



Research for new economic policies

NERI Working Paper Series

Housing Affordability for Ireland's Young People in the Context of the Cost of Living: A Long-Term Assessment

Dara Turnbull

October 2018

NERI WP 2018/No 56

For more information on the NERI working paper series see: www.NERInstitute.net

PLEASE NOTE: NERI working papers represent un-refereed work-in-progress and the author(s) are solely responsible for the content and any views expressed therein. Comments on these papers are invited and should be sent to the author(s) by e-mail.

Nevin Economic Research Institute (NERI)

31/32 Parnell Square
Dublin 1
Phone + 353 1 889 7722

45-47 Donegall Street
Belfast BT1 2FG
Phone + 44 28 902 46214

Email: info@NERInstitute.net
Web: www.NERInstitute.net

HOUSING AFFORDABILITY FOR IRELAND'S YOUNG PEOPLE IN THE CONTEXT OF THE COST OF LIVING: A LONG-TERM ASSESSMENT

Dara Turnbull¹

Keywords: Housing, Affordability, Rent, Youth Affairs, Wages, Taxation, Cost of Living

JEL Codes : E21, E24, H20, J12, J31, N34, R21, R31, R38

ABSTRACT

A lack of affordable housing, both rented and mortgaged, remains a significant source of concern for the stability and continued prosperity of the Irish economy. While activity has recovered strongly following the economic downturn, housing supply has not. However, there are other factors at play in rising housing costs, such as the increased 'financialisation' of residential property.

Taking these factors into account, this paper assesses access to the housing market for Ireland's young people over the past 30 years in the wider context of the overall cost of living. The results suggest that accessing housing is significantly more of a financial burden for Ireland's young people today than was the case for their parents.

¹ Dara Turnbull is an independent Irish economist based in Paris, France. The author wishes to thank Lisa Wilson of the NERI and Michelle Norris of University College Dublin for their helpful feedback and comments, as well as Morgan O'Donnell from the CSO for the provision of ad hoc income calculations. Any errors are entirely the author's responsibility. Further observations and comments on this working paper are welcome. These can be directed to the author: daraturnbull@hotmail.com

HOUSING AFFORDABILITY FOR IRELAND'S YOUNG PEOPLE IN THE CONTEXT OF THE COST OF LIVING: A LONG-TERM ASSESSMENT

1. Introduction

This paper provides a detailed update on the earlier work of Turnbull (2017), which took an in-depth look at the issue of housing affordability for a number of different income groups in Ireland over the last 30 years.

In the interest of brevity, as well as not wanting to simply re-articulate the findings of the aforementioned research, this paper will not delve into the underlying socio-economic drivers and implications of housing affordability in as much detail. It is the aim, however, to provide new ways of assessing the issue that were not previously touched upon, as well as providing updated estimates of some findings, taking into account newly released data sources and research on the topic.

In terms of moving along the discourse on housing affordability, this paper will attempt to assess the ease with which a typical young couple, both aged 25-34, can access private housing in Ireland (both rented and mortgaged) whilst taking into account the wider context of the overall cost of living. The data from the most recent six waves of the CSO's Household Budget Survey (HBS) will be used for this purpose. This covers the period 1987-2016 at intervals of approximately five years.

The paper will proceed as follows: Section 2 will review how the spending habits of young people in Ireland have changed in recent decades. Section 3 will take a look at young peoples' changing relationship with housing and their tenure, as well as addressing the growing issue of the so-called 'financialisation' of housing. Section 4 will outline changes in private rent and residential property prices. Section 5 will look at changes in the cost of living and how this impacts on access to housing. Section 6 will analyse changes in underlying housing market dynamics such as mortgage rates and earnings. Section 7 will provide various measures of housing and rental affordability. Section 8 will sum up the arguments and provide some conclusions.

2. Spending of Young Irish Households

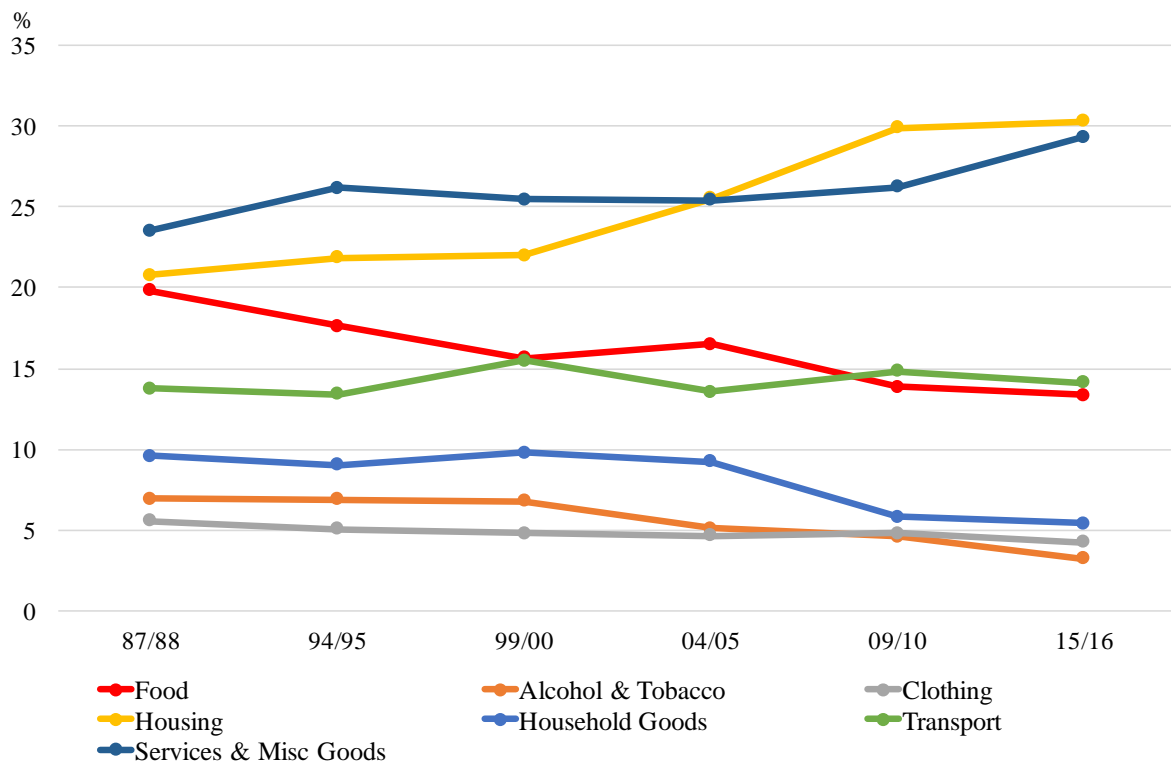
The various waves of the HBS aim to "determine in detail the pattern of household expenditure in order to update the weighting basis of the Consumer Price Index" (CSO, 2018). This is done by recording the income and expenditure of a representative sample of Irish households roughly every five years. The most recent wave of the HBS was carried out in 2015/16 (see CSO, 2017).

Using the underlying anonymised data from the HBS we can assess how the spending patterns of young Irish households have changed over the past 30 years.²

For the purposes of this research, spending, as assessed by the HBS, will be broken down into seven main categories, namely:

1. Food
2. Clothing
3. Household Goods (Both durable and non-durable)
4. Alcohol & Tobacco
5. Housing (includes cost of provision, upkeep and utilities)
6. Transport
7. Services & Miscellaneous Goods

Figure 1: *Equivalised Expenditure of Young Irish Households*³



Source: Author's calculations, based on HBS (Various Years)

Notes: Based on mean figures

² A young household is defined for the purposes of this section as a household in which the nominated 'Head of the Household' is aged 25-34. This covers all housing tenures.

³ This uses the national equivalisation scale, with the first adult being attributed a value of 1, each subsequent adult 0.66 and each child under the age of 16 0.33. For example, a house with two adults and two children would have an equivalisation coefficient of 2.32.

Analysis of the HBS data shows that the primary change in the spending of young households in the past three decades has been in the area of housing. This represents the cost of the occupied housing unit (i.e. rent paid to a landlord or mortgage repayments), as well as housing insurance, basic upkeep and utilities like electricity and heating.

A typical young household would have laid out 20.8 per cent of its annual equivalised expenditure on housing in the 1987/88 wave of the HBS. This number saw little change until the turn of the millennium. Housing accounted for 22 per cent of equivalised expenditure in 1999/2000, jumping by 8.3 percentage points to 30.3 per cent in the 2015/16 HBS wave.

Other notable changes in spending include 'food', on which expenditure declined from 19.8 per cent in 1987/88 to 13.3 per cent in 2015/16 and 'alcohol & tobacco', which saw a fall from 6.9 per cent to 3.3 per cent. Services and Miscellaneous Goods expenditure rose from 25.4 per cent in 2004/05 to 29.3 per cent in 2015/16. This diverse expenditure category primarily consists of spending on medical care, subscriptions (e.g. TV, internet and mobile phone), childcare, holidays, literature and entertainment (e.g. cinema, sporting and musical events).

The figures should not be interpreted as suggesting that young people today are sacrificing eating and socialising in order to put a roof over their heads, even if that may be true in some cases.⁴ What the data show is that meeting basic housing requirements is a relatively greater financial spend for today's youth than was the case for their parents' generation.

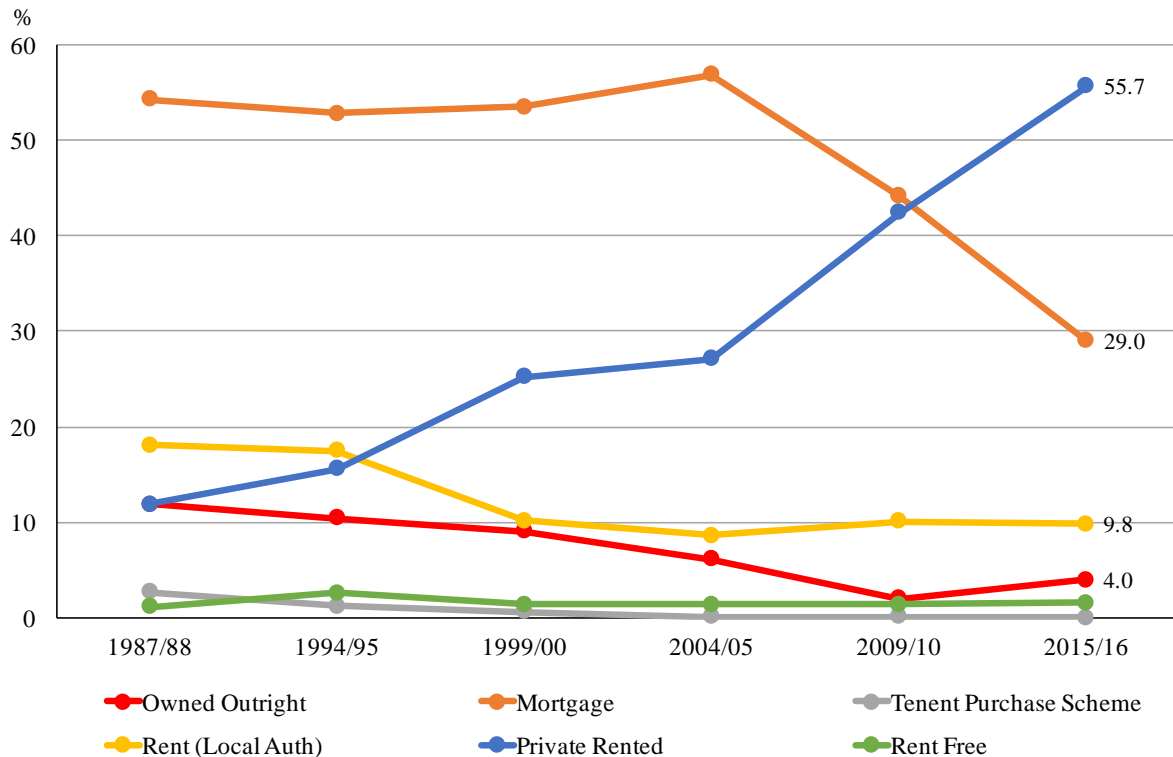
Similar trends in the spending patterns of young people are visible in other countries. For example, Hirsch *et al.* (2017) provides a long-term analysis of the ex-housing spending of young people in the UK, while Belfield *et al.* (2015) provides evidence of rising real equivalised spending on housing in the country, particularly in the private rented sector. The former research paper shows a decrease in the percentage of spending going on food and alcohol & tobacco. The paper concludes that "[t]he lack of opportunities to settle down in stable housing is affecting the perspectives of millennials, pushing them in particular towards short-termism...Linked to this, millennials are more interested in spending money on "experiences" rather than "stuff"" (Hirsch *et al.*, 2017, p. 53). However, the implicit view of the paper that "stuff" is in some way a 'better' use of income than "experiences" is of course a subjective one.

⁴ Eurostat figures show that 18.2 per cent of people aged 25-34 in Ireland say that they are financially unable to "regularly participate in a leisure activity", compared to a Eurozone average of 13.2 per cent [Table ilc_mdcs11a]. Meanwhile, 13.5 per cent state that they cannot afford to "get-together with friends or family (relatives) for a drink or meal at least once a month" compared to a Eurozone average of just 6.9 per cent [Table ilc_mdcs10a].

3. Changes in Young Peoples' Relationship with Housing

3.1 Tenure of Young Irish Households

Figure 2: Tenure of Young Irish Households



Source: Author's calculations, based on HBS (Various Years)

What is important to note is that with increased numbers of young people renting from private landlords due to issues around affordability and lack of supply, as well as the changing lifecycles and expectations of younger people today (see Turnbull, 2017 for a more in-depth discussion of these issues), a larger percentage of their money is now being used to provide 'temporary' shelter, as opposed to delivering a long-term tangible asset, as would be the case if they were paying a mortgage.

It is worth mentioning that while there are of course alternatives to the owner-occupier model that Ireland has favoured, the current structure of protections for tenants (i.e. security of tenure, effective rent controls) as well as the absence of a meaningful state house building operation, makes many alternative systems infeasible in the Irish context.⁵ Thus, unless a radical overhaul of the Irish housing model is forthcoming, the focus needs to be on making sure that we have an

⁵ Eurostat figures [Table *ilc_lvho02*] show that 69.8 per cent of the Irish population were owner-occupiers in 2016. By contrast, Switzerland, a country where there is an over 70-year history of strong rent controls and in which tenants enjoy protection from arbitrary eviction, had just 42.5 per cent owner-occupiers

owner-occupier system that functions; meaning housing is relatively affordable and that there is adequate supply to meet demand.

The HBS data indicate that 55.7 per cent of young households were in the private rented sector in 2015/16. This compares to just 11.9 per cent of young households in 1987/88. Analysis of Irish Census data shows that a smaller 50.8 per cent of young Irish households were in private rented accommodation in April 2016, up from 15.3 per cent in April 1991 (Turnbull, 2017). It is also important to note that those living in affordable local authority housing in Ireland has broadly halved, as the State has taken a much less interventionist role in construction since the late 1980s (see *Norris, 2016* for discussion of this).

This is similar to the trend in the UK, where 61 per cent of 25-34 year olds owned their own home in 1996 (combined owned outright and mortgaged), falling to 38 per cent in 2016. However, a more active culture of social housing provision in the UK than Ireland means that a smaller 42 per cent were living in private rented accommodation (Brown *et al.*, 2017).

Analysis carried out by the CSO (2016) has found that:

“[the] age at which home ownership became the majority tenure category [in Ireland] was 35 years in 2016...In comparison to previous censuses dating back to 1991, the ages which marked the changeover between renting and home ownership were 32 years (2011), 28 years (2006), 27 years (2002) and 26 years (1991).

The point at which two-thirds of householders owned their own homes (with or without a loan) occurred at age 41 in 2016, while in 1991 the equivalent age for that particular milestone occurred at 28 years of age”.

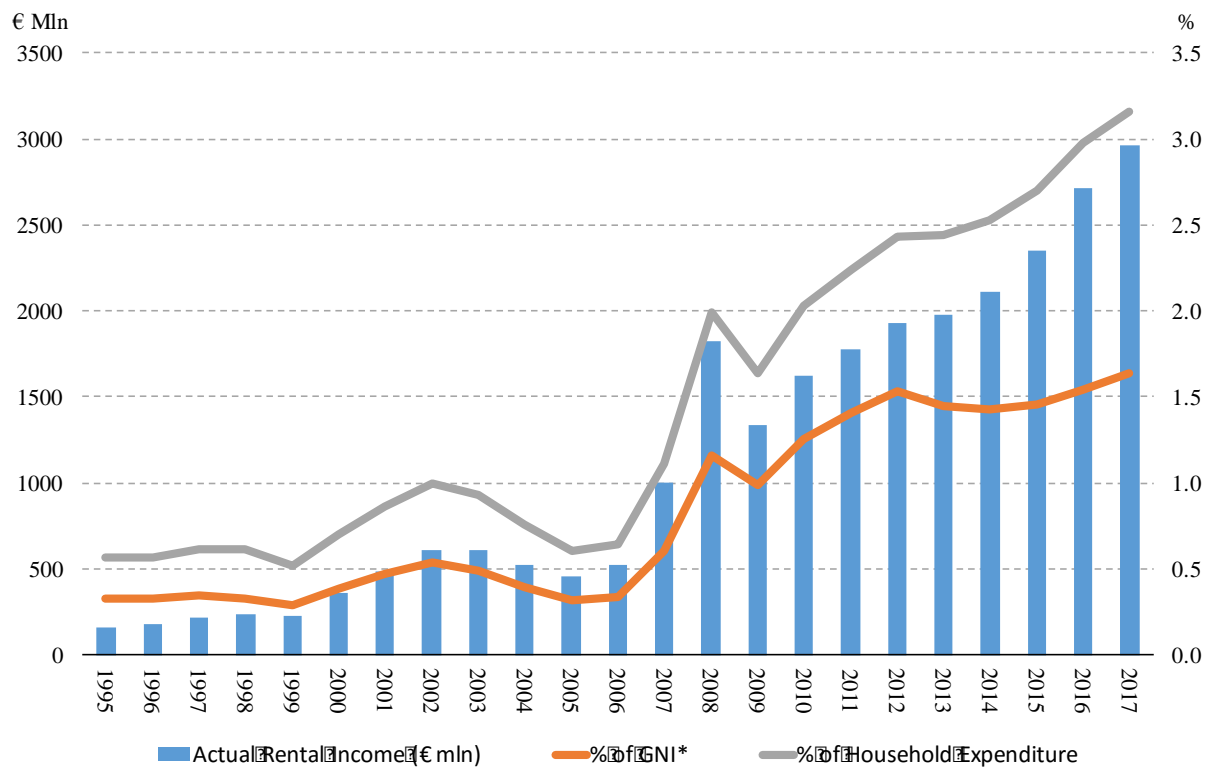
While affordability is an issue in this regard, and this will be discussed in greater detail later on, a lack of supply is also a significant factor.⁶ However, the dearth of available housing units for sale goes further than a simple lack of building activity, even though recent figures released by the CSO (2018b) show this has been weaker in recent years than had been originally thought.

⁶ Analysis of changes in the Irish residential property market from 1978-2012 has shown that a 10 per cent increase in the value of the housing stock was associated with an 8 per cent decline in real house prices (Lyons, 2017).

3.2 The Increasing Role of the Rental Market and Housing ‘Financialisation’

Rent of private dwellings has become a more significant sector of the economy in Ireland since the mid-2000s. Indeed, an estimated €3bn was paid out to landlords in rent in 2017. This equated to 3.2 per cent of total national household spending. To put that in context, the figures in 1995 were a paltry €163m and just 0.6 per cent of expenditure.

Figure 3: Actual Rental Income



Source: Author’s calculations, based on CSO ‘National Income and Expenditure Annual Results’ (Various Years)

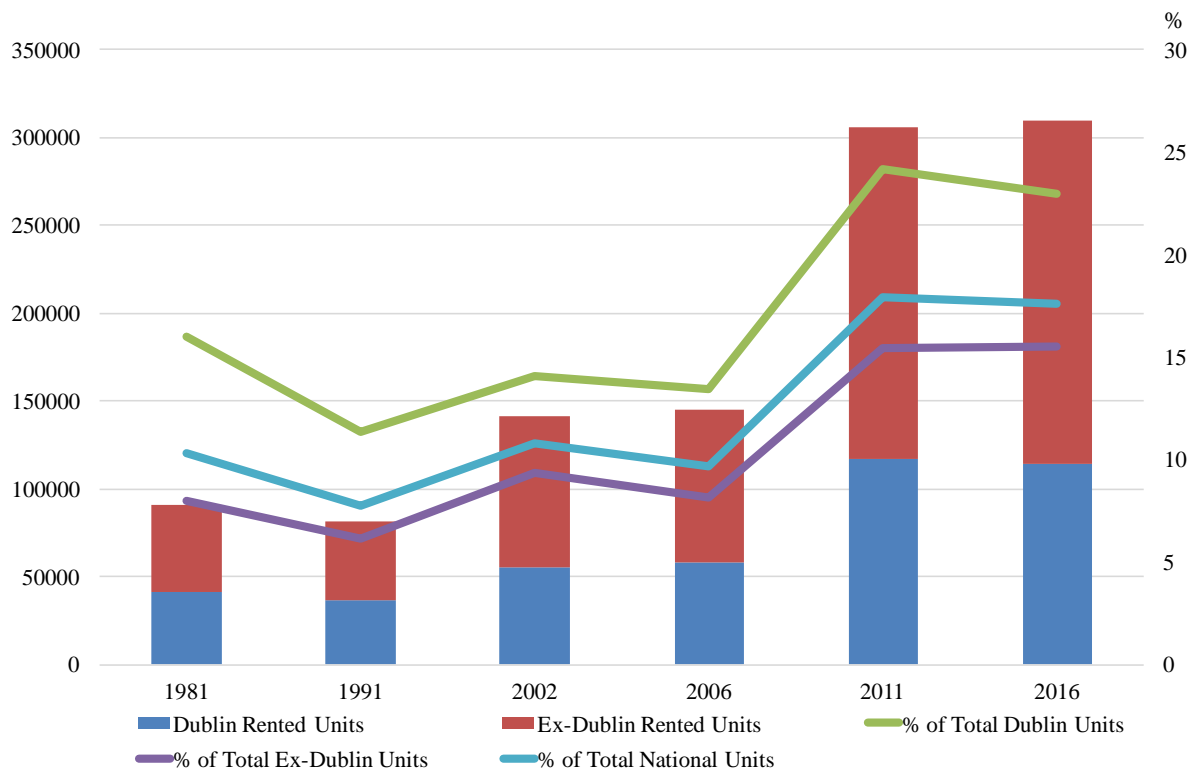
Note: The data represent ‘actual’ rents paid to landlords, as opposed to ‘imputed’ rents which represent the estimated value to a property owner of having that property. The ‘actual’ rent figures presented here are based off of CSO estimates. The CSO is currently working with the Residential Tenancies Board (RTB) to firm up on these estimates.

More and more housing units are being rented out to private tenants, with the total number of tenancies registered with the RTB rising to 339,447 in 2017, up from 206,054 in 2008, a 64.7 per cent increase (RTB, 2017). RTB figures also suggest that the stock of housing which is being rented out has become concentrated into fewer hands, with the actual number of registered landlords falling from a recent peak of 212,306 in 2012 to 174,001 in 2017, an 18.0 per cent decline. This supports the perception that private ‘landlord’ enterprises, such as real estate investment trusts (REITs) are becoming more active in the market.

Indeed, figures from the CSO (2018c) show that there has been a steady rise in the proportion of housing units being purchased by 'non-household' buyers in recent years. This is particularly prevalent in terms of apartments, with 56.6 per cent of new apartments sold in Ireland in 2017 being bought by the non-household sector. Overall, 26.0 per cent of the 10,283 new properties purchased in Ireland in 2017 were purchased by this sector. This is compared to just 6.6 per cent as recently as 2010.

New properties are particularly interesting for private investors as, having never been rented out before, they can be rented for as high a price as the market can tolerate, unlike rental units already in the market, which may be subject to the Rent Pressure Zones provisions of the '*Planning and Development (Housing) and Residential Tenancies Act (2016)*', which have the aim of keeping rent increases to a maximum of 4 per cent per year in certain, predominantly urban, areas. Thus, a common-sense proposal would be for the legislation to be amended to dictate that rents on properties entering the private rental market for the first time must be in line with the prices already being charged for similar properties in the same area.

Figure 4: Private Rented Accommodation in Occupied Housing Stock



Source: Author's calculations, based on CSO Census of Population (Various Years)

According to Census 2016, 17.6 per cent of the occupied national housing stock was being rented out by private landlords. This equated to 23.0 per cent of the stock in Dublin and 15.5 per cent of

the stock on an ex-Dublin basis. This compares to just 7.7 per cent of the national occupied stock in 1991 (11.4 per cent in Dublin and 6.1 per cent ex-Dublin).

Table 1: Equivalised Cost of Housing as a Percentage of Expenditure

	All Young Households	Owner-Occupier Young Households	Private Renter Young Households
1987/88	20.8	22.3	17.8
1994/95	21.9	22.4	23.6
1999/00	22.0	21.8	23.6
2004/05	25.5	25.8	26.1
2009/10	29.9	30.4	31.1
2015/16	30.3	27.8	32.8

Source: Author's calculations based on HBS (Various Years)

Not only does renting not deliver a tangible asset, as we shall see, it has also become approximately as expensive to rent a property as to repay a mortgage on one. This means that while owning is the prudent thing to do, if possible, the lack of supply and the increased competition in the housing market, as 'financialisation' or 'marketisation' (see *Ahern, 2017* and *Norris, 2016* for discussion of this) becomes more pronounced, has made this impossible for many young people.

Head of Research for Savills Ireland, John McCarthy, has succinctly described the situation:

"people have had to stay out of the home ownership market due to difficulties in getting a mortgage, meaning pressure on the rental market has intensified. This in turn pushes rental yields up, which attracts investors who come in and compete with each other and residual owner-occupiers...It's also driving inequality and access to the property market. How can a couple, or an individual, on an average salary hope to compete with a cash-rich investor when they're constrained by lending limits and ever rising prices?" (Reddan, 2017).

Of course, the 'financialisation' of housing and its links to changing tenure patterns are not unique to Ireland. This is part of a wider trend across developed countries. For example, in the period 2007-2013, there was an average annual 0.63 percentage point decline in the number of people aged 18-34 in the EU who classed themselves as homeowners. This corresponded to a 0.53 percentage point annual increase in those renting and a 0.10 percentage point rise in those living with their parents (Arundel and Doling, 2017).

The issue of deep pocketed enterprises taking a more active role in global housing markets has even attracted the attention of the United Nations. The UN's Special Rapporteur on Adequate Housing has stated that:

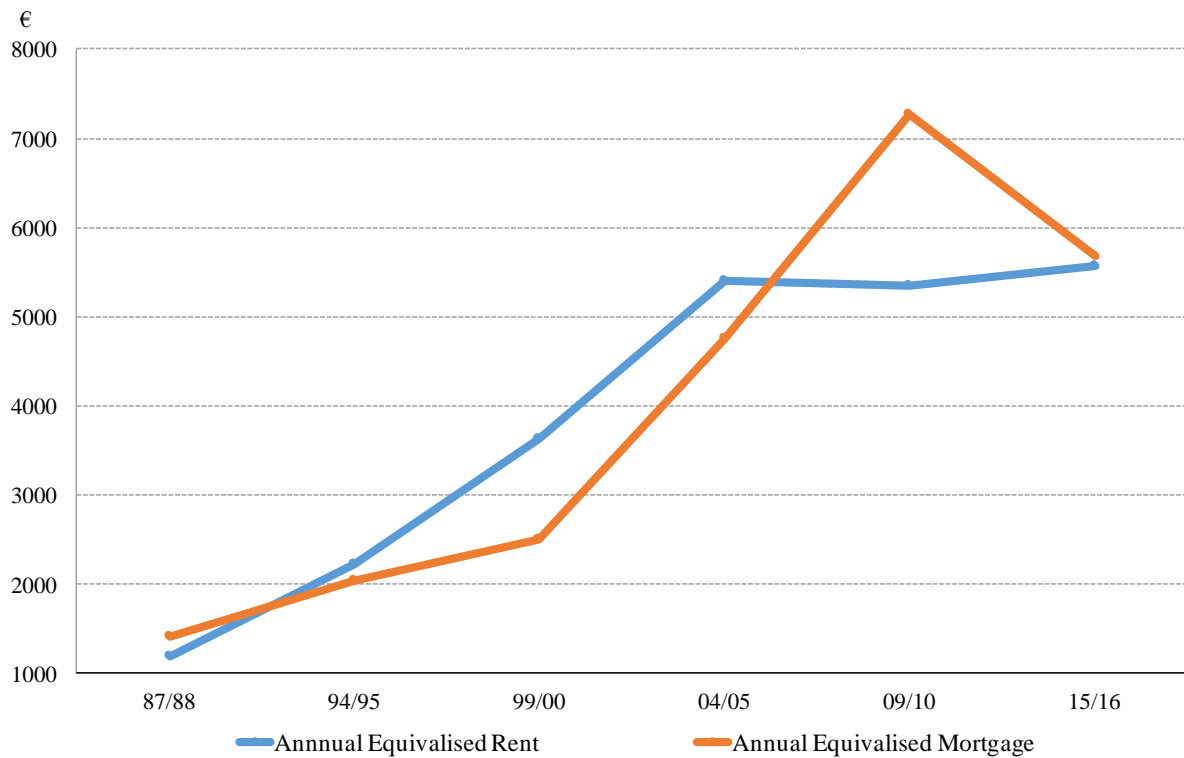
“Housing and commercial real estate have become the “commodity of choice” for corporate finance and the pace at which financial corporations and funds are taking over housing and real estate in many cities is staggering...In the course of one year, from mid-2013 to mid-2014, corporate buying of larger properties in the top 100 recipient global cities rose from US\$ 600 billion to US\$ 1 trillion. Housing is at the centre of an historic structural transformation in global investment and the economies of the industrialized world with profound consequences for those in need of adequate housing...Constructing human rights accountability within a complex financial system to which Governments are themselves accountable, involving trillions of dollars in assets, may seem a daunting task. However, the global community cannot afford to be covered by the complexity of financialization” (UN Special Rapporteur on Adequate Housing, 2017).

While financialisation of housing in Ireland has only really come to the fore in the last few years and thus, stocks of properties held by industrial scale landlords are likely to still be at relatively low levels,⁷ it is something which needs to be monitored closely and perhaps more tightly regulated. Ireland's strong levels of economic growth, openness to investment, young population, strong democratic values and transparent legal system make it an ideal location to invest in housing as a revenue generating asset. This could see housing access and affordability curtailed further in the years to come.

Going forward in this research, the HBS data are not appropriate for the purposes of analysing the user cost, or the trade-off between owning and renting. The reasons for this are evident in Figure 5, below.

⁷ RTB (2017) showed that 895 landlords had 20+ rental properties. This equated to 0.6% of total landlords.

Figure 5: Equivalised Annual Young Household Spending on Dwellings



Source: Author's calculations, based on HBS (Various Years)

Note: The 2015/16 mortgage cost also includes payment of the Local Property Tax (LPT)

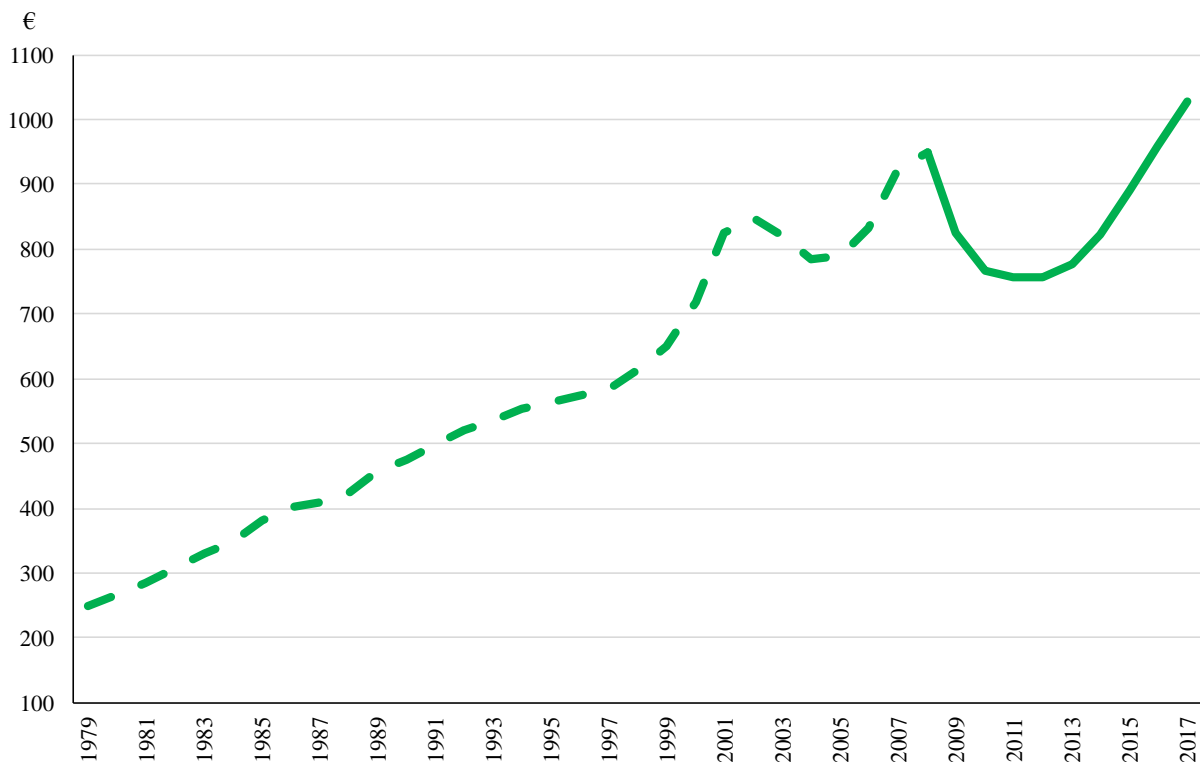
The HBS data for mortgage repayments are not time specific. This means that someone who, for example, took out a mortgage at the height of the residential property boom in 2007, will show up as having a very high mortgage repayment in the 2009/10 wave of the HBS, even though residential property in this period was much more affordable. Thus, the HBS data can often be more reflective of 'legacy' affordability dynamics, rather than the current situation. The HBS figures are, therefore, inappropriate for assessing the affordability of housing in Ireland in isolation.

4. Irish Property and Private Rent Prices

4.1 Private Rent Prices

As discussed in Turnbull (2017), no long-term indicator of the actual cost of the average private rent in Ireland exists. However, we can construct such a measure.

Figure 6: Average Irish Monthly Rent of a Private Property (Nominal)



Source: Author's calculations, based on CSO 'Consumer Price Index' (Base 2016) and Residential Tenancies Board (RTB) 'Standardised Average Rent'

Note: CSO CPI 'Private Rents' sub-index 1979-2007. RTB measure 2008-2017

The CSO's monthly Consumer Price Index release (CSO, 2018d) provides an index value for changes in private rents. At the same time, the Residential Tenancies Board (RTB) has since Q3 2007 provided a quarterly regression-based estimate of the average 'standardised' national monthly rent paid to a private landlord (RTB, 2018). The RTB has the advantage of not just measuring the change in the price of newly advertised rental properties, but rather all properties being privately rented (Lawless *et al*, 2018). Thus, it likely gives a more accurate account of the cost of renting a property.⁸

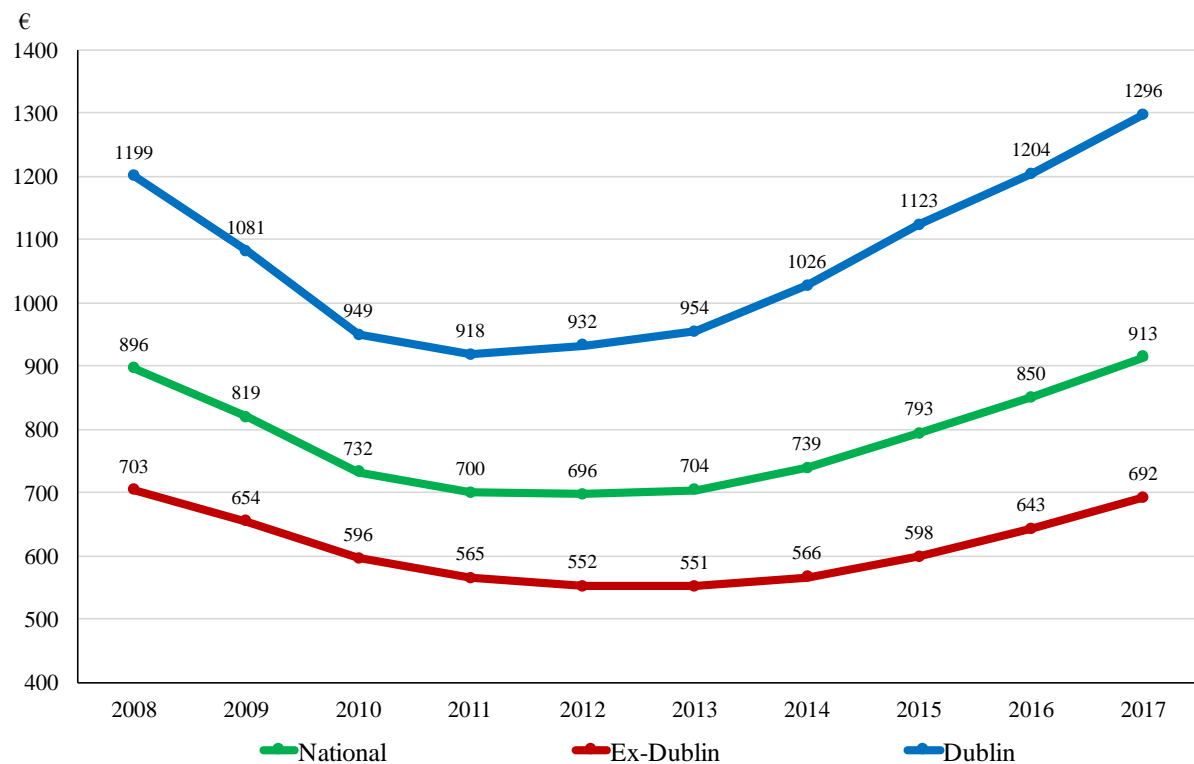
By splicing the CSO and RTB indices together, we can create an approximate long-term series showing the change in the monthly cost of renting the typical private residential property. The average rent is at an all-time high in nominal euro terms. The typical rental property would have cost €1027 per month in 2017.

⁸ The RTB index stated that the average standardised monthly rent was €1,060 in Q1 2018 (RTB, 2018). By contrast, its main 'rival', the Daft.ie measure of average rental prices, which is based on newly advertised rents, estimates that the average rent was €1,261 in Q1 2018 (Daft, 2018), 19 per cent above the RTB estimate.

However, it would be inappropriate to use this figure as an indicator of the cost of private rented accommodation for a typical young couple, as it is fair to say that they are not renting the ‘standardised’ rental property, which may be too large for their needs. Thus, it is more appropriate to assume that they will be renting a smaller than average property.

The RTB provides a quarterly estimate of the monthly cost of the average “1 to 2 bed” rental property. However, this is broken down on a 26-county basis. Thus, while we have official RTB figures for Dublin, we need to ‘construct’ estimates of the ‘National’ and ‘ex-Dublin’ monthly cost. This can be approximated by using CSO Census figures on the numbers of units being rented by private tenants in each county in 2006, 2011 and 2016 and weighting the figures accordingly.⁹

Figure 7: Estimated RTB 1 to 2 Bed Monthly Rent Price (Nominal)



Source: Author’s calculations, based on RTB (2018) and CSO ‘Census of Population’ (Various Years)

The estimated average national 1 to 2 bed monthly rent was €913 in 2017. This is equivalent to repaying a mortgage of approximately €204,000 over a 25-year period at a mortgage interest rate of 3.44 per cent. In Dublin, monthly rent would have been €1296, equivalent to a €289,000 mortgage. In the ex-Dublin area, monthly rent is estimated at €692, which is equivalent to a

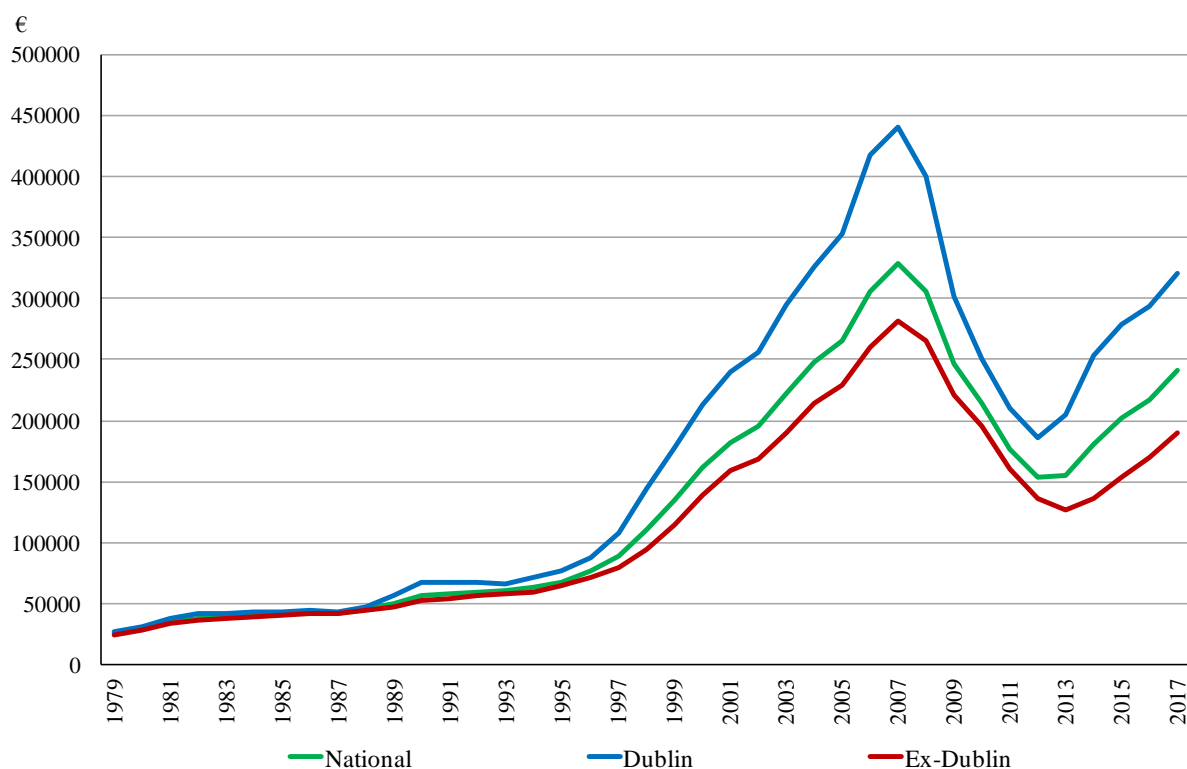
⁹ The intervening years between censuses are bridged assuming smooth rates of change. For example, there were 3064 housing units being rented privately in Carlow in 2011 and 3130 units in 2016. Thus, assuming a consistent annual change in the intervening years gives figures of 3077 for 2012, 3090 for 2013, 3104 for 2014 and 3117 for 2015. This same methodology is applied to all 25 non-Dublin counties.

€155,000 mortgage. The obvious issue with the constructed RTB index is that it only goes back as far as 2008, which will hinder our long-term assessment of affordability in the context of the overall cost of living.

4.2 Irish House Prices

Turnbull (2017) provided an in-depth look at the factors underpinning the cost of housing in Ireland at a i) National and ii) Dublin level. This paper provides updated estimates of house prices, whilst also including an estimate of ex-Dublin prices.

Figure 8: Average Annual Irish Residential Property Prices (Nominal)



Source: Author's calculations, based on CSO 'Residential Property Price Index', ESRI/Permanent TSB House Price Index and Department of Housing Average Property Prices and Mortgages Paid

As was the case in Turnbull (2017), property price estimates are created by 'splicing' together various sources of information on residential prices.¹⁰ Using this method shows that the average national residential property price in 2017 was approximately €241,000. This is 26.7 per cent below its 2007 peak of €328,000. The value of the typical Dublin property, which fell further during the downturn than the national average, but which has also recovered more quickly,

¹⁰ ESRI/Permanent TSB prices are used for the period 1996-2005. Then, weighted Department of Housing price growth rates are used to work the index back to 1979, with ex-Dublin prices assumed to make up 70 per cent of the weighting of the overall national figure. CSO growth rates are applied to ESRI prices for the period 2006-2017, using the 2005 actual ESRI/Permanent TSB euro value as a base

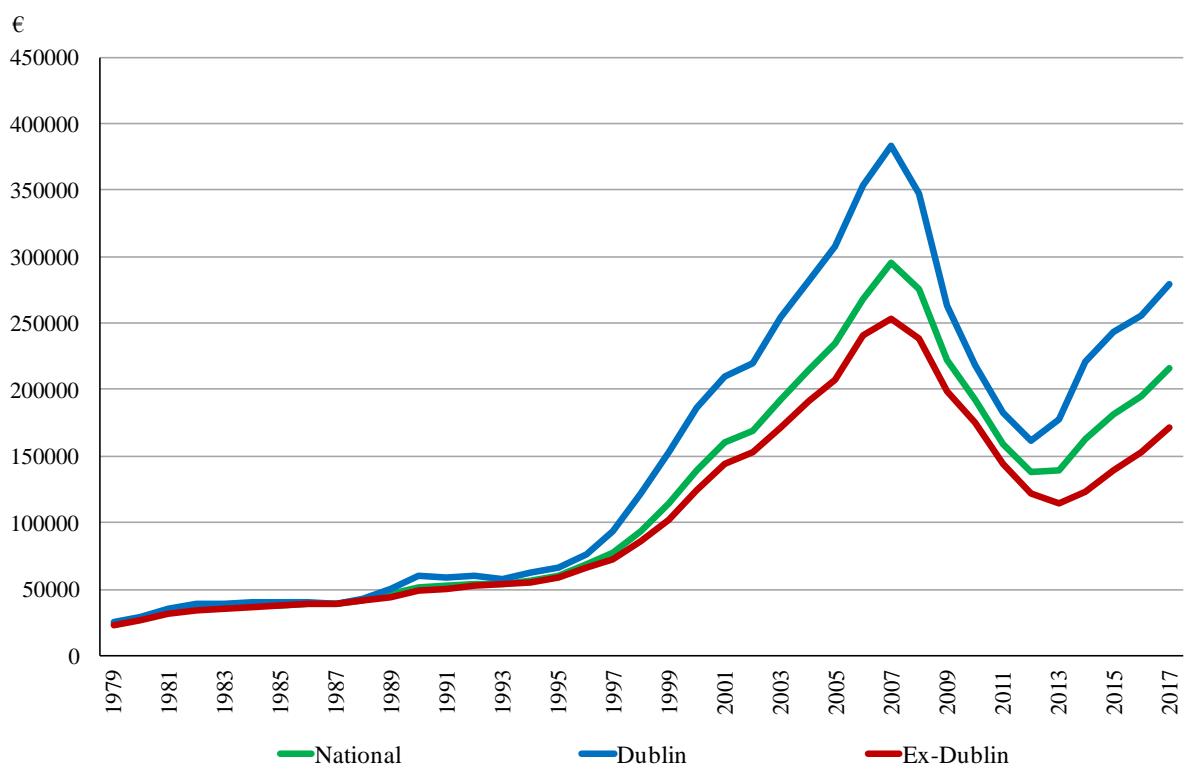
would have been €321,000 in 2017, 27.1 per cent below its 2007 peak of €440,000. The average ex-Dublin property would have cost approximately €190,000 in 2017, 32.4 per cent below its €282,000 peak in 2007.

4.3 Irish First Time Buyer House Prices

The house price figures presented in the previous sub-section are for the average residential property. However, as already discussed in relation to private rents, the case could be made that the average young person is not buying the average house. First-time buyers (FTBs) tend to buy properties which are below average cost. This is despite the fact that the average FTB in Ireland is now 34 years old (Kinghan *et al*, 2017).

Figures from the CSO (2018c), based on transactions data, show that the average FTB paid €261,300 in 2017, versus a €272,061 national average for all buyer types. While these figures are not adjusted using any sort of hedonic regression, and are therefore susceptible to fluctuations based on the mix of properties being sold in a given period, they still serve to demonstrate that FTBs spend less on a property in general than other buyer types, such as movers.

Figure 9: Average Annual Irish First-Time Buyer Property Price (Nominal)



Source: Author's calculations, based on CSO 'Residential Property Price Index', ESRI/Permanent TSB House Price Index and Department of Housing Average Property Prices and Mortgages Paid

The now discontinued ESRI/Permanent TSB house price index provided estimates of the cost of a typical FTB property on a National, Dublin and ex-Dublin basis for the years 1996-2007. Comparing these FTB figures to the averages for the market as a whole allows us to 'roll the index forward' to the present day, as well as back to 1979.¹¹

Using this technique suggests that the average FTB property cost €217,000 in 2017, compared to €296,000 in 2007. The average Dublin FTB property cost €279,000, off a high of €383,000 and the typical ex-Dublin residential property sold for €171,000 in 2017, compared to a 2007 high of €253,000.

5. Housing Affordability and the Cost of Living

5.1 How Much Can a Young Couple Save for a Mortgage Down payment?

An issue for most young people trying to save for a house is the Central Bank of Ireland's (CBI) mortgage macroprudential rules (CBI, 2016). While these rules are appropriate in terms of keeping prospective buyers within sensible borrowing limits, they do have the unintended impact of disadvantaging ordinary prospective buyers, that is to say, those who seek to purchase a property using a mortgage, as so-called 'cash buyers' and institutional investors who do not require a mortgage are, in effect, exempt from them. In relation to this issue, The Central Bank of Ireland has stated that:

"Non-household buyers, such as investment funds...remain important market participants. Reflecting in part to the prominence of non-household buyers, the proportion of non-mortgage financed transactions is estimated to be substantial at up to 55 per cent of total residential property transactions in H1 2017...Prices related to those non-mortgage financed transactions appear to have risen at a faster pace than prices for mortgage financed transactions and are contributing to overall price dynamics in the market" (CBI, 2017).

In other words, wealthy cash buyers are distorting the market, purchasing over half of available properties and pushing up prices, making it harder for 'ordinary' buyers to access the property market.

¹¹ The National average FTB price is assumed to be 90 per cent of the overall National average on this basis. The Dublin price is assumed to be 87 per cent of the overall Dublin average and the ex-Dublin average is also assumed to be 90 per cent of the overall ex-Dublin average. In the pre-1996 period, the difference between the average FTB and overall average prices is assumed to be slightly smaller.

The other issue with the macroprudential rules is that requiring a prospective buyer or buyers to put aside 10 per cent of the cost of a property as a down payment. As already stated, the average age of a FTB in Ireland is now 34 years old. Thus, it is reasonable to assume that prior to buying a house, an FTB is active in the private rental market. Renting accommodation at all-time high prices, meeting one's other costs of living and putting enough away to save for a down payment can be a challenge. So the obvious question is how much could a prospective young couple save every month, once all of their 'fixed costs' such as rent, healthcare, food, transport and clothing have been met?

Using the household expenditure data from six waves of the HBS can give us a reasonably solid indication of this. For this purpose, we will consider two possible saving 'scenarios'.

The first scenario proposes a young couple with no children or dependents, living together in private rented accommodation, spending the bare minimum and saving all that is left at the end of the month. In this scenario, the young couple is not allowed to spend any money whatsoever on alcohol or tobacco, recreational activities outside the home, including eating or drinking as well as any holidays (both foreign and domestic), sweets or other confectionary and non-essential household goods, such as jewellery or children's toys. In addition, they are only allowed to spend 50 per cent as much on clothing as would otherwise be the case and 80 per cent on necessary household durable goods.

Overall then, spending is primarily confined to such headings as food, healthcare, transport, necessary upkeep of the home, clothes and of course, rent. In effect, this very strict scenario proposes that the hypothetical young couple not be allowed to cover any costs other than what is required to live the bare minimum existence, whilst meeting all of their base needs.

Table 2: Potential Annual Young Renter Household Savings: Scenario 1 (Euro)¹²

	Adjusted Fixed Costs	Disposable Income	Potential Savings
1987/88	9,424	16,152	6,728
1994/95	14,153	24,750	10,597
1999/00	20,007	34,592	14,585
2004/05	29,989	55,347	25,358
2009/10	28,937	57,976	29,039
2015/16	30,878	54,663	23,785

Source: Author's calculations, based on CSO HBS (Various Years)

The steady pace of increase in the cost of living for a typical young renter couple seen between the 1987/88 HBS wave and the 2004/05 wave, which was broadly matched by increases in disposable income, was interrupted by the economic downturn. With rental prices falling, the cost of living also declined. Meantime, with average wages for young workers still relatively high in 2009/10 (didn't reach a trough until 2013)¹³ potential annual savings increased. With wages in 2015/16 still well below their 2008 peak for young workers and rent prices rising to all-time highs, the potential for savings quickly diminished.

The second young savers scenario is less severe, taking on board some of the parameters of the well-established Vincentian Partnership's 'Minimum Essential Standard of Living'. This has as its aim establishing "the cost of what is needed to enable a life with dignity, at a minimum acceptable standard that members of the public agree nobody should be expected to live below" (VPSJ, 2018).

Thus, in Scenario 2, the young couple will be allowed to spend some of their income on what the VPSJ refers to as 'social inclusion & participation'. This includes allowances for participation in sports and other leisure activities, attending social events and making infrequent trips to the cinema or to concerts. An allowance will also be given for eating in a restaurant infrequently,

¹² 'Adjusted Fixed Costs' refers to costs which have been reduced in step with the equivalisation scale where more than two working adults were present in a young private rented household. For example, if there were three working adults in a house, then this would give an equivalisation coefficient of 2.32. Thus, the fixed costs of this household were taken as being 71.5 per cent of the stated value, bringing them into line with the fixed costs of a 1.66 coefficient two earner household. This was done to make up for the relative dearth of households with two young workers in the private rented sector, particularly in the first three waves of the HBS, boosting the sample size

¹³ This will be discussed in greater detail in Section 6.1

while a small two per cent of a household’s disposable income will be given to finance an annual holiday. All non-essential spending outside the home was set to zero in Scenario 1.¹⁴

Table 3: Potential Annual Young Renter Household Savings: Scenario 2 (Euro)

	Adjusted Fixed Costs	Disposable Income	Potential Savings (Scenario 2)	Potential Savings (Scenario 1)
1987/88	10,380	16,152	5,773	6,728
1994/95	15,861	24,750	8,889	10,597
1999/00	22,457	34,592	12,135	14,585
2004/05	32,669	55,347	22,678	25,358
2009/10	31,506	57,976	26,470	29,039
2015/16	33,567	54,663	21,097	23,785

Source: Author’s calculations, based on CSO HBS (Various Years)

Table 3 demonstrates that allowing for some level of ‘social inclusion and participation’ has a relatively modest bearing on the potential savings of a young renter couple. However, the potential positive impact on the health and emotional wellbeing of the couple may be significant, even if quantifying such intangible benefits may be difficult.

It is useful to note that this is a ‘National’ position. If we assume that the cost of living in the Dublin and ex-Dublin areas are not the same due to a variety of social and supply related factors then we can construct ‘Dublin’ and ‘ex-Dublin’ estimates of potential savings, at least for the 2009/10 and 2015/16 waves of the HBS, by substituting in the appropriate estimated RTB rents, as outlined in Figure 9, and altering spending to reflect differences in the ex-rent cost of living.¹⁵

¹⁴ The allowances given equate to 25 per cent of what would otherwise have been spent on food outside the home, 100 per cent on participation in sports, music or language lessons, 20 per cent on alcohol at home, 30 per cent on alcohol outside the home and 25 per cent on attending entertainment events like the cinema or concerts

¹⁵ Analysis of the HBS data suggests that the ex-rent costs of living for a young renter couple in Dublin were 6.5 per cent above the national average in 2009/10 and 8 per cent below in 2015/16. Conversely, the ex-Dublin costs were 6 per cent below the national average in 2009/10 and 9.5 per cent above in 2015/16. This tallies with the comments of the CSO that “Breaking the trend of previous surveys, Rural households spent more than Urban households in 2015-2016” (CSO, 2017). Although, there are of course many ex-Dublin urban areas.

Table 4: Potential Annual Young Renter Household Savings (Using RTB Rents)¹⁶

	National	Dublin	Ex-Dublin
2009/10	27,010	25,555	28,225
2015/16	22,010	20,820	22,404

Source: Author's calculations, based on CSO HBS (Various Years) and Turnbull (2017)

Notes: This is based on the spending allowed in Scenario 2

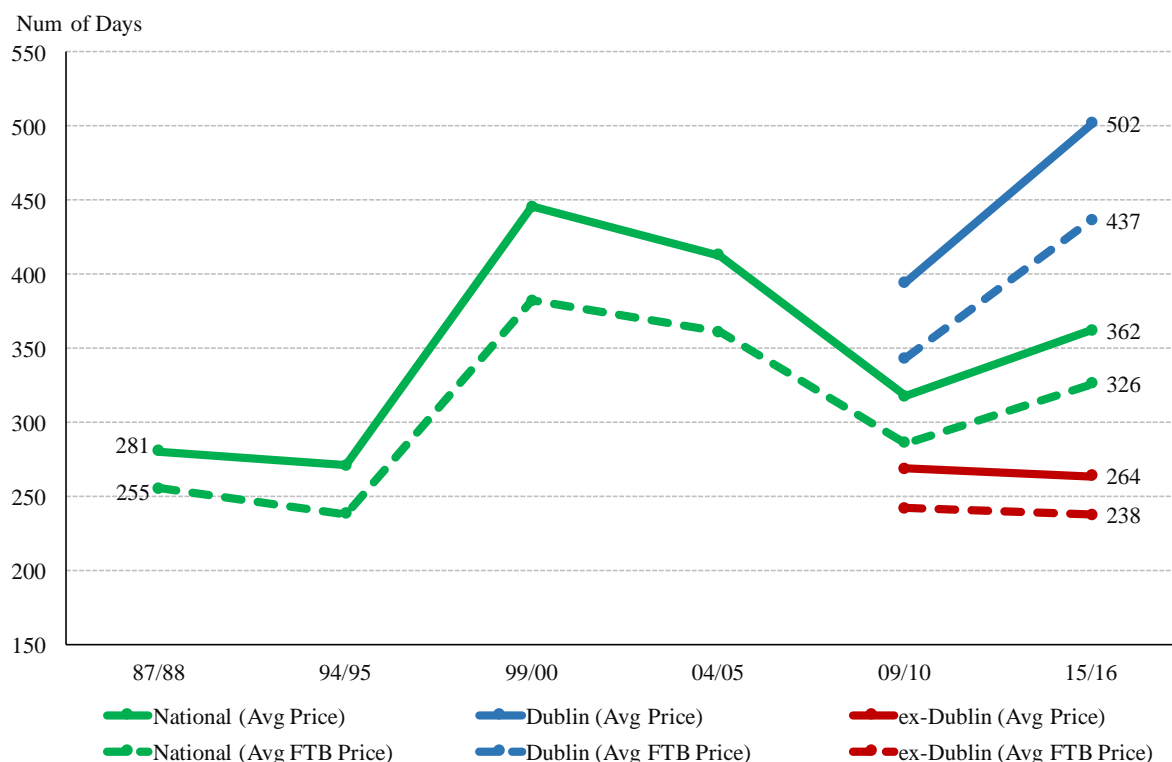
Once we have adjusted for differences in the cost of living in the Dublin and ex-Dublin regions and substituted in the appropriate RTB rents for each region, we can see that despite our assumption of higher wages in Dublin, higher rents in the region mean that potential savings are lower than in the ex-Dublin region.

¹⁶ This assumes that the earnings of an average young couple are 10 per cent above the national average in Dublin and 5 per cent below the average in the ex-Dublin area. Based on the levels of personal taxation and reliefs, this is estimated to lead to a level of disposable income of 7.7 per cent above the national average in Dublin in 2009/10 and 7.8 per cent in 2015/16. Disposable income is estimated at 4.3 per cent below the national average in the ex-Dublin area in 2009/10 and 4.2 per cent below in 2015/16.

5.2 Saving for a Mortgage Deposit

Given the assumed potential annual savings of a young renter couple outlined in the previous section, we can estimate how long it would have taken to save for a 10 per cent down payment on a typical residential property over the last 30 years.

Figure 10: Number of Days to Save for a Down payment (10 Per Cent Deposit)



Source: Author's calculations based on HBS (Various Years) and RTB (2018)

Notes: 'Num of Days' represents the time it would take to save for a 10 per cent down payment pursuing the spending and savings patterns outlined in Table 3 and Table 4 and presuming average house prices as outlined in Figure 6 and Figure 7.

Analysis of the potential savings and house price figures outlined in the previous sections of this paper suggests that there has been a significant increase in the amount of time it takes a typical young renter couple to save for a 10 per cent down payment on a typical residential property.¹⁷ While it is not possible to extend the estimate for the Dublin and ex-Dublin measures back before the 2009/10 HBS wave, as the RTB data only began in mid-2007, if we assume that private rents in these two regions broadly followed the dynamics of house prices, then one could make the

¹⁷ The figures presented in Figure 10 are on the whole lower than the estimated 'time to save' (TTS) presented in the research for the Central Bank of Ireland by Connor and McCann (2016). This seems to reflect the fact that they assume earnings of a young couple to be lower than those used in this research. They also assume the average young couple is buying a three-bedroom house. Their house prices come from underlying Daft.ie asking price figures, which, as far as this author can discern, are not based on a hedonic regression, and are thus, highly susceptible to changes in the compositional make-up of sales from one quarter to the next

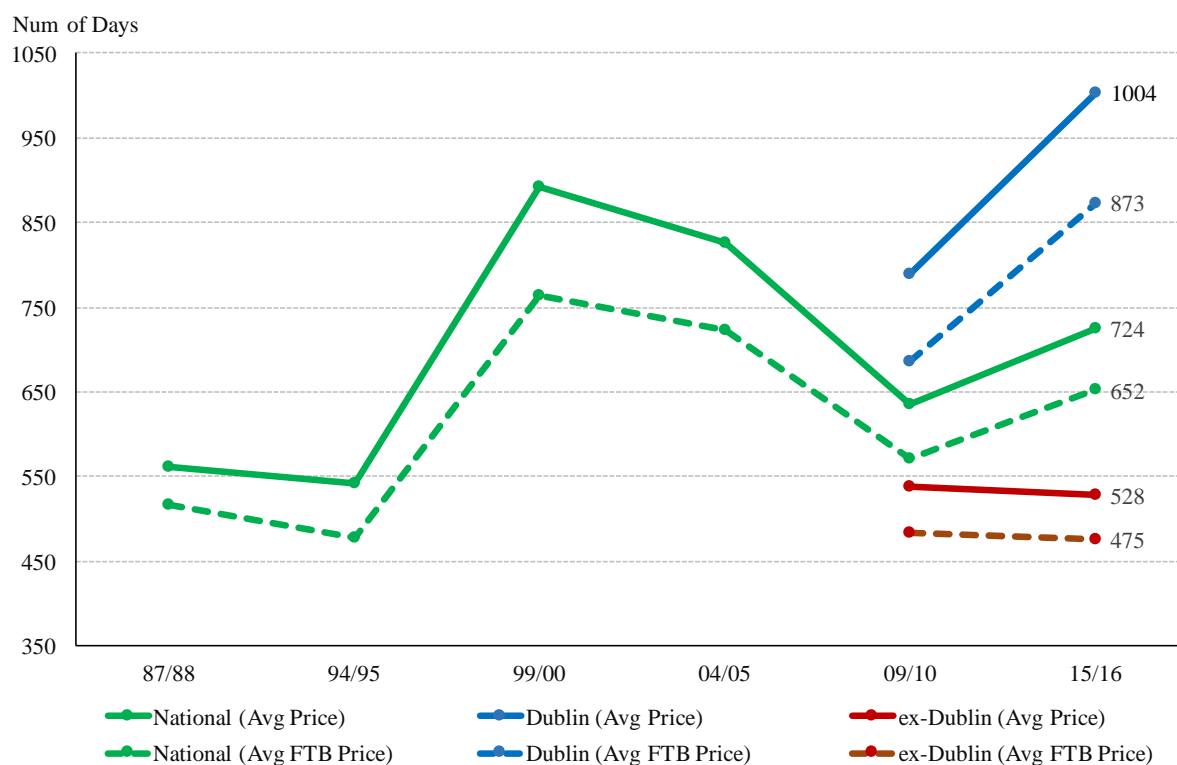
assumption that the time to save for a mortgage in these areas in the mid-1980s would have been close to the national average, only showing meaningful deviations from the late 1990s onwards.

The estimated time to save for a down payment of 326 days based on a national average FTB property and 362 days based on a national average property might seem somewhat strange, given the anecdotal difficulty that young people report in saving for a deposit. However, it is important to note that the average FTB today is in fact not only laying out a 10 per cent deposit.

Figures from the Central Bank of Ireland show that the average Loan-to-Value (LTV) for a FTB property purchased with a mortgage in H1 2017 was 79.4 per cent (Kinghan, 2017b). This makes sense when we consider that the average gross income of a young couple in 2017 was approximately €64,000 (see Appendix A), which would allow them to purchase a property for a maximum of €249,422 under the Central Bank macroprudential rules. However, the Central bank reported that average price of a FTB property in H1 2017 was €265,860. Thus, a higher than 10 per cent deposit would have been needed.

When the cost of legal and agents' fees, furnishing and doing necessary works is added to the cost of buying a house, we can see where the difficulty in saving for a deposit lies. Furthermore, it should be noted that the savings rate implied by Table 4 is over 40 per cent of disposable income. The recent study of housing affordability in Ireland carried out by Indecon (2017) stated that a savings rate of 10 per cent of gross earnings should be considered to be "very high". Thus, such a high level of saving as demonstrated in Section 5.1 may be difficult to sustain over the medium-term.

Figure 11: Number of Days to Save for a Downpayment (20 Per Cent Deposit)



Source: Author's calculations based on HBS (Various Years) and RTB (2018)

Notes: 'Num of Days' represents the time it would take to save for a 20 per cent down payment pursuing the spending and savings patterns outlined in Table 3 and Table 4 and presuming average house prices as outlined in Figure 6 and Figure 7.

In addition, between 2013 and 2017 the earnings of a young couple increased by an average of just 0.6 per cent per annum (author's calculations, see Section 6.1), CPI inflation (excluding mortgage interest and local property taxes) grew by an average of 0.4 per cent (CSO, 2018d), while the headline national residential property price index grew by 9.5 per cent per annum (CSO, 2018c). This means in effect that someone saving for a down payment today, will see the amount of time that they need to save increasing all the time. Thus, the number of days to save for a deposit posited in Figures 10 and 11 for 2015/16 will in reality be even higher today.

It must be noted of course that since the start of 2017 prospective FTBs have been able to avail of a cash payment under the 'Help to Buy' (HTB) scheme. A refund on income tax and DIRT paid in Ireland in the previous four years up to a maximum value of €20,000 is available. This is provided you have a mortgage with at least a 70 per cent LTV and the property purchased costs €500,000 or less (Revenue Commissioners, 2018). The crucial detail of the HTB, though, is that it is only available on newly constructed properties.¹⁸ This highlights the rather transparent nature

¹⁸ There were 5,932 applications under the HTB scheme in 2017 (2,052 in Dublin and 3,340 ex-Dublin). Of these, 4,824 were approved. The average tax rebate was €14,277 and the median figure was €14,750 at a cost to the Exchequer of €68.9m (Oireachtas, 2018).

of the grant as a means of supporting private housing development 'by the back door' as opposed to a genuine effort to alleviate the housing affordability issues being faced by many young people. Of the 12,278 properties purchased by FTBs in Ireland in 2017, only 25.6 per cent were new builds (CSO, 2018c).

Figures from the CSO show that the average price paid for a new FTB property in 2017 was €311,993 (CSO, 2018c). Thus, a typical 10 per cent deposit would have been €31,119. Assuming the average HTB payment of €14,277, this would have left a balance of €16,922 to be saved for, or 52.2 per cent.

The current HTB scheme is a reincarnation of the old 'First-Time Buyers Grant' scheme which was in place between 1977 and 2003. The grant initially offered £1,000 (€1,269) to purchasers of new homes, but it was quickly increased to £2,000 (€2,539) eventually being worth €3,610 when it was abolished in 2003 (McDonald, 2002). In addition, a £2,250 (€3,174) housing grant was in place in the late 1980s, which replaced the old 'mortgage interest subsidy' payment (Blackwell, 1988).

The typical new home cost €48,151 in 1987 and €52,450 in 1988 (Department of Housing, 2016). Thus, a 10 per cent deposit would have been €4,815 and €5,245 in the two years, respectively. With up to €5,713 available in first time-buyer grants, this effectively meant that affording a down payment was unlikely to be a major obstacle for FTBs in the early years under investigation in this study, with supports more generous both in value terms and in universality terms (grant provided with no obligation to have paid any form of tax in recent years) than those on offer today. This is also without considering the mortgage interest relief that was available until its abolition in 2012. This will be discussed in greater detail in Section 6.2.

5.3 The Cost of Childcare

For the sake of simplicity, this research is primarily concerned with affordability for a young couple with no children or other dependents. This is due to the complexity of the childcare issue, with diverse costs by region and family status. For example, a couple who are from the area where they live and work who have young children may be able to avail of cost free child minding services delivered by a family member or other acquaintance. However, a young couple who may come to an area from elsewhere or who simply do not have available family supports cannot, meaning either they must avail of private childcare, or else at least one parent will have to take a diminished role in the labour market or else cease participation in it altogether. Thus, childcare is a complex issue with many potential variables in terms of delivery and costs.

However, given that the average age of a first time mother in Ireland in 2017 was 31 (CSO, 2018f) and that, as has already been stated, the average FTB was 34 years old, it would be disingenuous to not give some consideration to the cost of childcare.

Figures from the CSO show that in Q3 2016 the average weekly cost of private pre-school childcare was €118 (CSO, 2017b). This amounts to €6,513 on an annualised basis. However, there was significant regional divergence around this. Parents in Dublin incurred the highest weekly cost of €150, or €7,821 on an annualised basis. This was 80.7 per cent higher than the lowest cost of €83 per week (€4,328 per year) in the South-East region.¹⁹

One thing which is interesting to note is that the average amount of time spent in childcare per week was 27 hours. However, in Q3 2016, the national average working week was 35.9 hours (39.4 for males and 32.0 for females). This suggests that some parents were working reduced hours in order to accommodate collection of children, which is likely to lead to a host of professional ramifications, not least of which being, for the purposes of this study, reduced earnings. Indeed, a wealth of international literature demonstrates a link between childbirth and reduced earnings, particularly for women (see for example *Kleven et al., 2017*).

In comparison to other developed nations, childcare as a whole in Ireland is extremely expensive. Indeed, Ireland has the third highest level of out-of-pocket spending on childcare for a typical couple in the OECD, with only New Zealand and the United Kingdom ahead of us (OECD, 2016). The OECD estimates that the average couple, both of whom are working full time and have combined annual earnings equal to 167 per cent of the average single full-time worker, would pay 27.4 per cent of their net annual income on out-of-pocket childcare expenses. This is more than double the OECD average of 12.6 per cent, even taking into account available childcare subsidies.

Indeed, since January 2010 parents have been able to avail of the 'Early Childhood Care and Education' (ECCE) scheme, which provides three hours of childcare per day, five days a week for children aged 3-5 (CSO, 2017b). The CSO has noted that only 53 per cent of children had availed of the scheme, with 39 per cent of those not availing in the survey period already having used up their one year of subsidisation. The scheme has since been extended to two years.

¹⁹ South-East region incorporates Carlow, Kilkenny, Waterford City & County, Wexford and Tipperary South

Leaving childcare costs aside, the annual cost of raising a child can be substantial, which, for want of a more tactful way of phrasing it, can impede the possibility of saving for a mortgage down payment. MacMahon *et al* (2012) attempts to estimate the gross annual costs for various child age groups.

Table 5: Direct Cost of a Child

	Infant (Ex. Childcare)	Infant (Incl. Childcare)	Pre-School (Ex. Childcare)	Pre-School (Incl. Childcare)
URBAN				
Weekly	91.13	296.13	48.29	223.87
Annual	4,738.76	15,398.76	2,511.08	11,641.24
RURAL				
Weekly	92.98	260.31	50.03	183.44
Annual	4,834.96	13,536.12	2,601.56	9,538.88

Source: Reproduced from MacMahon *et al.* (2012)

Notes: Excludes entitlement to secondary benefits such as a medical card

The research notes that when social welfare payments and other child benefits are taken into account, the annual cost of an infant (excluding childcare) was €1,114.75, while this figure was €1,223.73 in the rural area. While the government has made further attempts to increase state subsidies to families for childcare recently, Nugent (2017) demonstrates that even accounting for these payments, the cost of childcare for young workers remains substantial. This is particularly the case in urban areas.

6. Underlying Affordability Variables

6.1 The Earnings of Young People in Ireland

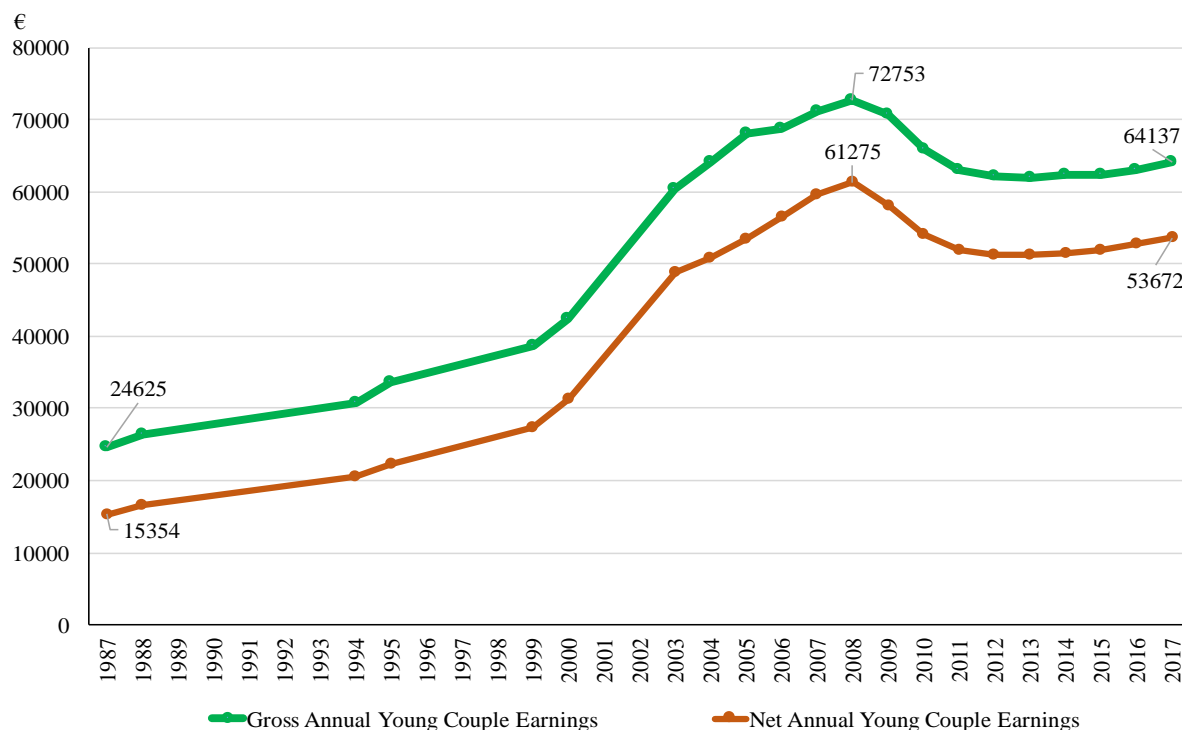
Discussion of young peoples' access to the housing market has been, thus far, largely confined to the parameters of the HBS. Assuming that our typical young couple can access the housing market, how affordable is renting a property or repaying a mortgage?

The first thing we must consider in order to assess affordability is the annual earnings of a typical young working couple. Regrettably, there is no long-term series on the earnings of a typical young person in Ireland. However, as in Turnbull (2017), we can construct one using a number of different data sets, including the various waves of the HBS.²⁰ Assuming that such a couple has no children and is not in receipt of state transfers and that the appropriate levels of taxation and

²⁰ See Annex A for further details on the construction of this data series

reliefs are levelled in each year for which we have gross earnings figures, we can also show the level of net annual income.

Figure 12: Annual Earnings of a Young Working Couple (Both 25-34)



Source: Author's calculations. See Annex A

Figure 12 shows how average nominal earnings have evolved over the past 30 years, albeit somewhat intermittently. Strong economic growth from the mid-1990s up until the economic crash in the mid-2000s coincided with a solid pace of growth in average earnings. Government policy of reducing the level of personal direct taxation in this period also meant that net earnings grew more quickly than gross earnings. Gross nominal earnings for our young couple increased by 88 per cent between 1999 and their peak in 2008, while net earnings grew by 123 per cent.

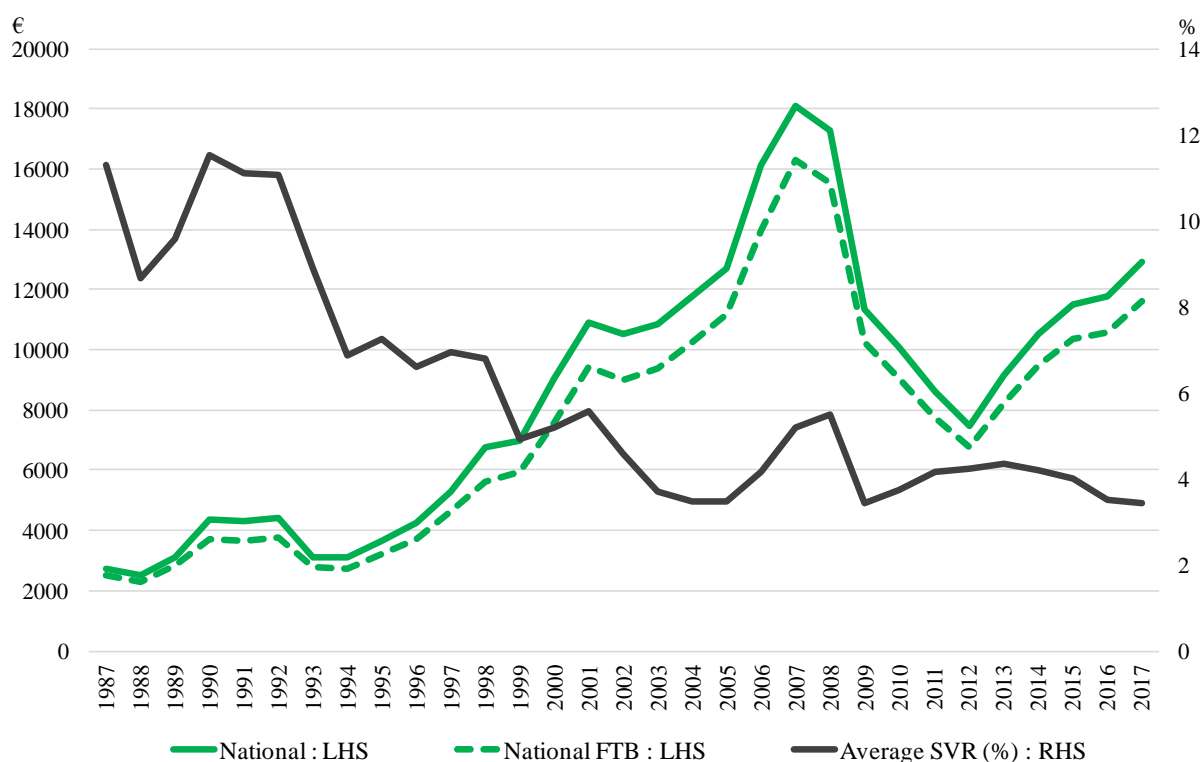
However, the economic downturn saw a large increase in youth unemployment, with the numbers of people aged 35+ in work seeing relatively little change, while the numbers of younger workers declined sharply (Turnbull, 2017). This meant that the earnings of young people were particularly negatively impacted by the downturn. Indeed, gross annual earnings for a young working couple in 2017 were 11.8 per cent below their 2008 peak, while net earnings were 12.4 per cent lower.

6.2 The Annual Cost of Servicing a Mortgage

The cost of servicing a mortgage is a factor of three main variables; namely the amount of money borrowed, interest rates and the term of the loan (i.e. the period during which the loan will be repaid, normally somewhere between 20 and 30 years).

For the purposes of the rest of this section, it will be assumed that the amount borrowed is equal to 90 per cent of the value of a residential property in a given year, as outlined in Section 3. The term of the mortgage will be 25 years. The interest rate will be the average standard variable mortgage rate in a given year.

Figure 13: Annual Cost of Servicing the Average Mortgage



Source: Author's calculations, CSO, Dept. of Finance, ESRI/Permanent TSB, Dept. of Housing, Central Bank of Ireland.

Notes: 'National' is based on the average national house price as outlined in Section 4.2. 'National FTB' refers to the average FTB house price as outlined in Section 4.3.

While the average Standard Variable Rate (SVR) has fallen substantially in the past 30 years,²¹ higher house prices have meant that the annual repayment on a mortgage has increased dramatically in nominal terms. It should also be noted that Mortgage Interest Relief (MIR), which was discontinued in 2012, significantly lowered the effective SVR that a mortgage holder would

²¹ This is based on the average Standard Variable Mortgage Rate charged by Irish lenders. Data for the period 1987-2013 (inclusive) are taken from an unpublished series available from the CBI. Data for 2014 - present are taken from CBI Table B.3.1 (Retail Interest Rates – Lending for Home Purchase).

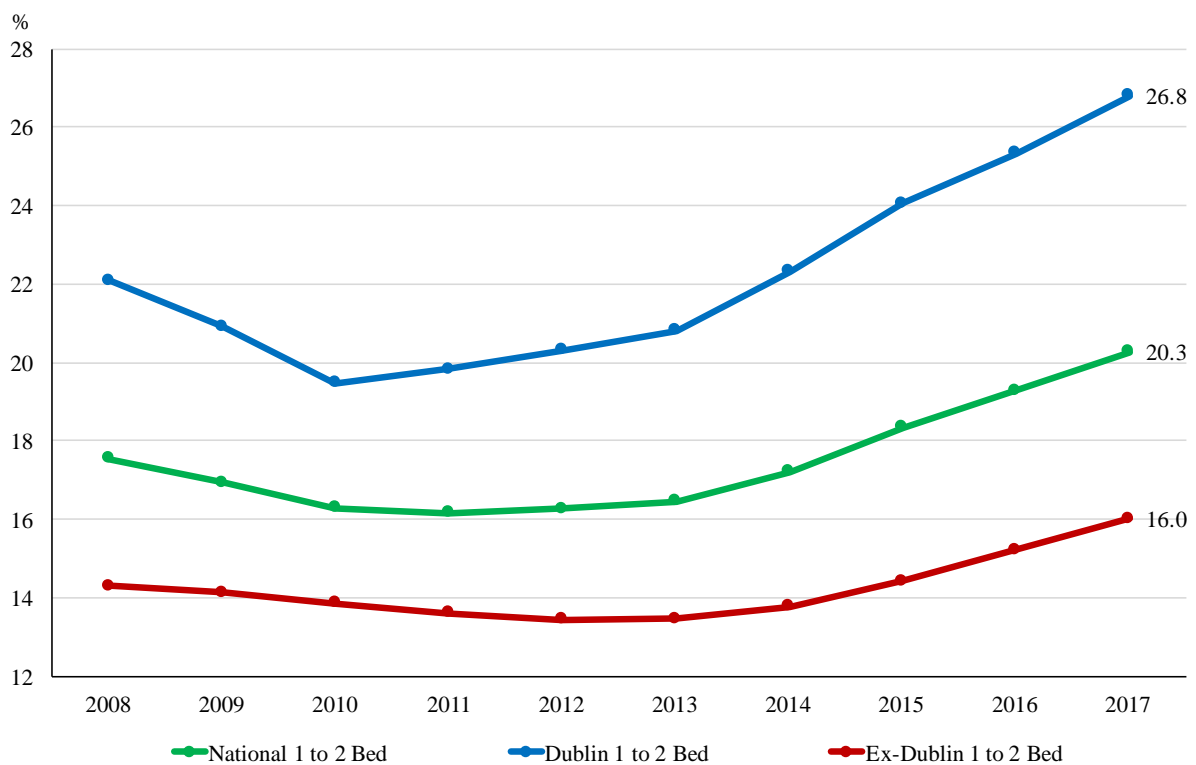
have had to repay in the past. Indeed, a couple earning the average industrial wage for men and women in 1988 (approximate combined wages of €25,000) and repaying a mortgage of roughly €35,000 would have had an annual disposable income that was 8.6 per cent higher than would have been the case without MIR (Blackwell, 1988).

7. Measuring Affordability

7.1 Affordability of Annual Rent of a Private Dwelling

As already stated, we regrettably do not have a reliable long-term series of representative rental prices paid by young people. However, comparing the constructed RTB 1 to 2 Bed property series to net annual earnings, as outlined in Section 6.1, will give us some sense of the recent issue of affordability of a rental property.

Figure 14: Net Annual Earnings to Cover the Rent of 1 to 2 Bed Property



Source: Author's calculations

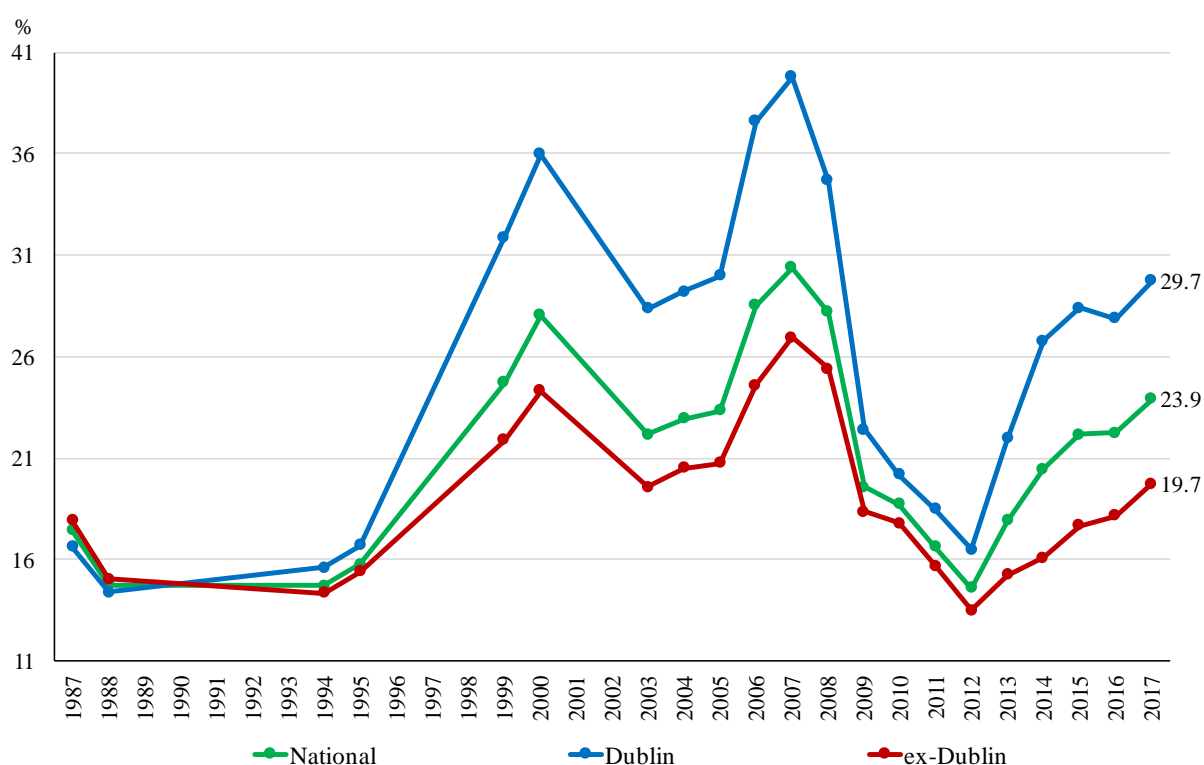
On this basis, the typical young couple would have parted with 20.3 per cent of their net annual earnings to rent the average national 1 to 2 Bed private property in 2017. In Dublin, where rents are particularly high, this figure rises to 26.8 per cent, while in the ex-Dublin area, a lower 16 per cent of net annual earnings would be required. It should be noted that even though our estimate of the average ex-Dublin rent (see Section 4.1) is slightly lower in 2017 than in 2008, lower levels

of net income now versus then mean that the relative financial burden of renting in the region is now greater.

7.2 Affordability of the Annual Mortgage Repayment

With due consideration having been given to the factors that underline mortgage affordability, we can now assess them all together.²² Affordability in relation to the average national residential property price will be considered in the first instance, and then subsequently in relation to the estimated average FTB price.

Figure 15: Percentage of Net Annual Earnings to Meet Mortgage Repayment



Source: Author's calculations, CSO, Dept. of Finance, ESRI/Permanent TSB, Dept. of Housing

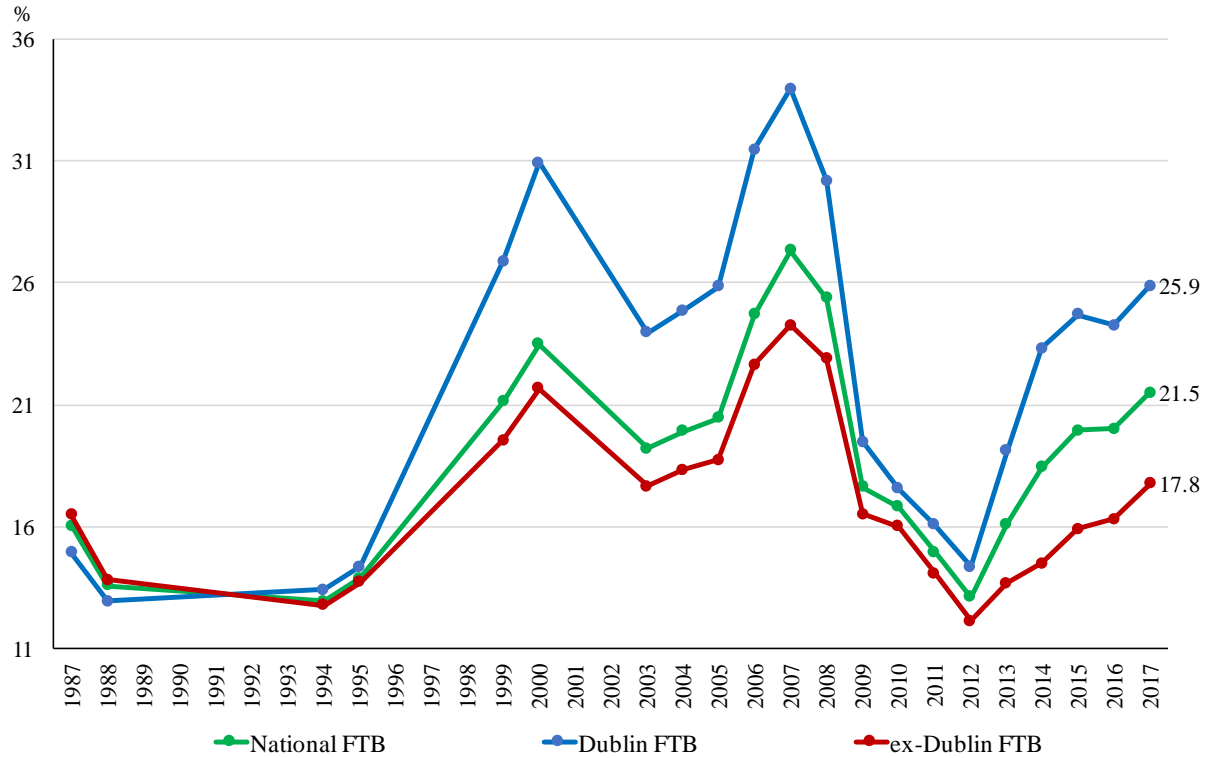
There can be no doubt from the evidence presented in Figure 14 that the affordability of residential property for a typical young working couple in Ireland today is less favourable than for their parents' generation. This is particularly the case in Dublin, where the average mortgage would command almost 30 per cent of net annual income to service.

However, as was stated earlier, it is fair to argue that the typical FTB does not purchase the average house, due to financial constraints as well as differences in lifestyle (may have fewer

²² Please note that due to altered estimates for average house prices and earnings, the figures presented in this section differ slightly from those put forward by Turnbull (2017)

children than second or subsequent buyers, may be more flexible in where they can live). Thus, how does affordability of the typical, lower cost FTB property compare?

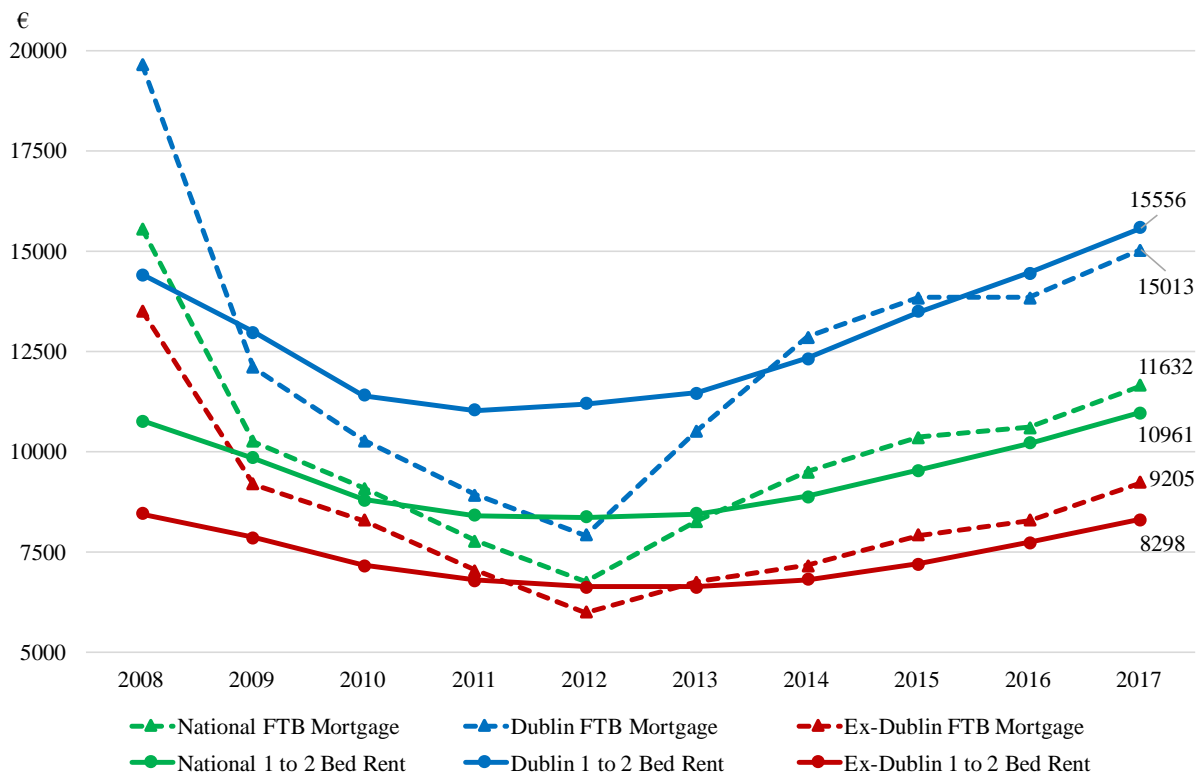
Figure 16: Percentage of Net Annual Earnings to Meet FTB Mortgage Repayment



Source: Author's calculations, CSO, Dept. of Finance, ESRI/Permanent TSB, Dept. of Housing

Affordability of the typical FTB property is only modestly better than for the average property. In 2017, the most recent year for which we can estimate the cost of repaying a mortgage, the average national FTB property would have demanded 21.5 per cent of net annual income, only 2.4 percentage points below the national average price-based measure of 23.9 per cent. At a Dublin level this was 25.9 per cent versus 29.7 per cent. On an ex-Dublin basis, it was 17.8 per cent compared to 19.7 per cent.

Figure 17: Annual Cost of Servicing a FTB Mortgage/Renting a 1 to 2 Bed Property



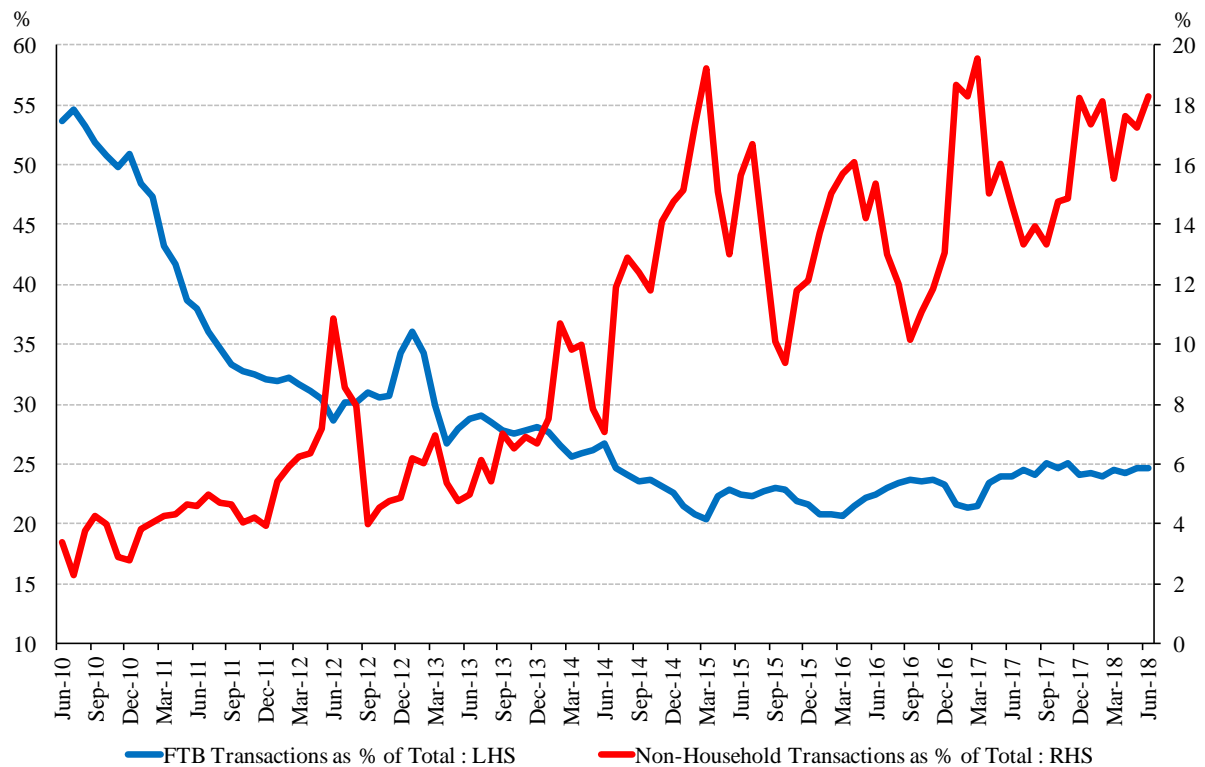
Source: Author's calculations

Therefore, the cost of servicing a mortgage is broadly approximate to renting a 1 to 2 Bed property on a national basis. It is slightly more expensive to rent in Dublin than to own, while the reverse is true on an ex-Dublin basis. Thus, the 'trade-off' between owning and renting for an average young couple was broadly balanced in 2017. This is of course provided we ignore the motive of owning a valuable store of wealth and having fixity and security of tenure, which provide somewhat intangible benefits.

7.3 The Affordability of Actual Properties Purchased

The analysis in Sections 7.1 and 7.2 was based off of a hedonic house price measure, which seeks to control for changes in the 'mix' of properties sold from one period to the next. It does this by tracking changes in prices based on the characteristics of properties, such as size, location and build quality. Crucially though, the CSO's hedonic price index, which is based off of housing transactions data, excludes the non-household sector from its calculations, even though it now accounts for around one fifth of the housing market (see Figure 19) and the CBI has admitted that cash buyers are pushing up prices in the market more quickly (CBI, 2017).

Figure 18: Housing Transactions (FTB and Non-Household)



Source: Author’s calculations, based on CSO

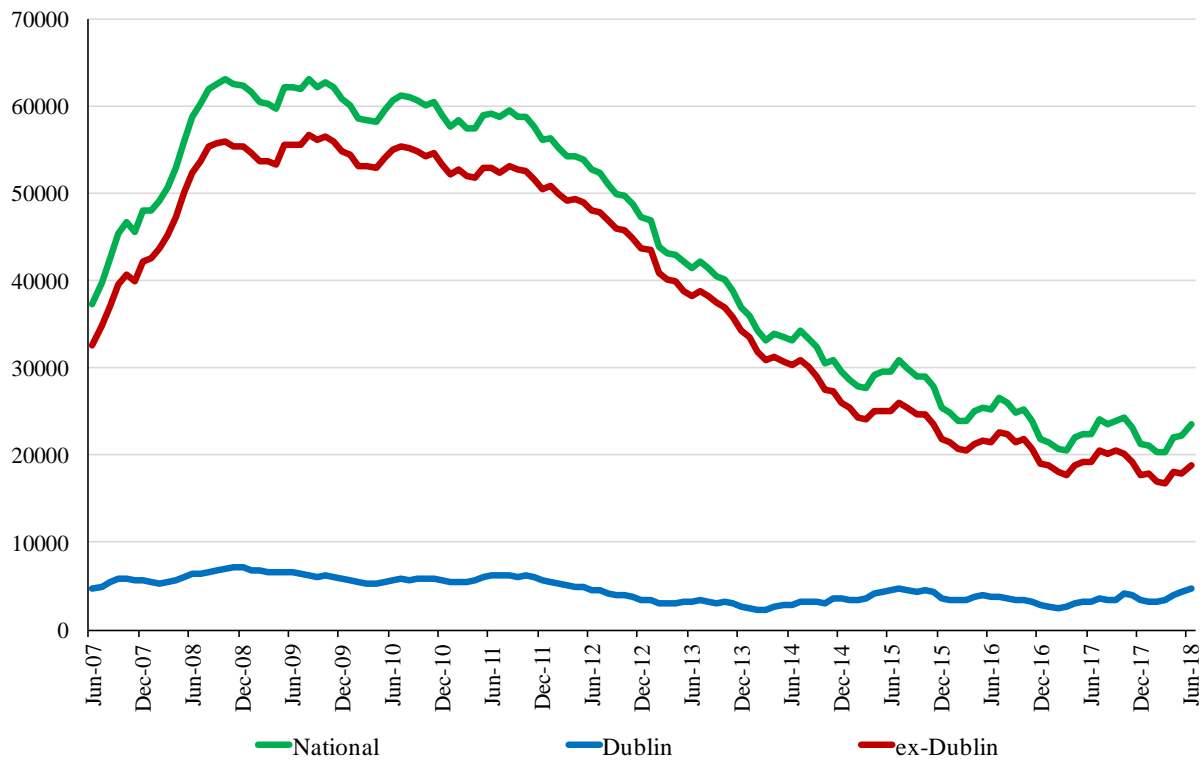
Notes: Percentages are Three Month Moving Averages. Based on ‘Market’ sales only

Supply and earnings issues mean that the typical FTB may not have access to the full ‘portfolio’ of housing in the market that is measured by changes in the CSO index. There were just 14,419 new dwellings completed in 2017 (CSO, 2018b). Assuming that around 10,000 new homes fall into obsolescence each year, this means that we should be building at least 40,000-50,000 new homes a year by some estimates (Lyons, 2018).

Daft.ie figures show that the volume of housing units available for sale remained at very low levels in H1 2018, particularly in Dublin, where supply has been low for over a decade now.²³

²³ Based of unpublished Daft.ie dataset, available upon request

Figure 19: Stock of Residential Properties for Sale

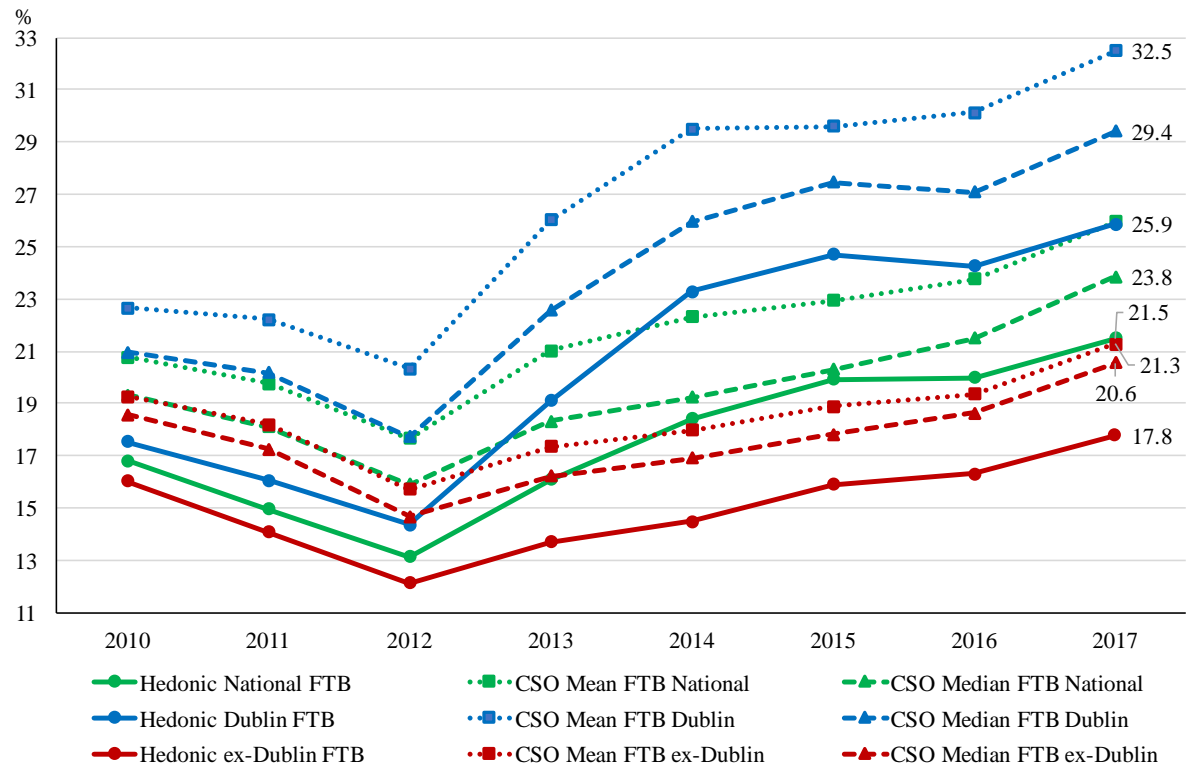


Source: Author's calculations, Daft.ie

In order to be as thorough as possible in our analysis, we will reconsider the cost of a mortgage of a typical FTB property, as per Section 7.2, in the context of the actual cost paid by FTBs for property in recent years. The CSO provides figures on this for the years 2010-2017.²⁴

²⁴ The ex-Dublin measure is based on a weighted average of transactions and prices from the 25 non-Dublin counties

Figure 20: Annual Mortgage Affordability (Various Property Price Measures)



Source: Author's calculations, CSO, Dept. of Finance, ESRI/Permanent TSB, Dept. of Housing

The true nature of the affordability issue is more clearly teased out in Figure 20. Not only do FTBs have to deal with property price growth which drastically outstrips increases in their real earnings, but a not insignificant proportion of the relatively more affordable stock of residential properties brought to market are being hoovered up by investors with deep pockets and no macroprudential constraints. A lack of supply is compounding the problem for potential FTBs.

8. Conclusions

The housing sector has become more volatile in recent decades, with a system in which the State took a significant active interest in housing giving way in the late 1980s to a more market-oriented model. This saw prices rise very sharply, reaching a peak in 2007, before the credit fuelled boom years saw prices and the wider economy decline. The economic downturn was disproportionality severe on the young population.

Changes in the cost of living over the past 30 years, as well as a growing trend of young people renting later into their life before they buy, have meant that saving for a deposit today is more of a challenge than was the case in the past. Government supports for First-time Buyers are also less generous and less universal than before.

The financialisation of housing has become a more pronounced trend in recent times. It has created additional competition in the market for residential properties, has pushed up prices and, while it may also be helping to spur some forms of construction activity, supply remains constrained overall to a degree that it is likely doing more harm than good from a housing affordability point of view. This is a far cry from the days when the State was building meaningful quantities of affordable homes for low-income families.

Overall, this research has put forward sufficient evidence by which it is reasonable to state that housing for Ireland's young people is less affordable today than was the case for their parents. Furthermore, we are clearly a long way from being a society in which having a place of one's own is a realistic ambition for most of our young people.

Bibliography

- Arundel, R., & Doling, J. (2017) *The end of mass homeownership? Changes in labour markets and housing tenure opportunities across Europe*. *Journal of Housing and the Built Environment*, 32 (4), 649-672.
- Belfield, C., Chandler, D., & Joyce, R. (2015) *Housing Trends in Prices, Costs and Tenure*. London: Institute for Fiscal Studies.
- Blackwell, J. (1988) *A Review of Housing Policy*. Dublin: National Economic and Social Council.
- Brown, J., Apostolova, V., Barton, C., Bolton, P., Dempsey, N., Harari, D., Hawkins, O., McGuinness, F., & Powell, A. (2017) *Millenials: House of Commons Briefing Paper CBP7946*. London: House of Commons Library.
- CBI (2016) *Review of residential mortgage lending requirements*. Dublin: Central Bank of Ireland.
- CBI (2017) *Review of residential mortgage lending requirements – Mortgage Measures 2017*. Dublin: Central Bank of Ireland.
- Connor, K., & McCann, F. (2016) *Rental markets, savings and the accumulation of mortgage deposits*, in *Central Bank of Ireland Quarterly Bulletin*, 4, 56-70, Dublin: Central Bank of Ireland.
- CSO (2016) *Census of Population 2016 - Profile 1 Housing in Ireland*. Dublin: Central Statistics Office.
- CSO (2017) *Household Budget Survey 2015-2016*. Retrieved from www.cso.ie [22 July 2018].
- CSO (2017b) *QNHS Module on Childcare – Quarter 3 2016*. Dublin: Central Statistics Office.
- CSO (2018) *Household Budget Survey Methods*. Retrieved from <https://www.cso.ie/en/methods/housingandhouseholds/householdbudgetsurvey/> [22 July 2018].
- CSO (2018b) *New Dwelling Completions Q1 2018*. Dublin: Central Statistics Office.
- CSO (2018c) *Residential Property Price Index June 2018*. Dublin: Central Statistics Office.
- CSO (2018d) *Consumer Price Index – June 2018*. Dublin: Central Statistics Office.
- CSO (2018e) *County Incomes and Regional GDP 2015*. Dublin: Central Statistics Office.
- CSO (2018f) *Vital Statistics Yearly Summary 2017*. Dublin: Central Statistics Office.
- CSO (2018g) *Annual Earnings and Labour Costs – 2017*. Dublin: Central Statistics Office.
- CSO (Various Years) *National Income and Expenditure Annual Results*. Dublin: Central Statistics Office.
- CSO (Various Years) *Household Budget Survey*. Dublin: Central Statistics Office.
- CSO (Various Years) *Census of Population*. Dublin: Central Statistics Office.
- Daft (2018) *The Daft.ie Rental Price Report – Q2 2018*, Dublin: Daft Media Limited.
- Department of Finance (Various Years) *Annual Budget*. Dublin: Government Stationary Office.
- Department of Housing (2016) *Average Price of Houses by Year, Statistic and Area*. Retrieved from: https://www.cso.ie/px/pxeirestat/Database/eirestat/Housing%20Statistics/Housing%20Statistics_statbank.asp?SP=Housing%20Statistics&Planguage=0&ProductID=DB_HS [10 April 2017].
- Department of Housing (2016b) *House Loans Approved and Paid by Year, House Type New or Second hand and Statistic*. Retrieved from https://www.cso.ie/px/pxeirestat/Database/eirestat/Housing%20Statistics/Housing%20Statistics_statbank.asp?SP=Housing%20Statistics&Planguage=0&ProductID=DB_HS [10 April 2017]
- ESRI/Permanent TSB (Various Years) *ESRI/Permanent TSB House Price Index*. Provided to the author by staff at the ESRI [June 2018].
- Hearne, R. (2017) *A Home or a Wealth Generator? Inequality, financialisation and the Irish housing crisis*. Dublin: Think-Tank for Action on Social Change.
- Hirsch, D., Valdez, L., & Gardiner, L. (2017) *Consuming forces: generational living standards measured through household consumption*. London: Resolution Foundation.

- Indecon (2017) *Indecon Impact Assessment of the Help to Buy Tax Incentive*. Retrieved from [http://www.budget.gov.ie/Budgets/2018/Documents/HTB Independent Impact Assessment Sept2017.pdf](http://www.budget.gov.ie/Budgets/2018/Documents/HTB_Independent_Impact_Assessment_Sept2017.pdf) [22 September 2018].
- Kinghan, C., Lyons, P., McCarthy, Y., & O'Toole, C. (2017) *Macroprudential Measures and Irish Mortgage Lending: An Overview of Lending in 2016*. Dublin: Central Bank of Ireland.
- Kinghan, C., Lyons, P., & McCarthy, Y. (2017b) *Macroprudential Measures and Irish Mortgage Lending: Insights from H1 2017*. Dublin: Central Bank of Ireland.
- Lawless, M., McQuinn, K., and Walsh, J. (2018) *Identifying Rent Pressures in Your Neighbourhood: A New Model of Irish Regional Rent Indicators*. *The Economic and Social Review*, 49 (1), 73-92.
- Kleven, H.J., Landais, C. & Sogaard, J.E. (2017) *Children and Gender Inequality: Evidence from Denmark*. Retrieved from https://www.henrikkleven.com/uploads/3/7/3/1/37310663/kleven-landais-sogaard_gender_feb2017.pdf [22 September 2018].
- Lyons, R. (2017) *Housing Market: Supply, Pricing and Servicing Issues (Draft Version)*. In John O'Hagan and Francis O'Toole (eds), *The Economy of Ireland – Policy & Performance* (13th edition). London: Palgrave MacMillan.
- Lyons, R. (2018) *Will Irish house prices fall?*. Retrieved from <http://www.ronanlyons.com/2018/06/04/will-irish-house-prices-fall/> [21 August 2018].
- MacMahon, B., Weld, G., Thornton, R., & Collins, M. (2012) *The Cost of a Child*. Dublin: Vincentian Partnership for Social Justice.
- McDonald, F (2002) *First time buyers grant abolished*. Retrieved from <https://www.irishtimes.com/news/first-time-buyers-grant-abolished-1.1126470> [1 September 2018].
- Norris, M. (2016) *Varieties of Home Ownership: Ireland's Transition from a Socialised to a Marketised Policy Regime*. *Housing Studies*, 31 (1), 81-101.
- Nugent, C. (2017) *The Affordability of Childcare in Ireland: Measuring Regional Disparities*, NERI Research in Brief, 2017 (52).
- OECD (2016b) *Society at a glance 2016*. Paris: The Organisation for Economic Co-operation and Development.
- Oireachtas (2018) *Answer to a Parliamentary Question from Deputy Roisin Shortall on 29/03/2018*. Retrieved from <https://www.kildarestreet.com/wrans/?id=2018-03-29a.279&s=2018-03-24..2018-04-02+section%3Awrans> [22 August 2018].
- Reddan, F (2017) *Housing: Who are the cash buyers and how come there's so many of them?*. Retrieved from <https://www.irishtimes.com/business/personal-finance/housing-who-are-the-cash-buyers-and-how-come-there-s-so-many-of-them-1.3224402> [1 August 2018].
- RTB (2017) *RTB Annual Report 2017: A Year of Change*. Dublin: Residential Tenancies Board.
- RTB (2018) *Rent Index – Quarter 1 2018*. Dublin: Residential Tenancies Board.
- Revenue Commissioners (2018) *Help to Buy (HTB) incentive*. Retrieved from <https://www.revenue.ie/en/property/help-to-buy-incentive/index.aspx> [22 August 2018].
- Turnbull (2017) *A long-term assessment of Irish house price affordability*. NERI Working Paper Series, 2017 (44).
- UN Special Rapporteur on Adequate Housing (2017) *Report of the Special Rapporteur on adequate housing as a component of the right to an adequate standard of living, and on the right to non-discrimination in this context*. Geneva: UN Human Rights Council.
- VPSJ (2018) *MESL 2018 – Update Report*. Dublin: Vincentian Partnership for Social Justice.

Appendix A. The Annual Earnings of a Young Couple (25-34)

This study provides various measures of housing affordability based against the average earnings of a typical young couple (both aged 25-34). While there is no consistent time series on the earnings of said young couple in Ireland, one can be constructed using a variety of different data sets. This of course poses the issue of differences in methodology between the income surveys used. That being said, the data series presented below is the best estimate of the earnings of a young couple available in the Irish context in the period of observation.

This data set draws on three main CSO sources. These are the Household Budget Survey (HBS), National Employment Survey (NES) and Earnings Analysis using Administrative Data Sources (EAADS).

While the NES and EAADS sources give direct estimates of average earnings, the HBS data must be modified slightly to make them more representative of the average. It is for that reason that HBS derived figures presented in Table 6 (below) are in fact 95 per cent of the average earnings viewed in the underlying micro data. This is to account for the fact that young people living outside the family home and thus, appearing in the survey, are likely to be slightly better off financially than their age based peer group as a whole.

It should also be noted that neither the NES nor the EAADS data published by the CSO provided an estimate of the average earnings of 25-34 years olds. The figures which are based on these income surveys and presented below were very kindly provided on an *ad hoc* basis by the CSO for the purpose of carrying out the research in this working paper.

For the years 2016 and 2017, average earnings are estimated by increasing the figure for the previous year in line with the growth in nominal regular wages for each year as presented by the CSO (2018g). This amounts to a 0.9 per cent increase in 2016 and a 1.9 per cent increase in 2017.

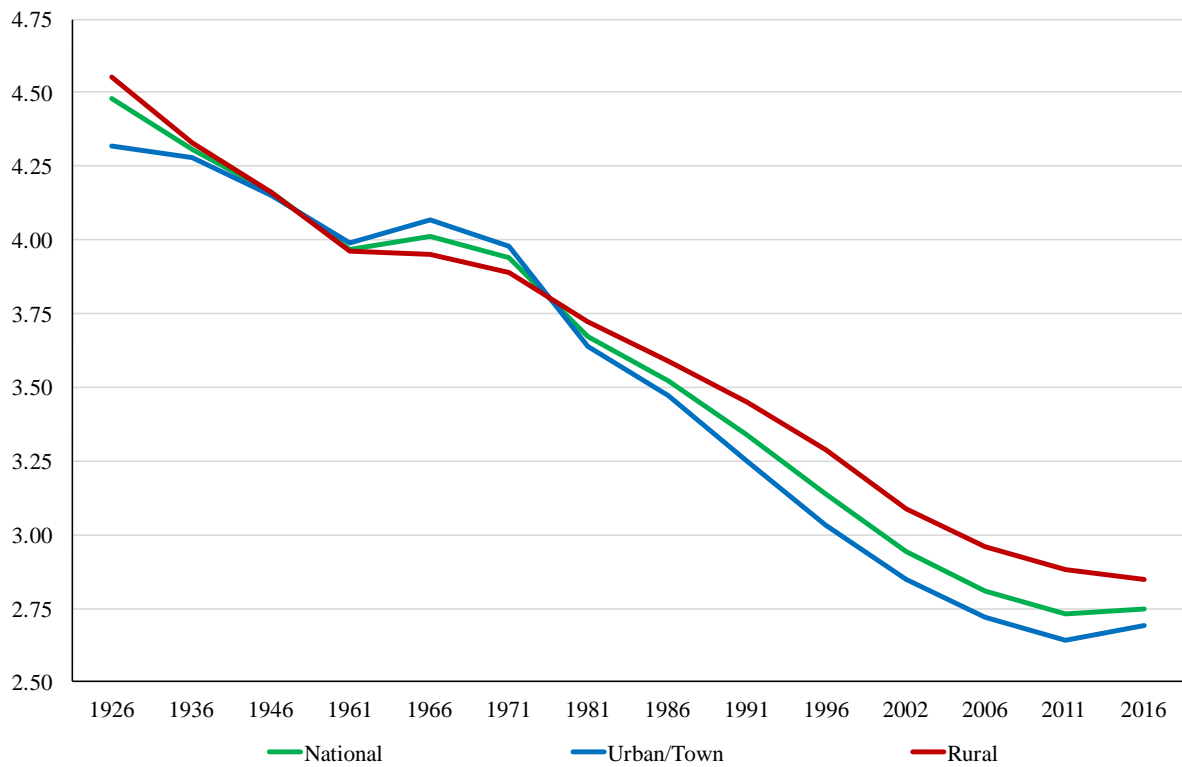
The 'annual mean earnings' figures are predicated on the assumption that there are 52.14 weeks in a year.

Table 6: Average Gross Earnings of a Young Couple (Both 25-34) in Euro

Year	Mean Weekly Gross Earnings (Young Couple)	Annual Mean Earnings (Young Couple)	Source	Notes
1987	472.29	24625.14	Author's Estimate Base on HBS Data	
1988	507.06	26438.28	Author's Estimate Base on HBS Data	
1994	591.74	30853.46	Author's Estimate Base on HBS Data	
1995	644.57	33608.08	Author's Estimate Base on HBS Data	
1999	740.61	38615.36	Author's Estimate Base on HBS Data	
2000	814.48	42466.74	Author's Estimate Base on HBS Data	
2003	1156.37	60293.13	NES	
2004	1231.38	64204.35	NES/HBS	(2003 Figure + 2005 Figure) / 2
2005	1306.40	68115.58	Author's Estimate Base on HBS Data	
2006	1318.97	68771.10	NES	
2007	1365.07	71174.75	NES	
2008	1395.33	72752.51	NES	
2009	1356.15	70709.66	NES	
2010	1261.26	65762.06	HBS	
2011	1207.54	62961.14	EAADS	
2012	1191.55	62127.42	EAADS	
2013	1189.07	61998.11	EAADS	
2014	1194.52	62282.27	EAADS	
2015	1196.80	62401.18	Author's Estimate Base on HBS Data	
2016	1207.03	62934.73	Author's Estimate	2015 Figure (+0.9%)
2017	1230.09	64137.07	Author's Estimate	2016 Figure (+1.9%)

Appendix B. Supplementary Charts

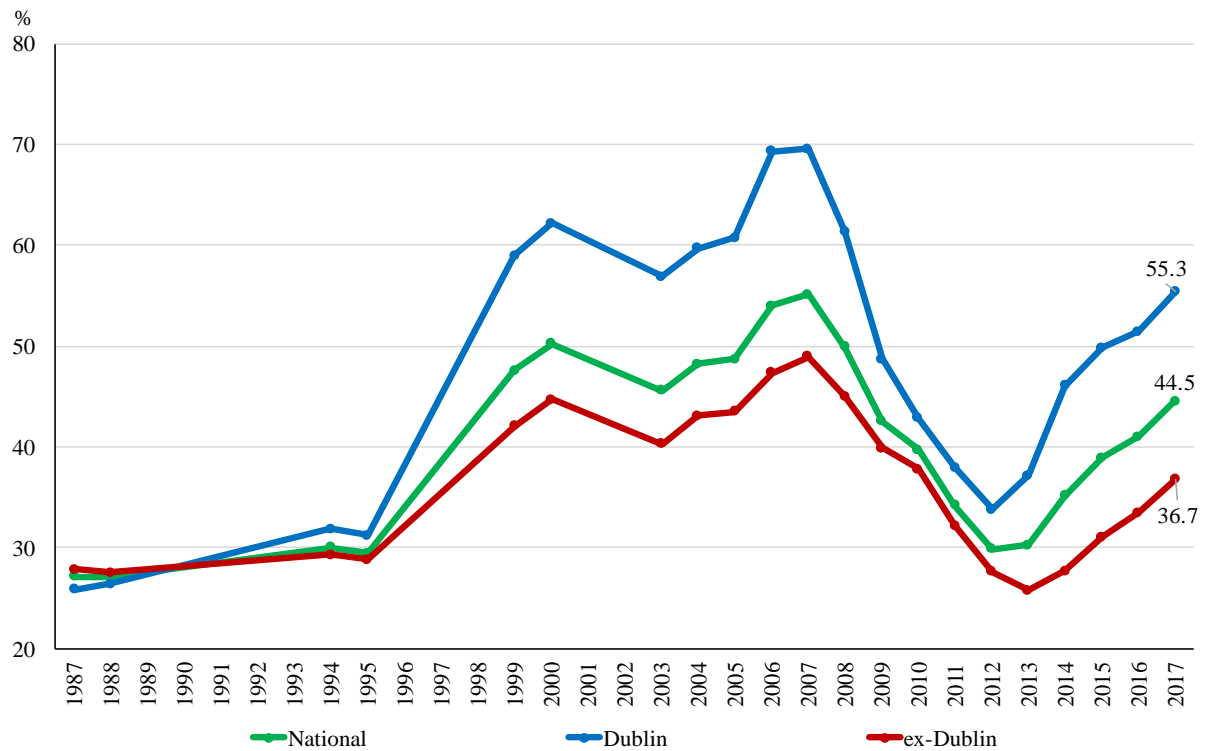
Figure 21: Average Number of People Per Private Household



Source: Author's calculations, based on CSO Census of Population (Various Years)

Note: The figure has increased in Urban/Town areas for the first time since 1966

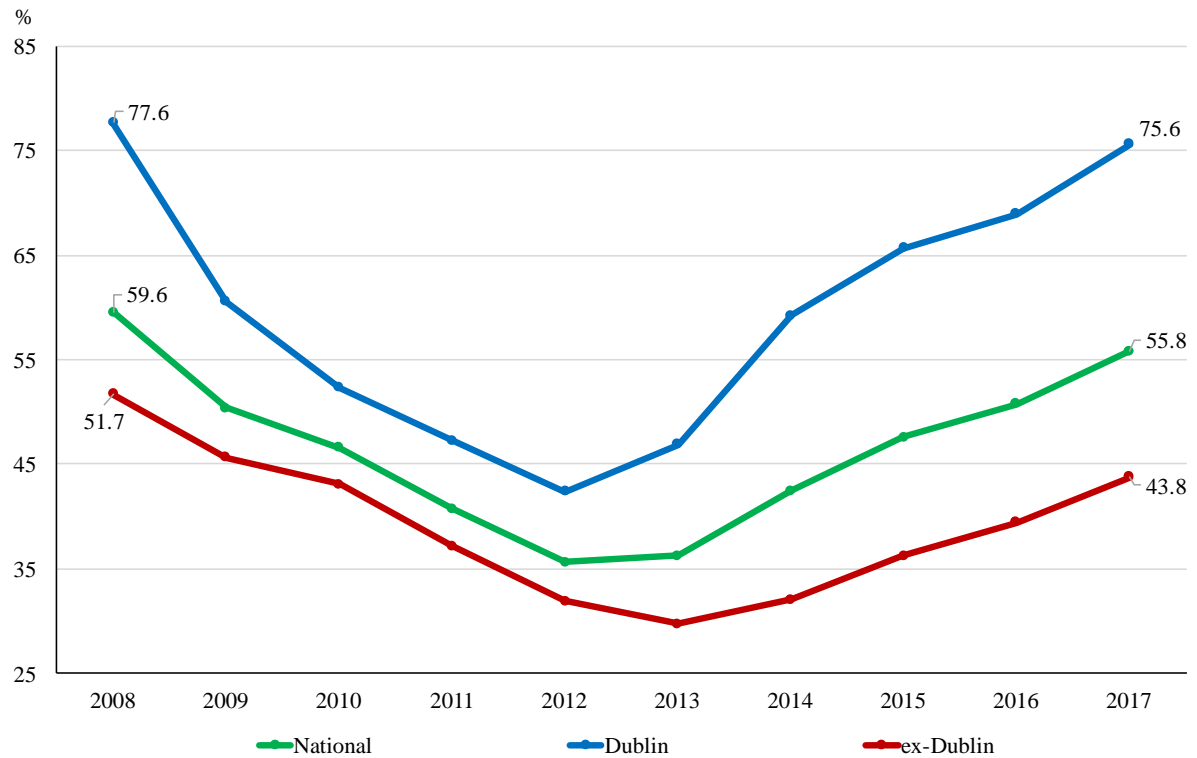
Figure 22: 10 Per Cent Deposit as Percentage of Net Annual Earnings



Source: Author's calculations

Notes: Based on typical young couple and house prices as outlined in Section 4.2

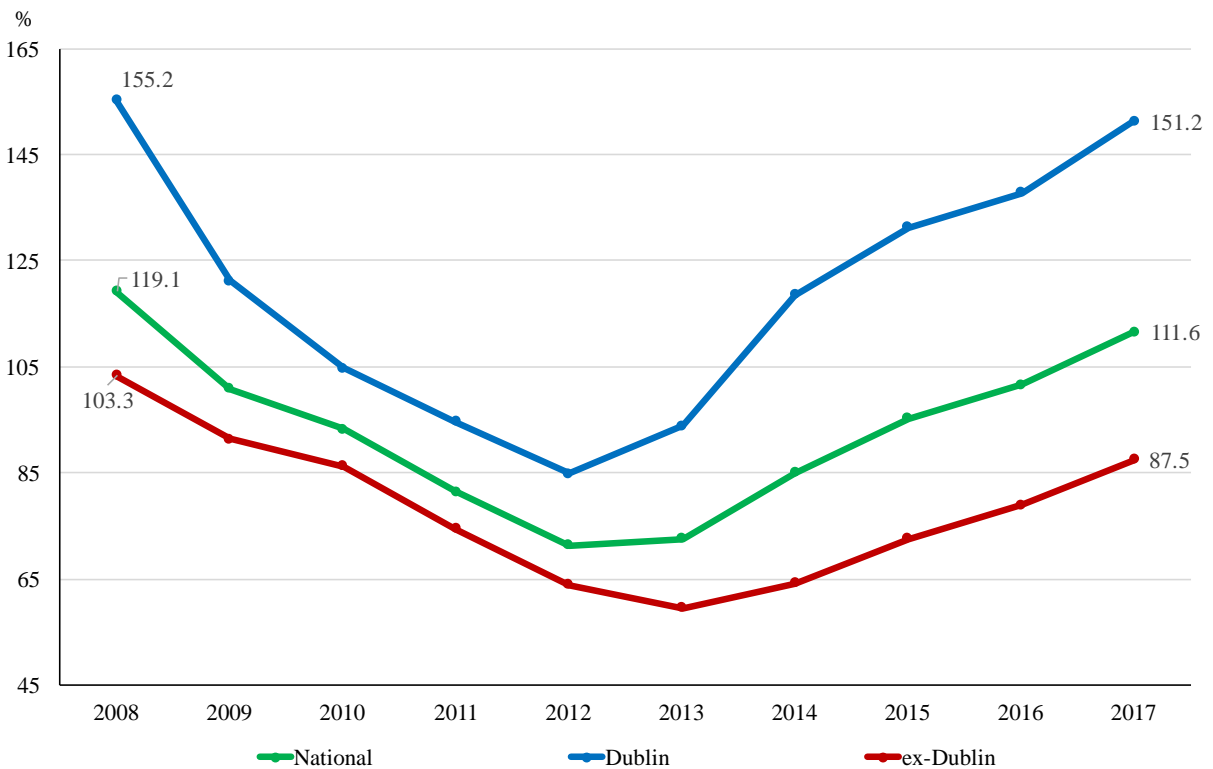
Figure 23: 10 Per Cent Deposit as a Percentage of Net Earnings (Minus Average Rent)



Source: Author's calculations

Notes: Based on a typical young couple and RTB 1 to 2 Bed Rent, House Prices as outlined in Section 4.2

Figure 24: 20 Per Cent Deposit as a Percentage of Net Earnings (Minus Average Rent)



Source: Author's calculations

Notes: Based on a typical young couple and RTB 1 to 2 Bed Rent, House Prices as outlined in Section 4.2

RECENT NERI WORKING PAPERS

The following is a list of recent research working papers from the NERI. Papers are available to download by clicking on the links below or from the NERI website:

<http://www.nerinstitute.net/research/category/neriworkingpapersseries/>

Number	Title/Author(s)
55	'Bad' Jobs and Productivity: The flexibility paradox – Paul Mac Flynn and Lisa Wilson
54	Equality in Irish Healthcare – Time for a New Deal - Paul Goldrick-Kelly & Tom Healy
53	Labour Market Trends in the Republic of Ireland - Thomas A. McDonnell & Ciarán Nugent
52	Housing Provision in Northern Ireland and its implications for Living Standards and Poverty – Paul Mac Flynn & Lisa Wilson.
51	Wage sufficiency in the context of the Irish Housing Emergency: Rents and Access to homeownership - Ciarán Nugent
2017:	
50	The gendered nature of employment and insecure employment in Northern Ireland: A story of continuity and change - Lisa Wilson
49	A Low skills equilibrium in Northern Ireland? - Paul Mac Flynn
48	Taxation and Revenue Sufficiency in the Republic of Ireland - Paul Goldrick-Kelly & Thomas A. McDonnell
47	Northern Ireland, the Republic of Ireland and the EU Customs Union - Paul Mac Flynn
46	Public Spending in the Republic of Ireland: A Descriptive Overview and Growth Implications – Thomas A. McDonnell & Paul Goldrick-Kelly
45	Patterns and Trends in employment arrangements and working hours in Northern Ireland – Lisa Wilson
44	A long-term assessment of Irish house price affordability - Dara Turnbull
43	A time series analysis of precarious work in the elementary professions in Ireland – Ciarán Nugent
42	Industrial Policy in Northern Ireland: A Regional Approach - Paul Mac Flynn
41	Ireland’s Housing Emergency – Time for a Game Changer - Tom Healy & Paul Goldrick-Kelly
40	Innovative Competence, How does Ireland do and does it matter? - Thomas A. McDonnell
2016:	
39	Productivity and the Northern Ireland Economy - Paul Mac Flynn
38	Divisions in Job Quality in Northern Ireland - Lisa Wilson
37	Employees on the Minimum Wage in the Republic of Ireland - Micheál L. Collins
36	Modelling the Impact of an Increase in Low Pay in the Republic of Ireland - Niamh Holton and Micheál L. Collins

For earlier NERI Working Papers see <http://www.nerinstitute.net/research>