RESEARCH SERIES NUMBER 164

JULY 2023

HOUSING AFFORDABILITY: IRELAND IN A CROSS-COUNTRY CONTEXT

WENDY DISCH AND RACHEL SLAYMAKER

INSTITIÚID TAIGHDE EACNAMAÍOCHTA AGUS SÓISIALTA
ESRI ECONOMIC & SOCIAL RESEARCH INSTITUTE

HOUSING AFFORDABILITY: IRELAND IN A CROSS-COUNTRY CONTEXT

Wendy Disch

Rachel Slaymaker

July 2023

RESEARCH SERIES

NUMBER 164

Available to download from www.esri.ie

https://doi.org/10.26504/rs164

ABOUT THE ESRI

The mission of the Economic and Social Research Institute (ESRI) is to advance evidence-based policymaking that supports economic sustainability and social progress in Ireland. ESRI researchers apply the highest standards of academic excellence to challenges facing policymakers, focusing on 10 areas of critical importance to 21st Century Ireland.

The Institute was founded in 1960 by a group of senior civil servants led by Dr T.K. Whitaker, who identified the need for independent and in-depth research analysis to provide a robust evidence base for policymaking in Ireland.

Since then, the Institute has remained committed to independent research and its work is free of any expressed ideology or political position. The Institute publishes all research reaching the appropriate academic standard, irrespective of its findings or who funds the research.

The quality of its research output is guaranteed by a rigorous peer review process. ESRI researchers are experts in their fields and are committed to producing work that meets the highest academic standards and practices.

The work of the Institute is disseminated widely in books, journal articles and reports. ESRI publications are available to download, free of charge, from its website. Additionally, ESRI staff communicate research findings at regular conferences and seminars.

The ESRI is a company limited by guarantee, answerable to its members and governed by a Council, comprising up to 14 members who represent a cross-section of ESRI members from academia, civil services, state agencies, businesses and civil society. The Institute receives an annual grant-in-aid from the Department of Public Expenditure and Reform to support the scientific and public interest elements of the Institute's activities; the grant accounted for an average of 30 per cent of the Institute's income over the lifetime of the last Research Strategy. The remaining funding comes from research programmes supported by government departments and agencies, public bodies and competitive research programmes.

Further information is available at www.esri.ie.

THE AUTHORS

Rachel Slaymaker is a Research Officer at the Economic and Social Research Institute (ESRI) and an Adjunct Assistant Professor at Trinity College Dublin (TCD). Wendy Disch is a Research Assistant at the ESRI.

ACKNOWLEDGEMENTS

This research was completed under the Joint Research Programme on Housing Economics between the ESRI and the Department of Housing, Local Government, and Heritage. The views expressed in this paper are those of the authors and they should not be regarded as an official position of the Department of Housing, Local Government, and Heritage. We are grateful to Eurostat and the Central Statistics Office (CSO) for facilitating access to the Survey of Income and Living Conditions (SILC) Research Microdata Files. Thanks also to the members of the Research Programme Steering Committee, as well as the anonymous external and internal reviewers for their helpful comments and guidance.

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

ABBREVIATIONS

AHB	Approved housing body
CSO	Central Statistics Office
ESRI	Economic and Social Research Institute
EU-SILC	Eurostat Survey on Income and Living Conditions
FTB	First-time buyer
HAP	Housing Assistance Payment
HCTI	Housing-Payment-Cost-to-Income ratio
ISR	Income sufficiency ratio
LA	Local authority
MRTI	Mortgage-Repayment-to-Income ratio
RAS	Rental Accommodation Scheme
RPZ	Rent Pressure Zone
RS	Rent Supplement
RTB	Residential Tenancies Board
RTI	Rent-to-Income ratio
SILC	Survey on Income and Living Conditions

EXECUTIVE SUMMARY

Persistent, structural housing affordability challenges in Ireland have been well documented for particular groups (private renters, low to middle income households and those in urban areas (Corrigan et al., 2019)). Recent research has also documented the access to credit constraints faced by first-time buyers and the challenges associated with accumulating a deposit and tight loan-to-income limits (McQuinn et al., 2021; Kelly and Mazza, 2019; Slaymaker et al., 2022). However, these challenges are not unique to Ireland, and worsening affordability pressures and falling homeownership rates have been highlighted globally (Demographia, 2022) as the share of household income spent on housing costs has risen over-time (OECD, 2021a).

This paper aims to better contextualise the housing affordability challenges faced in Ireland by examining how key affordability indicators such as housing-payment-cost-to-income ratios for Irish households (across tenures, incomes, household composition, urbanisation and age) compare with those in 14 other European countries. This analysis is based on 2019 Eurostat cross-country Survey on Living Conditions (EU-SILC) data to avoid any potential distortions in affordability indicators as a result of differing COVID-19 income support policy responses across countries. A considerable benefit of using nationally representative household level microdata is that they provide a more complete affordability picture for the full stock of tenants and mortgage holders compared to frequently cited rent/house price index measures based solely on new tenancies/recent movers.

A particular focus of the work is how the housing cost burdens of the most affordability challenged groups in Ireland compare to similar households across Europe and whether there are other cohorts in Ireland who are comparatively better off (spending lower proportions on housing costs) than their internationally comparable peers. Due to the challenges associated with cross-country comparison, we examine how the affordability outcomes for mortgage holders and all renters differ for similar groups of households (e.g. by income, age, urban, household composition), rather than grouping households according to the type of support (if any) they receive due to considerable variation in the types of rental supports available across countries. We supplement this cross-country analysis with insights from more detailed Irish SILC data to provide the most up-to-date affordability picture for Irish households and also examine the changing composition of the rental sector in Ireland in recent years.

MAIN FINDINGS

Key findings on cross-country affordability and tenure patterns

- This analysis focuses on housing-payment-cost-to-income ratios as they permit comparison across countries. However, these measures of housing affordability have limitations as they do not account for households' differing capacities to pay across the income distribution, or that certain households may choose higher levels of housing consumption as a preference rather than out of necessity. The broader housing context within different countries is also important.

- On average Irish households pay around one-fifth of their net incomes on their housing payment costs. Nine countries see higher housing-payment-cost-to-income ratios on average than in Ireland, with only five countries displaying better average housing affordability (Norway, Denmark, Portugal, Austria and Sweden).

- While the levels of outright homeownership vary significantly across countries, the distribution of outright ownership across incomes within countries is generally more comparable. In Ireland, though, this tenure is most common for households in the lowest income quintile, 54 per cent of whom own outright and therefore have no housing payment costs. This finding is driven by very high rates of outright ownership for retirees (over 65s) who make up half of Ireland's lowest income quintile.

- Overall, renters in Ireland have the lowest rent-to-income ratios (RTI) among the 15 countries analysed, paying on average 20 per cent of their net income on rent. Note for renters, to facilitate cross-country comparison, we report findings for the full rental sector inclusive of those in social housing, in receipt of housing allowances and private sector renters paying full market-price rents; there is considerable variation within the sector. This overall finding is driven by lower-middle income renters, with those in the lowest income quintile in Ireland facing an average RTI 10 percentage points lower than elsewhere and RTIs for those in the second and third quintiles 1 percentage point lower than elsewhere.

- While on average Irish renters have better affordability relative to other countries analysed, renters in the fourth and fifth income quintiles face rent-to-income ratios that are on average 2 to 3 percentage points higher than their European peers.

- Mortgage holders are concentrated in higher parts of the income distribution. Nordic countries exhibit a comparatively more equitable distribution of mortgage holders across the income distribution, as the only countries with fewer than 50 per cent of mortgage holders in the top two income quintiles. Ireland, along with Germany and Belgium have the smallest share of mortgage holders in the lowest income quintile. For Ireland this is likely linked to a variety of factors including the comparatively tight macroprudential mortgage parameters, high house prices and the Tenant Purchase Scheme.

- At an average of 20 per cent, Ireland ranks third for the proportion of monthly income spent on mortgage payments, behind France and Belgium, with Greece and Spain having lower but similar levels to Ireland. On average those in other European countries have lower mortgage repayment-to-income ratios (MRTI) than Irish households across all parts of the income distribution. Despite this relative position, few households pay more than 30 per cent of their income on mortgage payments.

- Regarding measures of high housing costs, elsewhere in Europe 20 per cent of households face housing costs greater than 30 per cent of their income, whereas the equivalent share in Ireland is lower at 15 per cent. However, in terms of the most severe affordability pressures, the rates in Ireland look similar to other countries; over 8 per cent of households spend more than 40 per cent of their income on housing in Ireland and elsewhere.

- Rent-to-income ratios (RTIs) are more dispersed for Irish households, meaning that even where mean RTIs are similar, some households do face more (and others less) extreme affordability burdens than their European counterparts. This is particularly the case in the fourth income quintile where a larger share of households pay more than 30 per cent of their incomes on rental costs (14 vs 3 per cent), and also in the third quintile (16 vs 9 per cent). Note more than half of private sector renters not in receipt of housing supports in Ireland fall within these income bands.

- Both in Ireland and elsewhere households in urban areas pay higher shares of their incomes on housing costs. While RTIs are generally higher elsewhere in Europe relative to Ireland, Irish renters (along with Norway and Greece) appear to have a larger urban/non-urban divide than their European counterparts, with a 5.5 percentage point gap in average RTI compared to a difference of just 2 percentage points elsewhere in Europe. Amongst mortgage holders the gap is less apparent.

- Lone parent families face higher housing-payment-cost-to-income ratios in Ireland than elsewhere (31 vs 27 per cent). This is even the case for renters who overall we have shown fare relatively better than their European counterparts.

- In general, single adult households are the most likely to face high housing costs elsewhere in Europe (35 per cent vs 27 per cent in Ireland). This is particularly the case in the rental sector where two-fifths of single renters face high housing costs compared to just under one-quarter in Ireland. This is likely related to the low share of single, childless households in Ireland compared to its European peers.

- Housing-payment-cost-to-income ratios and high housing cost benchmarks can only measure affordability for independently formed households. Affordability and availability concerns also impact the formation of new households. Several findings indicate Ireland faces significant challenges in this regard.

- More than one-in-four young adults aged 25-34 in Ireland remained living with parents in 2019. This is far below the levels observed in the southern European countries with a long history of family support and less established rental sectors (Portugal, Italy, Greece and Spain which range from 45 to 58 per cent). However, Ireland did see the largest percentage rise in this share between 2015 and 2019 across the 15 countries analysed.

- Ireland has the fourth highest rate of homeownership for households aged 40+ (just under 80 per cent). However, Ireland has only the tenth highest rate of homeownership for households aged below 40 (34 per cent), resulting in one of the biggest gaps in ownership rates between younger and older generations (second only to Greece). Aside from Greece, the countries with lower ownership rates for those <40 are those with a more established tradition of renting such as Denmark, Austria, Germany and Switzerland.

- Ireland has the lowest share of single adult households amongst independently formed households under 40.

Key findings on changing composition of Irish rental sector (2005-2019) and latest affordability trends (2021)

- There have been significant changes within the Irish rental sector in recent years which has led to a somewhat altered affordability outlook overall. In 2017, 58 per cent of households had insufficient residual income after housing costs to meet minimum living costs in the market price private rental sector. By 2019 this proportion had fallen to one-in-three households. This is at least partly due to the changing composition of the market price renting population which is linked to the expansion of policy supports such as Housing Assistance Payment (HAP).

- Given the targeting of HAP tenancies towards low-income households, the sample of market price renting households changes as these households are removed. Since 2017 the share of households in the bottom half of the income distribution who remain in the market price private renters cohort has fallen. This may be due to increased numbers of HAP recipients (from 31,228 households in 2017 to 52,529 in 2019) or other factors such as middle-income renters remaining in the private rental market as the rate of homeownership declines.

- Since 2014, the share of renters in the bottom 25 per cent of the income distribution not in receipt of any form of long-term housing supports fell from over 45 per cent to 25 per cent. In the second quartile of the income distribution this share also fell markedly from 2017 to 2019 by nearly 20 percentage points.

- Supported renters in receipt of subsidies (e.g. HAP/Rent Supplement) faced an average RTI of 15 per cent in 2021. In the absence of these subsidies, on average these households would have paid nearly 43 per cent of their income on their rent and nearly half would have faced an RTI above 40 per cent. It must be noted that this research does not explore the extent (or prevalence) of feedback loops between any policy supports and the market dynamics (such as price levels). While the affordability benefits for recipients are clear, any assessment of policy efficacy would require both costs to the State and feedback loops to be considered.

- While elsewhere rising affordability pressures have been primarily concentrated amongst the lowest income rental households, in Ireland the extensive supports have mitigated the effects for these households. However, despite the removal of many lower income households from the market price rental sector, affordability pressures remain elevated, with one-in-three rental households not in receipt of state housing supports paying more than 30 per cent of their net income on rent in 2021. This compares to only 7 per cent of mortgaged households.

CHAPTER 1

Introduction

Persistent housing affordability challenges in Ireland have been well documented. Previous research has shown that affordability challenges are not universal but instead are concentrated amongst distinct cohorts that face severe affordability pressures (private renters, low to middle income households and those in urban areas (Corrigan et al., 2019)). Their analysis used data up to 2016, therefore these trends of structural and persistent high housing cost burdens predate the more recent period of high rental and house price inflation. Since that period a number of policy instruments have also been deployed into the market which are relevant. In particular, the Housing Assistance Payment (HAP) which aims to address affordability challenges for low-income households in the rental sector, has expanded rapidly, and Rent Pressure Zones (RPZ) which aim to dampen rental inflation in designated areas, have been implemented.

Recent research has also documented the credit access constraints faced by first-time buyers and the challenges associated with deposit accumulation and tight income leverage limits, resulting in changes to the tenure structure (McQuinn et al., 2021; Kelly and Mazza, 2019; Slaymaker et al., 2022). Challenges faced by new tenants and first-time buyers in Ireland have also been documented in rent/house price index measures such as the RTB/ESRI Rent Index or Daft.ie[1] measures. However, these challenges are not unique to Ireland and affordability pressures and falling homeownership rates have been highlighted globally (Demographia, 2022), as the share of income spent on housing costs has risen over time (OECD, 2021a). While headline cross-country affordability measures such as Eurostat's housing cost overburden rate provide an overall measure of the challenges faced by each country, they are only able to provide an aggregate picture.

Within this context the aims of this paper are twofold. First, this paper aims to better contextualise the housing affordability challenges faced in Ireland by examining how key affordability indicators such as housing-payment-cost-to-income ratios for Irish households (across tenures, income distribution, household composition, urban vs non-urban and age) compare with those in 14 other European countries. A considerable benefit of the nationally representative household level microdata used in this study is that these provide a more complete affordability picture for the full stock of tenants and mortgage holders compared to measures based solely on new tenancies and recent movers or first-time buyers. A particular focus of the work is on how the housing cost burdens of the most affordability challenged groups in Ireland compare to similar households across

[1] Daft is Ireland's largest rental/sales listings website.

Europe and whether there are other cohorts in Ireland who are comparatively better off (spending lower proportions on housing costs) than their internationally comparable peers. We also investigate how the proportion of Irish households who meet high housing cost benchmarks (e.g. 30/35/40 per cent of income) compares with other European countries. The second major aim is to supplement this cross-country analysis with insights from more detailed Irish Survey on Living Conditions (SILC) data to explore how the composition of the Irish rental sector has changed in recent years and to document the resulting impacts on the latest affordability trends using 2021 data for Ireland.

The cross-country analysis presented in this paper is based on 2019 Eurostat cross-country Survey on Living Conditions (EU-SILC) data. We use 2019 rather than 2020 data[2] to avoid any potential distortions in affordability indicators resulting from differing COVID-19 income support policy responses across countries. While a cross-country study does bring challenges, particularly with regard to the differing housing systems, policy supports and tenure classifications across countries, the examination of households' housing-payment-cost-to-income ratios across different parts of the income distribution aims to harmonise the analysis and aid comparisons. Furthermore, the use of harmonised, nationally representative household surveys facilitates cross-country comparisons by avoiding issues around what particular rent or house price indexes in different countries may include in their calculations. They also provide a more accurate affordability picture for the full stock of tenants/ mortgaged homeowners, rather than measures based solely on new tenancies/recent movers. We focus on examining how the affordability outcomes for mortgage holders and all renters differ for similar groups of households (e.g. by income, age, urban, household composition), rather than grouping households according to the type of support (if any) they receive due to considerable variation in the types of rental supports available across countries.

The remainder of the paper is structured as follows. Chapter 2 provides an overview of how affordability can be measured as well as some historical context to differing housing systems across Europe. Chapter 3 explores how tenure patterns and key affordability indicators for different groups of Irish households compare to their European counterparts, and discusses the differences in the size and extent of support in rental markets across countries. Chapter 4 presents the latest housing affordability trends across tenures in Ireland in more depth and also examines the changing composition of the Irish rental sector in recent years. Chapter 5 concludes.

2 2021 cross country Eurostat microdata files were not yet available at the time of analysis.

CHAPTER 2

Background and context

The purpose of this chapter is to provide a discussion of what constitutes a housing cost and the pros and cons of different housing affordability indicators as context for the work in the remainder of this paper. Finally, we provide some background to historical cross-country differences in housing systems.

2.1 HOW TO MEASURE AFFORDABILITY?

2.1.1 Housing costs

The definition of housing costs is not straightforward and can vary substantially across datasets and papers. Narrower definitions focus purely on housing payment costs (rent or mortgage payments), while broader measures may also include utilities, mandatory service charges and insurance, regular maintenance and repairs, and taxes (e.g. EU-SILC's total housing cost measure). While the inclusion of utilities may provide a more accurate picture of the total costs faced by households in relation to housing, these are separate markets, and price fluctuations may be influenced by global events, as currently seen with high levels of inflation in energy markets following the Russian invasion of Ukraine in February 2022. Their inclusion could therefore confound understanding of what is happening specifically in the housing market, our core interest.

For mortgaged households there is also the question of whether to include the mortgage principal component. The EU-SILC total housing cost measure used by Eurostat excludes the mortgage principal component. When taking a longer-term lifecycle approach, mortgage principal payments can be thought of as contributing to the accumulation of housing wealth as opposed to a 'cost' of housing (Dewilde, 2015). On the other hand, in the short-term the mortgage payment in its entirety is a fixed monthly outlay for a household; in practice it is therefore not the same as a form of savings that can be paused if no longer feasible. As such, under a cashflow/point-in-time framework the mortgage repayment (inclusive of principal and interest) is a fixed monthly outlay for a household and should therefore be considered in its entirety. This approach is consistent with recent OECD and IMF publications (OECD 2021a; El Fayoumi et al., 2021). The inclusion (or not) of the mortgage principal component in the definition of housing costs is therefore dependent on the research question.

In this paper we follow the approach taken in Corrigan et al. (2019) and O'Toole et al. (2020) and focus purely on housing payment costs (either rental or mortgage repayment inclusive of principal and interest components).

2.1.2 Housing affordability indicators

Once housing costs are defined, another challenge is selecting an appropriate measure of housing affordability. Table 2.1 presents a description of commonly used housing affordability measures and weighs up the strengths and weaknesses of each measure.

TABLE 2.1 AN OVERVIEW OF KEY AFFORDABILITY METRICS

Measure	Detail	Pros	Cons
Housing-payment-cost-to-income ratio	Measure explores how much of (typically) net take-home income is spent on rental/ mortgage payments	Intuitive and straightforward to construct Can be compared across countries Can be disaggregated by groups (tenure, age, income distribution, household composition)	Can be too simplistic – single indicator does not take account of different levels of residual income across income distribution Does not account for households who may have preference to pay higher share of income on housing costs
Housing-payment-cost-to-income ratio – limited to lower end of income distribution	Measure explores how much of (typically) net take-home income is spent on rental/mortgage payments but is limited to those at lower end of income distribution, e.g. 30/40 measure[3]	Limits focus to lower-moderate income households in an attempt to exclude higher income households who may have a preference for paying a higher share of income to achieve higher quality	Arbitrary thresholds – e.g. is 40% the right income cut-off? Corrigan et al. (2019) find challenges up to 60th percentile in Ireland
Residual Income	Measures whether households have sufficient residual income after housing costs to cover a minimum level of required expenditure on other goods and services	Links housing affordability to potential consumption impacts	Requires detailed budget data – often not available and not easily comparable across countries How to define appropriate minimum essential standard of living budget? – consistency over time and countries Can also capture households with an income maintenance rather than housing cost issue

Source: Authors' analysis.

Table 2.2 presents two commonly used high housing cost indicators. These measures of high housing costs are based on the housing-payment-cost-to-income ratio expenditure and residual income measures outlined in Table 2.1.

3 The 30/40 measure captures those who face both a HCTI>30 per cent and are in the bottom 40 per cent of the income distribution.

TABLE 2.2 HIGH HOUSING COST INDICATORS

Indicator	Name	Detail
Indicator 1	% of households with rent-to-net income ratio > X per cent	Measure explores how much of net take-home income is spent on rental/mortgage payments
Indicator 2	% of households with sufficient residual income ratio < 1 (ISR)	Indicator measures whether households have sufficient residual income after housing cost to cover a minimum level of required expenditure

Source: Authors' analysis.

Indicator 1 is a simple per cent rule whereby a household is classified as having high housing costs if their rent or mortgage payment exceeds a particular benchmark percentage of their monthly net disposable income. The specific parameterisation of this indicator differs across countries and over time (Meen and Whitehead, 2020). For example, in Corrigan et al. (2019) and O'Toole et al. (2020) a 30 per cent rule for Ireland is used which draws on work by Quigley and Raphael (2004). However, Meen and Whitehead (2020) note a 40 per cent rule is applied in many European countries. In Ireland, the Planning and Development Act (2000) indicates a threshold of 35 per cent of net income and thus, from our perspective, can be used as an indicator. To take into consideration the potential for differences in the measures of affordability depending on the parameterisation of the benchmark, we present a range in this paper.

Indicator 2 is a residual income approach. It measures whether households have sufficient residual income after housing costs to cover a minimum level of required expenditure. If the level of the ratio is less than 1 this is an indicator of housing affordability stress as the household does not have sufficient income after housing costs to purchase a basic basket of goods and services. O'Toole et al. (2020) use the Vincentian Partnership Minimum Essential Standing of Living (MESL) expenditure levels as the minimum required level of expenditure. Corrigan (forthcoming) takes an alternative approach using a threshold of income adequacy grounded in social security payment rates.

The purpose of this work is to examine how key affordability metrics vary on a cross-country basis across different household types. As noted in Table 2.1 comparable detailed budgetary data are not available on a cross-country basis. We therefore do not present residual income measures in this cross-country focused work (Chapter 3) and instead focus on housing-payment-cost-to-income ratio measures examining how much of net take-home income is spent on rental/mortgage payments. All affordability metrics outlined in Table 2.1 have both conceptual and measurement limitations and it is important to keep this in mind throughout the analysis presented in Chapters 3 and 4. In particular, no single threshold (e.g. 30/35/40 per cent of income) can capture differing levels of residual income and choice over housing costs across the income distribution. In addition, affordability represents only one component of the housing challenges people face. In practice households may trade-off reduced quality, or location, for increased affordability, or indeed vice-versa. See Corrigan (forthcoming) for more discussion around the broader concept of housing stress and deprivation.

In a cross-country context, additional challenges arise regarding the measurement of housing costs and subsequent construction of housing-payment-cost-to-income ratios. In particular, how to deal with the presence of housing subsidies in the rental sector given the different nature of supports available in different countries. We discuss this further in Chapter 3.

2.2 CROSS-COUNTRY BACKGROUND TO HOUSING SYSTEMS

As we aim to compare housing affordability in Ireland to other countries across Europe, it is important to recognise the similarities and differences of housing systems across these countries. Even where countries share similar histories, their housing systems may vary greatly and a full assessment of each of them is beyond the scope of this paper. However, this section attempts to provide a brief overview of the general development of European housing systems in order to contextualise the differences in each country's tenure patterns reported in Chapter 3. A further discussion on the supports, policies and regulations that have shaped rental systems within each country is provided in Section 3.5 where we group countries based on their current housing systems.[4]

Across western Europe, governments were faced with significant housing shortages after the devastation of the world wars. Government support of large-scale housing schemes became a substantial tool for addressing the shortage, with countries across Europe generally falling into one of two social housing models[5] (Van der Heijden, 2002).

In the first system, social rented dwellings were constructed on a large scale and housed a large and diverse segment of the population, rather than targeting lowest-income or the most vulnerable households, i.e. there was little means-testing.[6] Over time, countries with this model of social rented housing have

4 For a more in-depth overview of key recent Irish housing policy developments, see Doolan et al. (2022) for an overview of housing supports for lower income renters, and Coffey et al. (2022) for information on rental inflation and stabilisation policies.

5 As noted by Poggio and Whitehead (2017), while the definition of what is considered social housing can vary across countries, most commonly, the social rented sector refers to either directly or indirectly subsidised dwellings which are allocated administratively and let at below market rents. Note this includes the provision of dwellings directly by the state, as well as the provision of social housing by private or semi-private non-profit providers (Kemeny et al., 2005).

6 This is also referred to the mass model by Harloe (1995) or the unitary system by Kemeny (1992; 1995). Germany, the Netherlands, Austria, Denmark and Sweden are typically associated with this system.

demonstrated lower rates of homeownership, as the rental sector has been treated as a secure form of tenure. In the second system, the provision of social housing was typically means-tested and intended as a means of housing low-income or vulnerable households.[7] Countries with this system typically have a preference for owner-occupation, as the social rental sector is targeted to those on low incomes and the private rental sector is typically associated with high prices and limited tenure security.

The global economic crisis of the 1970s led to a major shift in the role of welfare policies across western Europe. Countries began reducing public spending on housing to varying degrees, with many relying more heavily on market-oriented finance (Driant and Li, 2012). At the same time, easier access to credit with the liberalisation of mortgage lending and rising incomes contributed to an increase in owner occupation rates (Van der Heijden, 2002). In effect, these changes resulted in large declines in social housing across almost all European countries throughout the 1980s and 1990s (Scanlon et al., 2015). Social housing is nowadays increasingly targeted towards low-income and vulnerable households and income related subsidies are becoming a more important tool for offsetting affordability challenges emerging in both the private and public rental sector (Poggio and Whitehead, 2017).

The history of housing in southern European countries (Portugal, Spain, Italy and Greece) varies considerably from that of the other countries assessed in this report. Whereas governments in northern and western Europe turned to social housing in order to address the shortages caused from the World Wars, owner occupation and familial support have dominated the housing system in these countries (Allen, 2006). As will be shown in Chapter 3, this has resulted in limited expansion of the rental sector as well as limited supports and tenure security provided to renters in these countries.

The development of housing systems in eastern and central Europe is quite distinct from that of other European countries and while these countries do not share identical histories or policies, recent developments of their housing systems generally follow the same patterns. Throughout eastern and central Europe, policies in the post-World War II period were characterised by large-scale central planning, which extended to the housing sector. The production of housing was viewed as a form of public service in which the private sector played no role (Hegedüs and Tosics, 1996). Therefore, in this socialist model of housing, governments supported owner-occupation and public rented housing. Beginning in the 1960s, marketisation policies distributed government subsidies to

7 This is also referred to as the residual model by Harloe (1995) or the dual system by Kemeny (1992; 1995). Norway, Finland, Belgium and Ireland are typically associated with this system.

encourage owner-occupation. Meanwhile, public rents were subsidised and controlled by the state to ensure affordability but typically were not high enough to cover maintenance costs, thereby leading to inefficiencies and inequities in this tenure. In the 1980s, the changing political and ideological landscape in these countries led to deregulation in the housing sector and large-scale housing privatisation in the 1990s (Pichler-Milanovich, 2001). These policies are largely responsible for the high share of outright ownership across eastern and central European countries and contribute to large differences in the housing systems of these countries compared to the rest of Europe.

CHAPTER 3

Cross-country affordability trends

The aim of this chapter is to better contextualise the housing affordability challenges faced in Ireland, by examining how key affordability indicators such as housing-payment-cost-to-income ratios for Irish households compare with those in other European countries. First, we outline the datasets used in this analysis. Second, we explore differences in housing tenure and present trends in housing-payment-cost-to-income ratios across key household characteristics such as tenure, income, household composition, urbanisation and age. A particular focus of the work is how the housing cost burdens of the most affordability challenged groups in Ireland compare to similar households across Europe and whether there are other cohorts in Ireland who are comparatively better off (spending lower proportions on housing costs) than their internationally comparable peers. We then document the extent to which Irish households face high housing costs relative to comparable European households. Finally, we conclude with some discussion around the differing rental systems across Europe.

3.1 DATA

The analysis in this chapter is based on cross-country EU Survey on Income and Living Conditions (EU-SILC) microdata files available from Eurostat. These surveys are conducted on an annual basis with approximately 250,000 households interviewed per annum across Europe. The surveys are carried out by national statistical agencies within each country. The 2019 wave contains data for households in 30 countries. These datasets provide nationally representative household-level information on tenure, housing payments, incomes, housing allowances and other socio-economic characteristics. They also collect key personal level information such as age and employment status for individuals within households.

For this cross-country analysis we use the 2019 wave rather than the 2020 data.[8] As household incomes are a key component of affordability metrics, we use 2019 data to avoid potential distortions caused by differing COVID-19 income support responses across countries which may be evident in the 2020 files. As our focus in this work is on the structural differences in tenures and affordability outcomes between Ireland and other European countries, we believe the 2019 data to be most appropriate for this purpose.

---

8 2021 cross-country Eurostat microdata files were not yet available at the time of analysis. In addition, at the time of analysis, 2020 data were unavailable for Germany and Italy.

A considerable benefit of using household level microdata is that they provide a more complete affordability picture for the full stock of tenants and mortgage holders compared to frequently cited rent/house price index measures based solely on new tenancies/recent movers e.g. RTB/ESRI Rent Index or Daft.ie reports for Ireland. These survey microdata also facilitate cross-country comparison as they avoid issues around what particular rent or house price indexes in different countries may include in their calculations.

However, as outlined in Section 2.1.2, there are numerous challenges associated with the use of cross-country datasets. As the data are harmonised across countries, this does necessitate omitting certain country specific information. For instance, there is no distinction between social or public rental versus private rental (Dewilde, 2015). While market price and below market price rent splits are provided, these are not clearly defined and the interpretation and/or implementation appears to differ markedly across countries. The latter category is designed to include both those in social and subsidised housing in addition to those whose rents are fixed by law, i.e. some form of rent control (Dewilde, 2017). For Ireland this means that the 'below market price' rent group would include both those who live in local authority accommodation and pay a differential rent, alongside private sector renters who live in Rent Pressure Zones and pay some of the highest rents. We do not find this distinction to be meaningful and/or consistently applied across countries and therefore do not use it in our analysis.[9] For this reason in this chapter we focus on examining how the affordability outcomes differ for similar groups of households (e.g. by income, age, urban, household composition), rather than grouping households according to the type of support (if any) they receive. We return to discussion of the provision of different types of rental accommodation and supports across countries in Section 3.5 and present more specific analysis for Ireland in Chapter 4.

Throughout this analysis, income refers to a household's net disposable income.[10] In the EU-SILC dataset, net disposable income refers to the sum of gross personal income from all household members minus taxes on income and social contributions, any regular wealth taxes and/or inter-household cash transfers paid. Specifically, income is inclusive of earnings from employment or self-employment; pensions; unemployment, sickness, disability, and old age benefits; housing allowances; child or family allowances; inter-household cash transfers received; income from rental property or land; and interest or dividends from investments.

9 Indeed, using the more detailed tenure information available in Irish SILC 2021 shows that of Irish rental households not in receipt of state housing supports, there was a 50/50 split as to whether they were recorded as paying market price or below market price rent.

10 Income data in EU-SILC 2019 refer either to calendar year t-1 (i.e. 2018) or to income in the 12 months prior to the interview date, depending on the country.

In the EU-SILC datasets used in this chapter, rents are reported gross of housing allowances i.e. the full rental amount is recorded, not the amount actually paid directly by the tenant in the case of housing allowances. Net incomes used to calculate rent-to-income ratios are also reported inclusive of housing allowances. An alternative approach would be to subtract housing allowances from both rents and net incomes prior to calculating the RTI. As noted by Dewilde (2017), these two approaches do not give equivalent rent-to-income ratios for the same household. The question of which is the most appropriate method depends on the precise nature of any housing allowances. The first method is most suitable where the housing subsidy is implicit and not directly and separately identifiable, such as for households in Ireland living in local authority or approved housing body (AHB) owned housing stock and paying a differential rent. It is also arguably appropriate for households in receipt of an income subsidy towards housing costs whereby tenants are still responsible for paying the full rental price (e.g. Rent Supplement in Ireland). In Ireland however, given the nature of how HAP operates, for those in receipt of HAP, this method would lead to higher RTIs than in the case where housing allowances are subtracted from both rents and incomes prior to calculating the RTI, thus overstating the affordability challenges these households face. On balance for this cross-country analysis, we feel this first method is the most appropriate as the EU-SILC cross-country datasets do not contain this level of detail regarding the specific nature of any housing allowances, including if households are living in social or public housing. As a robustness check we will examine the implications of this choice on the distribution of RTIs. However, more detailed tenure information available in the 2021 CSO Irish-specific SILC dataset allows us to directly identify households in receipt of HAP and calculate their RTI using this second method. We will return to this in more detail in Chapter 4.

3.2 HOUSING TENURE

Figure 3.1 presents the share of the population in each housing tenure: owners, renters (of any type) and free housing[11] across all countries available in EU-SILC in 2019. Here we combine both outright and mortgaged homeowners into a single group, while renters include households in any type of rental accommodation: market price/private, subsidised, not for profit and social housing. As noted above, because EU-SILC surveys are harmonised and designed to be comparable, the rental tenure is not broken down further into these categories given the varying definitions of social and subsidised housing across countries.

Figure 3.1 shows huge variation in the rate of homeownership and the size of rental markets across countries, with the ownership rate ranging from under 40 per cent in Switzerland to nearly 95 per cent in Romania. The right-hand panel of Figure 3.1

[11] Free housing relates to accommodation which is provided rent-free, such as when the accommodation comes with the job, or is provided rent-free from a private source such as (but not limited to) a family member.

shows that central and eastern European countries have very high homeownership rates (often outright). Many of these are former communist countries which have historically had less market-based housing systems (Norris and Domański, 2009) and have been characterised as having less developed commercial mortgage lending markets (Shinozaki, 2005).

To focus on a narrower and more informative group of comparator countries, we therefore limit the remainder of our analysis in this work to those countries shown in the left-hand panel of Figure 3.1: Spain, Norway, Greece, Portugal, Italy, Belgium, Finland, France, Sweden, the Netherlands, Denmark, Austria, Germany and Switzerland. We feel the countries in the right-hand panel of Figure 3.1 are less useful and relevant as comparator countries for Ireland based on the following factors: i) very high outright homeownership rates, ii) less developed commercial mortgage markets iii) high proportion of 'free housing' and iv) small rental sectors. Nevertheless, from Figure 3.1a among the remaining European countries there is still substantial variation in tenure with higher ownership rates among southern European countries such as Spain, Greece, Portugal and Italy (70 per cent or higher), and much larger rental markets in more northern countries.

FIGURE 3.1 HOUSING TENURE – ALL COUNTRIES

Source: Authors' analysis of 2019 EU-SILC microdata files.

To further examine cross-country differences in housing tenure, Figure 3.2 breaks out the share of outright owners, mortgage holders, renters and free housing across five quintiles of the (net) income distribution, ranging from the lowest (Q1) to the highest income households (Q5).[12]

12 See Table A.1 for the euro amounts associated with these net disposable income quintiles.

Outright ownership

Southern European countries such as Greece, Spain and Italy see high levels of outright ownership across the income distribution. As discussed in Chapter 2, we know that these countries have a greater history of familial support for housing needs and less developed rental sectors. The role of familial support in southern European countries also extends to homeownership; housing and land owned by the family is more likely to be preserved amongst family members rather than sold and divided (Norris and Domański, 2009). While varying in share of the total population, we see most countries have relatively similar shares of households in outright ownership by income quintile. Two exceptions are Austria, with a much higher share of outright owners in the highest income quintile, and Ireland where this tenure is most common amongst those in the lowest income quintile. In Ireland this is driven by high outright ownership levels among retirees (proxied by households aged 65+, 86 per cent of whom own outright, (Appendix Figure A.2)), with households aged 65+ accounting for 50 per cent of households in Q1 and 39 per cent in Q2 (Figure A.3).

Mortgaged ownership

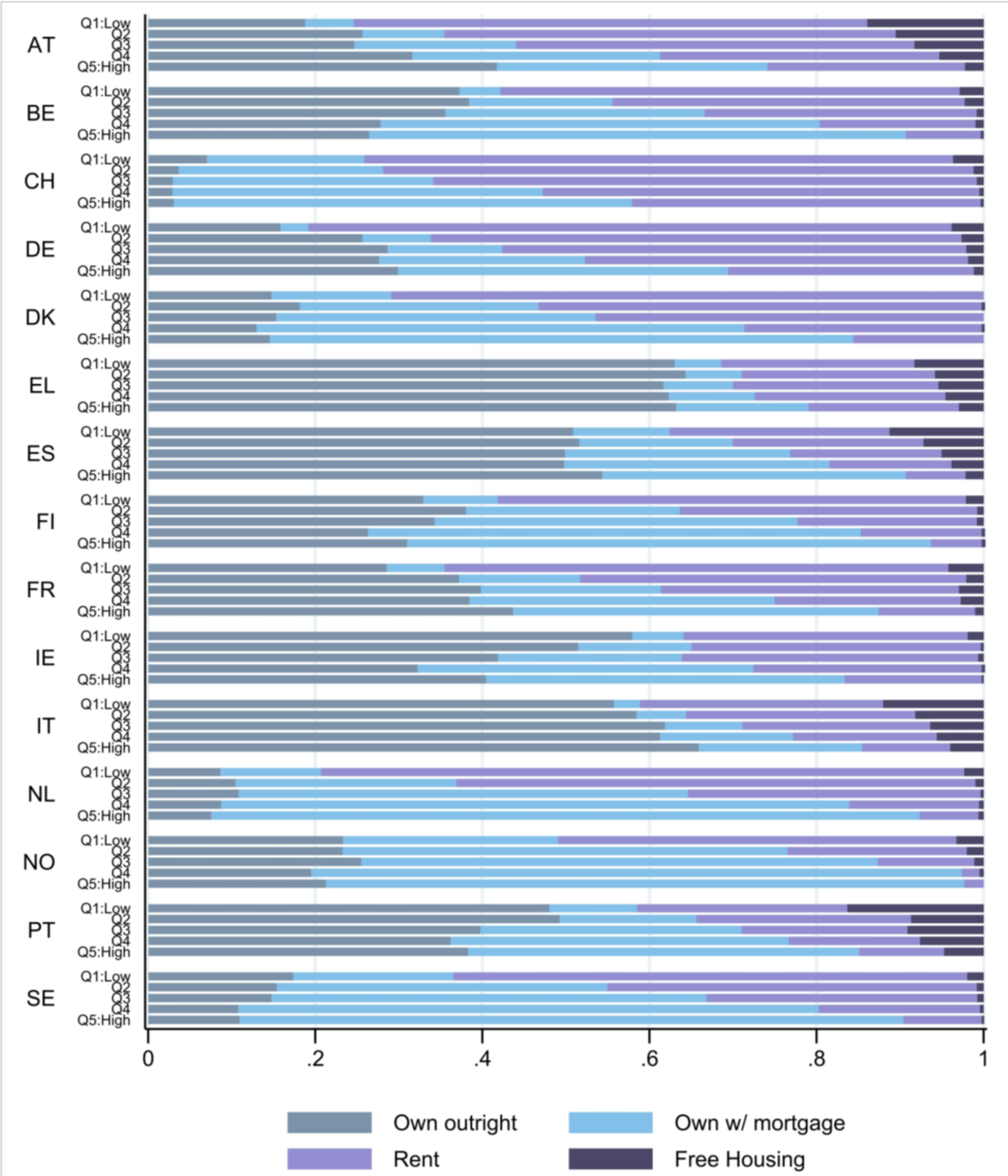
In contrast to outright ownership, there is a clear deviation in mortgaged households by income quintile across nearly all countries, with higher-income households much more likely to hold a mortgage than poorer households. In general, the Nordic countries have a relatively large share of households in the mortgaged sector, whereas this tenure group remains quite small in southern European countries.

Renters

In most countries, regardless of the size of their rental sector, renting (social and private combined) is the dominant tenure for lowest income households. Greece, Ireland, Italy, Portugal and Spain are exceptions to this, with the dominant tenure in Q1 and Q2 being outright homeownership, as presented in Figure 3.2. Households are much less likely to rent as their incomes increase, although this trend is much more pronounced in some countries than others. In the Netherlands, for example, only 7 per cent of highest-income households rent compared to 77 per cent of lowest-income households. Ireland and Greece are unique in this split; in both countries, the share of households in the rental sector remains constant across the bottom three income quintiles.[13]

[13] In Ireland, just over a third of households are in the rental sector in the first three quintiles, while in Greece, nearly a quarter of households in each of these income groups rent.

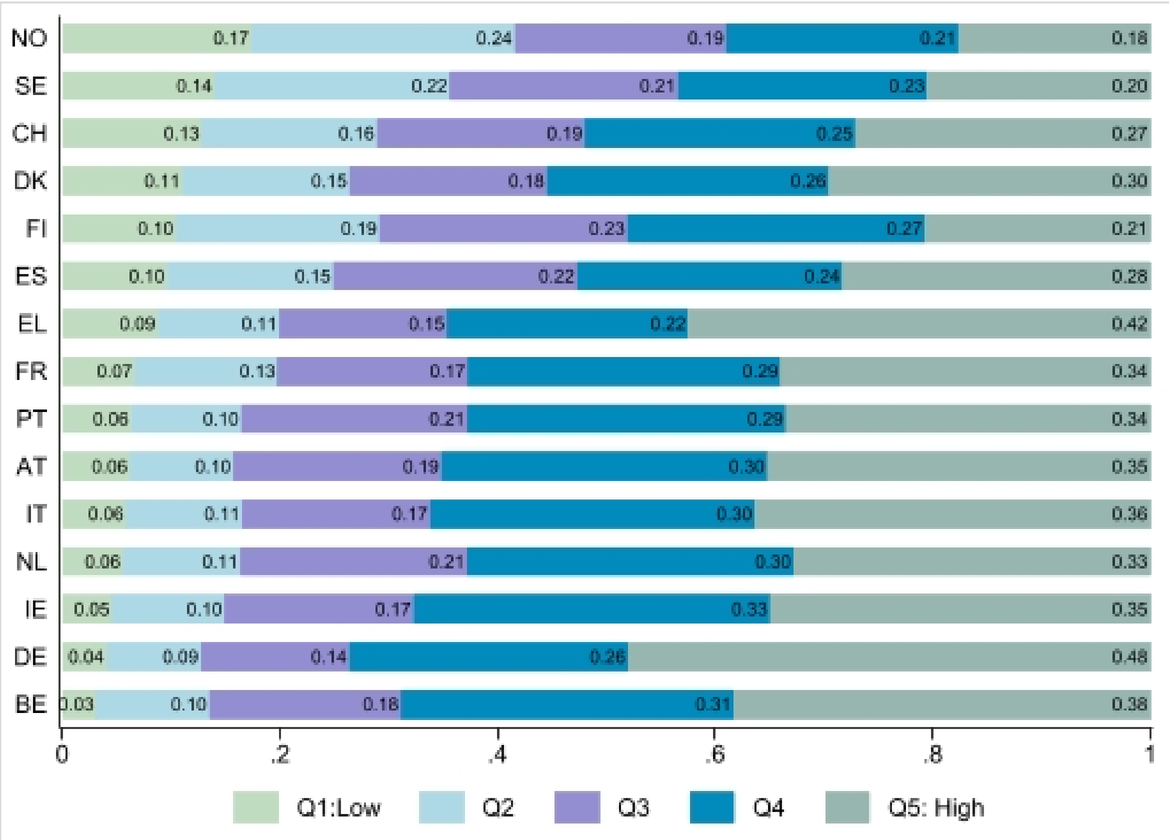
FIGURE 3.2 HOUSING TENURE ACROSS THE NET INCOME DISTRIBUTION



Source: Authors' analysis of 2019 EU-SILC microdata files.
Note: Renters include households in any type of rental accommodation (social, private/market price, etc.). Income distribution based on net incomes.

In contrast to the high outright ownership seen in Ireland driven by older cohorts, the challenges faced by younger Irish households to become homeowners in recent years have been well documented (Kelly and Mazza, 2019; McQuinn et al., 2021; Slaymaker et al., 2022). Figure 3.3 examines where mortgage holders are located across the income distribution on a cross-country basis. While overall levels of homeownership and mortgage holders vary significantly across these countries, it is clear that mortgage holders are consistently concentrated at the higher end of the income distribution. Apart from Norway, Sweden and Finland which see a somewhat more even spread across the income distribution, over 50 per cent of all mortgage holders are in the top two income quintiles. In Italy, Ireland, Belgium and Germany this is most pronounced, with two-thirds or more of all mortgage holders in the top two income quintiles. Belgium, Germany and Ireland have the fewest mortgage holders in the lowest income quintile (5 per cent or less). This is consistent with Lydon and McCann (2017) who show that few households at the lower end of the income distribution in Ireland receive mortgage credit relative to pre-2008 levels. These findings are likely related to the high rates of outright homeownership in Q1, as well as both high house prices and the macroprudential mortgage regulations and bank affordability stress tests in place since 2015 in Ireland to limit the amount that can be borrowed. Indeed, key macroprudential parameters are generally tight in Ireland relative to elsewhere in Europe (O'Toole and Slaymaker, 2022).[14] For Ireland, 17 per cent of mortgage holders are located in the third quintile, similar to the levels in France and Italy, Belgium and Denmark. Only Germany (14 per cent) and Greece (15 per cent) have a lower share. Finland reports the highest share in Q3 at 23 per cent).

FIGURE 3.3 WHERE ARE MORTGAGE HOLDERS LOCATED ACROSS THE NET INCOME DISTRIBUTION?



Source: Authors' analysis of 2019 EU-SILC microdata files.

[14] Note this analysis pre-dates the relaxation of macroprudential mortgage measures in Ireland which took effect from January 2023.

Turning now to differences in tenure by age, Figure 3.4 separates households aged below 40 from those aged 40+.[15] Note where any adult aged 40 or over is present that household is classified in the 40+ age group. It is important to note the 'young' households described here only include those who have formed independent households and therefore not those who remain in their family home. Across all countries, we see that renting is a more common tenure for younger households compared to older households. In Ireland, despite having a smaller rental sector overall,[16] the share of households under 40 who rent is higher than the average share amongst its peers (66 vs 61 per cent).[17] Only countries with a substantial rental market see higher shares of young households in the rental sector than Ireland.[18] Again, it must be kept in mind here that these findings are based on those in this age cohort living independently and therefore do not take into account variation in the likelihood of young adults living in the family home.[19] It is unclear which tenure we might expect young adults living at home to otherwise belong to. In Ireland on the one hand, a shortage of rental supply and high rent levels may prevent those who would like to rent from doing so. On the other hand, high house prices and the well-documented challenges faced by first-time buyers may be preventing those who would prefer to move directly into homeownership. The overall impact is therefore unclear.

Compared to other European countries, Ireland has a relatively high share of outright ownership amongst households over 40 (54 per cent). As noted above, Ireland sees very high levels of outright ownership among retiree cohorts aged 65+. Yet when looking at mortgage holders, Ireland is much closer to the average[20] across all comparable countries, with 25 per cent of Irish households over 40 in this tenure. Taking homeownership as a whole, previous research has documented the falling homeownership rates among younger age cohorts in Ireland (Roantree et al., 2021; Slaymaker et al., 2022). We see from Figure 3.4c that Ireland has one of the highest homeownership rates for those aged 40+; only Norway, Spain and Greece have higher ownership rates. However, Ireland has the sixth lowest rate of homeownership amongst households under 40,[21] resulting in one of the biggest gaps in ownership rates between younger and older households (second only to Greece).

15 This threshold was informed by previous research documenting differences in homeownership rates across age cohorts in Ireland (Slaymaker et al., 2022) whilst also ensuring sufficiently large sample sizes (particularly for young mortgage holders) across countries.

16 29.2 per cent of households are in the rental sector in Ireland compared to 36.4 per cent across comparable countries (Appendix Table A.2).

17 See Appendix Table A.3 for shares of households under 40 renting in each country.

18 Austria, Denmark, Germany and Switzerland have corresponding rates of 68, 71, 79 and 87 per cent of young households in the rental sector in 2019.

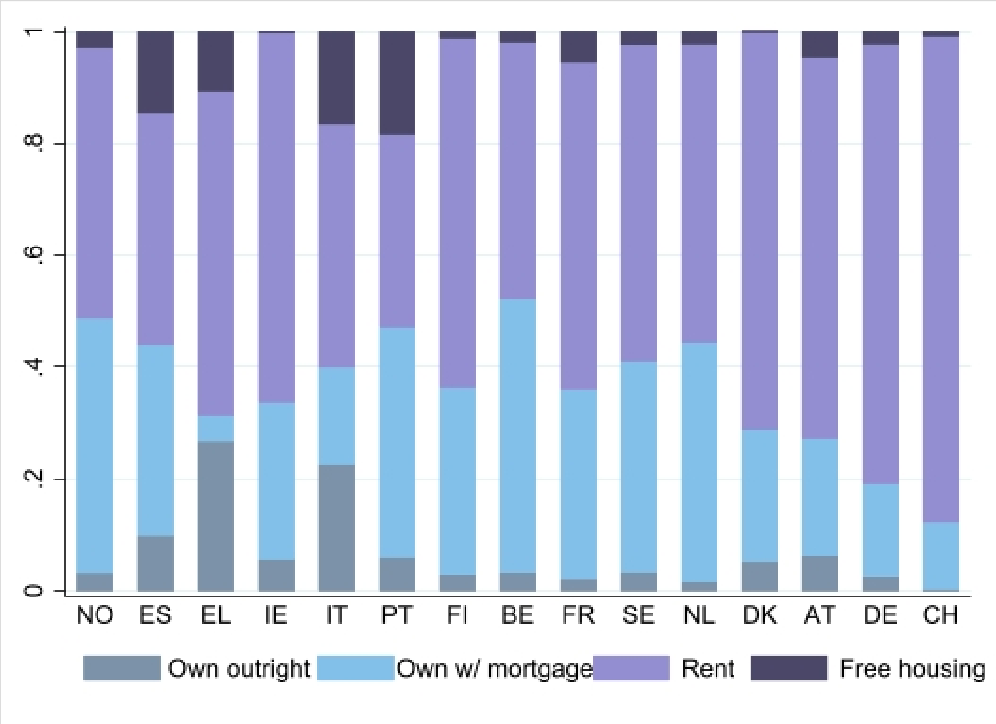
19 We return to this in Section 3.5.

20 See Appendix Table A.3. Average share of households over 40 in comparable countries who own with a mortgage is 22.2 per cent.

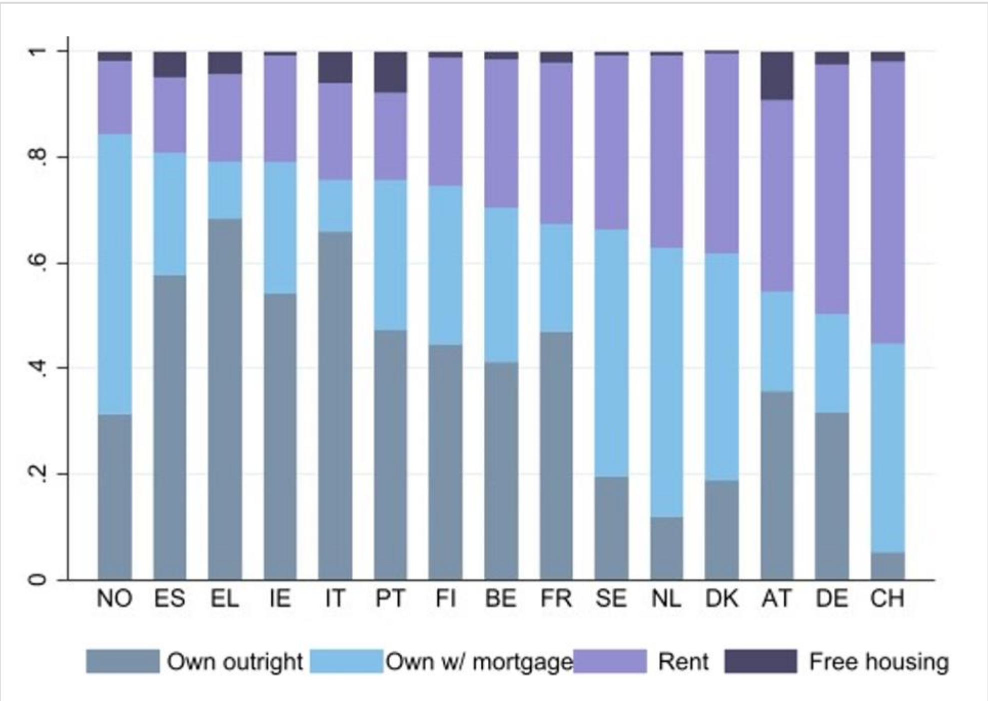
21 In Ireland, 34 per cent of independently formed households under 40 are homeowners. Greece, Denmark, Austria, Germany and Switzerland have corresponding homeownership rates of 31, 29, 27, 19 and 12 per cent amongst younger households.

FIGURE 3.4 HOUSING TENURE BY AGE

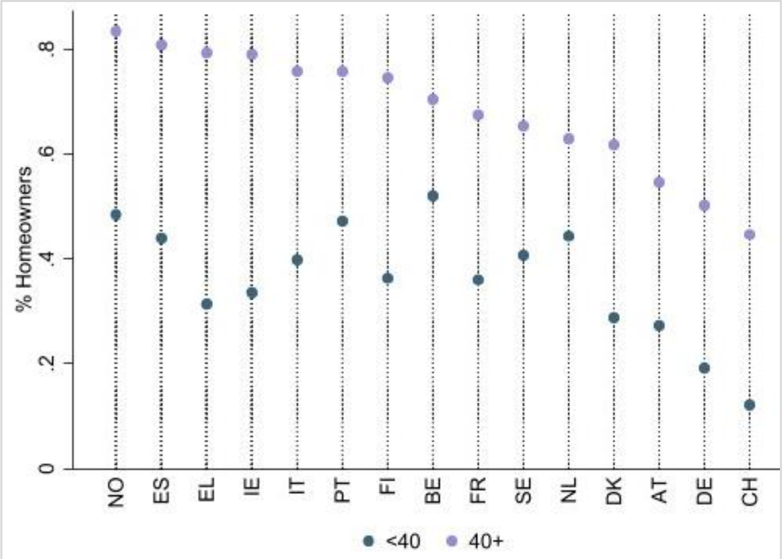
a) Under 40s:



b) 40s and Over:



c) Difference in Homeownership Rates by Age



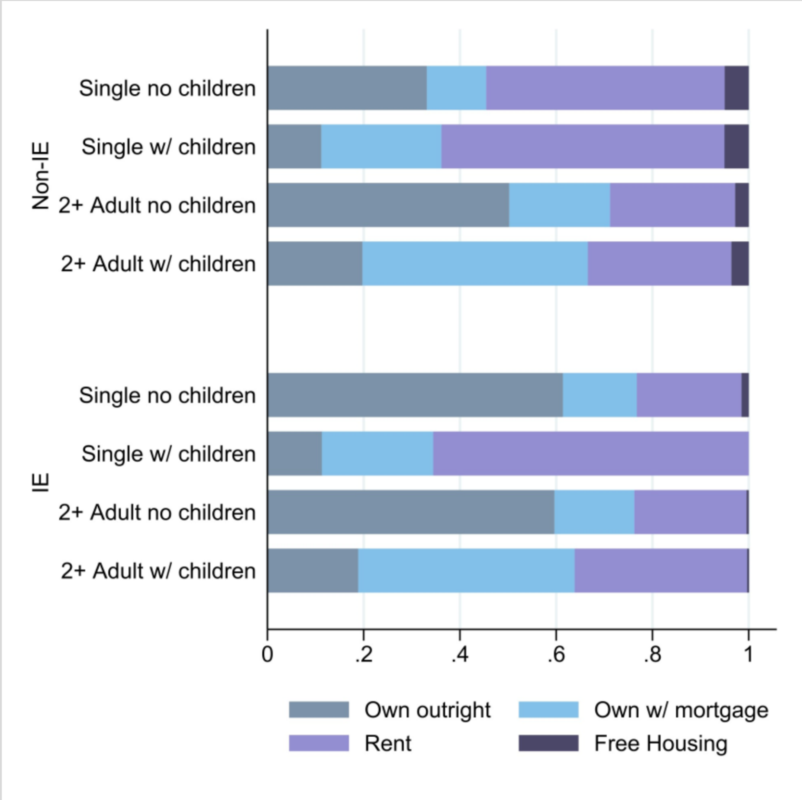
Source: Authors' analysis of 2019 EU-SILC microdata files.
Notes: Households under 40 relate to households in which all household members are younger than 40. Households are considered 40+ if any member of the household is aged 40 or older.
Charts are ordered in descending order by homeownership rates for households over 40.

Another important dimension is household composition. We group households into four types (single, single with children, two or more adults, two or more adults with children) and assess if there are differences in tenure patterns between Ireland and its European peers.

First, it is important to note that household compositions differ quite significantly between countries. Particularly in southern European countries and increasingly in Ireland, familial support is an important factor in housing tenure (see Section 3.5) which may help to explain the low share of single households without children in these countries (23-26 per cent). In other comparable countries, this composition accounts for over one-third of all households.[22] This is especially clear to see when household composition is split by age; of households under 40, just 11 per cent are composed of single adults with no children in Ireland compared to 40 per cent in other European countries.[23] Instead, younger households in Ireland are more likely to contain two or more adults than their European peers.[24] This also explains why we see a much greater share of single, childless households in the rental sector outside of Ireland (Figure 3.5). In contrast, these households are much more likely to be older and own their homes outright in Ireland.

22 Appendix Table A.4.
23 Appendix Table A.5.
24 28 per cent of Irish households under 40 live in this composition compared to 23 per cent across other countries.

FIGURE 3.5 HOUSING TENURE BY HOUSEHOLD COMPOSITION



Source: Authors' analysis of 2019 EU-SILC microdata files.

3.3 HOUSING AFFORDABILITY METRICS BY HOUSEHOLD CHARACTERISTICS

Having profiled differences in housing tenure patterns in the previous section, we now turn to the critical issue of affordability. To consider this in more detail, we present trends in the average housing-payment-cost-to-income ratio (HCTI) which is defined for an individual household *i* in period *t* as follows:

$$HCTI_{it} = \frac{Housing\ Payment\ Cost_{it}}{Disposable\ Income_{it}}$$

where the housing payment refers either to a rental payment for renters or a mortgage payment (inclusive of mortgage principal and interest components) for mortgaged homeowners. Households with no housing payment costs such as outright owners or those living rent free are therefore excluded from the remainder of our analysis. It is important to note that the comparatively high levels of outright ownership in Ireland mean a smaller share of the population actually have housing costs relative to elsewhere.[25] This should be kept in mind when interpreting the findings throughout the remainder of this chapter.

25 In the 2019 EU-SILC data 45.3 per cent of Irish households either own outright or have free housing and are therefore not included in the affordability analysis, compared to an average of 40.4 per cent across the other countries on average.

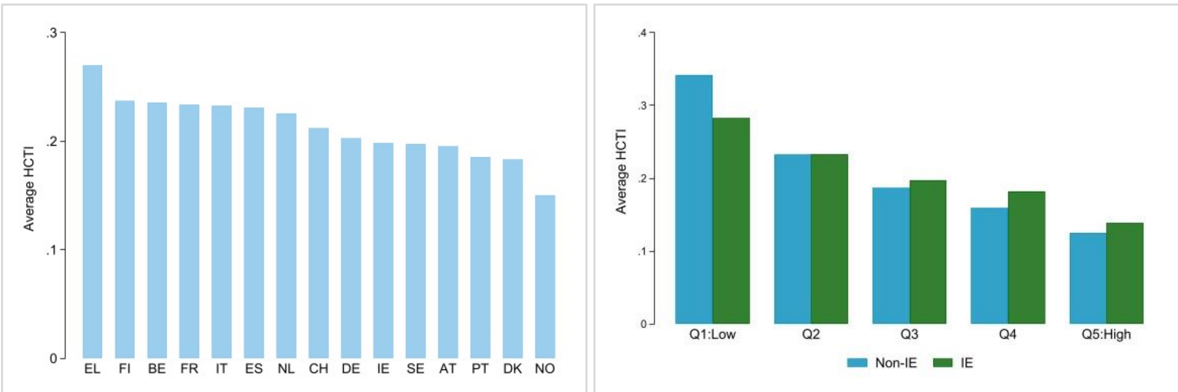
3.3.1 HCTI overall and by tenure

Figure 3.6a presents the average housing-payment-cost-to-income ratio across countries in 2019 and shows that on average housing-payment-cost-to-income ratios are lower in Ireland than in many of the other countries in our sample. Households in Ireland pay on average one-fifth of their net incomes on housing payments, whereas the average equivalent cost for households across comparable countries is 22 per cent. This average ranges from a low of 15 per cent in Norway to a high of 27 per cent in Greece.

However, from Figure 3.6b we see that this overall picture hides important distributional differences. For both Ireland and elsewhere, the share of income spent on housing payment costs falls as income rises.[26] However, while the lowest income (Q1) households in Ireland pay a lower share of their incomes on housing costs than their European counterparts, those in the second quintile pay very similar shares, while those in the middle and on higher incomes (Q3-Q5) pay more relative to those elsewhere in Europe. To understand these patterns further it is necessary to separate them out across tenures.

FIGURE 3.6 MEAN HOUSING COST-TO-NET INCOME RATIOS ACROSS COUNTRIES AND OVER INCOME DISTRIBUTION

a) Across Countries | b) Across Income Distribution – Ireland vs Other



Source: Authors' analysis of 2019 EU-SILC microdata files.
Notes: Non-IE reports the mean figures across the other 14 countries combined.

Focusing first on mortgage holders, Figure 3.7a presents average mortgage repayment-to-income ratios (MRTI) for all countries in our sample.[27] The first thing to note is the variation across countries. French mortgage holders face the highest average MRTIs at 21.5 per cent. Mortgage holders in Belgium, Ireland, Greece and Spain find themselves paying the next highest share of their monthly incomes on

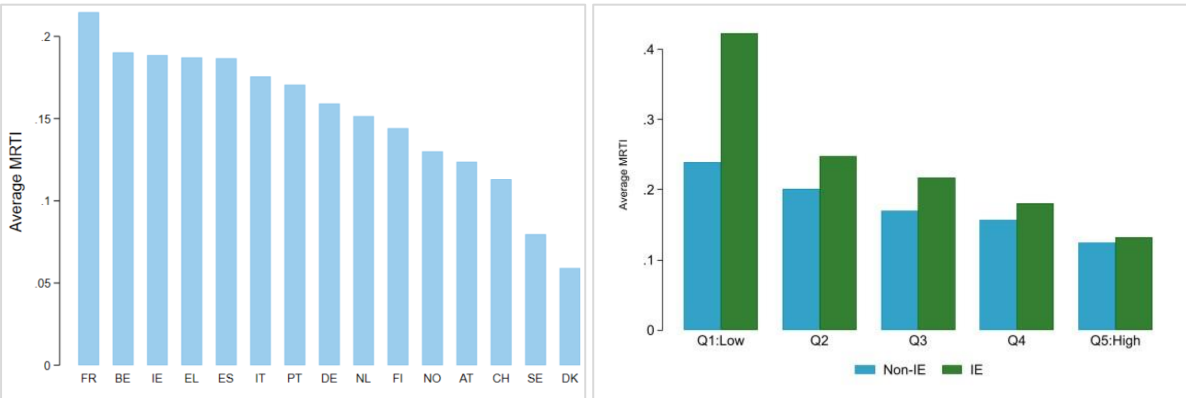
[26] As with all analysis of affordability metrics in this chapter, only households with housing payment costs are included in the analysis.
[27] In Denmark mortgage holders do not repay capital on a monthly basis so their ratios only include interest payments.

their mortgage payments (between 18.5-19 per cent).[28] That MRTIs in Ireland are at the higher end is perhaps unsurprising given high house prices levels and the fact that interest rates in 2019 were comparatively high in Ireland, at least in part due to the enhanced capital buffer requirements for Irish banks.[29] Figure 3.7b shows that on average those in other European countries have lower MRTIs than Irish households across the income distribution. The greatest differences are found at the lower end of the income distribution. However, it is important to note that there are very small numbers of Irish mortgage holders in Q1 of the income distribution as documented in Figure 3.3. The higher MRTIs faced by Irish households, and particularly for those at the lower end of the income distribution, are likely legacy issues from the loose credit conditions of the mid-2000s boom whereby households including those on lower incomes were able to borrow large multiples of their incomes (McCarthy and McQuinn, 2017). The affordability challenges faced by these low-income mortgage holders were previously documented by Corrigan et al. (2019).

FIGURE 3.7 MEAN MORTGAGE REPAYMENT-TO-NET INCOME RATIOS ACROSS COUNTRIES AND OVER INCOME DISTRIBUTION

a) Across Countries

b) Across Income Distribution – Ireland vs Others



Source: Authors' analysis of 2019 EU-SILC microdata files.
Note: Note there are very few mortgage holders in the lowest income quintiles. For Ireland 5 and 10 per cent respectively for Q1 and Q2 (see Figure 3.3). Non-IE reports the mean figures across the other 14 countries combined.

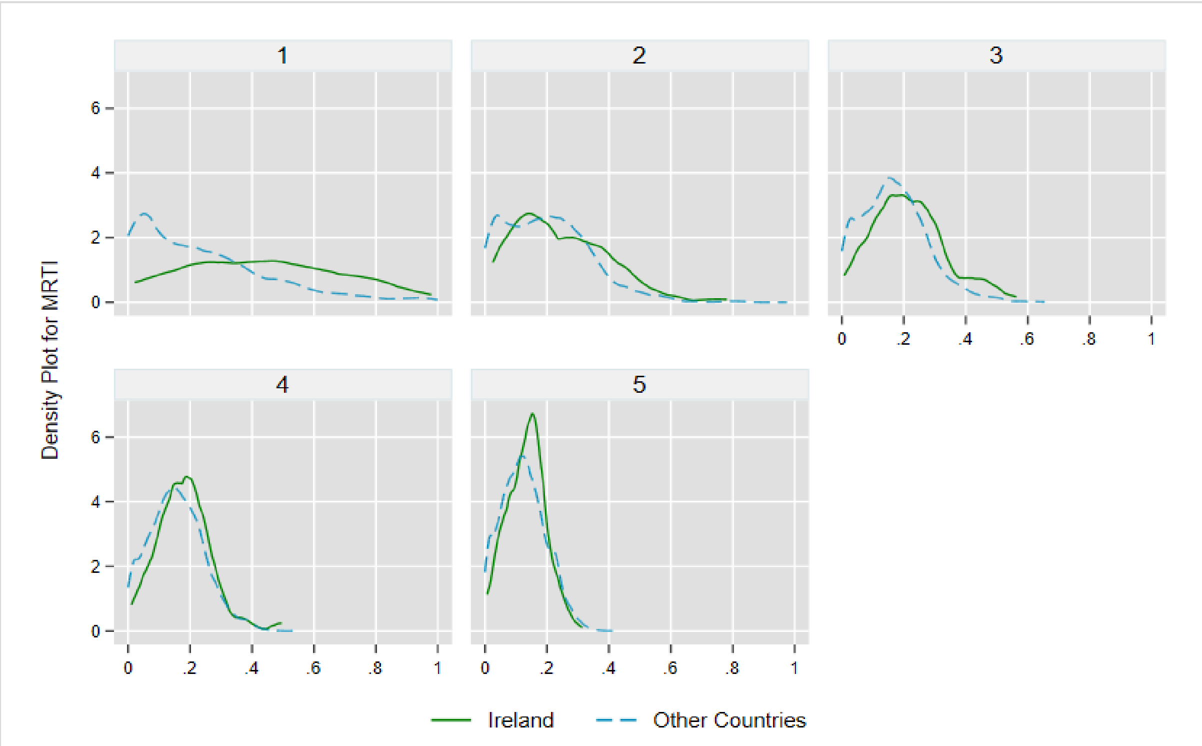
While averages can be informative, distributional analysis is typically more useful for capturing those facing the most (and least) severe affordability pressures. Figure 3.8 shows the distribution of MRTIs for Ireland versus the other countries combined across the income distribution. It is first important to note here that

28 Note that mortgage duration does not appear to be a significant factor in MRTI measurements, although mortgage durations do vary by country. Irish mortgage holders are similar to their European counterparts with average loan durations for first-time buyers and second-time buyers of 29 and 24 years, respectively. Loan durations in most countries range from 20 to 30 years. Portugal is a slight outlier, with an average duration of 33 years. In Switzerland, loan durations are much lower than other European countries and in Sweden, the contractual length is typically 30 to 50 years, however, mortgage borrowers frequently terminate or switch mortgages before the contract length is reached (see European Mortgage Federation, 2022).

29 As of August 2019, interest rates for new mortgage lending in Ireland were second only to Greece among EU countries with available data (Central Bank of Ireland, 2019).

there are only small numbers of mortgage holders in population income quintiles 1 and 2 (e.g. for Ireland 5 and 10 per cent of mortgage holders respectively, see Figure 3.3) and therefore the first two panels represent small numbers of households. For the second and third income quintiles, while the overall shapes of the distributions are similar, it is clear that there are more Irish households paying MRTIs between 30-50 per cent. The distributions for the fourth and fifth income quintiles also lie to the right of those for the other countries, although few households in these categories are paying more than 30 per cent of their income on housing costs. Overall Figures 3.7 and 3.8 show that Irish MRTIs are higher on average across all income quintiles and that more lower-to-middle income Irish mortgage holders are paying high mortgage burdens (30-50 per cent) relative to elsewhere. Conversely, very few middle-to-higher income Irish mortgaged households pay an MRTI above 30 per cent. As discussed and shown in Figure 3.3, this is perhaps unsurprising given that most mortgage holders in Ireland are in the top two income quintiles and the macroprudential mortgage regulations and bank affordability stress tests in place since 2015 in Ireland limit the amount that can be borrowed. Furthermore, key macroprudential parameters are generally tight in Ireland relative to elsewhere in Europe (O'Toole and Slaymaker, 2022).

FIGURE 3.8 DISTRIBUTION OF MORTGAGE REPAYMENT-TO-INCOME RATIOS ACROSS INCOME QUINTILES



Source: Authors' analysis of 2019 EU-SILC microdata files.
Note: The axes are identical for all five density plots. The X axis presents MRTIs in decimal form, e.g. 0.2 refers to an MRTI of 20 per cent. Non-IE reports the distribution for the other 14 countries combined. It is important to note that there are only small numbers of mortgage holders in population income quintiles 1 and 2 (e.g. for Ireland 5 and 10 per cent of mortgage holders respectively, see Figure 3.3) and therefore the first two panels represent small numbers of households. Within this we therefore see cases at the top end of the distribution where households appear to be paying at or close to 100 per cent of their income on mortgage repayments. This can occur for a small number of households, for instance in the case of income loss and relying on savings for a period.

It is important to note here that Kelly et al. (2021) do not find the mortgage burdens of Irish households to be out of line when comparing among OECD countries. Their study includes more traditionally high homeownership countries such as the UK, US, Australia and Canada, compared to those in Europe, which may explain why Irish households' mortgage burdens rank higher amongst European as opposed to OECD countries.

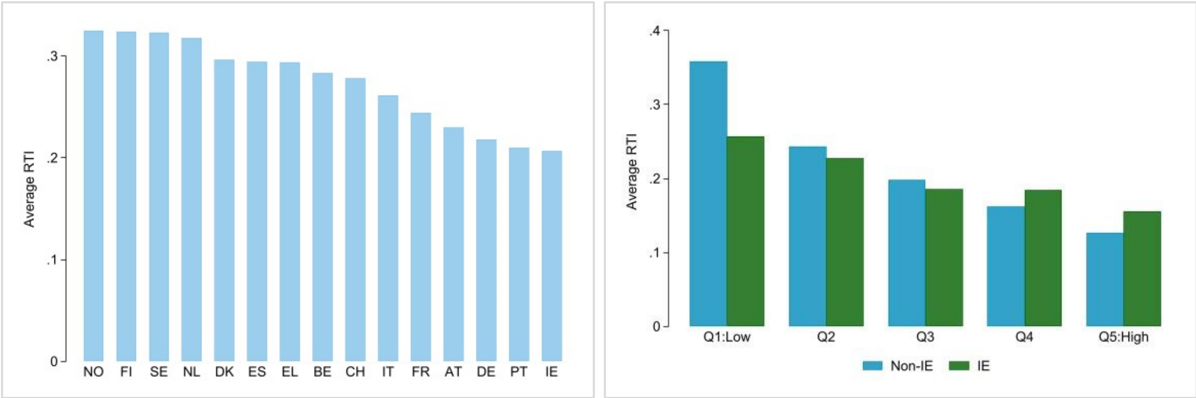
Turning now to the rental sector, we see quite different trends in affordability amongst this tenure compared to mortgage holders. Renters in Ireland have the lowest RTIs on average among the countries in our sample, with renters paying one-fifth of their income on rent (Figure 3.9a). While at first glance this may seem surprising given the well documented affordability pressures faced by households in the Irish private rental sector, more than half of renters in Ireland are now in receipt of housing supports (Doolan et al., 2022).

The impact of the supports provided to Irish renters can be seen when we look at cost-to-income ratios by income quintile (Figure 3.9b). Clearly, low-income households in Ireland are paying a much lower share of income towards rental costs than their European peers on average (26 per cent compared to 36 per cent, respectively). These findings are consistent with prior evidence that social housing rents are comparatively low in Ireland. Comparing Ireland with Denmark, Norris and Byrne (2017) note that in 2016 Irish social housing rent levels were only one-third of those found in Denmark. They note the income-based system of differential rents in Ireland contrasts with the more common approach in many western European countries whereby social housing rents are typically set to cover the maintenance and management of properties and also to service borrowing costs associated with social housing provision (Norris and Byrne, 2017). For households in Q2 (23 vs 24 per cent) and Q3 (19 vs 20 per cent) of the income distribution, Irish renters pay a slightly lower RTI than elsewhere in Europe. However, in Ireland, households in the fourth and fifth highest income quintiles pay two to three percentage points more of their income on rent than their European peers.

FIGURE 3.9 MEAN RENT-TO-INCOME RATIOS ACROSS COUNTRIES AND OVER INCOME DISTRIBUTION

a) Across Countries

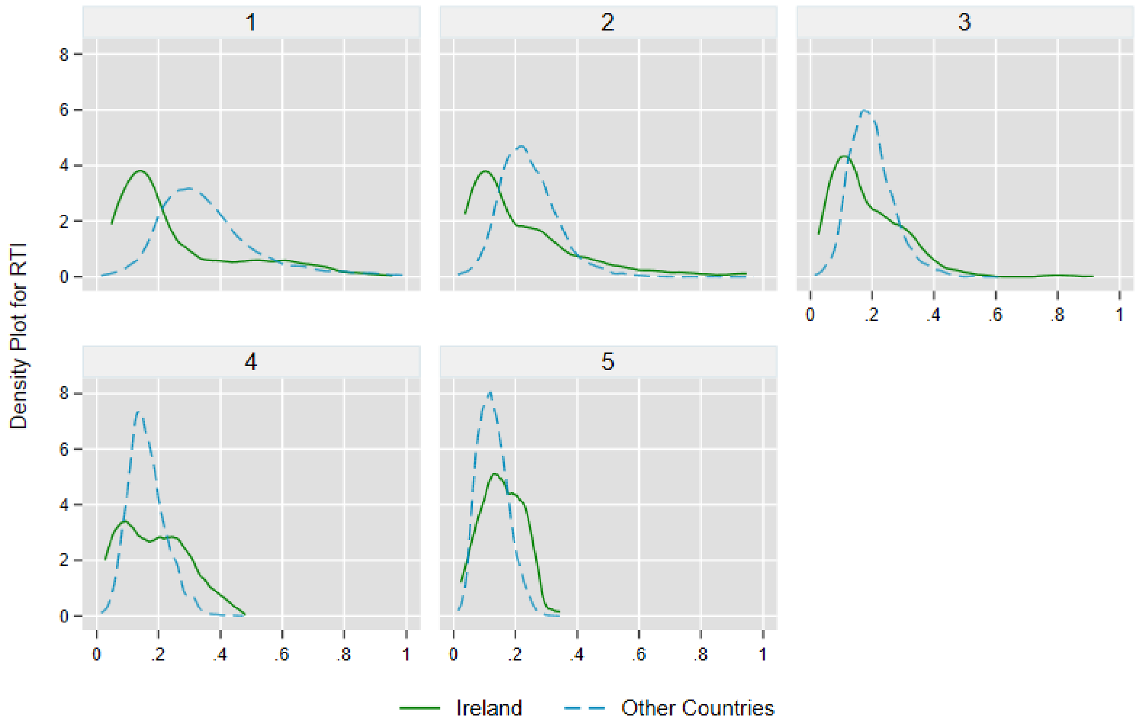
b) Across Income Distribution – Ireland vs Others



Source: Authors' analysis of 2019 EU-SILC microdata files.
Notes: Non-IE reports the mean figures across the other 14 countries combined.

When looking at the distribution of rent-to-income ratios (Figure 3.10), it is clear to see that the RTI distributions for Irish households in Q1-Q3 are shifted to the left and therefore rental households in the bottom 60 per cent of the income distribution fare better in Ireland than elsewhere in Europe overall. These findings are likely driven by the extensive nature of rental supports for lower income households in Ireland. However, these distributions also show a small proportion of households in these quintiles that pay higher shares of their income on rent and who therefore face a more extreme affordability challenge than their European peers. While the shapes of the distributions for MRTIs across income quintiles were similar between Ireland and other countries, this is not the case in the rental sector (Figure 3.10). Amongst higher income households, the distribution is much narrower in other countries; in general, very few higher income Q4 (Q5) households pay more than 30 (25) per cent elsewhere. However, housing-payment-cost-to-income ratios amongst households in the Irish rental sector are more dispersed. Particularly in Q4, more households are paying 30 to 50 per cent of their incomes on rental costs in Ireland than elsewhere. This is consistent with previous work highlighting the significant affordability pressures faced by those in the Irish private rental sector (O'Toole et al., 2020). As a robustness check, we also provide the distribution of rent-to-income ratios calculated by the alternative measure of subtracting housing allowances from both rent and income (see Appendix Figure A.1). Overall, differences in the measurement do not appear to make a significant difference and do not alter our findings.

FIGURE 3.10 DISTRIBUTION OF RENT-TO-INCOME RATIOS ACROSS INCOME QUINTILES



Source: Authors' analysis of 2019 EU-SILC microdata files.
Note: Axes are identical for all five density plots. The X axis presents RTIs in decimal form, e.g. 0.2 refers to an RTI of 20 per cent. Non-IE reports the distribution for the other 14 countries combined. In Q1-Q3 we see small numbers of cases at the top end of the distribution where households appear to be paying at or close to 100 per cent of their income on rent. This can occur for a small number of households, for instance in the case of income loss and relying on savings for a period.

3.3.2 HCTI by other characteristics

In Section 3.2 we saw that among the 15 countries examined, Ireland has the second largest gap in homeownership rates between younger and older households (defined as below 40 or 40+). For those in the rental sector, Table 3.1 shows that on average Irish renters over 40 pay a significantly lower share of their income on rent relative to elsewhere in Europe (17.9 vs 25.1 per cent). For renters under 40 again Irish renters pay less on average, but the figures are more similar (24.1 vs 26 per cent). This means there is a much bigger gap between what younger and older renters pay in Ireland (24.1 vs 17.9 per cent of income) relative to elsewhere (26 vs 25.1 per cent). This is likely related to the difference in likelihood between age groups of being in receipt of housing supports in Ireland. We return to this in Chapter 4.

Older mortgage holders in other European countries face lower MRTIs than their younger counterparts. This is unsurprising due to lifecycle effects and income growth through middle-age. In Ireland however, the opposite is true, with younger mortgage holders seeing slightly lower MRTIs than their older counterparts. This is likely associated with the mid-2000s credit boom and then availability of loose credit (McCarthy and McQuinn, 2017), and the subsequent introduction of macroprudential mortgage regulations. The greater challenges faced by younger households in terms of credit access (Slaymaker et al., 2022) mean that those who do obtain a mortgage tend to be those on higher incomes which likely explains their comparatively lower MRTIs.

TABLE 3.1 MEAN HOUSING-PAYMENT-COST-TO-INCOME RATIOS BY AGE

		HCTI (%)	RTI (%)	MRTI (%)
Ireland	Young HHs	22.1	24.1	17.4
	HHs Over 40	18.7	17.9	19.3
	Overall	19.8	20.7	18.9
Non-IE	Young HHs	23.7	26.0	19.0
	HHs Over 40	20.6	24.7	15.3
	Overall	21.5	25.1	16.1

Source: Authors' analysis of 2019 EU-SILC microdata files.

Previous research has found that urban renters are a group who face significant affordability pressures in Ireland (Corrigan et al., 2019). El Fayoumi et al. (2021) similarly note particularly severe rental affordability pressures in numerous major European cities and document how rental prices have risen faster than incomes leading to worsening affordability in recent years. Examining the drivers further they conclude that urbanisation and the structural shift towards high-skilled services have contributed to these pressures. In Table 3.2 we therefore examine mean HCTIs separately for urban and non-urban areas. Both in Ireland and elsewhere households in urban areas pay higher shares of their incomes on housing costs, consistent with previous findings. For renters, as we have seen previously, RTIs are generally higher elsewhere in Europe relative to Ireland. However, renters in Ireland appear to have a larger urban/non-urban divide than their European counterparts, with a 5.5 percentage point gap compared to a difference of just 2 percentage points elsewhere in Europe. Amongst mortgage holders the gap is much less apparent; urban mortgage holders in Ireland only pay 2.6 percentage points more than those in rural areas. Elsewhere in Europe, the gap is less than one percentage point between urban and rural mortgage holders.

TABLE 3.2 MEAN HOUSING-PAYMENT-COST-TO-INCOME RATIOS BY URBANISATION

		HCTI (%)	RTI (%)	MRTI (%)
Ireland	Urban	22.5	23.7	20.6
	Non-Urban	18.1	18.2	18.0
	Overall	19.8	20.7	18.9
Non-IE*	Urban	23.7	27.7	16.9
	Non-Urban	20.8	25.8	16.1
	Overall	21.5	25.1	16.1

Source: Authors' analysis of 2019 EU-SILC microdata files.
Note: Urban is defined as 'densely populated areas' as coded in the SILC survey under the 'degree of urbanisation' variable; non-urban areas therefore are associated with 'thinly populated' or 'intermediate areas', as defined in the SILC survey. *Data not available for Germany and the Netherlands.

Due to the challenges in accessing the mortgage market, in addition to the high levels of outright ownership, there are not sufficient shares of lower-income households with a mortgage to report on MRTI by income quintile for urban/non-urban areas separately (Table 3.3). However, we can still draw comparisons regarding overall housing costs and rental costs.

TABLE 3.3 MEAN HOUSING-PAYMENT-COST-TO-INCOME RATIOS BY URBAN AREA AND INCOME

	HCTI (%)				RTI (%)			
	IE, Urban	IE, Non-Urban	Non-IE*, Urban	Non-IE*, Non-Urban	IE, Urban	IE, Non-Urban	Non-IE*, Urban	Non-IE*, Non-Urban
Q1	33.7	24.8	37.5	33.0	30.9	22.1	39.4	36.3
Q2	28.4	20.8	25.6	23.0	31.6	18.6	26.9	25.1
Q3	22.1	18.3	20.3	18.1	20.9	16.8	21.9	19.8
Q4	20.4	16.7	16.7	15.7	20.0	16.6	17.5	16.0
Q5	15.5	12.6	12.6	12.1	16.9	12.1	13.4	12.3

Source: Authors' analysis of 2019 EU-SILC microdata files.
Note: There are insufficient low-income mortgage holders in Ireland to present MRTIs separately, so data are presented for all households and separately for rental households. *Data not available for Germany and the Netherlands

Across all parts of the income distribution, urban households spend a higher share of income on housing costs than households in less densely populated areas, both in Ireland and elsewhere. However, this gap is the most pronounced amongst low-income households. While the gap between urban and non-urban housing costs is evident across European countries, it is particularly apparent in Ireland. Again, we see that renters in the lowest two income quintiles have substantially lower housing costs in Ireland than elsewhere. Urban renters in income Q3 fare similarly in Ireland versus elsewhere, but urban renters in the highest two income quintiles pay a notably larger share of income in Ireland.

Turning to household composition, previous research has highlighted that single adult and single parent households face significant housing challenges and affordability pressures in Ireland (Corrigan et al., 2019). Indeed, Roantree et al. (2022) highlight high levels of income poverty and material deprivation faced by lone parents, especially after housing costs. In Table 3.4, it is clear that both within Ireland and across European countries, single adult households (with and without children) pay a higher proportion of their incomes on housing payment costs relative to those containing at least two adults. For renters, single adults in Ireland tend to have lower rent-to-income ratios than their European peers. However, previous research has also found that while single adults receiving supports in Ireland may benefit from lower housing costs, they tend to face significant challenges finding properties within the permitted price limits (Doolan et al., 2022).

Irish mortgage holder single adult households (both with and without children) face higher MRTIs compared to similar households elsewhere in Europe (around 27 per cent vs approx. 20 per cent). Single adults and single parent families make up a small proportion of Irish mortgage holders (11 per cent and 3 per cent, respectively – see Chapter 4). Irish MRTIs for households with two or more adults (with or without children) are more comparable with similar households elsewhere in Europe (13-17 per cent).

As discussed in Section 3.2, the share of single adult households in the rental sector is much lower in Ireland than its European peers. Single adults in Ireland face substantially lower RTIs than their European counterparts (6 percentage points lower). This is likely related to the higher levels of single adults in the supported relative to non-supported rental sectors in Ireland (see Section 4.3). Households containing at least two adults with no children (i.e. couples and house shares) is also the only composition within the rental sector in which Irish households pay a slightly higher share of incomes on rent (21.1 vs 20.5 per cent on average).

TABLE 3.4 MEAN HOUSING-PAYMENT-COST-TO-INCOME RATIOS BY HOUSEHOLD COMPOSITION

		HCTI (%)	RTI (%)	MRTI (%)
Ireland	Single no children	24.6	23.0	26.7
	Single w/ children	25.1	24.3	27.4
	2+ Adult no children	19.3	21.1	16.8
	2+ Adult w/ children	17.3	18.1	16.7
	Overall	19.8	20.7	18.9
Non-IE	Single no children	27.0	29.2	19.3
	Single w/ children	24.9	26.8	21.1
	2+ Adult no children	17.2	20.5	13.3
	2+ Adult w/ children	18.2	20.4	16.7
	Overall	21.5	25.1	16.1

Source: Authors' analysis of 2019 EU-SILC microdata files.

3.4 HOUSEHOLDS WITH HIGH HOUSING COSTS

The analysis of trends in the housing-payment-to-income ratios presented in Section 3.3 provides insight into the higher housing cost burden experienced by certain groups in the population. To shed more light on this issue, and to provide a more direct assessment of the issue of high housing costs, we follow the work of Corrigan et al. (2019) and O'Toole et al. (2020) by using a simple per cent rule whereby a household is classed as having high housing costs if their rent or mortgage payment exceeds a particular benchmark percentage of their monthly net disposable income. The specific parameterisation of this indicator differs across countries and over time (Meen and Whitehead, 2020). For example, in Corrigan et al. (2019) and O'Toole et al. (2020) a 30 per cent rule is used which draws on work by Quigley and Raphael (2004). However, Meen and Whitehead (2020) note a 40 per cent rule is applied in many European countries (e.g. Eurostat overburden rate). In Ireland, the Planning and Development Act (2000) indicates a threshold of 35 per cent of net income and thus, from our perspective, can be used as an indicator. To take into consideration the potential for differences in the measures of affordability depending on the parameterisation of the benchmark, we present a range in this paper. Our analysis below presents estimates based on benchmark rates of 30 per cent, 35 per cent and 40 per cent to span the main range used internationally and in Ireland. As noted in Chapter 2 however, it is important to keep in mind the limitations of these thresholds in that they do not translate directly into affordability stress, as no single threshold can capture differing levels of residual income and choice over housing costs across the income distribution.

Table 3.5 shows these rates overall and separately for renters and mortgage holders. Elsewhere in Europe, one-in-five households face housing costs greater than 30 per cent of their income whereas the equivalent share in Ireland is 15 per cent. However, in terms of the most severe affordability pressures, the rates in

Ireland look similar to other countries; over 8 per cent of households spend more than 40 per cent of their income on housing in Ireland and elsewhere.

As discussed in Section 3.3, lower-income renters are typically relatively better off in Ireland than elsewhere in Europe, and this is apparent in the smaller share above the 40 per cent threshold amongst Irish renters. Still, despite the fact that more than half of rental households in Ireland are in receipt of some form of housing support (subsidy or direct provision of accommodation) (Doolan et al., 2022), 10 per cent of all rental households in Ireland are paying in excess of 40 per cent of their incomes on rent, compared to 12 per cent elsewhere. The majority of these households in Ireland are likely to be those not in receipt of any state housing supports. We return to this in Chapter 4.

Turning to mortgage holders, we see those with mortgages are less likely than renters to be paying more than 40 per cent, yet a greater share of Irish households in this tenure do so compared to their European peers (6 per cent vs 3 per cent). As discussed previously, this is likely driven by legacy issues from the mid-2000s Irish credit boom period.

TABLE 3.5 SHARE OF HOUSEHOLDS (%) WITH HIGH HOUSING-PAYMENT-COST-TO-INCOME RATIOS (30/35/40%)

	HCTI			RTI			MRTI		
	>30%	>35%	>40%	>30%	>35%	>40%	>30%	>35%	>40%
Ireland	15.4	11.3	8.2	18.0	13.3	9.9	12.4	8.9	6.3
Non-IE	20.3	13.1	8.5	27.5	18.1	12.0	9.6	5.5	3.3

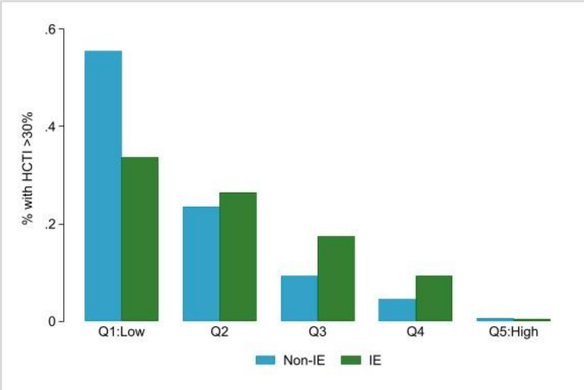
Source: Authors' analysis of 2019 EU-SILC microdata files.
Notes: All figures are percentages.

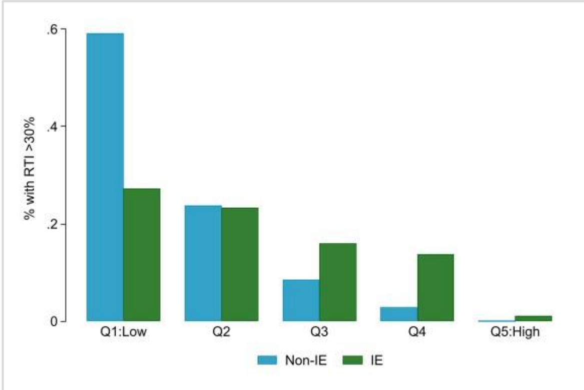
Due to small numbers of observations for certain mortgaged groups (e.g. younger households and lower income groups), in the remainder of the analysis of high housing costs, we report overall rates (mortgaged and renters together) and rates for renters separately. We look now at high housing cost rates by income quintile. Just over one-third of Irish households in the bottom income quintile pay over 30 per cent of their incomes on housing costs. However, across comparable countries, this share rises to 55 per cent. Outside of the bottom income quintile, a larger share of Irish households are paying more than 30 per cent of their income on housing costs compared to their European counterparts. In the rental sector, just under a quarter of households (both in Ireland and in comparable countries) are facing high housing costs. In Ireland, a larger share of those in the third and fourth income quintiles face high rental costs than their peers (16 vs 9 per cent in Q3 and 14 vs 3 per cent in Q4). Note more than half of private sector renters not in receipt of housing supports (54 per cent) fall within these income bands (see Chapter 4).

FIGURE 3.11 SHARE OF ALL HOUSEHOLDS AND RENTERS PAYING >30% INCOME ON HOUSING COSTS BY INCOME QUINTILE

(a) Overall

b) Renters





Source: Authors' analysis of 2019 EU-SILC microdata files.

Turning to age, households in Ireland are less likely to face high housing costs than their European counterparts and this is true for both younger <40s (23.2 vs 19.4 per cent) and older households aged 40+ (19.2 vs 13.3 per cent). Note these age findings are influenced by the characteristics of those within each age group. There are fewer young adults (<40s) living alone in Ireland (see Section 3.2) and, relative to elsewhere, independently formed Irish households <40 are much less likely to be in the lowest income quintile[30] (a group shown in Figure 3.11 to have a considerably higher likelihood of high housing costs outside of Ireland). For rental households aged 40+ the difference is stark, with more than twice as many European households paying more than 30 per cent of their income compared to those in Ireland (27 vs 12.4 per cent). However, the gap is much narrower for younger renters (28.5 per cent vs 24.9 per cent). Within Ireland, despite both age-cohorts experiencing lower housing-payment-cost-to-income ratios than their European peers, age is a particularly significant factor in the levels of affordability experienced. The findings in Table 3.6 show that Irish renters under 40 are twice as likely to face high housing costs (RTI>30 per cent) compared to Irish renters aged 40+ (24.9 per cent vs 12.4 per cent), while the difference between age groups elsewhere is minimal (28.5 per cent vs 27 per cent).

30 In our sample on average 25 per cent of <40s households elsewhere are in the lowest income quintile, compared to only 8 per cent of <40s Irish households. Conversely, 46 per cent of young (<40s) households are in Q4/Q5 in Ireland compared to just 35 per cent in non-IE.

TABLE 3.6 SHARE OF HOUSEHOLDS (%) WITH HOUSING-PAYMENT-COST-TO-INCOME RATIOS > 30% BY AGE

		HCTI	RTI
Ireland	HHs over 40	13.3	12.4
	Young HHs	19.4	24.9
	Overall	15.4	18.0
Non-IE	HHs over 40	19.2	27.0
	Young HHs	23.2	28.5
	Overall	20.3	27.5

Source: Authors' analysis of 2019 EU-SILC microdata files.
Note: Due to the low share of young households with mortgages, we cannot report MRTI separately.

Appendix Table A.7 compares how the share of rental households facing high housing costs has changed across recent years (between 2015 and 2019). For Ireland it shows that the share of Irish renters facing high housing costs overall increased only marginally. While the share fell for over 40s (15 to 12 per cent), it rose for younger renters (21 vs 25 per cent). This is likely related to a number of factors such as younger renters on average likely having started their tenancies more recently and therefore being more affected by high rates of rental inflation for new tenancies. The falling share for over 40s may have been impacted by the expansion of HAP as well as due to the challenges of transitioning into homeownership and the resulting change in the composition of the private rental sector in that time. Moreover, while any deterioration in affordability in other countries has generally been observed more so at the lower end of the income distribution, in Ireland the biggest rise occurred in the fourth income quintile. We return to a more in depth look at the role of supports and the changing composition of the Irish rental sector over this period in Chapter 4.

Both in Ireland and elsewhere households in urban areas are significantly more likely to face high housing costs (HCTI>30 per cent). For urban renters in Ireland the figure is just under one-in-four, compared to around one-in-three for urban renters elsewhere. However, the urban/non-urban divide is larger for urban Irish renters than their European urban peers (10 vs 5 percentage point difference).

TABLE 3.7 SHARE OF HOUSEHOLDS WITH HOUSING-PAYMENT-COST-TO-INCOME RATIOS > 30% BY URBAN AREAS

		HCTI %	RTI %
Ireland	Urban	19.8	23.2
	Non-Urban	12.5	13.7
	Overall	15.4	18.0
Non-IE*	Urban	26.0	34.4
	Non-Urban	19.1	29.2
	Overall	20.3	27.5

Source: Authors' analysis of 2019 EU-SILC microdata files. *Data not available for Germany and the Netherlands.

Lone parent families are more likely to face high housing costs in Ireland than elsewhere (31 vs 27 per cent). This is even the case for renters who we have shown fare relatively better overall than their European counterparts. In general, single adult households are the most likely to face high housing costs elsewhere in Europe (35 per cent vs 27 per cent in Ireland). This is particularly the case in the rental sector where two-fifths of single renters face high housing costs compared to just under one-quarter in Ireland. It is important to keep in mind here the low share of single, childless households in Ireland compared to its European peers.

TABLE 3.8 SHARE OF HOUSEHOLDS WITH HOUSING-PAYMENT-COST-TO-INCOME RATIOS > 30% BY HOUSEHOLD COMPOSITION

		HCTI %	RTI %	MRTI %
Ireland	**Single no children**	27.2	23.1	32.6
	Single w/ children	31.2	30.1	34.5
	2+ Adult no children	14.6	17.8	9.9
	2+ Adult w/ children	8.3	11.8	5.5
	Overall	15.4	18.0	12.4
Non-IE	**Single no children**	35.4	39.7	19.9
	Single w/ children	27.2	29.6	23.0
	2+ Adult no children	10.7	14.7	5.9
	2+ Adult w/ children	9.0	13.0	6.4
	Overall	20.3	27.5	9.6

Source: Authors' analysis of 2019 EU-SILC microdata files.

3.5 CROSS-COUNTRY RENTAL SECTOR COMPARISONS

Our focus so far in this chapter has been on examining how key affordability outcomes for similar types of households in terms of income, age and household composition differ in Ireland compared to in other European countries. One of the challenges with the cross-country analysis presented so far has been the lack of distinction between different types of rental tenure. In this section, we aim to provide additional context to the affordability analysis presented so far. Chapter 2 provided a more historical, broad overview of housing system developments across countries. Here we provide a more current overview of the measures in place to address affordability challenges amongst households in the rental sector. This enables us to group countries loosely based on the size and stability of their rental sector. Note that as our main focus in this work is on within-tenure affordability, generally a greater challenge for renters, we focus purely on the rental sector in this section. A cross-country review of credit access and first-time buyer (FTB) homeownership issues is outside the scope of this paper.

Size of rental market and extent of familial support across countries

The size of the rental sector, as measured by the share of households who rent in each country, is a useful first step in gauging similarities between housing markets (Table 3.9). Note that this includes households in any type of rental accommodation (social, market price, etc.). In countries such as Germany, Denmark, Austria, the Netherlands and Sweden, a large share of households are in the rental sector, which is typically viewed as a relatively secure tenure in these countries.[31] Switzerland also has a significant share of households in the rental sector (60.9 per cent); however, the policies and structure of social housing in Switzerland contrasts considerably with other countries that have similar shares of rental housing. Countries such as France, Finland, Belgium, Ireland and Norway are considered high owner-occupier countries and while significant supports may be in place for renters, they typically do not offer the same security of tenure as countries with a large rental sector.

Using data from Eurostat, Figure 3.12 compares the average share of young adults, aged 25-34, living at home over the period 2012–2015 with that over 2016–2019. We average across several years as these numbers do see fluctuations on a year-to-year basis. As can be seen, the Nordic countries have very low shares of young adults living at home (at or below 10 per cent), while Ireland, Germany, the Netherlands, Austria, Belgium, France and Switzerland typically range between roughly 10 and 20 per cent. Unlike most of these countries, which experienced little change from the periods assessed, Ireland has experienced a notable increase in the share of young adults living at home. In the 2012-2015 period, 21.1 per cent of young adults were living at home whereas 26.5 per cent were doing so in the 2016-2019 period, representing the largest percentage increase of all countries studied. It is important to recognise here that these figures are likely to be impacted by the stage of each country's economic cycle. Indeed, in Ireland the 2012-2015 period was associated with high levels of emigration during a period of economic recovery. Comparing the 2016-2019 period with the 2003-2007 boom period for

[31] These are countries which typically correspond to the mass model or unitary system discussed in Chapter 2.

Ireland reveals an average of 26.5 per cent of young adults were living at home across both periods.

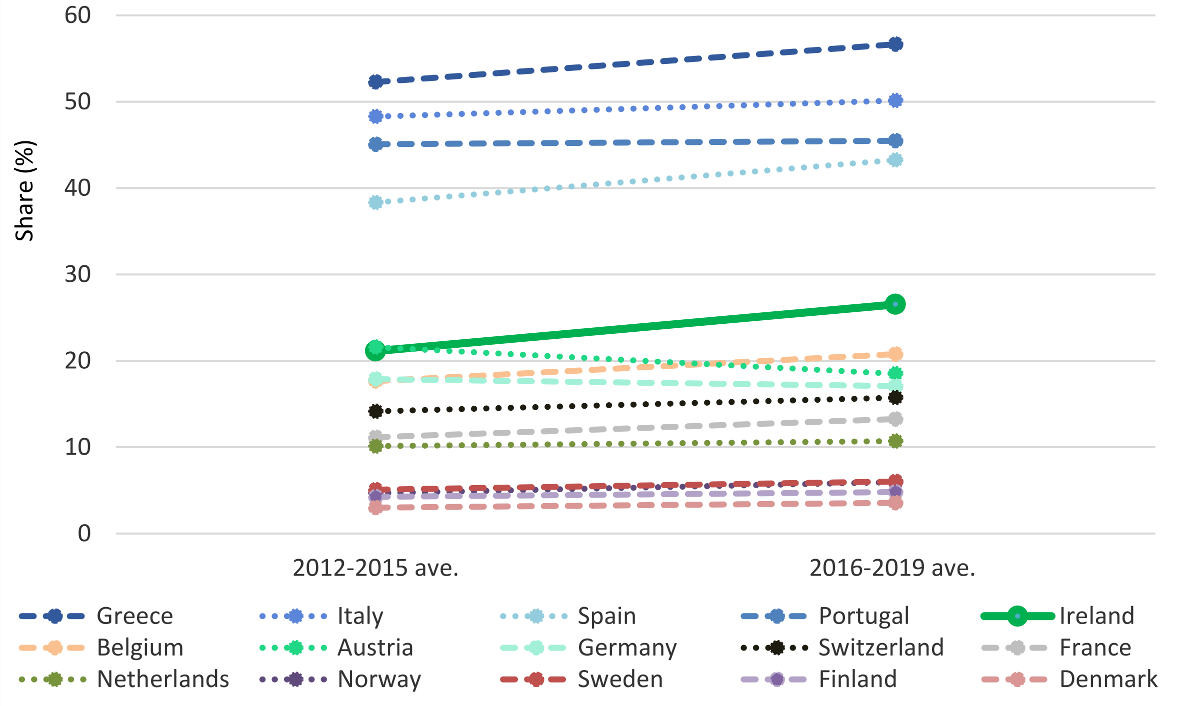
Finally, the southern European countries have a relatively low share of households in the rental sector. Instead, housing provided via familial support is a much more common tenure. In Greece, Italy, Portugal and Spain, over 45 per cent of young adults between ages 25 and 34 live in the family home (Table 3.9). Typically, it is common for young people to rely on familial support for housing in countries where market and state supports are underdeveloped (Norris and Domański, 2009). While Ireland has seen a rise in the share of young adults living at home over the 2012-2019 period, from Figure 3.12 it is clear that the level of familial support in this regard remains considerably lower than in these southern European countries.

TABLE 3.9 CROSS COUNTRY HOUSING SYSTEMS IN CONTEXT

Group	Country	Share of HHs in Rental Sector (Any) (%)	Young Adults (aged 25-34) living with Parents (%) (average 2016-2019)
1. Large rental sector; strict regulations	Germany	53.9	17.1
	Denmark	46.9	3.6
	Austria	43.6	18.5
	Netherlands	40.9	10.7
	Sweden	40.1	6.0
2. Limited homeownership; strict price controls	Switzerland	60.9	15.7
3. High homeownership; less secure rental sector	France	36.6	13.3
	Finland	34.9	4.8
	Belgium	31.9	20.8
	Ireland	29.2	26.5
	Norway	24.5	6.0
4. Limited rental sector; limited supports for renters	Greece	21.8	56.7
	Italy	21.2	50.1
	Portugal	18.8	45.5
	Spain	18.1	43.3

Source: Authors' calculations using SILC data (share renters); Eurostat (2023). *Share of young adults aged 25-34 living with their parents by age and sex – EU-SILC survey* (ilc_lvps08).
Note: Due to fluctuations between years, we refer to the average over the stated period.

FIGURE 3.12 YOUNG ADULTS (AGED 25-34) LIVING WITH PARENTS



Source: Authors' calculations using Eurostat (2023). *Share of young adults aged 25-34 living with their parents by age and sex – EU-SILC survey* (ilc_lvps08).

The role of social housing, subsidies and regulation across countries

There are many ways in which countries have attempted to address challenges related to housing and affordability. We will focus on the following three main tools and discuss the extent to which countries use each of them.

Social housing: each country may vary in their classification of social housing, but it is generally defined as dwellings which are subsidised (indirectly or directly) to be let out at below pure-market rents and allocated administratively (Poggio and Whitehead, 2017).

Housing subsidies: direct financial support also varies by country but typically are implemented through direct subsidies and often targeted to specific groups or communities such as economically deprived households, elderly, homeless people, migrants or ethnic communities (ECSO, 2019).

Rent regulation: or the restriction of rents on a rental dwelling. Rent regulation can involve freezing rents at a certain level (1st generation rent control);[32] setting regulations which govern rents and rent increases, while usually maintaining a

32 For example, this type of rent control was used during the world wars to freeze rents.

'reasonable' rate of return for landlords (2nd generation); or controlling rent increases within a tenancy but leaving them unrestricted between tenancies (3rd generation) (Kettunen and Ruonavaara, 2021).

Group 1: Large rental sector, strict regulations

Sweden has the highest degree of both rent control and pro-tenant regulation, while Denmark, Austria, the Netherlands and Germany have typically had a significantly higher degree of rent controls in the private sector than most other countries (Cuerpo et al., 2014). While these countries have been largely successful in protecting sitting tenants, the strength of rental market regulation has been associated with weaker investment in rental housing and can result in reductions to housing supply, a challenge which most of these countries are currently facing (OECD, 2021a).

Germany has the most restrictive tenure security regulations and one of the most restrictive rent control regulations of these countries (OECD, 2021a). Tenant laws in Germany are very developed, dating back to the Tenure Security Act of 1971 in which tenants were provided with an infinite term and protections against eviction (Hubert, 2003). Maximum rents are set with limits on the increase in rent, and rent controls in Germany operationally restrict the scale of rent increases that can be applied during a tenancy (Turner et al., 2017). Germany also provides housing allowances to subsidise rental costs for low-income households not in receipt of other benefit payments (Kemp, 2007). Challenges in meeting housing demand can be seen in Germany, where it is estimated that supply is only meeting about 70 per cent of the needs for affordable housing (Housing Observatory, 2021).

Denmark and Sweden both have universal housing policies and second-generation rent control. In Denmark, all rented dwellings are subject to regulation and housing benefits are also provided for low-income households and pensioners (Kettunen and Ruonavaara, 2021). In Sweden, rent control policies are the strictest of the countries assessed in this report although the system for setting rents in Sweden is unique in that it is not set through explicit forms of rent control but rather through negotiations between landlords and tenant organisations (Kettunen and Ruonavaara 2021; OECD, 2021a). While tenant protection is strong, strict rent regulations and shortfalls in housing completions have led to an undersupply in affordable housing. Easing rent regulations has been recommended by the OECD to facilitate access to housing for young and low-income households, as current policies in Sweden favour sitting tenants. Population growth in Sweden is expected to increase housing demand and raise price-to-income ratios in the near term (OECD, 2021b).

Social housing remains an important part of the Austrian housing market, with nearly one-in-four Austrians living in social housing, and housing associations are responsible for over a quarter of total housing construction. Like Germany, Austria also faces significant challenges in meeting housing demand (Egner et al., 2020). One recent measure implemented to tackle supply shortages has been the decision to freeze land costs for land set aside for subsidised housing (Housing Observatory, 2021).

In the Netherlands, both social housing and housing supports based on income requirements are available to a large share of renters. Long established housing laws in the Netherlands regulate the quality of housing and provide a framework for the provision of financial government support to housing associations (Hoekstra, 2017). Housing associations play a large role in the provision of housing, accounting for approximately 75 per cent of all rental homes in the country.[33] Housing associations must meet on an annual basis with municipalities and tenant organisations to agree on activities carried out by the housing association. Allocation of social rental dwellings is prioritised for those on the lowest incomes (Hoekstra, 2017). The strict policies in the Netherlands have also been coupled with growing supply challenges resulting in housing shortages of over 6 per cent of the current stock in large cities, and waiting times for households seeking social housing average five and a half years in the Amsterdam region (Housing Observatory, 2021).

Group 2: Limited homeownership; strict price controls

Switzerland is quite distinct from other countries due to its unique tax and housing systems. One reason for the high share of renters in Switzerland is because, in contrast to most comparable countries, the tax and housing systems are neutral between homeowners and landlords (Hilber and Schöni, 2016). Furthermore, unlike most other countries, Switzerland lacks a national social housing policy. Instead, the provision of affordable housing is approached at a regional level and with the support of various non-profits. Rent control is prevalent in Switzerland, with a rent reference index published and rent increases guided by either the rent reference index or CPI. Tenants may also refer to the index, when appropriate, to request rent reductions. Switzerland also has limitations on the provision of second or investment homes (Hilber and Schöni, 2016).

Group 3: High homeownership; less secure rental sector

Countries in this group not only vary greatly from the other groups but also have vast differences between each other. In particular, France and Finland have slightly

33 See: Government of the Netherlands (Rented housing | Housing | Government.nl).

larger and well-established rental sectors than Belgium, Ireland and Norway[34] and have invested in larger shares of social housing. These two countries also have the highest share of renters in receipt of housing subsidy supports (Table 3.10).

In France, housing policy has had a long history of promoting both social homeownership and the provision of public rentals (Kholodilin et al., 2022). In particular, social housing in the post-war period provided an important pathway towards homeownership for the working class in France, rather than a form of tenure for the most vulnerable. France has been an exception to the declines in social housing experienced across Europe since the 1980s; the joint contributions of government, financial institutions and non-profit housing organisations have worked efficiently to maintain the provision of social housing. However, more recent policies to support homeownership and declines in public funding for housing have presented challenges in the social housing sector. Housing subsidy supports are increasingly important in assisting households in the rental sector, with over half of renters receiving some form of housing support (Table 3.10).

Of the Nordic countries, Finland and Norway have notably less regulation in the rental market than Sweden and Denmark. Despite a history of social mixing and greater income-equality, tenure in Finland has recently been strongly driven by urbanisation and income, with lower-income households more likely to rent and be segregated in urban areas (Anundsen et al., 2021). Finland has the highest share of renters in receipt of housing subsidy supports, however it is the only country apart from the southern European countries which has not implemented a rent regulation policy.

In Norway, homeownership has long been the preferred tenure, with early social housing policy promoting homeownership (even for low-income households) through subsidised loans provided by state banks and strict price regulation (Sandlie and Gulbrandsen, 2017). In contrast to countries with a larger rental sector and stricter regulations, the lack of assistance towards social rental accommodation has led to a private rental sector that is much larger than the public sector. As house prices have increased substantially in Norway in recent decades, access to homeownership has become much more difficult for young and vulnerable households. As a result, housing allowances have become an important policy for assisting households in the private rental sector. While protections for renters do exist in Norway, a lack of clarity on regulations has sparked plans to develop new social housing laws between the government and municipalities (Housing Observatory, 2021).

34 See Table 3.9: over a third of households are in the rental sector in France and Finland compared to 32, 29 and 25 per cent in Belgium, Ireland and Norway, respectively.

Like Norway, housing policies in Belgium favoured homeownership across the income distribution and the construction of single-family homes (Kholodilin et al., 2022). In contrast to Group 1 countries, rent prices in the private market have been largely unregulated and public funding for housing has been limited. Housing shortages in the 1980s led to the rise of social rental agencies or grassroots organisations which have become the main force in the provision of adequate and affordable housing (de Decker, 2002). Despite a low share of social rented housing and limited regulation of rental prices in the private sector, Belgium has a relatively low share of renters in receipt of housing allowances. Limited intervention by the government in the housing sector has contributed to increasingly challenging conditions: in Brussels, housing supply has not kept pace with demand; in parts of the country, decreasing size of households is increasing the demand for smaller dwellings; and the low share of social housing in the country has led to long wait times (Housing Observatory, 2021).

Like Belgium and Norway, Ireland has historically had a preference for owner-occupation and indeed has a high share of ownership rates, particularly amongst older households. This was facilitated at least in part by local authorities being key players in the FTB lending market prior to the late 1980s (O'Toole and Slaymaker, 2022), as well as specific schemes such as the Tenant Purchase Scheme. It also falls between southern European countries and its other European counterparts in respect to its relatively high share of young adults living in family homes. As a result of these factors, the rental sector accounts for just under 30 per cent of all households. However, the importance of the rental sector and the degree of regulation in the rental sector have increased substantially in recent years, with Doolan et al. (2022) showing the share of renters rose from 18 to 29 per cent between 2000 and 2020. Throughout Chapter 3, we have noted that renters in the lowest income quintiles fare relatively well in Ireland compared to elsewhere in Europe, an indication that the combination of policy tools in Ireland is lowering the housing costs faced by low-income households. We will discuss the changing composition of the Irish rental sector in recent years and resulting affordability impacts in more depth in Chapter 4. While housing subsidies are more widely used in certain other countries (i.e. covering a greater share of renters), Ireland stands out in terms of the average amount of the subsidy for those in receipt, which is three to four times larger than that offered by most other countries.[35]

Group 4: Limited rental sector; limited supports for renters

Finally, we group together Greece, Italy, Portugal and Spain as these countries have the lowest share of households in the rental sector as well as some of the lowest

[35] On average, those in receipt of housing support payments in Ireland in 2019 received €690 per month, the highest payment across countries (Table A.6).

shares of social housing and housing subsidy supports. As noted in Chapter 2, the history of housing systems across southern Europe is distinct from that of northern and western Europe. Strong familial and neighbourhood networks combined with a more informal employment sector has contributed to a bias in housing policies for homeownership rather than public rental housing, as owner-occupation is viewed as a greater form of both security and investment for households.

As discussed in this report, affordability pressures are particularly acute amongst younger households. Spain and Portugal are unique amongst the countries assessed in this report, as they offer housing subsidies specifically targeted towards young households. However, despite some housing subsidy supports being available to renters in Spain, Portugal and Italy, they are of limited quantitative importance and typically are strictly aimed at low-income or marginalised households (Egner et al., 2020). While it shares a similar housing system to the other southern European countries, Greece is unique in its lack of public intervention in housing; security of tenure in the rental sector is regarded as relatively limited, as leases can be ended easily and rent increases are not regulated (Egner et al., 2020).

TABLE 3.10 SOCIAL HOUSING AND SUPPORTS BY COUNTRY

Group	Country	Share of Social Housing (% of total housing, 2019)	Rent Control Policy
Large rental sector; strict regulations	Germany	3.0	Yes (3rd)
	Denmark	21.0	Yes (2nd)
	Austria	24.0	Yes (2nd)
	Netherlands	39.1	Yes (2nd)
	Sweden	17.0	Yes (2nd)
Limited homeownership; strict price controls	Switzerland	X	Yes (2nd)
High homeownership; less secure rental sector	France	16.0	Yes (2nd)
	Finland	11.0	No
	Belgium	5.4	Yes (3rd)
	Ireland	9.0	Yes (2nd)
	Norway	4.0*	Yes (3rd)
Limited rental sector; limited supports for renters	Greece	0.0	No
	Italy	3.8	No
	Portugal	2.0	No
	Spain	1.1	Yes (3rd)

Source: The State of Housing, Housing Observatory, 2021; Kettunen and Ruonavaara 2021.
Note: *Social housing in Norway relates to non-profit housing as reported in Nordic housing policy (2021).

CHAPTER 4

Ireland – latest affordability trends

4.1 INTRODUCTION

The focus of the cross-country analysis in Chapter 3 was on examining housing affordability outcomes for Irish households relative to their European peers across a number of characteristics such as incomes, age, household composition and whether they live in urban areas. As noted, one of the challenges with the use of these cross-country datasets is the inability to separate out between different types of rental tenure. In Ireland there have been significant changes in this regard in recent years with the introduction and rapid expansion of Housing Assistance Payment (HAP) in particular. The purpose of this chapter is therefore twofold. First, we explore how the composition of the Irish rental sector changed over the period 2005-2019. Second, utilising new detailed tenure information available in the 2021 Irish SILC data we provide the most up-to-date picture of affordability across all tenures in Ireland. The analysis in this chapter is conducted using CSO Irish Survey on Income and Living Conditions (SILC) data.[36] The Irish SILC and EU-SILC datasets (used in Chapter 3) are based on the same household samples for the corresponding year, but the CSO Irish SILC data contain additional country-specific information that the harmonised EU-SILC versions do not. These include detailed tenure based on Irish specific policy supports to separate local authority renters, renters in receipt of a rent subsidy support e.g. HAP/Rental Accommodation Scheme (RAS)/Rent Supplement (RS)[37] and non-supported private renters. This chapter aims to provide helpful context for the analysis presented in Chapter 3.

4.2 THE CHANGING COMPOSITION OF THE MARKET PRICE RENTAL SECTOR 2005-2019

Previous research for Ireland documented that high housing cost pressures have been evident for certain groups on a persistent basis, in particular low to moderate income households, and those in urban areas (Corrigan et al., 2019). These trends, based on data up to 2016, predate the more recent period of high rental inflation and can be documented back to the mid-2000s using SILC data. Since then, Ireland's rental sector has seen notable changes. In particular the rapid expansion of HAP, which aims to address affordability challenges for low-income households in the rental sector; as well as the introduction of Rent Pressure Zones, which aim to moderate rent price increases in areas with high prices and rapid rental growth.

36 Results in this Chapter are based on analysis of strictly controlled Research Microdata Files provided by the Central Statistics Office (CSO). The CSO does not take any responsibility for the views expressed or the outputs generated from this research.

37 See Doolan et al. (2022) for a more detailed discussion of the different rental supports.

Given the shift away from the direct provision of support – through local authority and approved housing body (AHB) owned accommodation – and towards indirect subsidisation of housing costs in the private rental sector (Doolan et al., 2022), in this section we make an important distinction between supported and market price renters. In effect, we are attempting to identify any households who receive long-term housing payment supports to cover their housing costs (HAP and RAS), as well as those directly in local authority housing. Therefore, the market price renters are private market tenants paying market price rents and not in receipt of any long-term housing supports (i.e. excluding HAP/RAS tenants). These groupings were not used in Corrigan et al. (2019) who relied instead on the differentiation between private renters and local authority renters. Given the considerable provision of long-term housing policy supports through the private sector, we feel it is a better distinction from an affordability perspective to group these households by whether they are in receipt of long-term housing allowances or not. It is important to note that in SILC 2005-2019 any household in receipt of short-term income supplements such as Rent Supplement would not be included in our definition of supported renters and would therefore remain in the market-price group. Our assessment of affordability for these households takes account of the Rent Supplement through the household income channel.

The analysis presented in this subsection spans the period 2005 to 2019. Changes to the structure of the SILC dataset and the definition of key housing tenure and cost variables from 2020 onwards does not permit consistent analysis across time beyond this point. These changes are explained further in Section 4.3 where we present the latest affordability trends using 2021 SILC data.[38]

Figure 4.1 presents trends in the high housing cost indicators outlined in Chapter 2 for market price renters, i.e. those not in receipt of any long-term housing supports. In Panel A, the share of market price renters with an RTI > 30 per cent, >35 per cent and > 40 per cent is presented for the period 2005-2019. The data suggest that since 2008, approximately 30 per cent of households over time have had an RTI > 30 per cent. There was an increasing trend between the years 2013 and 2017 but the share has declined since then. It stood at 28 per cent in 2019. The evolution of the alternative 35 and 40 per cent benchmarks was similar, albeit at lower levels; 20 per cent of market price renters had an RTI > 35 per cent in 2019, while 14 per cent had an RTI > 40 per cent. Note these 2019 figures for market price renters are higher than those for all renters shown in Chapter 3 (18, 13 and 10 per cent respectively). This is due to the extensive housing subsidy supports that mitigate the affordability challenges faced by those in the non-market price rental sectors.

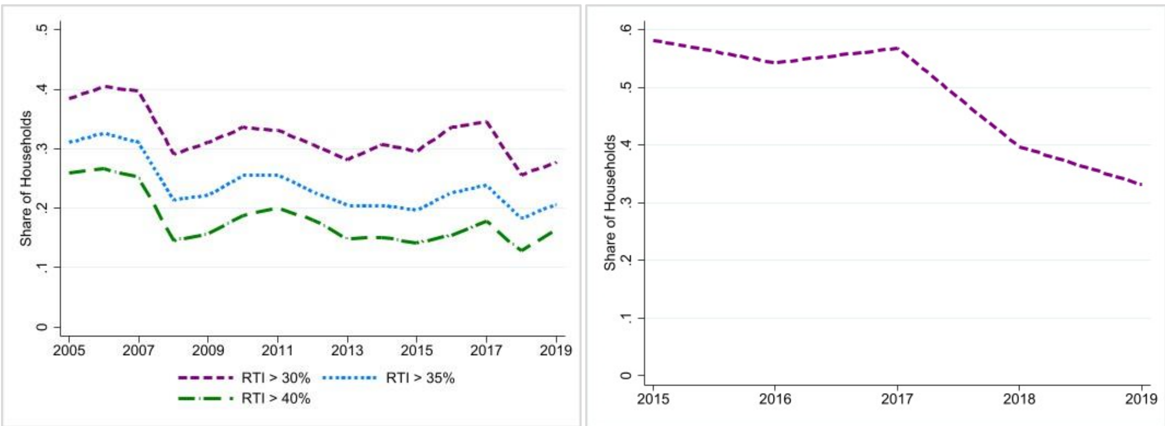
38 Note changes to the Irish SILC income reference period occurred in 2020. From the 2020 survey onwards the income reference period is the t-1 calendar year. Up to SILC 2019 the income reference period was the 12 months prior to the interview date.

In Panel B the share of market price renters with an income sufficiency ratio (ISR) < 1 is presented for the period 2015-2019. The considerable burden on Irish households in the rental sector from 2015 to 2017 is clearly evident from this chart, with nearly 60 per cent of then market price renters having insufficient income after housing costs to cover a minimum standard basket of goods and services. However, the share with an ISR < 1 dropped dramatically from 2017 to 2019 falling to just over 30 per cent, or approximately one-in-three households. While it is not possible to causally determine the exact reason for this change, it is likely due to the extensive roll-out of HAP which would have removed more vulnerable, lower income households from this particular sample. The number of households in receipt of HAP rose rapidly in this period from 31,228 in 2017 to 52,529 in 2019.[39]

FIGURE 4.1 HIGH HOUSING COST INDICATORS – MARKET PRICE RENTERS OVER TIME

a) Share with RTI>30/35/40% 2005-2019

b) Share with ISR<1 2015-2019



Source: Author's analysis of SILC 2005-2019
Notes: Changes to SILC tenure variables used to classify market price renters from 2020 onwards only permits consistent analysis up to 2019. The shorter timeframe in Panel B (2015-2019) is informed by the need for consistent, detailed budget data for different household types for income sufficiency ratio calculations.

Now we explore whether these trends are driven by changes to the composition of the sample. Compositional change could be caused, for example, by the removal of a large number of lower income households from the market price group following the widescale deployment of the HAP scheme, as well as higher income households remaining in the rental sector if transitions to homeownership are not taking place. Indeed, by transferring households' housing cost from a market rent to the local authority differential rent,[40] households receiving HAP should experience a considerable improvement in affordability. We return to this in Section 4.3.

39 Source: HAP Exchequer Spend Landlord Payments. https://www.gov.ie/en/collection/6060e-overall-social-housing-provision/#housing-assistance-payment.

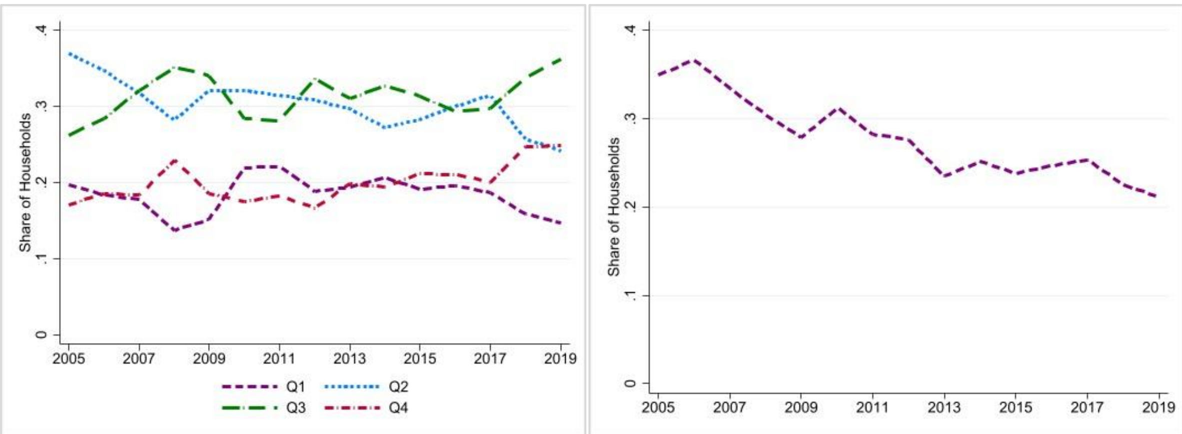
40 Differential rents vary according to the financial circumstances of tenants. Each local authority uses their own specific scheme criteria. See Corrigan (2019) and Doolan et al. (2022) for further details.

To explore the change in the composition of market price renters, i.e. those not in receipt of long-term housing supports, we split the sample by income and the number of adults; these are key variables in explaining differences in housing costs across the rental sector. Figure 4.2 Panel A presents the share of households in the market price rental sector for the four quartiles of the income distribution.[41] While the shares appeared relatively stable over the period 2009 to 2017, there has been a marked reduction in the share of lower income households in the market price rental sector since 2017. This share has been declining for households in the second quartile of the income distribution as well as those in the first. Between 2017 and 2019, the share of households in the bottom two income quartiles dropped by 10 percentage points. Panel B shows the share of one adult households (either with or without children) had fallen considerably since 2005 but had stabilised between 2015 and 2017. The downward trend re-emerged in 2017 with falls in both 2018 and 2019.

FIGURE 4.2 CHANGES IN COMPOSITION OF MARKET PRICE RENTERS – NET INCOME QUARTILE AND SINGLE ADULT HOUSEHOLDS

a) Share of Households by Income Quartile

b) Share of Single Adult Households



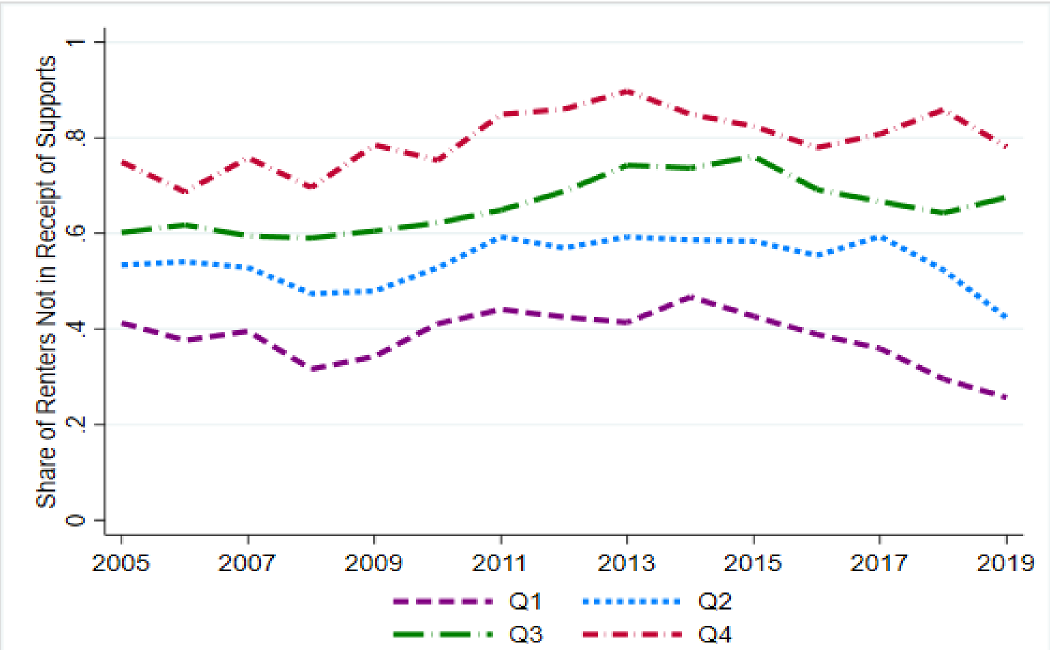
Source: Authors' analysis of SILC 2005-2019.
Notes: Single adult refers to number of adults only, i.e. this includes both households with and without children.

While these data point to a change in the composition of the market price rental sample, a clearer way to identify if this was due to an expansion of policy support (in particular around the extension of HAP) is to explore for the full rental sample, and what percentage are in receipt of long-term housing supports. Figure 4.3 presents the share of renters in each income quartile (of the population income distribution) that are not in receipt of long-term housing supports. Since 2014, the share of renters in the bottom 25 per cent of the income distribution that are not in receipt of long-term housing supports fell from over 45 per cent to 25 per cent. The share of renters in the second quartile of the income distribution also fell markedly from 2017 to 2019 by nearly 20 percentage points. This chart provides

41 Note we are unable to use income quintiles here as in Chapter 3 due to limited observations for some groups.

tentative evidence that the expansion of the housing policy support programmes has led to more lower income households receiving supports and thus this should improve their housing affordability. This finding however must be caveated, as we do not undertake an analysis of overall policy efficacy in this paper. Any such analysis would need to take into account the feedback loops between the policy support and the market in price terms, as well as issues around access and tenure security. These findings are also consistent with the analysis presented in Chapter 3 showing that in 2019 lower-income Irish renters paid a lower share of their income on rents on average relative to other European countries. Figure 4.3 is also consistent with the findings of Corrigan (2019) and Doolan et al. (2022) who show that while lower-income households are the primary beneficiaries of housing supports, there is a group of higher-income households in receipt of housing supports.

FIGURE 4.3 SHARE OF RENTERS IN EACH NET INCOME QUARTILE NOT IN RECEIPT OF HOUSING SUPPORTS



Source: Authors' analysis of SILC 2005-2019.

As noted previously, the affordability tenure composition analysis we conduct requires information on household incomes, tenure and housing costs and can therefore only be observed for independently formed households. In addition to changes in the composition for households in the rental sector, Appendix Table A.8 also shows that between 2015-2019 Ireland saw the largest percentage increase in the share of young adults aged 25-34 living at home (from 22.3 in 2015 to 27.4 in 2019, a rise of 23 per cent). Greece, Spain and Italy, all countries with a history of familial housing support, also saw notable rises.

4.3 AFFORDABILITY TRENDS ACROSS TENURES IN IRELAND 2021

The 2021 Irish SILC data contain additional, more detailed tenure information enabling us to more clearly separate mortgage holders, renters not in receipt of any state housing supports and renters in receipt of supports, which we can further separate into renters in receipt of either HAP/RAS/Rent Supplement (RS) and renters in local authority accommodation. Note this classification of supported renters now also includes households in receipt of the intended shorter-term Rent Supplement subsidy as well. The definition of renters with no supports in this section therefore differs slightly from that of market price renters used for the 2005-2019 analysis in the previous section.[42]

Table 4.1 presents descriptive statistics by tenure and helps to provide context for the cross-country analysis in Chapter 3 where it was not feasible to split out among the different rental tenures. Here we combine renters in receipt of HAP/RAS/RS with local authority renters due to small numbers of observations.[43]

In 2021 mortgaged households made up just over 27 per cent of the population with renters accounting for 29 per cent, of which more than half were in receipt of some form of state housing support (15.6 vs 13.5 per cent of the population). Note only households with housing payment costs are reported here i.e. we omit outright owners and those in free accommodation (43.6 per cent of the population in 2021 CSO Irish SILC data). Mortgaged households had a median gross income of nearly €88,000, approximately €30,000 more than renters with no supports. The corresponding figure for supported rental households was just under €32,000. Note that incomes are inclusive of housing subsidy supports for those in receipt of HAP/RAS/RS.

Regarding the income distribution, in 2021 almost 70 per cent of mortgage holders were in the top two-fifths of the population net disposable income distribution, and only around one-in-eight were in the bottom two quintiles. Two-thirds of renters with no supports were in the top three quintiles, while two-thirds of supported renters were in the bottom two quintiles. This provides useful context for the analysis in Chapter 3 where we were able to split households by their position in the income distribution and by broad tenure (mortgage vs rental), but not by whether they are in receipt of housing supports.

---

42 In SILC 2005-2019 supported renters were identified indirectly based on variables such as amount of rent paid to LA and value of housing allowances. From 2020 onwards households in receipt of rent subsidy supports such as HAP, RAS and Rent Supplement are specifically identified in a more detailed tenure classification variable.

43 Note there is no explicit category for AHB tenants in the 2021 SILC dataset, but our understanding is that they are grouped with local authority tenants, i.e. accommodation is provided directly, as opposed to those in receipt of subsidy supports.

The vast majority of mortgaged households contain at least two adults. Only 3 per cent of mortgaged households were single parent families, with a further 11 per cent comprising single adults. In contrast, while households with more than one adult make up more than 85 per cent of mortgaged households and more than 70 per cent of non-supported rental households, the figure is roughly 50 per cent for supported renters, almost a third of whom are single adult households. Turning to the age profile of adults within each tenure, traditionally the rental sector (especially private sector) has been associated with younger adults. However, only 16 per cent of adults living in rental households with no supports are aged 18-29, with two-thirds aged 30-49 and a further fifth aged 50 and over. For renters with supports, nearly three-quarters are aged 40+. In contrast there is a more even age split among those living in mortgaged households with one-fifth of these adults aged 18-29. It is important to note that here we are capturing the ages of all adults living in particular tenures, not that of the household head. This therefore likely captures the large proportions of young Irish adults living in their family home; Eurostat figures show that in 2019, 27 per cent of young Irish adults aged 25-34 and 90 per cent of those aged 18-24 were living in their family home. As of 2021, these shares increased to 41.2 per cent and 92.1 per cent, respectively. Some caution must be applied to the interpretation of these numbers as they are likely impacted by COVID-19 restrictions in place during this year such as the closures of colleges and businesses.[44]

[44] Source: Eurostat. *Share of young adults aged 25-34 living with their parents by age and sex – EU-SILC survey* (ilc_lvps08).

TABLE 4.1 DESCRIPTIVE STATISTICS BY HOUSING TENURE – IRELAND 2021

	Mortgaged	Rent – No Supports	Rent – Supports (All)
Share of population (%)	27.3	13.5	15.6
Income			
P(25) annual gross income(€)	61,071	39,099	17,856
P(50) annual gross income(€)	87,775	57,190	31,738
P(75) annual gross income(€)	125,941	79,804	44,456
Mean annual gross income(€)	97,727	65,558	35,374
P(25) annual net income(€)	50,353	34,434	17,856
P(50) annual net income(€)	67,494	48,366	30,548
P(75) annual net income(€)	87,583	60,619	41,921
Mean annual net income(€)	71,391	51,060	33,763
Net Income Quintile (% of households)			
Q1	3.7	14.4	37.9
Q2	9.6	19.5	28.0
Q3	17.8	32.7	20.9
Q4	32.8	21.5	*
Q5	36.1	[11.9]	*
Household Composition (% of households)			
1 adult, no children	11.1	*	30.9
1 adult, 1+ children	[3.0]	*	16.8
2+ adults, no children	27.6	37.0	26.7
2+ adults, 1+ children	58.3	34.5	25.5
Age (% of adults in households)			
18-29	19.5	16.2	7.4
30-39	24.2	40.0	19.4
40-49	33.1	25.6	30.1
50+	23.2	18.2	43.1

Source: Authors' analysis of CSO SILC 2021 microdata files.
Note: Figures reported are percentages unless otherwise indicated. *Number of observations too low to report these percentages. Note where one category has insufficient observations and the shares sum to 100 per cent, it is also necessary to redact the next smallest group. [ ] Number of observations sufficient to report but low and therefore subject to greater margins of error. Income quintiles based on net disposable incomes. Children defined as anyone in the household aged below 18. Adult offspring remaining in the family home would be contained in either of 2+ adults categories. Note that age here refers to the ages of all adults in the household, not solely the head of household.

Turning to affordability, in Chapter 3 we noted that in the SILC datasets, both rents and incomes are reported inclusive of any housing allowances (where these are explicit and separately identifiable) and discussed the merits and drawbacks of this approach to calculating rent-to-income ratios. While suitable in many cases, given the nature of how HAP operates in Ireland, we noted that this approach would overestimate RTIs for HAP recipient households and therefore overstate the affordability challenges they face. As a robustness check we documented that this calculation choice did not however alter the overall findings that lower income Irish renters face significantly lower affordability burdens relative to European peers (see Figure A.1). In this chapter, the more detailed tenure information present in the 2021 CSO Irish SILC dataset allows us to directly identify HAP households. As this allows us to focus specifically on the affordability burdens of these households, we therefore subtract the annual amount of housing subsidy received from both the total annual rent and the annual disposable income prior to calculating the ratio for HAP tenants. We feel this is more reflective of the RTI these households face as it captures the actual rent they pay (differential rent plus any top-ups not covered by the subsidy) and the fact the subsidy is paid to landlords rather than forming part of these households' incomes. For Rent Supplement recipients we do not make any such adjustments as these households are responsible for paying their full rent amount directly and they directly receive the subsidy which forms a part of their income.

Table 4.2 presents mean and median housing-payment-cost-to-income ratios by each tenure, as well as the share of households facing high housing costs using 30, 35 and 40 per cent of income benchmarks. In 2021 one-in-three rental households not in receipt of supports faced an RTI>30 per cent, one-in-five above 35 per cent and one-in-nine faced an RTI above 40 per cent. The average HCTI was ten percentage points higher for renters with no supports compared to mortgage holders. The percentages of supported renters facing high housing costs are too small to report,[45] but the mean RTI of 12 per cent was less than half that of non-supported renters (26 per cent). These findings help to explain the trends observed in Chapter 3 showing that the lowest income Irish renters face substantially lower rent-to-income ratios on average than their European peers. In contrast, those in the upper half of the income distribution, a group that largely consists of renters facing market price rents, are worse off relative to similar households in Europe.

Having documented the clear affordability benefits for those in receipt of housing allowances, a natural question that arises is how the affordability burdens of similar income households not in receipt of supports compare. A comprehensive analysis of this type is best done with administrative data to ensure a sufficiently large and representative sample of households close to the social housing income thresholds. However, while not directly addressing this question, the availability of information on the total rent due in addition to the total housing subsidy received by households on HAP/RAS/RS permits us to calculate a counterfactual RTI, i.e. what these households would pay to live in the same home in the absence of housing supports.[46] In the absence of their HAP/RAS/RS subsidies, on average these households would be paying nearly 43 per cent of their income on their rent, with nearly half facing an RTI above 40 per cent, Eurostat's measure of significant affordability stress. In contrast, with HAP/RAS/RS payments, the mean RTI for these households is actually just over 15 per cent. Notwithstanding the significant

45 Due to CSO minimum cell size requirements of 30 observations.

46 To calculate this counterfactual RTI we use the annual full market price rent of the property the household lives in (i.e. exclusive of any subsidy) and we subtract the annual amount of the housing subsidy from the total annual disposable (net) income prior to calculating the ratio.

costs to the Exchequer, security of tenure concerns, the lack of properties available to rent within scheme limits (Doolan et al., 2022) and concerns around the broader impacts on the market, the affordability benefits for recipients are clear.

TABLE 4.2 HOUSING AFFORDABILITY METRICS BY TENURE – IRELAND 2021

	Mortgaged	Rent – No Supports	Rent – Supports (All)	Rent – Supports – HAP/RS	Rent – Supports – LA
Mean HCTI	16.7	26.4	12.3	15.5	10.8
Median HCTI	14.3	25.3	10.6	11.3	10.4
% HCTI>30%	7.3	32.4	*	*	*
% HCTI>35%	4.2	20.2	*	*	*
% HCTI>40%	[3.0]	[11.2]	*	*	*
Mean HCTI – counterfactual				42.6	
Median HCTI – counterfactual				38.4	
% HCTI – counterfactual>30%				62.2	
% HCTI – counterfactual>35%				54.6	
% HCTI – counterfactual>40%				46.7	

Source: Authors' analysis of CSO SILC 2021 microdata files.
Note: Figures reported are percentages unless otherwise indicated. *Number of observations too low to report these percentages. [ ] Number of observations sufficient to report but low and therefore subject to greater margins of error. To calculate HCTI for HAP recipients we subtract the annual amount of housing subsidy received from both the total annual rent and the annual disposable (net) income prior to calculating the ratio. We believe this is more reflective of the RTI these households face as it captures the actual rent they pay (differential rent plus any top-ups not covered by the subsidy) and the fact the subsidy is paid to landlords rather than forming part of these households' incomes. For Rent Supplement recipients we do not make any such adjustments as these households are responsible for paying their full rent amount directly and they directly receive the subsidy which forms a part of their income.

The findings in this chapter depict a changing rental landscape for lower income households but, for many renters who remain in the market price sector and not in receipt of state housing supports, widespread affordability pressures continue. The changing composition of the market price rental sector led to a moderation in affordability distress at the aggregate level, as measured by the insufficient residual income indicator, between 2015-2019. The share of households with insufficient income to cover basic expenditures after housing costs declined from 58 per cent in 2015 to 33 per cent in 2019. This is likely driven by an expansion of HAP supports which have removed lower income households (historically a group experiencing significant housing affordability distress) from the market price renters group. Indeed, we directly identify a drop in the share of lower income households who do not receive long-term housing supports. Nevertheless, with one-in-three non-supported rental households facing high housing costs in 2021 based on a 30 per cent benchmark rule, vulnerabilities remain elevated, despite the removal of many lower income households from this sector.

CHAPTER 5

Conclusion

The aim of this paper has been to better contextualise the housing affordability challenges faced in Ireland by examining how housing-payment-cost-to-income ratios for Irish households (across tenures, income distribution, household composition, urbanisation and age) compare with those in 14 other European countries. A particular focus of the work has been on how the housing cost burdens of the most affordability challenged groups in Ireland compare to similar households across Europe and whether there are other cohorts in Ireland who are comparatively better off (spending lower proportions on housing costs) than their internationally comparable peers. While useful to benchmark Ireland against other European countries, it is important to acknowledge the general worsening of affordability pressures observed internationally (OECD, 2021a; El Fayoumi et al., 2021). Particularly in the wake of the global financial crisis, housing demand has outstripped supply, with prices rising faster than incomes in both homeownership and rental markets. Furthermore, governments have typically played less of a role in the provision of social and affordable housing than in the past, instead relying on greater market-based provision.

A number of findings arise from our analysis. Overall, housing-payment-cost-to-income ratios in Ireland are not out of line with those observed across Europe. In fact, nine of the 15 countries analysed have higher housing-payment-cost-to-income ratios on average compared to Ireland. Irish households pay on average around one-fifth of their net incomes on their housing payment costs (either rent or mortgage payments inclusive of capital repayments), compared to 22 per cent elsewhere. However, this overall picture masks how the situation differs in Ireland in several key respects.

Comparatively, renters in Ireland face the lowest RTIs on average among the 15 countries studied. This finding is driven by lower income Irish renters paying a lower share of their income on rents compared to their European peers. Indeed, extensive rental supports in Ireland have had a clear impact in sheltering lower income households from more significant affordability pressures. In the lowest income quintile Irish renters are less than half as likely to be paying more than 30 per cent of their income on rent compared to their European counterparts. While a 30 per cent threshold may be too high for many of these households, the poverty and deprivation challenges faced by these households in Ireland are primarily issues of low incomes rather than high housing costs. In addition, high levels of outright ownership amongst Irish households in the lowest income quintile means that more than half of these lowest income households in Ireland face no housing payment costs at all. This finding is driven by very high rates of outright ownership for retirees (proxied by those aged 65+) who make up half of Ireland's lowest income quintile.

While the overall share of mortgage holders in the population varies significantly across countries, they are consistently concentrated at the higher end of the income distribution. In Ireland, along with Belgium and Germany, this is most pronounced, with over two-thirds of all mortgage holders in the top two income quintiles. Mortgage holders in these three countries are also the least likely to be in the lowest population income quintile. For Ireland this is likely related to factors including the high rates of outright homeownership in the lowest income quintile; lower mortgage levels under the Tenant Purchase Scheme may have facilitated earlier outright homeownership for some lower income households. In addition, high house prices, the macroprudential mortgage regulations in place since 2015, and bank affordability stress tests limit the amount that can be borrowed. Indeed, key macroprudential parameters have been shown to be tight in Ireland relative to elsewhere in Europe (O'Toole and Slaymaker, 2022).

Irish mortgage holders rank third highest for the share of income spent on mortgage repayments out of the 15 countries analysed. This is unsurprising given the high house prices and comparatively higher interest rates faced by Irish households, but could also be driven by a larger share of mortgage holders at the top of the income distribution who may be able to afford to spend a higher proportion of their income on a mortgage. Despite this relative position, few households pay more than 30 per cent of their income on mortgage payments and the affordability pressures faced by renters are greater both in Ireland and elsewhere.

While the overall picture for renters is more favourable from an affordability perspective in Ireland, two findings in particular highlight the significant challenges faced by certain groups of Irish renters. First, Irish middle-to-higher income renters are more likely to face high housing costs than their European peers. Rent-to-income ratios for Irish rental households are more dispersed, meaning that even where average RTIs are similar, some households do face more extreme affordability burdens than their European counterparts (and some less). This is particularly the case in Q4 of the income distribution where more Irish households are observed paying RTIs of above 30 per cent (14 vs 3 per cent), but also in the third quintile (16 vs 9 per cent). Note from Chapter 4 we see that more than half of private sector renters not in receipt of housing supports fall within these income bands, highlighting that it is predominantly these households who are worse off than elsewhere in Europe. Second, the Irish rental sector sees one of the largest urban/non-urban divides. While this reflects the pressures faced by urban households, it also reflects that Irish households renting in non-urban areas have lower RTIs compared to European peers.

Housing-payment-cost-to-income ratios and related high housing cost benchmarks are one measure through which affordability pressures can be observed, but only for independently formed households. As well as impacts on existing households, affordability and availability concerns impact the formation of new households too. There are several findings that indicate Ireland faces some of the most significant challenges in this regard. Between 2015 and 2019 Ireland saw the largest rise in the share of young adults aged 25-34 remaining in their family home. In addition, among already formed households under 40 Ireland has the lowest share of single adult households. Furthermore, while Ireland has the fourth highest rate of homeownership for households aged 40+ across the 15 countries analysed, it has only the tenth highest rate for households aged below 40. While Ireland is not unique in seeing falling homeownership rates over time, it does have one of the biggest gaps in ownership rates between younger and older generations (second only to Greece). Aside from Greece, the countries with lower ownership rates for those <40 are those with a more established tradition of renting such as Denmark, Austria, Germany and Switzerland. Taking these points together highlights the extent of the challenges faced, over and above those shown by key affordability metrics, especially by younger households.

In Chapter 4, using more detailed Irish specific data we document the impacts of significant changes within the Irish rental sector in recent years, particularly between 2017 and 2019, which has led to a somewhat altered affordability outlook overall. The increase in long-term policy support recipients in the private rental sector (likely through the expansion of HAP) has removed the exposure of many low-income households from private market rent levels which would otherwise have been burdensome from an affordability perspective. While the share of lower income households in this market-price cohort has declined, significant affordability challenges have persisted in the cohort of renters who do not receive long-term state supports. One-in-three of these households faced high housing costs in 2021 based on a 30 per cent benchmark rule. These findings are consistent with the heightened relative affordability challenges faced by middle-to-higher income Irish renters relative to their European peers shown in Chapter 3. They also show that while internationally rising affordability pressures have been primarily concentrated amongst the lowest income households (El Fayoumi et al., 2021), in Ireland the extensive supports have mitigated the effects for these households.

There are numerous challenges associated with comparing housing tenure and affordability outcomes across countries and it is therefore important to acknowledge the limitations of this work. While we use housing-payment-cost-to-income ratios for their comparability across countries, these measures do have limitations and cannot be taken in isolation. No single threshold (e.g. 30/35/40 per cent of income) can capture differing levels of residual income and choice over housing costs across the income distribution. The broader context within different countries is also crucial. For instance, households' capacities to afford higher or lower shares of income spent on housing costs will depend on factors such as the generosity of other household supports, the provision of affordable healthcare and childcare, amongst others. A residual income measure would provide an important complement to this work but is unfortunately not feasible due to a lack of comparable budgetary data across countries. In addition, our focus in this work is purely on affordability and tenure. In practice affordability is one dimension of housing and households may trade-off affordability for quality or location for example. Further, affordability metrics say nothing about the potential security of tenure or lack thereof.

REFERENCES

Allen, J. (2006). ‘Welfare regimes, welfare systems and housing in Southern Europe‘, *European Journal of Housing Policy*, *6*(3), 251-277.

Anundsen, A.K., M. Bergman, E.E. Bø, E. Eerola, N. Määttänen and S. Nyberg (2021). *Nordic Economic Policy Review 2021: Nordic Housing Markets and Policies*. Nordic Council of Ministers.

Central Bank of Ireland (CBI) (2019). ‘Household Credit Market Report 2019’. Central Bank of Ireland: Dublin. Available at: https://www.centralbank.ie/docs/default-source/publications/household-credit-market-report/household-credit-market-report-2019.pdf?sfvrsn=2784821d_6.

Coffey, C., P. Hogan, K. McQuinn, C. O’Toole and R. Slaymaker (2022). *Rental inflation and stabilisation policies: international evidence and the Irish experience*, ESRI Research Series Report No. 136. Economic and Social Research Institute: Dublin. https://doi.org/10.26504/rs136.

Corrigan, E. (2019). ‘The Scale and Impact of the Local Authority Rent Subsidy’, *The Economic and Social Review*, 50, issue 1, p. 159-211.

Corrigan, E. (forthcoming). *Housing Stress, Deprivation and Affordability*, (mimeo).

Corrigan, E., D. Foley, K. McQuinn, C. O’Toole R. Slaymaker (2019). ‘Exploring Affordability in the Irish Housing Market’, *The Economic and Social Review*, 50, issue 1, p. 119-157.

Cuerpo, C., P. Pontuch and S. Kalantaryan (2014). ‘Rental Market Regulation in the European Union’, European Economy – Economic Papers 2008 – 2015 515, Directorate General Economic and Financial Affairs (DG ECFIN), European Commission.

De Decker, P. (2002). ‘On the genesis of social rental agencies in Belgium’, *Urban Studies*, *39*(2), 297-326.

Demographia (2022). *International Housing Affordability* 2022 Edition. Available at: https://fcpp.org/wp-content/uploads/Demographia-International-Housing-Affordability-2022-EditionCORR.pdf.

Dewilde, C. (2015). ‘What have ECHP and EU-SILC to contribute to the comparative study of housing?’, *Critical Housing Analysis*, *2*(2), pp.19-26.

Dewilde, C. (2017). ‘Do housing regimes matter? Assessing the concept of housing regimes through configurations of housing outcomes’, *International Journal of Social Welfare*, *26*(4), pp.384-404.

Doolan, M., B. Roantree and R. Slaymaker (2022). *Low Income Renters and Housing Supports*, ESRI Research Series Report No. 141. Economic and Social Research Institute: Dublin. https://doi.org/10.26504/rs141.

Driant, J.C. and M. Li (2012). ‘The ongoing transformation of social housing finance in France: Towards a self-financing system?’, *International Journal of Housing Policy*, *12*(1), 91-103.

Egner, B., K. Schulze, S. Thomas, M.C. Krapp and M. Vache (2020). ‘Housing policies in the European Union’, Institut Wohnen und Umwelt GmbH, Conference paper.

El Fayoumi, K., I. Karpowicz, J. Lee, M. Marinkov, A. Mineshima, J. Salas, A. Tudyka and A. Schaechter (2021). ‘Affordable Rental Housing: Making it Part of Europe’s Recovery’, IMF Departmental Paper No. 2021/013.

European Construction Sector Observatory (ECSO) (2019). *Housing affordability and sustainability in the EU.*

European Mortgage Federation (EMF) (2022). *A review of Europe's mortgage and housing markets.*

Harloe, M. (1995). *The People's Home? Social Rented Housing in Europe and America*. Oxford: Blackwell Publishers.

Hegedüs, J. and I. Tosics (1996). 'The disintegration of the East European housing model', in David Clapham, József Hegedüs, Keith Kintrea, and Ivan Tosics (Eds) *Housing Privatization in Eastern Europe* (London: Greenwood), pp. 15-40.

Hilber, C.A. and O. Schöni (2016). 'Housing policies in the United Kingdom, Switzerland, and the United States: lessons learned', *Cityscape*, *18*(3), 291-332.

Hoekstra, J. (2017). 'Reregulation and Residualization in Dutch social Housing: a critical Evaluation of new Policies', *Critical Housing Analysis*, *4*(1), 31-39.

Housing Observatory (2021). 'The State of Housing in Europe 2021', *Housing Europe.*

Hubert, F. (2003). 'Rent control: academic analysis and public sentiment', *Swedish economic policy review*, *10*(1), 61-88.

Kelly, J., G. Kennedy and D. Lambert (2021). *The cost of housing and indebtedness across European and OECD households*. No. 10/FS/21. Central Bank of Ireland, 2021.

Kelly, R. and E. Mazza (2019). 'A measure of bindingness in the Irish mortgage market', *Financial Stability Notes* 12/FS/19, Central Bank of Ireland. https://EconPapers.repec.org/RePEc:cbi:fsnote:12/fs/19.

Kemeny, J. (1992). *Housing and Social Theory*. London: Routledge.

Kemeny, J. (1995). *From Public Housing to the Social Market*. London: Routledge.

Kemeny, J., J. Kersloot and P. Thalmann (2005). 'Non-profit housing influencing, leading and dominating the unitary rental market: Three case studies', *Housing Studies*, 20(6), 855-872.

Kemp, P. (Ed.) (2007). *Housing allowances in comparative perspective*. Policy Press.

Kettunen, H. and H. Ruonavaara (2021). 'Rent regulation in 21st century Europe. Comparative perspectives', *Housing Studies*, *36*(9), 1446-1468.

Kholodilin, K.A., S. Kohl and F. Müller (2022). *The rise and fall of social housing? Housing decommodification in long-run perspective* (No. 22/3). MPIfG Discussion Paper.

Lydon, R. and F. McCann (2017). 'The income distribution and the Irish mortgage market', Central Bank of Ireland Economic Letters (5).

McCarthy, Y. and K. McQuinn (2017). 'Credit conditions in a boom and bust property market: Insights for macro-prudential policy', *The Quarterly Review of Economics and Finance* 64, 171-182.

McQuinn, K., C. O'Toole and R. Slaymaker (2021). 'Credit access, macroprudential rules and policy interventions: Lessons for potential first-time buyers', *Journal of Policy Modeling*, 43(5), 944-963. https://doi.org/10.1016/j.jpolmod.2021.03.013.

Meen, G. and C. Whitehead (2020). *Understanding Affordability: The Economics of Housing Markets*, Bristol University Press, Bristol, UK.

Norris, M. and H. Domański (2009). ‘Housing conditions, states, markets and households: A Pan-European analysis’, *Journal of Comparative Policy Analysis*, *11*(3), 385-407.

Norris, M. and M. Byrne (2017). ‘A tale of two busts (and a boom): Irish social housing before and after the global financial crisis’, *Critical Housing Analysis*, 4(2), p.19.

O’Toole, C. and R. Slaymaker (2022). ‘Back to the future? Macroprudential policy and the rebirth of local authority mortgages in Ireland’, *The Economic and Social Review*, 53(4), pp.223-260.

O’Toole, C., R. Slaymaker, K. McQuinn, C. Coffey and E. Corrigan (2020). *Exploring the short-run implications of the COVID-19 pandemic on affordability in the Irish private rental market*, ESRI Research Series Report No. 108. Economic and Social Research Institute: Dublin. https://doi.org/10.26504/rs108.

OECD (2020). ‘HC1.2. Housing Costs Over Income’, OECD Affordable Housing Database.

OECD (2021a). *Brick by Brick: Building Better Housing Policies*, OECD Publishing, Paris, https://doi.org/10.1787/b453b043-en.

OECD (2021b). ‘OECD Economic Surveys: Sweden 2021’, OECD Publishing, Paris, https://doi.org/10.1787/f61d0a54-en.

Pichler-Milanovich, N. (2001). ‘Urban housing markets in Central and Eastern Europe: convergence, divergence or policy ‘collapse’’, *European Journal of Housing Policy*, *1*(2), 145-187.

Poggio, T. and C. Whitehead (2017). *Social housing in Europe: legacies, new trends and the crisis*. Critical Housing Analysis, 4 (1). pp. 1-10. ISSN 2336-2839.

Quigley, J.M. and S. Raphael (2004). ‘Is Housing Unaffordable? Why isn‘t it More Affordable?’, *The Journal of Economic Perspectives*, Vol. 18, No. 1, pp. 191-214.

Roantree, B., B. Maître, A. McTague and I. Privalko (2021). *Poverty, income inequality and living standards in Ireland*. Economic and Social Research Institute and The Community Foundation for Ireland: Dublin. https://doi.org/10.26504/bkmnext412.

Roantree, B., M. Barrett and P. Redmond (2022). *Poverty, income inequality and living standards in Ireland: Second Annual Report*. Economic and Social Research Institute and The Community Foundation for Ireland: Dublin. https:// https://doi.org/10.26504/jr1.

Sandlie, H.C. and L. Gulbrandsen (2017). *The Social Homeownership Model-the case of Norway. Critical Housing Analysis*, 4 (1). pp. 52-60. ISSN 2336-2839.

Scanlon, K., M. Fernández Arrigoitia and C.M.E. Whitehead (2015). *Social housing in Europe*. European Policy Analysis (17). pp. 1-12.

Shinozaki, S. (2005). ‘A comparative assessment of housing finance markets in transition economies’, in: *OECD, Housing Finance Markets in Transition Economies: Trends and Challenges*. Paris: OECD Publishing, pp. 7-81.

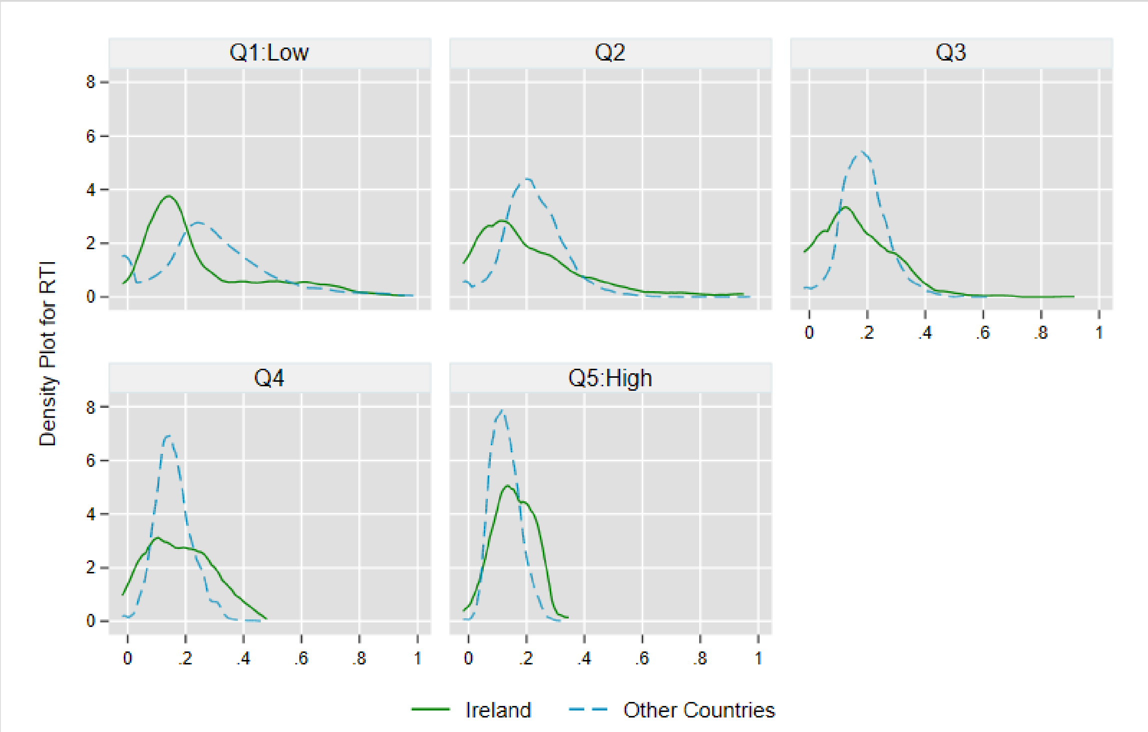
Slaymaker, R., B. Roantree, A. Nolan and C. O’Toole (2022). *Future Trends in Housing Tenure and the Adequacy of Retirement Income*. ESRI Research Series Report No. 143. Economic and Social Research Institute: Dublin. https://doi.org/10.26504/rs143.

Turner, E.O., B. Davies and S. Marquardt (2017). *Lessons from Germany: Tenant power in the rental market*. Institute for Public Policy Research.

Van der Heijden, H. (2002). ‘Social rented housing in Western Europe: developments and expectations’, *Urban Studies*, *39*(2), 327-340.

APPENDIX

FIGURE A.1 RTI BY INCOME QUINTILES – ALTERNATIVE RATIO CALCULATION METHOD

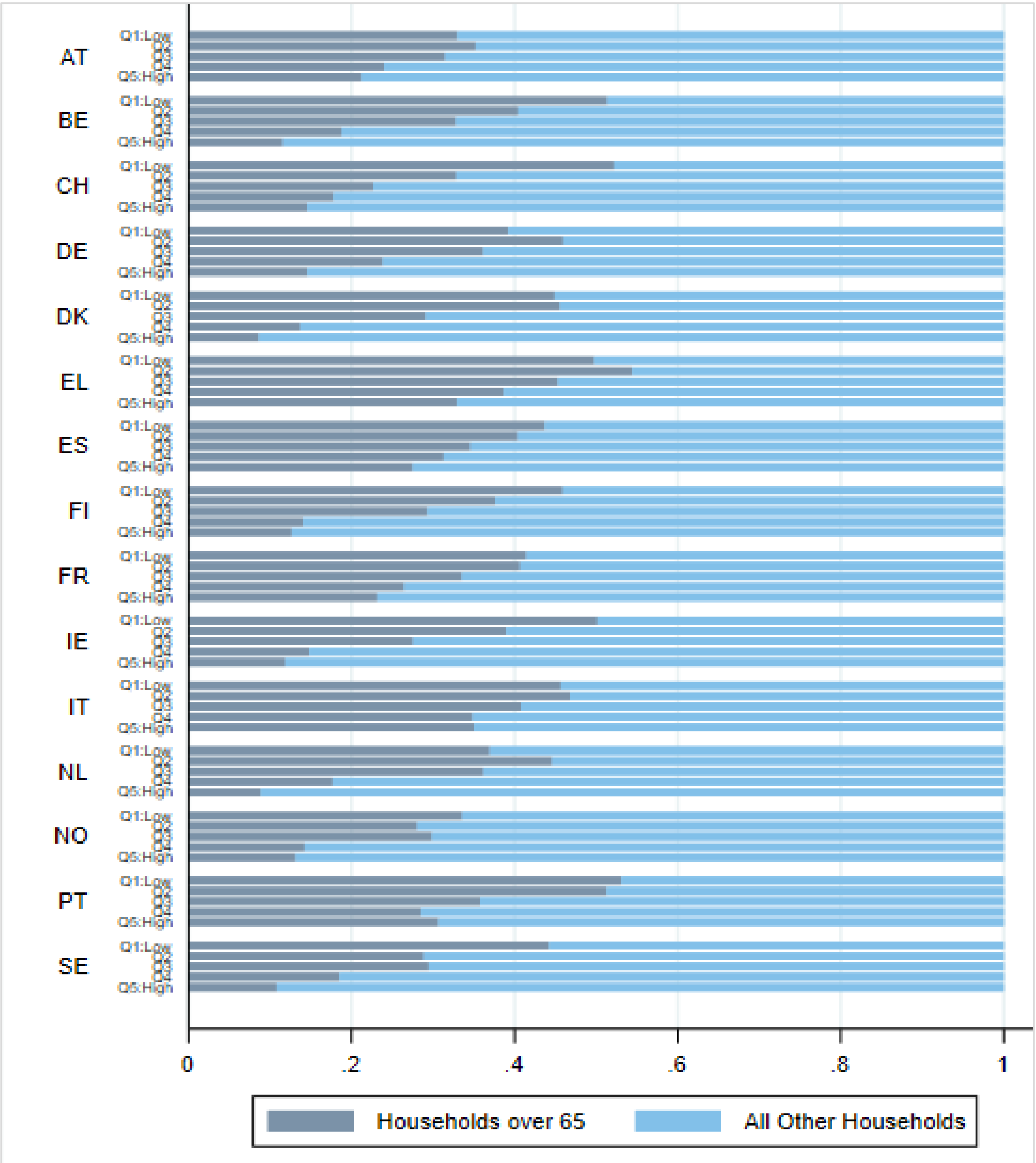


Source: Authors' analysis of 2019 EU-SILC microdata files.
Note: These density plots represent rent-to-income ratios calculated with housing supports subtracted from both rents and net incomes.

FIGURE A.2 TENURE OF HOUSEHOLDS AGED OVER 65

Source: Authors' analysis of 2019 EU-SILC microdata files.
Note: Data are sorted by share of households who own outright.

FIGURE A.3 SHARE OF HOUSEHOLDS AGED OVER 65 IN EACH INCOME QUINTILE



Source: Authors' analysis of 2019 EU-SILC microdata files.

TABLE A.1 SUMMARY STATISTICS OF HOUSEHOLD INCOMES BY QUINTILE AND COUNTRY

		Quintile 1	Quintile 2	Quintile 3	Quintile 4	Quintile 5
AT	min	1,932	21,598	31,726	43,904	60,837
	median	15,653	26,486	37,670	51,282	75,955
	mean	14,987	26,535	37,630	51,728	81,236
	max	21,582	31,723	43,896	60,837	145,687
BE	min	6,301	19,687	29,285	41,554	59,059
	median	15,884	24,408	34,749	50,037	71,950
	mean	15,408	24,351	34,969	50,113	76,649
	max	19,684	29,272	41,519	59,059	129,135
CH	min	10,552	36,057	55,229	77,566	108,419
	median	26,517	45,774	66,039	90,998	131,840
	mean	25,676	45,695	65,950	91,430	143,520
	max	36,055	55,217	77,566	108,404	274,848
DE	min	3,128	18,376	27,182	36,363	51,396
	median	12,627	22,819	31,294	42,966	64,853
	mean	12,486	22,786	31,420	43,148	69,340
	max	18,375	27,180	36,353	51,395	126,526
DK	min	9,058	27,612	38,073	53,058	74,606
	median	20,604	32,237	44,704	63,707	89,318
	mean	19,935	32,468	44,993	63,504	95,391
	max	27,601	38,071	53,024	74,594	171,882
EL	min	2,400	6,757	10,035	13,653	19,830
	median	5,150	8,400	11,726	16,344	25,430
	mean	5,019	8,385	11,770	16,472	27,181
	max	6,756	10,030	13,650	19,820	49,400
ES	min	636	13,291	20,785	29,260	41,991
	median	9,251	17,057	24,806	34,467	54,094
	mean	8,777	16,984	24,898	34,857	58,138
	max	13,287	20,781	29,254	41,989	102,999
FI	min	7,337	24,753	37,868	52,212	69,865
	median	16,730	30,860	45,098	59,555	83,394
	mean	16,971	30,873	44,954	60,048	90,423
	max	24,741	37,841	52,204	69,851	169,844
FR	min	7,370	20,280	29,280	39,560	53,920
	median	16,060	24,290	34,030	45,710	68,380
	mean	15,480	24,428	34,234	45,999	74,971
	max	20,270	29,270	39,550	53,910	141,230
IE	min	9,510	22,400	34,620	48,980	69,740
	median	15,290	28,270	40,800	58,010	86,590
	mean	15,956	28,467	41,185	58,205	94,814
	max	22,370	34,580	48,950	69,720	194,460
IT	min	0	14,309	21,409	30,131	44,571
	median	9,361	17,888	25,238	36,364	56,938
	mean	8,504	17,910	25,446	36,689	62,346
	max	14,304	21,407	30,126	44,566	120,022

Contd.

TABLE A.1 CONTD.

		Quintile 1	Quintile 2	Quintile 3	Quintile 4	Quintile 5
NL	min	3,972	20,471	29,006	41,850	59,571
	median	15,955	24,408	35,008	50,136	73,322
	mean	15,128	24,474	35,061	50,284	79,129
	max	20,469	28,999	41,843	59,559	147,115
NO	min	5,009	38,012	58,811	78,679	101,010
	median	26,736	47,641	67,877	88,774	119,185
	mean	25,968	47,798	68,360	89,077	127,581
	max	37,984	58,781	78,676	101,008	227,956
PT	min	2,100	8,450	13,064	18,140	26,192
	median	6,272	10,623	15,652	21,402	34,365
	mean	6,087	10,681	15,645	21,710	37,565
	max	8,449	13,062	18,139	26,190	75,388
SE	min	2,609	22,647	34,366	49,445	65,479
	median	15,489	28,112	40,999	56,522	77,392
	mean	15,168	28,272	41,166	56,805	81,147
	max	22,647	34,355	49,444	65,452	131,772

Source: Authors' analysis of 2019 EU-SILC microdata files.

TABLE A.2 TENURE IN IRELAND AND COMPARABLE COUNTRIES (%)

	Own Outright	Own w/ mortgage	Rent	Free Housing
Ireland	44.7	25.5	29.2	0.6
Non-IE	36.5	23.2	36.4	3.8

Source: Authors' analysis of 2019 EU-SILC microdata files.

TABLE A.3 TENURE IN IRELAND AND COMPARABLE COUNTRIES BY AGE (%)

	Age of HH	Own Outright	Own w/ mortgage	Rent	Free Housing
Ireland	HHs > 40	54.2	24.9	20.2	0.7
	HHs <40	5.7	28.0	66.0	0.3
Non-IE	HHs > 40	43.9	22.2	30.5	3.4
	HHs <40	5.7	27.3	61.2	5.8

Source: Authors' analysis of 2019 EU-SILC microdata files.

TABLE A.4 HOUSEHOLD COMPOSITION BY COUNTRY (%)

Country	Single no children	Single w/children	2+ adults no children	2+ adults w/ children
IE	25.8	5.6	37.4	31.2
PT	22.8	3.4	48.6	25.2
ES	25.7	2.0	47.2	25.1
EL	25.7	0.8	49.0	24.6
BE	34.6	4.2	38.8	22.4
FR	38.3	4.2	35.7	21.7
IT	33.0	2.6	43.7	20.6
NL	38.3	2.5	38.6	20.6
AT	37.4	1.8	40.3	20.5
CH	36.4	2.6	41.0	20.0
NO	45.7	4.7	30.7	18.9
SE	46.6	4.8	29.8	18.8
DK	43.9	4.6	33.7	17.9
FI	44.7	2.9	34.5	17.9
DE	42.0	2.9	38.2	16.9

Source: Authors' analysis of 2019 EU-SILC microdata files.

TABLE A.5 HOUSEHOLD COMPOSITION BY AGE IN IRELAND AND COMPARABLE COUNTRIES (%)

Country	Age of HH	Single no children	Single w/children	2+ adults no children	2+ adults w/ children
Ireland	HHs > 40	29.5	2.9	39.7	27.9
	HHs <40	10.8	16.5	27.9	44.9
Non-IE	HHs > 40	35.8	2.4	43.9	17.8
	HHs <40	39.7	5.9	23.0	31.4

Source: Authors' analysis of 2019 EU-SILC microdata files.

TABLE A.6 SHARE OF RENTERS IN RECEIPT OF HOUSING SUPPORT PAYMENTS AND AVERAGE VALUE OF MONTHLY PAYMENT BY COUNTRY

Group	Country	Share of renters receiving housing subsidy supports (%)	Average amount received in subsidy supports (euros unless otherwise indicated)
Large rental sector; strict regulations	Germany	13.4	295
	Denmark	45.6	207**
	Austria	8.5	144
	Netherlands	40.2	218
	Sweden	23.9	235
Limited homeownership; strict price controls	Switzerland	1.6	614**
High homeownership; less secure rental sector	France	50.8	206
	Finland	54.0	267
	Belgium	1.2	144
	Ireland	13.7	690
	Norway	13.0	195
Limited rental sector; limited supports for renters	Greece	0.0	0
	Italy	1.9	85
	Portugal	1.4	103
	Spain	3.4	180

Source: Authors' analysis of 2019 EU-SILC microdata files.
Note: Amount received in subsidy supports refers to households in receipt of a housing allowance payment only, as recorded by the SILC dataset. **National currency reported.

TABLE A.7 SHARE OF RENTERS PAYING > 30% OF INCOME BY AGE AND INCOME QUINTILE IN 2015 AND 2019 (%)

Country	Year	All HHs	HHs > 40	HHs <40	Income Quintile 1	Income Quintile 2	Income Quintile 3	Income Quintile 4
AT	2015	20.2	16.5	28.1	49.8	16.9	5.5	0.2
	2019	21.1	18.2	26.3	52.7	20.3	6.0	1.6
BE	2015	40.8	40.9	40.7	69.5	42.7	14.0	0.8
	2019	37.5	37.0	38.6	65.0	40.0	14.2	0.3
CH	2015	29.0	31.8	23.8	74.9	28.8	11.2	2.6
	2019	32.1	34.9	26.5	81.6	36.6	13.0	3.9
DE	2015	23.7	24.5	21.9	58.8	13.8	4.8	1.3
	2019	18.2	18.9	16.6	47.1	11.4	3.7	2.8
DK	2015	38.8	36.1	42.6	61.7	24.8	7.0	2.7
	2019	42.5	38.5	48.6	72.3	32.5	15.5	4.8
EL	2015	44.0	42.2	46.9	95.4	70.5	38.3	14.4
	2019	36.3	34.5	39.9	92.2	65.8	34.7	10.2
ES	2015	36.3	42.2	46.9	70.4	42.7	12.5	8.6
	2019	37.8	34.5	39.9	71.2	47.2	25.5	6.6
FI	2015	51.5	51.8	51.1	76.2	31.5	5.4	3.3
	2019	52.5	56.0	49.0	75.6	29.8	10.8	1.0
FR	2015	23.5	22.0	26.2	50.2	16.1	5.8	1.7
	2019	25.1	24.0	27.2	51.3	17.7	4.8	1.3
IE	2015	17.6	14.9	21.1	28.9	23.2	20.3	6.2
	2019	18.0	12.4	24.9	27.3	23.3	16.0	13.8
IT	2015	28.4	26.7	33.8	58.0	30.7	10.4	1.1
	2019	29.1	28.3	31.5	77.0	34.7	9.8	0.7
NL	2015	48.6	48.2	49.7	72.7	23.3	4.0	0.0
	2019	49.7	49.8	49.4	82.0	41.0	13.3	4.4
NO	2015	49.2	42.8	52.8	61.5	19.8	2.5	0.0
	2019	48.0	40.0	53.1	63.1	18.5	6.0	0.0
PT	2015	27.2	22.6	43.0	43.8	41.4	19.3	9.5
	2019	23.4	20.9	31.6	41.3	34.0	15.9	8.7
SE	2015	48.2	49.5	46.3	78.5	26.2	4.4	1.5
	2019	49.3	51.9	45.7	82.2	29.9	10.5	0.8

Source: Authors' analysis of 2019 EU-SILC microdata files.
Note: We do not report income Q5 due to very small numbers of observations. Estimates for Q4 are also based on small sample sizes and should therefore be treated with caution.

TABLE A.8 SHARE OF YOUNG ADULTS (AGED 25-34) LIVING AT HOME AND SHARE OF INDEPENDENTLY FORMED YOUNG HOUSEHOLDS (<40) WHO RENT OR OWN WITH A MORTGAGE IN 2015 AND 2019 (%)

Country	Year	YA at home (25-34)	HHs <40s in rental sector	HHs <40s own w/ mortgage
AT	2015	21.4	68.2	19.2
	2019	19.3	68.1	21.1
BE	2015	19.0	47.5	48.5
	2019	21.0	46.1	48.9
CH	2015	13.7	87.9	10.9
	2019	14.5	87.0	11.9
DE	2015	19.1	78.6	15.8
	2019	16.6	78.7	16.5
DK	2015	3.7	69.8	22.9
	2019	4.0	71.1	23.6
EL	2015	53.4	56.2	7.8
	2019	57.8	58.0	4.6
ES	2015	39.1	32.5	44.3
	2019	46.4	41.4	34.2
FI	2015	4.7	57.6	37.8
	2019	4.8	62.5	33.4
FR	2015	10.1	58.2	34.1
	2019	11.4	58.5	34.0
IE	2015	22.3	52.6	32.5
	2019	27.4	66.0	28.0
IT	2015	50.6	34.0	24.6
	2019	53.1	43.5	17.3
	2015	9.9	55.5	43.2
	2019	10.2	53.4	42.7
NO	2015	5.4	47.1	45.2
	2019	5.8	48.5	45.5
PT	2015	45.7	28.0	52.7
	2019	45.2	34.3	41.2
SE	2015	5.3	60.0	37.5
	2019	5.7	56.6	37.7

Source: Eurostat: *Share of young adults aged 25-34 living with their parents by age and sex – EU-SILC survey* (ilc_lvps08); otherwise authors' analysis of 2019 EU-SILC microdata files.

Whitaker Square,
Sir John Rogerson's Quay,
Dublin 2
Telephone **+353 1 863 2000**
Email **admin@esri.ie**
Web **www.esri.ie**
Twitter **@ESRIDublin**

INSTITIÚID TAIGHDE EACNAMAÍOCHTA AGUS SÓISIALTA
ESRI ECONOMIC & SOCIAL RESEARCH INSTITUTE