



DERREG

Developing Europe's Rural
Regions in the Era of
Globalization



CASE STUDY CONTEXTUAL REPORT 8



West Region of Ireland

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1. Introduction

1.1 Location and Geography

This contextual report is concerned with the West of Ireland case study region, with a particular focus on County Roscommon (*Ros C omain* in Irish). County Roscommon is one of twenty-six counties of the Republic of Ireland (figures 1 and 2), which together with the counties of Galway to the south-west and Mayo directly west forms the West Region of Ireland, a NUTS3 statistical region which occupies a peripheral location on the north-western edge of Europe. The three counties of the West Region also lie within the traditional province of Connacht.

The West region stretches from the Atlantic Ocean to the banks of the River Shannon, with the latter forming the eastern border of County Roscommon. County Roscommon lies within the central plain of Ireland and is largely comprised of agricultural lowlands, broken in places by low hills as well as many areas of bogs and lakes. It is the tenth largest of the twenty-six counties, covering an area of 2,547 km². This accounts for 18.5% of the total 13,801 km² land area of the West Region, which itself comprises 20% of the national territory. Both Roscommon and the larger West Region within which it lies are ‘predominantly rural’ in character, with 100% of the latter’s territory classified as such by Eurostat. The Atlantic Ocean provides a rugged coastline of off-shore islands, including the Aran Islands which lie at the mouth of Galway Bay, and large numbers of quality beaches, fringed by coastal mountain chains running through County Galway and County Mayo. The West Region also has a rich cultural heritage, with prehistoric sites, monasteries, fortifications and castles dispersed throughout.

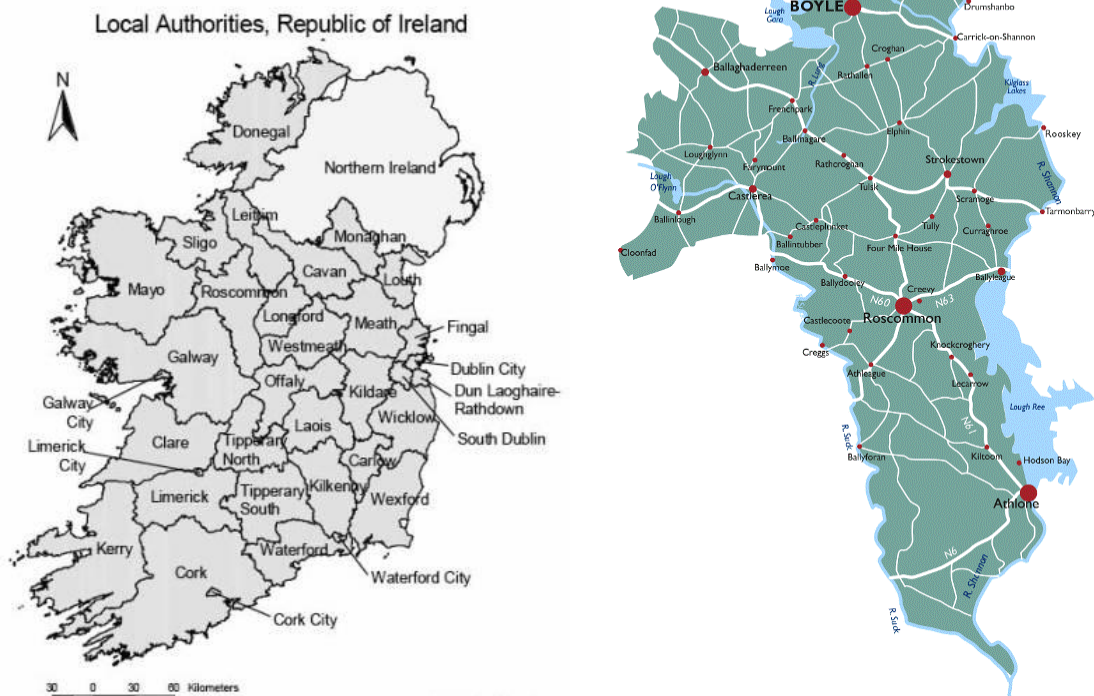


Figure 1: (Left) Location of Counties Roscommon, Mayo and Galway.¹
Figure 2: (Right) County Roscommon, showing major settlements.

¹ Source: Ordnance Survey Ireland

In 2006, the population of County Roscommon stood at 58,768 people which is 14.1% of the 415,500 living in the West Region, with 55.7% (231,035 people) living in County Galway and 30% (126,000 people) in County Mayo. This places Roscommon 22nd out of the 26 counties in terms of population size and gives it a relatively low population density of only 23.1 persons per km². This is slightly lower than that for the whole West Region, where a population density of 30.5 persons per km² places it third lowest across the ten DERREG case study regions.

The only significant urban centre within the West Region is the regional capital city of Galway, situated on the River Corrib in County Galway, with a population of 72,414 in 2006 making it the third largest city in the Republic of Ireland. Other main urban centres in the West Region include Ballina (10,409), Tuam (6,885), Ballinasloe (6,158) and Westport (5,475), while the largest in County Roscommon are Roscommon town (5,017), Boyle (approx 2,500), Castlerea (1,870) and Ballaghaderreen (1,720) (Figure 2). The larger town of Athlone (14,347) sits just outside the border of County Roscommon in neighbouring Westmeath, but around 2,500 people live in suburbs of Athlone that spill over into County Roscommon, notably the community of Monkslands. Only a third of the population of the West Region live in settlements of over 1,500 residents and this is particularly pronounced in County Roscommon, where a settlement pattern of small towns and villages dominates.

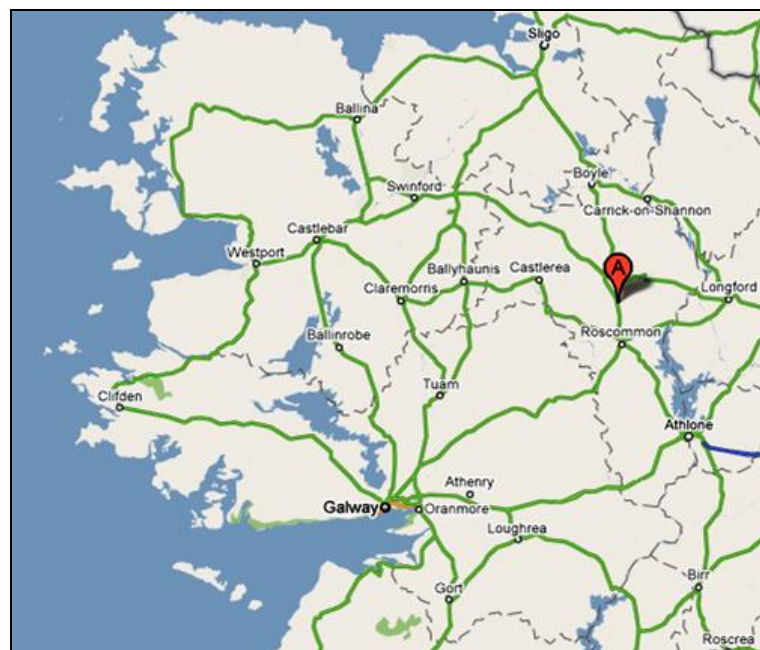


Figure 3: Major towns and road connections with the West Region.
Source: Google Earth

The West of Ireland achieves a relatively low score on ESPON's accessibility index of 24,700 due to a generally poor (but improving) transport infrastructure, resulting in a lack of efficient access to the main cities and ports (Figure 3). Current travelling time between Galway and Dublin takes 3 hours by road to cover the 140km distance. This should be improved with the planned completion in 2010 of the M6 Motorway linking Galway to Athlone and Dublin. Other primary roads serving Galway city are the N17 from the North (Tuam, Sligo, Donegal), the M6 motorway from the East (Athlone, Dublin), and the N18 from the South (Shannon Town, Limerick and Cork). Distances from Galway to other major Irish cities include 306km to Belfast, 209km to Cork and 105km to Limerick. Southern parts of

Roscommon county have a relatively high degree of accessibility, with driving times of around one and a half hours to Dublin (via the M6 motorway from Athlone), and a hour to Galway. Transport connections to central and northern parts of County Roscommon, however, are less developed. Roscommon town is 80km from Galway city, but over an hour's travel time by road; Boyle is 125km and nearly two-hours drive time from Galway city.

Passenger rail connections similarly connect both Galway and Mayo to Dublin, whilst a new Mayo to Dublin Freight Route has enhanced the status of Ballina as a major rail freight hub (to Dublin and Waterford Ports). There are stations at Roscommon and Castlerea on the Dublin-Westport-Ballina line, with four services a day to Dublin; and at Boyle on the Dublin-Sligo line, with eight services a day to Dublin. Athlone has a major station at the junction of the Dublin-Westport and Dublin-Galway lines. There are 2 international airports within the West Region, with the Ireland West Airport at Knock, County Mayo, and Galway airport providing services to Dublin, UK, Mainland Europe and the USA (just from Knock). Galway city is also an important commercial seaport.

1.2 Government and Politics

Ireland as a whole is one of the most centralised member states of the European Union. The Irish system of local government was inherited from Britain in 1922, and has changed little since. Devolution of significant powers, particularly fiscal powers, to either the regional or local level has been slow. It is estimated that approximately 90% of locally-controlled public expenditure goes to local governments. In 2001, this amounted to €5,872 million, or just 6% of GNP. The main branches of local government are:

1. Local Authority structures (decision-making)

These are the primary units of local government, established over 100 years ago. In the West Region there are three County Councils (Galway, Mayo and Roscommon) and one City Council (Galway City), responsible for providing a range of public services, as well as controlling and co-ordinating planning and development. County and city councillors are elected every five years. There is also a secondary tier of Town Councils, which have some limited responsibilities in small towns. There is only one town council in County Roscommon, Boyle Town Council, along with three in County Galway (Ballinasloe, Longrea and Tuam) and three in County Mayo (Ballina, Castlebar and Westport).

2. Regional Authority structures (advisory)

The West Region is one of eight NUTS 3 level Regional Authorities in Ireland which were established in 1993. Their remit is to promote co-ordination of public service, and to monitor and review EU programmes and spending in their area. They do not provide services directly to the public. The Western Regional Authority comprises of 27 members appointed from the councillors of the county and city councils in the region.

3. Regional Assemblies (advisory)

The country is further designated into two NUTS II Regions, The Border Midland & Western Region (BMW) and the Southern & Eastern Region (S&E), with the West Region part of the former. These came into effect in 1999 and each have a Regional Assembly with the stated remit to promote co-ordination of public services, advise on regional dimensions of the National Development Plan, Monitor EU Programmes and manage Regional Development Operational Programmes. They do not provide services directly to the public. The BMW regional assembly is based in Ballaghaderreen in County Roscommon.

There are also a number of other organisations engaged in local governance in the region, including various state agencies, community and voluntary groups, local development groups, education and health bodies with a combination of decision-making and advisory roles.

NUTS 1	NUTS 2	NUTS 3	LAU 1	LAU 2
Republic of Ireland	Border, Midland and West	West Region	3 County Councils: Galway Mayo Roscommon 1 City Council: Galway City	Electoral districts: 216 Galway county 154 Mayo county 112 Roscommon 72 Galway city

Table 1: Hierarchy of administrative/statistical units for West Region

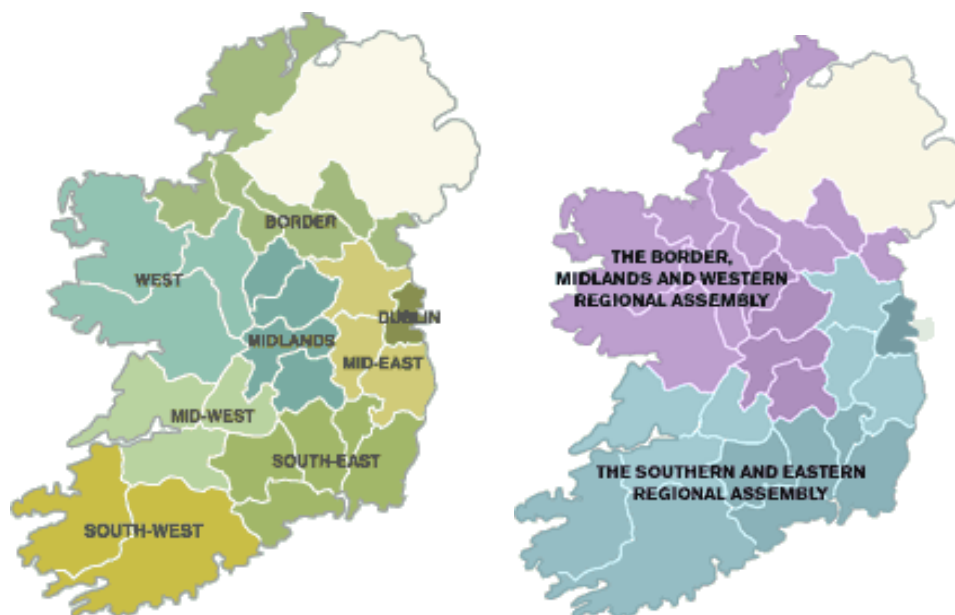


Figure 4: (left) NUTS3 Regional Authorities; Figure 5: (right) NUTS2 Regional Assemblies.
Source: The Irish Regions Office.²

Party politics in the Republic of Ireland is shaped by a political cleavage dating to the Irish Civil War rather than left-right class cleavage evident in most countries. Both the main parties, *Fine Gael* and *Fianna Fáil*, are broadly centrist in outlook. Local politics in rural Ireland are generally conservative and personality-driven, with a large number of Independent councillors. The West region has traditionally been regarded as a stronghold for *Fianna Fáil* (the Republican Party), which is considered to be marginally to the left of *Fine Gael*, and which since 2007 has formed the national government in coalition with the Green Party and the Progressive Democrats. However, the 2009 local elections saw gains by *Fine Gael* (United Ireland Party) in line with a national anti-government swing, with *Fine Gael* becoming the largest party in local government in the region for the first time ever (Table 2).

	Fine Gael	Fianna Fail	Labour	Sinn Fein	Non Party/Ind
Galway Co Council:	13	7	1	1	8
Galway City Council:	3	3	5	0	4
Mayo Co Council:	17	7	0	2	5
Roscommon Co Council:	10	8	0	1	7

Table 2: Results of the 2009 Irish local elections

² Available at: <http://www.iro.ie/index.shtml>

2. The Regional Economy

2.1 Economic History

Agriculture has been the traditional industry of the predominantly rural West Region, despite less favourable growing conditions in comparison to the large fertile pastures found in the midland and southern regions of Ireland. The agricultural sector has undergone significant structural changes since the 1970s following Ireland's accession to the EU and again with Common Agricultural Policy reforms introduced in 1992, but remains a relatively important regional employer in rural areas despite the widespread diversification of Ireland's national economy since the 1990s. The Irish economy as a whole expanded rapidly between around 1995 and 2007, during the 'Celtic Tiger' period. This was encouraged both by EU aid and investment, and state policies such as low corporate taxation and subsidies which attracted high-profile companies like Dell, Intel, and Microsoft to locate in Ireland as well as encouraging new business growth. With a lack of traditional industrial heritage, the West Region was largely able to successfully adapt to these processes of economic change and restructuring, with particular growth in the region's service economy (including tourism), hi-tech, and construction industries.

Figures for the West Region demonstrate the rapid growth of the regional service sector over the Celtic Tiger period in terms of its Gross Value Added (GVA), which increased by over 250% between 1995 and 2007 (figure 5). Industry also expanded in line with the service sector during the 1990s, but industrial growth stalled in 2001, such that the gap between GVA from services and industry has widened in the last decade. Agriculture experience some limited growth during the 1990s, but has declined since 2000, with GVA from agriculture, fishing and forestry in the West Region in 2005 equating to about 86% of the 1995 value. As such, the relative contribution of agriculture to regional GVA has decreased from around 12% in 1995 to around 3.5% in 2005.³ In terms of how this translated to employment, figures for the larger NUTS2 Border, Midland and Western region show an increase in overall service sector employment between 2001 and 2007 of 41%, rising from 237,400 to 334,100 persons. Employment in primary industries declined by around 8000 people or 15% over the same period, whilst employment in the construction industry showed rapid growth (63%) compared to the rest of the industrial sector where employment decreased slightly by 7% (figure 6).⁴

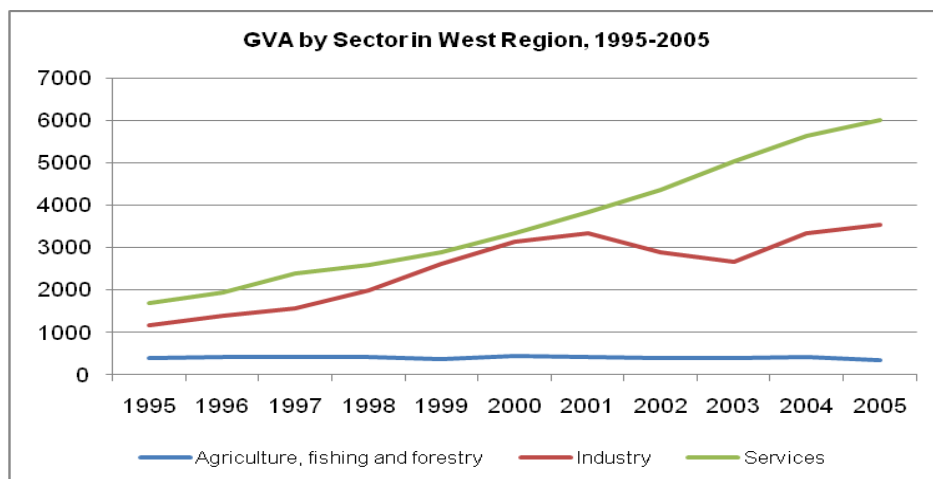


Figure 5: Gross Value Added (GVA) by Sector in the West Region, 1995-2005
Source: Eurostat

³ Source: Eurostat

⁴ Ibid

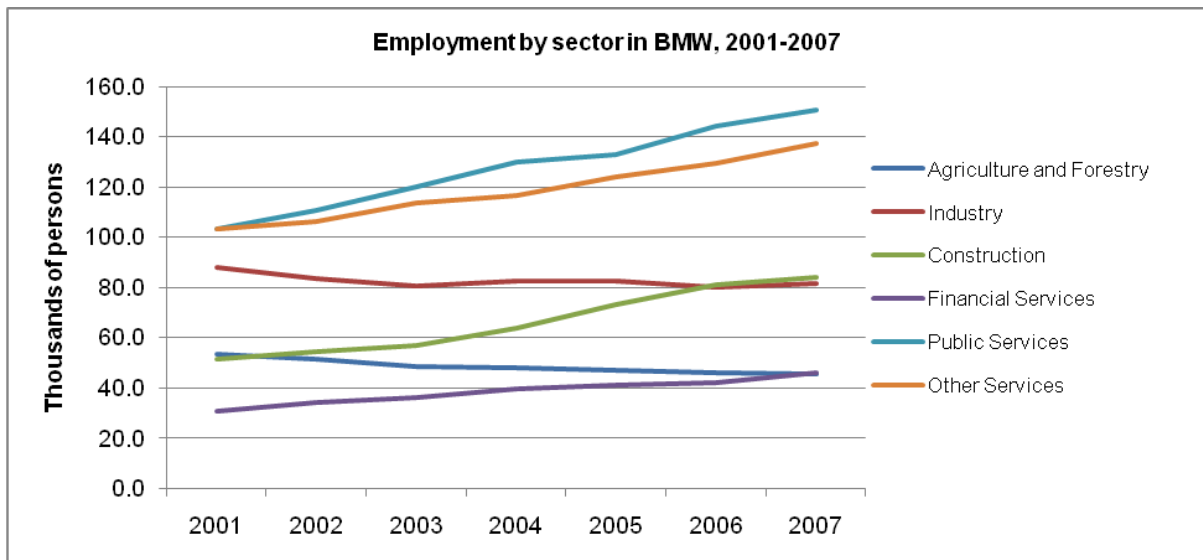


Figure 6: Employment by sector in the Border, Midland and Western NUTS2 region, 2001-2007. Source: Eurostat

This period of strong economic growth from the mid-1990s to mid-2000s has seen the GDP per capita in the West Region dramatically increase by a factor of 2.91, from €10,500 in 1995 to €30,600 in 2006 (figure 7); a period which has arguably seen Ireland transform from one of the poorest countries in Western Europe to one of the richest. This GDP figure for 2006 was the third highest across DERREG case study regions (after Overig Groningen and Oevre Norrland) and around 30% higher than the EU average, yet significant pockets of disadvantage and poverty remain within the West Region and particularly in rural areas. The coastal districts of north-west Mayo and the Connemarra area of Galway have particularly high levels of deprivation, whilst the peri-urban zone around Galway city is very affluent by national standard. County Roscommon has levels of prosperity around the national average, with greater deprivation in the north of the county. Communities around Athlone and rural areas neighbouring Roscommon town have above average affluence; but a number of rural divisions in northern Roscommon have relatively high levels of deprivation compared with the national average, especially around Loughglinn and Lough Allen.⁵

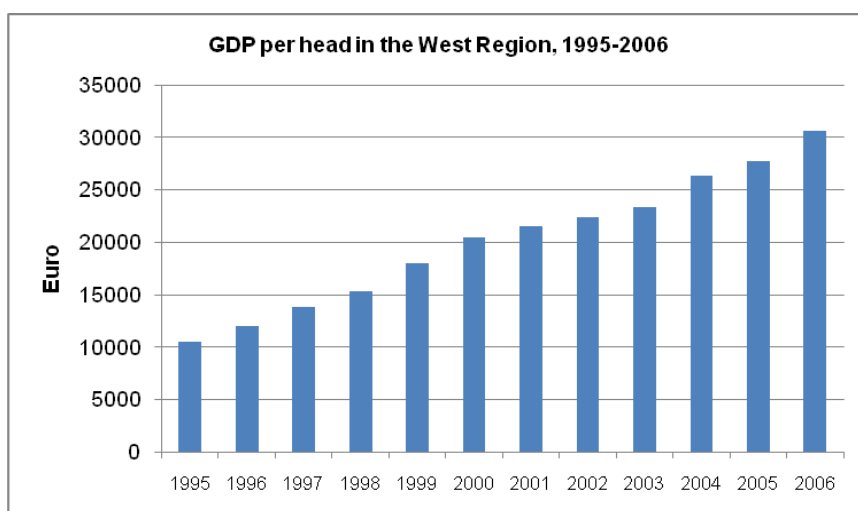


Figure 7: GDP per head in the West Region, 1995-2006. Source: Eurostat

⁵ Source: Haase (2007)

2.2 Present Economic and Employment Structure

The service sector is now the most important area of activity in the economy of the West Region, employing 65% of the regional workforce in 2008 compared to 50% in 1998. With the numbers of people in employment in total rising over this period from 142,500 to 195,500, this represented an increase of around 55,800 people employed in service occupations. Industry accounted for 26% of regional employment in 2008 compared to 30% in 1998, while the agricultural sector experienced a more significant decrease in terms of its proportion of employment from 20% to 9% over the same period leading to a growing emphasis on rural diversification and the tourism sector⁶ However, this still represents a comparatively large and important regional agricultural sector, with agricultural employment marginally higher still in County Roscommon (in 2006) at 10.1% of the 25,829 strong workforce, with the remaining 28.2% employed in industrial and 61.7% in service occupations. The single largest industry of employment in County Roscommon is construction, employing nearly 3,700 people (14.3% of the working population, followed by wholesale and retail trade (3,300; 12.8%), manufacturing (3,000; 11.7%), health and social services (2,850; 11.0%) and agriculture, fisheries and forestry (2,600; 10.1%).⁷

In 2001, over a quarter of the working population of the West Region were employed in professional and managerial occupations, whilst just under one-quarter are employed in both clerical and non-manual (service) and skilled manual and craft occupations (table 3).

	Number	%
Senior officers and managers	17153	11.58%
Professionals	22979	15.52%
Professional and managerial occupations	40132	27.10%
Technical and associate professionals	8672	5.86%
Clerical and secretarial workers	15671	10.58%
Service and retail workers	18193	12.29%
Clerical and non-manual occupations	33864	23%
Skilled agriculture and fishery workers	13428	9.07%
Craft and related trade workers	19935	13.46%
Skilled manual and craft occupations	33363	22.53%
Plant and machine operators and assemblers	14243	9.62%
Elementary occupations	11553	7.80%
Semi- and un- skilled manual work	25796	17.42%
Armed Forces	558	0.38%
Not described	5694	3.85%
Total workforce	148079	

Table 3: Occupational Structure of the West Region workforce, 2001;
Source: Eurostat

⁶ Source: Central Statistics Office Ireland (<http://www.cso.ie/>)

⁷ Source: Central Statistics Office Ireland (<http://www.cso.ie/>)

Within the larger Border, Midland and West region, the economic activity rate amongst the population aged 15 plus was 62.1% in 2007; an increase of 7.1% since 1999 and the third highest out of comparable DERREG NUTS2 regions after Oevre Norrland and Groningen.⁸ Within the BMW, the economically active population of the West Region similarly increased from 164,700 to 206,900 persons between 1999 and 2006, whilst the unemployment rate fell sharply from the late 1990s from 9.7% in 1997,⁹ to a low of 3.8% in 2004, before increasing again slightly to 4.6% in 2007 (still the second lowest out of the DERREG case study regions after Alytus), before the impact of the current recession (see below).

There are geographical variations within economic activity rates, with census data for 2006 for County Roscommon recording 55.2% employment amongst the potentially active population yet also a low unemployment rate of 3.7%, suggesting a larger proportion of the population are economically inactive including children and the elderly. As such, regional planning strategies for the West Region emphasize the need to increase employment opportunities in rural areas which builds upon the success of key regional settlements such as Galway and Tuam in County Galway, and Castlebar and Ballina in County Mayo.¹⁰

The focus for economic growth has been the region's primary urban settlement of Galway City and its surroundings, which is now the third largest city in Ireland as well as its fastest growing, and has a strong local economy based on retail and distribution, tourism, education, healthcare, financial and ICT services, as well as a high proportion of public sector employment. The West Region has also developed a modern hi-tech manufacturing industry, producing and exporting medical equipment, electronics and chemicals, while a large regional food processing sector is the most important industrial employer in Roscommon.

Private enterprise has expanded in the West Region since the late 1990s, encouraged by EU funding targeted at enterprise promotion, innovation and technology deployment. Key areas of business growth have included in key areas including ICT services, medical devices and the food and beverage sector. However, of 62,884 new company start-ups in Ireland between 1999 and 2002, only 13% were in the BMW Region (with the rest in the Southern and Eastern region which includes the capital Dublin), indicating that the BMW has lagged behind in terms of developing a competitive business environment. Figures show that the number of firms operating in the manufacturing industry in Roscommon increased from 56 in 2000 to 66 in 2004, with employment correspondingly increasing from 2144 to 2576 persons. However, while two new firms were established in the region's largest industrial sector of food, beverages and tobacco, employment in the sector actually fell by over 20%. At the same time, the start-up of two firms in 'Chemicals, Rubber, plastics, and mineral products' contributed to over 500 new jobs in that sector over the 4 year period.¹¹ There are now approximately 350 registered enterprises in County Roscommon, of which 41% are micro enterprises of less than ten employees, 52% are small to medium sized enterprises (10-49 employees) and 7% are large firms (50+ employees). Many of the larger firms operate in the food and drink, construction and pharmaceuticals industries.

There is significant commuting from the south of the county to workplaces in Athlone, which has expanded rapidly as an industrial growth pole and is now once of the largest centres of the pharmaceuticals industry in Ireland (along with Castlebar and Westport in County Mayo, as well as Newbridge (Co. Kildare) and Waterford). Two of the major pharmaceutical companies in Athlone, Elan Drug Technologies and Athlone Pharmaceuticals are actually

⁸ Source: Eurostat

⁹ Source: *The Western Region: Key Statistics*. Available at: <http://www.wdc.ie/publications/reports-and-papers/reports-2008/>

¹⁰ Source: http://www.iro.ie/west_region.html

¹¹ Source: Roscommon Co. Council Demographic, Economic & Employment Profile of co. Roscommon, June 2008

based in Monksland, in County Roscommon, with other firms based in Athlone town, including Bioclin Laboratories, Tyco Healthcare, Utah Medicare and Pharmaplaz. Other major employers in Athlone include Ericsson (telecommunications), Alcatel (cables), Alienware (computer hardware) and Athlone Extrusions (polymers), as well as public sector employers including the Department of Education and Science, the Revenue Commissioners and the Irish Army (at Custume Barracks). The medical supply industry is also a significant employer in several Roscommon towns, including Harmac Medical Products (Castlerea) and Innocoll Technologies in Roscommon. The other major employers in County Roscommon include Colour Communications (Manufacturing, Castlerea), Connacht Gold Co-operative (Dairy processing, Ballaghaderreen), Hannon's Poultry Exporting (Roscommon), Carson Industries (Plastics, Roscommon) and Finola Foods (Castlerea).

Over 2,200 people in the public sector in County Roscommon, with the largest employers including the Health Services Executive (995 jobs) and Roscommon County Council (655 jobs), and a further 1,500 people are estimated to commute to public sector employment outside the county.¹²

The Irish economy has been badly hit by recession since 2007, with GDP falling by 5% in 2008 and 11% in 2009.¹³ Nationally, the unemployment rate has increased sharply from 4.3% in 2007 to 6% in 2009 to over 12% in 2010. Between 2005 and 2009, the number of unemployed people in County Roscommon increased by 180%, with a 140% increase in County Galway and a 120% increase in County Mayo.¹⁴ Notable job losses in County Roscommon include up to 80 jobs lost with the closure of the Dawn Meats factory in Ballaghaderreen, announced in January 2008; 60 jobs lost with the closure of Casey Autogroup in Roscommon, Athlone and Carrick-on-Shannon; and 80 redundancies at the Elan plant in Monksland, announced in February 2009.

2.3 Rural Primary Industries

The relative significance of agriculture in the economy of the West Region (and Ireland as a whole) has reduced substantially in recent decades, yet it remains a significant source of income, export earnings and regional employment in rural areas, such as across much of County Roscommon. Whilst agricultural GVA in the West Region moderately decreased from €402.6 million in 1995 to €346.6 in 2005, its share of regional GVA fell over the same period from 12.4% to just 3.5%. However, the sector's share of regional employment remains higher, with the number of agricultural employees falling from 53,500 full-time equivalent workers in 2001 to 45,700 in 2007; or from approximately a 12% to a 9% share of total regional employment. The level of agricultural employment is marginally higher in County Roscommon at 10.1% in 2006 due to the more favourable growing conditions moving inland from the West coast. This figure is likely higher still in rural districts within the county where the highest proportions of farms are concentrated e.g. Kiltullagh and Ballinlough.

In 2007, there were 30,100 farms in the West Region of Ireland which is an 8% decrease from the 2000 figure within a general downwards trend.¹⁵ Mid-sized farms dominate the region, with just under 50% having holdings between 10 and 30 hectares. Of the remaining 50%, roughly half have holding of less than 10 hectares and half with holdings of more than 30 hectares giving an average farm size of 24.1 hectares (24.8 ha in County Roscommon).¹⁶

¹² Source: Roscommon Co. Council Demographic, Economic & Employment Profile of co. Roscommon, June 2008

¹³ Source: Central Statistics Office Ireland, www.cso.ie

¹⁴ Source: 'Many Eyes' blog, www.manyeyes.alphaworks.ibm.com

¹⁵ Source: Eurostat Rural Development Report, 2008

¹⁶ Source: Eurostat

This is the lowest average farm size out of Ireland's 8 NUTS 3 regions and reflects the poorer land quality in the west which limits agricultural productivity.

In 2005, 45.6% of farmers in the West Region had another source of gainful activity, whether through farm-diversification or additional employment. Of a sample of farms in the West Region reporting gainful non-agricultural activity on site, around 38% were involved in farm tourism whilst other activities include home-crafts, recreation, fish farming and renewable energy production.¹⁷ Almost all the agricultural land is owned by the farmers who work it, with the former tenancy system replaced by owner-occupancy in the late nineteenth and early twentieth century.¹⁸ More than half of farm owners (55.2%) in the West Region are aged over 55, including nearly 30% over 65, reflecting the traditional organizational structure of the region's agricultural sector where 88.5% of farm owners are also male.¹⁹

Farms and enclosed fields dominate the Irish landscape, with agricultural areas covering 66.8% of the state territory. Utilised (farmed) agricultural land covers 52.3% of the territory of the West Region and 62.6% of County Roscommon specifically, while much of the remaining land may be used by farmers as rough grazing for cattle and sheep. This land in the West Region is generally of poor quality, with 100% of farms classified as located within 'less favoured areas', although County Roscommon generally enjoys a higher quality of agricultural land due to its inland position adjoining the central plain of Ireland. These conditions mean that the land is generally more suitable for the growth of grass than arable crops and, as such, agriculture in the region is predominantly mixed pastoral (livestock) farming with some subsidiary arable cropping. This is reflected in figures for the larger BMW region, where permanent grassland accounts for over 80% of the utilised agricultural area in 2006.²⁰

Livestock production dominates farming in the West Region, with 99% of farm holdings in 2005 having some form of livestock while 44% incorporated some arable land use. Cattle and sheep farming are the largest sectors, with 2.3 million heads of cattle recorded in the larger BMW region in 2007, which is the second highest figure across comparative DERREG NUTS2 regions after Oevre Norrland. In County Roscommon, sheep and cattle are raised on the limestone grasslands with area to the east of Boyle particularly renowned for its cattle pastures, while Roscommon town is a focus for sales of lamb and sheep at livestock fairs and also wool sales. The majority of livestock raised in the West Region is processed for sale by the region's established food processing industry, before being sold to both domestic and overseas markets. The main crop types grown in the West Region are barley, wheat, oats, potatoes and sugar beet; with oats and potatoes in particular better able to tolerate the wet conditions and poorer soils found in the west.

The village of Arigna, in the far north of County Roscommon, was the location of Ireland's last coal-mine. Mining in the district dates back to the Middle Ages with iron extraction from Slieve Anierin (Iron Mountain). An iron smelter was built at Arigna in the sixteenth century, and coal mining originally started in the eighteenth century to fuel the smelter, replacing timber that had become scarce. After the iron works closed in 1838, the coal was put to wider domestic and industrial uses in the region. At its peak, the Arigna coal mine employed around 400 people, with 60 more employed at the neighbouring coal-fired power station that had opened in 1958. The power station was closed in the 1980s, with the coal mine following in 1990. The mine is now a tourist attraction. In the broader West region, lead-zinc-silver mining was active at Tynagh in County Galway between 1961 and 1982, and gold deposits were discovered in County Mayo in the 1980s, but were not mined.²¹

¹⁷ Source: Farm Structure Survey 2007

¹⁸ Source: <http://www.ireland-information.com/reference/geog.html#AGR>

¹⁹ Source: Eurostat

²⁰ Source: Ibid

²¹ Source: <http://www.dcenr.gov.ie/Natural/Exploration+and+Mining+Division/Mining+in+Ireland/>

In contrast to mining, quarrying is an expanding industry in the region. Marble is quarried in west Galway, whilst in County Roscommon the number of operational quarries increased from four in 2000, to eight in 2004, to 28 in 2008, driven by demand from the construction boom. Employment in quarrying in Roscommon doubled between 2000 and 2004 to more than 200 people, whilst gross employee earnings over the same period increased from €2.6 million to €7.1 million.²²

Ireland is among the least forested nations in Europe, with forests and woodland covering just roughly 9% of the territory of the BMW region. Forestry is therefore not a major economic sector nationally; however, State policies of afforestation have focused on areas in the north and west of the country less suited for agriculture, mainly upland and peat bog areas, which are becoming a source of income for people in the Western region as forests mature and timber output increases.

2.4 Tourism

Tourism plays an important role in the economy of the West Region, based both on the region's rich cultural heritage and natural attractions— inland rivers, lakes, mountains and plains—which draw visitors from within Ireland and overseas. Key tourist areas are currently the west coast of Counties Mayo and Galway, including the Aran Islands, as well as Galway City, while tourism has been identified as a potential growth sector for inland rural areas such as Roscommon.

International tourist visitors to Ireland have increased continually over the past 2 decades, rising from 3.06 million visitors in 1990 to 8.01 million in 2007. However, figures for 2001 suggest only 15.7% of these overseas arrivals were to the Border, Midland and Western region, with the vast majority focused around Dublin and southern Ireland.²³ Similarly, 17% of the 4.4 million domestic tourist trips made in Ireland in 2008 were to the West of Ireland.²⁴

Furthermore, tourism in the West region is disproportionately concentrated in coastal and upland areas of Mayo and Galway, especially in resort towns such as Clifden and Westport, in the Connemara and around Lough Corrib, as well as in Galway City. Only 3.9% of tourists to the West region visited County Roscommon (45,000 people), and whilst overseas visitors spent €441 million in the West region in 2005, only €16 million of this (3.6%) was spent in County Roscommon.²⁵

Nationally, just over 50% of overseas tourist visitors to Ireland in 2007 came from Great Britain, 32% from other European countries, 13.5% from the US and Canada and the remaining 4% from other areas. In the West region, however, British visitors account for less than four in ten overseas tourists, with three in ten coming from North America; but these figures are strongly skewed by the strength of American tourism in Galway (where 32% of overseas tourists in 2005 were from North America, with 35% from the UK, and 26% from mainland Europe). In Roscommon, by contrast, only British visitors accounted for 60% of overseas tourists and 50% of expenditure by overseas tourists (Tables 4 and 5).

²² Source: Roscommon Co. Council Demographic, Economic & Employment Profile of co. Roscommon, June 2008

²³ Source: Eurostat

²⁴ Source: <http://www.failteireland.ie/getdoc/c2acf9e8-291f-4535-9f64-a630a0a47ff0/Domestic-Tourism-2-2008>

²⁵ Source: Roscommon Co. Council Demographic, Economic & Employment Profile of co. Roscommon, June 2008

	Origin of overseas tourists				Total
	UK	Mainland Europe	North America	Other	
County Roscommon	27,000 (60%)	6,000 (13%)	9,000 (20%)	3,000 (7%)	45,000
West Region	439,000 (38%)	282,000 (24%)	359,000 (31%)	81,000 (7%)	1,161,000

Table 4: Overseas tourists to County Roscommon and West Region, 2005, (Rounded to nearest thousand)
Source: Demographic, Economic and Employment Profile of Co. Roscommon, 2008

	Origin of overseas tourists				Total spend
	UK	Mainland Europe	North America	Other	
County Roscommon	8 (50%)	4 (25%)	2 (12.5%)	2 (12.5%)	16
West Region	138 (31%)	152 (34%)	123 (28%)	28 (6%)	441

Table 5: Spend by overseas tourism in County Roscommon and West Region, 2005, (€ million)
Source: Demographic, Economic and Employment Profile of Co. Roscommon, 2008

Tourism employs around 1,200 people in County Roscommon, or 4.6% of the workforce, compared with 5.3% of the workforce across the whole of West Region. Regional development strategies have attempted to support the development of tourism in County Roscommon, including the Mid Shannon Tourism Investment Scheme, launched in 2007, which offers tax incentives for investment in the tourism industry along the corridor of the River Shannon from Lough Ree to Lough Derg, including most of southern County Roscommon.

Significant tourist attractions in County Roscommon include Strokestown Park House and Famine Museum, Clonalis House, Roscommon Castle, Boyle Abbey and the Arigna Mining Experience. Lough Ree, Lough Allen and Lough Key offer opportunities for sailing and fishing. However, the development of tourist attractions has been limited by the restricted development of tourism infrastructure, including accommodation. Indeed, in spite of a 30% growth in tourism-related employment in the West region between 1998 and 2003, the number of bed places in the region increased by just 4% between 2000 and 2006.

2.5 International Integration

Ireland's entry into the EU in the 1970s led to greater integration within European economic markets, while the 1990s onwards has seen foreign direct investments (FDI) into Ireland massively increase due to targeted policies, tax breaks and concessions offered through Ireland's Industrial Development Authority (IDA). Leading sources of foreign investment in Ireland since the 1990s include the USA, UK and Germany, with a large proportion from high-tech computer and pharmaceutical companies. While the rush of investment slowed to an extent in recent years with the global economic crisis, reports indicate that Ireland remains a major target for foreign investments; receiving 7% (€19bn) of all FDI in the EU in 2009.²⁶ Benefits of overseas investment in Ireland have been spatially uneven, with the cities of Dublin and Cork the focus for major FDI due to the large workforces, services and greater accessibility. Attracting FDI to rural areas with high unemployment has become a priority for

²⁶ Source: <http://www.independent.ie/business/irish/ireland-bucks-trend-as-foreign-investment-hits-euro19bn-2269697.html>

the IDA, set out in the agency's recent strategy document 'Horizon 2020' (March 2010) which aims for 50% of FDI to be located outside Dublin and Cork by 2014.²⁷

Over 70 foreign owned companies are located in the West Region, employing over 14,000 people. Their sectoral focus includes life sciences (predominantly medical technologies), information & technologies, engineering and consumer goods, and international financial services. The Galway City region is a particular focus for foreign investment due to its transport and technological infrastructure and skilled workforce. International firms based in Galway include Boston Scientific, Medtronic, Tyco, Hewlett Packard, Nortel, Cisco, SAP and Fidelity²⁸ County Roscommon has eight FDI projects, employing over 900 people. These include Athlone Pharmaceuticals and Elan Corporation in Monksland, Harmac Medical and Colour Communications in Castlebar, and Carson Industries, System Label Ireland, Advanced Couplings and Innocoll Technologies in Roscommon.²⁹

The major exporting sectors in Ireland are: office/electrical etc.; food/drink/tobacco, chemicals, software and medical devices. Together these sectors account for 40 of the top 50 exporters in Ireland. The BMW Region has 20% of the top 50 exporting companies in Ireland, but they account for only 10% of the exports, as they tend to be at the smaller end of the scale. The fishing industry is a very significant natural resource-based sector in the BMW and West of Ireland Region. It has only developed since the middle of the last century and its main ports are Killybegs, Galway and Rossaveal. In 2001 exports were €433.4 million of pelagic & white fish, farmed fish and inland species. There are 132 small processing plants, many part-time with over 60% of exports from one company

Bord Gáis, established under the Gas Act, is responsible for the supply, transmission and distribution of natural gas which was first brought ashore in 1976 from the Kinsale Head Gas Field. New sources of supply are expected to come on stream after 2010, including the Corrib gas field in County Mayo and potentially the Shannon Liquefied Natural Gas (LNG) terminal. These energy exports from the West of Ireland could potentially transform the Irish economy, but the construction of a pipeline to transport the gas has proved highly controversial (see section on 'environmental issues').

The medical devices sub-sector in Ireland exports goods in excess of €3 billion per annum. It directly employed over 22,000 people by the end of 2003. It creates total direct and indirect employment amounting to approximately 36,000 jobs and employs a highly skilled workforce. Over 40% of employees in the medical device and diagnostic sector have Third Level education. It includes 13 of the world's top 25 medical devices and diagnostics companies. Although primarily located in Galway (10 companies) and Mayo (4), the sector has companies in Sligo (2), Donegal (2), Roscommon (1), Offaly (2), Westmeath (2) and Louth (2). These include Contech Medical International Ltd. Ireland, a medical device company based in Galway city, who export 35% of their product to Europe, USA, Mexico, Japan and Australia; and Medtronic, a global leader in medical technology and employs over 2000 staff in Galway.

The agency Enterprise Ireland specifically works to support indigenous exporting companies. In 2008 it supported 74 businesses in County Roscommon, employing over 1,800 people, and had invested €7.5 million in local companies since 2002.³⁰

²⁷ Source: <http://www.idaireland.com/news-media/publications/library-publications/ida-ireland-publications/IDA-Ireland-Strategy-2020.pdf>

²⁸ Source: www.idaireland.com

²⁹ Source: Roscommon Co. Council Demographic, Economic & Employment Profile of co. Roscommon, June 2008

³⁰ Source: Roscommon Co. Council Demographic, Economic & Employment Profile of co. Roscommon, June 2008

3. Population and Migration

3.1 Population and Development

The West of Ireland has experienced a remarkable turnaround in population dynamics over the last few decades. After a long period of depopulation through much of the twentieth century, the population of the West Region has increased steadily since the 1980s, rising from 343,100 in 1990 to 415,500 in 2006; an increase of 72,400 persons or 21.1%. This rapid population growth has to a large degree been driven by the expansion of Galway city and its adjacent peri-urban districts, and population growth has been slower in more rural parts of the region, including County Roscommon.

The population of County Roscommon fell by over 30,000 people between 1926 and 1991, equal to more than a third of the 1926 population. In the five years between 1986 and 1991 the population decreased by 5%, or over 2,600 people. However, in the early 1990s the population trend was reversed, and between 1996 and 2006 the population of County Roscommon increased by 13.2% (Table 6). The county's population is projected to reach 67,000 by 2014.³¹

	1986	1991	1996	2002	2004	2006
West Region	#	343000	352400	380300	398000	415500
County Roscommon	54592	51897	51975	53744	#	58768

Table 6: Population of the West Region and County Roscommon, 1986-2006.
Source: Eurostat

This trend of population growth from the early 1990s is partly due to natural population increase, as the birth rate in the West Region has continued to exceed the death rate since the mid-1990s. The gap between births and deaths has widened further in recent years, with a noticeable fall in the death rate from 9.1 in 2001 to 7.1 in 2007, coinciding with the birth rate rising from 13.3 to 15.3 over the same period.³² In County Roscommon, the birth rate in 2006 was 11.3 births per 1,000 population, compared with a death rate of 8.5 deaths per 1,000 population, producing a natural population increase between 2002 and 2006 of 642 people.³³

At the same time, the region has experienced significant net in-migration since the mid-1990s (figure 9). Data for the net migration gains or losses between successive censuses show that, between 1986 and 1991, out-migration from the West region exceeded in-migration resulting in the loss of over 13,000 people. This trend reversed between 1991 and 1996, with a gain of 5,059 people, and this net population increase has grown rapidly in subsequent years, with a gain of 21,596 from in-migration for 1996 to 2002 and 24,564 in 2002 to 2006. Net in-migration to County Roscommon between 2002 and 2006 was 4,284 people, a rate of 19 in-migrants per 1,000 population, which is double the national average for Ireland.

The areas of greatest population growth within Roscommon have been rural and peri-urban communities within easy commuting distance of larger urban settlements outside the county, and some of the larger small towns. The latter areas include districts adjacent to Athlone in the south of the county (Athlone West, Carnagh and Kiltoom), Danesfort (neighbouring

³¹ Source: Roscommon Co. Council Demographic, Economic & Employment Profile of co. Roscommon, June 2008

³² Source: Eurostat

³³ Source: Roscommon Co. Council Demographic, Economic & Employment Profile of co. Roscommon, June 2008

Carrick-on-Shannon), and Termonbarry (adjacent to Lanesborough); whilst the former include Ballaghaderreen, Boyle, Castlerea and Roscommon and surrounding communities. Some pockets of depopulation persist in the west and far north of County Roscommon, in areas where deprivation rates are also highest.

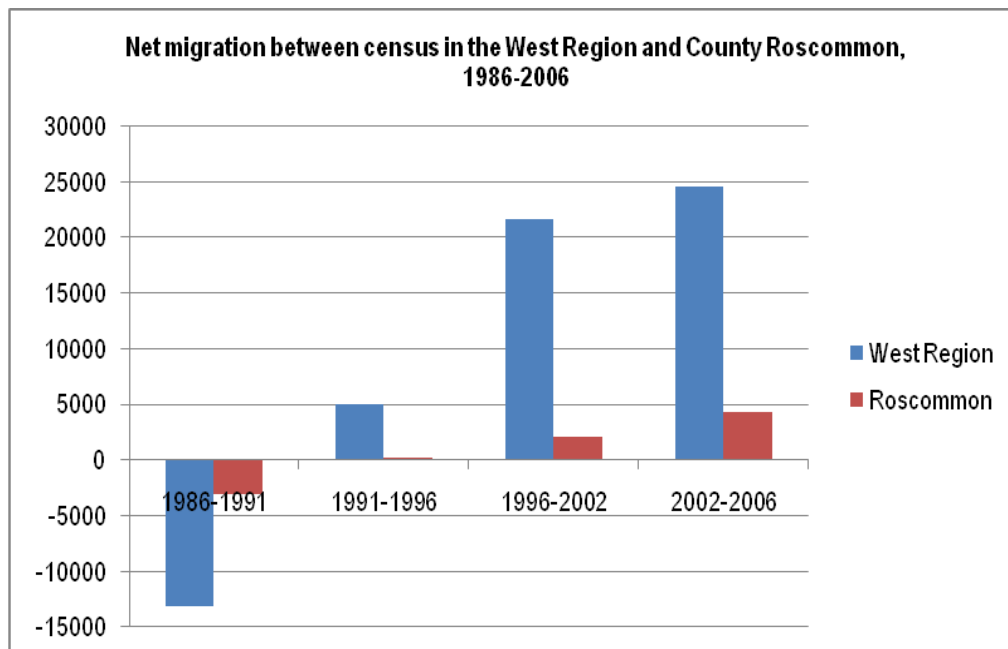


Figure 9: Net migration between censuses in the West Region and County Roscommon, 1986-2006. Source: Central Statistics Office Ireland

3.2 Demographic and Household Characteristics

In 2001, the median age of residents in the West Region was 30, which is the lowest across the DERREG case study regions. This is explained by the highest proportion of residents, 21.5% (20.4% in County Roscommon), across the case study regions who are aged under 15. At the same time, 9.2% of the West region's residents are aged over 70, which is the lowest proportion of elderly residents across the case study regions. The proportion of over 70's in County Roscommon is slightly higher at 10.8%, indicating some regional variation between rural and urban areas such as Galway City (figures 10 and 11). This regional variation is also reflected in the lower proportion of 15 to 25 year in County Roscommon, 12.8%, compared to for the whole of the West Region where they account for a 16% share. This can be accounted for by the presence of over 16,000 students at the National University of Ireland Galway.

Typical household size in the West Region is larger than for the majority of other DERREG case study regions, with only 7.9% of the population living in single-person households in 2001 compared to 57.6% in households of four persons or more and 17.5% with six persons or more.³⁴ This is a historical legacy and there has been a more recent trend in Ireland towards smaller households (from an average of 3.72 persons per household in 1981 to 3.09 persons per household in 2002), which has been accompanied by a controversial trend of building new, freestanding rural housing (Corcoran et al., 2007). The combination of historic depopulation and upgrading to new housing has left a substantial volume of vacant properties in rural areas of Ireland. In high-amenity areas such as coastal Mayo and Galway, many vacant properties have been acquired as holiday homes. Holiday homes comprise 7%

³⁴ Source: Eurostat

of the housing stock in County Mayo, rising to a third of houses in the Louisborough electoral division on Clew Bay.³⁵ Although the proportion of second homes is lower in County Roscommon, the county council was still able to raise €494,000 in 'second home tax' during the first six months of 2010.³⁶ Vacant properties plus unoccupied holiday homes combined accounted for 20.5% of the housing stock in the West Region in 2006.³⁷

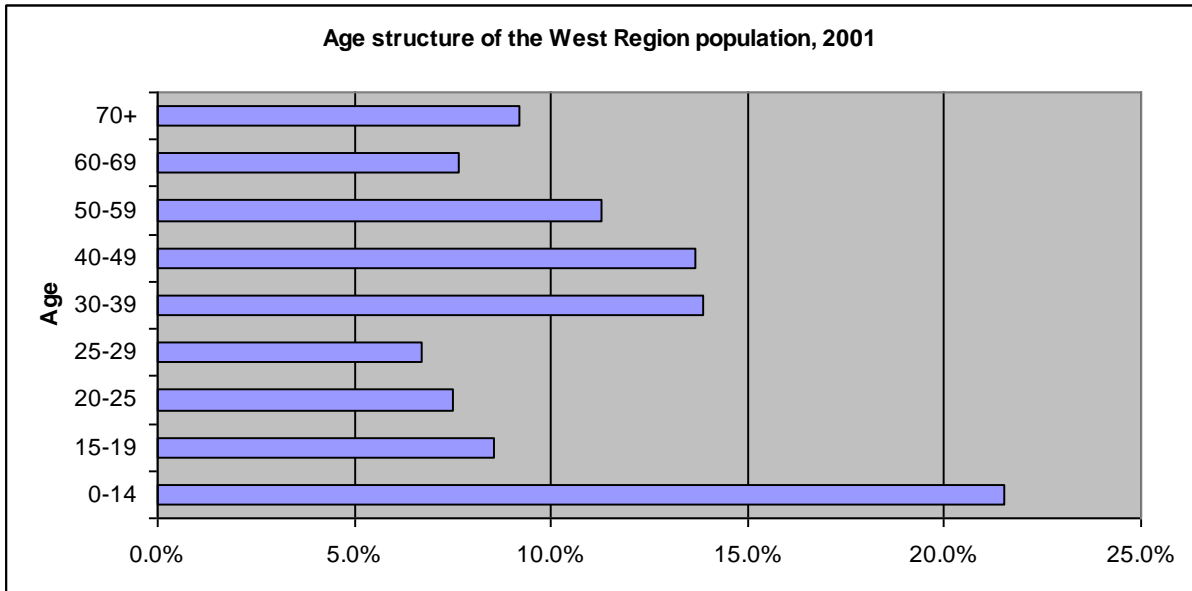


Figure 10: Age Structure of the West Region population, 2001.
Source: Eurostat

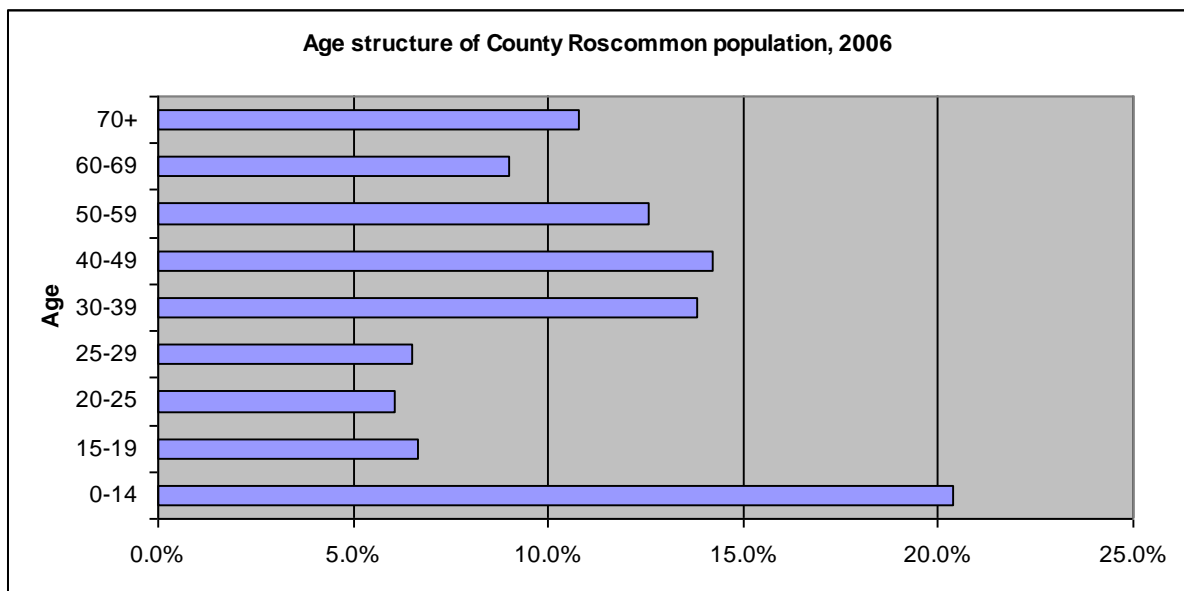


Figure 11: Age structure of County Roscommon population, 2006.
Source: Central Statistics Office Ireland

³⁵ Source: Corcoran et al. (2007)

³⁶ Roscommon Herald, 14 July 2010

³⁷ Source: Central Statistics Office Ireland

A total of 1,316 new houses were built in County Roscommon in 2006, an increase of 78% on 2002, and part of a wider property boom. Average property prices in the West Region rose from €109,905 for a new build house in 1997 to a peak of €300,750 in 2007, before the impacts of the global recession saw prices fall back to €281,177 in 2008. Property prices in County Roscommon in 2010 were reported to be 19-30% down on the peak, depending on type, with a new build semi-detached house selling for around €170,000.³⁸

3.3 Non-national Residents

Historically, the West of Ireland experienced some of the highest levels of emigration and population decline in the country during the nineteenth century due to evictions, starvation and harsh living conditions, with England, Scotland, the United States, Canada, and Australia the destinations for many Irish emigrants. Nowadays, the region is renowned for the preservation and continuation of Irish cultural traditions and particularly the use of the Gallic Language, which is widely used in the Gaeltacht areas of the region and also in Galway city.

The region is also today a destination for international in-migration. Over half of in-migrants to West Region in the year prior to the 2006 Census had moved from outside Ireland, and there were 44,013 non-Irish nationals living in the region, comprising 10.6% of the population – the highest proportion of non-national residents of any of the DERREG case study regions. This figure includes 5,900 non-national residents in County Roscommon (10.1% of the population).

International in-migrants to the West of Ireland generally fall into one of two groups. The first group are return migrants: individuals who had emigrated from Ireland returning home later in life, or descendants of emigrants returning to their 'home' country. The trend of return migration was documented as long ago as the 1970s, but gathered pace in the 1990s with the Celtic Tiger boom. Between 1991 and 1996, around 19.1 return migrants arrived in County Roscommon per 1,000 population, around 22.2 per thousand population in Mayo, and around 23.8 per thousand population in Galway.³⁹ Many return migrants come from the UK, with others from further afield, notably North America. In the year prior to the 2006 census, 12% of in-migrants to the West Region had previously lived in England and Wales, and 3.8% in the United States. British citizens comprise the largest group of foreign nationals resident in the West Region at 34.5% (45.2% in County Roscommon).⁴⁰ However, this figure will include not just return migrants, but also amenity migrants and relatively short-distance migrants from Northern Ireland.

The second key group of immigrants are migrant workers. Historically Ireland was a significant exporter of migrant labour, but the Celtic Tiger economy turned it into an importer of migrant labour, especially following EU enlargement in 2004. Figures from 2001 recorded just over 10,600 registered migrant workers in the West Region, with 63% from the (pre-enlargement) European Union and the remainder from outside. Nearly 60% of these were employed in the service sector and around 25% in industry.⁴¹ Following EU enlargement in 2004, Ireland, along with the UK and Sweden, experienced high levels of in-migration by workers from new eastern European member states. In 2006 there were around 6,000 Polish nationals in the West region (13.7% of all foreign nationals in the region), and around 1,600 Lithuanian nationals (3.8%). These included around 650 Poles and 230 Lithuanians in County Roscommon. Poland was also the largest source of new immigrant arrivals in West

³⁸ Source: Irish Independent, 14 May 2010

³⁹ Source: Jones (2003)

⁴⁰ Source: Central Statistics Office Ireland

⁴¹ Source: Eurostat

Region in the year prior to the 2006 census, with around 3,350 Polish in-migrants, accounting for 16% of all in-migration to the West Region. Around 500 Lithuanian migrant workers also arrived in the West Region during that year, comprising 2.6% of all in-migration.⁴² Estimates suggested that there were nearly 1,200 migrant workers from Central and Eastern Europe in County Roscommon in 2006.⁴³

The number of migrant workers in Ireland has fallen in the current recession, which has particularly hit the construction and service sectors in which many migrant workers were employed. The number of migrant workers in Ireland from outside the EU fell by 41% during 2009, in part as a result of tighter immigration controls imposed in reaction to rising unemployment in Ireland.⁴⁴ Total new registrations for Personal Public Service (PPS) numbers by migrants from the new EU member states decreased from a peak of almost 140,000 in 2006 to just over 60,000 in 2008.⁴⁵ Whilst these figures indicate a slowing in-flow, there are no firm figures for migrant workers returning home, and Krings et al. (2009) point out that flow of migrant workers has always been dynamic, with many only spending relatively short periods in Ireland. As such, there are no accurate figures for the number of migrant workers from Central and Eastern Europe currently resident in the West Region.

There are patterns of geographical concentration of non-national residents in the West Region. Galway City is a key magnet for international in-migrants, with nearly 12,000 non-Irish residents in 2006, comprising 18% of the city's population. Nearly 7,000 of these were from the EU, including migrant workers from Poland, Lithuania and Latvia, as well as British citizens. Additionally, 5% of the population of Galway City were foreign-born Irish citizens. However, several smaller towns also had significant non-national populations. Nearly a quarter of the population of Roscommon town in 2006 were non-nationals, including around 600 EU citizens (including migrant workers) (12% of the population), but also 250 Brazilian nationals (5% of the population), particularly employed in meat-processing and manufacturing. Ballaghaderreen similarly has a significant community of over 100 Pakistani nationals (7.5% of the town's population), working in meat-processing plants and in mushroom growing enterprises in the surrounding rural area. There are also around 100 Indian nationals in Monksland in the Roscommon suburbs of Athlone.⁴⁶ Ballaghaderreen also hosts a reception centre for asylum seekers, with over 60 residents from countries including Nigeria, Togo and the Democratic Republic of the Congo. Meanwhile, the town of Gort in County Galway has a large community of Brazilian nationals, originally recruited to work in the Kepak meat-processing plant in 1999.⁴⁷ In 2006, there were around 900 Brazilians living in Gort, making up over a third (34.7%) of the population.

In 2007, Roscommon was the first county in Ireland to adopt an 'Inter-cultural Strategy' designed to promote inclusion and harmonious relations between the diverse ethnic groups, including the indigenous Traveller community, which numbers over 350 individuals in the county. Among the facilities for cultural minorities in Roscommon include a weekly programme in Portuguese on the local community radio station, and a regular column in Portuguese in the local newspaper.⁴⁸

⁴² Source: Central Statistics Office, Ireland

⁴³ Source: Roscommon Inter-cultural Strategy, 2007-2010

⁴⁴ Source: The Irish Times, 4 January 2010

⁴⁵ Source: Krings et al. (2009)

⁴⁶ Source: Roscommon Inter-cultural Strategy, 2007-2010

⁴⁷ Source: Dean (2008)

⁴⁸ Source: Roscommon Inter-cultural Strategy, 2007-2010

4. Environment and Sustainable Development

4.1 The Regional Environment

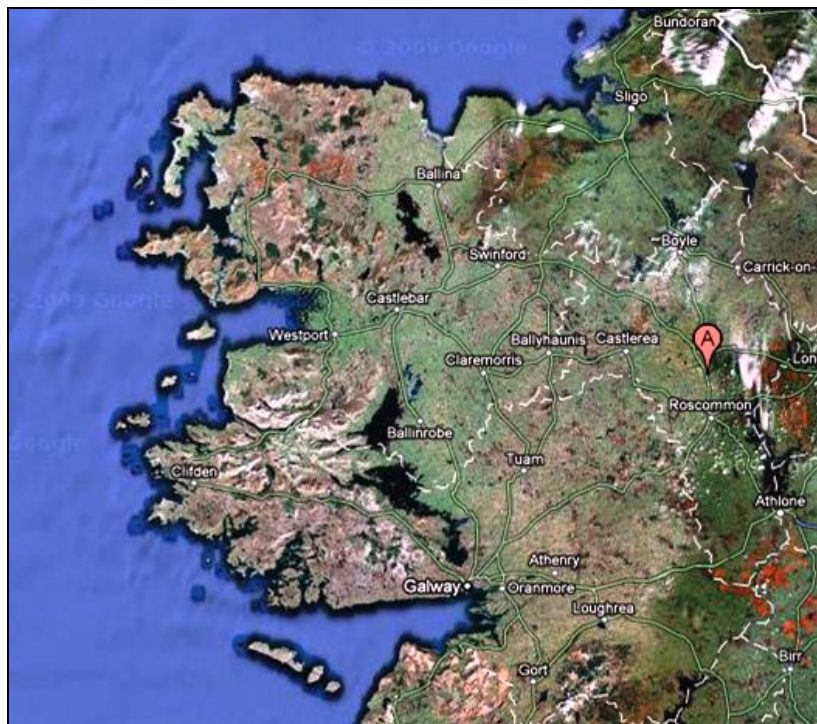


Figure 12: Aerial view of West Region landscape. Source: Google Earth

The environment of the West Region is predominantly rural in character, with varied relief of mountains, lakes and lowlands, and is dominated by primary sector land uses including agriculture, forestry, fishing and aquaculture, and mineral resource extraction. This is despite much of the lowlands being unsuitable for agriculture because they are poorly drained boglands or have thin soils. The rugged West Coast is composed of headlands and sheltered bays due to the erosive power of the Atlantic, and is dotted with off-shore islands. The coast is fringed by mountainous areas including the Twelve Bens and Maumturk Mountains in the Connemara district of western County Galway and County Mayo, and the West Region's highest mountain, Mweelrea (814m), in County Mayo. At the foot of Mweelrea, Ireland's only natural fjord, Killary Harbour, extends inland for 16km and forms a natural border between counties Galway and Mayo. The mountains decrease in size and the land quality increases moving inland into eastern Galway and County Roscommon; the latter lying within the central plain of Ireland and largely comprised of agricultural lowlands, broken in places by low hills, bogs and lakes.

Major rivers include the Shannon, Corrib and Moy. Many of the rivers are small and flood each year with flood plains developing. The River Shannon, the longest river in the British Isles, forms the eastern border of County Roscommon, flowing through Lough Ree and dividing west Ireland from the south and east. Other water bodies include the two lakes of Lough Corrib in County Galway (the second largest lake in Ireland covering an area of 165.6km²) and Lough Mask (89 km²) in County Mayo, both of which empty into the River Corrib, through Galway and into Galway Bay.

The landscape of the West Region is classified by the European Environment Agency as a mixture of rural mosaic and pasture landscape, and open semi-natural landscape.⁴⁹ Just over 50% of the territory of the West Region (721,300 hectares) is recorded as utilised agricultural land in 2008, including 383,900 hectares (27.5%) of pasture land, 211,000 hectares (15.1%) of hay and grass silage, 4,400 hectares (0.3%) of cereal crops and 18,400 hectares (1.3%) of other crops, and 108,000 hectares (7.7%) used for the rough grazing of cattle.⁵⁰ Since 1991, the area of utilised agricultural land in the West Region has increased very slightly by 3%, yet within this period a more significant increase of 7% (rising to 769,600 hectares) occurred up to the year 2000 before decreasing to current levels. Built up areas in the west of Ireland have increased rapidly in recent years, for example, built up areas of Galway city encompass at least 40 km².

4.2 Protected Areas

Significant areas of the natural landscape of the West Region have been protected by national and international designations, reflecting their unspoilt character and environmental importance. Ballycroy National Park, established in 1998, is located on the western seaboard in northwest County Mayo and covers an area of 11,800 hectares of Atlantic blanket bog and mountainous terrain, including the Nephin Beg mountain range. The park contains one of the last intact active blanket bog systems in Ireland and Western Europe and is therefore also designated as a Special Area of Conservation (SAC) by the European Union Habitats Directive, recognising the scientific importance of the unique habitat for diverse flora and fauna (figure 13). A second national park in the West Region is the Connemara National Park in County Galway, which opened in 1980 and covers 2,957 hectares of mountains (some within the Twelve Bens or Beanna Beola range), expanses of bogs, heaths, grasslands and woodlands.

There are 190 designated sites with the Natura 2000 European network within the West Region (151 Special Areas Conservation (SAC) and 39 Special Protected Areas (SPA). Thirty-two of these Natura 2000 sites lie wholly or partially within County Roscommon including many bog and lake habitats. In addition, the West Region are currently has 61 National Heritage Areas (11 in County Roscommon), which is the basic environmental conservation designation in Ireland and many of which may have overlapping SAC or SPA designations, and 9 nationally designated wildlife Nature Reserves (6 in County Galway, 3 in County Mayo). There are also 8 Ramsar designated wetlands of international importance wholly or partially within the West Region, covering a total area of 19,271 hectares, and including coastal habitats, bays and estuaries, as well as blanket bogs and lakes (loughs).⁵¹ One of these sites, Lough Gara (1,742 ha), lies between counties Roscommon and Sligo and includes a shallow limestone lake, low-lying islands, peatland and raised bog.

4.3 Sustainable Development

Clear policies for the development of renewable sources of energy production have been set at the state level in Ireland, with the Republic committed to a binding target of a 40% renewable contribution to the total electricity supply by 2020. The country is seen to have huge potential for renewable energy production and particularly wind power, through the locating of on-shore and off-shore wind farms along the west coast which harness the strong winds blowing off the Atlantic Ocean. As such, the West Region is a key area for this development and an ongoing regional priority is fully maximising its natural resources in this regard. There are currently 11 wind farms located in the west region; 4 in County Mayo (28.55mw output), 3 in County Galway (72.64 mw output) and 3 in County Roscommon (18.59 mw output). The wind farm at Bellacorick in County Mayo is Ireland's first commercial

⁴⁹ European Environment Agency, CORINE database

⁵⁰ Source: Central Statistics Office Ireland

⁵¹ Source: <http://www.ramsar.org/>

wind farm, having opened in 1992 with 21 turbines with a total installed capacity of 6.45mw which produces enough electricity to supply 4,500 households.



Figure 13: Blanket Bog landscape within Ballycroy National Park.
Source: <http://www.ballycroynationalpark.ie>

Bellacorick was also the site of a peat burning power station until its closure in 2005. Ireland has a long history of exploitation of peat for fuel and this had continued into the present with industrial scale burning for electricity generation. However, environmental pressure has led to the closure of several large plants in recent years, with one of the three remaining peat burning power stations located just across the border of County Roscommon in Shannonbridge, County Offaly. The one remaining carbon-fuel power station in the West Region is the 400mw natural gas power station located at Tynagh, in County Galway.

The development of sustainable agriculture has been less comprehensively addressed in terms of organic farming, with just 7880 hectares (0.004%) of utilised agricultural land in the larger BMW region under organic production in 2005.⁵² However, regional schemes such as the Western Organic Network offer training in organic farming for farmers and smallholders. Draft Regional Planning Guidelines for the West Region (2010-2022) have identified an upsurge in local/farmers markets (e.g. Galway city Saturday and Sunday; Ballinasloe on Friday; Loughrea on Thursday; Roscommon, Boyle on Saturday), food festivals (e.g. Roscommon lamb festival) and general consumer interest in locally produced food in recent years; with the region's farming and food sectors encouraged to respond through diversification of products and new enterprises.⁵³ For example, local food tourism has been identified as a potential niche product within the West Region, with a scheme currently in development to create a tourism trail based on a network of local producers and indigenous products. Some local products have already garnered wider recognition, with Connemara Hill Lamb a registered Protected Geographical Indication (PGI).

⁵² Source: Eurostat Rural Development Report 2008

⁵³ Source: <http://www.galway.ie/en/Business/WestRegionalAuthority/DraftRegionalPlanningGuidelines20102022/>

4.4 Environmental Issues

Environmental concerns in the West Region are related to climate change and sustainable energy production, as well as maintaining a balance between nature and landscape conservation alongside efforts to improve infrastructure, housing and employment opportunities within the most rural parts of the region. Specifically, local community opposition against Shell's plans to develop a gas terminal on the Corrib Gas Field near to Rosspoint in County Mayo has been ongoing since 2005, fuelled by concerns that the new terminal will damage the coastal environment, farmland and wildlife habitats, as well as fishing grounds vital to the local economy. The *Shell to Sea* campaign has gathered wider support, with solidarity campaigns organised in other communities resisting fossil fuel extraction e.g. Merthyr Tydfil in Wales (see Gilmartin, 2009; Leonard, 2007). Meanwhile in 2009, climate camp protestors forced the temporary closure and cessation of carbon emissions from the Shannonbridge peat burning power station close to County Roscommon's eastern border. Other environmental NGO's operating in the region includes An Taisce (The National trust for Ireland) and Friends of the Earth, as well as a number of community based organisations focused on specific issues such as recycling and alternatives to incineration.

5. Regional Development and Innovation

5.1 Regional Development Programmes

The current National Development Plan (NDP) 2007-2013, with a budget of €184 billion, is the country's current overall strategy for economic and social development. The co-ordination of regional economic and social development programmes is primarily the responsibility of the Western Regional Authority, overseen by the Border, Midland and West Regional Assembly which advises on regional dimensions of the overarching NDP. Draft Regional Planning Guidelines for the West Region (2010-2022)⁵⁴ produced by the Regional Authority set out the broad issues/objectives within the region as a need to better focus population, settlements, housing and employment throughout the region; a need to factor environmental issues into the revised Regional Authority Guidelines, including flooding, fisheries resources, natural, architectural and archaeological heritage, nature conservation, biodiversity and coastal zone management; maximising the potential of the West Region's rich resources with regard to renewables (wind and off-shore); and promoting the role of the Gateway (Galway City) for enhancing tourism and recreation for the wider region.

Under the first two rounds of Structural Funds (1989-2006), the whole of Ireland was classified as an Objective 1 region. However, given the high-levels of economic growth since the late 1990s, parts of Ireland exceeded the eligibility criteria for Objective 1 status. For the 2000-2006 programming period, the country was therefore designated into two NUTS II regions; with the Border, Midland and Western Region (BMW) remaining an Objective 1 region while the Southern and Eastern Region (S&E) was classified as a transitional Objective 1 region (meaning it still qualified for EU support but on a declining scale). For the funding period 2007-2013, the BMW no longer qualifies for Objective 1 funding (having a GDP per capita above 75% of the EU average) and qualifies instead as a phasing-in region for Objective 2 funding (Regional Competitiveness and Employment Objective).

The 'BMW Regional Operational Programme 2007-2013' is supported by €228.76 from the European Regional Development Fund, with a further €343.14 in match-funding from Irish national and regional authorities. Key priorities of the programme are⁵⁵:

⁵⁴ Ibid

⁵⁵ Source: http://ec.europa.eu/regional_policy

- *Innovation, Information and Communication Technologies (ICT) and Knowledge Economy*: Raise the research and innovation capacity and enhance the usage of ICT infrastructure in the BMW Region to support collaboration and technology transfer between higher education institutes and the business sector to promote entrepreneurship and competitiveness of enterprises.
- *Environment and Risk Prevention*: Promote the sustainable development of rural areas and the protection and enhancement of the rural environment through innovative technologies. The priority will also stimulate energy efficiency, renewable energy deployment and the integration of sustainable energy practices into public policies.
- *Urban Development and Secondary Transport Networks*: Strengthen the spatial structuring of the BMW Region by investing in integrated sustainable initiatives in order to enhance the competitiveness, accessibility and social cohesion of the region's urban growth centres and enhance their potential as drivers of economic growth.

In addition, the West Region is also in receipt of EU Structural Funds delivered through various Objective 3 Territorial Cooperation ('Interreg') programmes to support joint socio-economic and sustainable development at cross-border (with Northern Ireland/parts of Scotland and with parts of Wales), wider transnational (North West Europe, Atlantic Area and Northern Periphery zones) and pan-European levels.⁵⁶

The LEADER programme operates across rural Ireland as part of the rural development plan. The Roscommon Integrated Development Company (RIDC) was established in 2008 to deliver the LEADER programme for 2007-2013 in the county, as well as several other programmes including the Social Inclusion Programme and the Rural Social Scheme.⁵⁷ It has a total budget for LEADER activities between 2007 and 2013 of €86,782. The RIDC replaced the Mid South Roscommon LEADER group, Arigna LEADER and the Roscommon Partnership, which had been responsible for delivering LEADER during the previous programme period 2000-2006. Mid South Roscommon LEADER, for example, distributed funds of almost €2.3 million to support various local development initiatives such as rural/agri-tourism, business development and community facilities.⁵⁸

In addition, within the West Region there are various regional regeneration and development initiatives such as LookWest, the Western Development Commission and WESTBIC; the latter being the official EC Business and Innovation Centre in the BMW region which provides support to innovative enterprises.

Enterprise Ireland works to support indigenous exporting companies and overseas companies in the food sector. Between 2002 and 2008, Enterprise Ireland provided €7.5 million in support to 74 businesses in County Roscommon, and spent a further €1.2 million on support for research and development. Enterprise Ireland had also invested €1.47 million in establishing Enterprise Centres in Arigna, Ballaghderreen and Roscommon, with further centres planned for Boyle and Castlerea.⁵⁹ Collectively, Enterprise Ireland, the County Enterprise Board were calculated to support over 250 businesses and over 3,500 jobs (Table 7), with a further 200 full-time and 200 part-time jobs in companies supported by LEADER and by the Roscommon Partnership.

⁵⁶ Source: <http://www.iro.ie/EU-overview.html>

⁵⁷ Source: www.ridc.ie/documents/LEADERRoadshowPresentation2009.pdf

⁵⁸ Source: www.ec.europa.eu/ireland

⁵⁹ Source: Demographic, Economic and Employment Profile of County Roscommon, 2008.

	2004	2005	2006	Total units (firms) 2006
Enterprise Ireland	1873	1976	1806	74 approx
IDA	887	902	901	8
County Enterprise Board	803 f/t	863 f/t	924 f/t	169
	232 p/t	229 p/t	258 p/t	
Total	3563 f/t	3741 f/t	3631 f/t	254
	232 p/t	229 p/t	258 p/t	

Table 7: Jobs in County Roscommon supported by enterprise agencies
(Source: Demographic, Economic & Employment Profile of Co. Roscommon, 2008)

5.2 Regional Skills-base and Infrastructure

The West Region has a relatively young, well educated workforce, thanks largely to the position of Galway city as regional educational and cultural centre. The city is home to the National University of Ireland Galway (founded 1845) which has over 16,000 students and world-class research centres such as the Regenerative Medicine Institute (REMEDI), National Centre for Biomedical Engineering Science (NCBES) and Digital Enterprise Research Institute (DERI). The Galway city region is also home to one of the five campuses of the Galway-Mayo Institute of Technology which together cater for around 8000 students in courses including Business, Engineering, Science, Humanities, Nursing, and Hotel and Catering. This is reflected by Irish census data for 2006, which records a relatively high 27.5% of residents aged 15 and above (whose full-time education has now ceased) as having a tertiary qualification.⁶⁰ This is a significantly higher proportion than in the neighbouring Midland region where the figure is 22.9%, but is slightly lower than the national average of 29%. At the same time, the proportion of adults participating in education or training in the West Region is relatively low at 6.2%.⁶¹

In County Roscommon, however, only 17.2% of adult residents in 2002 had a tertiary level qualification, significantly below both the national and regional averages, and only 20% of these had a qualification in science, business or IT subjects, again below the national average. Participation rates in higher education are increasing, with 58% of 17-19 year-olds in County Roscommon entering higher education in 2004, above the national average. There is only one higher education provider in the county, the County Roscommon Higher Education Centre, established in 2003, which had 139 students attending national certificate or diploma courses in 2008, and 213 enrolled on IT and recreational courses. Most students from Roscommon go to Universities or Institutes of Technology in Galway, Dublin, Sligo or Westmeath. Only 19% of students from County Roscommon returned to live and work in the county on graduation in 2004, which whilst a significant improvement on the retention rate of 7% in 2000, still ranks 18th out of the 26 Irish counties.⁶²

This educational and skills base in the region, together with state-led incentives for FDI, has provided a nucleus for a burgeoning research and development cluster in the West Region in areas such as medical devices, pharmachem, ICT and biotechnology. This is supported by Ireland's Industrial Development Authority (IDA) which has invested in a number of Business & Technology Parks across the West Region (Galway city, Tuam, Castlebar, Westport, Ballinasloe and Roscommon town), aimed at attracting further foreign-owned enterprises to strategic locations outside of the Galway city focus. A new Science and Technology Park with biopharmaceutical facilities is also currently being developed in Oranmore, just outside of Galway city, which is also home to the Marine Institute; the national agency responsible for marine research, technology, development and innovation.

⁶⁰ Source: Central Statistics Office Ireland

⁶¹ Source: Eurostat Rural Development Report 2008

⁶² Source: Demographic, Economic and Employment Profile of County Roscommon, 2008.

Together with regional development initiatives (discussed in the previous section) targeting indigenous business and enterprise growth, these development are designed to address some of the problems faced across the wider BMW region in terms of low levels of innovative activity in comparison with the rest of the country. This is exacerbated by low graduate retention rates ('brain drain') and deficiencies in the region's innovation and knowledge transfer infrastructure, including the lack of large scale research institutions in the region and low levels of industry/tertiary level linkages.⁶³

In the BMW region, 30,074 people were employed in hi-tech industries in 2008 compared to 102,987 in the S&E region. However, in terms of proportion of the regional workforce these figures are much closer, representing 5.6% of employment in the BMW and 6.6% in the S&E.⁶⁴ Similarly, intramural expenditure on research and development activities in the BMW region totalled €299 million in 2007 compared to €1304 million in the S&E region of Ireland. Yet within a European context, this research and development expenditure in the BMW region was the second highest across equivalent DERREG NUTS2 regions after Dresden.

The benefits of broadband availability for businesses and households and the opportunities that broadband provides for access to information services and new markets are enormous throughout Ireland but even more so in the west region where rural isolation impinges on business development. Improving broadband access across rural areas of the West Region has been identified as a key infrastructural priority in order to strengthen the region's attractiveness and economic competitiveness, as well as facilitating educational opportunities and public service access. The National Broadband Scheme is co-funded by the European Regional Development Fund under the BMW Regional Programme 2007-13 and will support the regional priority of enhancing ICT, innovation and the knowledge economy within the BMW region. Coverage and take-up rates are converging to the OECD average. Ireland has 21.4 subscribers per 100 inhabitants compared to the OECD average of 22.4. Telecommunication networks, in particular fibre broadband is advancing slowly, though a National Broadband Scheme (NBS) is now underway and may improve availability in west region areas significantly.

In 2008, most of County Roscommon could access broadband services, but from varying sources and of varying quality. Optical-fibre based 'metropolitan area networks' were being installed in Castlerea, Monksland and Roscommon town at the time, whilst slower and more limited DSL broadband connections through landline telephone networks were available within 4 km of 11 DSL-enabled exchanges. Wireless broadband was available from two providers in areas close to 13 local transmission stations in the county, whilst direct satellite broadband was available in most parts of the county.⁶⁵

⁶³ Source: http://www.iro.ie/irish_regions.html

⁶⁴ Source: Eurostat

⁶⁵ Source: Demographic, Economic and Employment Profile of County Roscommon, 2008.

6. Summative Analysis

The contemporary economic, social and environmental situation of the West Region of Ireland is characterised by:

- A relatively peripheral location, both within Ireland and within Europe, with relatively poor transport connections to Dublin and other parts of Ireland, but improved international connections via airports at Galway and Knock.
- A predominantly rural environment and settlement pattern, with one comparatively large urban centre at Galway, but a more general pattern of small towns and scattered rural communities.
- A period of rapid economic growth from the early 1990s to 2008, associated with the realignment of the regional economy away from agriculture and traditional industries to hi-tech industry and services, producing a three-fold increase in GDP per capita before stalling with recession in the late 2000s.
- A large growth in overall employment, including significant increases in service sector employment, producing a low unemployment rate and surplus jobs in low-grade positions up to 2008, but followed by a sharp increase in unemployment since 2008.
- Overall relative affluence, but with significant areas of relative deprivation in coastal, rural districts of County Mayo and County Galway, and in some pockets of northern County Roscommon.
- A steady growth in population since the 1980s, reversing an historic trend of depopulation, resulting both from natural population increase and net in-migration, including international migration.
- An important tourism economy, especially in coastal areas of County Galway and County Mayo, with a substantial volume of international visitors from North America and Europe in County Galway.
- A distinctive and varied natural environment and landscape, with considerable opportunities for recreation but also international significance for conservation.
- A comparatively centralised system of government with weak regional political authority.
- Long-term pro-active regional development strategies, focused on attracting inward investment and developing export industries, supported by substantial funds from the European Union and the Irish government, and by tax incentives.
- A strong regional innovation system, centred on Galway city, and combining a significant higher education capacity with the growth of science and hi-tech industries.

More specifically, the economic, social and environmental situation of County Roscommon is characterised by:

- A predominantly rural context, with no town with a population in excess of 6,000 people, but with the adjacent larger town of Athlone providing services and employment for communities in the southern part of the county.

- Relatively good access to national transport links from the southern part of the county, but poor internal transport connections to the north of the county.
- The decline in significance of the once-dominant agricultural sector, with most farms not able to provide a viable livelihood, but with one in ten working residents still employed in agriculture and with food-processing plants still among the largest local employers.
- Economic diversification into manufacturing, notably pharmaceuticals and medical equipment, and services, often as a result of inward investment.
- An underdeveloped tourism sector compared with other parts of the region.
- A recent turnaround in population dynamics, with a long period of substantial depopulation from the 1920s to 1990s supplanted by significant population growth since 1991, including significant in-migration.
- A weak local skills-base and infrastructure for innovation, with no research-active higher education institute in the county, a below average proportion of the population with tertiary qualifications, and a low retention rate of graduates in the county.

Taken as a whole, the West Region of Ireland perhaps most closely resembles the 'segmented rural areas' in van der Ploeg et al's (2008) typology, characterised by specialised sectors emerging alongside specialised agriculture, with multifunctional rural land use, but with elements of 'new suburbia' in peri-urban districts close to Galway city, and as of 'dreamland' in the amenity-rich landscape of western County Galway and western County Mayo. As apparent in the analysis presented in this paper, whilst the three counties of the West region share a broader trajectory of economic growth, realignment away from agriculture and population expansion, there are also considerable local variations. As such, it is perhaps more helpful consider County Roscommon individually in terms of its comparability with other European rural regions.

In the emerging DERREG typology, County Roscommon can be categorised as a 'Traditional Agricultural Region', characterised by a declining agricultural sector, but continuing relatively high levels of employment in farming and food-processing, the predominance of small-scale farms rather than industrial agriculture, and a rural landscape dominated by farmland. As such it has commonalities with Pomurska, among the other DERREG case study regions, but also with parts of France such as the Lot and Lot-et-Garonne départements, and some more rural areas of Britain such as Powys in mid Wales.

The engagement of the West of Ireland and County Roscommon with globalisation has been strongly conditioned by Irish government policies over the last two decades, and in particular by the rise and fall of the Celtic Tiger economy. Notable expressions of globalisation evident in the West of Ireland from our initial analysis include:

- Substantial foreign direct investment (FDI) in the regional economy since the 1990s, as a core element of the regional development strategy, helping to stimulate the development of science and technology industries, but also creating a large number of foreign-owned branch plants.
- The expansion of export industries, both in new sectors such as pharmaceuticals and medical equipment, and in traditional sectors such as food processing, leading to the integration of the regional economy into global trading networks.

- A high degree of international in-migration, including return migration from Britain and North America, and amenity migration.
- The presence of a large number of foreign migrant workers in the region, notably from Poland, Lithuania and Latvia, as well as in smaller numbers from Brazil, India and Pakistan. Migrant workers and their dependents comprise significant proportions of the populations of several towns including Galway, Roscommon, Ballaghaderreen, and Gort.
- Large volumes of international tourists, especially from Europe and North America, visiting County Galway, but less so County Mayo and County Roscommon.

The nature of these global or transnational relations, together with the distinctive socio-economic character of the region, creates both opportunities and vulnerabilities for future regional development. The opportunities are presented by:

- The strength of the region's pharmaceuticals and medical equipment industries and their capacity to supply a growing global healthcare sector.
- The potential of new communications technologies, including broadband, to facilitate the development of new businesses in more remote and deprived rural communities by enabling immediate access to global networks.
- Opportunities to expand international tourism in County Roscommon by capitalising on the established reputation of neighbouring County Galway.
- The reservoir of both high-level skills and manual labour presented by international in-migrants to the region, and the potential to develop cultural and family ties for commercial purposes.

At the same time, however, our initial analysis suggests that regional development in the West of Ireland is vulnerable to both global and endogenous pressures and challenges in a number of ways. These include:

- The impact of the current Irish recession and the government's recovery programme in reducing consumer expenditure and government spending, cutting public sector support and activities, squeezing available domestic capital for investment and potentially making Ireland a less attractive destination for foreign direct investment.
- The risk that foreign-owned corporations will in a global recession seek to make savings by closing or reducing the workforce of branch plants in regions such as the West of Ireland.
- Increased competition in international markets for exports from the West Region, particularly from newly industrialised economies in south and east Asia.
- A possible decrease in levels of international tourism resulting from the pressures of the global recession.
- Localised conflicts and tensions between established residents and in-migrants, particularly over access to housing (especially in high amenity areas such as Clew Bay), and access to jobs (especially in the context of rising domestic unemployment).

- The prospective withdrawal or scaling-back of EU funds for regional development, in response to economic pressures and the eastward expansion of the EU.

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