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Wage sufficiency in the context of the Irish Housing Emergency: Rents and access to homeownership.

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Wage Sufficiency in the context of the Irish Housing Crisis*

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ABSTRACT

The return to growth in Ireland since 2012 has coincided with a turnaround in the housing market and sustained increases in the price of rental accommodation and asking prices. This growth has significant distributional implications, both between younger citizens more likely to be renting and older citizens more likely to be property owners as well as regionally with housing costs in the Dublin area increasingly diverging from the rest of the country. This paper assesses both the cost of renting relative to wages and the ease of buying in all areas across Ireland for which data is available. Rather than looking at average growth rates for all property types this paper attempts to match minimally adequate accommodation with various household types whilst comparing affordability and access for younger and older workers. Rent prices are compared to the take home pay of full-time minimum wage earners and the median take home pay of younger and older cohorts of workers whilst the accessibility of the housing market is estimated by the ratio of the cost of the house to annual gross wages. The data shows that the cost of renting a one-bedroom apartment anywhere in Dublin is at least 50% of the net pay of the median Irish wage earner and as such is a higher proportion for 50% of all Irish employees. For two median earners renting a three-bed semi-d the cost anywhere in Dublin is a minimum of 35% of take home pay. The paper also finds that given central bank rules on lending, getting a mortgage as a first-time buyer for a one-bedroom apartment would be highly unlikely in all but 2 out of 25 Dublin areas considered based on the wages of the median Irish employee. A mortgage for a three-bedroom house or bigger anywhere in Dublin is beyond the reach of two employees earning the median wage in 2017.

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1 . INTRODUCTION

Rising house prices since the economy turned the corner in 2012 have been of concern to academics, policymakers and workers alike with Ireland's property crash, financial crisis and resulting fiscal crisis still fresh in the collective minds of the country and the economic effects still felt by most. After the bursting of the property bubble in 2007, Ireland saw a decline in construction employment of over 50% and the mass emigration of skilled construction workers as the market imploded and building all but stopped (Wickham 2017). Directly following the crash, property prices fell dramatically as did lending from a financial system, which was deeply exposed to the market (Dellepiane & Hardiman 2012). The shock of the collapse has left the housing market in disarray and drastically reduced the construction of much needed residential property in the private market. This was further exacerbated by huge cuts to capital spending on social housing in successive austerity budgets leading to a huge mismatch of supply and demand (Kitchin, Hearne, & O'Callaghan 2015). Although there seems to be a widespread consensus that the issue at the heart of rising prices is a lack of supply, how that might be addressed is an ongoing matter of debate. Construction in residential housing is still unable to keep up with demographic pressures let alone dealing with the backlog (Healy & Goldrick-Kelly 2017). Rents in 2017 exceed Celtic Tiger peaks with average rents up 60% nationally since 2012 and asking prices for properties continue on a trajectory towards Celtic Tiger heights with a 40% rise in the same period (Lyons 2017).

At the same time, there has been relatively little movement in wages with average weekly earnings up a mere 2% in the same period (CSO 2017a) and the labour market has become more precarious, especially for young and low-skilled workers (Nugent 2017). These trends have obvious implications for the spending power of workers and a negative impact on the **living standards** of those forced to rent, specifically young people and the low skilled, as a higher proportion of their disposable income is eaten up by the cost of renting. These increases also further diminish the chances of workers saving for a deposit to buy their own home or being able to contribute to a pension.

This has resulted in more people being made **homeless** every month since the first count in 2014 with a 93% rise for young people in that time (Focus Ireland 2017). There are now 460,000 adult children living at home in Ireland, twice as many as in 2006 (CSO 2016b), and

the average age for first time buyers is continuing to rise steadily. Census 2016 showed that 35 is now the age at which homeownership becomes the majority tenure status compared to 26 in 1991 and 28 as recently as 2006. The absolute number of households renting also rose by almost 5% between 2011 and 2016 (CSO 2016b).

On a macro level, these trends have **distributional implications** as some preferred sections of society, namely property owners and banks, benefit at the expense of more vulnerable ones, young people and those in low skilled and low paid professions (Hearne 2017). Older homeowners are happy to see the value of their home increase and their negative equity position improve, landlords are happy that their rent is going up and banks are happy to see their balance sheets recover.

The diversion of a larger share of wages going to housing every year also has implications for every other sector in the Irish economy as the **demand for goods or services** besides housing suffers. This affects the profitability of the local shop owner, publican, restaurateur, taxi driver, sports club and music school and by extension, affects the demand these businesses have for labour and the amount they decide to invest more generally. This redistribution feeds through into the wider economy hitting employment and investment. Similarly, when housing and property prices rise **resources are diverted** in the form of capital and labour, from more productive sectors of the economy. (This diversion of resources has also been identified as a factor in the fiscal instability of the Irish state in the aftermath of the property crash in 2008. The state had been highly reliant on property related tax receipts and when this huge stream of revenue dried up the states' ability to deal with a ballooning welfare bill was severely hampered, turning a property crash and financial crisis into a full-blown fiscal crisis (Lane 2011, Whelan 2014).)

These growing disparities also affect the **long-term productive capacity** of the Irish economy by **affecting Ireland's ability to attract investment**, the lynchpin of Irish development policy for the past four decades, as well as the ability to attract **high-skilled labour**- in other words our competitiveness. The American Chamber of Commerce of Ireland recently expressed the concern of its membership in this regard (Lyons 2017b). Excessive housing costs will affect the cost-benefit analysis of multinationals considering investing here or adding to their operations here. Higher housing costs mean higher wages to attract skilled and often highly mobile workers who need accommodation. Leading recruiters *Prosperity* also recently highlighted the difficulty in attracting high-skilled talent from abroad to fill positions in key industries that our education system is not producing, due in no small part to the excessive cost of housing in Dublin (Salary Survey 2017).

This paper adds to recent research produced by the Nevin Economic Research Institute on long-term housing affordability (Turnbull 2017), by the Economic and Social Research Institute (McQuinn 2017) and by the National Economic and Social Council (NESC 2014). McQuinn (2017) found ‘unambiguous’ results that the current Irish housing market displays no signs of overheating and that currently the market is not in ‘bubble’ territory as the ‘irrational exuberance’ and associated over-lending which were major features of the crash are not currently features of the housing market. Instead, the paper concludes that the current trends are a reflection of underlying fundamentals and a correction of an ‘over-correction’ in house prices post-2008. The paper also found that Ireland has a relatively ‘affordable’ housing market internationally and indeed that applying some internationally recognized econometric modelling techniques that the Irish market may still be undervalued in 2017. Turnbull (2017) however, found strong evidence of the growing difficulty, especially for young people in accessing the housing market whilst NESC (2014) forecast that homeownership among semi and un-skilled groups is likely to decline over the coming years.

The paper considers affordability in the rental market in 2017 and the ‘accessibility’ of the residential property market for full-time minimum wage workers and median earners in two age brackets; 25-34 year olds and 35 plus. Median disposable wage income for these groups is compared with rental costs whilst gross wages are considered against house prices allowing the paper to produce indicative figures of affordability of rent and the accessibility of the housing market for a minimum of half the Irish workforce. Incorporating the standard of accommodation, the paper considers the minimally adequate accommodation for these earners in Irish society as well concentrating on geographical heterogeneity.

2. MEASUREMENT

Affordability is a fuzzy concept and thus measurement requires some judgement calls, with examples of a variety of approaches taken over the years in the literature (Stone 2006a). Affordability is not an intrinsic feature of a given domicile. Obviously, for some at the higher end of the distribution any house will be affordable and for those at the very bottom, none will be without financial assistance from the state. Therefore, affordability is a relationship between housing cost and the income of a given set of individuals or households and refers to the balancing act of the cost of actual or potential housing with the costs of all other living expenses within the constraints of disposable income.

Financial experts tend to advise individuals not to spend more than 30% of their income on housing. This arbitrary definition of affordability, the origins of which are in the New Deal in post WW1 USA made its way into political discourse and academia as a benchmark and the 30% ratio

(initially 25%) of housing cost to income is widely accepted as an appropriate rule-of-thumb for affordability (Stone, Burke & Ralston 2011). The OECD and Eurostat calculate a housing cost overburden rate, which counts the number of households who have to spend over 40% of their disposable income on accommodation. Similarly, the annual Demographia International Housing Affordability Survey categorizes housing markets as 'affordable', 'moderately', 'seriously' and 'severely' unaffordable based on this concept (Demographia 2017). An indicator of 3.0 or less of median household income to median house price is classed as an affordable market. (Ireland as a whole was found to be moderately unaffordable, whereas Dublin was found to be seriously unaffordable in 2017.) Normatively, the **ratio approach** recognizes the difficult choices most households have to make in what they will pay for housing at the expense of other goods relative to their income, given limited and often insufficient alternatives, though the framework tends not to detail the cost of other necessities. Similarly, the approach ignores several complicating factors such as the tradeoffs between housing in cities and additional travel costs of commuters (Hulchanski 1995). In practice, some households pay more than they can realistically 'afford' whilst some pay less, whether measured as a proportion of income or in absolute terms. These groups are not randomly assigned but are a function of economic and social circumstances. The idea underpinning the ratio approach unfortunately ignores distributional concerns in that it assumes the lower the income of a household, the lower amount of money it requires for non-housing expenses. In reality in fact those with lower incomes can afford to spend less of a share of their income on housing than those at the higher end of the distribution if a minimum standard of living is to be achieved through their spend on non-housing needs. In most empirical studies, the price to income approach has little utility other than as a crude indicator of affordability. It has come under criticism for being too descriptive and not clearly conceptualizing affordability, whilst ignoring the heterogeneity of household circumstances. In other words, the approach applies the same standard to all household compositions and all consumption standards.

The **residual income approach** has been put forward in recent years as an alternative in which the day-to-day expenses of households are estimated, based on normative assumptions of what a household needs and should reasonably expect to afford, and the income left over is compared to housing costs to measure affordability (Stone, Burke & Ralston 2011). (For some in-depth analysis in the same vein as the residual-income approach see the Vincentian's work on minimum essential standard of living in which minimum day-to-day expenses are calculated for urban, suburban and rural groups (IE, W. B. 2017).) The **relative affordability approach** is also widely used and measures the relationship of income and housing cost over time. Though again this approach provides no normative standards of affordability such as is in the residual income framework and research utilizing the framework has tended to ignore distributional income data for identifying how many or what kinds of households might be having affordability problems, it serves a useful

descriptive purpose for assessing the cost burden and thus living standards over time.

For a study on affordability to have any utility, it is important to ask what section of society is being considered and what standard of accommodation (Stone 2006). This paper will focus on wage earners or employees. In terms of standards, this paper will not go into complicating factors such as energy ratings, new builds or period houses, but will focus on minimally adequate unit size for a selection of household types; singles, couples and couples with children, and their location, using average prices compiled by Daft.ie. The analysis will consider the cost of renting a room in shared accommodation for a single employee at different stages of the wage distribution as well as renting or buying a one-bedroom apartment. For a couple, the paper will compare wages for specific groups with the cost of renting or buying two-bedroom and three-bedroom units with a specific focus on the viability of mortgage applications for these groups in the current housing market. As these are normative assumptions on what minimum adequacy entails, it is possible that some may argue that a couple should start with a one-bed or a family with a two-bed or that a one-bedroom apartment is an unreasonable amount of space for any individual or group of workers at the bottom of the wage distribution in 2017. On a macro scale, the normative thrust of the paper suggests that 50% of the working population should be able to buy a minimally adequate property or expect at the very least, that their wages rise in line with rental prices to maintain their current standard of living.

The paper continues in two sections. First, the disposable income of median wage earners in two age groups (25-34 and 35+) as well as the after tax wages of a full-time minimum wage worker are compared to average rents across the Republic of Ireland. On this basis, through the median earner, the analysis provides a general indication of affordability for at least 50% of Irish wage earners, making comparisons over time (note: the median wage is for all employees who identify as 'at work', both part-time and full-time. Students are not included). Thus, the analysis in this section takes a relative approach as well as incorporating some of the theoretical underpinnings of the residual income approach. This involves examining the monetary difference between the take home pay of certain groups of workers and their rent burden, giving an idea as to the effect of rising prices on the disposable income left over after paying for this fundamental need, the level of which of course determines quality of life and living standards.

In the next section, rather than affordability per se, the analysis considers how easy it would be for wage earners to apply successfully for a mortgage by calculating the ratios of the gross income of the same examples of workers in the middle of the wage distribution to average asking prices. Although the arbitrary nature of simple ratios and problems around relying on them in discourse and empirical studies in affordability has already been discussed, in Ireland's case there is a practical justification for this approach as it pertains to buying residential property; central bank

rules on maximum mortgage lending. Loan-to-income rules on Irish mortgage lending state that Irish banks cannot lend a worker or couple of workers (with some exceptions) more than 3.5 times their annual gross income (CBI 2016). Thus, this section could more accurately be described as measuring ‘accessibility’ rather than ‘affordability’ and as such refrains from including complicating factors such as the cost of servicing a mortgage or the cost of property taxes. The justification of this approach lies in the simple idea that a worker or couple of workers cannot service a mortgage or pay property taxes if current market dynamics and mortgage rules restrict them from being able to buy in the first place.

3. DATA

Data on net wages and the net wages of specific age cohorts is drawn from the Survey on Income and Living Conditions from 2012-2015, the most comprehensive dataset on living standards available in Ireland. SILC is part of an annual European wide survey and in 2015 the data gathered refers to a nationally representative sample of 13,793 individuals in 5,452 households. As with any survey on income, SILC is likely to underestimate income at the top end of the distribution due to a higher non-response rate in this group whilst lower income groups are likely to be under-represented.

Net wages for 2016 and 2017 are estimated using SILC 2015 data and annual movements recorded in the Earnings, Hours and Employment Costs survey (EHECS) in that time. This survey showed average weekly wages for full-time employees growing at 1% and 2% in those years. All survey respondents identifying as ‘at work’ as their work status and as an ‘employee’ as their work type are considered here. The net wages of a full-time minimum wage employee for the years 2012-2017 is calculated using the full minimum hourly rates for an adult worker. Annual take home pay is calculated as 52 weeks of 39 hours with adjustments for the introduction of USC in 2011. As the distribution of Irish wage income is not symmetrical with outliers at the top, the median rather than the mean employee income is the focus. The median is the middle value when a sample is sorted in ascending order such that the median point in the wage distribution represents the point at which 50% of wage earners earn less and 50% earn more.

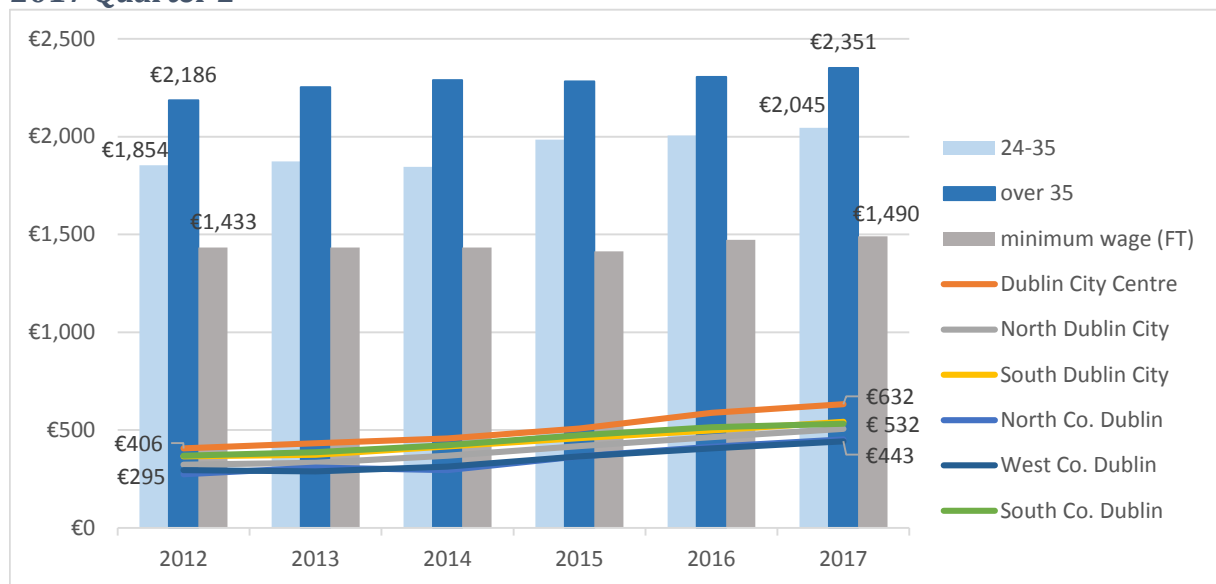
Data on house price movements are from the latest Daft.ie House Price Report: An analysis of trends in the Irish Residential Sales Market for 2017 Q3. Data on rental prices are from the latest Daft.ie Rental Price Report: An Analysis of Recent Trends in the Irish Rental Market 2017 Q2.

4. RENTING. DUBLIN V THE REST

4.1 The affordability of renting for individual employees

Graph 4.1.1 shows the growth in the median take home pay of an Irish 25-34 year old employee, the median after tax wage of a 35-64 year old and a full-time minimum wage earner compared to changes in rent prices for a single room since 2012 across Dublin. All areas across the capital and the surrounding county area have seen increases of between 35 and 55% in the past five years. Both Dublin City Centre and North County Dublin (the most and least expensive areas) have seen rises of over 50% in this period for a box-room. The cost of a single-room in shared accommodation in Dublin City Centre is €632 a month or 42% of the take home pay of a full-time minimum-wage employee and €226 euro more on average than in 2012. In the same period that workers net earnings have gone up by €57 such that €169 more a month or 12% more of their disposable income is going on renting a room with a single-bed. In 2017, it took over 18 hours to earn that much at the minimum wage. The average single-room in shared accommodation costs 31%, 26% and 25% of the median take home pay of an employee between the ages of 25 and 34 in Dublin City Centre, South Dublin City and North Dublin City respectively.

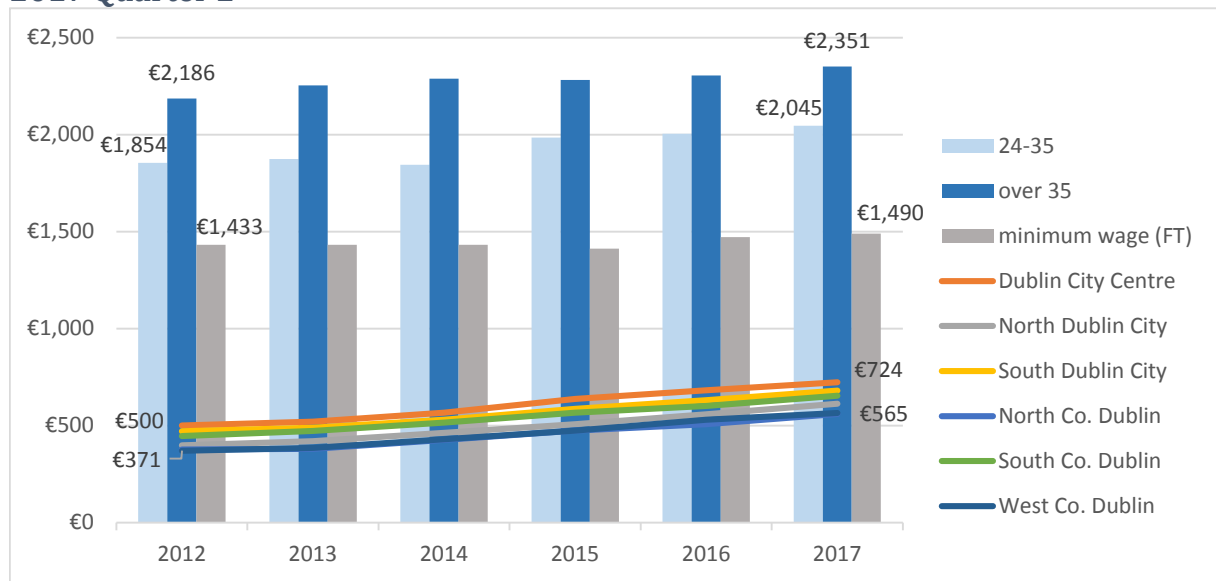
Graph 4.1.1: Net wages and renting a single-bed room in shared accommodation, 2017 Quarter 2



note: net wages refers to monthly after-tax pay of individual employees. Changes reported are for average rents in the year up to Q2 2017).

The average cost of a room with a double-bed in shared accommodation in the Dublin area ranges from 38% of the take home pay of a full-time minimum wage worker to 49%, in North Co. Dublin and Dublin City Centre respectively. Rents have risen in both areas by over 40% in just five years with comparable trends seen throughout Dublin. An employee between the age of 25 and 34 earning the median net wage for that cohort will spend 29% of their take home pay on a double-

Graph 4.1.2: Net wages and renting a double-bed room in shared accommodation, 2017 Quarter 2

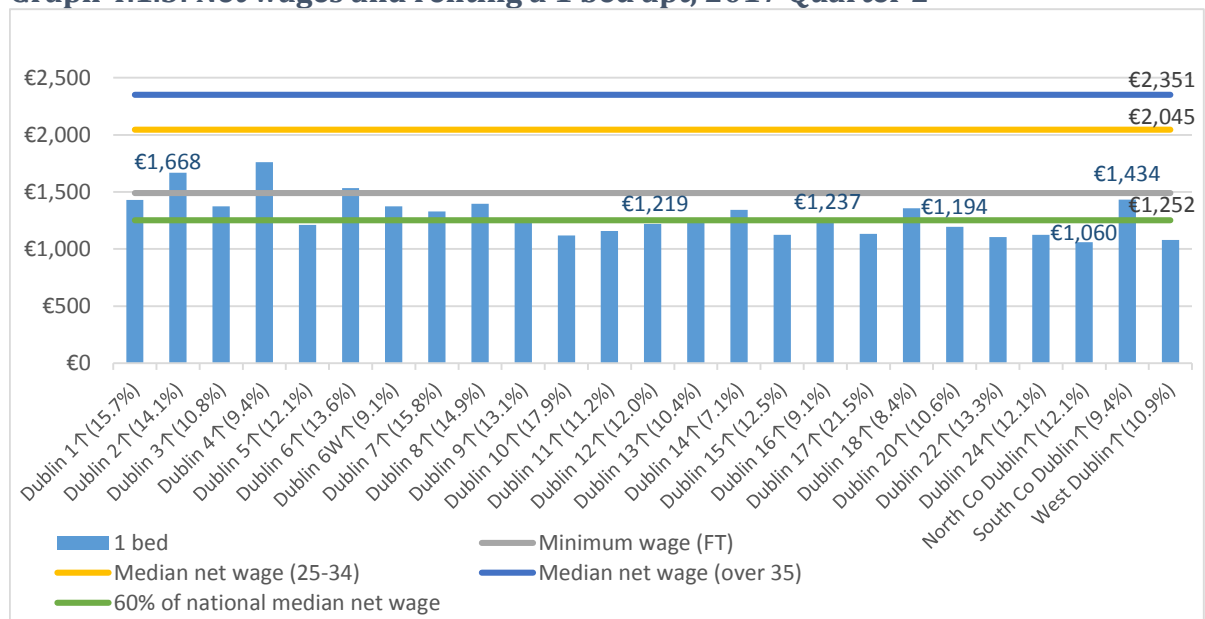


note: net wages refers to monthly after-tax pay of individual employees. Changes reported are for average rents in the year up to Q2 2017).

room in the North of the city and just over 30% in the South and in South Co. Dublin.

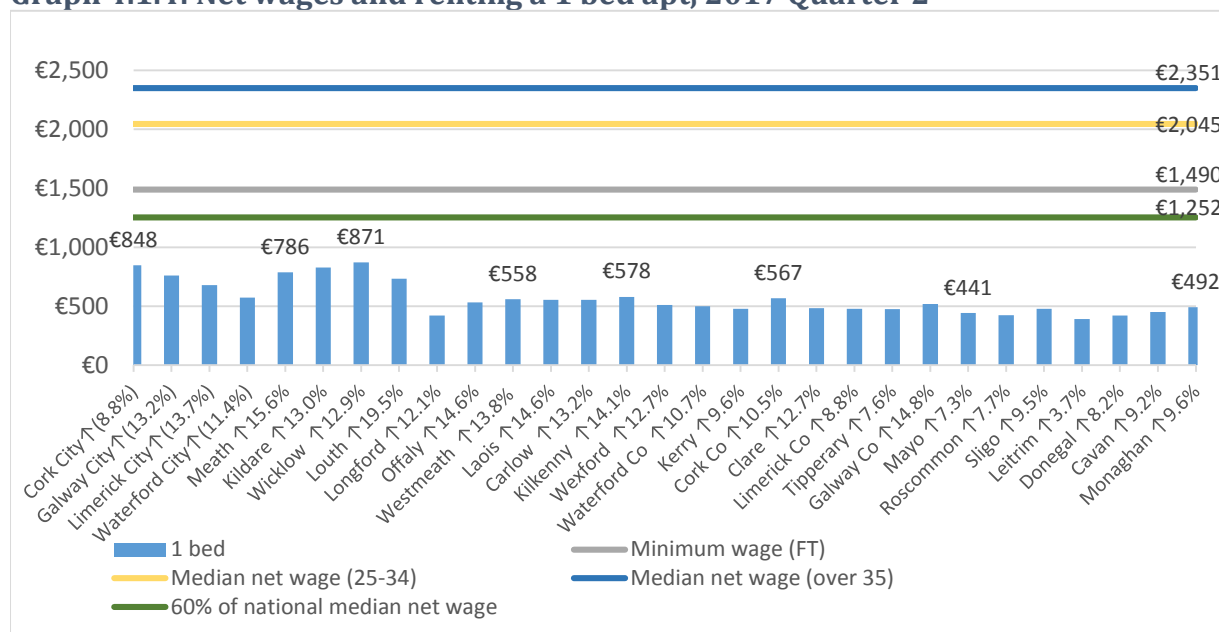
The cheapest price for an average one-bedroom apartment in the entire county of Dublin is just over €1,000 a month in North County Dublin. This area includes Donabate, Balbriggan and Portmarnock and rental prices have risen over 12.1% in the year up to quarter 2, 2017. At €1,060 the figure is just under 50% of the median Irish net take home pay and over 50% of the take home pay of the median 25-34 year old employee such that 50% of this age group will spend at least

Graph 4.1.3: Net wages and renting a 1 bed apt, 2017 Quarter 2



note: net wages refers to monthly after-tax pay of individual employees. Changes reported are for average rents in the year up to Q2 2017).

Graph 4.1.4: Net wages and renting a 1 bed apt, 2017 Quarter 2



note: net wages refers to monthly after-tax pay of individual employees. Changes reported are for average rents in the year up to Q2 2017).

this proportion of their net wages on rent should they wish or need to live in the area. The median Irish wage earner would have to spend 70% of their take home pay on a flat in Dublin 8, leaving about €150 a week to pay for food, utilities, clothes, transport, unexpected costs related to healthcare and saving for a deposit to buy a house. 50% of employees in Ireland are worse off than this individual. Similarly, a full-time minimum-wage worker would be left with just over €100 a week after paying rent in an average one-bed apartment in North Co. Dublin compared to closer to €130 just last year. The entirety of the same employee's wages would not cover rent in Dublin 2, 4 or 6.

The contrast with affordability for individual employees and one-bedroom apartments outside of Dublin illustrated in graph 4.1.4 is stark, though some would argue still excessive in places. The most expensive area outside of Dublin according to Daft.ie is Cork City where an average one-bed goes for around €850, leaving around €650 a month for other expenses for a full-time minimum wage employee and less than €1,250 for half of Irish employees. This constitutes about 39% of the take home pay of the median 25-34 year old employee and the 8.8% rise in rent for the average one-bed in the last year means that this employee is paying around €840 more this year than last. The cheapest area to rent is about half of that in Leitrim where an average one-bed is about €400 a month. Donegal, Cavan, Roscommon and Longford show comparable prices though all have also seen a reduction in after rent disposable wage income in the past year.

4.2. The affordability of renting for two wage earners.

Graph 4.2.1 illustrates affordability for two employees on minimum wage, two employees age 24-35 on the median wage for their age group and similarly for two employees aged 35-64. An average two-bedroom apartment in the cheapest area in Dublin (North County Dublin), at €1,219 is still 30% of the take home pay of two employees in the middle of the national wage distribution (€4,174), and €110 more a month than the same period in 2016. In places closer to the city, such

Graph 4.2.1: Net wages and renting a 2-bed, 2017 Quarter 2

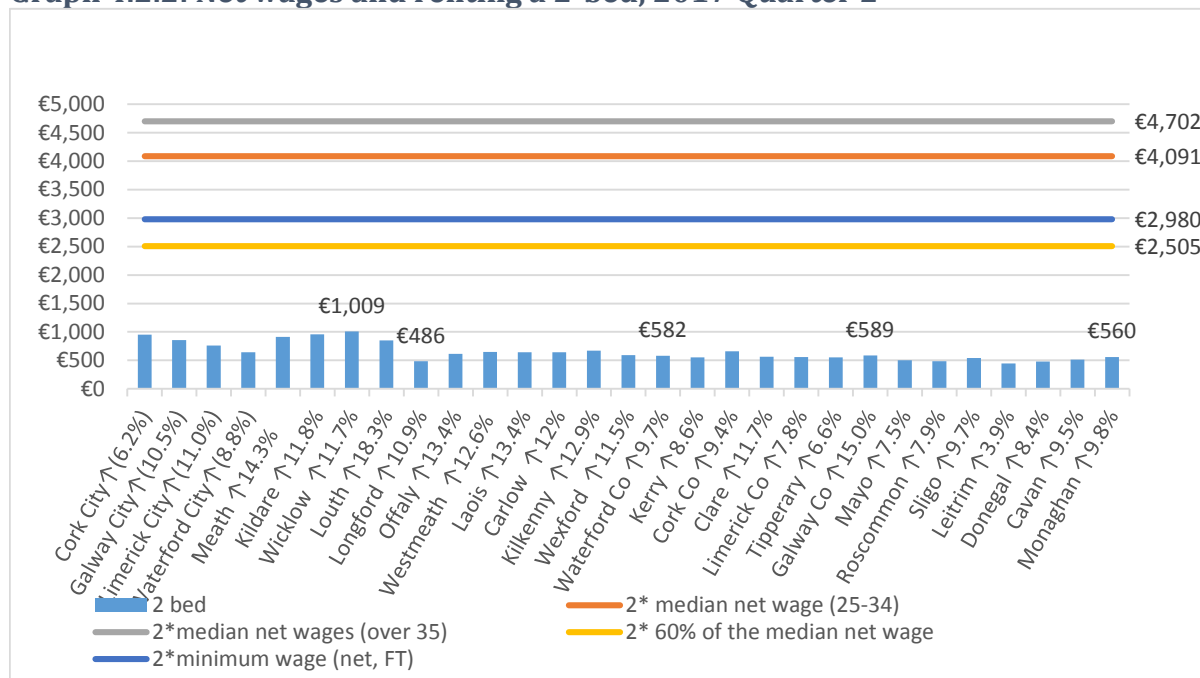


note: net wages refers to monthly after-tax pay of individual employees. Changes reported are for average rents in the year up to Q2 2017).

as Dublin 3, 7 or 8 rent prices per month are approximately €300 more expensive for a similar property leaving approximately €300 per week per person on the median wage and less than €200 for two full-time minimum wage employees for other necessities. An average 2-bed in Dublin 7 is about €185 a month more in 2017 Q2 (€1,529) than a year previously such that approximately ten hours' worth of wages of two-minimum wage employees each extra a month is eaten up by rent rises alone in that period. A majority of the areas in Dublin have seen double digit growth in rents in the year leading up to the second quarter of 2017.

Outside of Dublin rent for an average two-bedroom property only exceeds €1,000 a month in one area, Co Wicklow which of course is on the edge of Dublin with many commuter towns such as Bray and Greystones feeding the city. In Cork city the recorded prices are similar and thus two full-time minimum wage employees pay about 30% of their €2,980 take home pay on rent for a two-bed. For the median waged employee, the proportion is about 25% and much more manageable. Rents in the Border, Midlands and West regions for a similar property tend to be

Graph 4.2.2: Net wages and renting a 2-bed, 2017 Quarter 2



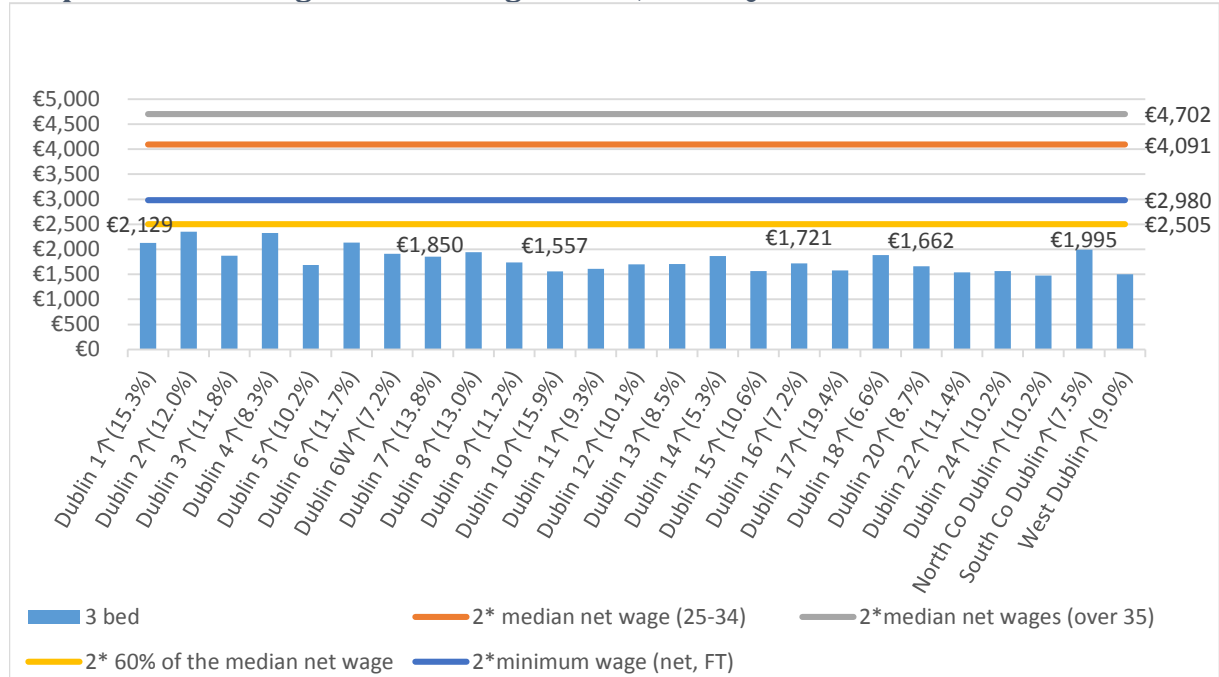
note: net wages refers to monthly after-tax pay of individual employees. Changes reported are for average rents in the year up to Q2 2017).

between €450 and €550 a month, though in only one area has rent not risen by more than 5% in the 12 months up to quarter 2, 2017. The rise in rents in Galway City, Limerick city, Meath, Kildare, Wicklow, Longford, Kilkenny, Carlow, Offaly, Westmeath, Laois, Wexford and Clare all exceeded 10% and the average two-bed in Louth has risen by almost one-fifth (18.3%) in the year up to spring 2017.

4.3 The affordability of renting a minimally adequate family home for two wage earners.

Graph 4.3.1 shows the proportion of wages going towards rent should two employees wish to rent the minimally adequate unit in which to raise a family, a three-bed semi-detached house. Again, for many, rents are unaffordable. For a majority of Irish workers, rents are at the very least, prohibitive. Rent in Dublin in the second quarter of 2017 for an average 3-bedroom semi-d ranges from €1,475 in North Co Dublin to €2,349 in Dublin 2 translating to about 35% and 56% of the take-home pay of two employees earning the median wage respectively. Rents are at the low end in Dublin 10, 15, 17, 22 and 24, all hovering in around €1,500 a month. As a proportion of the take home pay of two median wage earners between 25 and 34 this comes to about 37% and just over 50% of the take home pay of two full-time minimum wage earners. In all of these areas rents rose by over 10% in the period in question and thus each of the dual earner examples given would have at least €150 less a month to spend in the local shop, restaurant or pub or to put towards a deposit. This is a loss of about 10% of after tax wages for two full-time minimum wage workers in the

Graph 4.3.1: Net wages and renting a 3-bed, 2017 Quarter 2

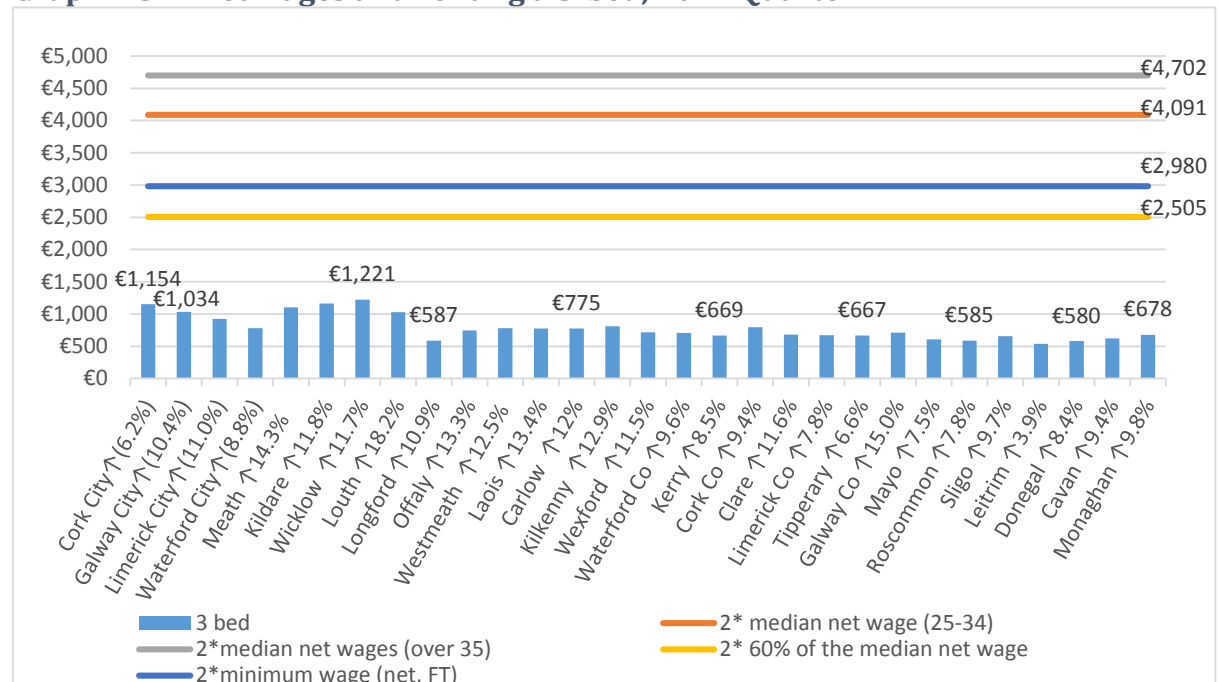


note: net wages refers to monthly after-tax pay of individual employees. Changes reported are for average rents in the year up to Q2 2017.

space of 12 months. Rises in Dublin in the twelve months in question range between 7.2% or €128 in Dublin 6W and 19.4% or €255 in Dublin 17. That's 14 or 27 hours work at the minimum wage, respectively.

Outside of Dublin the highest rents for a three-bed are still those with commuter towns feeding the capital; Wicklow (€1,221), Kildare (€1,162), Meath (€1,101) and Louth (€1,027) as well as

Graph 4.3.2: Net wages and renting a 3-bed, 2017 Quarter 2



note: net wages refers to monthly after-tax pay of individual employees. Changes reported are for average rents in the year up to Q2 2017.

Cork and Galway Cities; €1,154 and €1,034 respectively. Louth has seen an incredible almost €200 rise in rent for an average three-bed in just 12 months, with the other commuter counties and Galway City seeing rises of over €100. Leitrim and Longford show the lowest rent costs of any area at €537 and €585.

5. HOUSE PRICES TO GROSS SALARY; HOUSING MARKET ACCESSABILITY

5.1 Buying a one-bedroom apartment for a single employee.

In this section the ratio of gross earnings to house prices across the country are compared with a specific focus on first time buyers. As the Central Bank rule on loan-to-income ratio is based on gross income rather than net, the following analysis is based on employee income before the deduction of income taxes. The same groups of earners as discussed in section 2 are considered: individual employees earning the median wage, median wage earners of two age groups, 25-34 and 35-64 as well as full-time employees on the minimum wage. Household types are also matched with minimally adequate units as in section 2.

Affordability, as mentioned is a fuzzy concept and difficult to define or measure objectively with many complicating factors. Therefore, it is important to note some of the complicating factors that are **not addressed here**.

Central bank rules state that at a maximum an individual or couple can be given a mortgage of 3.5 times their gross salary and a 10% deposit is required. There are possible rebates of 5% of the value of the mortgage for first time buyers. A financial institution can make some exceptions to this rule up to 4.5 times salary but are capped (CB 2016). Of course, the approval of a mortgage is dependent on many other things, including employment contract, making it even more difficult for many young workers who are in a much more precarious labour market and much less likely to have an open-ended employment contract than older employees and much less likely than younger workers pre-crisis (Nugent, 2017). These factors are not incorporated here. Issues around the cost of mortgage repayments in Ireland, which were recently found to be among the most expensive in the EU are also not considered (Kelpie 2017). Similarly, keeping in mind rental costs and the trends in those costs addressed in section 2, the difficulty of saving for a 10% deposit whilst renting, especially in the capital is not estimated here other than to point out that renters in general, but particularly in Dublin are finding it increasingly more difficult to save for a deposit. The fact that a minimum deposit of 10% is required and thus mortgage applications would be for 10% less than the asking prices given (as long as there is no additional loan taken for work on the house or for interior decoration) is not incorporated in the ratios given either. (The issue is considered in some calculations to illustrate examples of the choices facing representative

households in today's market.) There is also ample evidence to suggest that with the lack of supply bidding wars are common amongst buyers and thus asking prices underestimate the actual sales price ('Dublin 12: Buyers must go well above 'asking' Jan 2017).

Table 5.1.1: Gross wages and buying a 1-bed, 2017 Quarter 3

Affordability of a one-bed apartment for a single adult, 2017 Q3	1 bed (average)	Minimum wage (FT)	Gross wages to house price ratio	Median gross wage (25-34)	Gross wages to house price ratio	Median gross wage (35+)	Gross wages to house price ratio
Dublin 1 (↑14.8%)	€207,000	€18,759	11.0	€31,284	6.6	€36,918	5.6
Dublin 2 (↑20.3%)	€286,000	€18,759	15.2	€31,284	9.1	€36,918	7.7
Dublin 3 (↑4.8%)	€227,000	€18,759	12.1	€31,284	7.3	€36,918	6.1
Dublin 4 (↑3.1%)	€305,000	€18,759	16.3	€31,284	9.7	€36,918	8.3
Dublin 5 (↑3.6%)	€170,000	€18,759	9.1	€31,284	5.4	€36,918	4.6
Dublin 6 (↑4.6%)	€285,000	€18,759	15.2	€31,284	9.1	€36,918	7.7
Dublin 6W (↑1.2%)	€230,000	€18,759	12.3	€31,284	7.4	€36,918	6.2
Dublin 7 (↑11.8%)	€186,000	€18,759	9.9	€31,284	5.9	€36,918	5.0
Dublin 8 (↑10.4%)	€189,000	€18,759	10.1	€31,284	6.0	€36,918	5.1
Dublin 9 (↑1.2%)	€173,000	€18,759	9.2	€31,284	5.5	€36,918	4.7
Dublin 10 (↑5.9%)	€112,000	€18,759	6.0	€31,284	3.6	€36,918	3.0
Dublin 11 (↑3.7%)	€135,000	€18,759	7.2	€31,284	4.3	€36,918	3.7
Dublin 12 (↑6.6%)	€155,000	€18,759	8.3	€31,284	5.0	€36,918	4.2
Dublin 13 (↑1.5%)	€175,000	€18,759	9.3	€31,284	5.6	€36,918	4.7
Dublin 14 (↑1.6%)	€220,000	€18,759	11.7	€31,284	7.0	€36,918	6.0
Dublin 15 (↑5.9%)	€140,000	€18,759	7.5	€31,284	4.5	€36,918	3.8
Dublin 16 (↑1.7%)	€192,000	€18,759	10.2	€31,284	6.1	€36,918	5.2
Dublin 17 (↑7.6%)	€123,000	€18,759	6.6	€31,284	3.9	€36,918	3.3
Dublin 18 (↓1.1%)	€211,000	€18,759	11.2	€31,284	6.7	€36,918	5.7
Dublin 20 (↑0.5%)	€157,000	€18,759	8.4	€31,284	5.0	€36,918	4.3
Dublin 22 (↑4.7%)	€115,000	€18,759	6.1	€31,284	3.7	€36,918	3.1
Dublin 24 (↑2.6%)	€121,000	€18,759	6.5	€31,284	3.9	€36,918	3.3
North Co Dublin (↑2.6%)	€139,000	€18,759	7.4	€31,284	4.4	€36,918	3.8
South Co Dublin (↓0.8%)	€248,000	€18,759	13.2	€31,284	7.9	€36,918	6.7
West Dublin (↑1.2%)	€134,000	€18,759	7.1	€31,284	4.3	€36,918	3.6
Cork City (↓0.7%)	€100,000	€18,759	5.3	€31,284	3.2	€36,918	2.7
Galway City (↑3.0%)	€97,000	€18,759	5.2	€31,284	3.1	€36,918	2.6
Limerick City (↑2.0%)	€71,000	€18,759	3.8	€31,284	2.3	€36,918	1.9
Waterford City (↑2.4%)	€61,000	€18,759	3.3	€31,284	1.9	€36,918	1.7

note: gross wages given are monthly for individual employees. Changes reported are for average asking prices in the year up to Q3 2017.

The tables use 3.5 times the gross wages of a selection of employees as a crude but indicative measure of affordability, focusing on the likeliness of successfully applying for a mortgage on current employee wages, whilst ignoring other sources of income. With all this considered it is important to remember that this 3.5 to 1 ratio is not a golden rule of affordability but merely an indicator of ease/difficulty for wage earners to access credit for a residential property.

Another clear divide between Dublin and the rest is evident from the data. Ratios of gross income to average asking prices above 3.5 are highlighted in red.

Table 5.1.2: Gross wages and buying a 1-bed, 2017 Quarter 3

Affordability of a one-bed apartment for a single adult, 2017 Q3	1 bed (average)	Minimum gross wage (FT)	Gross wages to house price ratio	Median gross wage (25-34)	Gross wages to house price ratio	Median gross wage (over 35)	Gross wages to house price ratio
Meath↑ (3.2%)	€89,000	€18,759	4.7	€31,284	2.8	€36,918	2.4
Kildare↑ (2.9%)	€96,000	€18,759	5.1	€31,284	3.1	€36,918	2.6
Wicklow↑ (4.4%)	€119,000	€18,759	6.3	€31,284	3.8	€36,918	3.2
Louth↑ (6.4%)	€81,000	€18,759	4.3	€31,284	2.6	€36,918	2.2
Longford↑ (17.3%)	€44,000	€18,759	2.3	€31,284	1.4	€36,918	1.2
Offaly↑ (2.5%)	€60,000	€18,759	3.2	€31,284	1.9	€36,918	1.6
Westmeath↑ (5.0%)	€66,000	€18,759	3.5	€31,284	2.1	€36,918	1.8
Laois↑ (0.1%)	€59,000	€18,759	3.1	€31,284	1.9	€36,918	1.6
Carlow↑ (6.5%)	€63,000	€18,759	3.4	€31,284	2.0	€36,918	1.7
Kilkenny↑ (1.2%)	€72,000	€18,759	3.8	€31,284	2.3	€36,918	2.0
Wexford↑ (5.8%)	€66,000	€18,759	3.5	€31,284	2.1	€36,918	1.8
Waterford Co↑ (9.7%)	€72,000	€18,759	3.8	€31,284	2.3	€36,918	2.0
Kerry↑ (8.7%)	€62,000	€18,759	3.3	€31,284	2.0	€36,918	1.7
Cork Co↑ (12.0%)	€75,000	€18,759	4.0	€31,284	2.4	€36,918	2.0
Clare↑ (10.6%)	€61,000	€18,759	3.3	€31,284	1.9	€36,918	1.7
Limerick Co↑ (11.9%)	€57,000	€18,759	3.0	€31,284	1.8	€36,918	1.5
Tipperary↑ (10.3%)	€58,000	€18,759	3.1	€31,284	1.9	€36,918	1.6
Galway Co↑ (7.5%)	€57,000	€18,759	3.0	€31,284	1.8	€36,918	1.5
Mayo↑ (3.7%)	€49,000	€18,759	2.6	€31,284	1.6	€36,918	1.3
Roscommon↑ (7.3%)	€42,000	€18,759	2.2	€31,284	1.3	€36,918	1.1
Sligo↑ (7.1%)	€49,000	€18,759	2.6	€31,284	1.6	€36,918	1.3
Leitrim↑ (2.8%)	€42,000	€18,759	2.2	€31,284	1.3	€36,918	1.1
Donegal↑ (0.5%)	€46,000	€18,759	2.5	€31,284	1.5	€36,918	1.2
Cavan↑ (3.3%)	€47,000	€18,759	2.5	€31,284	1.5	€36,918	1.3
Monaghan↑ (9.7%)	€55,000	€18,759	2.9	€31,284	1.8	€36,918	1.5

note: gross wages refers to monthly pay of individual employees. Changes reported are for average asking prices in the year up to Q2 2017).

The price of an average one-bedroom apartment is 6.6 times the gross salary of the median 25-34 year old employee and 5.6 times of the median worker over 35 in Dublin 1. The price of a one-bed in Dublin 2,4 and 6 is over 7.5 times the gross wage of the middle earner in the 35+ age bracket. A similar apartment in Dublin 1,2,3,4,6,6W,7,8,9,13,14,16,18 and South County Dublin are all at least 5.5 times the annual income of the median 25-34 year old employee. Using the 3.5 benchmark ratio we see that for at least 50% of Irish employees aged 25-34, who would eligible for a maximum mortgage of €109, 494, a one-bedroom apartment in most parts of Dublin is out of reach on their current wages. With an open-ended and secure contract and a 10% deposit it would be possible for this group to buy in Dublin 10, 17, 22 or 24 presently, but, with projections for continued strong price growth, this is less likely next year. Similarly, there is little chance for any full-time minimum wage worker, eligible for a maximum mortgage of €65,656 to buy a one-bed in Dublin, Cork, Galway or Limerick cities. Even for older earners, whose middle earner makes €36,918 a year and is therefore eligible for a maximum mortgage of €129, 213, other than Dublin 10, 17, 22 and 24 a mortgage in Dublin would be out of reach on their current wages. Again, if current trends continue, and most commentators expect them to (McQuinn 2017), even those areas will likely not be an option for the median worker over 35 in a years time.

The difference in the burden of housing cost outside of Dublin is stark. For the median earner over 35, the only area outside of the capital where the ratio of gross salary to the price of a one-bedroom apartment is above 3.5 is in Wicklow, the average of which is likely pushed up by commuter towns near the border to Dublin. The average one-bedroom apartment is currently at 2.7, 2.6 and 1.9 times the gross pay of a median worker over-35 in Cork, Galway and Limerick city respectively. The ratio is as low as 1.1 in places like Leitrim, Longford and Roscommon.

5.2 Buying a two-bedroom terraced house for two employees.

In this section, the gross wages of two employees aged 25-34 and 35 and over earning the median wage for their age groups is assessed relative to prices of average two-bedroom apartments across the country. Again, it is clear that most employees in Ireland right now will have trouble securing a mortgage for an average property of this type in the Dublin area. Prices outside of Dublin, though by no means universally affordable are much more manageable than in the capital.

Table 5.2.1: Gross wages and buying a 2-bed, 2017 Quarter 3

Affordability of a two bed apt/hse for a two adult household, 2017 Q3	2 bed mean	2* median gross wage (25-34)	gross wages to house price ratio	2*median gross wages (over 35)	gross wages to house price ratio
Dublin 1 (↑14.8%)	€308,000	€62,568	4.9	€73,836	4.2
Dublin 2 (↑25.5%)	€408,000	€62,568	6.5	€73,836	5.5
Dublin 3 (↑11.4%)	€335,000	€62,568	5.4	€73,836	4.5
Dublin 4 (↑4.7%)	€437,000	€62,568	7.0	€73,836	5.9
Dublin 5 (↑10.6%)	€248,000	€62,568	4.0	€73,836	3.4
Dublin 6 (↑11.6%)	€417,000	€62,568	6.7	€73,836	5.6
Dublin 6W (↑8.0%)	€336,000	€62,568	5.4	€73,836	4.6
Dublin 7 (↑19.3%)	€272,000	€62,568	4.3	€73,836	3.7
Dublin 8 (↑17.8%)	€277,000	€62,568	4.4	€73,836	3.8
Dublin 9 (↑8.0%)	€253,000	€62,568	4.0	€73,836	3.4
Dublin 10 (↑13.0%)	€164,000	€62,568	2.6	€73,836	2.2
Dublin 11 (↑10.7%)	€198,000	€62,568	3.2	€73,836	2.7
Dublin 12 (↑13.8%)	€226,000	€62,568	3.6	€73,836	3.1
Dublin 13 (↑8.3%)	€256,000	€62,568	4.1	€73,836	3.5
Dublin 14 (↑8.4%)	€322,000	€62,568	5.1	€73,836	4.4
Dublin 15 (↑13.0%)	€205,000	€62,568	3.3	€73,836	2.8
Dublin 16 (↑8.6%)	€280,000	€62,568	4.5	€73,836	3.8
Dublin 17 (↑14.8%)	€180,000	€62,568	2.9	€73,836	2.4
Dublin 18 (↑5.6%)	€309,000	€62,568	4.9	€73,836	4.2
Dublin 20 (↑7.3%)	€229,000	€62,568	3.7	€73,836	3.1
Dublin 22 (↑11.8%)	€168,000	€62,568	2.7	€73,836	2.3
Dublin 24 (↑9.5%)	€177,000	€62,568	2.8	€73,836	2.4
North Co Dublin (↑9.5%)	€203,000	€62,568	3.2	€73,836	2.7
South Co Dublin (↑5.8%)	€362,000	€62,568	5.8	€73,836	4.9
West Dublin(↑8.0%)	€197,000	€62,568	3.1	€73,836	2.7
Cork City↓ (↑8.2%)	€148,000	€62,568	2.4	€73,836	2.0
Galway City (↑12.3%)	€144,000	€62,568	2.3	€73,836	2.0
Limerick City (↑11.2%)	€105,000	€62,568	1.7	€73,836	1.4
Waterford City (↑11.6%)	€91,000	€62,568	1.5	€73,836	1.2

note: gross wages refers to annual salary of individual employees. Changes reported are for average asking prices in the year up to Q2 2017.

No two full-time minimum wage workers would qualify for a mortgage for a two-bedroom apartment in Dublin without an additional source of income. In Dublin 1, 2, 3, 4, 6, 6W, 7, 8, 14, 16, 18, and South County Dublin the average two-bedroom apartment exceeds 3.5 times the median wage for both younger and older workers with average prices in Dublin 5, 9, 12, 13 and 20 also more than 3.5 times the gross wage of the median 25-34 year old Irish employee. In Dublin 2, 4 and 6 the average asking price for a two-bed is over 6.5 times the gross annual salary of the same two workers and above 5 times in Dublin 3, 6W, 14 and in South Co. Dublin. Logically it follows that the gross wage to house price ratios are higher again for half of the wage earners in that age group that earn less than the median figure. In Dublin 1, the price rise in the past year alone is equal to almost three quarters of a year's gross salary of a median Irish 25-34 year old employee and two thirds of the median over 35 year old. In Dublin 2, in the same one-year period the rise in average asking price for a two-bedroom apartment is one and a half times the gross wage of the median younger worker.

Although as in Dublin almost every other county in Ireland has seen significant growth in asking prices this past year, the difference in wages to house price ratios between the wider Dublin area and the rest is again clear. In Longford, Offaly, Westmeath, Laois, Carlow, Wexford, Waterford, Kerry, Clare, Limerick, Tipperary, every county in the Border and West regions as well as in

Table 5.2.2: Gross wages and buying a 2-bed, 2017 Quarter 3

Affordability of a two bed apt/hse for a two earner household	2 bed mean	2* median gross wage (25-34)	Gross wages to house price ratio	2*median gross wages (over 35)	Gross wages to house price ratio
Meath↑ (11.2%)	€129,000	€62,568	2.1	€73,836	1.7
Kildare↑(11.0%)	€139,000	€62,568	2.2	€73,836	1.9
Wicklow↑(12.6%)	€171,000	€62,568	2.7	€73,836	2.3
Louth↑(14.7%)	€117,000	€62,568	1.9	€73,836	1.6
Longford↑(26.5%)	€64,000	€62,568	1.0	€73,836	0.9
Offaly↑(10.5%)	€87,000	€62,568	1.4	€73,836	1.2
Westmeath↑(13.2%)	€95,000	€62,568	1.5	€73,836	1.3
Laois↑(7.9%)	€86,000	€62,568	1.4	€73,836	1.2
Carlow↑(14.8%)	€91,000	€62,568	1.5	€73,836	1.2
Kilkenny↑(9.1%)	€104,000	€62,568	1.7	€73,836	1.4
Wexford↑(14.1%)	€95,000	€62,568	1.5	€73,836	1.3
Waterford Co↑(12.8%)	€94,000	€62,568	1.5	€73,836	1.3
Kerry↑(11.9%)	€82,000	€62,568	1.3	€73,836	1.1
Cork Co↑(15.3%)	€98,000	€62,568	1.6	€73,836	1.3
Clare↑(13.8%)	€79,000	€62,568	1.3	€73,836	1.1
Limerick Co↑(15.1%)	€75,000	€62,568	1.2	€73,836	1.0
Tipperary↑(13.5%)	€76,000	€62,568	1.2	€73,836	1.0
Galway Co↑(14.4%)	€76,000	€62,568	1.2	€73,836	1.0
Mayo↑(10.4%)	€66,000	€62,568	1.1	€73,836	0.9
Roscommon↑(14.2%)	€57,000	€62,568	0.9	€73,836	0.8
Sligo↑(14.0%)	€66,000	€62,568	1.1	€73,836	0.9
Leitrim↑(9.4%)	€57,000	€62,568	0.9	€73,836	0.8
Donegal↑(7.0%)	€62,000	€62,568	1.0	€73,836	0.8
Cavan↑(10.0%)	€63,000	€62,568	1.0	€73,836	0.9
Monaghan↑(16.8%)	€74,000	€62,568	1.2	€73,836	1.0

note: gross wages refers to annual salary of two employees. Changes reported are for average asking prices in the year up to Q3 2017.

Waterford City the asking price for an average two-bed apartment is 1.5 times or less the median wage of two 25-34 year olds and less again for the median older workers. Galway and Cork cities are less than 2.5 times having seen big hikes in 2016/2017 of 8 and 12 per cent respectively. In the Border and West counties the ratios for two older earners are between 0.8 and 1.

5.3 Buying a three-bedroom semi-detached house for two employees.

Table 5.3.1: Gross wages and buying a 3-bed, 2017 Quarter 3

Affordability of a three bed apt/hse for families, 2017 Q3		2* median gross wage (25-34)	gross wages to house price ratio	2*median gross wages (over 35)	gross wages to house price ratio
Dublin 1 (↑12.7%)	€415,000	€62,568	6.6	€73,836	5.6
Dublin 2 (↑16.7%)	€546,000	€62,568	8.7	€73,836	7.4
Dublin 3 (↑10.0%)	€454,000	€62,568	7.3	€73,836	6.1
Dublin 4 (↑5.6%)	€650,000	€62,568	10.4	€73,836	8.8
Dublin 5 (↑10.5%)	€361,000	€62,568	5.8	€73,836	4.9
Dublin 6 (↑11.6%)	€607,000	€62,568	9.7	€73,836	8.2
Dublin 6W (↑8.0%)	€489,000	€62,568	7.8	€73,836	6.6
Dublin 7 (↑19.3%)	€396,000	€62,568	6.3	€73,836	5.4
Dublin 8 (↑17.8%)	€403,000	€62,568	6.4	€73,836	5.5
Dublin 9 (↑8.0%)	€368,000	€62,568	5.9	€73,836	5.0
Dublin 10 (↑13.0%)	€239,000	€62,568	3.8	€73,836	3.2
Dublin 11 (↑10.7%)	€288,000	€62,568	4.6	€73,836	3.9
Dublin 12 (↑13.7%)	€329,000	€62,568	5.3	€73,836	4.5
Dublin 13 (↑8.3%)	€372,000	€62,568	5.9	€73,836	5.0
Dublin 14 (↑8.4%)	€469,000	€62,568	7.5	€73,836	6.4
Dublin 15 (↑13.0%)	€298,000	€62,568	4.8	€73,836	4.0
Dublin 16 (↑8.5%)	€408,000	€62,568	6.5	€73,836	5.5
Dublin 17 (↑14.8%)	€262,000	€62,568	4.2	€73,836	3.5
Dublin 18 (↑5.5%)	€449,000	€62,568	7.2	€73,836	6.1
Dublin 20 (↑7.3%)	€333,000	€62,568	5.3	€73,836	4.5
Dublin 22 (↑11.8%)	€244,000	€62,568	3.9	€73,836	3.3
Dublin 24 (↑9.5%)	€258,000	€62,568	4.1	€73,836	3.5
North Co Dublin (↑9.4%)	€296,000	€62,568	4.7	€73,836	4.0
South Co Dublin (↑5.8%)	€527,000	€62,568	8.4	€73,836	7.1
West Dublin(↑8.0%)	€286,000	€62,568	4.6	€73,836	3.9
Cork City↓ (↑4.6%)	€229,000	€62,568	3.7	€73,836	3.1
Galway City (↑8.6%)	€222,000	€62,568	3.5	€73,836	3.0
Limerick City (↑7.5%)	€162,000	€62,568	2.6	€73,836	2.2
Waterford City (↑7.9%)	€140,000	€62,568	2.2	€73,836	1.9

note: net wages refers to annual salary of two employees. Changes reported are for average rents in the year up to Q3 2017.

This section assesses the affordability of three-bedrom semi-detached houses across the country for two employees. If a couple wishes to raise a family, a dwelling with three bedrooms is considered here to be a minimally adequate unit (albeit a contestable one). The results of house prices to wages in Dublin show that successfully applying for a mortgage to buy a three-bedrom semi-detached house in Dublin is out of reach for two employees earning the median Irish wage

with just three areas in Dublin showing a gross wage to house price ratio of 3.5 or under for the median 35-64 year old employee; Dublin 10, 22 and 24.

Table 5.3.2: Gross wages and buying a 3-bed, 2017 Quarter 3

Affordability of a three bed apt/hse for families		2* median gross wage (25-34)	gross wages to house price ratio	2*median gross wages (over 35)	gross wages to house price ratio
Meath↑ (10.8%)	€184,000	€62,568	2.9	€73,836	2.5
Kildare↑(10.6%)	€198,000	€62,568	3.2	€73,836	2.7
Wicklow↑(12.1%)	€245,000	€62,568	3.9	€73,836	3.3
Louth↑(14.2%)	€167,000	€62,568	2.7	€73,836	2.3
Longford↑(26.0%)	€91,000	€62,568	1.5	€73,836	1.2
Offaly↑(10.1%)	€125,000	€62,568	2.0	€73,836	1.7
Westmeath↑(12.8%)	€136,000	€62,568	2.2	€73,836	1.8
Laois↑(7.5%)	€122,000	€62,568	1.9	€73,836	1.7
Carlow↑(14.4%)	€130,000	€62,568	2.1	€73,836	1.8
Kilkenny↑(8.7%)	€149,000	€62,568	2.4	€73,836	2.0
Wexford↑(13.6%)	€135,000	€62,568	2.2	€73,836	1.8
Waterford Co↑(12.2%)	€140,000	€62,568	2.2	€73,836	1.9
Kerry↑(11.2%)	€122,000	€62,568	1.9	€73,836	1.7
Cork Co↑(14.6%)	€146,000	€62,568	2.3	€73,836	2.0
Clare↑(13.2%)	€118,000	€62,568	1.9	€73,836	1.6
Limerick Co↑(14.4%)	€111,000	€62,568	1.8	€73,836	1.5
Tipperary↑(12.8%)	€113,000	€62,568	1.8	€73,836	1.5
Galway Co↑(13.9%)	€112,000	€62,568	1.8	€73,836	1.5
Mayo↑(9.8%)	€97,000	€62,568	1.6	€73,836	1.3
Roscommon↑(13.6%)	€84,000	€62,568	1.3	€73,836	1.1
Sligo↑(13.4%)	€96,000	€62,568	1.5	€73,836	1.3
Leitrim↑(8.9%)	€83,000	€62,568	1.3	€73,836	1.1
Donegal↑(6.4%)	€91,000	€62,568	1.5	€73,836	1.2
Cavan↑(9.4%)	€92,000	€62,568	1.5	€73,836	1.2
Monaghan↑(16.2%)	€108,000	€62,568	1.7	€73,836	1.5

note: gross wages refer to annual salary of two employees. Changes reported are for average asking prices in the year up to Q3 2017.

The median gross wage in 2017 is approximately €34,000 with three quarters of employees earning less than €50,460. Two employees earning the median wage would be eligible for a loan of up to €238,000 and assuming that this couple is constrained in the amount that they can save whilst paying rent in Dublin they opt for the minimum deposit of 10% or €23,800. This leaves this couple with two salaries at the median of the distribution with a maximum house price of €261,800 and priced out of Dublin 1, 2, 3, 4, 5, 6, 6W, 7, 8, 9, 11, 12, 13, 14, 15, 16, 17, 18, 20, 21, North Co. Dublin, South Co. Dublin and West Dublin.

In 2017, 75% of Irish employees have a gross salary of less than approximately €50,460 a year. Two earners at the 75th percentile thus earn €100,920 such that the ratio of gross wages to the price of an average three-bedroom house is still over 3.5 in Dublin 1, 2, 3, 4, 5, 6, 6W, 7, 8, 9, 13, 14, 16, 18 and in South Co. Dublin. If these two employees were renting and also constrained in how much they could save and paid the minimum 10% deposit they would not be eligible for a

mortgage for an average three-bedroom semi-detached house in Dublin 1, 2, 3, 4, 6, 6W, 8, 14, 16, 18 and South Co Dublin. With a slightly higher deposit, this couple could meet the minimum criteria to buy in Dublin 7.

6. CONCLUSION

The use of the median earner's wages gives an idea of the scale of the current problem in the Irish housing market. Half of all employees earn less than the median and half earn more such that if the median earner is having difficulty paying for housing, half the wage earning population will be having more difficulty without other streams of income.

Given the widely recognized affordability ratio of 30% of disposable income, the data shows that for a majority of workers renting a minimally adequate unit, as set out in the paper, in most areas in Dublin is 'unaffordable' and getting more 'unaffordable'. This is especially the case for single earners renting a one-bedroom apartment and two earners renting anything with three bedrooms and above. The data also show that most individual wage earners in Ireland would not meet the criteria to successfully apply for a mortgage for a one-bed apartment anywhere in Dublin and similarly, that two employees in the middle of the wage distribution are priced out of the market for three-bedroom semi-d's in Dublin given central bank rules on lending.

The figures are in sharp contrast to housing cost burdens in most areas outside of the wider Dublin area, though prices in Cork and Galway Cities are not far behind. The paper shows the inadequacy of simple national average wages to national average house price ratios as an indicator for affordability in the Irish market and that geographical heterogeneity, in particular as it relates to prices in Dublin, should be a major cause for concern for policymakers.

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