The Local Impact of the Economic Recovery

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Executive Summary

This study utilises an area classification system, based on size, to analyse how the economic recovery has impacted on rural and urban areas in Ireland. After a period of deep recession, Ireland has experienced a rapid recovery largely due to increased FDI investment and a low interest rate. This study examines at a spatial scale how this recovery has impacted on urban versus rural areas. The results highlight that although the economy has been in recovery for over five years since 2012, the impact has not been consistent across the country. There has been a long term trend of population share decline in rural areas whereas the population share in rural towns has increased. Migration into the cities of Cork and Dublin has resulted in population growth in these cities for the first time in over a decade. Since 2012, employment growth has been localised in Dublin and surrounding regions with lowest growth occurring in the Mid-West, West and the South West regions. In terms of economic activity since the previous peak in 2007, by 2014 only Dublin had seen a higher level of economic activity. In the border region, economic activity was 32% lower than at the previous peak. There is a clear divergence between Dublin and the rest of the country which has accelerated during the economic recovery. If we measure the economic strength of rural towns in terms of unemployment and migration, we find that the best performing towns are in general located around cities. Conversely, the worst performing towns are further away from cities, with a band of the weakest towns in an arc from the South East across the Midlands to the West, North-West and Border. Access to concentrated labour markets has had a strong impact on the recovery of rural areas and towns.

The Local Impact of the Economic Recovery

1. Introduction

Since 2006 Ireland has experienced a turbulent economic climate, with a property bubble and subsequent crash resulting in a 'great recession'. Since then Ireland has experienced a significant economic recovery (Noonan, 2016; Fitzgerald, 2014), however there are suggestions that there is a geographic imbalance in the recovery, as there was in the economic crash. This report examines the spatial distribution of economic recovery across urban and rural areas.

The economic crash had a larger negative impact outside the main cities as illustrated in research undertaken by O'Donoghue et al., (2013), which showed that compared to cities, poverty rates were 50% higher in small and medium sized towns and the open countryside. In these areas one third of working age households did not have a wage. Concern around the increasing divergence between urban and rural areas led to the establishment of CEDRA (Commission for the Economic Development of Rural Areas) to investigate the impact of the crash and the economic potential for recovery in rural Ireland. The CEDRA report highlights the differential impact on rural areas as unemployment increased by 192% compared to 114% in urban areas (CEDRA, 2014), with the largest declines in small and medium sized towns (O'Donoghue et al., 2013). The report also noted that the availability of substantial construction-related employment for many farmers and rural dwellers over the previous 15 years disappeared almost overnight, with employment in rural areas remaining concentrated in declining sectors.

Recent studies suggest that there has been a growing concentration of economic activity in and around Dublin City, with urban areas outperforming rural areas. The studies show that the worst performing areas which are largely rural are characterised by high levels of unemployment, low income and low levels of third level education (Morgenroth, 2014; Kilgarriff et al., 2016). Increasing incomes within the Greater Dublin Area (GDA) are not compensating for the cost of commuting to these areas (Vega et al., 2016). This is further highlighted by the Pobal Deprivation Index which shows the level of overall affluence and deprivation at the small area (local) level. Since the crash and recovery, cities have performed better than other areas. Counties outside the Greater Dublin Area are experiencing the biggest declines in affluence levels (Haase, 2017), with inhabitants claiming that the recovery has not reached these areas (Ruane, 2016).

However, there are disadvantages to living outside the five main cities (Dublin, Cork, Galway, Limerick and Waterford). In relation to employment opportunities, high wages tend to be found where high skilled workers concentrate in dense local labour markets where efficiencies can be increased by matching worker skills to jobs (Krugman, 1998). For this reason, rural areas suffer from outward migration of young and high skilled workers due to a lack of job opportunities and services (Pezzini, 2001). As a consequence, low access to and availability of high skilled jobs can lead to a 'low-skill, bad-job trap', where there is a low incentive for workers to upskill and for firms to offer high skilled jobs (Snower, 1994). Commuting distance to job opportunities impacts on the spatial distribution of employment (Rogers, 1997).

Media coverage has consistently highlighted the spatially inconsistent nature of the recovery with headlines such as: "Rural Ireland is recovering, despite claims to the contrary" (O'Brien, 2016), "A strong but uneven economic recovery in Ireland: Urban-rural divide widens as

regions are slow to recover" (Irish Times, 2015), "Recovery is not yet being felt in rural areas" (Boland, 2015), "Urban-rural divide in economic recovery" (Hogan, 2015), "Urban-rural divide widens as Capital booms – fears of two tier recovery as growth wanes in rural areas" (Weston, 2015), however many of the media reports note the dearth of data at regional or local scale to allow for more meaningful analysis at regional or sub-regional levels.

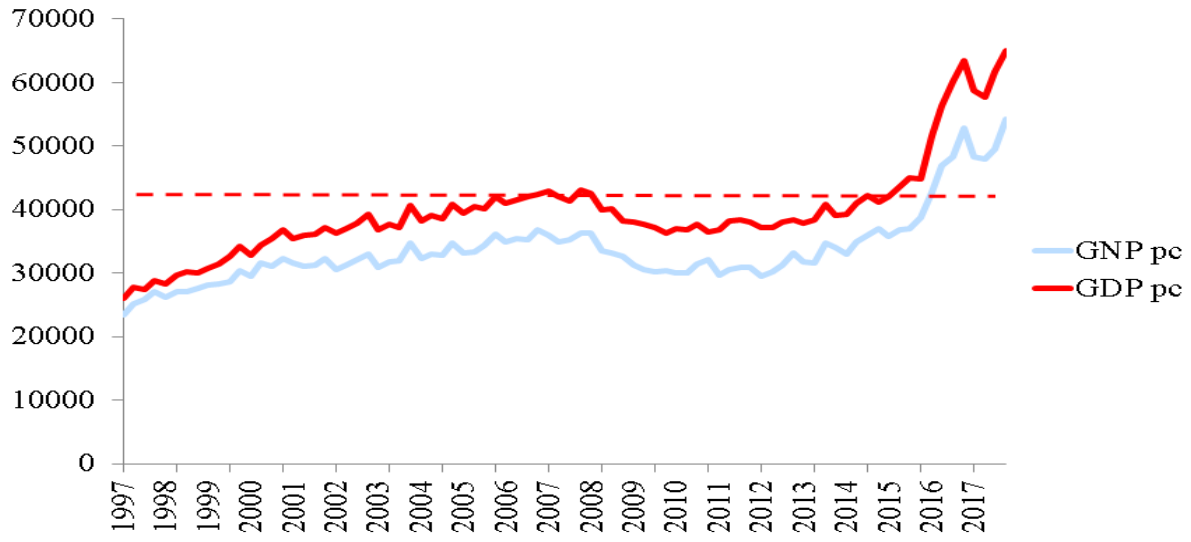
2. Current National Context

The EU-IMF assistance programme in 2010 provided the government with €80 billion in financial support over a three year period (Smyth, 2017). Lower than forecasted interest rates played a big role in Ireland's recovery and Ireland's successful adherence to the EU-IMF programme and better than expected economic performance, provided a series of "good news" stories to the markets which eventually led to Ireland's successful exit from the programme.

Commentators cite the state-led Foreign Direct Investment (FDI) growth model as a primary driver of recovery (Brazys and Regan, 2017; Regan, 2016), aided by Ireland's corporate tax rate of 12.5% which facilitated the attraction of FDI during a difficult economic climate. Ireland now has one of the highest FDI stocks as a percentage of Gross Domestic Product (GDP) in the OECD (OECD, 2017a). In addition, Ireland has one of the highest rates of tertiary education in the OECD - over 50% of those aged 25-34 (OECD, 2017b), which is an attractive demographic characteristic from an FDI perspective.

Since 2011, the economy has seen a very significant recovery, with GDP per capita (constant prices), increasing by 79% and the GNP equivalent increasing by 84% (Figure 1). While these figures incorporate a once off single year real growth rate of 41.8% and 36.5% respectively, between 2015 and 2016 (related to aircraft leasing), the economy had been steadily growing at four to five per cent per annum in the period 2012-2015. Thus real GDP per capita exceeded the pre-crash peak in Q2, 2015 and GNP per capita in Q3, 2015 (real GNP per capita had passed out the prior peak in Q4 2014, but only for one quarter). Employment growth has averaged two per cent per annum since 2012 and the uunemployment rate is now 7.9% compared to a peak of 14.9% (Eurostat, 2017).

Figure 1. GNP and GDP per capita (constant) prices



Source: CSO Quarterly National Accounts

However, the recovery is not equally distributed across the population. Young males have seen a faster recovery, with employment rates for those aged 20-24 increasing by 41.1% and 19.1 % for women. For ages 25-59, employment growth has been respectively 12% and 13% for men and women. The Gini coefficient which measures inequality in relation to the distribution of wealth is lower post recovery (30.8 in 2015 compared to 32.4 in 2006) as the introduction of more progressive taxes and the removal of low earners from the tax base and benefits improved the re-distributive nature of the tax-benefit system during the crisis years (Kennedy et al., 2016). However, the same however is not the case for other measures of poverty and inequality. The deprivation rate and consistent poverty rate were higher in 2015 compared to 2006. The deprivation rate in 2006 stood at 14% while in 2015 it is significantly higher at 25.5%, the rate reached peak levels in 2013 of 30.5%. Consistent poverty stood at 6.6% in 2006, reached peak levels of 9.1% in 2013 and was 8.7% in 2015 and (CSO, 2017d).

Employment remains below peak levels (Figure 2), with large increases in the numbers of long-term unemployed (McDonnell, 2016). There are large increases in vulnerability as 21.8% of Irish children live in jobless households, the highest in the OECD (OECD, 2016a). Initially there was little increase in employment for those with low education levels (Fitzgerald, 2014), and by Q1, 2017, employment had only recovered to 2.035 million, or 5.4% below peak, while the population had grown by 4.2% between 2008 and 2016. In early 2017, employment remains at 64.7%, highlighting that further progress is needed to reach the pre-crisis working age employment rate of 69.8%.

Figure 2. Employment level ('000s)

Source: CSO Quarterly National Household Survey

The next section describes the classification methodology and the data used to examine the localised nature of the recovery. Results are presented which illustrate the urban-rural differential impact of the recovery in relation to three indicator categories: demographic characteristics, economic indicators and a measure of the economic strength of towns and rural areas, within a spatial context.

3. Urban-Rural Classification

In quantifying the impact of the economic recovery on urban and rural areas, a methodology is required which allows us to differentiate areas into urban-rural and further disaggregate urban into small-medium sized towns. In addition, we would also like to examine rural areas on a regional basis and in terms of proximity to urban areas. There are currently a number of methodologies used to define urban and rural areas. Administrative boundaries are used in relation to municipalities such as cities, city or county boroughs, towns, urban districts etc. There are five city boroughs (Dublin, Cork, Galway, Waterford, and Limerick), however categorising areas outside of the main cities can be complex. For instance, there are contiguous parts of cities that are part of different counties in Limerick, Waterford and Dublin. Town and city boundaries have changed over time and in addition, there are considerable areas of higher population density surrounding cities and towns, while there are areas of lower population density and farmland in many cities (see O'Donoghue et al., (forthcoming) for an urban-rural sensitivity analysis).

Building on these existing methodologies, we aim to differentiate between cities, towns and rural areas and additionally differentiate towns on the basis of population, from small towns (1,500-2,999 inhabitants), to medium sized towns and large towns with over 10,000 inhabitants.

Using population density is one methodological approach which can be applied to classify areas as rural-urban. It can be argued that in international comparisons, it may make sense to use a higher population density as a small town like Listowel could be regarded as a mainly rural area. While it can also be argued that these rural districts, surrounding urban districts within a town area should be incorporated as being part of that town, we utilise a lower density of 50 inhabitants per km^2. O'Donoghue et al., (forthcoming) examine the sensitivity of economic and demographic summary statistics to the choice of population density. In this report we classify areas using a methodology similar to that utilised in O'Donoghue et al. (2013). This allows for cross comparisons between the two studies, with one study examining the crash and the other examining the recovery. Towns outside of the five cities are divided into five categories according to population size: 1,500-2,999 inhabitants, 3,000-4,999 inhabitants, 5,000-9,999 inhabitants and towns of 10000+ inhabitants. In addition, we define rural areas as having a population density of 50 per km^2 or having a population of less than 1,500. Dividing small towns into different categories allows a more accurate representation of current circumstances facing towns, reflecting the heterogeneity of circumstances in towns of different sizes.

Going beyond the size of towns, we utilise a measure developed by O'Donoghue et al. (2013), to define the 'economic strength' of a town and thereby identify the towns that recovered faster since 2012. While unemployment rates are often used to classify areas, this may not be appropriate for rural areas, where higher unemployment often leads to out-migration. In this analysis, the economic strength is an index that is a function of the unemployment rate and the level of migration. Lower unemployment and higher levels of inward migration signify stronger towns in the context of the economic recovery, compared to their performance during the crash.

4. Data Sources

Data is utilised from a number of Central Statistics Office (CSO) data sources including Small Area Population Statistics (SAPS), Quarterly National Household Survey (QNHS) and

National Accounts. SAPS data are used to examine the characteristics of areas at the Electoral Division (ED) level. The Quarterly National Household Survey provides us with spatially aggregated labour market data at the regional NUTS3 level. National Accounts provide us with data on economic performance measured using household income and gross value added, at county and regional levels. The QNHS is a large-scale nationwide survey of households (approx. 26,000) which aids in producing quarterly estimates of labour force measures. It is used in estimating the official measure of employment and unemployment for the state (CSO, 2017b). The Live Register series (CSO, 2017c), produced monthly by the CSO contains labour market data at a detailed geographic level, including the county and individual Department of Social Protection (DSP) office level. This is the only labour market data with a spatial component which is available on a regular basis. The Live Register records individuals who register for Jobseekers Benefit, Jobseekers Allowance or other entitlements at their local DSP office.

The National Accounts tables are published annually and quarterly by the CSO and are used to examine the performance of the economy as a whole or by sector. The tables provide information on aggregate measures such as Gross Domestic Product (GDP) and Gross National Product (GNP). Both household income data and regional accounts are also included in the National Accounts. They contain information on the levels of economic activity at a regional (NUTS3) and county level.

Regional Accounts

Gross Value Added (GVA) at basic prices is the total value of goods and services produced in a region that the producer receives, less any materials or services which come from outside the region, less any taxes and plus any subsidies. GVA and GDP both measure the value of goods and services produced in an economy. GDP is valued at market prices and includes taxes and excludes any subsidies, GVA excludes taxes and includes subsidies (CSO, 2017a).

While regional accounts provide an indication of where income earners work, we need data on household income to provide an indication of where income earners live. A breakdown of primary income, household income and disposable household income totals are published at the regional and county level. Primary income consists of compensation of employees (wages and salaries), self-employed income, rental income (including imputed rent), net interest and dividends. Household income is calculated using primary income plus social benefits and other transfers. Finally, disposable income consists of household income less any taxes and social contributions (CSO, 2017a). Disposable income per person is also published which provides an indication of per capita income.

Table 1. Administrative Areas in Ireland

Geographic Unit	Number of Divisions
Small Area	18,488
Electoral Division	3,409
Local Authority	34
County	26
NUTS 3	8
NUTS 2	2
NUTS 1	1

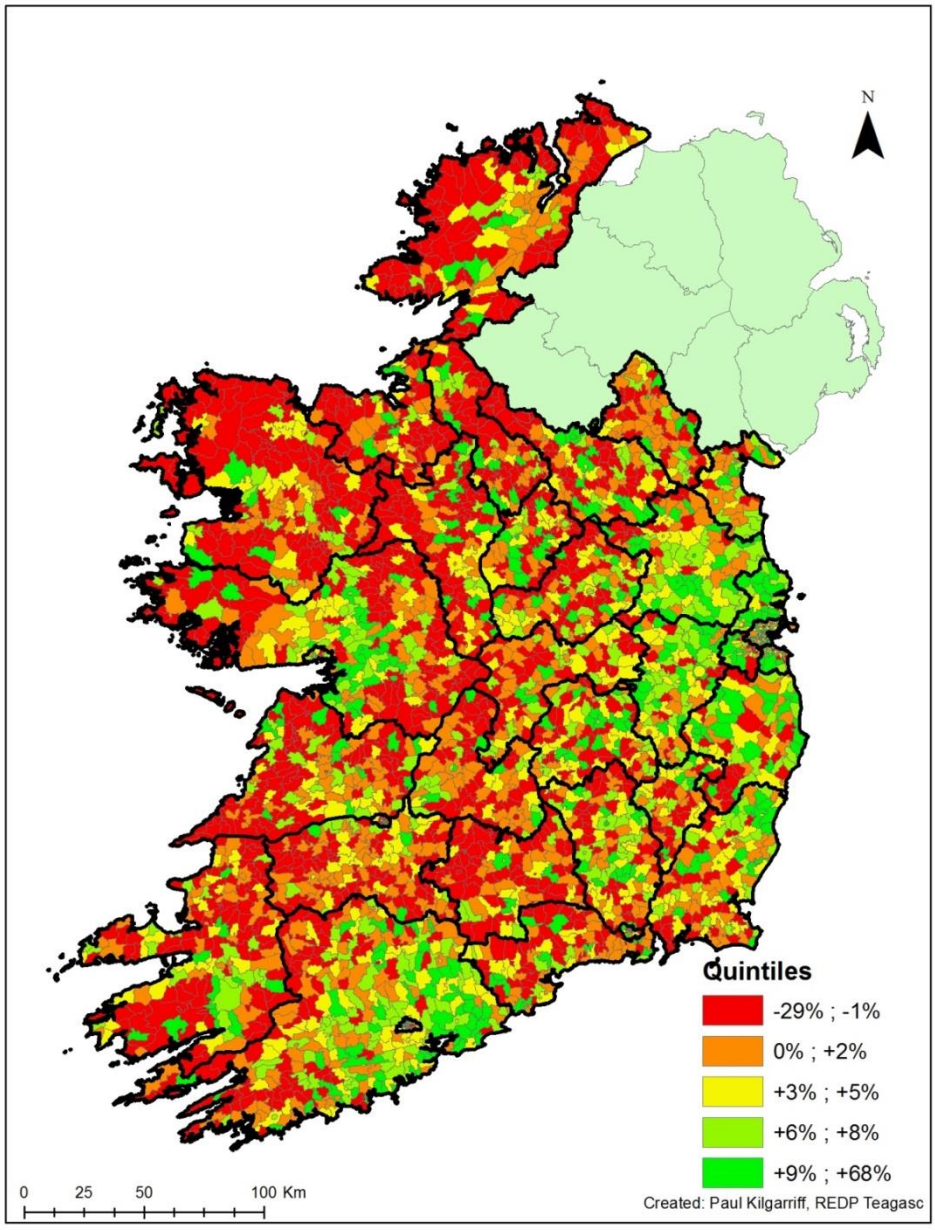
Source: CSO

Maps generated for this report were created using GIS software, using data at the Electoral Division (ED) level from the CSO SAPS 2011 & 2016. Maps are displayed as quintiles which are weighted by population, giving equal importance to each individual.

5. Results I: Demographic Context

In order to understand the impact of the economic recovery by area, this section reports the demographic context of the different areas in terms of education level, population share and the components of population change such as migration and age groups.

Figure 3. Population Change: 2011-2016

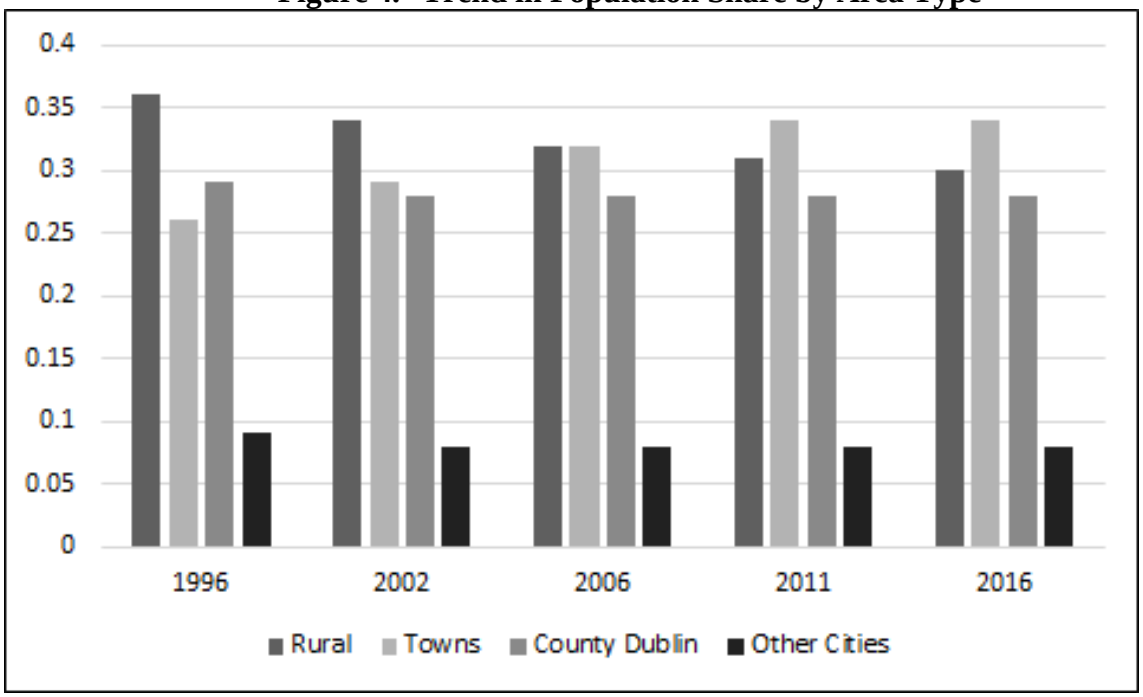


Source: CSO Small Area Census Data 2016

In Figure 3 we see that areas which have experienced the greatest levels of population growth are concentrated around the cities of Dublin, Cork and Galway. Despite some areas having population increases as high as 68%, many remote rural areas have experienced decreases in population (red on map). This is supported by figures showing an overall greater decrease in the population of rural compared to urban areas.

If we group areas in terms of rural areas, towns, Dublin and the other cities as illustrated in Figure 4, we see a gradual decline in the rural population outside the towns and cities from 36% of the population in 1996 to 30% in 2016, utilising a population density of 50 inhabitants per km^2. However the largest increase has occurred in towns rather than (other) cities, which have increased in share from 26% to 34%. Most of this growth in share occurred in the period 1996-2006. The share of the population in rural towns is thus higher than that in County Dublin, which, like the cities, has held a relatively constant share over time.

Figure 4. Trend in Population Share by Area Type



Source: CSO SAPS
Note: We define rural areas as having a population density of 50 inhabitants per km2 or having a population of less than 1500.

Demographic Characteristics

In public commentaries, rural areas and towns are sometimes characterised by rural decline, with out-migration and ageing populations. In reality the situation is somewhat different. In Table 2, we categorise different area types by their demographic statistics in 2016 and see that rural areas and towns have, in general, a higher share of younger people. In rural areas, 18% of the population is under 15 compared to 13% in Dublin City. These shares are higher than in any of the other cities. While there is typically a slightly higher share of older people in smaller settlements, the share is similar to the range within the cities. The areas with the largest share of older people are those in the open countryside and Cork City. Rural areas have the lowest levels of education attainment. This is not surprising given the high share of older people.

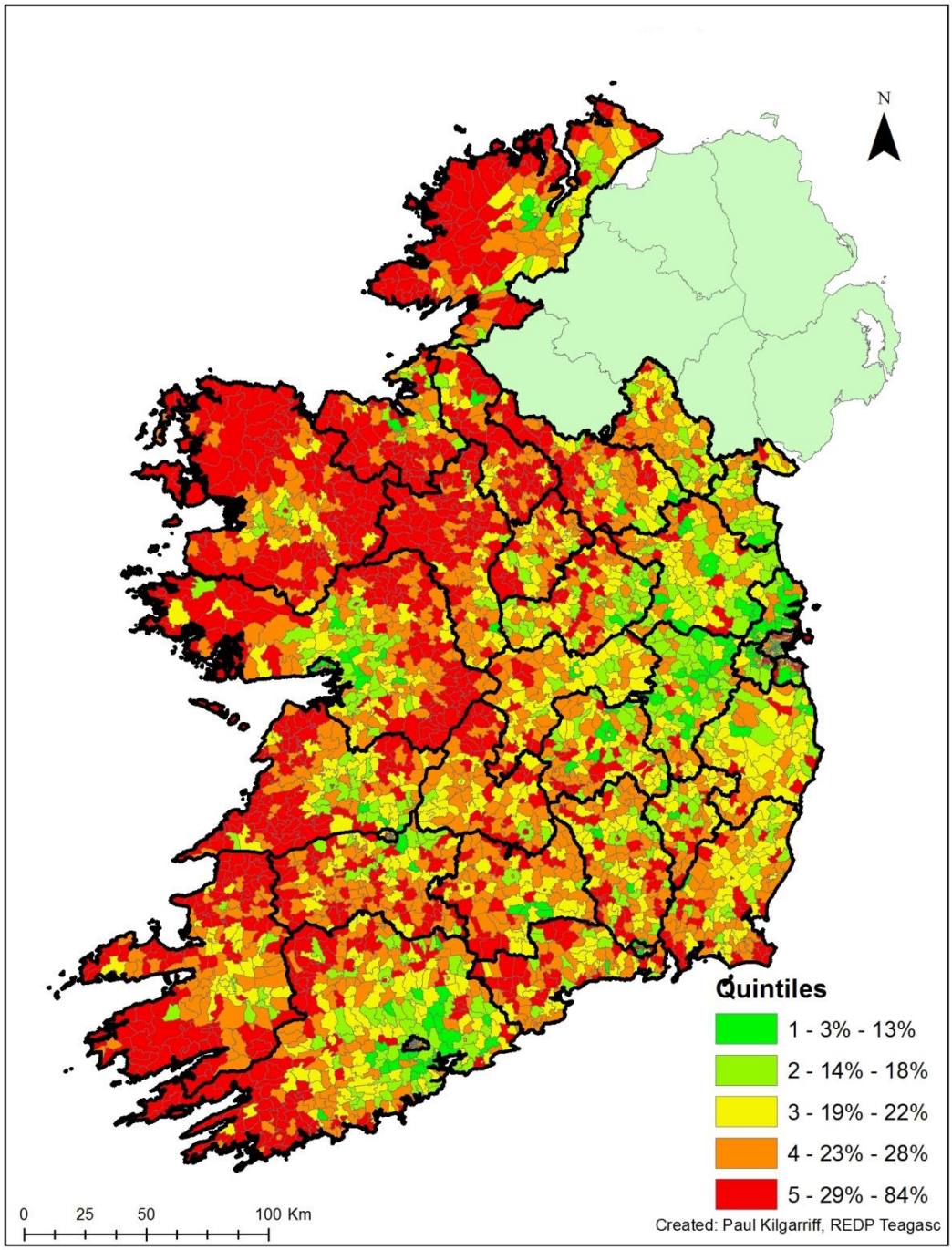
Table 2. Demographic Characteristics 2011 & 2016

	Open Countryside	Towns (1500-2999)	Towns (3000-4999)	Towns (5000-9999)	Towns (10000+)	Waterford City	Galway City	Limerick City	Cork City	Dublin City	County Dublin
Share of Population 2016	0.30	0.07	0.04	0.07	0.16	0.01	0.02	0.02	0.03	0.12	0.17
Share of Population 2011	0.30	0.08	0.05	0.09	0.15	0.01	0.02	0.01	0.03	0.12	0.16
Share Aged <15 2016	0.18	0.19	0.20	0.19	0.19	0.17	0.15	0.16	0.13	0.13	0.17
Share Aged <15 2011	0.19	0.20	0.20	0.20	0.19	0.17	0.14	0.15	0.12	0.13	0.19
Share Aged >=65 2016	0.18	0.16	0.15	0.15	0.14	0.16	0.13	0.15	0.18	0.15	0.14
Share Aged >=65 2011	0.15	0.14	0.13	0.13	0.12	0.15	0.11	0.15	0.17	0.15	0.11
Net Migration											
2011	0.01	0.05	0.15	0.09	-0.02	-0.02	-0.03	-0.06	-0.04	0.01	0.00
2016	-0.02	-0.01	0.00	0.00	0.01	0.01	0.01	-0.02	0.06	0.06	0.03
Tertiary Education Rate 2016	0.32	0.36	0.36	0.35	0.39	0.35	0.54	0.41	0.41	0.51	0.50
Tertiary Education Rate 2011	0.27	0.30	0.33	0.32	0.35	0.30	0.48	0.27	0.34	0.42	0.41
Unemployment Rate 2016	0.06	0.08	0.08	0.09	0.09	0.10	0.07	0.08	0.07	0.08	0.06
Unemployment Rate 2011	0.10	0.11	0.11	0.12	0.11	0.13	0.11	0.13	0.11	0.10	0.09

Source: CSO Small Area Census Data 2011 & 2016

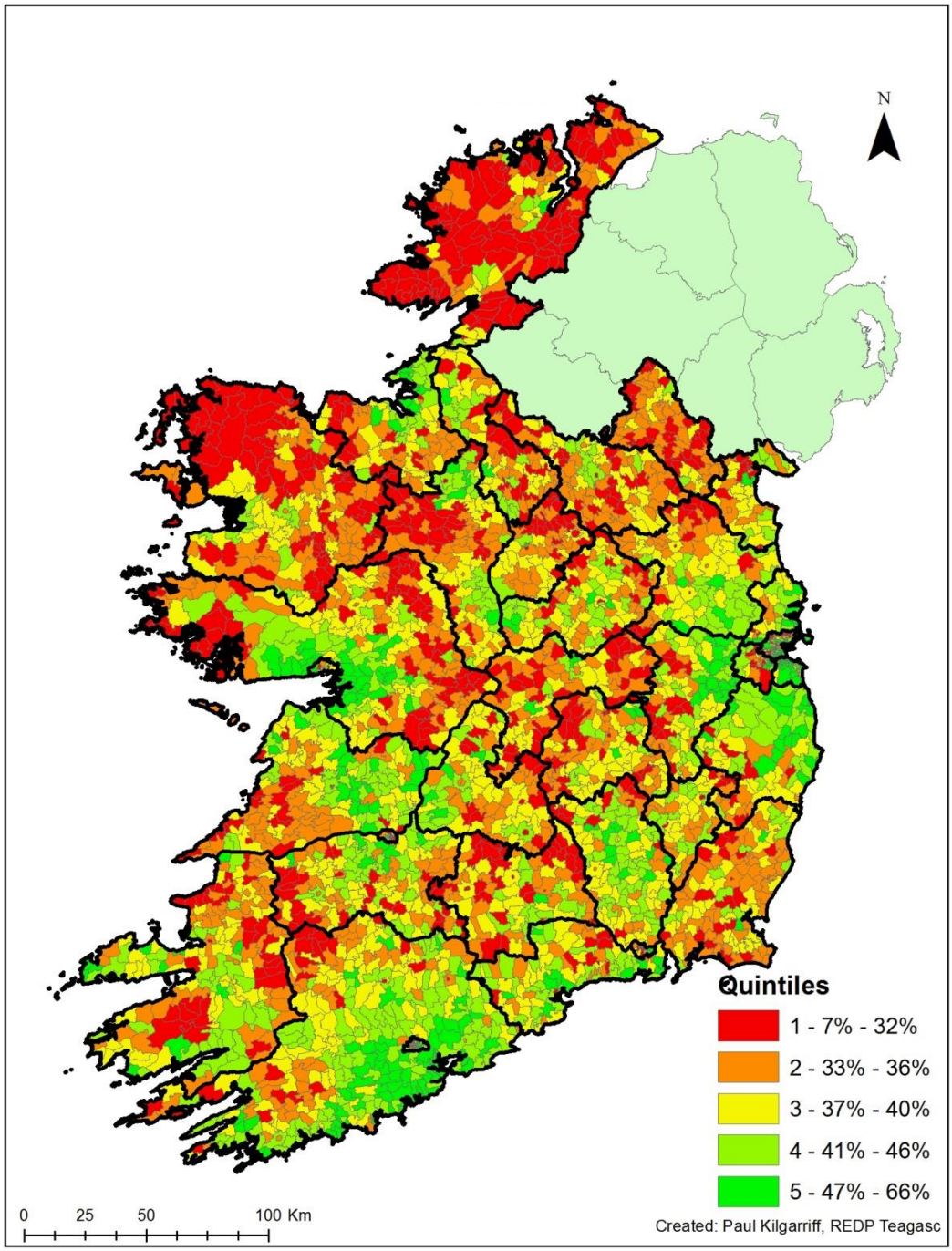
Figure 5 illustrates how the distribution of the elderly appears spatially. Using the old age dependency ratio (ratio of adults aged 65+ / adults aged 15 – 65) we can clearly see the districts with the highest levels of old people are located outside of the cities and commuter zones.

Figure 5. Old Age Dependency Ratio (2016)



Source: CSO Small Area Census Data 2016

Figure 6. Tertiary Education Rate (2016)

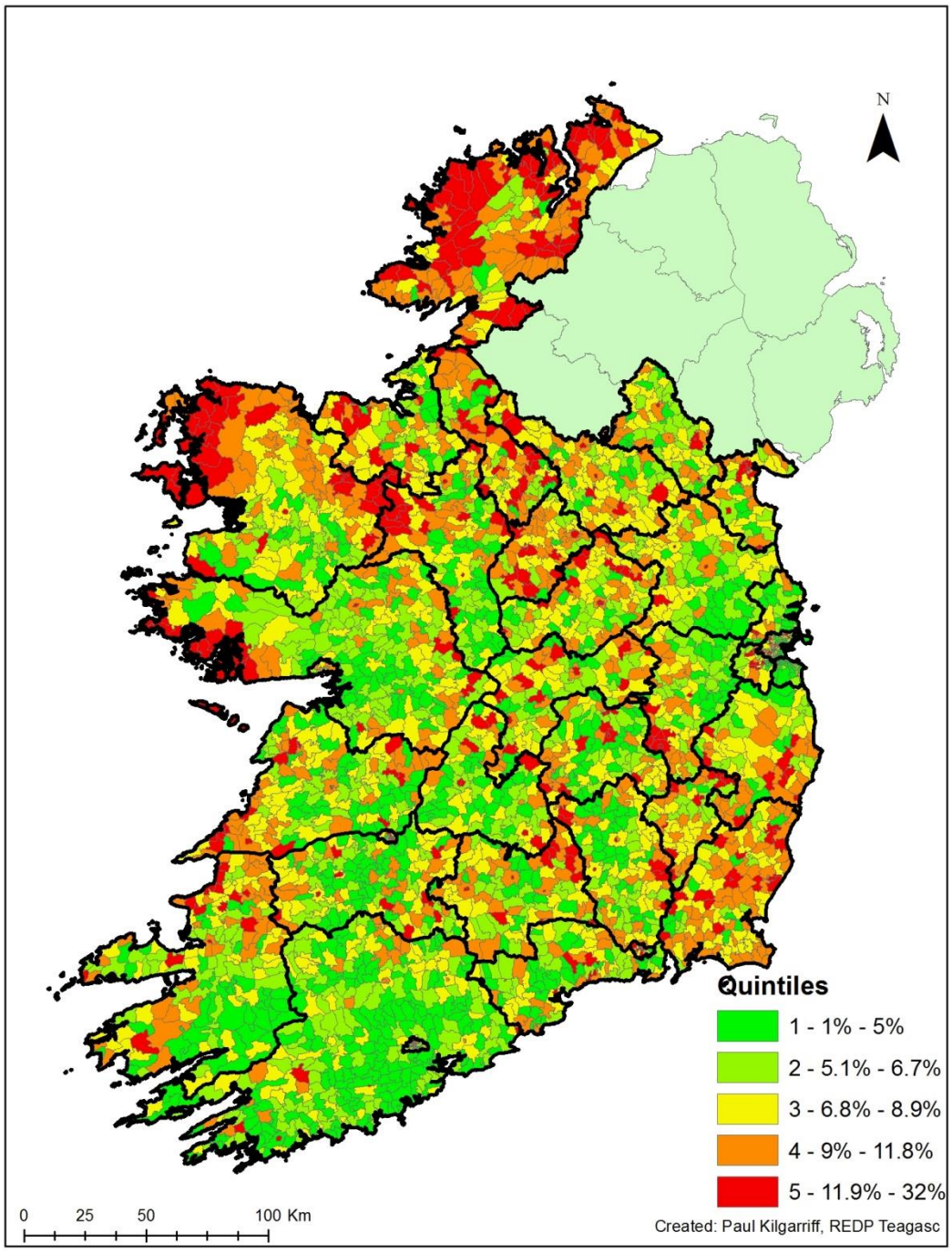


Source: CSO Small Area Census Data 2016

The tertiary education rate follows a similar pattern (Figure 6). Rural areas have the lowest levels of education attainment. This is not surprising given the high share of older people. This concentration of younger people in towns is possibly due to a high level of net migration from cities to towns in the period before 2011. Higher house prices in the main cities may have been of the drivers of this migration. However this trend changed during the recovery phase from 2011, where we have seen migration into the cities of Cork and Dublin, with flat

or growing out-migration in rural areas and towns. This marks the first population growth in most cities for over a decade. In 2016, Waterford city has the highest unemployment rate, followed by towns with populations of 5,000-9,999 and 10,000+ respectively. The lowest levels of unemployment are in the cities and rural areas. The low unemployment rate in rural areas compared to towns may reflect the fact that many unemployed in rural areas tend to migrate, particularly in the more remote areas (Hazans, 2004).

Figure 7. Unemployment Rate (2016)



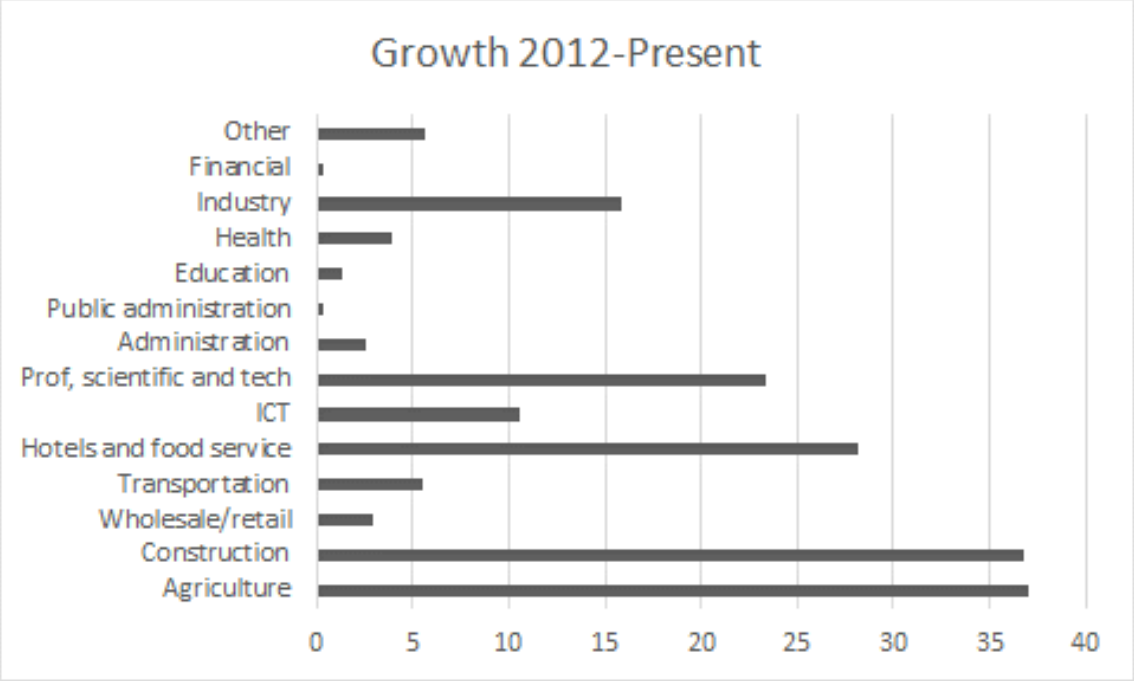
Source: CSO Small Area Census Data 2016

Observing this spatially in Figure 7, the lowest levels of unemployment are located in and around the major cities with surrounding areas benefitting from having increased job opportunities. The areas with the highest levels of unemployment are located in North Mayo and Co. Donegal, with pockets in Co. Wexford.

6. Results II: Impact of the Recovery on Towns and Rural Areas

In this section, we illustrate how the economic recovery has impacted differentially on cities towns and rural areas. Initially, we examine the growth rate in employment since 2012 across the main employment sectors nationally. Figure 8 shows employment growth by sector from 2012 to present. The main growth sectors are Agriculture, Construction, Hotels & Food, Professional and Scientific & Industry. This reflects the recent strength of the Agri-Food sector, bounce back of the construction sector after the collapse, the ongoing success of the tourism sector and the strength of the multi-national exporting sector. The poor public finance position impacted negatively on growth in the public and education sectors, while the impact of the economic crisis on balance sheets in financial institutions and the retail sector also led to poor growth in these sectors.

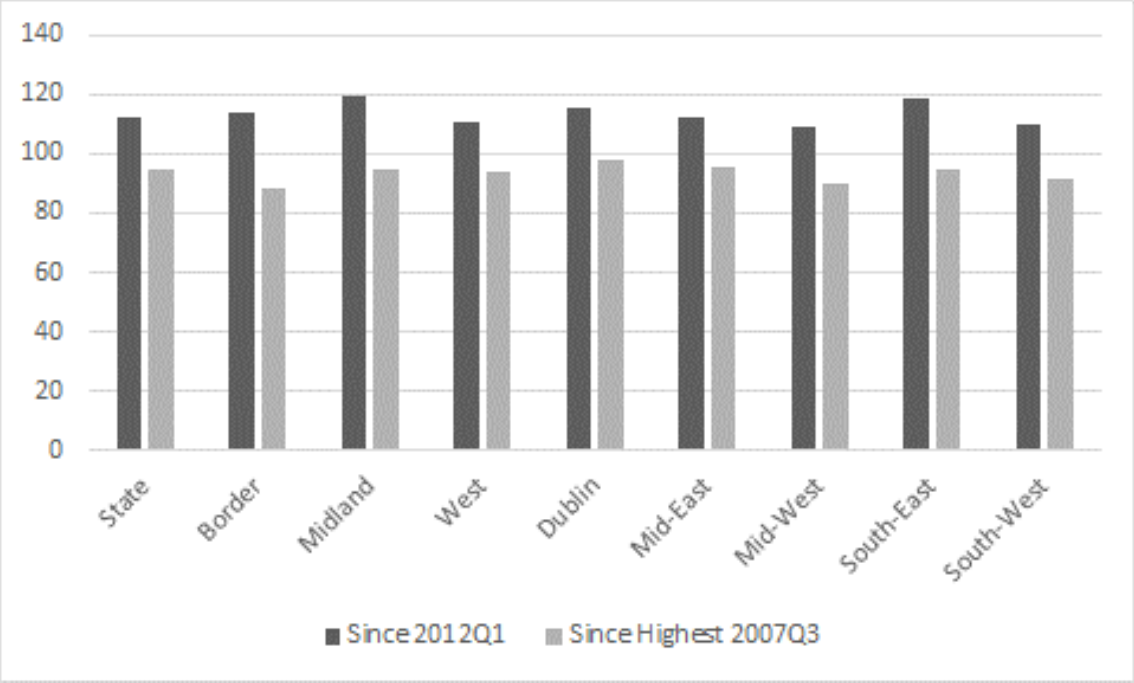
Figure 8. Sectoral Employment Growth (2012-present)



Source: CSO Quarterly National Household Survey

Many of these sectors represent opportunities for growth outside cities. However if we consider the location of the employment growth by region (Figure 9), we see that there is a two speed recovery. Growth is localised in Dublin which has seen almost 16% growth in employment and surrounding regions (Midlands 19.3%; South-East 18.2%). The lowest growth occurred in the Mid-West (9.3%), West (10.4%) and the South West (7%).

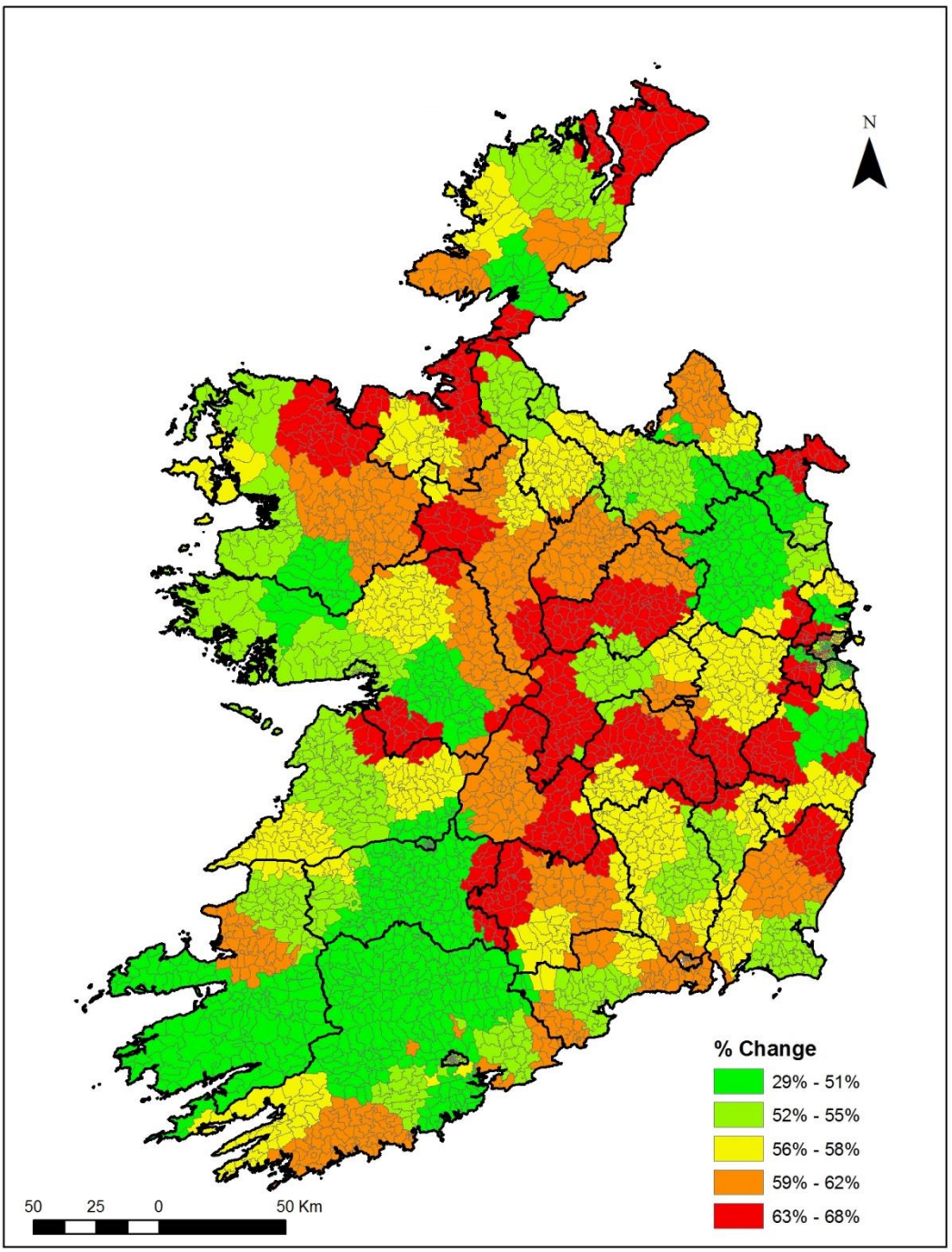
Figure 9. Regional Employment Growth 2012-Present (2012 = 100)



Source: CSO Quarterly National Household Survey

The Live Register statistics, although not a measure of unemployment, can be used as a proxy for changes in unemployment. Figure 10 reports the change in the numbers registered on the unemployment live register. While we observe an improvement across the country (except for Kerry), in general there is a smaller decline in areas furthest from the cities while the largest declines occur in proximity to the cities.

Figure 10. Change in Live Register 2012-Present (Current Live Register level as % of Peak)



Source: CSO Live Register Statistics

Figure 11 reports the growth in GVA per capita from the peak in 2007 to the lowest point in 2010/11 (after the crash) to the most recent year available, 2014. Looking at GVA per capita (figure 11a), we see that since the previous peak in 2007, only Dublin had seen a higher level of economic activity by 2014 (10% higher). In the Border area, economic activity was 32% lower than at the peak.

Household Disposable income per person in 2014 (Figure 11b) was lower than at the peak, due for example, to higher tax rates to fund the government deficit and higher social spending. However Dublin had improved the most by 2014, increasing by 5% relative to 2011. The next highest improvement was 3.9% in the South East. In both the West and the Border area, average disposable incomes were lower in 2014 than in 2011.

Figure 11. Regional Growth of Household Income and GVA – Relative to 2007

Figure 11a - GVA (as a % of 2007 level)

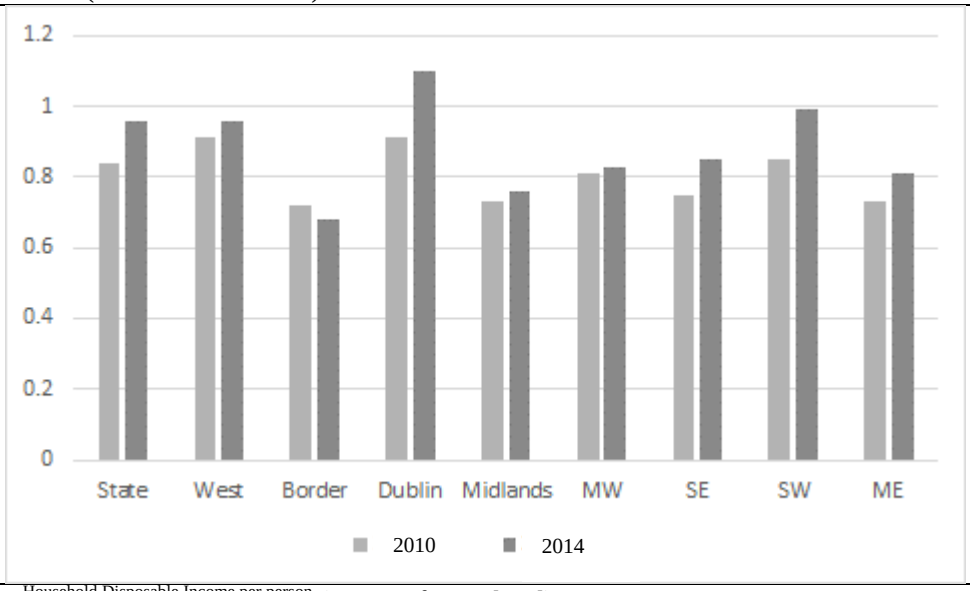
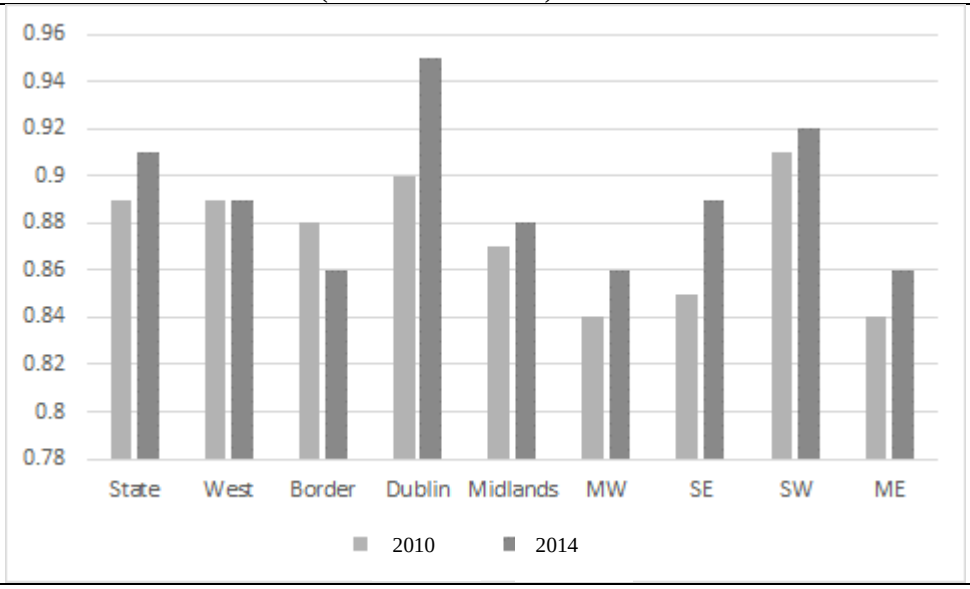


Figure 11b - Household Disposable Income per person (as a % of 2007 level)

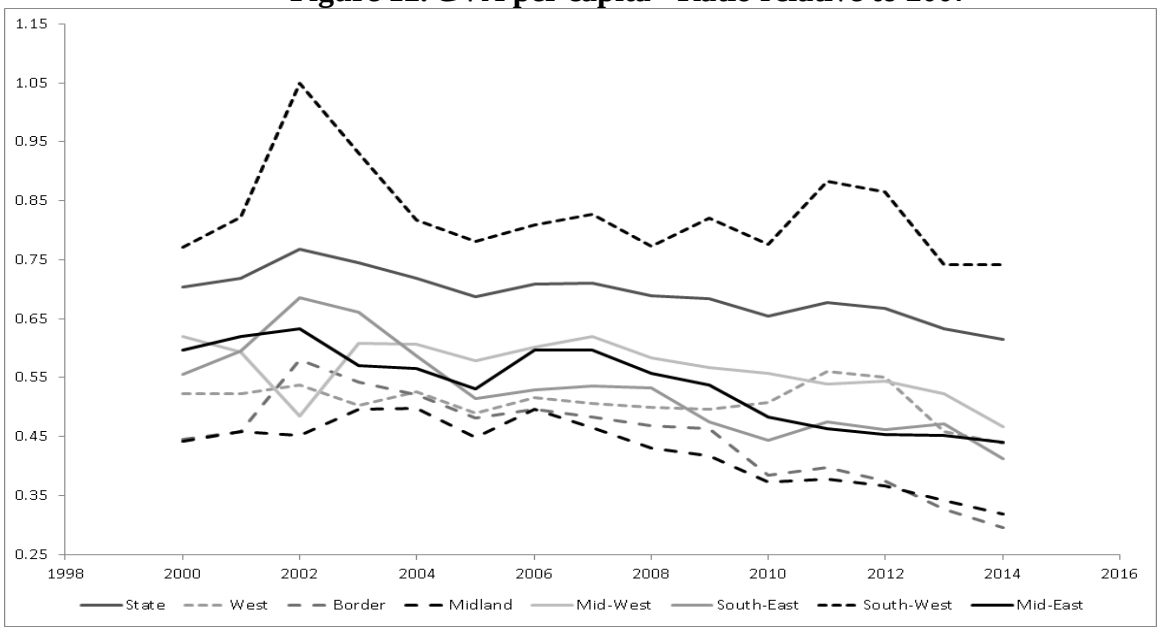


Source: CSO National Accounts

This divergence between Dublin and the rest of the country has accelerated during the economic recovery, as Dublin bounced back sooner due to agglomeration effects and the fact that some of the fastest growing multi-national tech sector and tourism businesses chose to locate there. This is particularly evident in Figure 12, which plots the ratio of GVA and Household Income per person for each region, relative to Dublin. While the ratio of GVA per person is in general downwards sloping, due to the long-term divergence of economic activity between Dublin and the rest of the country, the trend for household disposable income is

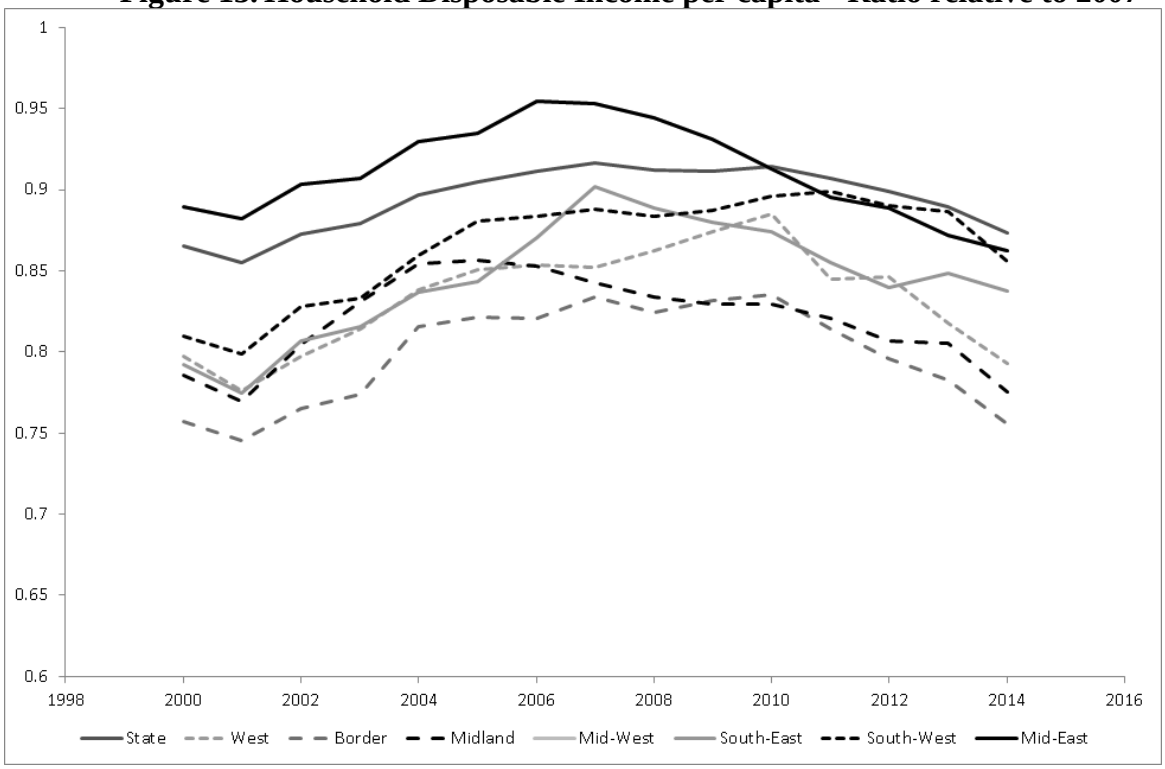
different (Figure 13). Here, we see convergence for the first part of the last decade to the peak in 2007, but divergence after the crash as Dublin recovered more quickly.

Figure 12. GVA per capita - Ratio relative to 2007



Source: CSO National Accounts

Figure 13. Household Disposable Income per capita - Ratio relative to 2007



Source: CSO National Accounts

7. Results III: Economic Strength of Towns and Rural Areas

In analysing the impact of the economic crash, O'Donoghue et al., (2013) developed an index of rural towns using 2011 data, which described the economic strength of towns and rural areas as measured by a combination of the unemployment rate and the migration rate. A more recent analysis O'Donoghue et al., (forthcoming) which examines the impact of the crash and recovery on towns, updates the rural towns index using the latest 2016 data.

Using the updated rural towns index, Table 3 describes the share of rural areas by quintile of economic strength, classified also by distance to the nearest city and shows a clear relationship between closeness to a city and economic strength. 49.7% of those in the strongest rural districts live within commuting distance of cities (the closest 2 quintiles). Conversely 16.8% of those in the weakest towns live in this range, while 43.2% of those living in the weakest towns are in the most remote districts.

Table 3. Rural Areas by Economic Strength Quintile and Distance to City Quintile

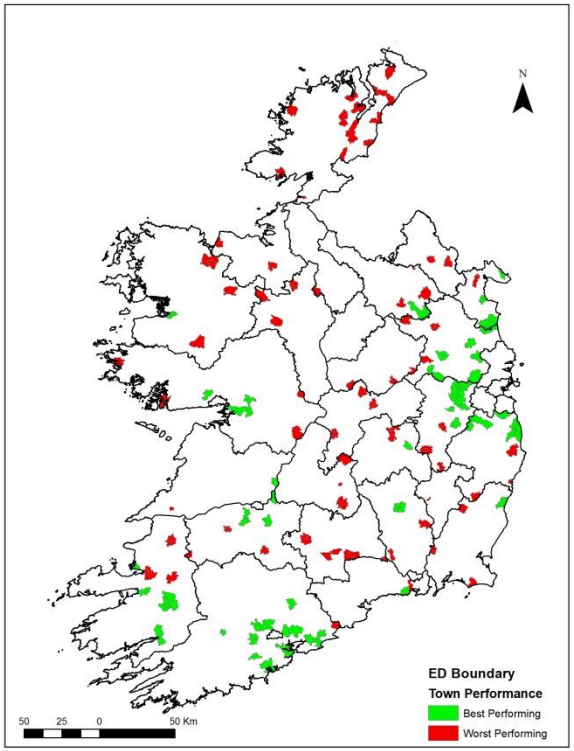
	Economic Strength Quintile				
	Strongest	2	3	4	Weakest
Distance to City Quintile					
Closest	22.9	9.6	10.1	7.8	4.9
2	26.8	27.0	16.1	14.0	11.9
3	19.3	27.9	25.2	23.5	20.9
4	18.7	19.1	25.3	26.4	19.1
Furthest	12.3	16.4	23.2	28.3	43.2

Source: (O'Donoghue et al., forthcoming)

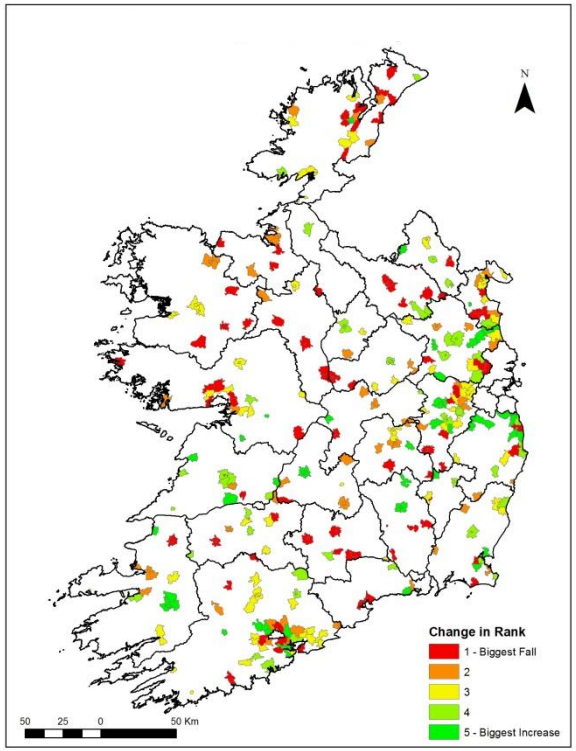
Figure 14 maps the distribution of towns by extremes (top and bottom quintile) of economic strength and quintile of changes in rank of economic strength. The best performing towns 14(a) and rural areas 14(c) and are in general around cities, South Kerry (Killarney and Kenmare) are exceptions. Conversely, the worst performing towns are further away from the cities, with a band of the weakest towns forming an arc from the South East across the Midlands to the West, North-West and Border regions. This is more extreme than the equivalent map in 2011, where there was a smaller difference between East and West and between areas closer to cities and remote areas. This is manifested in 14(b), which maps the change in rank between 2011 and 2016. It highlights that the worst performing towns are in the North West and Midlands. Commuting towns around Galway such as Barna, Clarinbridge and Oranmore have fallen out of the top 10% of towns, while Gort has increased dramatically moving up 164 places.

Figure 14. Rural Towns Index (Red indicate bottom 20%)

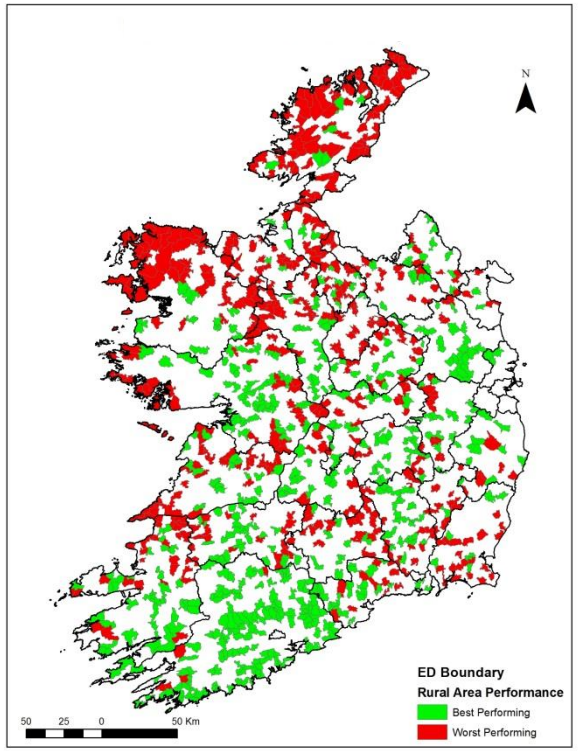
(a) Top and Bottom Quintile Economic Strength - Towns 2016



(b) Change in rank of Economic Strength – Towns 2011-2016



(c) Top and Bottom Quintile Economic Strength – Rural Areas 2016

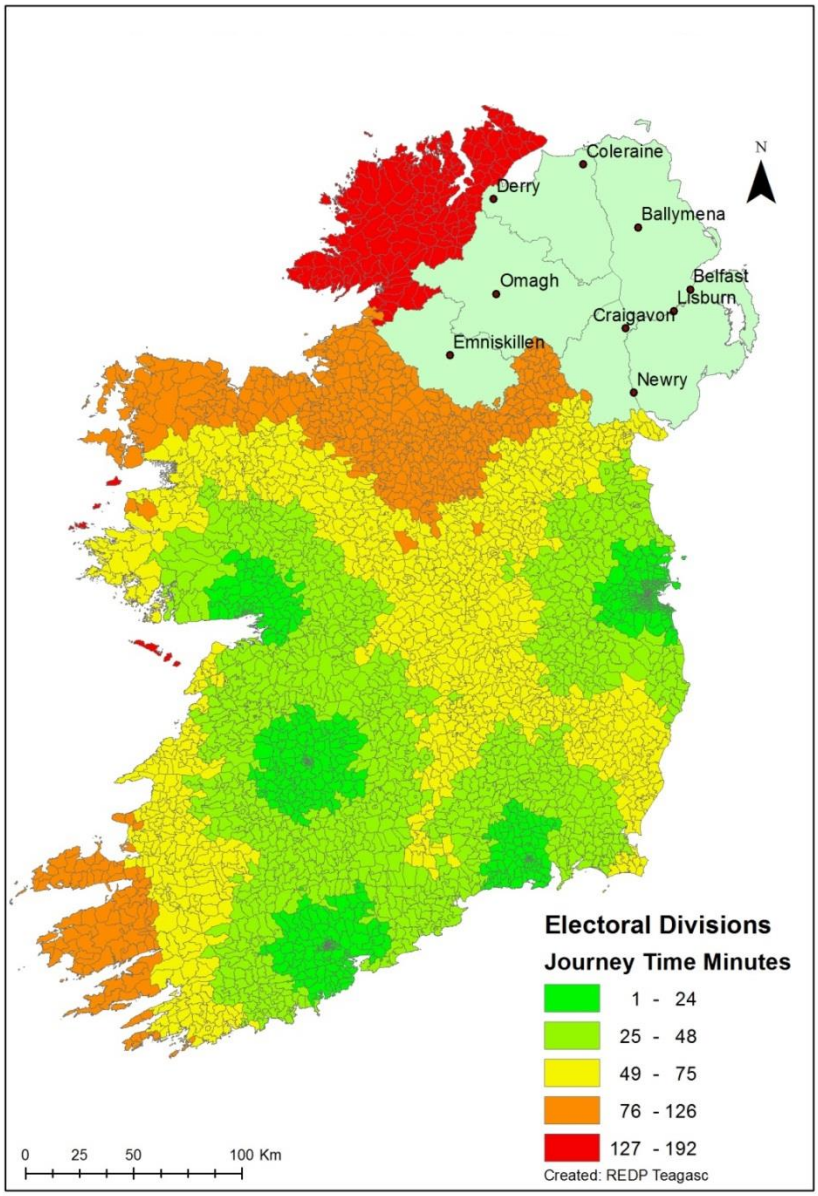


Source: Author calculations; CSO Small Area Census Data 2016; O'Donoghue et al., (forthcoming)

8. Spatial characteristics

The results of this report have highlighted the importance of proximity to cities. The best performing towns and rural areas tend to be located in close proximity to the major cities. Figure 15 shows the driving distance in minutes to the nearest city (Republic of Ireland only). This map highlights issues around accessibility for some areas. There are benefits to living within a commuting distance of a city such as more job opportunities and greater access to services. The results of this report have highlighted the impact distance to city has had on the economic recovery of areas.

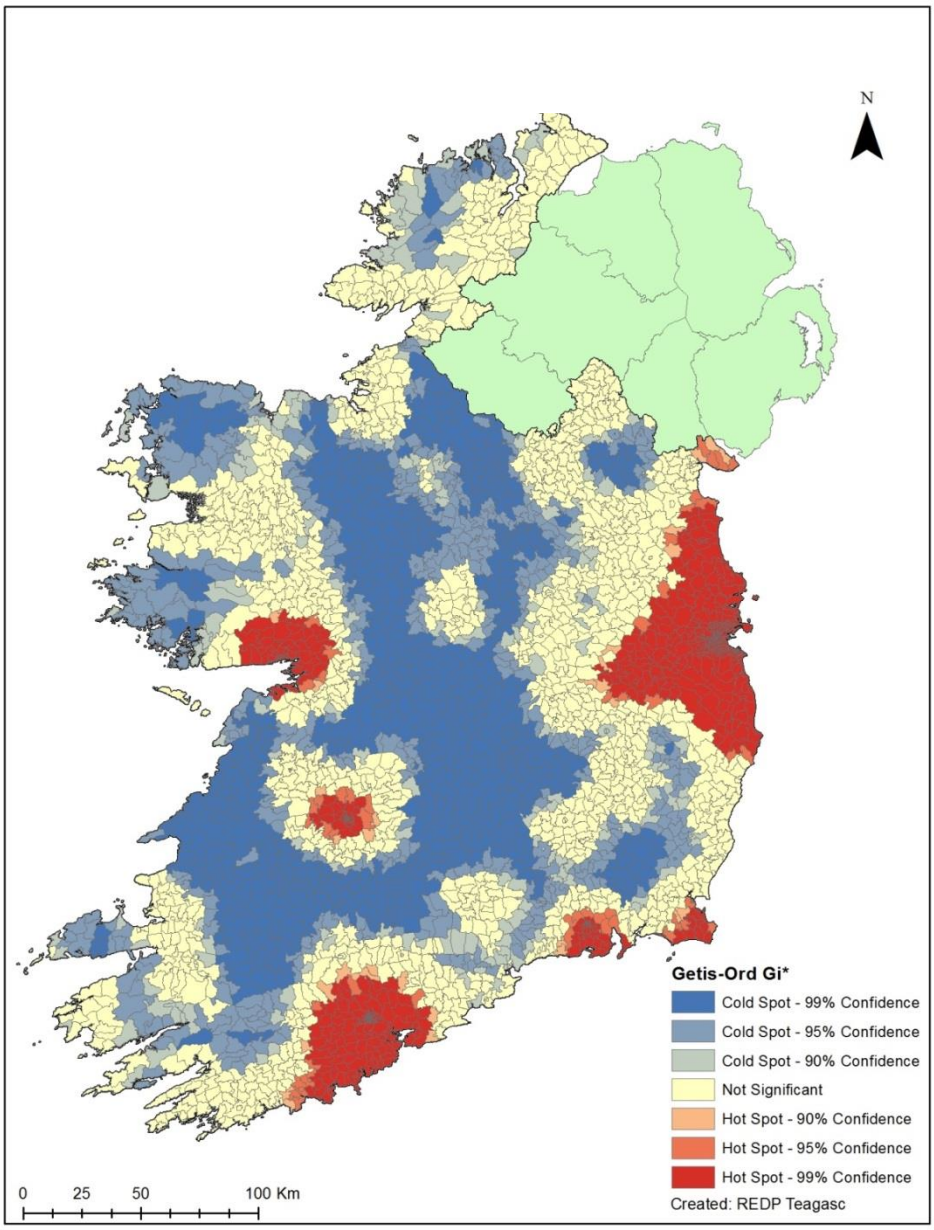
Figure 15. Driving Distance in Minutes to Nearest City



Source: Author calculations

Using SAPS 2016, the percentage of households in an ED with broadband is calculated and presented in Figure 16. The broadband penetration rate ranges from 13% in some areas to 95% in others. This figure however does not give an accurate indication of broadband provision and affordability issues which could also impact on penetration rates. The pattern displayed in Figure 16 shows the high level of broadband provision in the Greater Dublin Area (GDA), Galway and Cork and to a lesser degree in Limerick, Waterford and Wexford. The pattern is similar to the commuting accessibility pattern observed in Figure 15 with greater provision especially in the cities and commuter belts.

Figure 16. Household Broadband Penetration Rate (Red = High, Blue = Low)

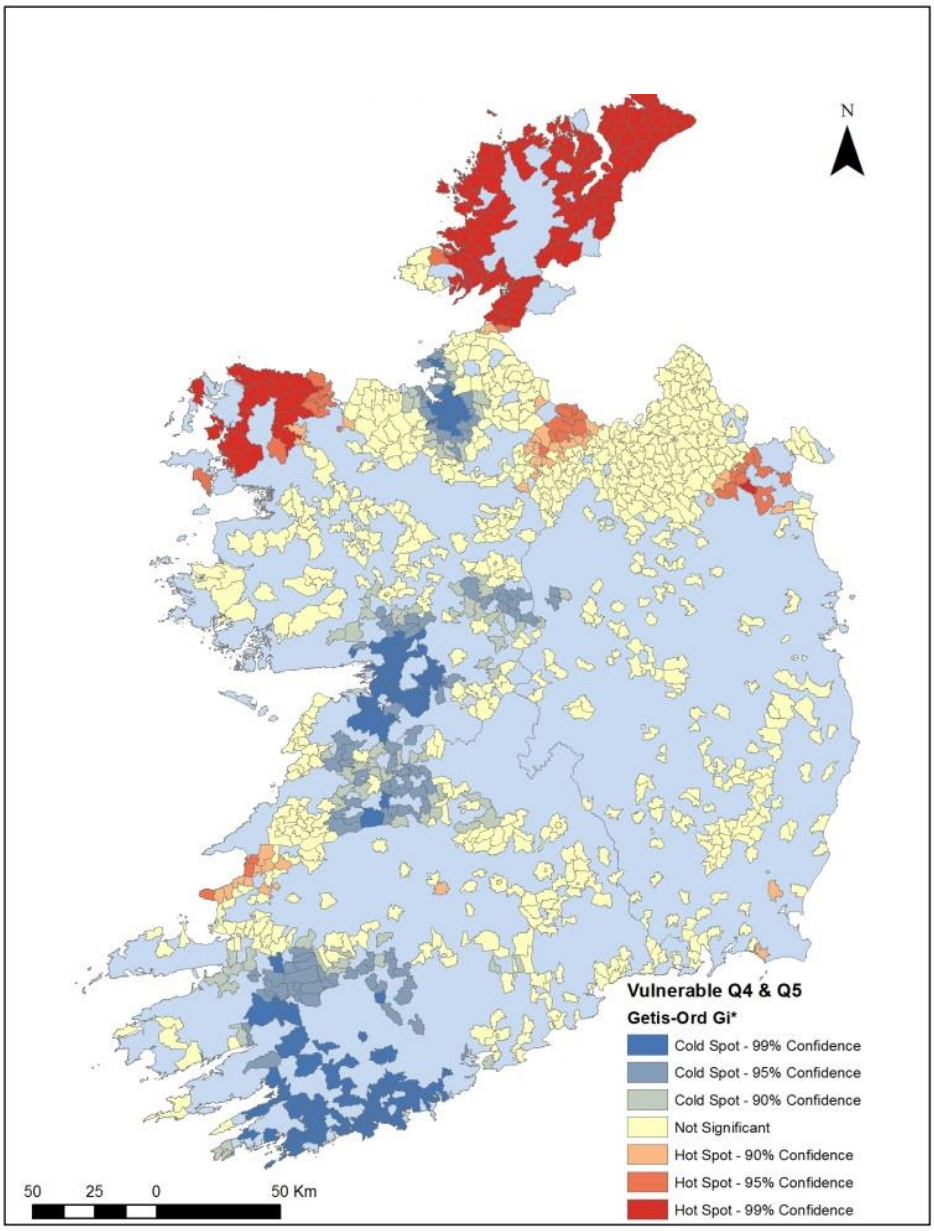


Source: CSO Small Area Census Data 2016

Using a farm economic viability classification (Hennessy et al., 2008; Frawley and Commins, 1996) areas are classified viable, sustainable and vulnerable. A farm household is classified as economically viable if it has the capacity to remunerate family labour at the average

agricultural wage, together with a return of five per cent on non-land assets. A farm household is considered sustainable if it is not viable, but has off-farm income. The residual category (vulnerable) is neither viable nor has a source off-farm employment. Figure 17 shows the areas with highest levels of vulnerable farm households together with the unemployment rate to create hot-spot and cold-spot clusters. From Figure 17 we see that the areas with high levels of farming vulnerability close to urban centres also have lower levels of unemployment (blue on map) as the proximity of these areas to major towns and cities results in better employment opportunities compared to areas that have both high levels of farm vulnerability and unemployment, such as is the case in the North-West region (predominantly red). In addition, farm families in areas with high levels of vulnerable farms, which are close in proximity to cities, may be able to benefit from further training and reskilling to help in finding off-farm employment. These opportunities may not exist in areas where the level of vulnerable farm households and unemployment levels are both high. The targeting of resources towards these areas may need consideration.

Figure 17. Vulnerable Farming Areas showing Unemployment Hotspots



Source: CSO Small Area Census Data 2016; O'Donoghue (2013)

9. Summary

- There has been a long term trend of population share decline in rural areas from 36% in 1996 to 30% in 2016. Rural towns have increased their share from 26% to 34%. The cities have declined slightly in share from 38% to 37%.

- While there was net large migration from cities into towns in the period before 2011, during the recovery phase from 2011, we have seen migration into Cork and Dublin cities, the first population growth in these cities for over a decade.

- Waterford City has the highest unemployment rate, followed by large rural towns

- Within rural areas, there is a marked difference between the most remote rural areas and those closer to cities. The unemployment rate observed in rural areas is lower than that in towns; this may be due to the unemployed in rural areas migrating, particularly in remoter areas.

- The lower tertiary education rates in rural areas and towns compared to the five cities may also be a reflection of this migration as high skilled individuals are more likely to move to find employment.

- Since 2012, employment growth is localised in Dublin which has seen 16% growth in employment and surrounding regions (Midlands 19.3%; South-East 18.2%). The lowest growth occurred in the Mid-West (9.3%), West (10.4%) and the South West (7%).

Table 4. Regional Employment Growth 2012-Present (2012 = 100)

	State	Border	Midland	West	Dublin	Mid-East	Mid-West	South-East	South-West
Since 2012Q1	112.1	113.9	119.3	110.4	115.8	112.4	109.3	118.2	109.8

- In terms of economic activity (GVA per capita), since the previous peak in 2007, only Dublin by 2014 had seen a higher level of economic activity (10% higher). In the border region, economic activity was 32% lower than at the previous peak.

- In terms of household income per capita, Dublin had improved the most by 2014, increasing by 6% relative to 2011. The next highest improvement was 3.9% in the South East. In both the West and the Border area, average disposable incomes were lower in 2014 than in 2011.

- This divergence between Dublin and the rest of the country has accelerated during the economic recovery as Dublin bounced back sooner due to agglomeration effects and the locations of some of the fastest growing sectors in the multi-national tech sector and tourism.

- Vulnerable farming households, particularly those in remote areas, face significant challenges. As farming assets are largely immobile, farming households cannot simply move to have greater access to job opportunities and off-farm employment.

- In remote rural areas retraining and reskilling may not be an effective solution for finding off-farm employment. The targeting of resources towards these areas may need consideration.

10. Conclusions

The suggestion that the recovery in the Irish economy has been due to the influx of FDI investment (Brazys and Regan, 2017; Regan, 2016), can go some way towards explaining the rapid recovery in cities and surrounding areas, compared to more remote areas where unemployment remains high and where economic performance of towns is low. The lower unemployment rate observed in towns compared to rural areas reflects the fact that many unemployed in rural areas migrate, particularly from the most remote areas.

This analysis highlights the greater economic recovery evident in rural areas and cities since 2011, compared to medium and large sized towns. However, this level of recovery seems to be dependent on distance to city and the spill-over benefits that are accompanied by having good access to cities.

Rural policy can be shaped in numerous ways to improve rural areas, with programmes such as indirect subsidies for transport, communications, and business infrastructure to improve rural area attractiveness and diversify economic activity. (Pezzini, 2001). The agricultural sector can play a role in creating new competitive advantages through environmental amenities, heritage and local specific products (Pezzini, 2000), however the OECDs rural Policy 3.0 (OECD, 2016b) moves beyond farming and subsidising specific sectors towards making rural areas more competitive. This new approach also recognises the fact that there are different types of rural areas (Pezzini, 2001). Rural areas with a higher quality of life but lower wages can attract and hold onto workers and their families.

Glossary

CAP	Common Agricultural Policy
CEDRA	Commission for the Economic Development of Rural Areas
CSO	Central Statistics Office
DSP	Department of Social Protection
ED	Electoral Division
FDI	Foreign Direct Investment
GDA	Greater Dublin Area
GDP	Gross Domestic Product
GIS	Geographic Information System
GNP	Gross National Product
GVA	Gross Value Added
NUTS	Nomenclature of Units for Territorial Statistics level (1, 2, 3)
QNHS	Quarterly National Household Survey
SAPS	Small Area Population Statistics

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