managers (11.3%), semi-skilled (9.9%), and the Higher professional socio-economic group (8.8%). This female socio-economic pattern is very similar to Sligo. As with Sligo and Galway, the male rural dwellers working in the Waterford gateway are more widely distributed across more socio-economic groups. One of the few differences across the gateways is there are proportionately fewer male rural dwellers engaged in the higher professional occupations in the Sligo (10.8%) and to a lesser extent Waterford (12.1%) gateways compared to Galway (15.5%).

Examining the gender profile of employment in Waterford, within the IDA case study, male rural dwellers (61.7%) outnumber female rural dwellers (38.2%) and there are proportionately fewer females in Waterford compared to either Galway (47.6%) or Sligo (44.6%). Once again male employment is spread more broadly across the range of socio-economic groups of which the most important are semi-skilled (22%), employers and managers (19.5%), manual skilled (19.3%), lower professional (14.1%) and higher professional (12.2%). Waterford is similar to Sligo and contrasts with Galway in the relatively low share of male higher professionals and the higher share of male manual skilled employment.

Female rural dwellers working in the Waterford IDA case study are mainly employed in five socio-economic groups. The most important is semi-skilled employment accounting for 27.8% of all female employment, higher than the male share of 22%, but less than in Galway (38.2%) and Sligo (29%).

The second most important group for female rural dwellers is non-manual employment with 27.2% engaged and this is much higher than either Galway or Sligo. Unlike the other case studies, the third most important socio-economic group for female rural dwellers is employers and managers (13.9%), more significant than in Galway or Sligo. Lower professional employment is the fourth most significant category accounting for 12.8% of female rural dwellers working in the Waterford IDA case study.

The fifth most important socio-economic group is higher professionals, accounting for 10% of female rural dwellers, similar to Sligo (10.8%) but much less than Galway (20%). This difference cannot be explained by other differences, for example the proportionately higher share engaged as employers and managers.

Education

Rural dwellers who commute to work in the Waterford IDA business park are less likely to have completed third level education (36.2%) compared to those rural dwellers who work elsewhere in the Waterford gateway (40.6%). Those rural dwellers commuting to work in Waterford are less likely to have a third level qualification compared to their equivalents in Galway and Sligo (44% and 41.6% respectively). Whether this reflects the educational levels of the local population or the type of employment or skills in demand is unclear but it is probable there is an element of both.

Age

The age profile of rural dwellers working in the Waterford IDA business park case study is concentrated in the 30-44 years age bracket, accounting for 56.9% of all rural dwellers employed there. In contrast the age profile of those rural dwellers working elsewhere in the gateway is more widely distributed, for example 50.2% are within the 30-44 years age bracket and over one fifth (20.8%) are aged over 50 years compared to just 14.1% within the IDA business park.

Among the younger age cohorts there are also proportionately more aged 30 years and under employed in the IDA business parks compared to the gateway generally (17.4%

and 16.1% respectively) and this contrasts with the pattern in Galway and Sligo, where there is proportionately more within the under 30 years age group working in the gateway generally compared to the IDA business parks. Therefore there is a younger age profile in multinational employment than that in Waterford generally. At the younger age level, this may reflect the education and skill levels required in the industries within the IDA business parks, but it may also reflect relatively scarce entry level positions in Waterford outside of the IDA business parks.

Summary points

- One in five (19% or 119,756) of all rural dwellers commute to work in one of the nine NSS gateways, indicating the importance of gateways as centres of employment for rural dwellers.
- Rural dwellers are an important source of labour supply for the gateways, accounting for 14.7% of all workers employed there.
- Journey times to work suggest that each gateway has a labour catchment or travel to work area of at least a 45 minute drive time. The geographic extent of the Galway labour catchment is the largest, followed by Waterford and then Sligo. In Galway, 75% of rural dwellers have a journey time of 45 minutes or less to their place of work. In Waterford and Sligo, the share is 78% and 84% respectively.
- Those rural dwellers who work in the gateway generally have a longer journey to work compared to those rural dwellers working in the IDA business parks. This difference is probably explained by the location of the IDA business parks which are often located outside the town centres and therefore slightly more proximate to the rural commuting population.
- Rural dwellers working in the selected IDA case studies account for between one quarter (Galway – 25.6%, Waterford – 24.9%), and less than one fifth (Sligo – 18.6%) of all rural dwellers commuting to work in the respective gateways. The relatively low share of rural dwellers employed in the Sligo IDA business parks may reflect in part the smaller scale of IDA employment there.
- The industrial profile of each gateway is more diverse than in the IDA parks. In the Sligo gateway the most significant sector in which rural dwellers are engaged is Education, Human Health and Social Work where over a third (34.1%) of all rural dwellers is engaged, higher than Waterford (30.9%) and Galway (27%).
- The industrial profile of each IDA case study is very similar. The largest sector is Manufacturing accounting for 69% of rural dwellers working in the IDA business park in Galway, 68.5% in Sligo and 60% of all rural dwellers commuting to work in the IDA business park in Waterford.

- The ICT sector is the second most significant sector, accounting for close to one fifth (19.6%) of rural dwellers working in the IDA business park in Waterford, 15.4% in Galway and 13.9% in Sligo.
- Semi-skilled employment is the single largest socio-economic group for rural dwellers working in the IDA case studies, accounting for 31.3% in Galway, 27.8% in Sligo and 24.2% in Waterford.
- The most significant occupations for female rural dwellers commuting to work in the gateways differ, depending on whether they are employed in the gateway generally or in the IDA case studies. In the IDA case studies, the most significant employment category for female rural dwellers is the semi-skilled socio-economic group. For example in the Galway IDA case study, this group accounts for 38.2% of all female employment, much higher than the male share of 25%. However, in the gateway, the semi-skilled socio-economic group is the fourth, or in the case of Galway, the third most common category for female employment.
- For female rural dwellers working in the Galway IDA case study, higher professional employment is particularly significant, accounting for 20% of all female employment there. This is double the share of female higher professional employment in Galway generally and also double the share of female rural dwellers engaged in higher professional employment in either of the other IDA case studies of Waterford (10%) and Sligo (10.8%). This may be partly a scale issue where there are greater opportunities in Galway given the relatively higher numbers engaged in the IDA case studies. It may also reflect particularly strong female gender patterns within some companies or sectors but this detail is not available from the data.
- Rural dwellers commuting to work in gateways are more likely to have a third level education (44.2%), compared to the national average of 34.8% and compared to rural dwellers working in rural areas (21.7%). However, rural dwellers who commute to work in the IDA case studies are slightly less likely to have completed third level education compared to those rural dwellers who work elsewhere in the gateway.
- Those rural dwellers commuting to work in the Waterford gateway are less likely to have a third level qualification (40.6%) compared to their equivalents in Galway and Sligo (44% and 41.6% respectively). Whether this reflects the educational levels of the local population or the type of employment or skills in demand is unclear, but it is probable that both factors are relevant.
- The largest age cohort of rural dwellers commuting to gateways is in the 35-39 age groups (18.1%) and close to half (49.7%), of rural dwellers working in gateways are aged between 30 and 44 years. The age profile of multinational employment is not as widely distributed as employment generally. The age profile of rural dwellers working in the three IDA case studies is more concentrated in the 30-44 years age bracket, with well over half of all rural dwellers employed there aged within this group; Waterford (56.9%), Sligo (57.2%) and Galway (61.9%).

Conclusions and Policy Implications

One fifth of all rural dwellers commute to work in the NSS gateways. Economic development and job creation strategies need to acknowledge and recognise the extent to which rural dwellers commute to gateways to work.

A significant proportion of those rural dwellers commuting to gateways, work in the foreign direct investment sector (FDI) and more specifically in IDA Business Parks, though the share varies in each case study gateway.

National strategy on foreign direct investment (*IDA Horizon 2020*) aims to locate 50% of investments outside of Dublin and Cork. Recent research however, indicates that there is an increasing concentration of foreign direct investment in the very large centres and Dublin in particular²⁴.

The analysis of three gateways of Galway, Waterford and Sligo show that rural dwellers often travel distances of up to 45km and sometimes longer to work in these gateways. They have the skills to access this employment and some may choose to travel long distances to access better employment opportunities located in the gateways.

The employment profile and opportunities in gateways, to which rural dwellers commute to, often require higher educational levels than the employment located in towns and rural areas. This may be in part due to the greater prevalence of certain elements of public sector employment and foreign direct investment in the gateways, many of which employ a very high proportion of graduates.

From a labour supply perspective, FDI jobs and enterprises can and do successfully locate in more regional locations with labour catchments drawing on a large supply of well qualified rural dwellers. Indeed some large multinationals choose rural locations proximate to urban centres to avail of both the urban labour supply and the labour supply of adjacent rural catchments. Recognising scale issues, with the right institutional and policy supports, a greater dispersal of FDI and indigenous employment creation to the smaller gateways is possible.

Outside of gateways, there are examples where some companies have not chosen city locations but have located in smaller locations to tap into the labour market that was resident there. This and previous industrial policy has shown that not all investment needs to be concentrated in the gateways.

The analysis of rural dwellers commuting to work in gateways and in the IDA case studies has shown that rural dwellers have the skills to access employment in the FDI and export based sectors. The evidence also shows that within a certain radius and with access to transport, rural dwellers choose to commute to avail of these jobs.

²⁴ For example, Chris van Egeraat, Proinnsias Breathnach & Declan Curran. *Gateways, hubs and regional specialisation in the National Spatial Strategy*, Administration, Vol 60, No.3 2013 and Breathnach, P, *Spatial trends in employment in Foreign Firms in Ireland*, CEDRA Research Paper, 2013

The labour market profile of rural dwellers may indicate a broad dual typology where often the higher educated, middle aged and often female rural dweller commutes to work in the gateways, largely in the public sector, retail or manufacturing employment. Rural dwellers working in rural jobs are less likely to have a third level education, are drawn from a broader age profile and may be less mobile, and are likely to be employed in agriculture, manufacturing, retail and some public sector employment.

Rural dwellers living in more remote rural regions are beyond the catchment of gateways and for these, employment opportunities in adjacent towns as well as rural areas is very important. (WDC CEDRA Research Report, Section 3, Chapter 2, *Rural Commuting and Employment in Towns*, 2013).

Income support and job creation for rural dwellers will continue to depend in part on commuting to larger centres to work in the public sector, locally traded and in the export oriented sectors (both indigenous and foreign).

The planned New Spatial Strategy needs to recognise the commuting patterns of rural dwellers as well as the capacity of smaller towns and cities to host smaller scale foreign and indigenous export oriented enterprises. It will be important to recognise, identify and document different types of rural areas and the characteristics of different types of rural commuting, for example the greater Dublin commuting rural belt, is likely to be different to the commuting patterns in the North West, West or Mid-West. On this basis appropriate policy responses for the benefit of rural dwellers can be devised.

Appendix

Methodology

The data analysis is based on the Census of Population 2011, Place of Work, School or College Census of Anonymised Records (POWSCAR). Several methodological issues are explained below.

Place of residence

In 2011, there were 1.7 million (1,770,644) workers of which 35.5% (629,382) are categorised as rural dwellers. The working population defined as urban dwellers (including gateway dwellers) comprises 64.5% of the total (1,141,262).

Of this urban population, 1.7% (29,227) reside in rural EDs within gateways as defined for this research where gateways and hubs constitute the legally defined boundaries of the urban centres in question plus all EDs that that adjoin these boundaries. This is more extensive than normal (town + environs) definition and will capture firms on the outskirts of urban centres. For those rural dwellers originally classified as rural but located within the gateway are reclassified as urban dwellers. The same reclassification occurs for place of work which if located in rural EDs within the definition of gateways is recoded to gateway places of work.

Place of work

Workers with 'no fixed place of work' (including blanks and mobile place of work) have been excluded which removes 295,428 workers from the analysis leaving a population of 1.475 million workers. Those working from home are categorised according to their place of residence; either rural, urban or gateway. This has a greater impact on the numbers working in rural areas, reflecting the greater proportion working 'from home' in the agricultural sector.

After removing blanks and mobiles and re-assigning those who work at or mainly from home to their place of residence, the total number of workplace destinations examined is 1,475,216 of which the proportion working in rural areas (rural jobs) accounts for 21.3% (314,213) of the total. Urban jobs (both gateway and towns) account for 78.7% of all jobs of which 55.2% (814,612) are in gateways, and 23.5% (346,391) are employed in the towns.

Students who work part time are not included in the analysis.

Classifications

Industry	Socio-economic group
1=Agriculture, forestry and fishing	A=Employers and managers
2=Manufacturing, mining and quarrying, Electricity, Gas, Water supply and Waste Management	B=Higher professional
3=Construction	C=Lower professional
4=Wholesale, Retail Trade, Transportation and Storage, Accommodation and Food Service Activities	D=Non-manual
5=Information and Communication, Financial, Real Estate, Professional, administration and support service activities	E=Manual skilled
6=Public Administration and Defence; Compulsory Social Security	F=Semi-skilled
7=Education, Human Health and Social Work Activities	G=Unskilled
8=Other Service Activities	H=Own account workers
	I=Farmers
	J=Agricultural workers
	Z=All others gainfully occupied and unknown