WESTERN DEVELOPMENT COMMISSION

Regional Economic Impact of COVID-19

2020 in Economic Statistics

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WDC Insights
Providing insights on key issues for the Western Region of Ireland

Contents

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Summary

One year on from the first national "lockdown", this report attempts to add to our understanding of the regional economic impact of COVID-19.

Pre-pandemic economic structures

As detailed throughout the report, it seems COVID-19 has exacerbated pre-pandemic structural issues in the Western Region and AEC. These issues include the structure of enterprise and concentrated employment in tourism focused sectors. Indicators of regional employment and output exposure suggest the Western Region and AEC counties are heavily exposed to COVID-19. The COVID-19 shock reiterates the need for further diversification of the regional employment base. Incentivising entrepreneurship and innovation activity should be a key regional priority. The WDC submission to the Seanad Public Consultation Committee on Small and Medium Sized Businesses in Ireland emphasised the importance of the removal of regional entrepreneurial barriers. The region's quality of life makes it attractive to knowledge intensive and creative sector workers, ensuring the availability of the facilities and services that these workers require is important. Growth opportunities to expand the knowledge intensive sectors, will be key to the region's economic future. The expansion of remote working may offer opportunities to grow regional employment across those sectors. The WDC is the co-ordinator of the AEC Enterprise Hubs Project to create an interconnected community hub network. Infrastructure is a fundamental building block for regional development. Key infrastructure projects for the Western Region are detailed in the WDC's recent submission to the National Development Plan consultation. The WDC argue that two I's (Infrastructure and Innovation) and the '3Es' (Enterprise, Employment and Education) are the key levers for effective regional development. When these three areas complement and support each other, they drive regional growth.

Impact on Labour Market

The regional dynamics of the COVID-19 labour market shock are influenced by the pre-pandemic economic structures. Given these structures it should be unsurprising in hindsight that the Western Region and AEC counties were severely exposed to a comparatively large negative labour market impact. The summer reopening phases coincided with a sharper reduction in Pandemic Unemployment Claims in those counties initially more adversely affected. Consequently, much less regional, and within-region variation in the labour market emerged. The re-emergence of increased restrictions coincided with a re-emergence of the initial regional trends. The analysis of gender and age dynamics suggests that females, particularly younger females as well as younger males within the Western Region and AEC may be more vulnerable to the COVID-shock. The overrepresentation of women in terms of PUP claims, and the vulnerability of younger workers has previously been noted at the national level. This report shows that these issues may be more pronounced at the regional level and should be considered in the context of labour market activation programmes. The Western Region and AEC counties generally held a comparatively lower share of TWSS supports and the Northern and Western Region generally held higher COVID-adjusted

unemployment rates and job loss rates indicating a worry in terms of comparatively high eventual unemployment rates.

Impact on Incomes and Output

With *and* without state income supports the Northern and Western Region was found to have held the largest declines in household incomes during 2020. The atypical nature of the COVID-19 shock means that it is sensible for policy to address both the supply and demand sides of the economy. The priority on the supply side is to find ways to open up the economy in a safe manner. On the demand side, the priority is that sufficient consumer confidence and certainty exists such that when the economy re-opens individuals are willing and able to engage in economic activity. The safe re-opening of the economy as quickly as possible is imperative, particularly given the level of exposure faced by the Western Region and AEC economy detailed in this report. In the short term, fiscal policy should continue to aim at temporary and targeted support to aid incomes and businesses in affected sectors, to improve healthcare capacity, test and trace systems and speedy vaccine rollouts. In this sense, fiscal policy might be thought of as disaster relief rather than traditional demand-side fiscal stimulus. Fiscal policy may also be appropriate for capital investment in long term projects such as energy, climate action, education, and infrastructure. These investment priorities are of particular importance for the Western Region given the sluggish recoveries in employment, output and household incomes from the last economic crisis that have contributed to economic divergence from national growth levels.

Impact on Housing

The initial supply side reaction in the housing market was a reluctance to reduce prices and instead to withdraw housing from the market. Nationally, the decline in sales volumes has generally been larger than in the Western Region and AEC counties. As the pandemic unfolded, the contraction in supply remained evident while demand remained strong. A reduction in supply coupled with strong demand leads to increased prices. Regionally, the CSO residential Property Price Index (RPPI) showed a slight decline in Dublin and the Mid-West but an increase in all other regions. The largest increases were in the West and South-West Regions. The Dublin trend and knock-on impacts may reflect the increase in remote working outside of the more densely populated areas. However, this trend is not clear and is difficult to distinguish with aggregated regional data. The rental market has been less volatile and nationally there has been considerable rent moderation. The Western Region and AEC counties have been amongst the counties with the largest rent increases (Mayo, Leitrim, Limerick, and Roscommon) but also the largest rent declines (Clare and Sligo).

1. Introduction

The focus of this report is on the regional economic impacts of COVID-19 during 2020.[1] The emergence of COVID-19 led to the Irish Government introducing a range of public health measures. On March 27th, 2020, the Government ordered what can be considered the first national "lockdown". All businesses deemed non-essential were ordered to close their premises and the public were ordered to remain at home, except in exceptional circumstances. Further restrictions and relaxations of public health measures occurred during the remainder of 2020 (Figure 1.1).

Figure 1.1 Timeline of Selected COVID-19 Policy Events during 2020

Successful regional economic policies rely on the availability of accurate and timely economic statistics. The availability of timely regional economic data is limited. The most comprehensive county level data is contained in Census publications and thus is available only every five years or more. Where comprehensive regional economic data is available there is often a considerably larger lag between the reference period and the publication date, than observed for the same data at the national level. For example, the latest available regional income accounts refer to 2018 and were published in February 2021.

There is a clear need for timelier regional and county level indicators of economic activity. In this regard, the Western Development Commission (WDC) compiles a set of timely economic indicators to help assess economic activity in the Western Region and Atlantic Economic Corridor (AEC), at the county-level (McGrath, 2020a).[2] There is a trade-off between data availability and data granularity in terms of regional analysis in Ireland. There is greater availability of regional data, based on the Nomenclature of Territorial Units for Statistics (NUTS), which is a European Union geocode standard for referencing the regions of Ireland for statistical purposes (See Table 1.1). This report attempts to add to our understanding of the Regional economic impact of COVID-19 by augmenting the regional analysis beyond the county level data contained in the WDC timely economic indicator reports.

[1] A detailed analysis of the development of the virus and health impacts across Ireland can be found in Lima (2021).

[2] The Western Region is defined under the Western Development Commission (WDC) Act 1998 as the seven counties of Clare, Donegal, Galway, Leitrim, Mayo, Roscommon, and Sligo. The AEC is set out in Ireland 2040 as an initiative to drive balanced regional development and encompasses the Western Region as well as Kerry and Limerick.

The approach taken in this report is to supplement the available county level data with NUTS regional data. This report as well as Lydon and McGrath, (2020) show that the economic impacts of COVID-19 exhibit consistent regional and within-region variation. The observed within-region variation highlights heterogeneity at the county level that may remain hidden by focusing solely on regional analyses at the NUTS levels. Table 1.1. shows the composition of the regions discussed throughout the report. With regard to the NUTS classification, the Northern and Western Region, comprising of the Border and West, most closely aligns with the Western Region, where the WDC holds its statutory remit.

Table 1.1 Composition of the "Regions" referenced within this report.

Composition of Regions Referenced in the Report		
Western Region	Clare, Donegal, Galway, Leitrim, Mayo, Roscommon, Sligo	
Atlantic Economic Corridor	Western Region, Limerick, Kerry	
Northern & Western	Border	Cavan, Donegal, Leitrim, Monaghan, Sligo
	West	Mayo, Roscommon, Galway
Southern	Mid-West	Clare, Tipperary, Limerick
	South-East	Carlow, Kilkenny, Wexford, Waterford
	South-West	Kerry, Cork
Eastern & Midland	Dublin	Dublin
	Mid-East	Kildare, Meath, Wicklow, Louth
	Midlands	Laois, Longford, Offaly, Westmeath

The structure of the report is as follows. Section 2 discusses pre-pandemic regional economic structures. Indicators of regional COVID-19 employment and output exposure are constructed and discussed. Section 3 details the regional impacts of COVID-19 on the labour market. Trends in state income supports are examined as well as gender and age dynamics. Regional COVID-adjusted unemployment rates and job loss rates are estimated and discussed. Section 4 provides an examination of income changes with and without state income supports and details some regional disparities from the national narrative. An overview of how the resultant economic shocks of COVID-19 have resulted in an atypical economic shock follows and the features of a potential "k-shaped" recession/recovery are outlined. Section 5 examines some key housing indicators, namely the residential property price index (RPPI), the Residential Tenancies Board (RTB) standardised rents and dwelling completions. Section 6 concludes with policy insights.

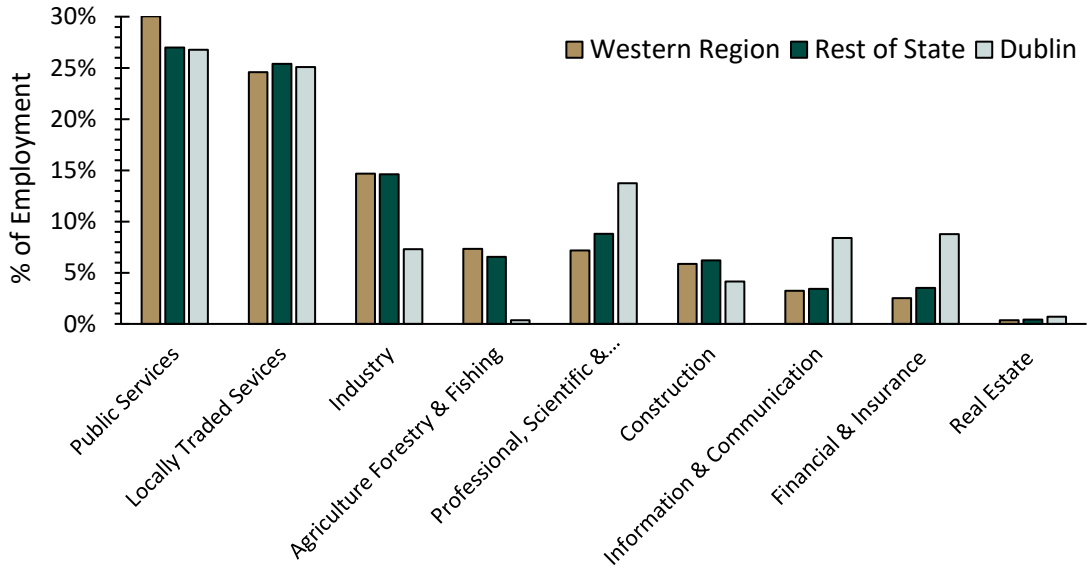
2. Pre-Pandemic Regional Economic Structures

The regional dynamics of the COVID-19 shock are influenced by and have been exacerbated by pre-pandemic structural factors. This section provides an insight into the pre-existing structures of employment and output with a particular focus on the Western Region and AEC. Indicators of regional COVID-19 employment and output exposure are constructed and discussed.

2.1 Structure of Employment

Figure 1 compares sectoral employment in the Western Region, Dublin and the Rest of State using Census 2016 data. The Western Region holds a greater reliance on public service employment, industry (manufacturing) and agriculture. The Western Region has a comparatively low employment share in the knowledge intensive services sectors (financial, insurance and real estate, information and communications, and professional, scientific, and technical activities). Pre-COVID-19 there had been a long-term trend of concentrated employment in the Western Region towards tourism, agriculture, and public services.

Figure 2.1 Sectoral Share of Employment from Census 2016



Source: Author Calculations from Census 2016. "Industry not stated" excluded. "Locally Traded Services" = Wholesale & Retail, Accommodation & Food Service, & Transport & Storage; "Public Services = Health, Education, and Public Administration. 'Rest of State' is all non-Western Region counties, excluding Dublin.

The slow employment recovery from the last economic crisis presents a worry for the future recovery of the Western Region. CSO business demography data, summarised by Lydon and McGrath (2020), shows that the Western Region and AEC counties, as a group, held similar average annual employment growth rates compared with the State from 2011-18.[3] However, the authors noted that counties such as Sligo, Leitrim, and Roscommon held comparatively low levels of employment growth over that period. Census data shows that five of the six slowest growing counties from 2011-2016 were in the Western Region, indicating a

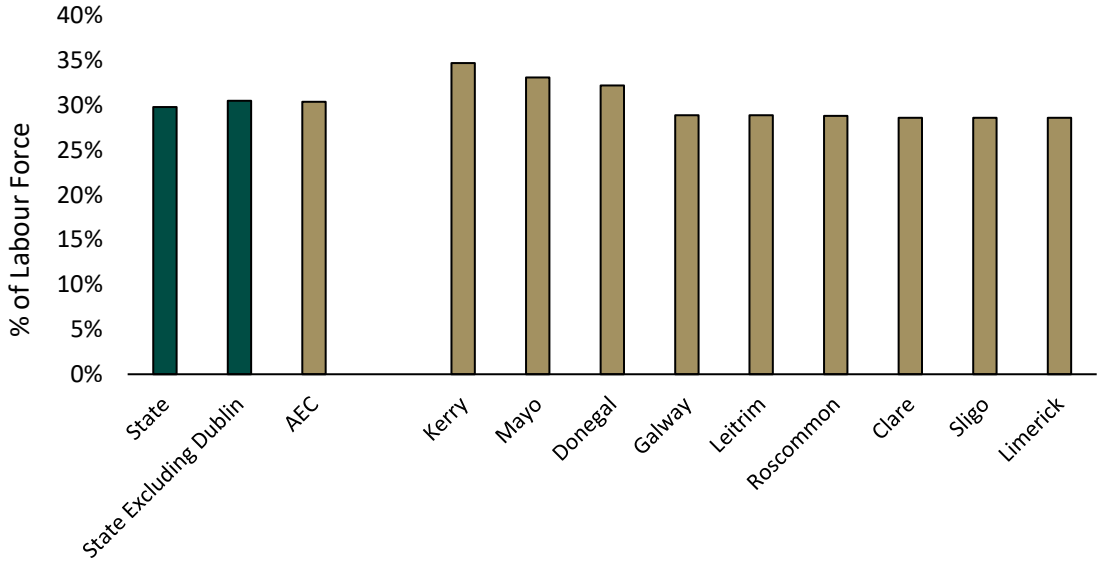
[3] It should be noted that the business demography data relates to the "business economy" and thus excludes agriculture and many public services.

comparatively sluggish recovery in employment (McHenry, 2020a). Lydon and McGrath suggest that the low levels of employment growth may be, at least in part, a result of the reliance on public sector employment. The authors noted that an analysis of the 26 counties showed a moderate to strong negative correlation between employment growth and the share of employment in public services. The negative correlation suggests counties with a larger share of public service employment held lower shares of employment growth. The dominant role of public services in the Western Region provides an indication of the relative weakness of private sector activity and opportunities in other economic sectors.

2.1.1 Regional COVID-19 Employment Exposure

Daly & Lawless (2020) classified a number of sectors as being "severely affected" by COVID-19.[4] Using Census 2016 employment statistics, Figure 2.2 demonstrates the share of employment within those severely exposed sectors. The AEC aggregate (30.4 per cent) is slightly above the State average (29.8 per cent) and virtually equivalent to the State excluding Dublin (30.5 per cent). However, the AEC aggregate hides within-region variation. Donegal, Mayo, and Kerry stand out with sectoral exposure of 32.2-34.7 per cent. The high dependency on public service employment and the lower share of knowledge intensive services may make a return to economic growth more difficult.

Figure 2.2 Employment exposure to COVID-19



Source: Author Calculations from CSO Census. Sectors are from Daly and Lawless (2020)

The regional enterprise structure also leaves the Western Region and AEC comparatively more exposed to the COVID-19 shock. Table A.1 within the appendix, shows "business economy" workers are far more likely to work in smaller enterprises. Leitrim and Roscommon have almost half of workers in micro-enterprises with almost no employment in very large enterprises. Duignan and McGeever (2020) show that, controlling for sector and region, smaller firms are more likely to take-up loan payment breaks since the onset of COVID-19.

[4] Mining, quarrying & extraction, construction & construction works, wholesale & retail trade & repair of vehicles, wholesale trade, retail trade, water transport services, air transport services, accommodation services, food & beverage services, publishing, film & broadcasting services, real estate activities, travel agency & tourism service activities, cultural, arts & gambling activities, recreation and sports activities, repair of consumer goods, other personal service activities.

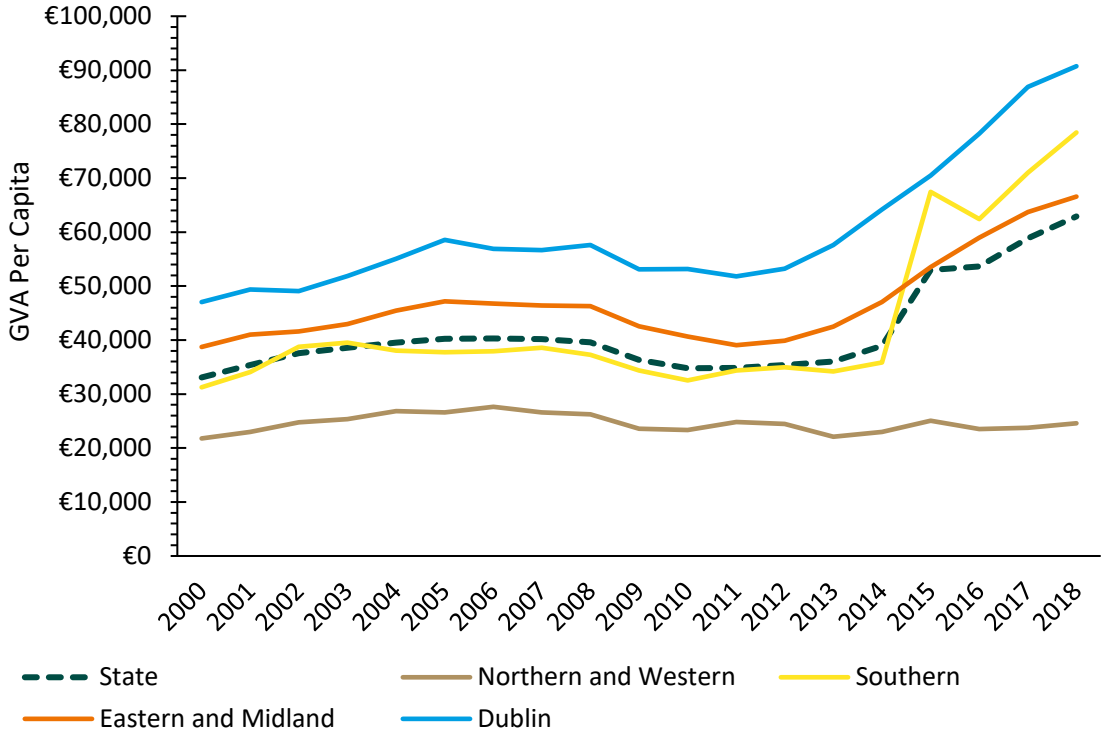
2.2 Structure of Economic Activity

The extent of the COVID-19 shock also relates to the structures of regional economic activity. Economic growth is most commonly measured by macroeconomic aggregates such as Gross Domestic Product (GDP). An equivalent measure to GDP, Gross Value Added (GVA) contains the most comprehensive regional macroeconomic data and is detailed below.

2.2.1 Regional Output

First, looking at the NUTS 2 regions and examining the Regional GVA data from 2000-18 reveals that the Northern and Western region has persistently held the lowest level of GVA per capita. The Northern and Western Region has also stagnated in the aftermath of the previous economic crisis compared with growth in all other regions. A trend of economic divergence and regional inequalities appears to have emerged. However, there are several important factors to be considered when examining these statistics. Regional GVA suffers from the same macroeconomic distortions observed at the national level, as discussed in a series of WDC Insights blog posts (McHenry, 2019). Distortions mean analysing regional GVA in comparative terms should be exercised with caution but as the distortions are less pronounced within the Northern and Western Region, an analysis of Northern and Western GVA growth itself is less problematic. Table 2.1 provides a summary of GVA growth rates (in constant 2018 prices) for the NUTS 2 and NUTS 3 regions and shows a slightly negative average annual GVA per capita growth rate for the Northern and Western Region from 2012-18. There are some implausibly high growth rates for some regions, driven by the distortions mentioned above, but there is a plausible trend that some degree of divergence has occurred. A finding of divergence is supported with the trends in household incomes discussed below.

Figure 2.3 Gross Value Added per Capita in Constant 2018 Prices by NUTS 2 Region

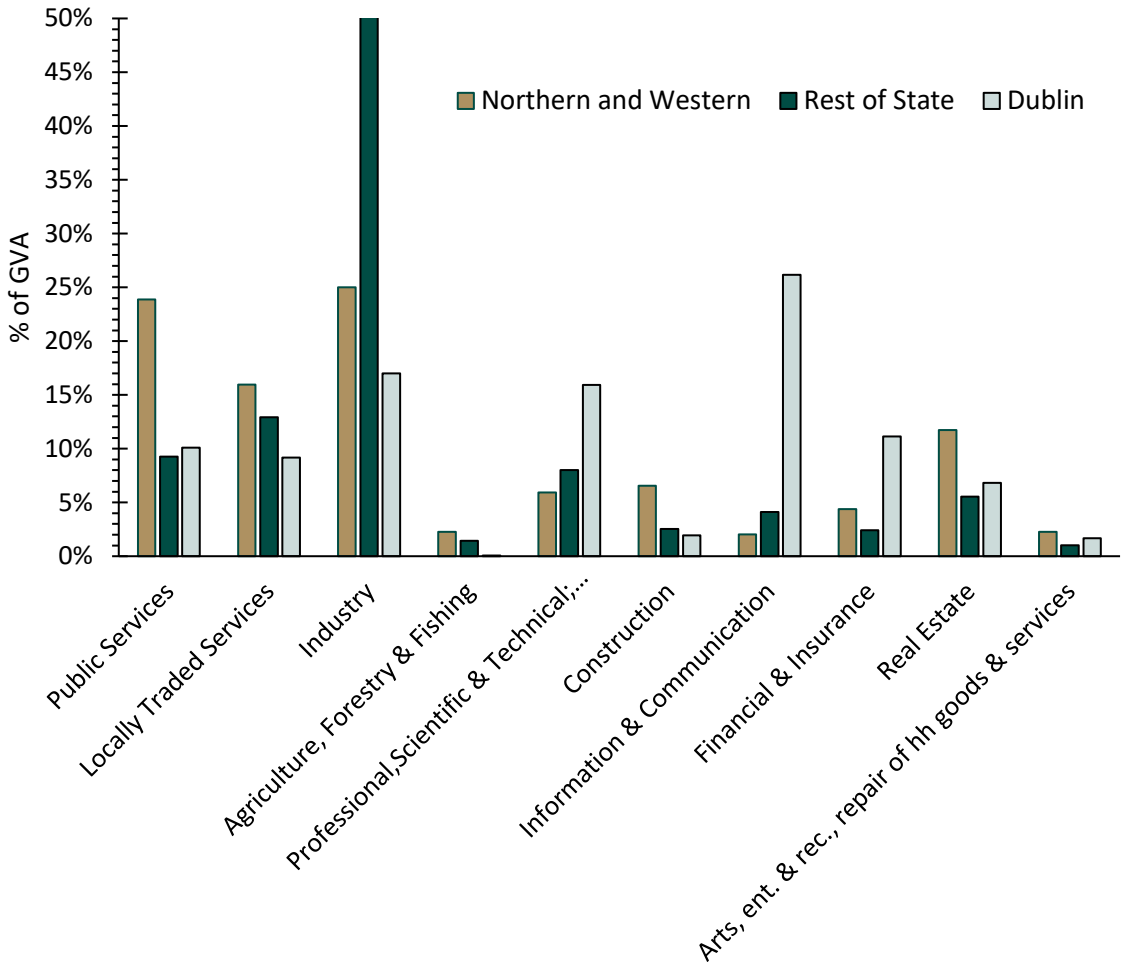


Source: Author Calculations from CSO County incomes and Regional GDP; CSO Consumer Price Index.

2.2.2 Regional COVID-19 Output Exposure

In recent years, the CSO have provided a sectoral breakdown of the components of regional GVA. Figure 2.4 shows the sectoral shares of GVA for the year 2018. As noted above, a comparative look at GVA is problematic given some significant distortions but can provide an indication of the sectoral concentration of regional economic activity. The Northern and Western Region holds a large share of GVA in the public services sector, locally traded services, construction, and real estate activities. The Northern and Western region holds a low share of GVA in most of the knowledge intensive service sectors.

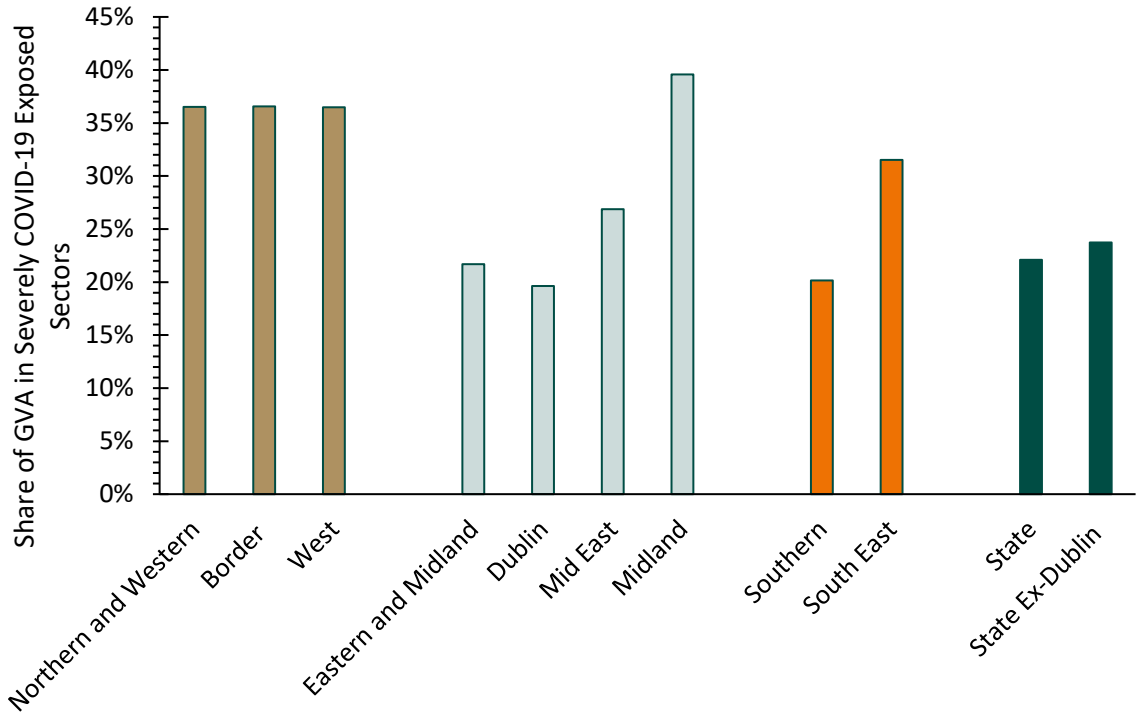
Figure 2.4 Sector Share of Gross Value Added (GVA) in 2018 for Selected Regions



Source: Author Calculations from CSO County incomes and Regional GDP; CSO Consumer Price Index

Using a slightly modified version of the sectoral classification from Daly and Lawless (2020) Figure 2.5 provides an indication of the relative GVA exposure to the COVID-19 shock. The Northern and Western (36.5 per cent) and Midland (39.6 per cent) regions stand out with a large share of GVA exposure. While the GVA data is distorted it does point to a concern that regional economic activity, particularly within the Northern and Western and Midland regions, may be comparatively more exposed to COVID-19.

Figure 2.5 % of Gross Value Added in Severely Exposed COVID-19 Sectors

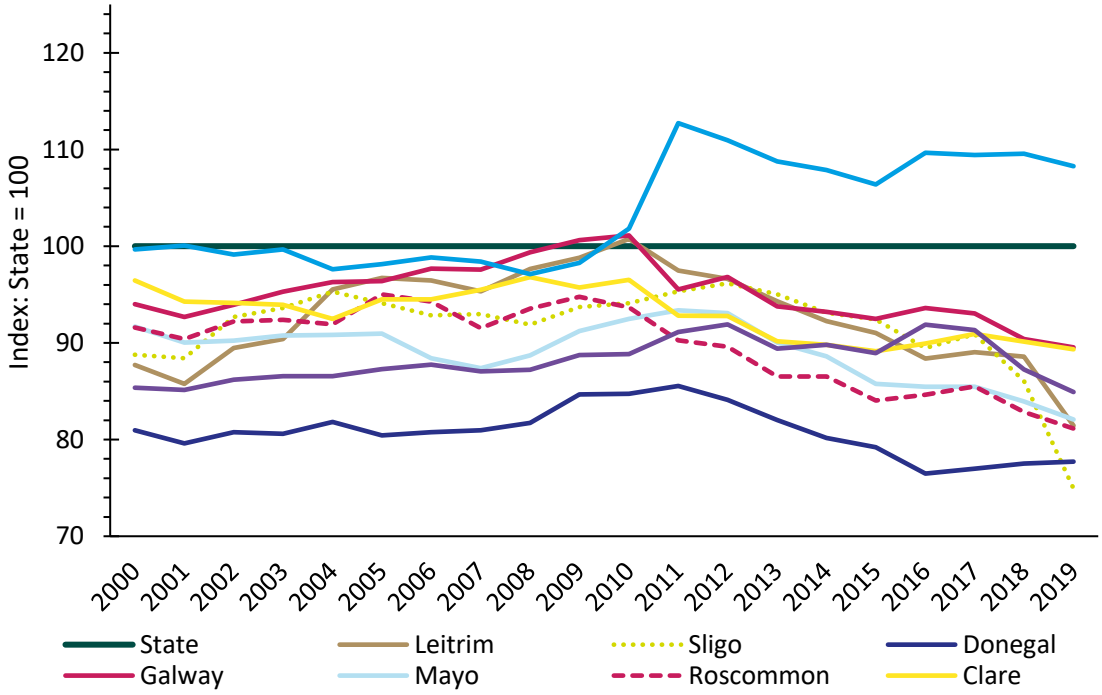


Source: Author Calculations from CSO Census and Live Register. Sectors are from Daly and Lawless (2020)

2.2.3 Regional Incomes

Household income statistics are not subject to the same level of distortions as the GVA data. The main issues with the income data relate to the fact that income is measured with respect to where earners live rather than where they work. The income data also reflects the functioning of the tax and welfare system. Poorer regions receive a greater degree of social transfers than richer regions. Another key advantage of the household income data is that county level data is available. Figure 2.6 illustrates disposable household income in the AEC counties relative to the national average from 2000-18. The county level income data again reveals a trend of divergence from the national average in the aftermath of the previous economic downturn. All Western Region and AEC counties except Limerick have diverged from the national average. Table 2.1 provides the average annual growth rates for the NUTS 2 and NUTS 3 Regions and reveals a similar regional divergence trend, although smaller in magnitude, observed from 2012-18 as indicated by the GVA data.

Figure 2.6 Disposable Household Incomes across the Atlantic Economic Corridor Relative to State



Source: Author Calculations from CSO County incomes and Regional GDP; CSO Consumer Price Index

Table.2.1 Summary Statistics on Regional Output and Incomes 2000-19 (constant 2018 prices)

Summary Statistics on Regional Output and Incomes 2000-19 (constant 2018 prices)						
	GVA Avg. Annual Growth per capita			HH income Avg. Annual Growth per capita		
	2000-07	2008-11	2012-18	2000-07	2008-11	2012-18
State	2.8	-3.5	8.4	2.8	-0.7	1.1
Border	3.7	-4.7	1.0	3.4	-0.1	-0.1
West	2.3	0.2	-0.9	2.9	0.7	-0.3
Northern & Western	2.9	-1.8	-0.1	3.1	0.3	-0.2
Mid-West	1.2	-3.6	n/a	3.1	-0.2	1.1
South-East	4.1	-7.5	9.6	3.7	-1.1	0.1
South-West	3.7	-0.9	n/a	3.2	0.0	0.8
Southern	3.0	-2.9	11.8	3.3	-0.3	0.7
Dublin	2.7	-4.0	8.0	2.0	-0.9	2.1
Mid-East	2.9	-10.3	7.8	3.0	-1.7	1.6
Midlands	3.5	-7.9	1.2	3.0	-1.1	-0.3
Eastern & Midland	2.6	-4.3	7.6	2.4	-1.2	1.7

Source: Author Calculations from CSO County Incomes and Regional GDP; Consumer Price Index

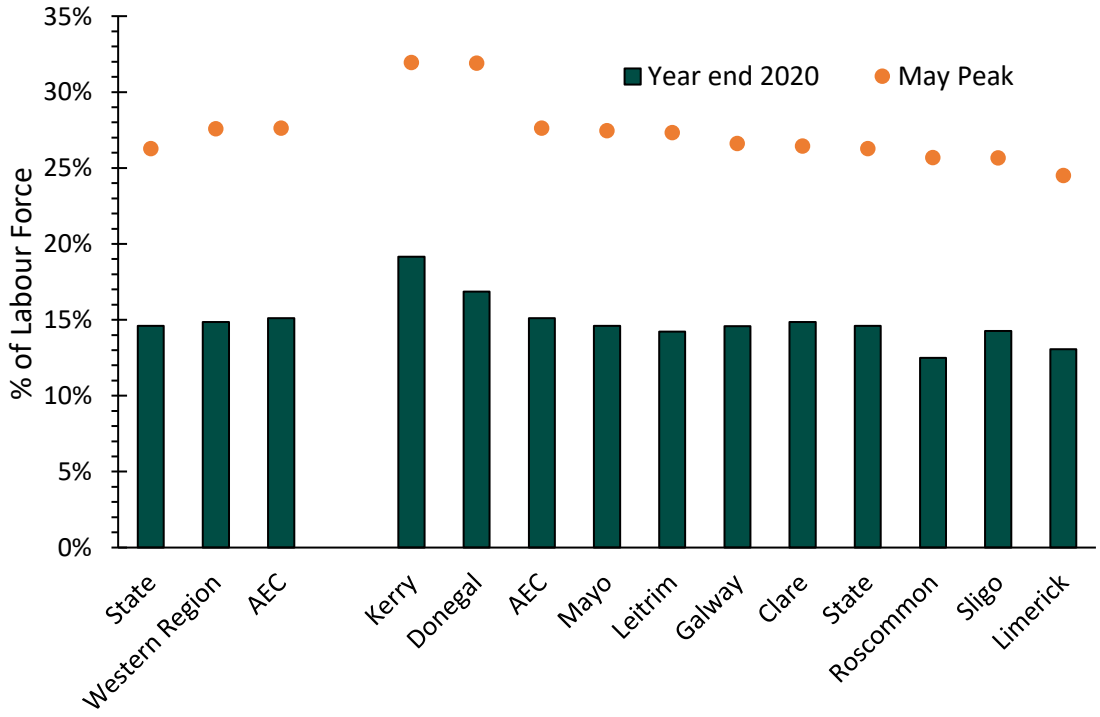
3. Impact on Labour Market

This section analyses labour market trends during 2020 and details how the regional dynamics of the COVID-19 labour market shock are influenced by the pre-pandemic structural factors discussed in Section 2. Gender and age dynamics of the labour market impact are discussed and estimates of regional COVID-adjusted unemployment and job loss rates are presented.

3.1 State Income Supports

Prior to the pandemic, conditions in the Irish labour market were close to full employment. By mid-June 2020, 1.13 million people, or almost half of the national labour force, were receiving some form of state income support. Given the levels of employment and output exposure to COVID-19 discussed in Section 2, it is unsurprising that employment in the AEC counties was severely affected by the public health restrictions. Figure 3.1 shows the share of the labour force in each AEC county in receipt of Pandemic Unemployment Payment (PUP) for selected dates during 2020. At the May peak, Kerry and Donegal had almost a third of their labour force in receipt of the PUP alone, higher than any other counties and six percentage points above the national average. The summer phased re-opening of the economy coincided with a sharper reduction in PUP claims in those counties with higher labour force shares of PUP recipients. Consequently, prior to the re-introduction of nationwide restrictions in October, PUP numbers in most counties accounted for 9-10 per cent of the labour force with much less regional and within-region variation. The increased restrictions coincided with a re-emergence of the initial regional trends.

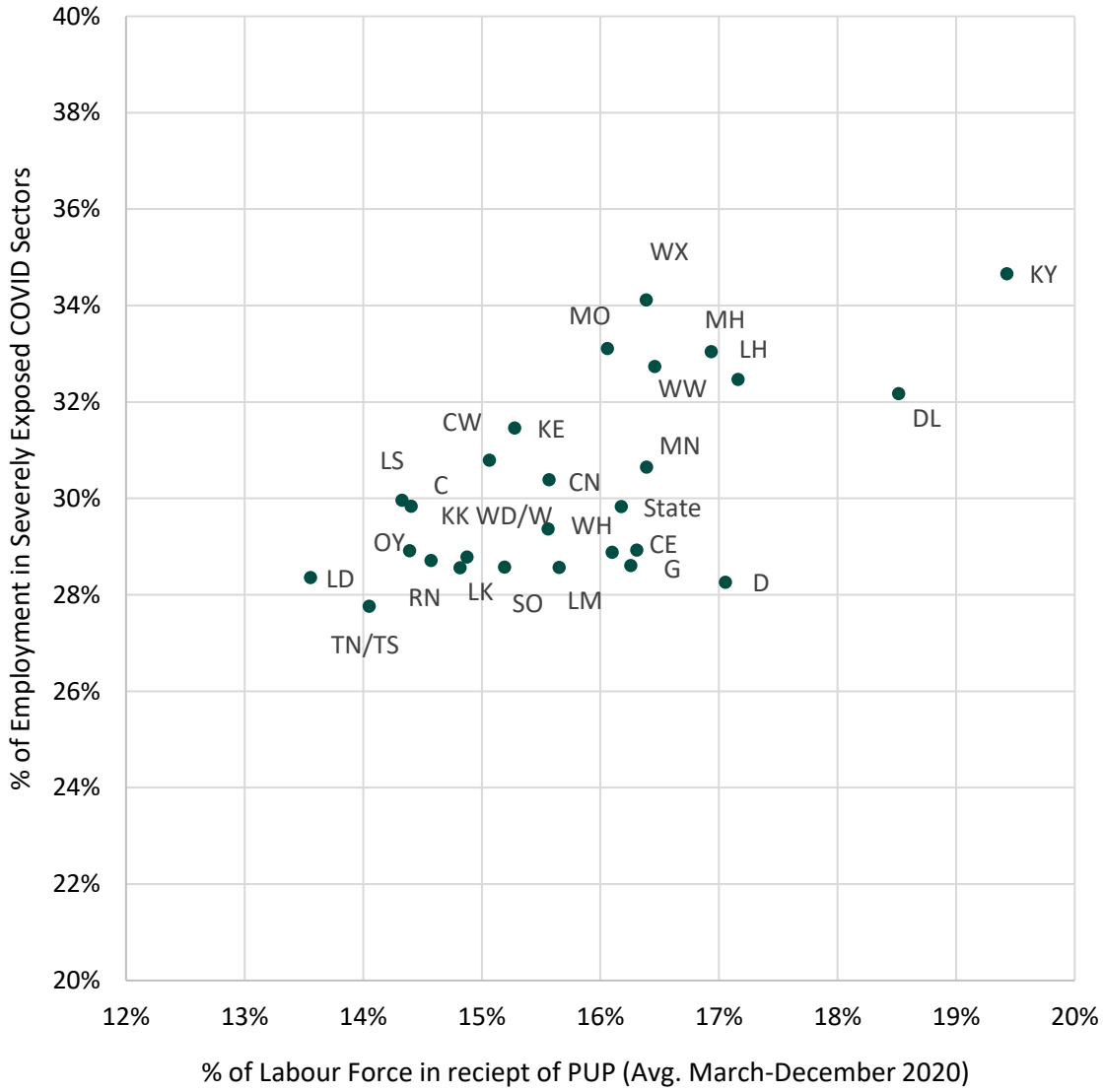
Figure 3.1 Pandemic Unemployment Payments as a share of Labour Force



Source: Author Calculations from CSO Live Register

The regional and within-region variation in the labour market was related to the pre-existing structures of employment and economic activity. Figure 3.2 shows the relationship between the share of employment in the severely exposed COVID-19 sectors and the average share of the labour force in receipt of PUP payments throughout 2020. A correlation coefficient of 0.65 suggests a strong positive relationship meaning those more highly exposed counties, in general, held a larger labour force share of PUP recipients. Using the March peak share of the labour force, rather than the average, yields a higher correlation coefficient of 0.75.

Figure 3.2 COVID-19 Exposure and % of Labour Force receiving Pandemic Unemployment Payment



Source: Author Calculations from CSO Census and Live Register. Sectors are from Daly and Lawless (2020)

There were two main state income support schemes enacted to support workers affected by the pandemic the PUP and the Temporary Wage Support Scheme (TWSS). As the TWSS retains a link between employers and employees, it would be expected that the likelihood of eventual unemployment is greater for PUP recipients than wage subsidy recipients. During 2020, the Western Region and AEC counties generally held a lower share of the labour force in receipt of TWSS than the national average, until a sharp rise towards the end of the period that the scheme was in operation (Table 3.1).

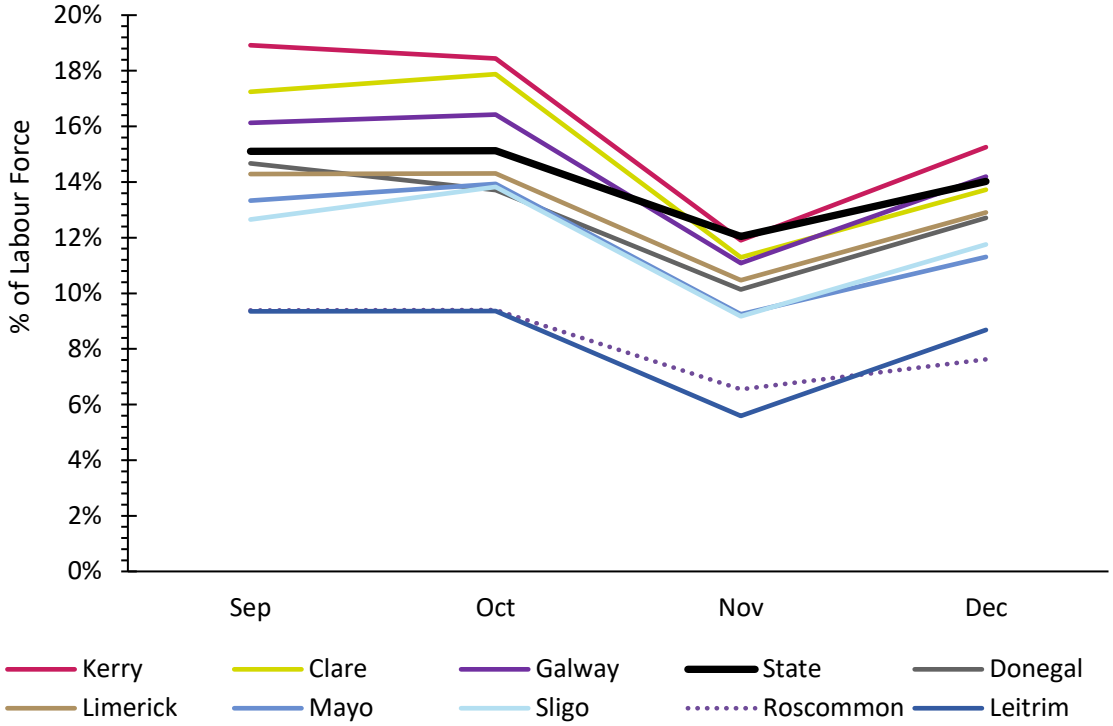
Table 3.1 Persons in Receipt of TWSS as % of Labour Force by County

Share of Labour Force in Receipt TWSS				
	March 22nd	May 3rd	July 5th	August 30th
Donegal	1%	11%	14%	15%
Sligo	1%	15%	15%	14%
Leitrim	1%	15%	15%	14%
Roscommon	1%	16%	14%	12%
Mayo	1%	15%	16%	15%
Galway	1%	17%	17%	15%
Clare	1%	16%	17%	15%
Limerick	1%	18%	16%	14%
Kerry	1%	17%	16%	17%
AEC	1%	16%	16%	15%
State	2%	18%	17%	14%

Source: Author Calculations from CSO Detailed COVID-19 Income Support and Live Register data downloaded on 05/10. Note: Share of labour force in parentheses. The TWSS closed on 31 Aug. and replaced with the Employment Wage Subsidy Scheme (EWSS). The CSO have noted that "we are not yet in a position to disseminate this information" thus no data for the EWSS scheme or the total number of persons in receipt of state income supports excluding overlaps are available yet.

The Emergency Wage Support Scheme (EWSS) replaced TWSS at the end of August. At that time, many AEC counties were at or above the national average, in terms of labour force share of EWSS recipients. The CSO does not yet provide detailed statistics on the EWSS. Based on data from Revenue, the Western Region and AEC averaged 15 per cent of the labour force in receipt of EWSS in September with a large range from 9 per cent in Roscommon to 19 per cent in Kerry (Figure 3.3). EWSS supports then fell following the re-introduction of public health restrictions to 13 per cent of the labour force during December, ranging from 8 per cent in Roscommon to 15 per cent in Kerry. December EWSS data showed most WR & AEC counties below the national average.

Figure 3.3 Emergency Wage Support Subsidy recipients as a share of the Labour Force



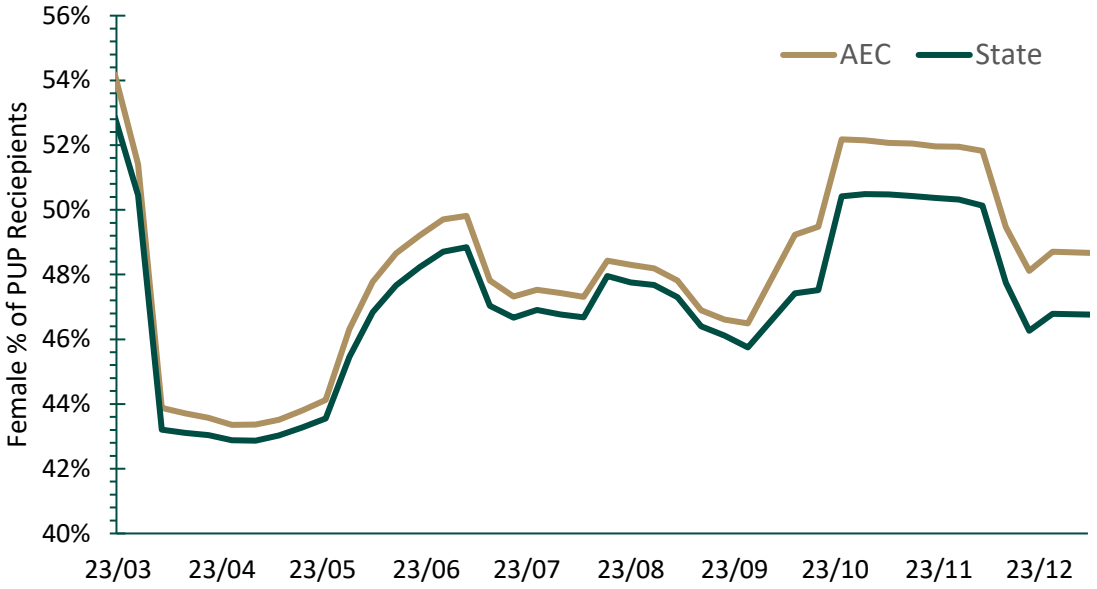
Source: Author Calculations from Revenue

3.1.1 Gender and Age Dynamics

The headline national state income support statistics will naturally disguise the variation in supports by age, gender, and region. At the regional level, there has been an even greater share of females in receipt of the PUP (Figure 3.4). The average share of females in receipt of PUP payments, using the weekly CSO live register data, was 47.2 per cent for the State compared with 48.2 percent for the AEC counties. The overrepresentation of women, in terms of PUP claims, has previously been noted at the national level but this report shows this issue seems to be more pronounced at the regional level. Hennessy and McGauran (2021) show that, at the national level, women comprise 47 per cent of workers but women sometimes comprised more than 47 per cent of PUP recipients throughout 2020. The larger female share observed for the AEC counties is unlikely to be a result of a greater general share of regional female employment. Census data suggests that the employment and labour force share of females in the AEC counties is comparable with the national average.[5] Instead, it is likely that, at least in part, the gender dynamics are driven by the sectors where females are employed. For example, White (2019) shows that females held a larger share of employment within the highly exposed accommodation and food sector and that the Western Region counties held a comparatively larger share of female employment within that sector.

[5] The national share of females in the labour force for 2016 was 45.9 per cent compared with 45.6 per cent in the AEC. The national share of female employment for 2016 was 45.9 per cent compared with the AEC at 45.6 per cent.

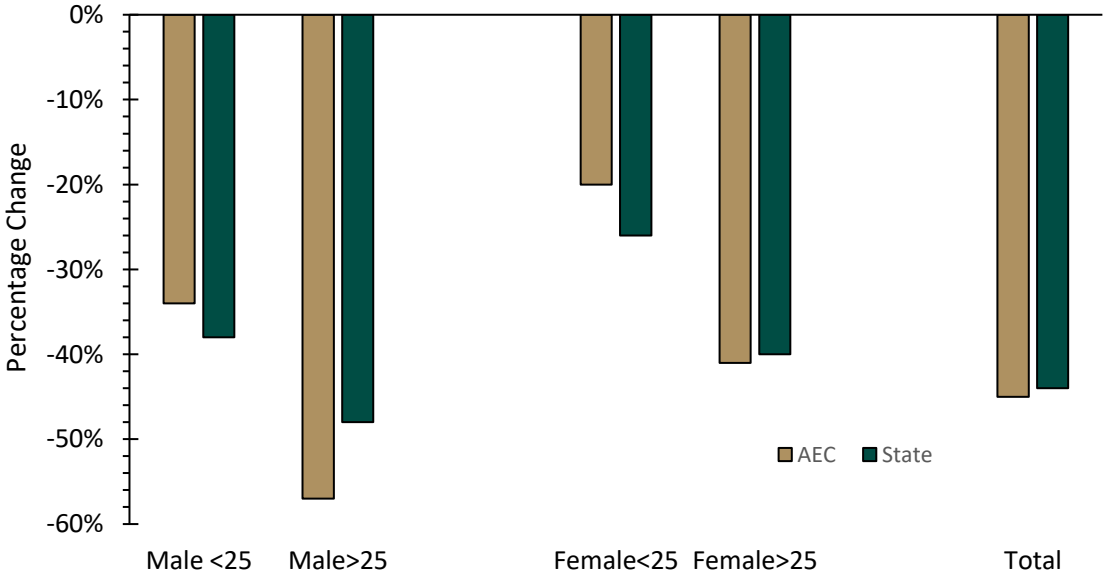
Figure 3.4 Female share of Pandemic Unemployment Payment AEC region compared with the State



Source: Author Calculations from CSO Live Register

There is also an interesting regional gender and age dynamic at play in the changes in PUP recipients between the May peak and year end 2020. Figure 3.5 shows that, overall, there has been a larger decline from the peak in the total number of people (both genders) receiving PUP in the AEC (-45 per cent) compared with the State (-44 per cent). However, this trend has been driven by a substantial relative decline in the over 25 male category and to a lesser extent the decline in the over 25 female category. For the under 25 females there has been a 20 per cent decline from the peak in the AEC compared with a larger decline nationally of 26 per cent. For under 25 males in the AEC there has been a 34 per cent decline from the peak, lower than the 38 per cent national decline. These trends suggest that younger females and younger males in the AEC region may be comparatively more vulnerable to the COVID-19 labour market shock.

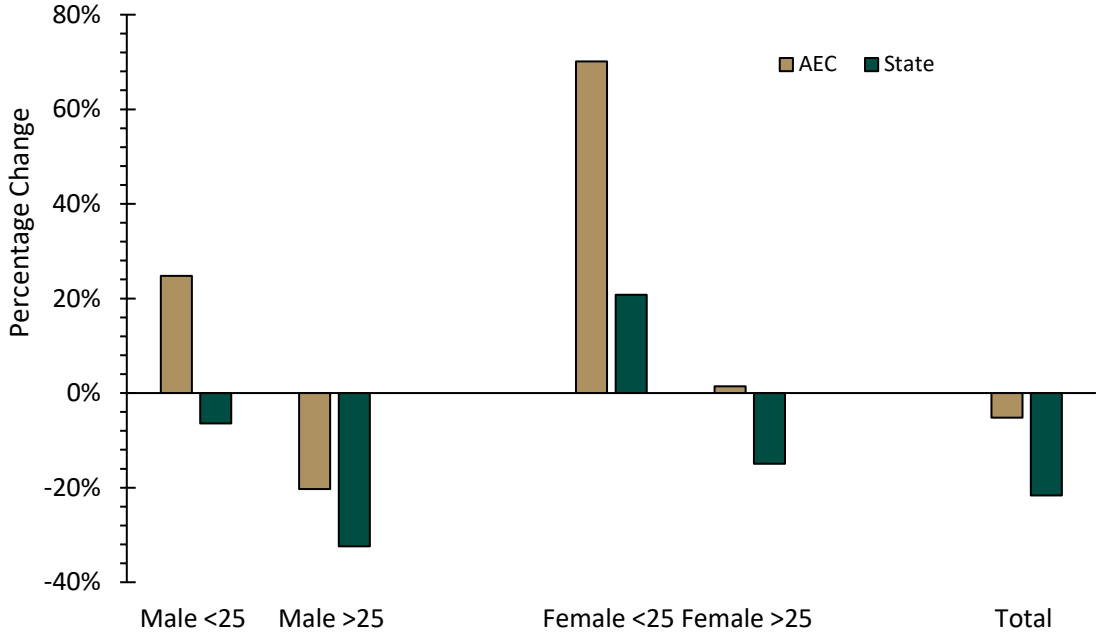
Figure 3.5 Pandemic Unemployment Recipients by Gender and Age % change from May peak to year end 2020



Source: Author Calculations from CSO Live Register

Lydon and McGrath (2020) as well as McGrath (2020b) noted a similar regional trend observed in relation to TWSS supports from the May peak to September. Nationally, TWSS supports declined by 22 per cent over that period compared with a decline of 5 per cent in the AEC. For much of that period TWSS supports were rising in the AEC compared with a decline nationally. Figure 3.6 shows that the regional trend was driven by females, particularly younger females and to a lesser extent, younger males. Lydon and McGrath suggested the AEC increase in TWSS supports for younger females may have been driven by the accommodation and food sector. Those jobs although supported by the TWSS, and thus linked with an employer may be comparatively more vulnerable given the enterprise structure within the AEC region, as discussed in Section 2.

Figure 3.6 Temporary Wage Support Subsidy Recipients by Gender and Age from May Peak to September

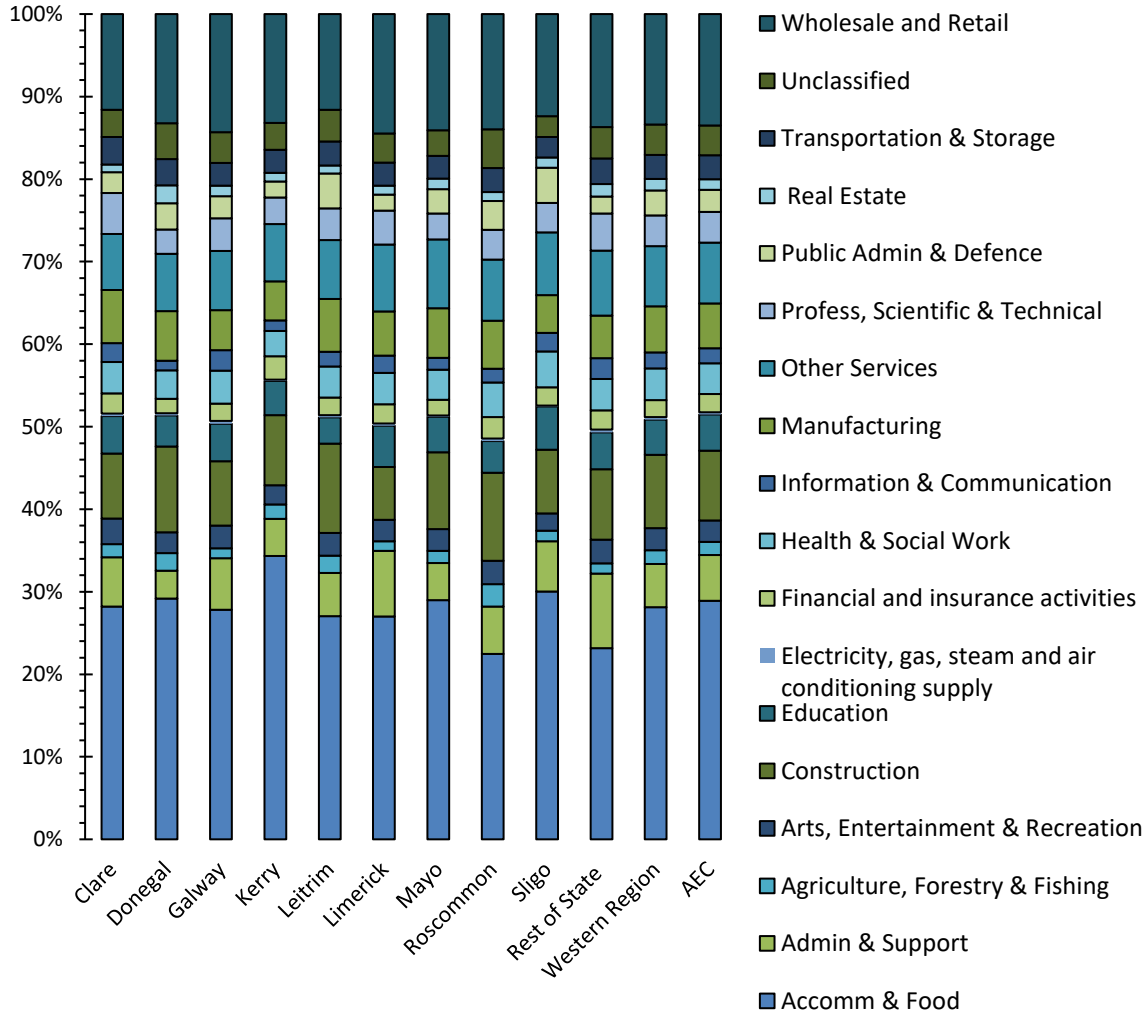


Source: Author Calculations from CSO Live Register

3.2 Covid- Adjusted Unemployment and Job Loss Rates

The analysis of the labour market above details the level of non-employment during 2020. This differs from technical "unemployment". The CSO are obliged, under EU Law, to apply certain definitions and methodology to calculate technical "unemployment". Those in receipt of the new state income supports do not meet the technical criteria to be considered unemployed. Insight can be gained on likely unemployment by looking at the sectoral variation in PUP supports and by calculating COVID-adjusted unemployment rates and job loss rates. In relation to the variation in the sectoral composition of PUP payments, a larger share of accommodation and food workers in the Western Region and AEC were in receipt of the PUP during June (Figure 3.7). That sector is likely to be severely impacted by domestic and international restrictions.

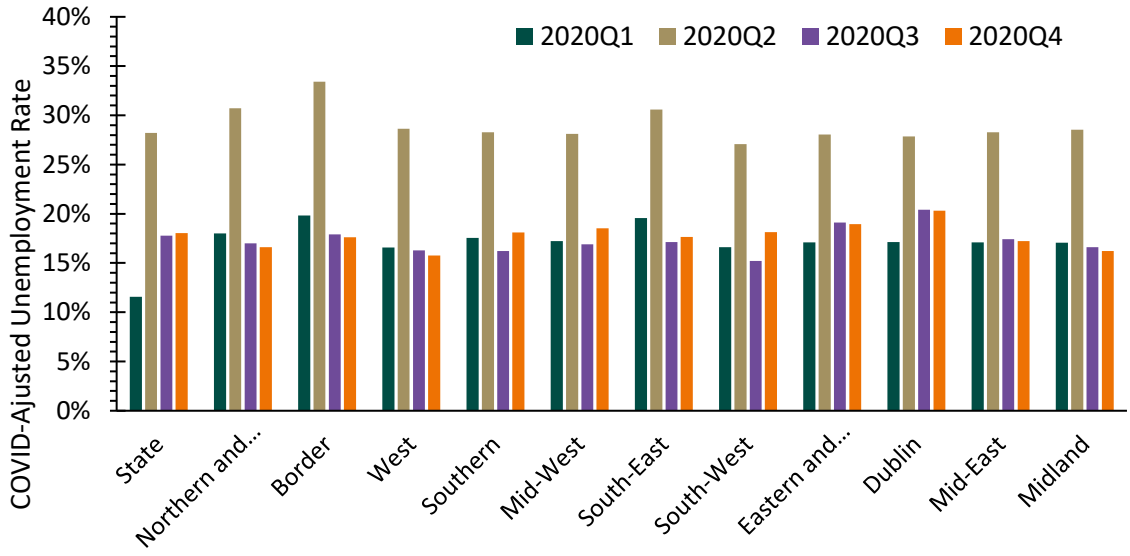
Figure 3.7 Sectoral PUP breakdown by County for Week of June 22nd



Source: Author Calculations from data obtained from Department of Employment Affairs and Social Protection

The CSO provide an estimate of COVID-adjusted unemployment, at the national level only. The COVID-adjusted Unemployment rate estimates the share of the labour force that are not working due to standard unemployment, or due to COVID-19 related absences. An approximation at the regional level can be calculated by following the CSO methodology. To estimate COVID-adjusted unemployment the CSO exclude those in receipt of the wage subsidy and add all persons in receipt of the PUP (CSO, 2020). On this basis, the CSO note that the COVID-adjusted unemployment rate provides an upper bound estimate of unemployment. Figure 3.8 and Table 3.2 show the estimated regional COVID-adjusted unemployment rates, by quarter, during 2020. The rates were calculated by following the CSO approach described above. The average number in receipt of the PUP taken from the weekly live register data were added to the numbers deemed unemployed by the LFS and then divided by the labour force in each quarter again as per the LFS data. The Border region has generally held the highest COVID-adjusted unemployment rate during 2020 peaking at 33.4 per cent during Q2. The national COVID-adjusted Unemployment rate was 28.2 per cent during Q2 2020.

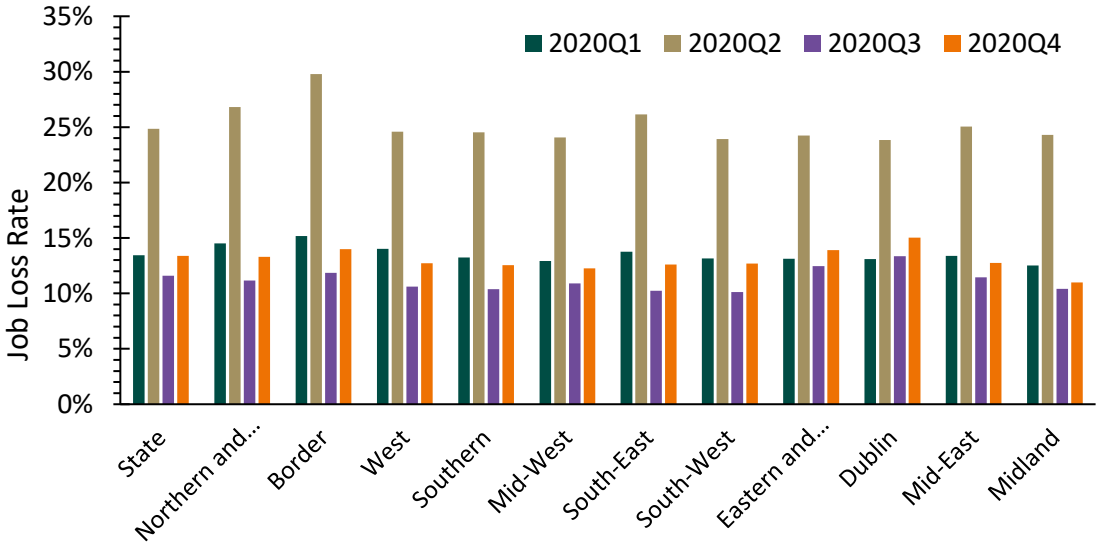
Figure 3.8 COVID-Adjusted Unemployment Rates Q1-Q4 2020.



Source Author Calculations based on CSO Live Register and Labour Force Survey data

An alternative labour market indicator is the job loss rate. The job loss rate can be calculated by dividing the numbers deemed employed from the LFS by the numbers in receipt of the PUP (McGuiness and Kelly, 2020). Regional job loss rates were calculated and illustrated in Figure 3.9 and Table 3.2. The Border region has also held the largest job loss rate during 2020. The job loss rate peaked during Q2 2020 at 29.8 per cent in the border region compared with a national job loss rate of 24.9 per cent. The variation in job loss rates is likely driven by sectoral and demographic compositions within the regions. Comparative job-loss rates are important as they provide an insight into re-employment probabilities. McGuiness and Kelly note that re-employment probabilities in high-risk sectors are likely to be *"substantially restricted due to high levels of employment loss (i.e. excessive labour supply), structural factors related to continued social distancing, and deep-cleaning requirements"*

Figure 3.9 Job Loss Rates Q1-Q4 2020



Source Author Calculations based on CSO Live Register and Labour Force Survey data

Table 3.2 Job loss and COVID-Adjusted Unemployment Rates Q1-Q4 2020.

Regional Job Loss and COVID-Adjusted Unemployment Rates								
	Job Loss Rate (%)				COVID-Adjusted Unemployment Rate (%)			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
State	13.4	24.8	11.6	13.4	17.4	28.7	17.8	18.3
Border	15.2	29.8	11.9	14.0	19.8	33.4	17.9	17.6
West	14.0	24.6	10.6	12.7	16.6	28.6	16.3	15.8
Northern & Western	14.5	26.8	11.1	13.3	18.0	30.7	17.0	16.6
Mid-West	12.9	24.1	10.9	12.3	17.2	28.1	16.9	18.5
South-East	13.8	26.1	10.2	12.6	19.6	30.6	17.1	17.7
South-West	13.2	23.9	10.1	12.7	16.6	27.1	15.2	18.1
Southern	13.2	24.5	10.4	12.5	17.6	28.3	16.2	18.1
Dublin	13.1	23.8	13.4	15.0	17.1	27.9	20.4	20.3
Mid-East	13.4	25.0	11.4	12.7	17.1	28.3	17.4	17.2
Midlands	12.5	24.3	10.4	11.0	17.0	28.5	16.6	16.2
Eastern & Midland	13.1	24.2	12.5	13.9	17.1	28.1	19.1	18.9

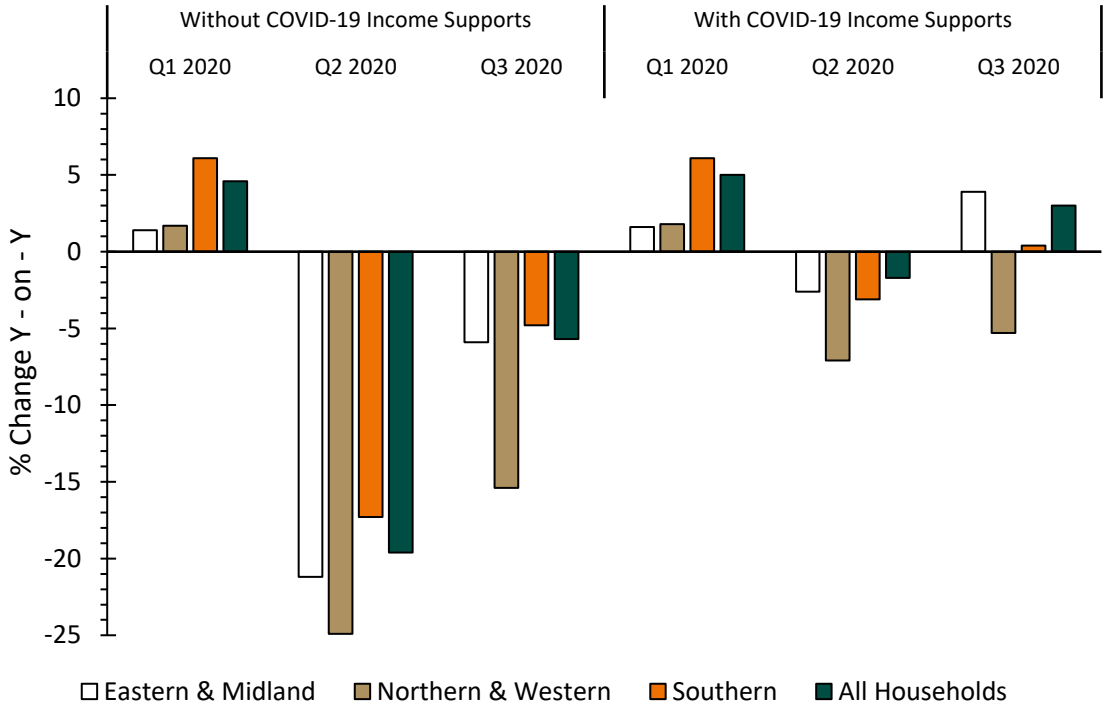
4. Impact on Incomes and Output

Section 3 detailed the severe COVID-19 labour market shock and highlighted several regional trends. This Section examines the atypical nature of the COVID -19 shock and how the negative labour market impacts discussed in the previous section have affected regional household incomes.

4.1 Income Changes with and Without Income Supports

Cahill and Lydon (2021) detail recent CSO research that examines the household income impacts of the state income supports. Figure 4.1 shows the author's estimates of changes in median household income in the absence of state income supports and when those income supports are included, at the NUTS 2 level. The authors noted that the analysis is for changes in gross household income and thus is not directly comparable with the institutional sector accounts discussed below. However, the analysis provides some insight into household income changes, nonetheless. With *and* without state income supports the Northern and Western Region was hit the hardest in terms of household income changes. During Q3 2020, household incomes rose in all other regions inclusive of state income supports, except the Northern and Western Region where incomes declined by 5.3 per cent. Fiscal supports still had a large impact during Q3 in the Northern and Western Region as the estimated change in incomes was -15.4 per cent in the absence of the supports.

Figure 4.1 Change in Median Household Incomes with and without state income supports



Source CSO Impact of COVID-19 on the Debt Sustainability of Irish Households Q3 2020; Cahill & Lydon (2021)

4.2 An Atypical Economic Shock

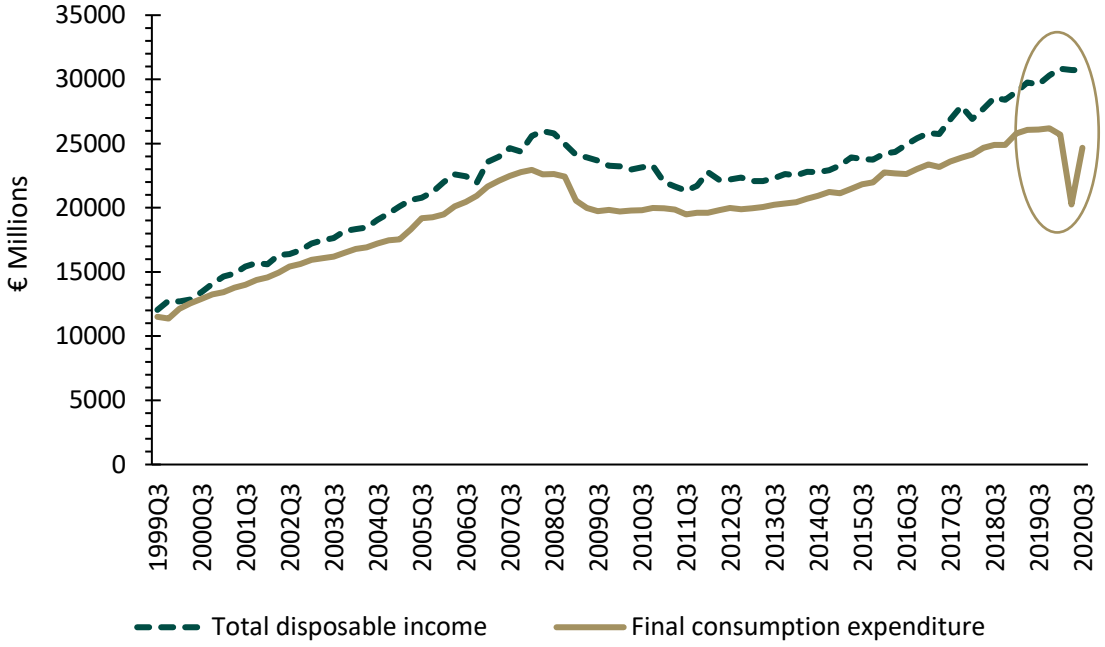
Macroeconomics textbooks discusses economic shocks being caused by a negative shock to aggregate demand (the total demand for goods and services in the economy) or aggregate supply (the total supply of goods and services in the economy). A negative aggregate demand shock occurs when a sudden event decreases consumer demand for goods or services. An example of a negative demand shocks is a change in consumer expectations making them more pessimistic about the future. To deal with an aggregate demand shock fiscal or monetary policy can be used to try and boost aggregate demand and stabilise output. However, it is imperative to avoid too much stimulus such that the economy exceeds its long run potential growth rate, this is known as "overheating" where excessive inflation becomes a risk (Cowen and Tabarrok, 2013). If fiscal policy is used, it also important to ensure fiscal stimulus can be financed and, perhaps more importantly, re-financed in a sustainable manner. A negative supply shock is an unexpected event that reduces the economy's productive capacity such as a natural disaster that causes a sudden loss of the human and/or physical factors of production. Negative supply shocks are particularly difficult for policymakers to deal with as conventional demand side polices are ineffective and can cause inflation or deeper recessions (Burda and Wyploz, 2013). Effective supply side polices relate to the removal of market distortions to allow the economy to react to the shock and reallocate resources efficiently.

The initial COVID-19 impact might be considered as a large negative shock to aggregate supply stemming from supply chain disruptions and public health restrictions on economic activity. Following the initial large aggregate supply shock there has been a subsequent aggregate demand shock as employment impacts unfolded. On the supply side, illness, fear of illness and public health restrictions reduce the ability of people to work, and several sectors have faced closures and/or significant capacity constraints. On the demand side, employment impacts, public health restrictions and the fear of illness reduce the desire and ability to consume goods and services. There is a debate in the academic literature over whether the macroeconomic impacts of COVID-19 are dominated by aggregate supply or demand shocks. Some studies have found that have found supply shocks dominate (Brinca et al., 2020; del Rio-Chanona et al., 2020; Bekaert et al., 2020) others have found demand shocks dominate (Andersen et al, 2020; Baler et al., 2020). Research has also suggested that the initial shock to aggregate supply may have itself caused a subsequent aggregate demand shock (Guerrieri et al., 2020). The literature also notes that there are heterogenous demand and supply shocks within specific sectors and sub-groups of the economy (del Rio-Chanona et al, 2020) here we can think about shocks related to forced closures in some sectors (entertainment and the "experience economy") and rapidly changing consumer preferences (e.g. air travel and cruise ships).

Concurrent and heterogenous shocks to both supply and demand makes this economic shock atypical and particularly difficult to respond to. One facet of the atypical nature of the COVID-shock is revealed in the national institutional sector accounts through the changes in income and consumption. A key feature of a conventional demand-side fiscal response is that consumption, a key component of aggregate demand, is driven by changes in disposable income. When incomes fall (rise), consumption falls (rises). The positive correlation between

incomes and consumption underlies the famous and oft-debated "fiscal multiplier" concept.[6] Using CSO data on Irish household disposable income and consumption spending from Q3 1999 to Q4 2019 there was a strong positive relationship between income and consumption with a correlation coefficient of 98.9. Figure 4.2 shows that this positive relationship broke down during the pandemic. During Q2, 2020 gross household incomes actually rose year-on-year, but consumption fell dramatically. Consequently, there has been a surge in household savings. Coffey (2020) examines these trends and explains that the fiscal response from the government, combined with lower taxes and social contributions paid has more than offset lower employee earnings. While household incomes have risen in the aggregate, at the national level these figures do not show the impact on different groups in society or regions. The negative impacts have been disproportionately borne by the more vulnerable workers, in general (Dept. of the Taoiseach, 2021). The level of fiscal response from the government would normally be expected to boost consumption spending, but as noted above this is clearly not a typical shock.

Figure 4.2 Total Disposable Income and Consumption Expenditure Q3-1999 – Q3 2020



Source CSO Institutional Sector Accounts

The atypical nature of the COVID-19 shock mean that it is sensible that policy addresses both the supply and demand sides of the economy. The priority on the supply side is to find ways to open up the economy in a safe manner. del Rio-Chanona et al. (2020) note that supply-side policy priorities are strategies for people to return to work as quickly as possible in a safe manner such as *"widespread antibody testing…, and rapid testing, tracing, and isolation to minimize future lockdowns…."* On the demand side the priority is that sufficient consumer confidence and certainty exists such that when the economy re-opens individuals are willing and able to

[6] The fiscal multiplier measures the effect that increases in fiscal spending will have on a nation's economic output. Ivory et al., (2020) examined fiscal multipliers in Ireland and found that that public investment measures are seen to have a greater impact on activity than other types of government spending. Public investment was found to potentially exhibit a positive and significant impact over the short run but that these impacts were not found to be significantly different from zero over the long run.

engage in economic activity. Guerrieri et al. note that a typical demand-side fiscal stimulus response will be ineffective and instead more targeted fiscal supports towards directly affected sectors are required. The short-run fiscal response in Ireland appears to have been effective at mitigating income losses. However, people remain uncertain about the future and are less inclined and/or are restricted from spending in some sectors. The major policy takeaway from the literature is that fiscal policy should continue to aim at temporary and targeted support to aid incomes and businesses in affected sectors, to improve healthcare capacity, test and trace systems and speedy vaccine rollouts. In this sense, fiscal policy might be thought of as disaster relief rather than traditional demand-side fiscal stimulus. However, we cannot forget the supply side constraints, fiscal stimulus cannot induce consumers to spend money in sectors that are not open for business or that face supply constraints thus it is imperative to re-open the economy as quickly as possible in a safe manner. This is particularly important for the Western Region and AEC given the levels of COVID-19 exposure detailed throughout this report. Fiscal policy may also be appropriate for capital investment in long term projects such as energy, climate action, education, and infrastructure. The WDC has recently addressed the need for public infrastructure investment in the context of the National Development Plan (Frost, 2021) and the key issues for the low-carbon transition in the Western Region (McHenry, 2020b).

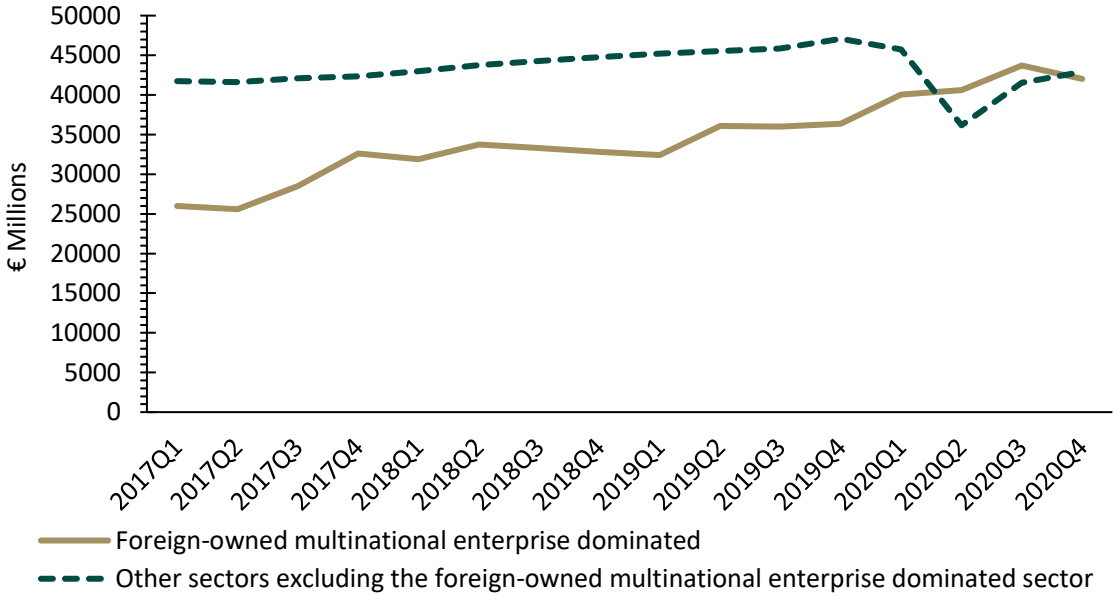
The Irish Fiscal Advisory Council have recently examined the dynamics of public debt in the current low interest rate environment and make three key arguments (Barnes et al., 2021). First, fiscal space exists to run higher primary deficits and there should be scope for a fast debt reduction. Second, higher debt ratios are inherently unstable and lead to vulnerabilities. Third, an ageing population puts pressures on the future of the public finances and will tend to apply upward pressure on debt ratios. In the medium to longer term, as the health risks subside and the economy returns to growth, Conefrey et al. (2021) suggest that *"any ongoing support via current expenditure should be targeted and temporary"*. The authors caution that *"permanent increases in current expenditure could only be sustainably accommodated if accompanied by offsetting revenue raising measures"* and that any lasting public expenditure increases funded by debt would *"amplify the risks to fiscal sustainability"* and *potentially "limit the scope for an expansionary fiscal response to future crises"*.

4.3 Possible K-Shaped Recession/Recovery

Going forward, demand and supply shocks will affect sectors and consequently will affect counties differently. For example, del Rio-Chanona et al., (2020) using US data, show that sectors like transport will be largely constrained by demand shocks, while sectors such as manufacturing and services will be largely constrained by supply shocks. The authors found that tourism, a key sector for the Western Region and AEC, faces large supply and demand shocks. The differing impacts on different sectors is contributing to what Gerard Brady (IBEC) and others has been referring to as a K shaped recession/recovery. The K shape refers to a scenario where sectors of the economy begin to recover at different speeds, in different periods, or to different extents. The CSO sector accounts illustrate one facet of this issue (Fig.2). Gross Value Added (GVA), in the multinational sector (dominated by pharma, medtech, IT and financial services) has been rising. In contrast, in the other domestic sectors there was

a stark decline during Q2 followed by a slight increase quarter-on-quarter in Q3 (year-on-year decline) and stagnation quarter-on-quarter during Q4 (year-on-year decline). The Western Region and AEC counties have a relatively lower share of multinational companies.

Figure 4.3 Performance of Foreign Owned Multinational Enterprises and other Domestic Enterprises



Source CSO Quarterly Gross Value Added for Foreign-owned Multinational Enterprises and Other Sectors

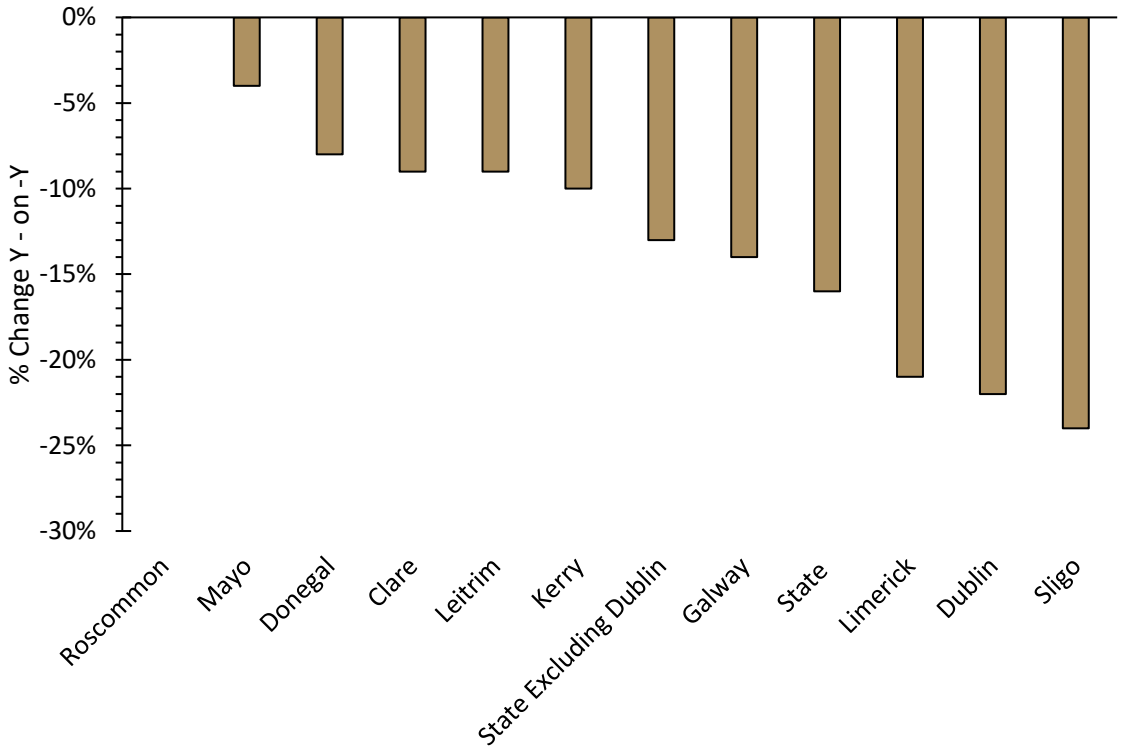
5. Impact on Housing

This section looks at some key housing indicators to identify trends during 2020. The indicators examined are sales volumes, the residential property price index (RPPI), the Residential Tenancies Board (RTB) standardised rents and dwelling completions.

5.1 Housing Sales Volumes

The initial supply side reaction in the housing market was a reluctance to reduce prices and instead to withdraw housing from the market (Lyons, 2020). There was a sharp decline in year-on-year sales volumes as illustrated in Figure 5.1. There was a particularly large decline at the beginning of the pandemic during April and May (McGrath, 2020b). Nationally, the decline in sales volumes has generally been larger than in the Western Region and AEC counties.

Figure 5.1 Housing Sales Volumes % change from 2019-20



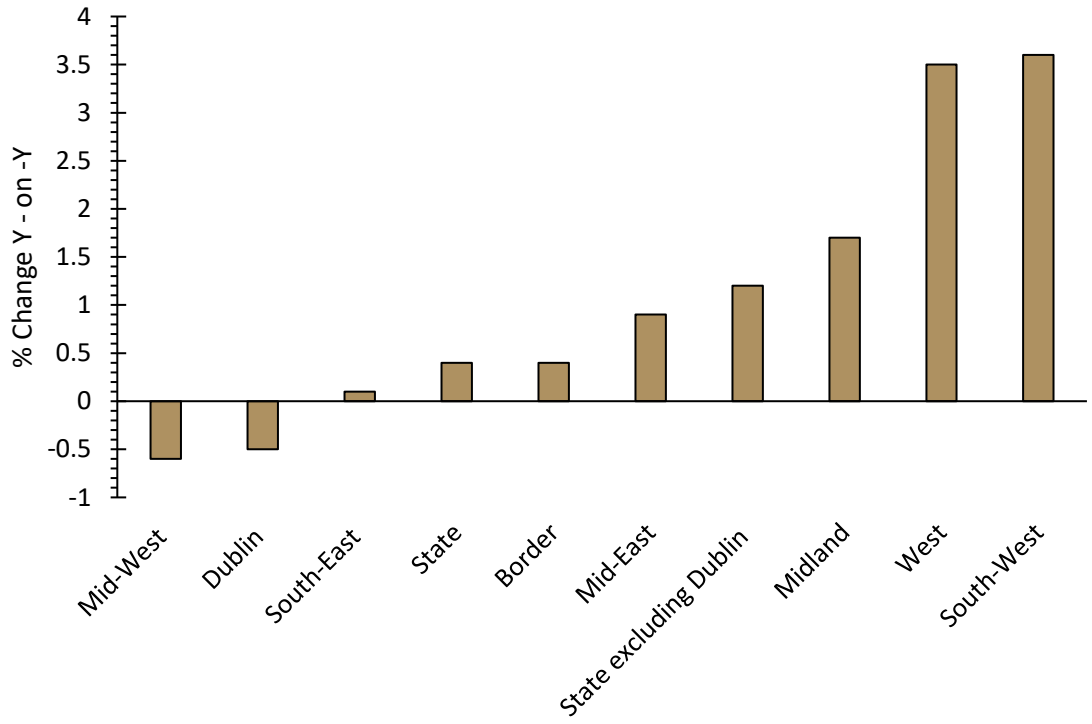
Source Authors Calculations from CSO Market-based Household Purchases of Residential Dwellings

5.2 House Prices

Since the onset of the pandemic there has been a large contraction in the supply of houses coming onto the market, this is partly reflected in the sales volumes reported above. According to Lyons (2020), the supply reduction has contributed to *"unprecedented scarcity of homes for sale"*. Lyons noted that on the Daft.ie site the average number of houses listed for sale had averaged 40,000 since 2007. Since March 2020, supply on Daft.ie has not breached 20,000 homes for sale on the market at any one time. Lyons noted that demand has held up remarkably well and attributes this to a possible flight to safe assets. Recall, from the previous section that incomes have held up well and employment declines have largely been in concentrated sectors and generally among the lower paid. A lack of supply coupled with

strong demand leads to an increase in house prices. Regionally, the CSO residential Property Price Index (RPPI) shows a slight decline in Dublin and the Mid-West but an increase in all other regions. The largest increases were in the West and South-West Regions. The Dublin trend and knock-on impacts may reflect the increase in remote working outside of the more densely populated areas. However, it is difficult to distinguish this trend using the aggregated NUTS regional data. For example, Lyons argues there is no clear evidence, using Daft.ie data, of a shift away from cities given *"prices are up only 1.7% year-on-year in Dublin 6, there are plenty of urban areas with much larger increases - for example, 11% inflation in nearby Dublin 8 and also in Dublin 10. Inflation is close to 10% also in Galway and Limerick cities. Definitive answers to those kinds of questions will have to wait, however. What is clear, though, is that, in 2020, Covid-19 has not upended - and in fact may have amplified - the trend that dominated Ireland's housing market in the 2010s. That trend is one of chronic and worsening shortages of housing, in particular for urban and smaller households."*

Figure 5.2 Change Year on Year in the Residential Property Price Index



Source CSO Residential Property Price Index

5.3 Rents

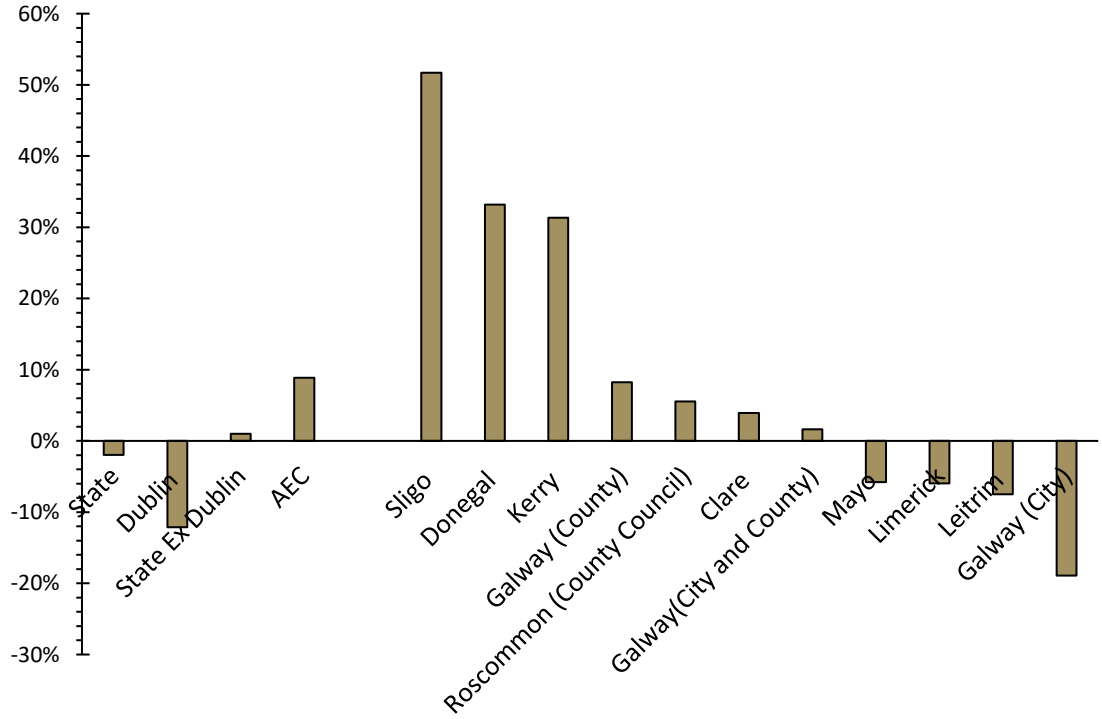
The rental market has been less volatile at least partly as a result of the fiscal response and the regulations aimed at the prevention of evictions. Rental data is available from the Residential Tenancies Board (RTB) up to Q3 2020. The Q2 RTB report shows that Q2 2020 was the first quarter since 2014 that year-on-year rental growth was below 10 per cent in all 26 counties. However, the largest annualised increases in rents were within the Western Region (Mayo 8.5 per cent and Leitrim 7.9 per cent). Standardised rents fell on a quarterly basis in Clare (-1.6 per cent) and Sligo (-1.9 per cent) and on an annual basis in Clare (-0.5 per cent). National trends were driven by the Dublin market. The Dublin trend and knock-on impacts may reflect the increase in remote working in more rural areas but as noted above it is difficult to answer this question clearly in the absence of more detailed data analysis. The Q3 RTB report again noted

a moderation in year-on-year rental growth and again found to be driven largely by Dublin. During Q3 there was a year-on-year fall in rents in both Clare (-2.2 per cent) and Sligo (-6.5 per cent). However, the 2nd and 3rd highest year-on-year growth rates nationally were in Roscommon (7.1 per cent) and Limerick (6.6 per cent). The Q3 report also noted the difficulty in linking rental trends to broader economic activity given the *"emergency and other legislation limiting price growth is likely altering the usual relationships between economic factors and rental inflation."* Table A.2 within the appendix shows the quarterly standardised rent by county.

5.4 Dwelling Completions

In addition to the number of houses listed for sale, another indicator of housing supply is the number of dwellings completed. Pre-COVID there was a sizeable increase in dwelling completions. During Q1 2020, completions rose 38 per cent, year-on-year in the AEC region compared to a national rise of 17 per cent. During Q2, completions fell year-on-year by 34 per cent in the AEC compared to a national decline of 32 per cent. During Q3 and Q4 there was a strong recovery in the AEC region. Figure 5.3 shows the percentage change in total dwelling completions between 2020 and 2019. The strong recovery in Q3 and Q4 contributed to year-on-year growth in dwelling completions during 2020 compared to a decline nationally. However, there was a decline in dwelling completions in Mayo, Limerick, Leitrim, and Galway city. There was considerable growth recorded in Sligo, Donegal, and Kerry. These large percentage increases generally relate to a small number of additional dwellings. In Sligo, for example, the 52 per cent increase represented an additional 61 dwellings.

Figure 5.3 Dwelling completions % change from 2019-20



Source CSO Dwelling Completions

6. Policy Insights

This report details how the regional dynamics of the COVID-19 shock are influenced by pre-pandemic economic structures. Given these structures it should be unsurprising that the Western Region and AEC counties were impacted by a comparatively large COVID-19 shock. A lower labour force share of wage subsidy supports coupled with high COVID-adjusted unemployment rates and job loss rates presents a worry in terms of comparatively high eventual unemployment rates. The analysis of gender and age dynamics suggests that females, particularly younger females and, to a lesser extent, younger males within the Western Region and AEC may be more vulnerable to the COVID-shock. The overrepresentation of women in terms of PUP claims, and the vulnerability of younger workers has previously been noted at the national level. This report shows that these issues may be more pronounced at the regional level and should be considered in the context of labour market activation programmes.

The atypical nature of the COVID-19 shock means that it is sensible that policy addresses both the supply and demand sides of the economy. The priority on the supply side is to find ways to open up the economy in a safe manner. On the demand side, the priority is that sufficient consumer confidence and certainty exists such that when the economy re-opens individuals are willing and able to engage in economic activity. The safe re-opening of the economy as quickly as possible is imperative, given the level of exposure to the Western Region and AEC economy as detailed in this report. In the short term, fiscal policy should continue to aim at temporary and targeted support to aid incomes and businesses in affected sectors, to improve healthcare capacity, test and trace systems and speedy vaccine rollouts. In this sense, fiscal policy might be thought of as disaster relief rather than traditional demand-side fiscal stimulus. Fiscal policy may also be appropriate for capital investment in long term projects such as energy, climate action, education, and infrastructure. The WDC has recently noted the need for regional public infrastructure investment in the context of the National Development Plan (Frost, 2021) and the key issues for the low-carbon transition in the Western Region (McHenry, 2020b). These investment priorities are of particular importance given the sluggish recoveries in employment, output and household incomes from the last economic crisis that have contributed to economic divergence from national growth levels.

As detailed throughout this report, it seems COVID-19 has exacerbated pre-pandemic structural issues such as the structure of enterprise and concentrated employment in tourism focused sectors. The COVID-19 shock reiterates the need for further diversification of the regional employment base. Incentivising entrepreneurship and innovation activity should be a key regional priority. The WDC submission to the Seanad Public Consultation Committee on Small and Medium Sized Businesses in Ireland emphasised the importance of the removal of regional entrepreneurial barriers (WDC, 2018). The region's quality of life makes it attractive to knowledge and creative sector workers thus ensuring the availability of the facilities and services these workers require is important. Growth opportunities to expand the knowledge intensive sectors, will be key to the region's economic future. The expansion of remote working may offer opportunities to grow regional employment across those sectors. The WDC is the co-ordinator of the AEC Enterprise Hubs Project to create an interconnected community hub network. The WDC argue that two I's (Infrastructure and Innovation) and the

'3Es' (Enterprise, Employment and Education) are the key levers for effective regional development as detailed in McHenry and White (2011) and White (2011). When these three areas complement and support each other, they drive regional growth.

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Appendix

Table A.1 Summary Statistics of Enterprise Structure and Employment Growth for the AEC counties, Dublin and State.

	Employment Share in Micro-Enterprises (<10 employees)	Employment Share in Large Enterprises (>250 employees)
All Counties	25.9	32.6
Dublin	15.8	48.0
Rest of State (Ex-Dublin)	34.0	19.3
AEC	34.0	18.2
Leitrim	46.6	0.0
Roscommon	46.1	0.0
Donegal	37.8	8.5
Kerry	36.4	16.7
Mayo	36.3	18.5
Clare	34.0	20.3
Galway	30.6	20.6
Sligo	30.1	28.2
Limerick	29.8	24.2

Table A.2 Residential Tenancies Board/ESRI Standardised Rents During 2020.

RTB/ESRI Standardised Rents 2020				
	Monthly Standardised Rent in €			
	Q1	Q2	Q3	Q3 % change Y-on-Y
Clare	736	728	740	-2.2
Donegal	618	616	606	1.1
Galway	1,178	1,705	1,041	1.7
Leitrim	600	599	554	3.6
Mayo	733	695	684	5.2
Roscommon	674	641	620	7.1
Sligo	812	739	754	-6.5
Limerick	1,022	988	957	6.6
Kerry	802	792	789	1.3
Dublin	1,758	1,709	1,735	0.9

Source: RTB/ESRI Rent Index Reports.

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