



# ESRI Research Note

## *A county-level perspective on housing affordability in Ireland*

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# A COUNTY-LEVEL PERSPECTIVE ON HOUSING AFFORDABILITY IN IRELAND

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\* **Matthew Allen-Coghlan, Conor Judge, Conor O’Toole, Rachel Slaymaker**<sup>1</sup>

## 1. INTRODUCTION

The issue of housing affordability in Ireland has come to the fore in recent years as house prices have increased significantly following the recovery. In a recent survey, Corrigan et al. (2019a) find that 86.5 per cent of renters expressed a preference for homeownership. However, rising house prices have led to serious concerns about the ability of first time buyers (FTB) to enter the housing market. This group has been cited as one particular pressure point in recent assessments of market affordability (Housing Agency, 2017). Analysis published in the ESRI *Quarterly Economic Commentary* (McQuinn et al., 2018) finds that house price growth has been uneven across the distribution, with cheaper properties growing at faster rates than more expensive properties. This is likely to further exacerbate the affordability concerns of first time buyers, who typically enter the housing market at lower house price levels than second and subsequent borrowers.<sup>2</sup>

To address the issue of first time buyer purchase affordability, a number of Government initiatives such as the Help to Buy scheme and the Rebuilding Ireland Home Loan for first time buyers, have been introduced with the aim of improving affordability.

While house prices have increased substantially in recent years, the national trend in house prices gives no indication of the heterogeneity in house prices across the country. In addition, as both house prices and incomes vary on a regional basis, it is not possible to draw conclusions about housing affordability by simply looking at regional house prices. Understanding which areas face the

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<sup>2</sup> Kinghan (2018) shows that in the first half of 2018 the average house price for first time buyers was approximately €287,000, as compared to €412,000 for second and subsequent borrowers.

greatest affordability challenges is crucial for policymakers when deciding where best to target supports.

One of the major challenges to assessing housing affordability at a regional level is to obtain granular data on both house prices and incomes. In this Note, we address this by combining data from a number of sources to assess housing affordability challenges at the county level. More specifically, we combine CSO disposable income data from the regional accounts with Survey of Income and Living Conditions (SILC)<sup>3</sup> data which contain information on both income and age, to obtain a measure of potential first time buyer incomes for each county. For house prices we exploit county-level data on first time buyer house prices from the CSO's Residential Property Price Index (RPPI) dataset.

We first document trends in county-level first time buyer house prices and incomes.<sup>4</sup> Then to provide an insight into how affordability has developed for this group we explore the housing costs they would face if they were to enter the homeownership market. More specifically, we calculate the mortgage payment and subsequent mortgage repayment-to-income ratio they would face if they were to purchase a property at the mean first time buyer price in each county. Finally, we explore whether households would be left with sufficient residual income, after paying these housing costs, to attain a minimum essential standard of living as defined by the Vincentian Partnership for Social Justice.

A number of recent studies have considered the issue of housing affordability. Corrigan et al. (2019) provide a detailed evaluation of the trends in housing affordability across existing renter and mortgage holder households in Ireland using the SILC household dataset. While this research provided a comprehensive review of trends in affordability across the market, the research did not specifically focus on the affordability level of new entrants to the housing market. Furthermore, as SILC is a nationally representative dataset with a relatively small number of observations at smaller geographic levels, the authors focused on broader regional breakdowns. One study which does focus on new market entrants is Turnbull (2017). Taking a long-term perspective, he examines whether owning a property is more or less affordable for young couples today compared to in the past. We build on this previous work, particularly Corrigan et al. (2019),

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<sup>3</sup> SILC is a voluntary survey that is conducted on annual basis in Ireland by the CSO. It is part of an EU-wide programme which allows policymakers to make comparisons across Member States.

<sup>4</sup> As the purpose of this Note is to determine affordability challenges for the average first time buyer we use the mean first time buyer income and house price in each county. The reason for using the mean is that the county incomes data (from which we obtain our estimate of first time buyer income) only provide mean data. There are no distributional data available to get median income at a county level from the CSO county incomes data.

by providing a more granular, county-level assessment of affordability for first time buyer households.

We find that between the years 2016-2018 the mortgage-to-income ratio for potential first time buyers has increased across all counties. In 2018 the ratio would have been more than 30 per cent in Dublin, Wicklow, Kildare and Meath while in 11 of the 26 counties this ratio was at or below 20 per cent. In terms of residual income, we find that a first time buyer couple should have sufficient income left over after paying their mortgage instalments to attain at least a minimum level of consumption in all counties.

This Note is structured as follows. Section 2 describes the data used in the analysis and presents trends in county-level house prices and incomes. Section 3 examines housing affordability for first time buyers. Section 4 explores trends in the residual income potential first time buyer households would have left after paying their monthly mortgage instalments. Section 5 extends the analysis beyond the county level to focus on key urban centres and Section 6 concludes.

## **2. DATA**

One of the key challenges to assessing housing affordability at a regional level is to obtain granular data on both house prices and incomes. In this section we outline our data sources and our calculations of first time buyer house prices and incomes in each county which enable us to assess county-level housing affordability in Section 3.

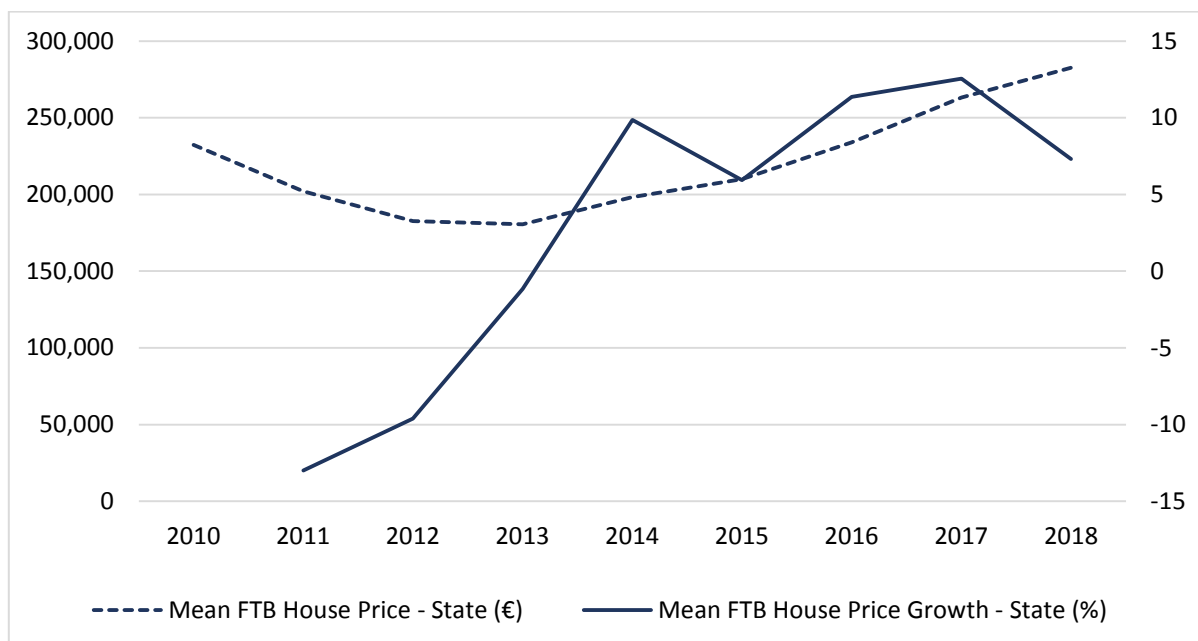
### **2.1 County house prices**

To assess the affordability challenges faced by first time buyers, we draw on both house price and income data at the county level. House price data were gathered from the Residential Property Price Index (RPPI) dataset which is compiled by the CSO.<sup>5</sup> The primary source for this dataset is stamp duty receipts which are provided by the Revenue Commissioners. The Index provides data on the average level of prices paid for residential properties in Ireland on a monthly basis. Crucially for this study, the RPPI contains additional indicators on household purchases, including household buyer type. This allows us to gather information about house prices specifically for first time buyers. The dataset also contains a regional dimension which allows us to observe the heterogeneity of these first time buyer house prices across each county in the State.

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<sup>5</sup> The RPPI data exclude non-household purchases, non-market purchases and self-builds.

**FIGURE 1 FIRST TIME BUYER MEAN HOUSE PRICE AND HOUSE PRICE GROWTH 2010-2018**



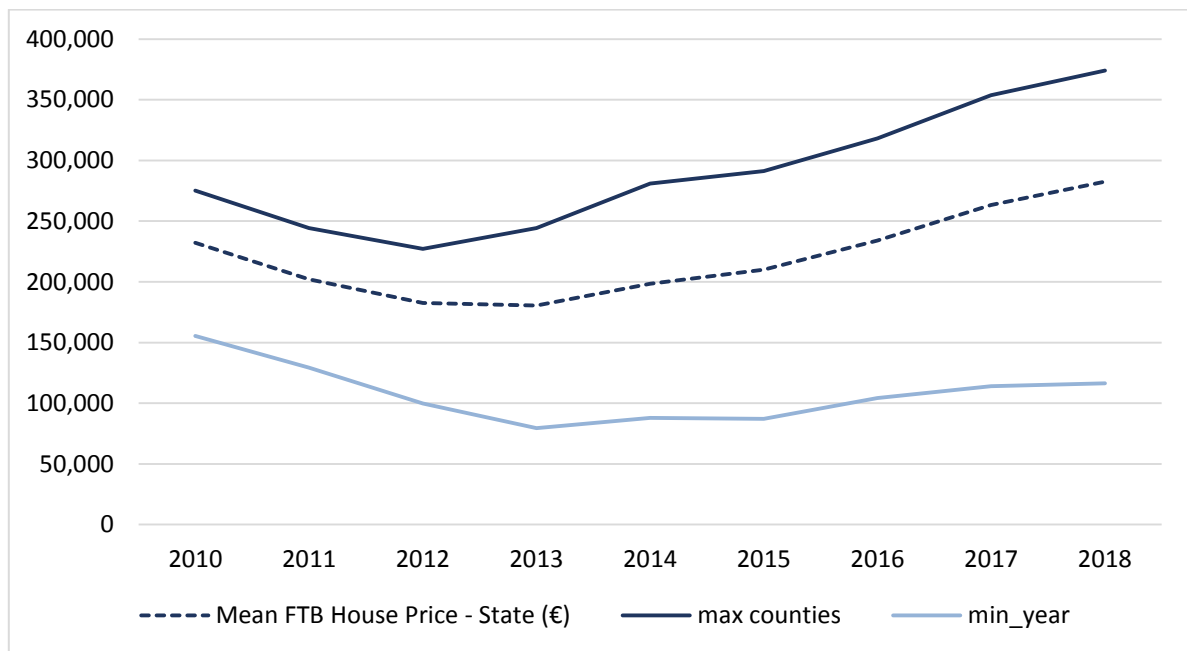
Source: Central Statistics Office.

Note: 2010 is the earliest year for which national house price data are available.

Figure 1 shows the national trend in first time buyer (FTB) house prices from 2010-2018. As illustrated by the dashed line, FTB house prices bottomed out in the country in 2013. Since then prices have risen year-on-year and in 2016 FTB house prices surpassed 2010 levels.

However, this national level trend gives no indication of the heterogeneity of house prices across the country. Figure 2 shows the distribution of FTB house prices looking at the county with the highest and lowest mean house price in each year. Unsurprisingly, Dublin had the highest mean house price in each year, while either Longford or Leitrim had the lowest mean house price in each year. FTB house prices in the lowest priced county are still a long way off the levels they had been in 2010 and have only seen a small recovery in prices from where they were in 2013. FTB house prices in Dublin, on the other hand, have seen strong growth in prices and actually started to recover earlier with prices bottoming out in 2012. In Dublin FTB house prices surpassed 2010 levels in 2014 and have continued to rise year-on-year ever since. Furthermore, in 2018 we observe that at just under €375,000, the mean FTB priced house in Dublin cost more than three times that of the mean FTB priced house in Longford (€116,000).

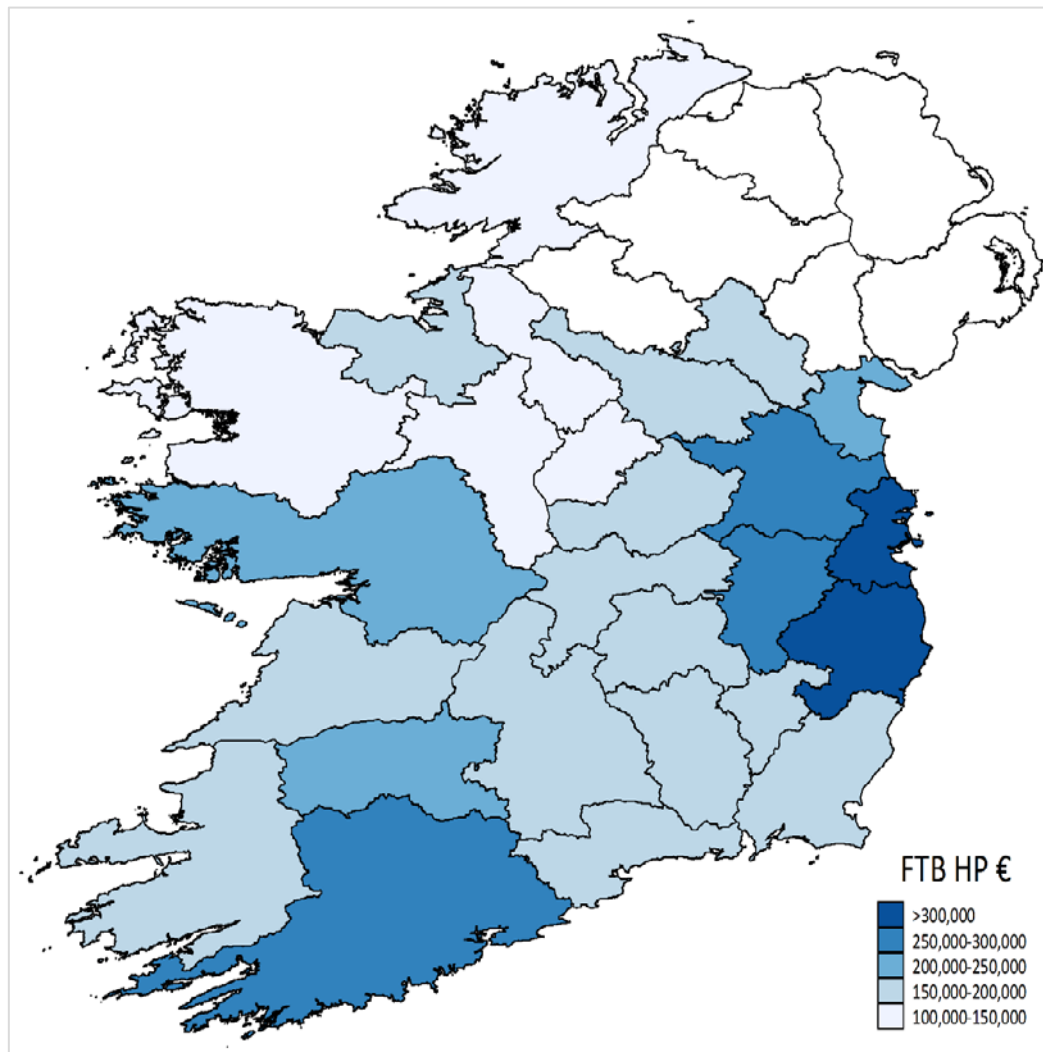
**FIGURE 2 FIRST TIME BUYER MEAN HOUSE PRICE DISTRIBUTION 2010-2018**



Source: Central Statistics Office.

To examine county-level heterogeneity more closely, in Table 1 we present the mean FTB house price and growth rate for each county in 2018. Only Dublin, Wicklow and Kildare are above the national FTB average of €283,000, while the mean FTB house prices remain below – and in many cases well below – €200,000 for 18 of the 26 counties. Figure 3 illustrates graphically this disparity in FTB house prices across the country. In addition to seeing the highest prices in Dublin and the Greater Dublin Area (GDA), the next highest priced counties are Cork, Galway, Limerick and Louth, while prices are lowest in the North-West of the country.

**FIGURE 3 FIRST TIME BUYER MEAN HOUSE PRICE BY COUNTY 2018**



Source: Central Statistics Office.

In terms of house price growth, from Table 1 we see that on average FTB house prices increased by 7.3 per cent between 2017 and 2018, a slowing of the 12.6 per cent growth seen between 2016 and 2017. Taking a longer-term perspective, we see that on average FTB house prices increased by 56.4 per cent over the period 2013-2018.<sup>6</sup> Higher than average growth over that period was observed in counties surrounding Dublin; Louth, Meath and Kildare, as well as in Cork, Laois, Monaghan, Waterford and Wexford.

<sup>6</sup> 2013 is used as this was the year in which the mean national first time buyer house price reached its nadir. However, it should be noted that the low point for house prices varies by county, with prices not bottoming out in some counties until 2015.



**TABLE 1 FIRST TIME BUYER MEAN HOUSE PRICE AND HOUSE PRICE GROWTH BY COUNTY**

County	Mean FTB HP 2018 (€)	FTB HP growth 2017-2018 (%)	FTP HP growth 2013-2018 (%)
All Counties	282,505	7.3	56.4
Carlow	182,957	10.2	52.6
Cavan	152,272	7.9	49.9
Clare	187,401	15.0	51.3
Cork	255,780	9.9	58.9
Donegal	134,344	0.8	34.0
Dublin	374,041	5.7	53.0
Galway	226,884	4.8	53.3
Kerry	180,137	2.1	31.8
Kildare	296,656	5.6	61.1
Kilkenny	191,497	11.5	38.8
Laois	182,600	17.5	71.8
Leitrim	119,725	2.3	46.3
Limerick	213,252	14.7	51.7
Longford	116,396	2.0	46.3
Louth	212,962	10.7	69.5
Mayo	149,949	3.4	26.5
Meath	275,356	7.9	66.6
Monaghan	168,591	6.5	56.6
Offaly	161,067	-1.0	45.4
Roscommon	133,498	10.5	36.6
Sligo	155,188	15.0	36.6
Tipperary	159,571	2.7	42.6
Waterford	187,474	5.0	64.7
Westmeath	178,721	11.1	55.4
Wexford	182,380	12.5	66.5
Wicklow	319,915	4.4	49.6

Source: CSO Table HPA02: Residential Dwelling Property Transactions by County, Dwelling Status, Stamp Duty Event, Type of Buyer, Type of Sale, Year and Statistic. Growth rates based on ESRI calculations.

## 2.2 County incomes

The most challenging aspect of assessing FTB housing affordability at a regional level is the lack of a suitable existing source of income data. In order to obtain a measure of first time buyer incomes, we combine data from two sources. First, we take the CSO per person disposable income excluding rent series 2000-2016.<sup>7</sup> As the most recent data available are for 2016, we use the annual growth in Average Hourly Earnings (McQuinn et al., 2019) to estimate income levels for 2017-2018. In order to account for regional variation in the growth rate of

<sup>7</sup> The exclusion of rental income is used as the county National Accounts include the rental income from landlords in the total income calculations. As we are attempting to gain information on first time buyers, we take the dataset which excludes the rental returns to landlords as this income should not accrue to non-homeowners.

incomes, we use the data for 2000-2016 to create a compound average growth rate for each county and then apply the relativities between this and the national annual growth from the QEC to create a regionally adjusted mean per person income for 2017-2018. As our focus in this Note is on first time buyers, we transform these per person figures into first time buyer couple household figures by multiplying them by 2.<sup>8</sup>

Second, we then exploit the Survey of Income and Living Conditions (SILC). SILC provides a detailed micro-level dataset of income and living conditions of households across Ireland and is conducted by the CSO on an annual basis. The advantage of using SILC is that it provides both income and age information for households. We proxy first time buyer incomes with the income of households aged 40 or under.<sup>9</sup> In order to ensure sufficient observations for each county, we pool the data for 2014-2016. This gives us a measure of mean income for households of all ages and for those aged 40 or less in each county. We then apply the ratio of the income of those aged 40 or less to all aged households' income from the SILC data to our adjusted CSO disposable income estimates to obtain an estimate of the mean annual first time buyer disposable income for each county. As the mean age of a first time buyer in 2018 in Ireland was 34<sup>10</sup> (Kinghan, 2018), we believe that adjusting the CSO per person disposable income levels by this age ratio from SILC provides a good proxy for potential first time buyer incomes.

In Figure 4 we plot the distribution of FTB couples' net after tax disposable incomes looking at the county with the highest and lowest mean income in each year. We see an increase in incomes from 2014 onwards, with the mean FTB couple's disposable income reaching approximately €43,250 in 2018. In addition, Dublin has had the highest mean income each year, reaching €48,900 in 2018, while Donegal consistently had the lowest income, reaching just under €33,900 in 2018. The mean FTB couple gross and disposable incomes for each county are reported in Table 2. In Figure 5 we present the mean FTB couple's income in 2018 graphically for each county. Figure 5 clearly shows that incomes are generally higher in the East and the South of the country.

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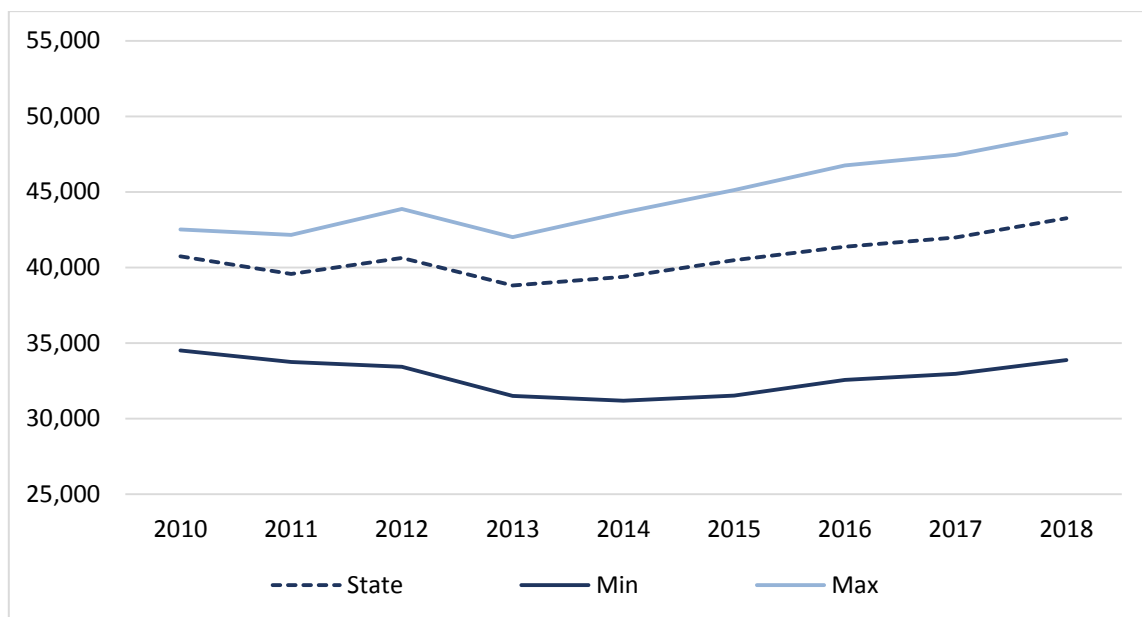
<sup>8</sup> It should be noted that there may be regional variation in the proportion of potential FTB who are single. Regions in which there is a greater proportion of single FTB are likely to face greater affordability challenges relative to regions with a greater proportion of FTB couples.

<sup>9</sup> We are unable to focus solely on private renters due to the insufficient number of observations for private renters at the county level in SILC.

<sup>10</sup> While the average age of first time buyers is likely to vary on a regional basis, we have no data on this at a regional level so are unable to explore this further.

A direct comparison between our estimated potential first time buyer mean income figures and another source is not possible.<sup>11</sup> However, at this point it is useful to compare our estimates with the income levels of actual first time buyers accessing mortgage credit through the banking sector. New mortgage lending data from the Central Bank reports that the mean gross income of first time buyers in 2018 was €73,536.<sup>12</sup> This is considerably higher than our national level potential FTB estimated mean gross income for 2018 of €56,825 reported in Table 2. That our figure is considerably lower is unsurprising as currently those households who are able to obtain a mortgage are situated in higher parts of the income distribution. Indeed Lydon and McCann (2017) show that more than 90 per cent of first time buyer purchases in 2014 were to households in the top 60 per cent of the population income distribution. Our measure is instead a measure which estimates the mean income of younger households (aged less than 40); those who are potential homeowners rather than actual homeowners. The difference in these two figures highlights the difficulty that these young, potential first time buyers have in actually becoming homeowners.

**FIGURE 4 POTENTIAL FIRST TIME BUYER MEAN DISPOSABLE INCOME BY COUNTY DISTRIBUTION 2010-2018**



Source: Central Statistics Office.

<sup>11</sup> As a very approximate comparison point we use CSO aggregate data on the average weekly household income by household composition and income decile which come originally from the Household Budget Survey 2015. This gives a national level mean annual disposable income of €44,148 for a two-adult household and a figure of €41,340 for the average of the 5th and 6th decile (as a proxy for the median) of the income distribution. Our 2015 calculated national disposable income level for a potential first time buyer couple of €41,038 therefore seems reasonable.

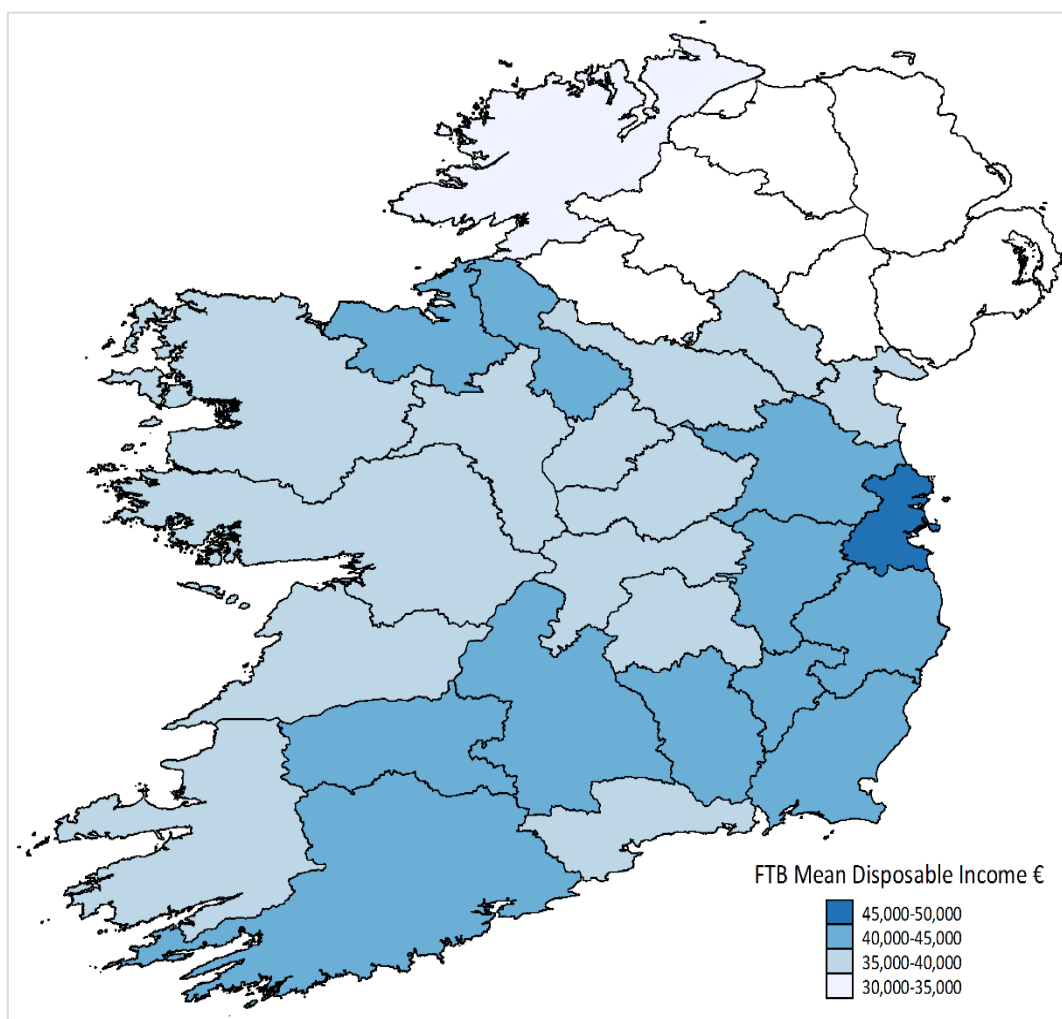
<sup>12</sup> See Central Bank of Ireland, New Mortgage Lending Data 2018.

**TABLE 2 MEAN GROSS AND DISPOSABLE INCOME OF POTENTIAL FIRST TIME BUYER COUPLE BY COUNTY 2018**

<b>County</b>	<b>Mean Gross Income (€)</b>	<b>Mean Disposable Income (€)</b>
<b>All Counties</b>	56,825	43,256
<b>Carlow</b>	53,986	42,713
<b>Cavan</b>	49,374	39,064
<b>Clare</b>	48,307	38,220
<b>Cork</b>	56,596	43,191
<b>Donegal</b>	42,825	33,882
<b>Dublin</b>	66,922	48,867
<b>Galway</b>	47,182	36,712
<b>Kerry</b>	50,264	39,769
<b>Kildare</b>	56,324	42,122
<b>Kilkenny</b>	51,239	40,540
<b>Laois</b>	47,783	37,806
<b>Leitrim</b>	51,344	40,623
<b>Limerick</b>	53,548	42,366
<b>Longford</b>	47,645	37,696
<b>Louth</b>	48,700	38,531
<b>Mayo</b>	47,114	37,276
<b>Meath</b>	53,513	40,020
<b>Monaghan</b>	47,929	37,921
<b>Offaly</b>	45,811	36,245
<b>Roscommon</b>	45,717	36,171
<b>Sligo</b>	52,310	41,387
<b>Tipperary</b>	53,967	42,698
<b>Waterford</b>	49,435	39,112
<b>Westmeath</b>	49,496	39,161
<b>Wexford</b>	51,147	40,467
<b>Wicklow</b>	54,178	40,517

Source: Central Statistics Office.

**FIGURE 5 POTENTIAL FIRST TIME BUYER MEAN DISPOSABLE INCOMES BY COUNTY 2018**



Source: Authors' calculations based on data from Central Statistics Office and Survey of Income and Living Conditions.

### 3. HOUSING AFFORDABILITY

In order to examine how affordable the mean FTB priced house would be for a couple on the mean FTB income, we follow the approach discussed in Corrigan et al. (2019). To do this we calculate what the monthly payment would be on a mortgage if these households were to purchase the mean FTB priced house in each county. To calculate the payment, we use the following amortisation formula:

$$Payment_{it} = LTV_{it} * HP_{ct} * \left( \frac{r(1+r)^{\tau}}{((1+r)^{\tau}) - 1} \right)$$

As first time buyers, these households would face the maximum loan-to-value ratio (LTV) of 90 per cent, allowed by the Central Bank's macroprudential mortgage rules. We take the average new business rate for household loans (3.02 per cent in 2018) from the Central Bank as the interest rate and use

a standard 30-year term mortgage which is the most prevalent duration in the market at present for first time buyers. Using this payment, we then calculate a mortgage repayment-to-income ratio (MRTI) for these households to test how affordable or not the market would be if they were to enter the mortgaged-owner segment at the mean FTB house price. It must be noted that our assessment of repayment to income is not conducted from the lens of mortgage credit access. Borrowers would face higher interest rate stress tests when banks are looking at their affordability from a lending and viability perspective.

In Table 3 we present these hypothetical monthly repayments and MRTIs for each county, without taking into account whether it would indeed be possible to achieve a mortgage under the current credit market conditions. Table 3 shows that FTB households in Dublin, as well as the surrounding commuter counties of Wicklow, Meath and Kildare would have to pay more than 30 per cent of their monthly income on their mortgage instalments.<sup>13</sup> In Wicklow and Dublin, the MRTI is greater than or equal to 35 per cent, which is a commonly used benchmark in Irish policy on affordable housing. In Galway and Cork the figures are 28 and 27 per cent respectively. In contrast, in many of the more northern and western counties, households would pay less than 20 per cent of their incomes on these mortgage instalments. These instalments would exceed €1,000 per month in Dublin, Wicklow, Meath and Kildare, with the mean payment in Cork just falling short of €1,000 per month.

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<sup>13</sup> 30 per cent is used as a simple benchmark measure, one that is commonly used in the international housing affordability literature; it should not be seen as an absolute affordability cut-off. At the household level, Corrigan et al. (forthcoming) highlight the importance of a measure of affordability which combines both housing costs and income. As our focus in this Note is specifically on whether the mean potential FTB income would allow the purchase of the mean FTB priced house, we believe that this simple 30 per cent measure provides a useful guide to affordability.

**TABLE 3 MEAN FIRST TIME BUYER MONTHLY MORTGAGE PAYMENT AND MORTGAGE REPAYMENT-TO-INCOME RATIOS BY COUNTY 2018**

County	Payment (€)	MRTI	County	Payment (€)	MRTI
Carlow	696	0.20	Longford	443	0.14
Cavan	579	0.18	Louth	810	0.25
Clare	713	0.22	Mayo	570	0.18
Cork	973	0.27	Meath	1,048	0.31
Donegal	511	0.18	Monaghan	641	0.20
Dublin	1,423	0.35	Offaly	613	0.20
Galway	863	0.28	Roscommon	508	0.17
Kerry	685	0.21	Sligo	590	0.17
Kildare	1,129	0.32	Tipperary	607	0.17
Kilkenny	728	0.22	Waterford	713	0.22
Laois	695	0.22	Westmeath	680	0.21
Leitrim	455	0.13	Wexford	694	0.21
Limerick	811	0.23	Wicklow	1,217	0.36

Source: Authors' calculations based on data from Central Statistics Office, Central Bank of Ireland and Survey of Income and Living Conditions.

In Figure 6 we present the MRTI for each county for 2016-2018 separately. Despite interest rates declining and income in each county increasing over this period, the MRTI ratio is shown to be increasing across a large range of counties. This is due to the rate of growth in house prices outstripping income growth over this period. The three maps reinforce the message from Table 3 that first time buyer affordability concerns are particularly concentrated in Dublin and the Greater Dublin Area (GDA). Furthermore, these maps illustrate how the MRTI has risen in a short space of time in certain areas. In particular between 2016 and 2017 the MRTI rose above 30 per cent in Kildare and Meath. The MRTI also rose above 20 per cent in Kerry, Clare, Limerick, Waterford, Laois, Westmeath and Offaly, while in 2018 the MRTI rose above 25 per cent in Louth. It is important to note that counties still represent a fairly large geographical area. For instance differences are likely between the urban area of Galway city and the more rural remainder of Galway county, and similarly for Cork. We address this in Section 5. There may also be other, smaller pockets of affordability challenges that we are unable to capture in this county-level analysis. One other point to note is that our analysis only focuses on a dual-earning couple. For single income households, the affordability challenges would be even more acute in those areas where prices are relatively high.

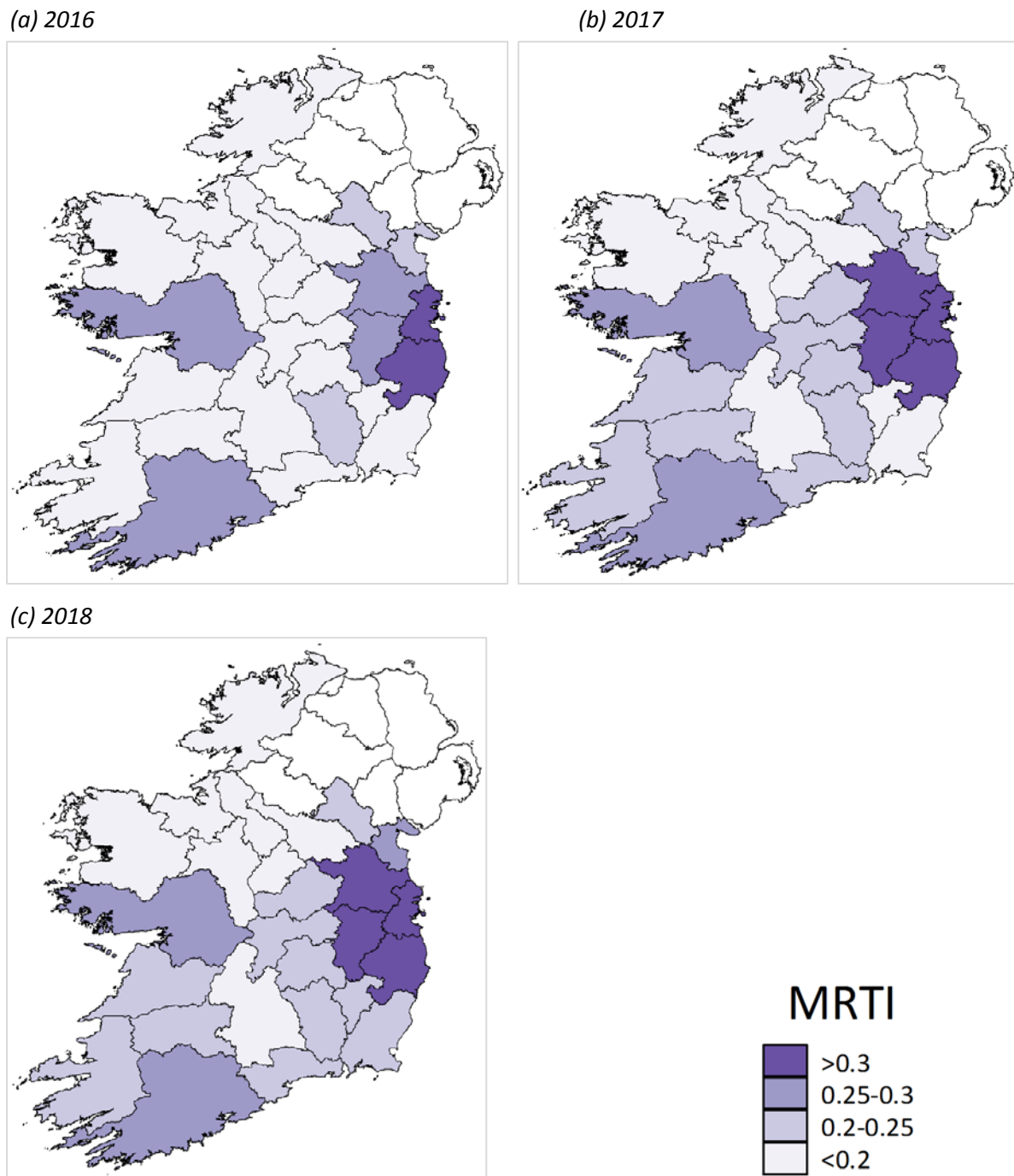
In this analysis, we have not explored the feasibility of borrowing by the illustrative households. To successfully obtain a mortgage, such households would have to comply with both bank-specific underwriting standards (such as on affordability, income verification etc.) and regulations governing mortgage market activity in Ireland, in particular the macroprudential regulations which are critically important for financial stability. In some of the areas where we find high repayment-to-income levels (in particular

Dublin and the surrounding counties), the implied loan-to-income ratio would likely be above the limit allowable without exemption from the current regulations. Such households would have to purchase a house at a lower price than the average to meet current borrowing limits.

This last point above points to a limitation with the current methodology that should be noted. By taking the mean house price for first time buyers and matching this to the mean income for potential first time buyers, we may overstate the affordability challenge facing such households. This is due to the fact that the average price facing potential FTBs at present is determined by the income levels of those FTBs who were able to purchase and whose income exceeds the average potential FTB income by some margin (Lydon and McCann, 2017). A potential FTB with the mean income can alternatively purchase a house with a price below that of the mean FTB house. If this is the case, then affordability would likely improve for this buyer as the house price would be lower. A fuller analysis which accounts for the differences across the price distribution is worthy of future research.



**FIGURE 6 FIRST TIME BUYER MEAN MORTGAGE REPAYMENT-TO-INCOME RATIO 2016-2018**



Source: Authors' calculations based on data from Central Statistics Office, Central Bank of Ireland and Survey of Income and Living Conditions.

#### **4. RESIDUAL INCOME**

The analysis in Section 3 focused on the proportion of income spent on mortgage instalments as a measure of affordability. An alternative measure of affordability is to examine whether the residual income that remains after paying this mortgage instalment is sufficient to ensure some minimum level of consumption.

To explore this, we take the Minimum Essential Standard of Living (MESL) income for a childless working age couple defined by the Vincentian Partnership for Social Justice.<sup>14</sup> They produce separate household budget expenditures for rural and urban areas on an annual basis. Based on whether it is possible to live in an area without car ownership, we classify all counties as rural except for Dublin.<sup>15</sup> It is important to note that any measure of the minimum level of required income is somewhat subjective.

In Figure 7 we map the ratio of residual income to MESL income as an alternative indicator of homeownership affordability for a first time buyer couple.<sup>16</sup> The first thing to note is that this ratio is greater than 1 in all counties. This indicates that a first time buyer couple on the mean income buying the mean FTB priced house will have sufficient income left over after paying their mortgage instalments to attain at least a minimum level of consumption. However, it must be noted that we conduct this analysis of residual income based on the household expenditure of a working age childless couple. Inevitably some of these young couples will wish to start a family and this analysis would not take these increased expenses of children and childcare costs into account. Furthermore, while a ratio of 1.25-1.5 would enable a couple to attain a minimum level of consumption, it would not leave them with a significant amount of residual income. In terms of the variation across the country, the lowest ratios are observed in Galway, Clare, Donegal, Offaly, Laois and Louth as well as in the GDA counties of Wicklow, Kildare and Meath. However, though they share a similar low ratio of residual income to MESL, the reasoning behind the low ratio varies by county. For example in Donegal the ratio is low due to relatively low income in that county while in the GDA the ratio is low due to the relatively high price of housing.

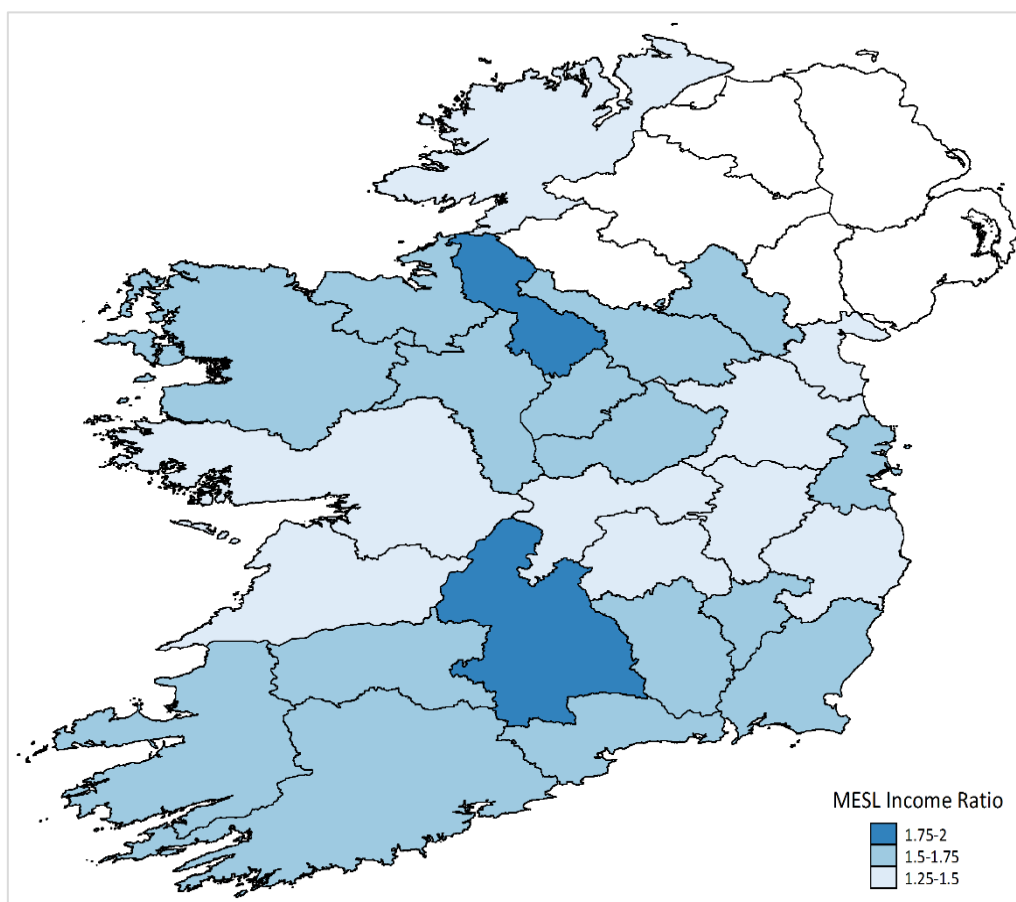
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<sup>14</sup> The Minimum Essential Standard of Living (MESL) income measure includes spending on the following items: food, clothing, personal care, healthcare, household goods, household services, communications, social inclusion, education, transport, household energy, personal costs, insurance, savings and contingencies. This measure excludes childcare and the effects of secondary benefits.

<sup>15</sup> In practice the differences between these rural and urban series for a couple without children are relatively small and make little difference to our estimates.

<sup>16</sup> As the purpose of this paper is to assess affordability for a first time buyer couple, the MESL we use for this exercise is for a couple without any children. As the number of children within a family increases, the MESL for that family will also increase, leading to a decrease in the income to MESL ratio. The ratios that we present can therefore be thought of as base cases that will likely deteriorate the more dependants there are in a family.

**FIGURE 7 RATIO OF RESIDUAL INCOME-TO-MINIMUM ESSENTIAL STANDARD OF LIVING INCOME BY COUNTY 2018**



Source: Authors' calculations based on data from Central Statistics Office, Central Bank of Ireland, Survey of Income and Living Conditions and Vincentian Partnership.

## 5. A FOCUS ON THE URBAN CENTRES

In Section 3 we noted that counties still represent a fairly large geographical area. As previously discussed, differences are likely between the urban area of Galway City and the more rural remainder of Galway County, and similarly for Cork. Given the already substantial challenges of obtaining data which permit analysis of housing affordability at the county level, analysis at a more granular regional level is not possible for much of the country. Nevertheless, in this section we do provide a more granular regional analysis for Dublin, Cork and Galway. Specifically, we split Dublin into its four local authorities, namely Dublin City, South Dublin, Fingal and Dún Laoghaire-Rathdown, and we separate Cork and Galway into City (urban) and County (rural).

From Table 4 it is evident that there are significant differences in the price of FTB houses between different areas in the same counties. In Dublin, Dún Laoghaire-Rathdown had by far the highest mean FTB house price of €520,000 which was

57 per cent greater than Fingal, the lowest priced area in the capital. In Galway there was a significant difference in price between Galway City and Galway County (rural) of €54,000. This urban rural gap is smaller in Cork where mean house prices in Cork City are roughly €15,000 higher than in the county (rural).

**TABLE 4 FIRST TIME BUYER MEAN HOUSE PRICE AND HOUSE PRICE GROWTH BY AREA 2018**

Area	Mean FTB HP (€)	FTB HP growth 2017-2018 (%)	FTB HP growth 2013-2018 (%)
Dublin City	382,344	8.8	68.4
South Dublin	339,445	5.2	56.9
Fingal	330,640	6.3	53.7
Dún Laoghaire-Rathdown	519,767	6.4	41.1
Cork County	252,990	8.3	55.7
Cork City	268,139	16.8	72.6
Galway County	208,589	7.8	53.7
Galway City	262,638	4.3	52.9

Source: CSO Table HPA03: Market-based Household Purchases of Residential Dwellings by Dwelling Status, Stamp Duty Event, RPPI Region, Type of Buyer, Year and Statistic. Growth rates based on ESRI calculations.

In Table 5 we present both gross and disposable potential FTB incomes by within county area. As with house prices, Dún Laoghaire-Rathdown has by far the highest income in Dublin, with a mean gross income of more than €12,000 more than in Dublin City. Incomes are higher in Cork County than City, but the opposite is true for Galway with higher incomes in the city area. This highlights the fact that housing affordability is likely to be more nuanced than a simple rural/urban divide.

**TABLE 5 MEAN GROSS AND DISPOSABLE INCOME OF POTENTIAL FIRST TIME BUYER COUPLE BY AREA 2018**

Area	Mean Gross Income 2018 (€)	Mean Disposable Income 2018 (€)
Dublin City	60,158	43,928
South Dublin	63,425	46,313
Fingal	73,103	53,380
Dún Laoghaire-Rathdown	77,162	56,344
Cork County	58,137	44,367
Cork City	49,120	37,487
Galway County	43,112	33,545
Galway City	58,665	45,647

Source: ESRI calculations based on CSO disposable income per person excluding rent, gross income per person and SILC data.

Note: Incomes are calculated using the method discussed in Section 2.2. We use the relativities between income levels for these areas in SILC to obtain estimates for these within county areas based on the CSO data.

In Table 6 we present the hypothetical mean monthly mortgage instalment, MRTI and the MESL residual income ratio for each area. We observe substantial variation in MRTI ratios across Dublin, ranging from 28 per cent in Fingal up to 42 per cent in Dún Laoghaire-Rathdown, with the most central area of Dublin City not far behind at 40 per cent. In Cork there is a substantially higher MRTI of 33 per cent in the city area compared to 26 per cent in the county. In Galway the difference is much smaller, with a slightly higher MRTI of 28 per cent in the county compared to 26 per cent in the city, likely driven by the substantially lower levels of income observed in Galway County.

**TABLE 6 MEAN FIRST TIME BUYER MORTGAGE REPAYMENT, MRTI, AND MESL INCOME RATIOS BY AREA 2018**

Area	Payment (€)	MRTI	MESL Income Ratio
Dublin City	1,454	0.40	1.38
South Dublin	1,291	0.33	1.61
Fingal	1,258	0.28	2.00
Dún Laoghaire-Rathdown	1,977	0.42	1.70
Cork County	962	0.26	1.64
Cork City	1,020	0.33	1.32
Galway County	794	0.28	1.20
Galway City	999	0.26	1.76

Source: Authors' calculations based on data from Central Statistics Office, Central Bank of Ireland, Survey of Income and Living Conditions and Vincentian Partnership.

## 6. CONCLUSION

In this *Research Note* we provide an examination of housing affordability for potential first time buyers at the county level in Ireland. More specifically, we calculate the mortgage payment and subsequent mortgage repayment-to-income ratio they would face if they were to purchase a property at the mean first time buyer price in each county.

We find that the proportion of income potential first time buyers would have to spend on mortgage repayments increased between 2016 and 2018. In 2018 these potential first time buyers would have faced a mortgage repayment-to-income ratio of more than 30 per cent in Dublin, Wicklow, Kildare and Meath, while in 11 of the 26 counties this ratio remained at or below 20 per cent. In terms of residual income. We show that a first time buyer couple on the mean income buying the mean FTB priced house will have sufficient income left over after paying their mortgage instalments to attain at least a minimum level of consumption in all counties.

In this Note our analysis only focuses on a dual-earning couple who earn the mean first time buyer income, attempting to buy the mean first time buyer priced house in each county. The affordability challenges for potential first time buyers at the lower end of the income distribution will be even greater, particularly in the Dublin, GDA, Cork and Galway areas. In areas where those earning the mean income are unable to borrow at a 90 per cent LTV and meet the LTI limits, they are likely to purchase houses at the lower end of the house price distribution. This may represent a further challenge to lower-income potential homeowners. The affordability challenges faced by single earner households will also be greater than for dual-earner households. An examination of this is outside the scope of this study. Further research could also explore the rent-to-income ratio and undertake a deeper dive of affordability trends in the private rental market at a county level.

Several subsidy schemes for FTBs have been introduced in recent years, such as the Help to Buy incentive and the Rebuilding Ireland Home Loan. However, these instruments must be complemented by the expansion of the housing stock and the provision of alternative rental models.

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