IRELAND'S HOUSING NEED & POLICY OPTIONS: AN OVERVIEW

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For: Irish Institutional Property

January 2020

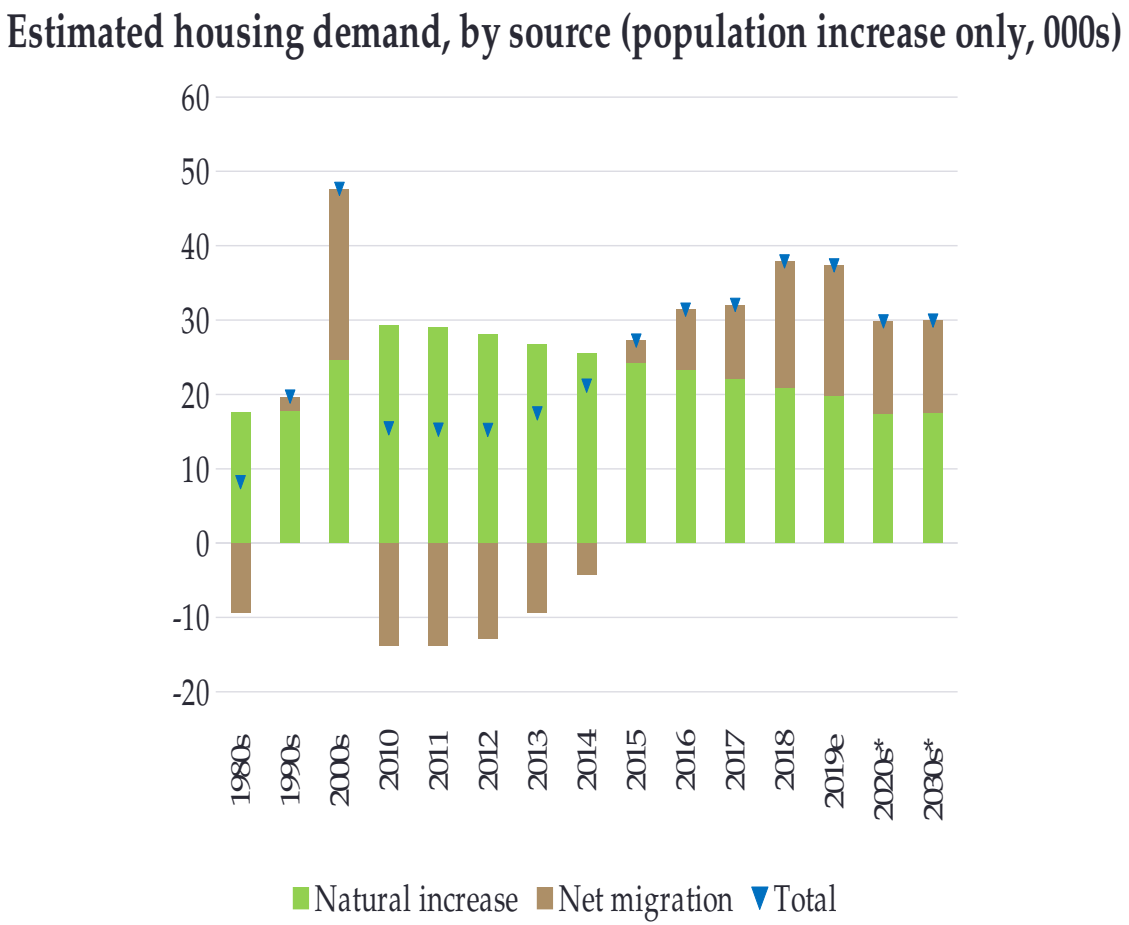
Structure

- **Medium-term Need**
- Current Context
- Policy Options

There are four principal sources of housing demand in any economy – some of which are more responsive to external conditions than others

- There are principal four sources of housing demand
  - **Natural increase**: changes in the local population, in particular in household-forming cohorts – best measured by comparing the 25-34 year-old female cohort with an older counterpart (e.g. 65-74 or 75-84 year-olds) – largely exogenous to economic conditions
  - **Net migration**: movement of people into the economy – in Ireland, hugely endogenous to economic conditions
  - **Change in household size**: determines the number of dwellings given a population – long-run trends largely exogenous but short-run trends hugely depending on housing supply
  - **Replacement of obsolescent stock**: each year, a small fraction of existing housing falls out of use – this will be higher in economies with greater internal migration (e.g. urbanization)
- These cover all tenure types – owner-occupied, private rental and social – and highlight the important distinction between latent and effective demand
- The spread of housing demand within the Irish economy depends on preferences (e.g. urbanization) but also public policy

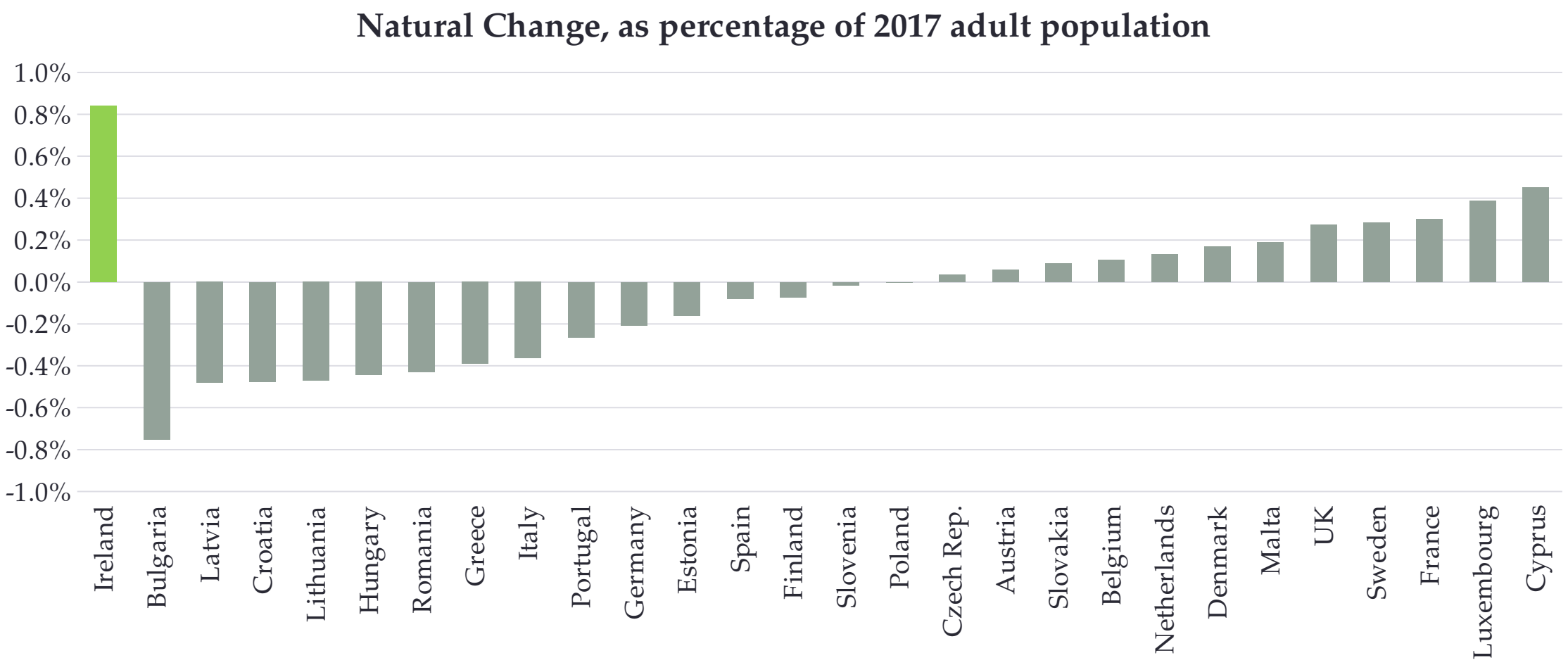
The first two sources of demand – natural increase and net migration – currently translate into at least 30,000 homes needed per year



Source: CSO. Notes: Net natural increase is calculated by the difference between 25-34 and 75-84 female cohorts; net migration is converted from persons into 2-person households; projections for 2020s and 2030s based on CSO population projections (including average of M1/M2 scenarios for migration)

- 30k homes a year are needed to meet likely population changes alone
- Natural increase, measured as gap between 25-34 and 75-84 year-old cohorts, peaked in 2010 and will level off ~17,000 per year by 2020s
- Offsetting this is increasingly positive trends in migration
  - Emigration fell 2010-2014 and each year since 2015 has seen larger numbers of net migrants into Ireland
  - Official migration projections are simplistic: 10k/20k/30k per year (vs. 34k in 2018)

The natural increase in the population in Ireland is by far the largest in Europe

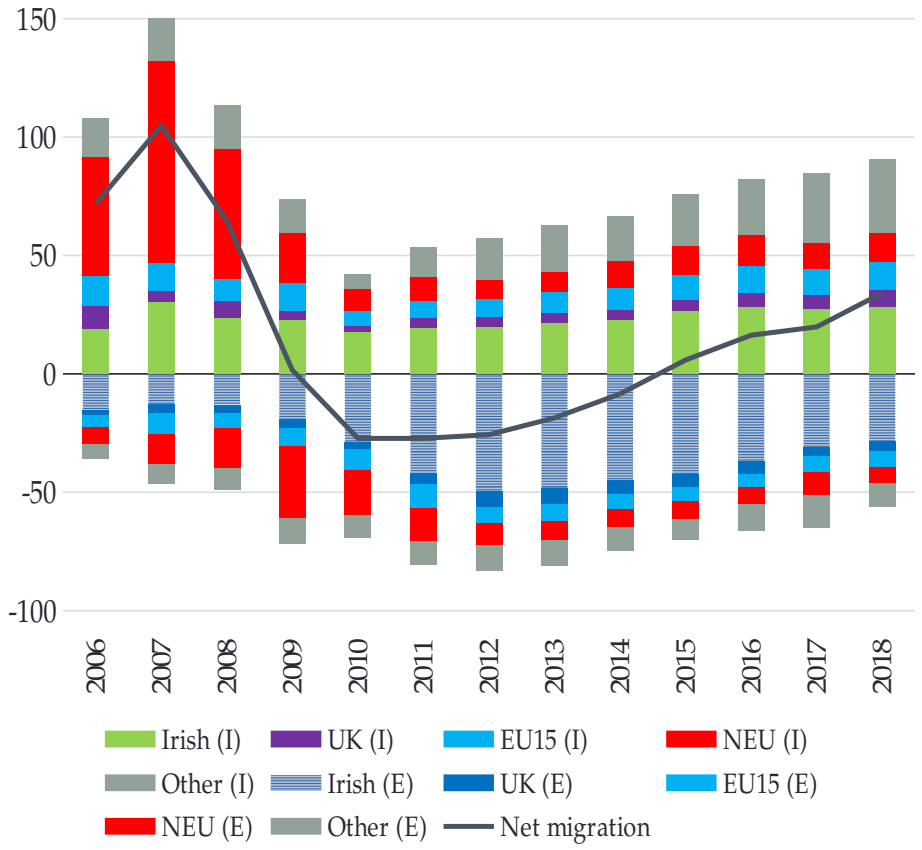


Source: Eurostat

Net migration has been positive and growing since 2015 – every extra 10,000 migrants require 4,000-5,000 new dwellings, principally in the cities

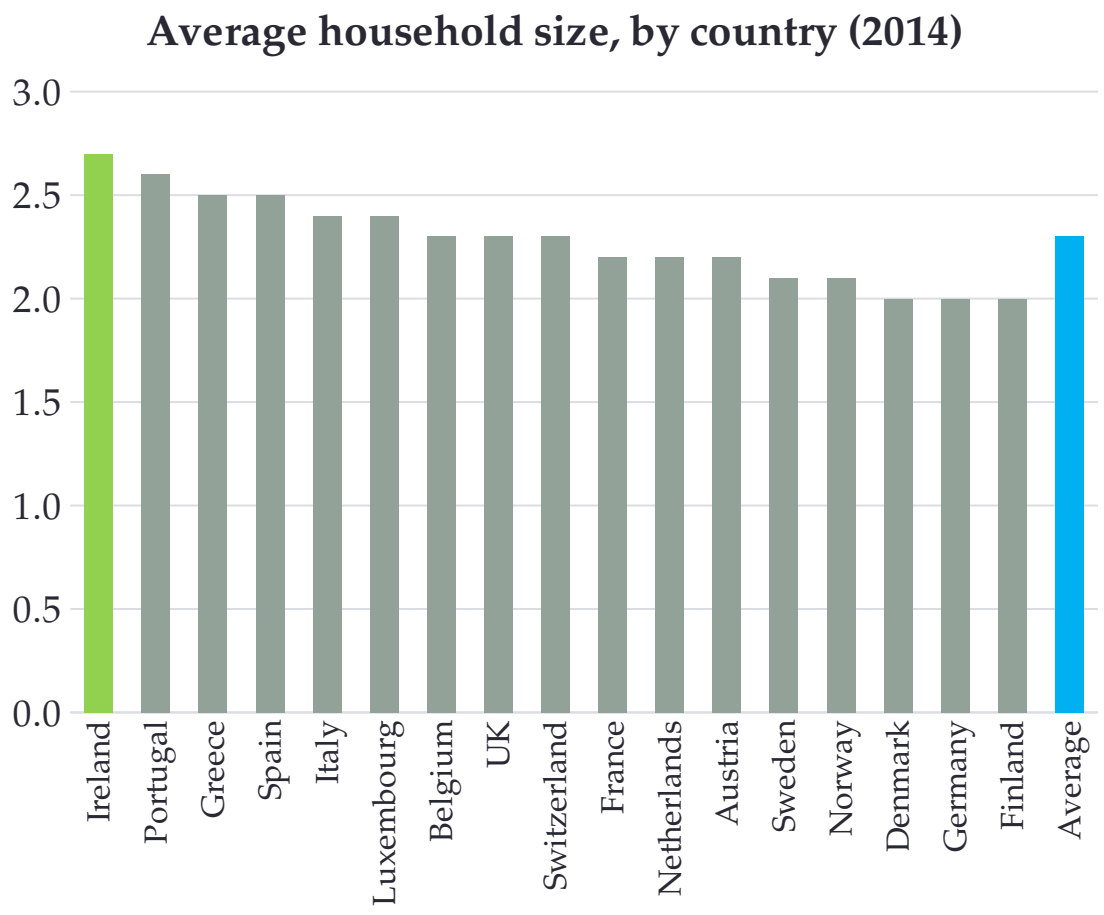
- Gross migration to Ireland doubled to 80,000 between 2010 and 2016
  - Emigration has fallen from 90,000 to 56,000, resulting in a swing from net emigration of 34,000 in 2012 to net immigration of 34,000 in 2018
  - The fall in emigration is driven by fewer Irish leaving – the rise in immigration by more non-EU nationals coming to Ireland
- Every additional 10,000 migrants require on average 4,000 dwellings
  - Non-Irish households have a lower number of people per HH than the average: 2.52 vs. 2.73 in Census 2011

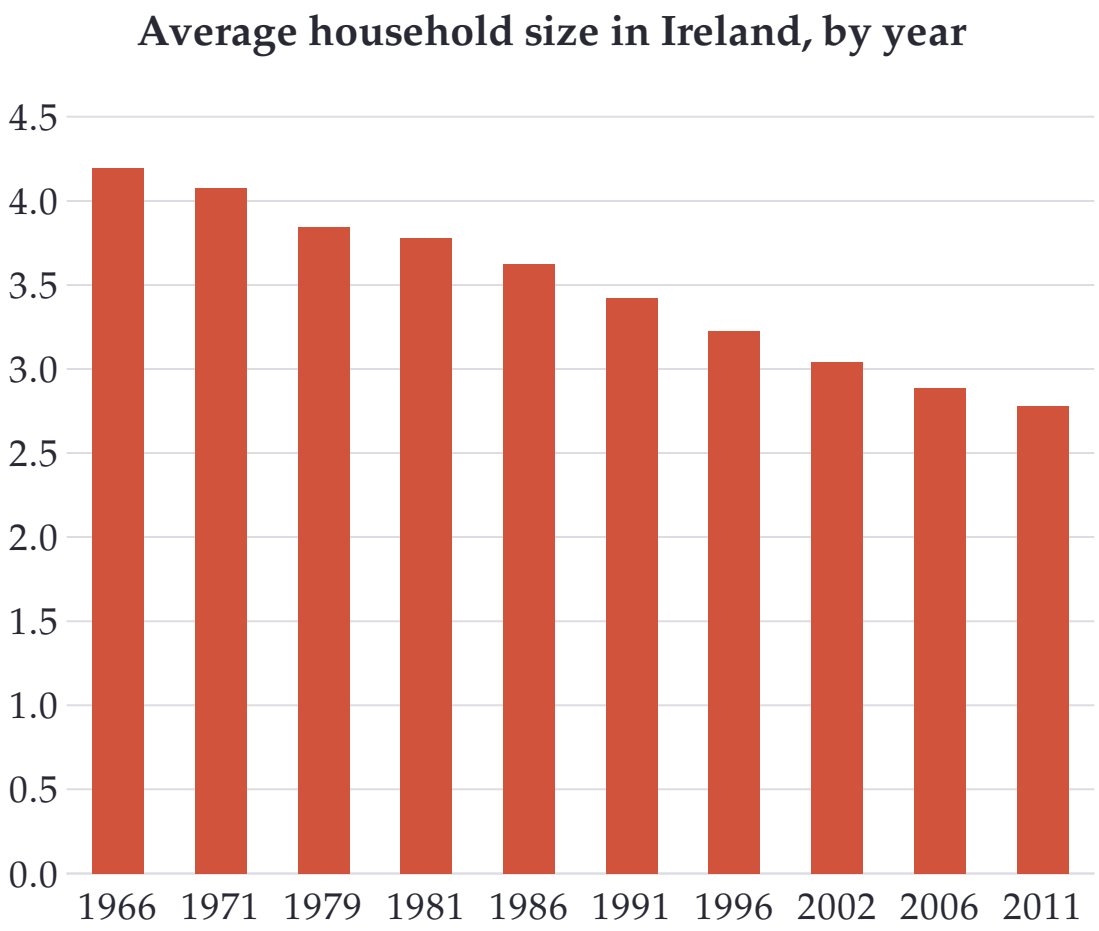
Immigration (I) and emigration (E), by year and nationality (000s), 2006-2018



Source: Census, CSO; "NEU" refers to new (post-2003) EU Member States

Ireland has Western Europe's largest average household size – but it has been falling steadily over the last five decades

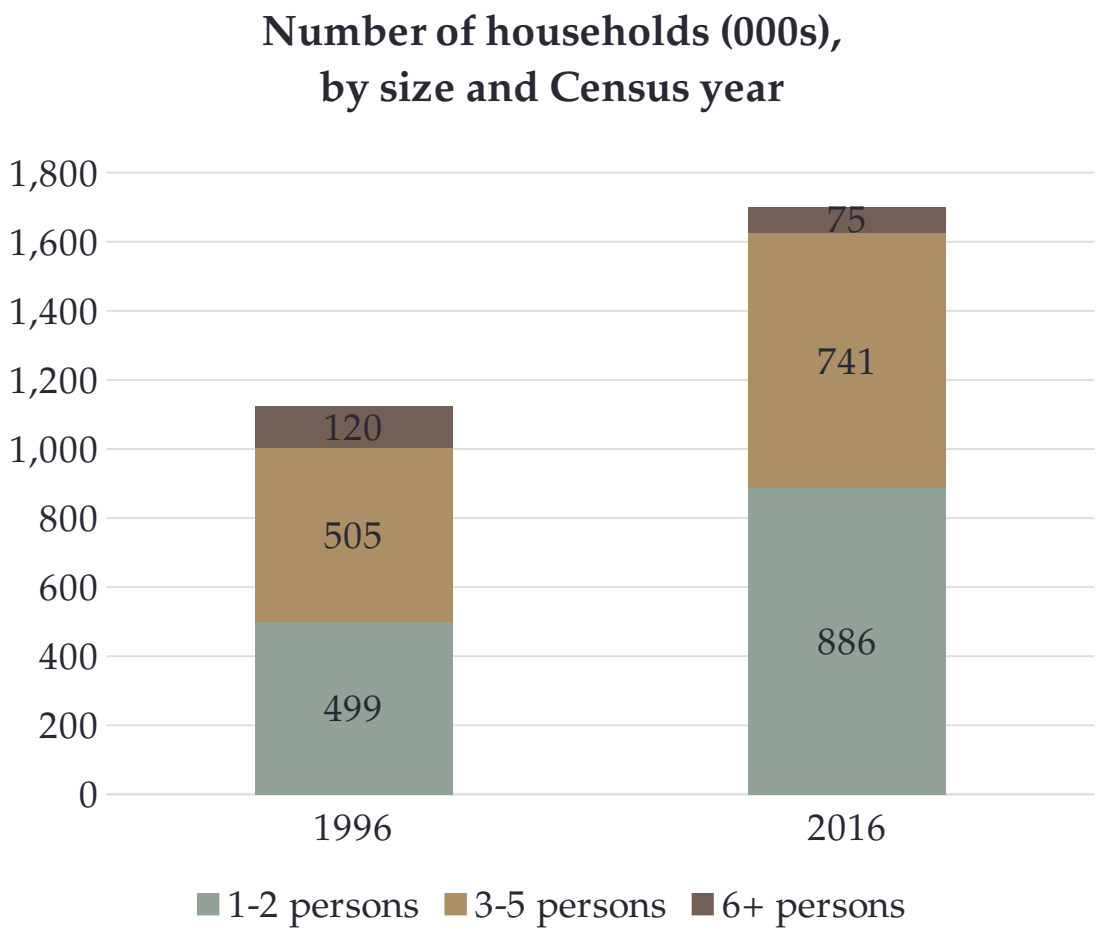




Source: Hypostat 2016; Census of ireland (various issues)

Two thirds of the growth in Irish households since 1996 has been 1-2 persons, who now form the majority of households in Ireland

- The number of Irish households grew by 50% between the 1996 and 2016 Censuses – from 1.1m to 1.7m
- Of the 580,000 new households, two thirds (390,000) were one or two person households
  - This represented 80% growth, from 0.5m to 0.9m households
  - 1-2 person households have increased from 44% to 52% of all households in Ireland
- A further 40,000 new households were 'crammer' households

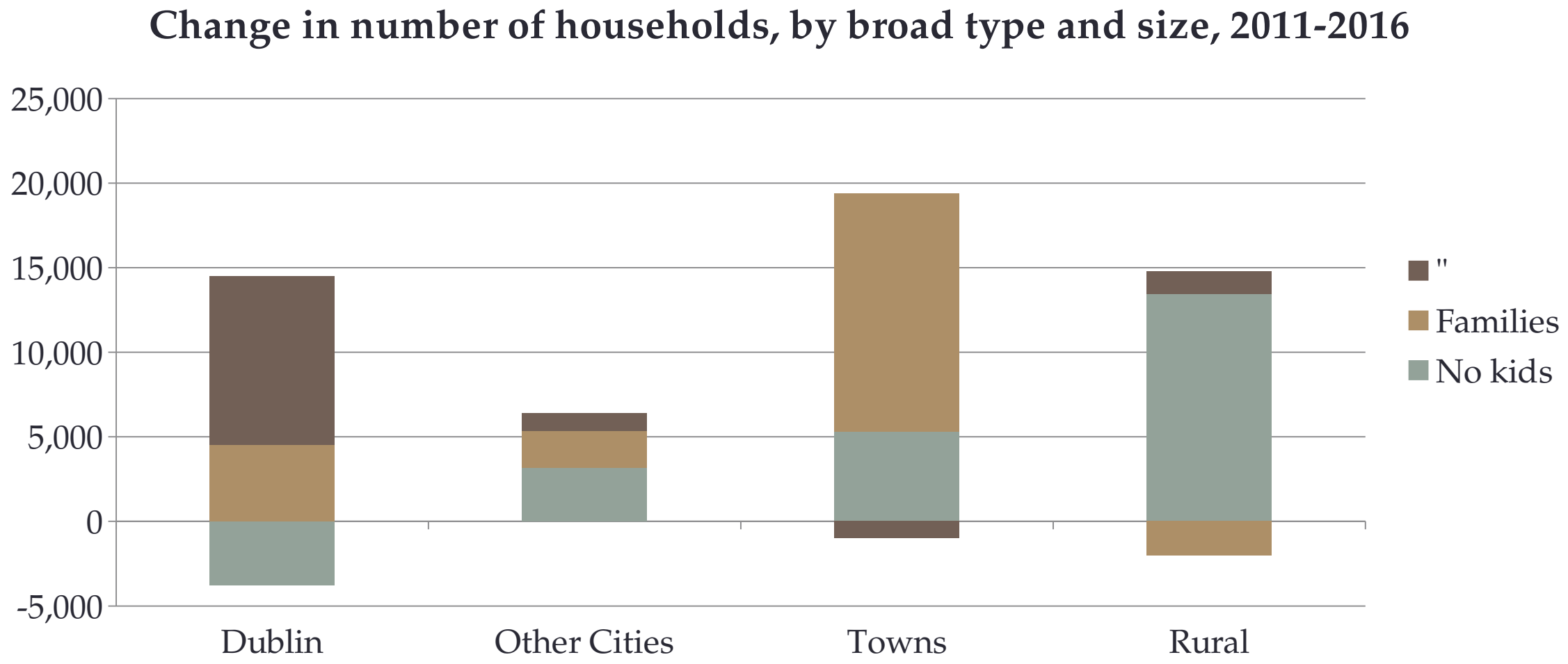


Source: Census of Ireland (various editions)

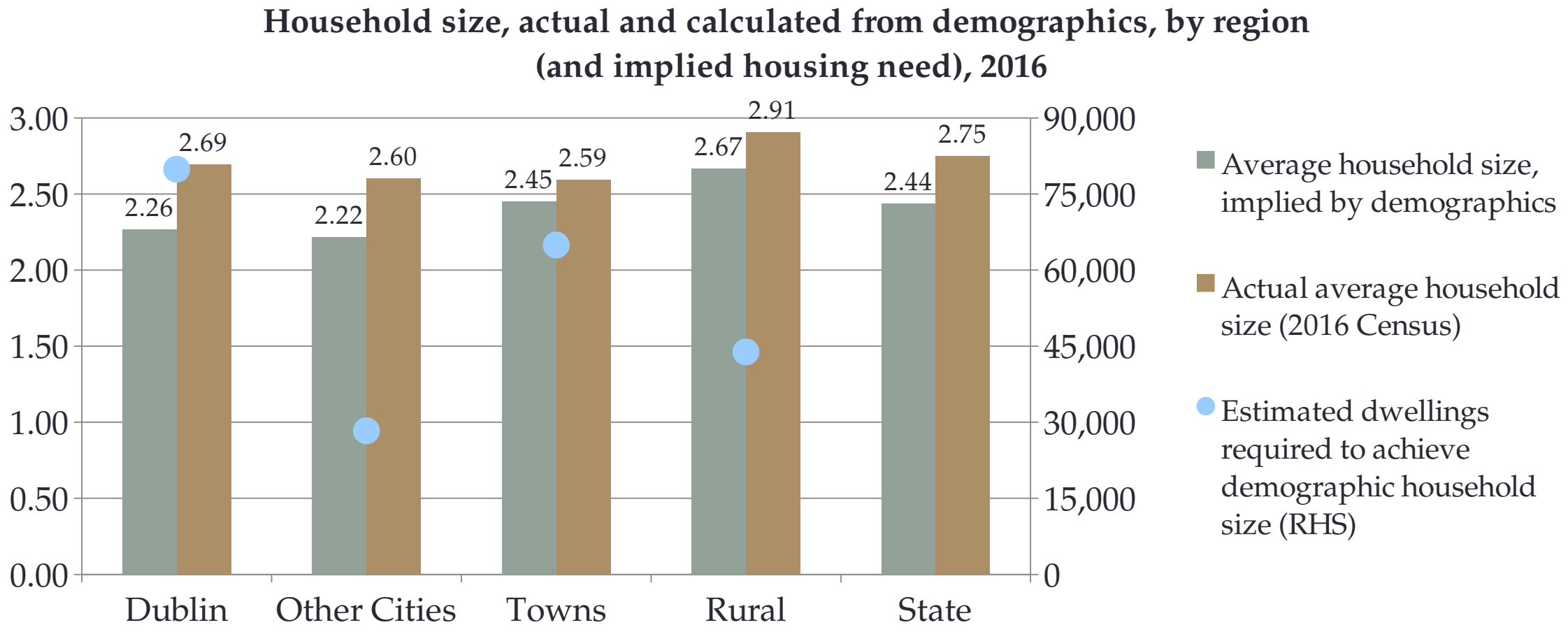
Average household size rose between the 2011 and 2016 Censuses – but this was driven by scarcity rather than demographics

- In the 2016 Census, the average household size in Ireland was 2.75, up from 2.73 in 2011
- This was not driven by a baby boom
  - Households with children made up 63% of the population in 2011 but just 48% of the population growth 2011-2016
  - 'Crammers' (households with unrelated parties) made up 15% of the 2011 population, but 35% of the 2011-2016 growth
- In order to fall to 2.6 – in line with recent trends – this would have required an extra 120,000 dwellings

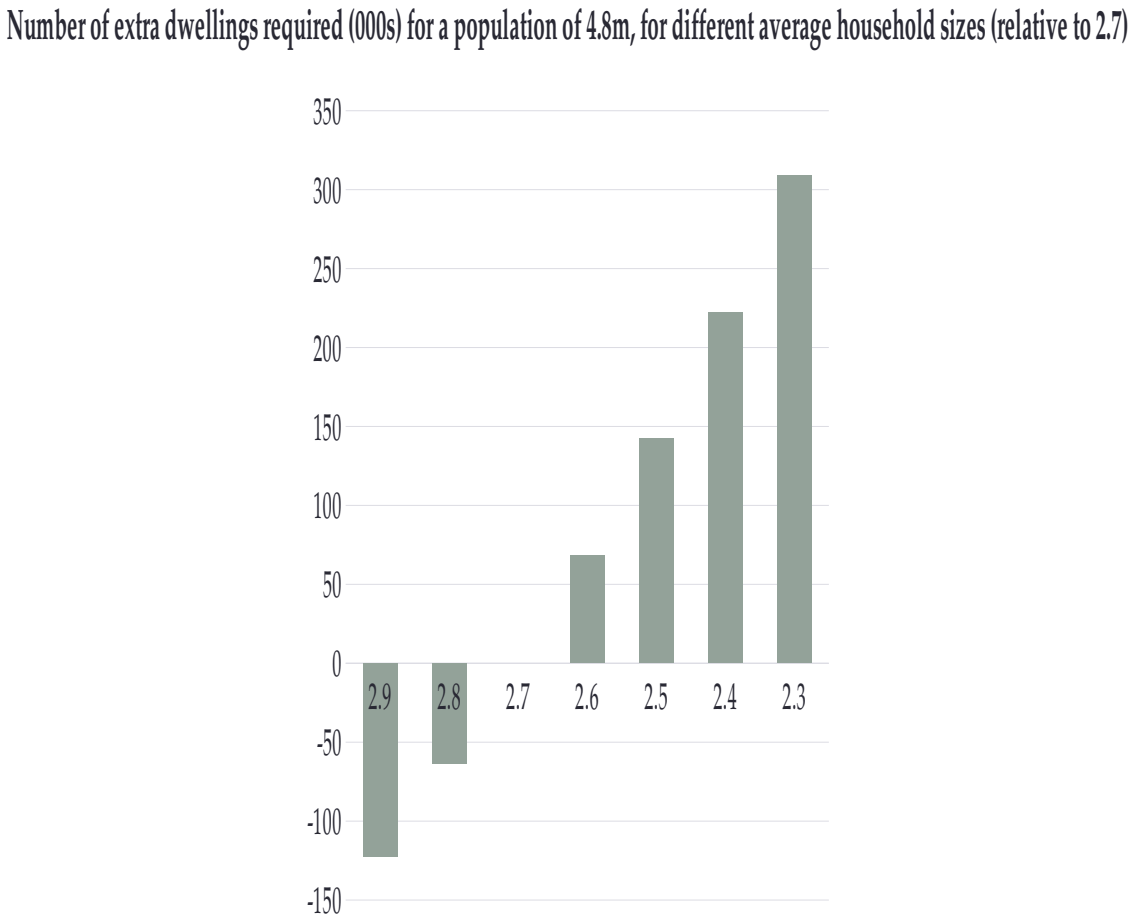
Household growth 2011-2016 was driven by three groups: older no-children households in rural locations, families in towns, and 'crammers' in Dublin



'Crammer' households keep household size high – demographics imply a true household size in 2016 closer to 2.4, requiring an additional 217,000 households



As Ireland's average household size converges to the European average, this will create significant demand, in particular for smaller homes

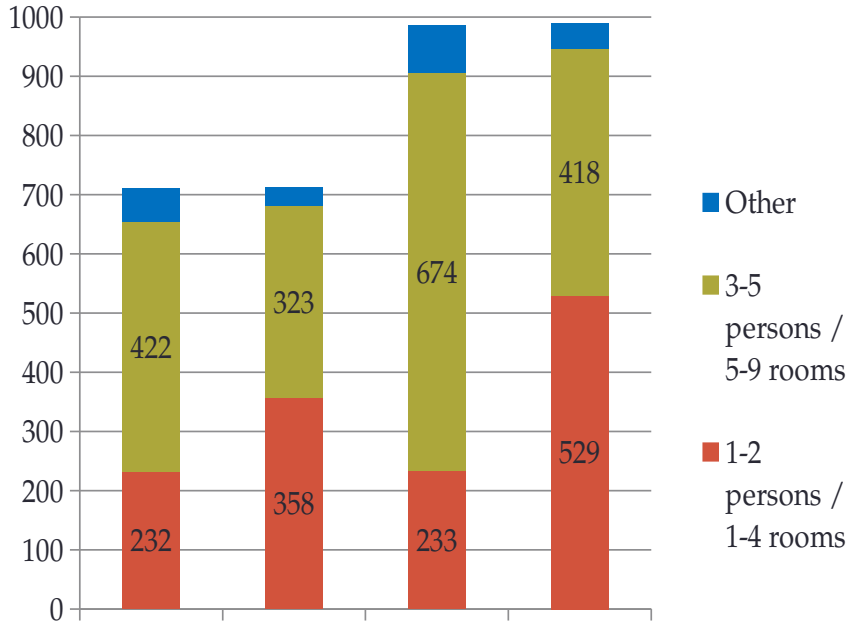


- Even with a fixed population, a rise in the fraction of 1-2 person households creates demand for a significant number of new dwellings
- Relative to a 2.7 average household size, a population of 4.8m with an average household size of 2.5 requires 142,000 extra dwellings
  - This is the equivalent of 11 years construction output at 2015 rates
  - Convergence to EU average of 2.3 would require an additional 300,000 dwellings

On demographics, the overall picture is clear: Dublin has a relatively homogenous housing stock that is ill-suited to meeting the diverse needs of its residents

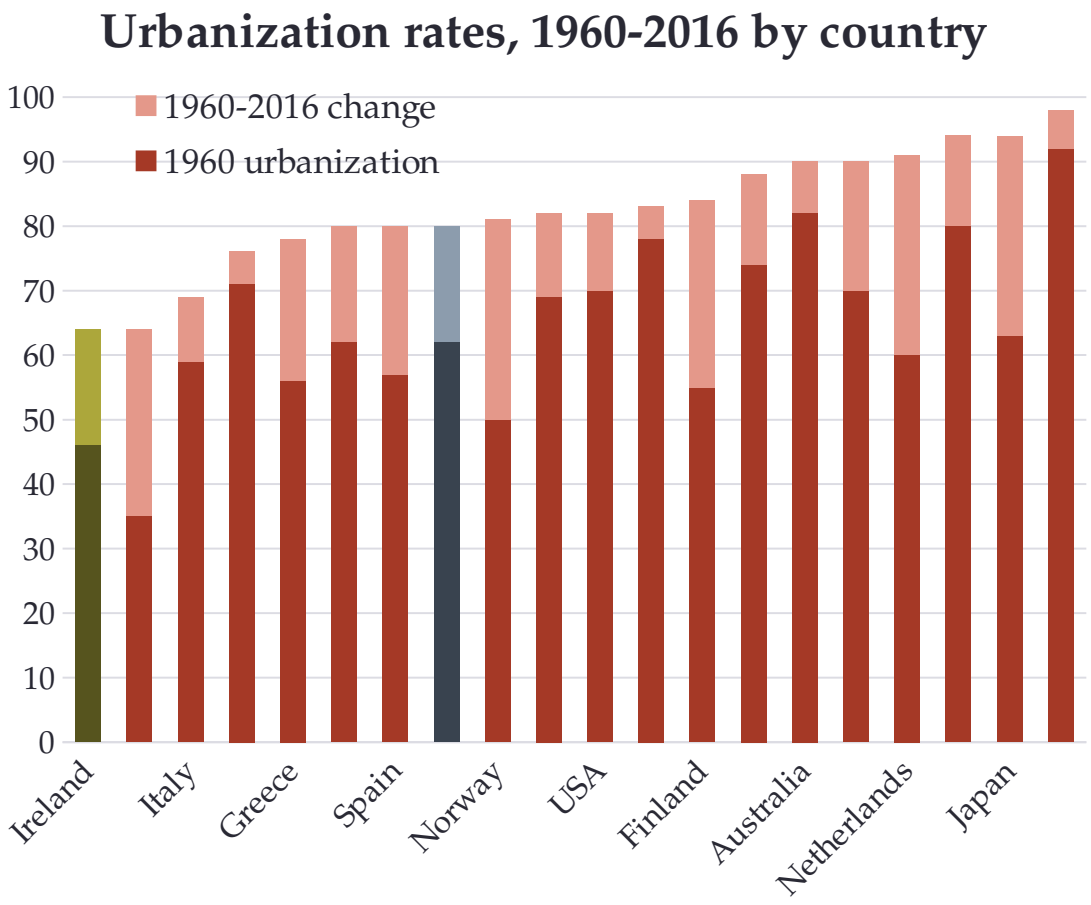
- In total, Dublin is missing roughly 125,000 multifamily dwellings
  - The Greater Dublin Area is home to ~360k households of 1-2 persons but has just ~230k dwellings of for 1-2 person-households
  - In contrast, it has a surplus of ~100k family homes, given its population structure
  - The mismatch is even larger outside GDA: between 250k and 300k units
- Within multifamily, there is a need at all lifecycle stages – from student accommodation to assisted living
  - The largest gap likely relates to housing workers, including those moving to Ireland from overseas, both long- and short-stay

Households by number of persons and related dwelling stock (000s), 2016



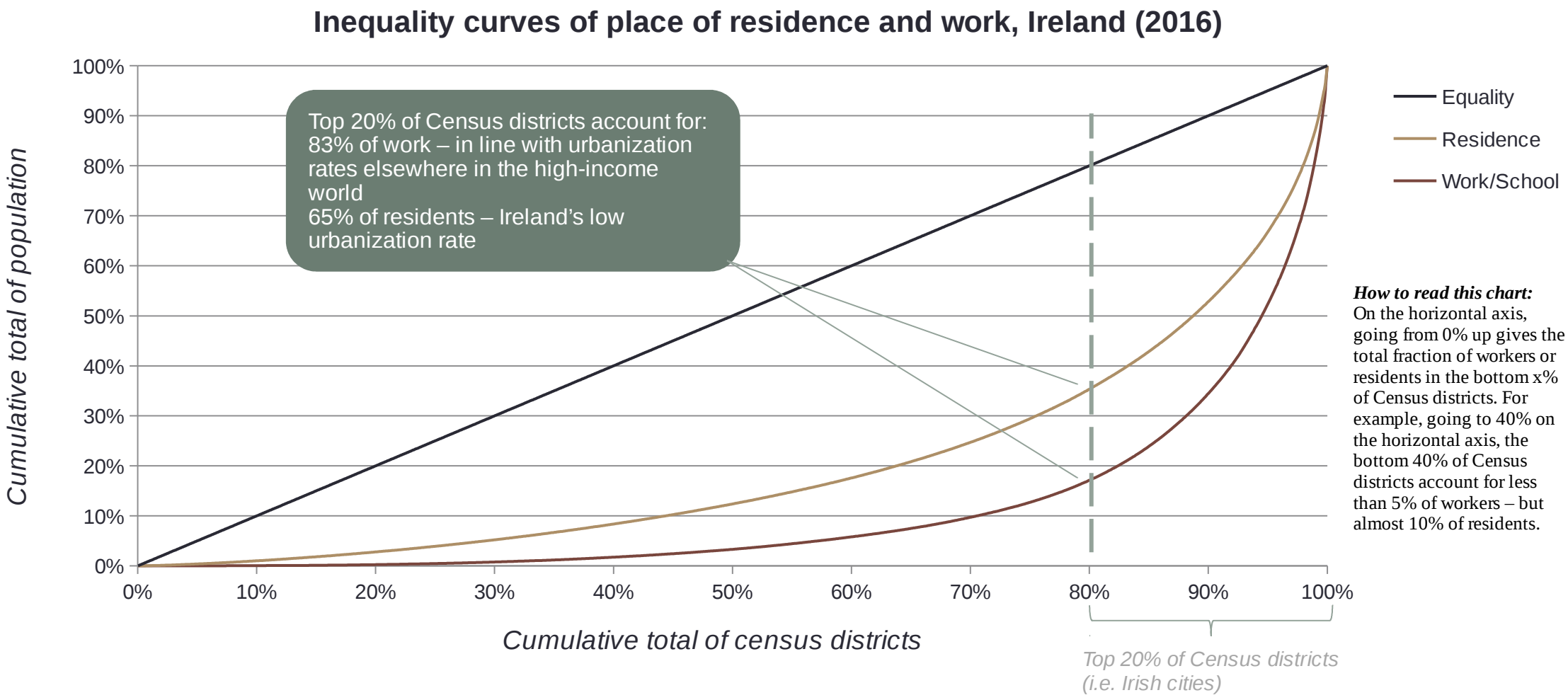
Ireland is a laggard in urbanization – but as it continues to urbanize, this will concentrate housing demand in and around its largest cities

- Urbanization is at the heart of economic growth
  - Cities allow specialization (more productive labour) and agglomeration (more productive capital and land)
  - Density also allows cheaper utilities and a wider variety of public/private services
- Since 1960, the fraction of people in high-income countries living in cities has risen from ~60% to ~80%
  - Ireland is only now at 64%, having been at 46% in 1960
  - Over the coming half-century, this is likely to increase to at least 80%, creating significant demand for urban housing



Source: World Urbanization Prospects, 2016

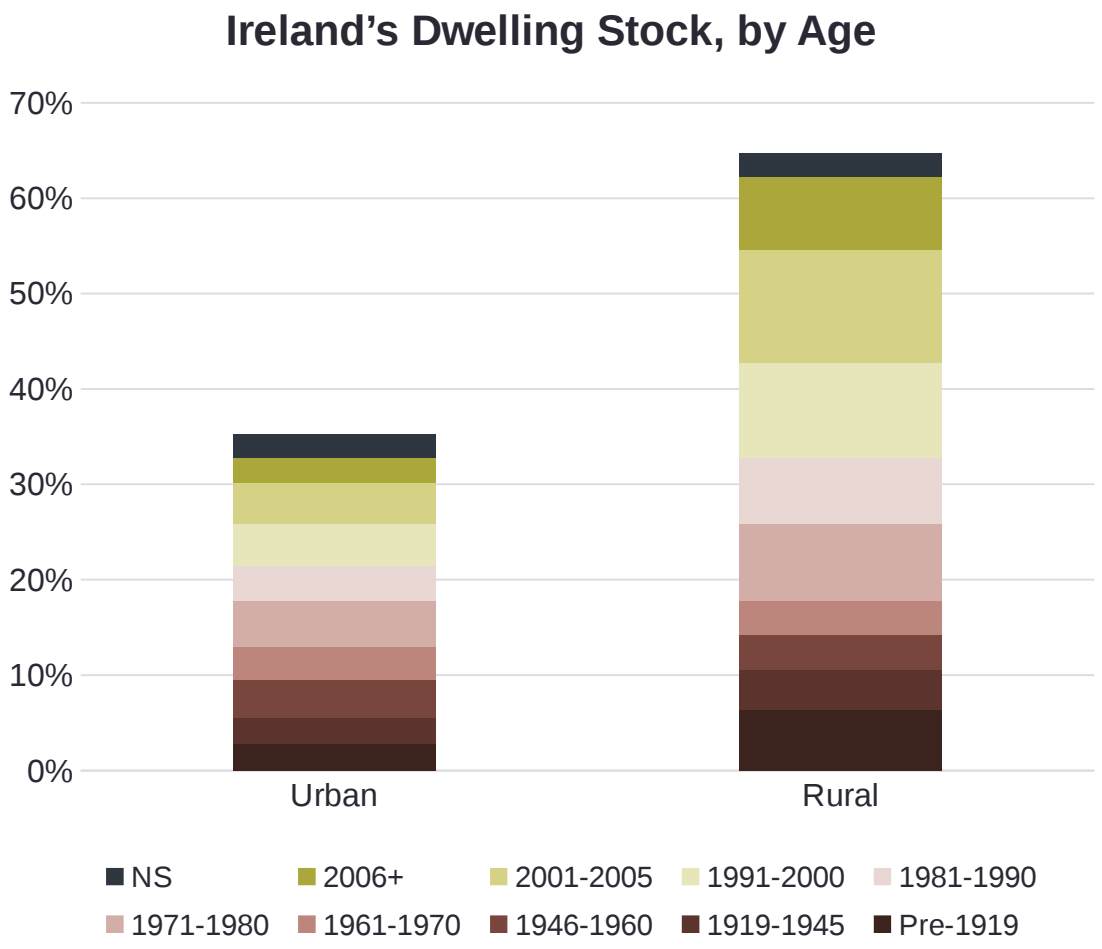
Ireland's labour market is as urbanized as other high-income countries – meaning its under-urbanization reflects inadequate housing close to cities



How to read this chart:
On the horizontal axis, going from 0% up gives the total fraction of workers or residents in the bottom x% of Census districts. For example, going to 40% on the horizontal axis, the bottom 40% of Census districts account for less than 5% of workers – but almost 10% of residents.

Related to urbanization, obsolescence also creates housing need – with Ireland's dwellings skewed older/ rural, ~10k homes are needed each year to keep stock constant

- Almost two thirds of Ireland's stock of dwellings is in rural locations
  - Ireland is experiencing delayed urbanisation – one that is being spatially skewed by land-use restrictions
- 150,000 households (9%) live in dwellings that are 100+ years old
  - 6.3% of Ireland's dwellings are buildings 100+ years old in rural locations
- If 5% of old urban stock and 10% of old rural stock falls obsolete annually, ~13,000 to "stand still"



Source: Census

For 2020-2025, demand for housing nationwide is likely to be above 45,000 per year – compared to a target of 25,000 per year in *Ireland 2040*

Source	State	GDA
Obsolescence	8,000	2,500
Headship	12,500	5,000
Natural Increase	18,500	7,400
Net Migration	8,000	3,200
Total	47,000	18,100

Rounded estimates of new units required in Ireland and in Greater Dublin area, per year, 2020-2025

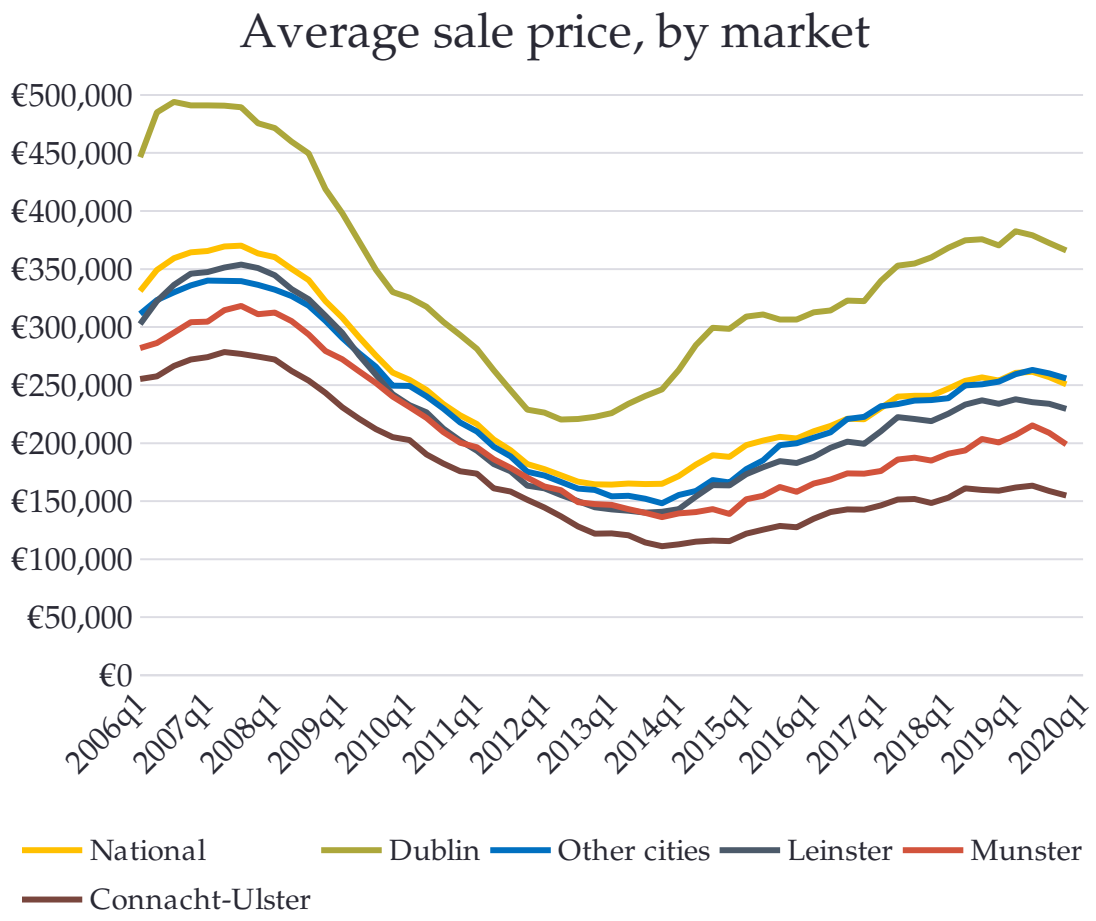
Assumptions: 0.4% obsolescence, a fall in household size to 2.5 by 2035, and natural increase (as defined by 25/34-75/84 cohort difference) of 18,000 and net migration averaging 20,000 per year (in 2.5 person households due to dwelling mix)

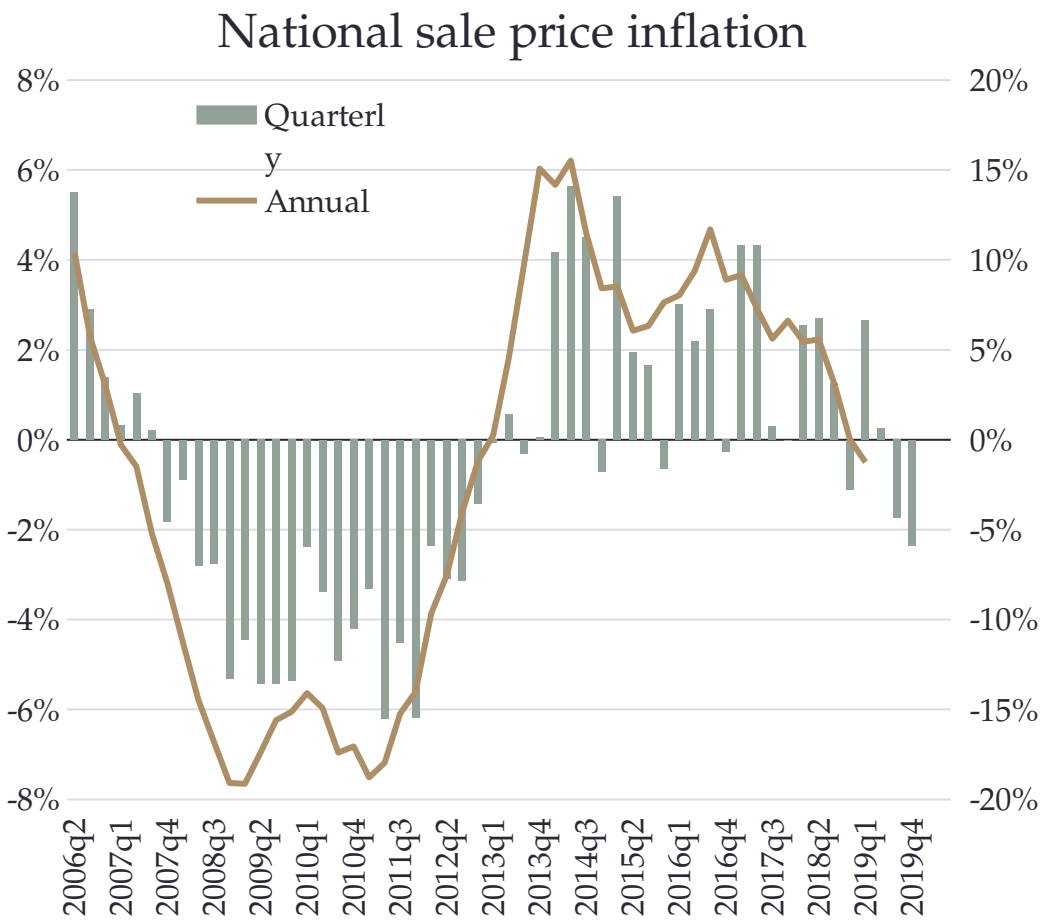
- Available evidence suggests underlying housing demand of more than 45,000 homes per year
  - This covers all elements of demand, including owner-occupied, rental and social housing
- While 25%+ social is common in many countries, it is likely that no more than 10% of new construction will be social
  - Major policy reforms, e.g. implementing cost-rental, could change this
- Of the remainder, current trends suggest that ~60% (28,000) are needed for owner-occupancy, with the other 30% (14,000) for rental

Structure

- Medium-term Need
- **Current Context**
- Policy Options

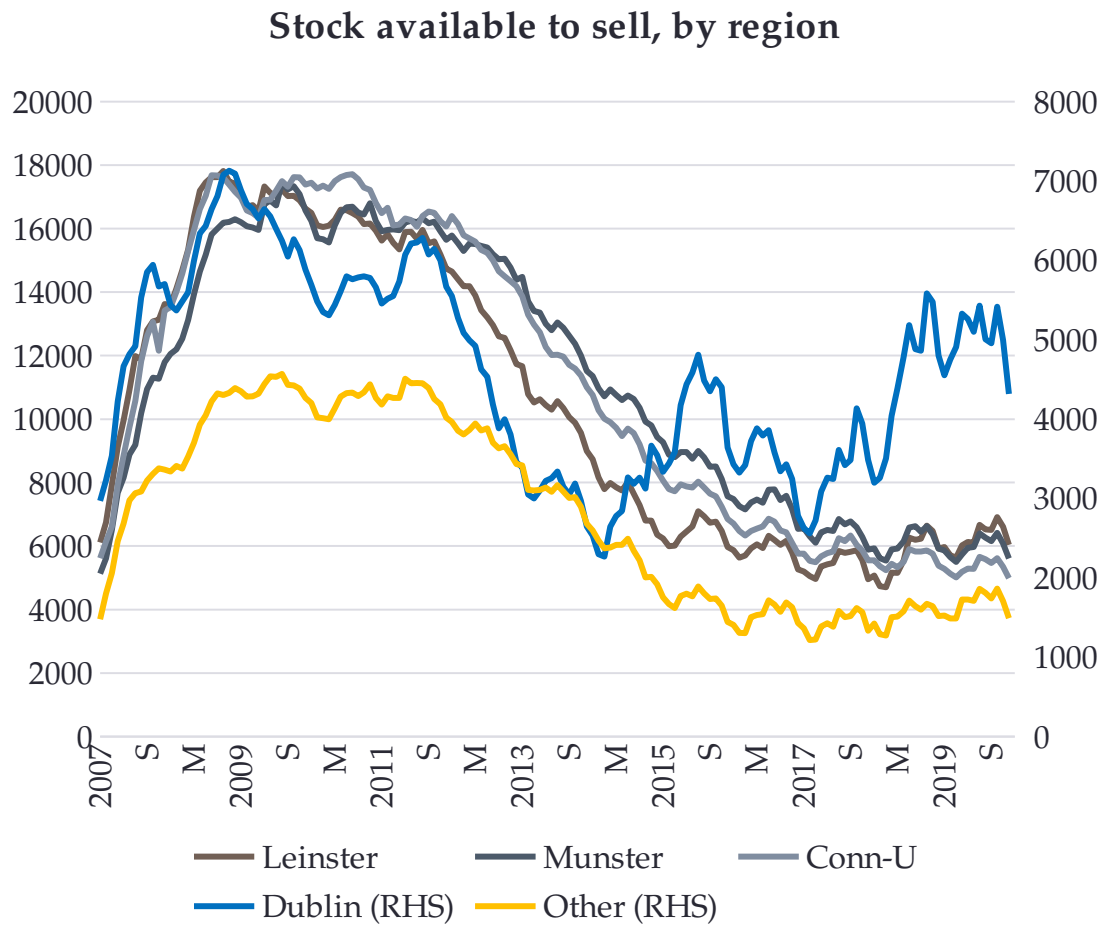
After roughly six years of strong inflation, sale prices in Ireland have now stabilised, having risen by >50% but remaining ~30% below 2007 peak levels

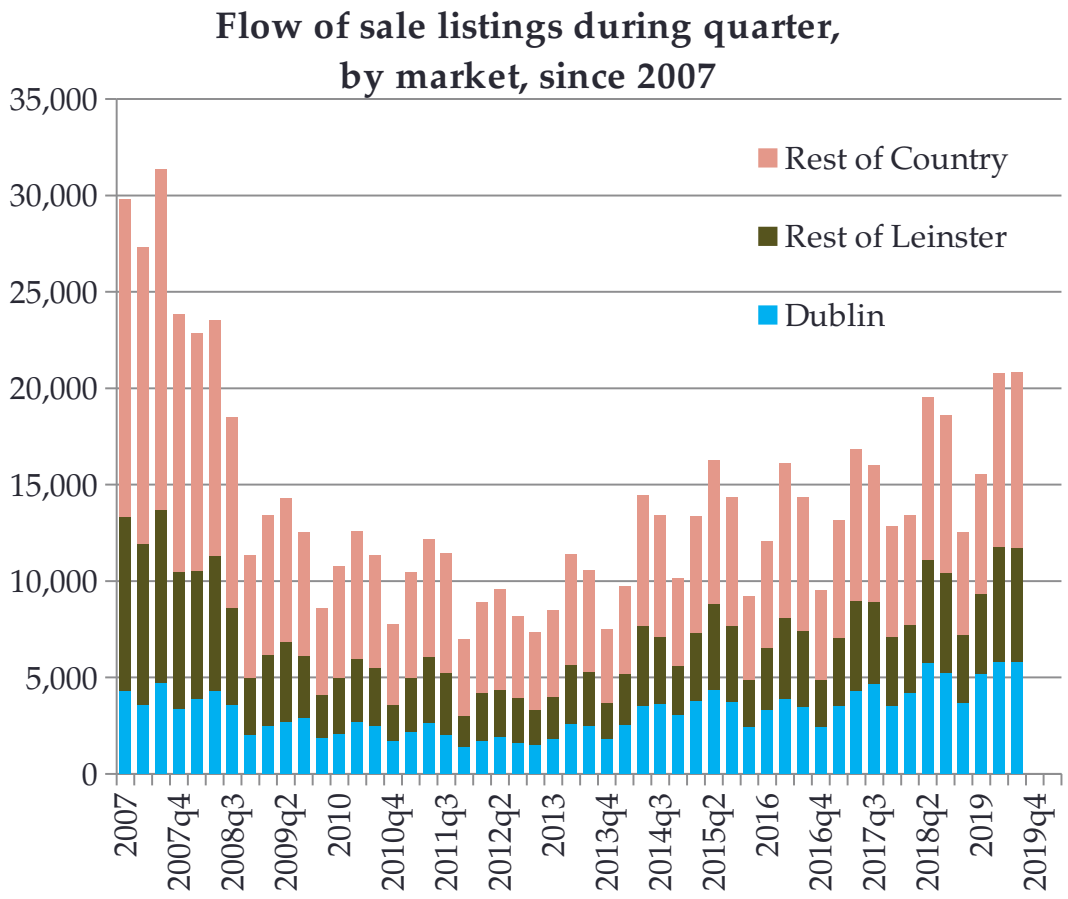




Source: Analysis of Daft.ie Report

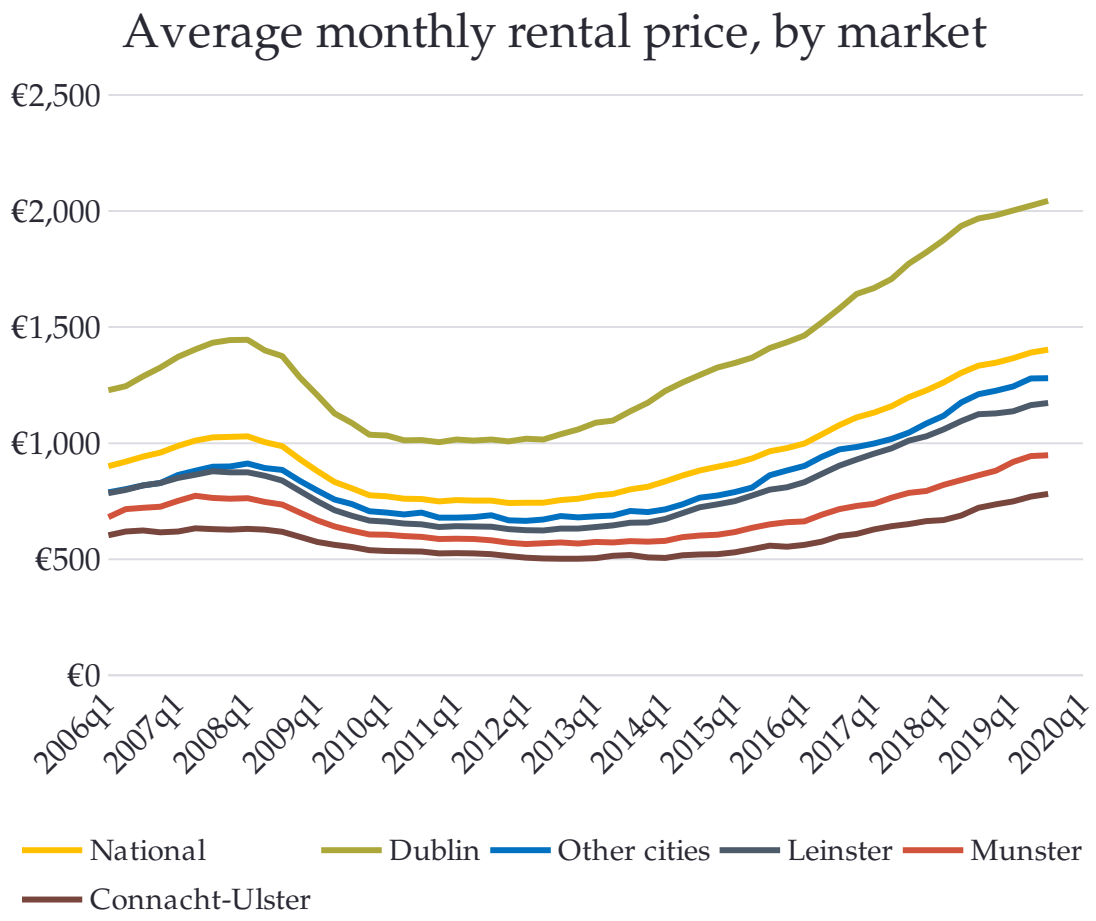
The ending of sale price inflation comes as the stock and flow of properties available has increased significantly in recent quarters

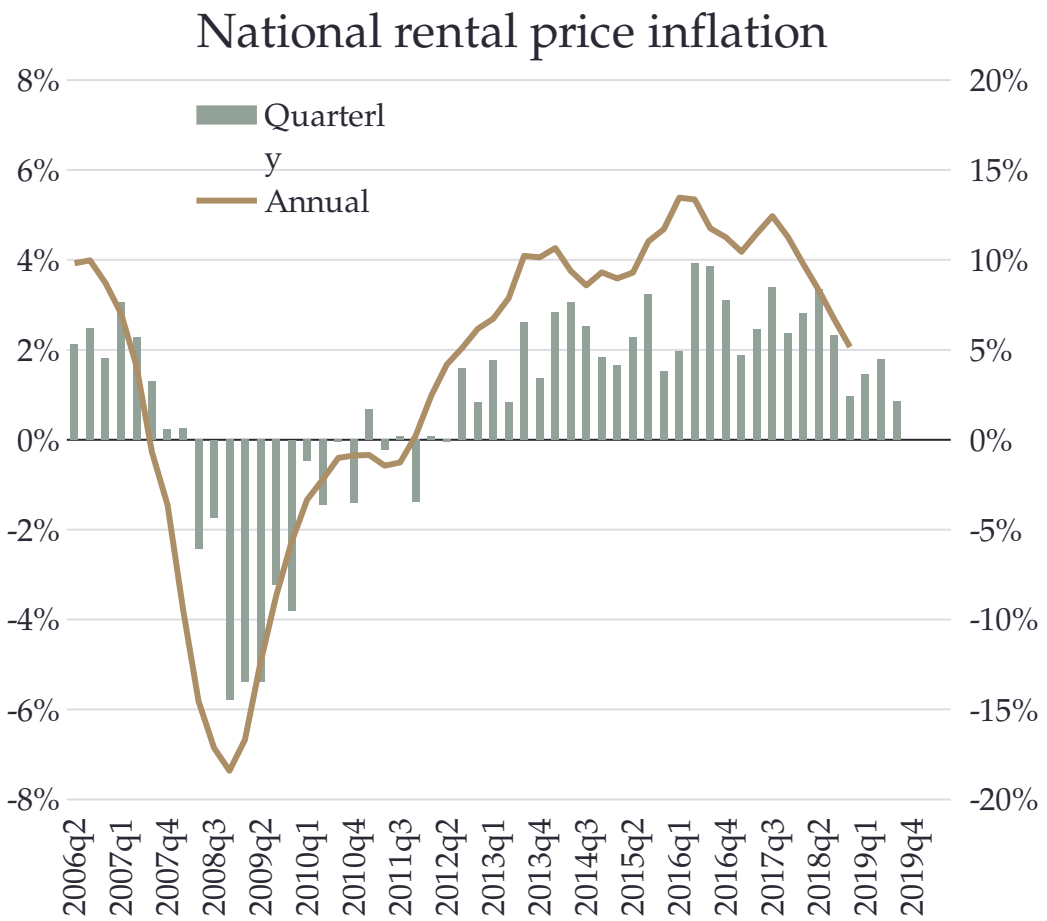




Source: Analysis of Daft.ie Report

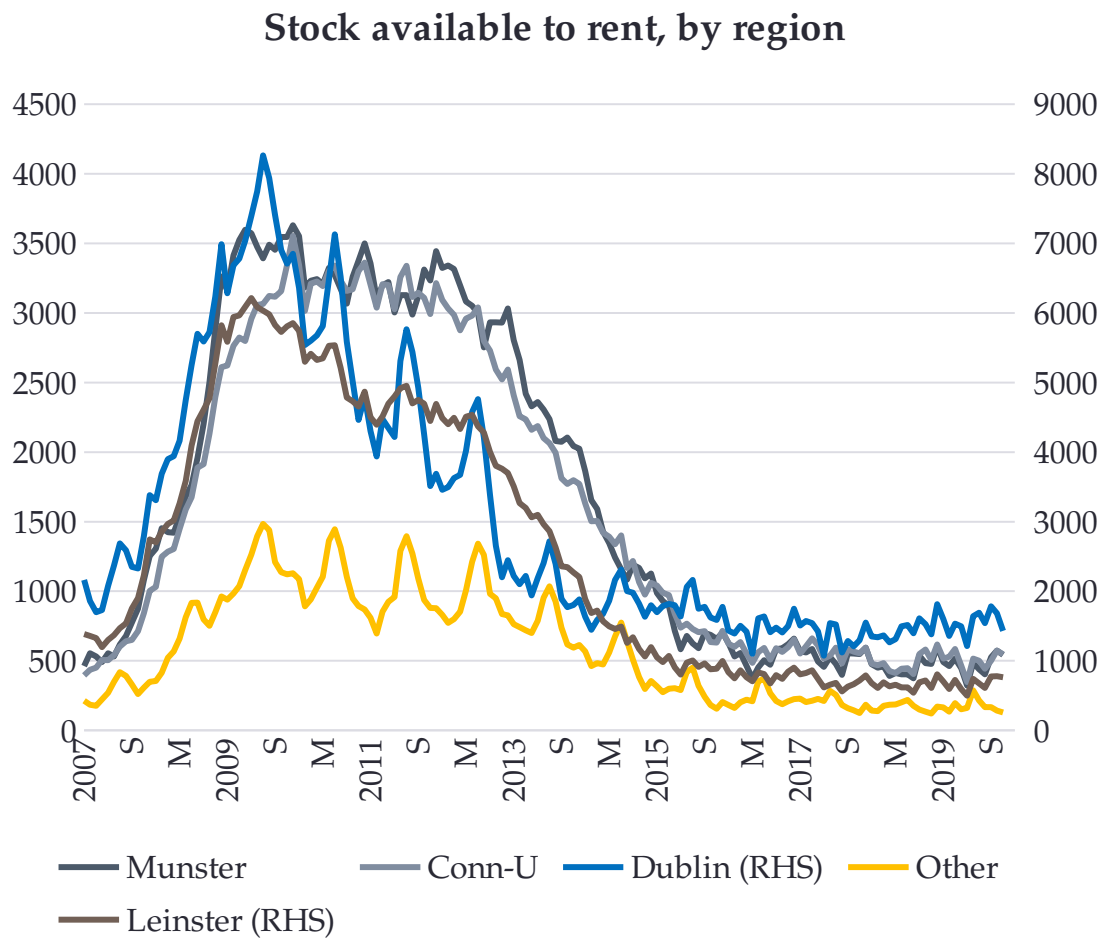
Rent inflation has slowed in 2019, but rents have risen for 29 consecutive quarters, nearly doubling in total and 35% higher than the previous peak

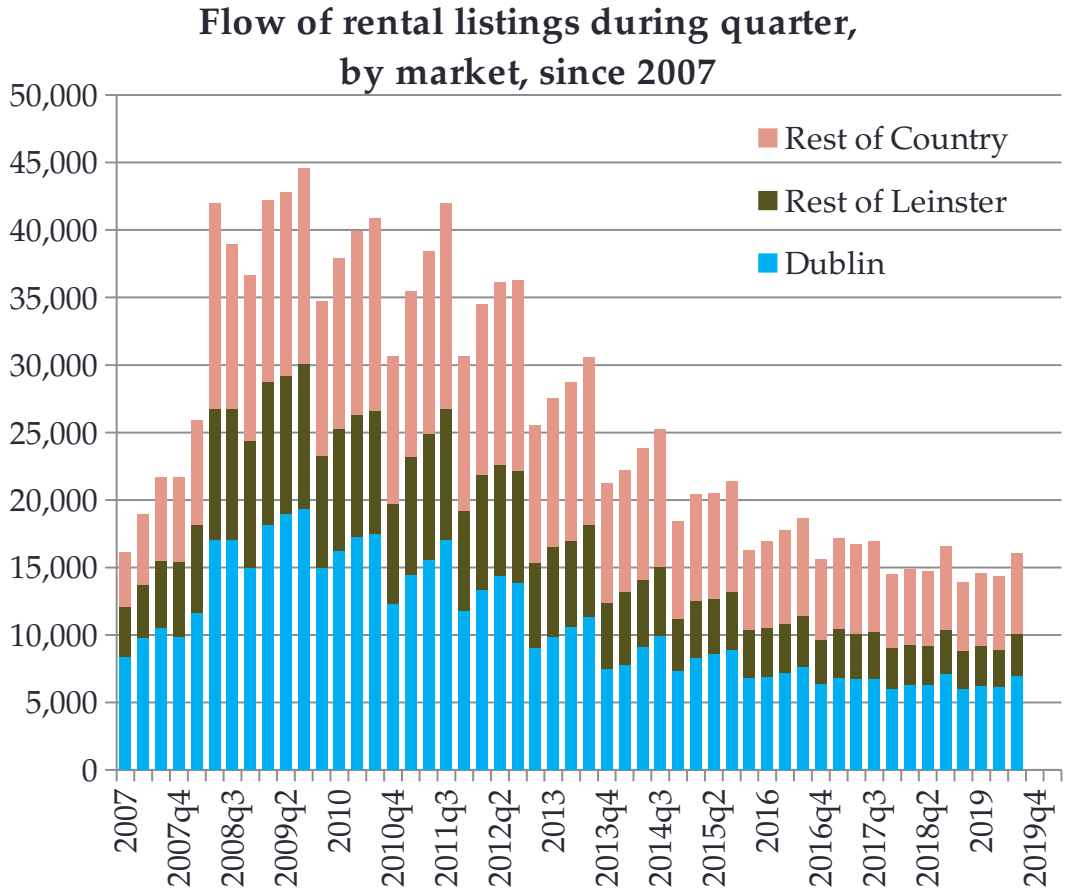




Source: Analysis of Daft.ie Report

In the private rental market, availability remains at extremely low levels, with the flow of rental listings also at all-time lows

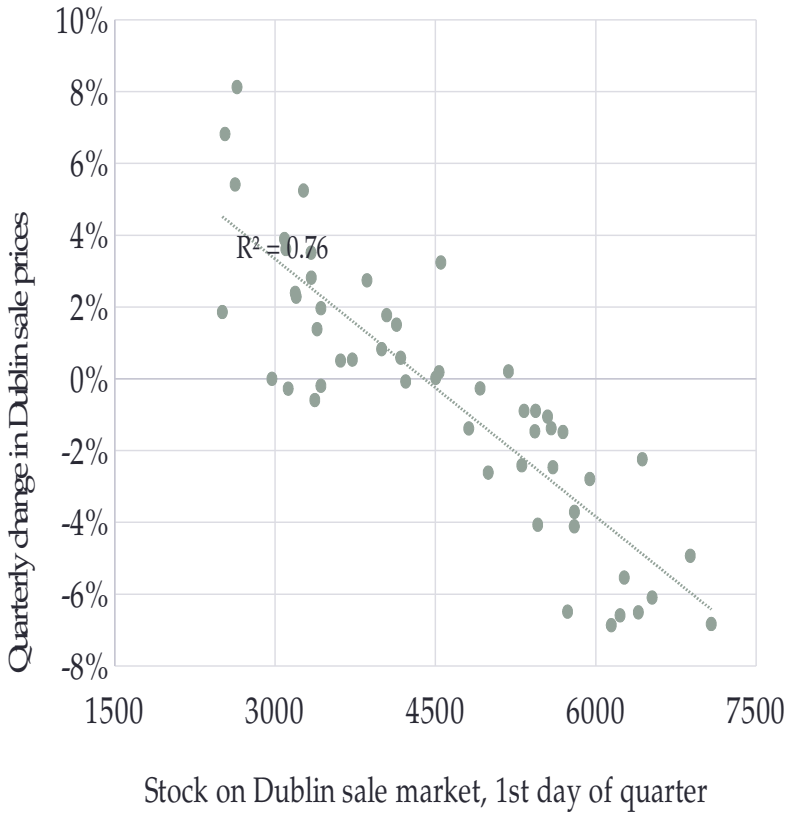




Source: Analysis of Daft.ie Report

The overwhelming evidence from both sale and rental markets in Dublin is that availability is the key determinant of subsequent price changes: supply matters

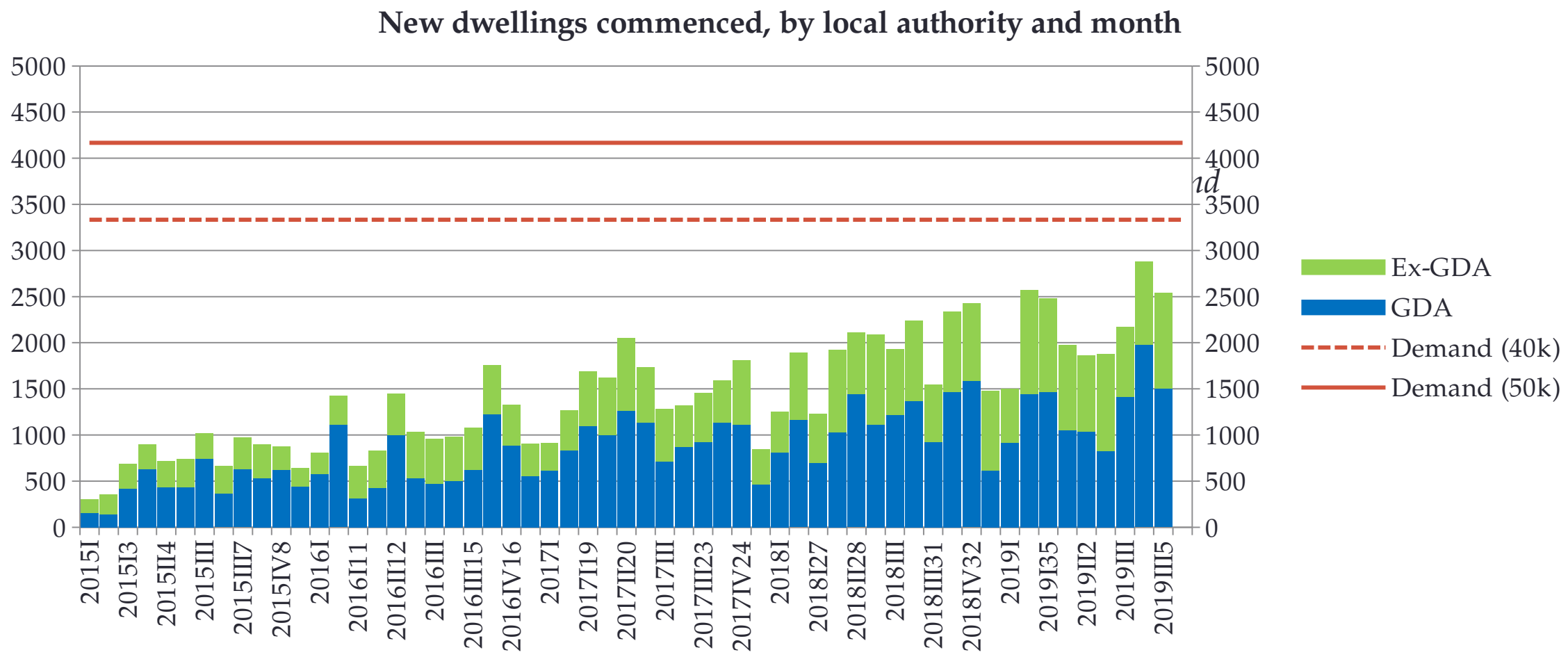
Scatterplot of Dublin sale listings and quarterly changes in sale prices, 2006-2019



Scatterplot of Dublin rental listings and quarterly changes in rents, 2006-2019

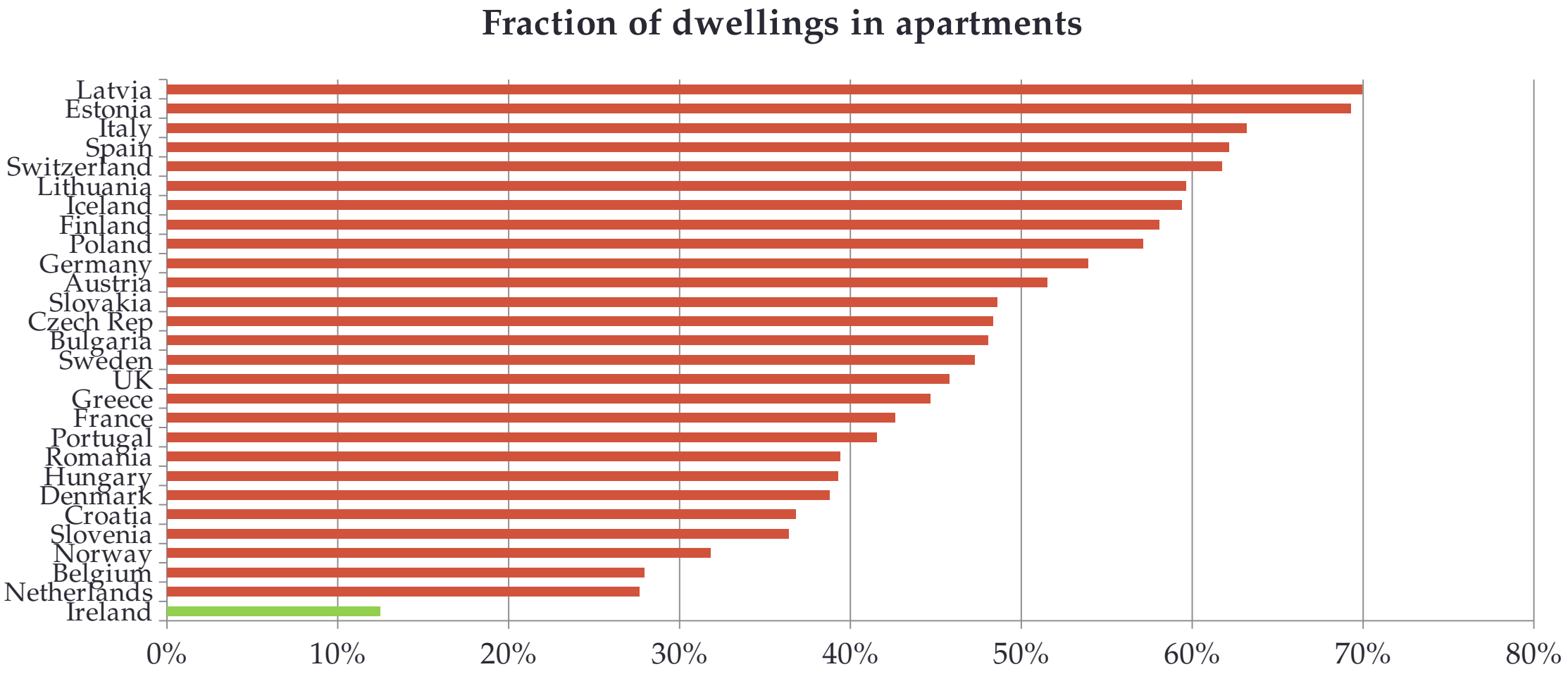
Source: Analysis of Daft.ie Report

But since the crash, supply (of all forms) has been inadequate – and recent improvements still fall short of underlying demand (40k-50k p/yr)



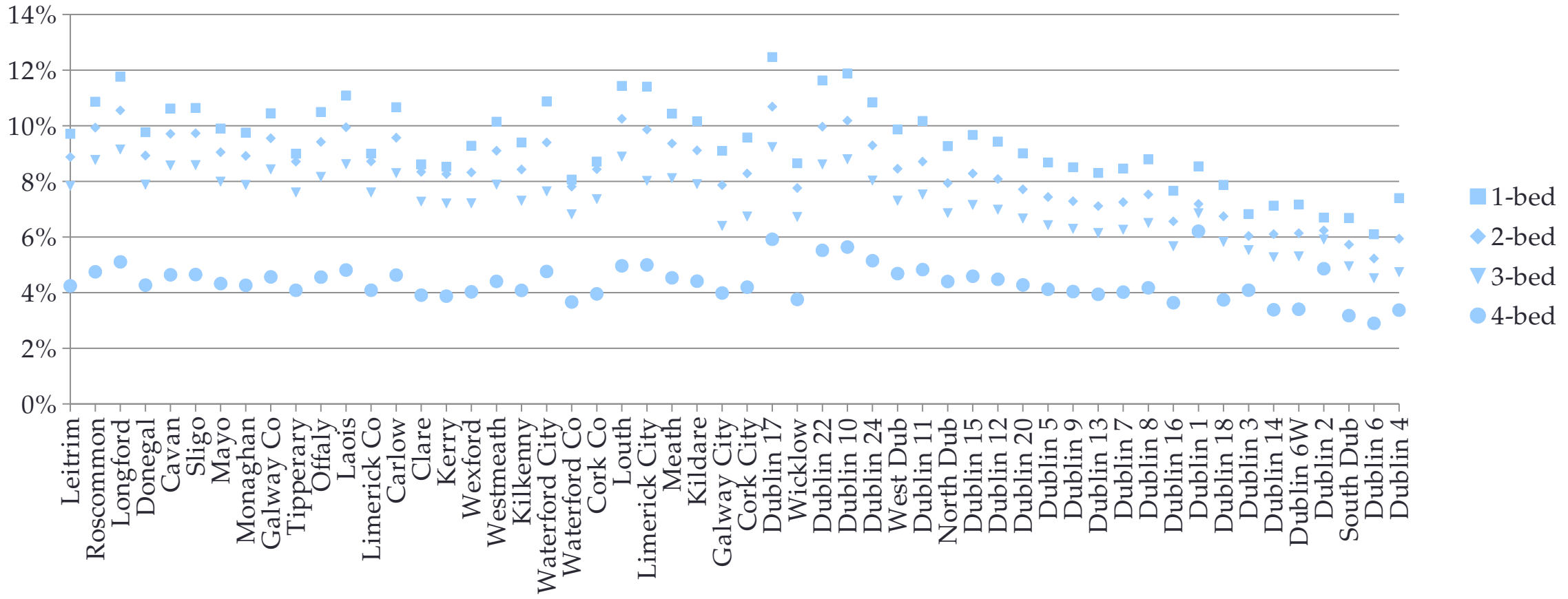
Source: Analysis of Census, CSO and Department of Housing figures

Ireland's housing is out of line not only with its own demographics, but also compared to all other European countries, where typically 50% of dwellings are apartments



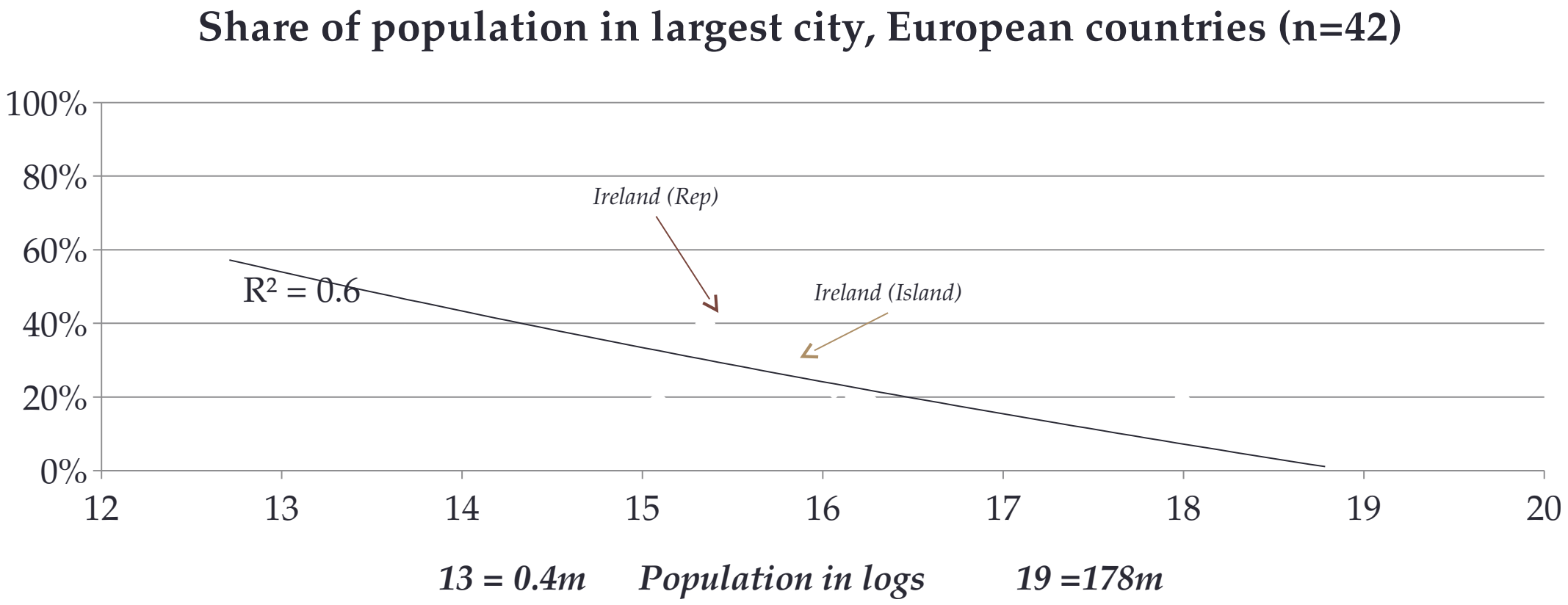
Significantly higher gross yields on homes for smaller households highlight the concentration of future demand in 1-2 bedroom homes

Average gross yield for residential real estate, mid-2019, by property size and location



Source: Analysis of Daft.ie Report; Markets are sorted from left to right by the 2019Q2 price of a 3-bed semi-detached property

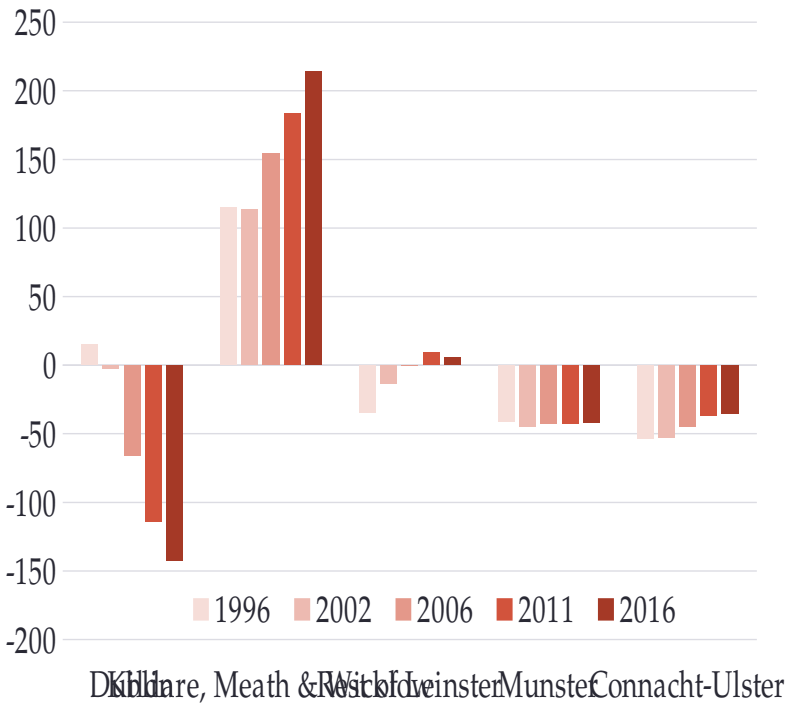
Little evidence that Dublin's population share is too big – smaller populations mean bigger share in largest city



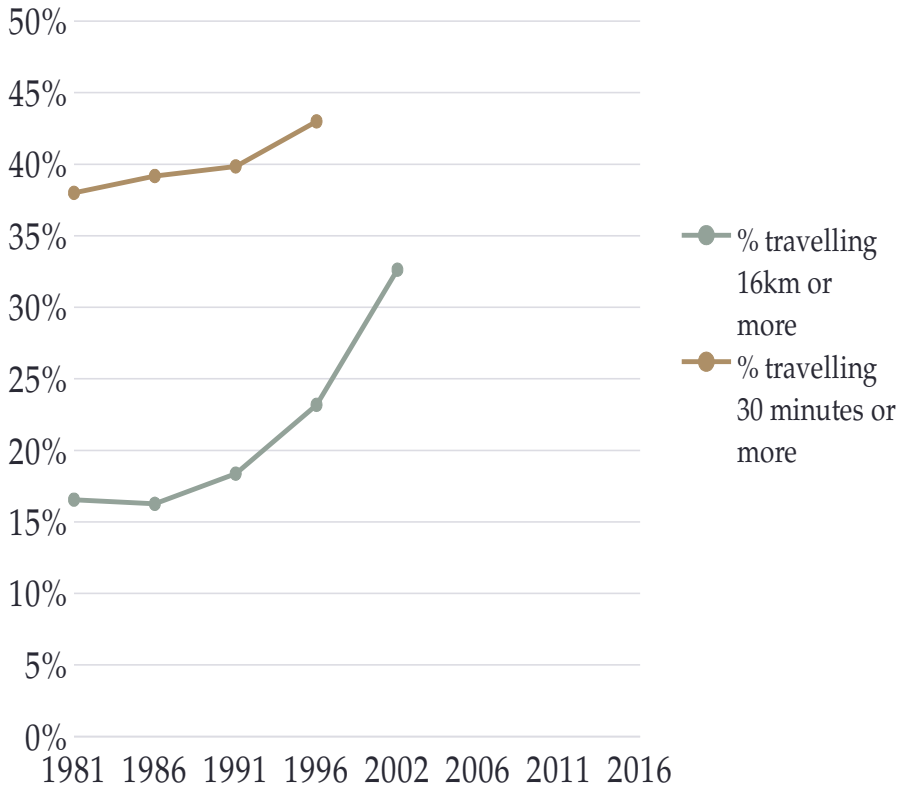
Source: Author calculations, based on jakubmarian.com, Wikipedia/CIA World Factbook

In fact, Dublin has gone from largest importer to largest exporter of people within Ireland – with consequences for commuting and quality of life

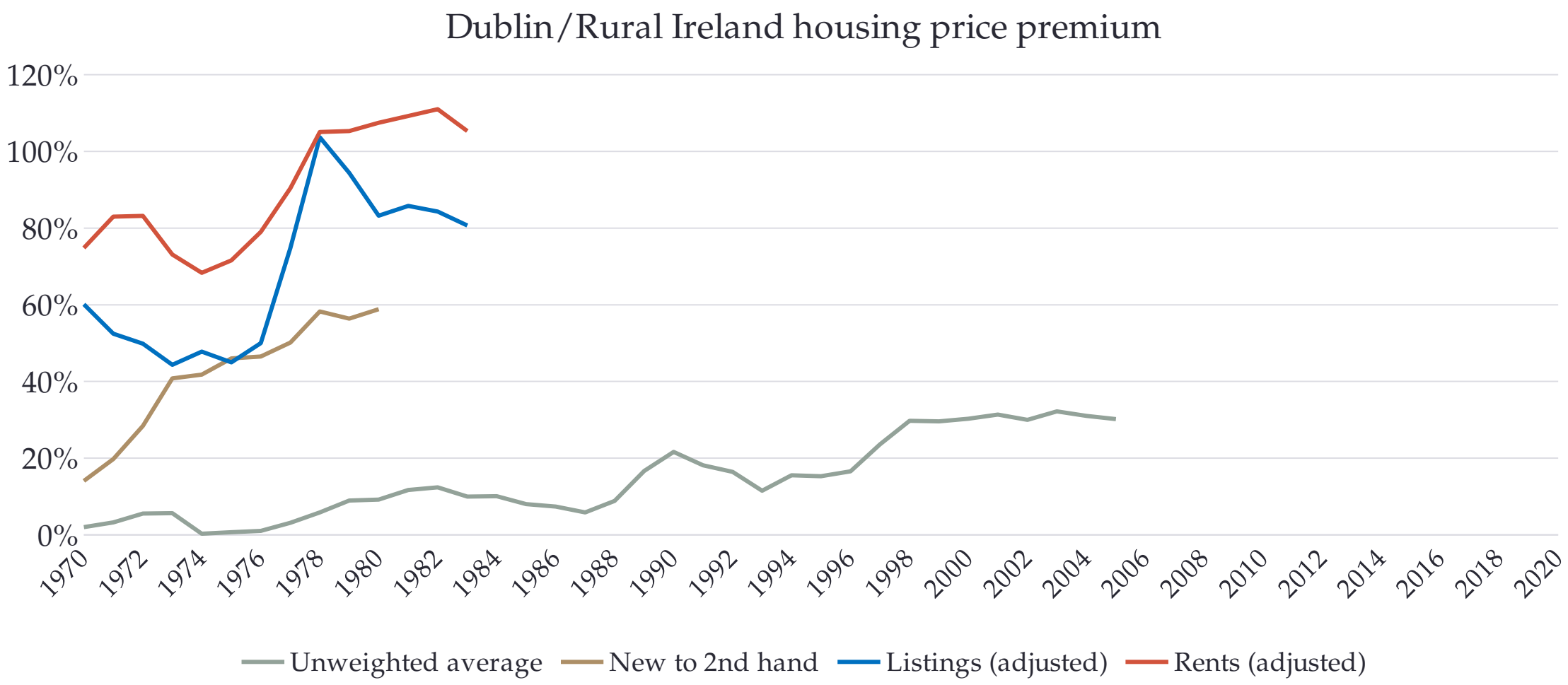
Net difference between resident and birth populations (000s), by region



Fraction of commuters with a 'long commute' by distance/time

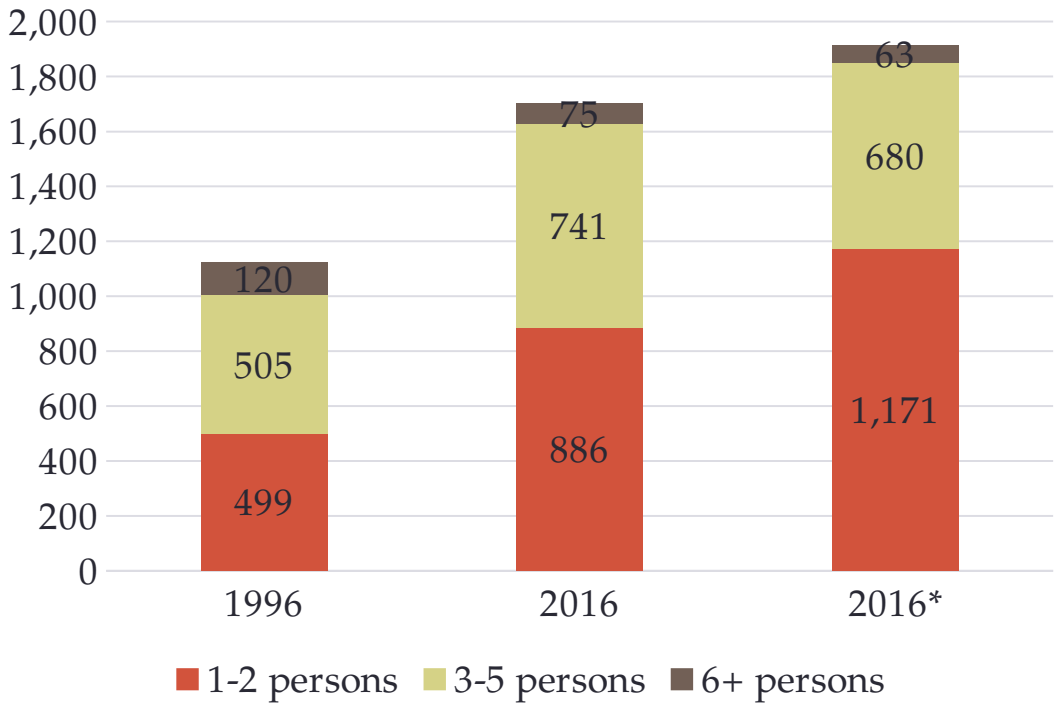


The location of new housing supply has been inadequate, with the emergence of a 100% Dublin housing price premium in recent decades

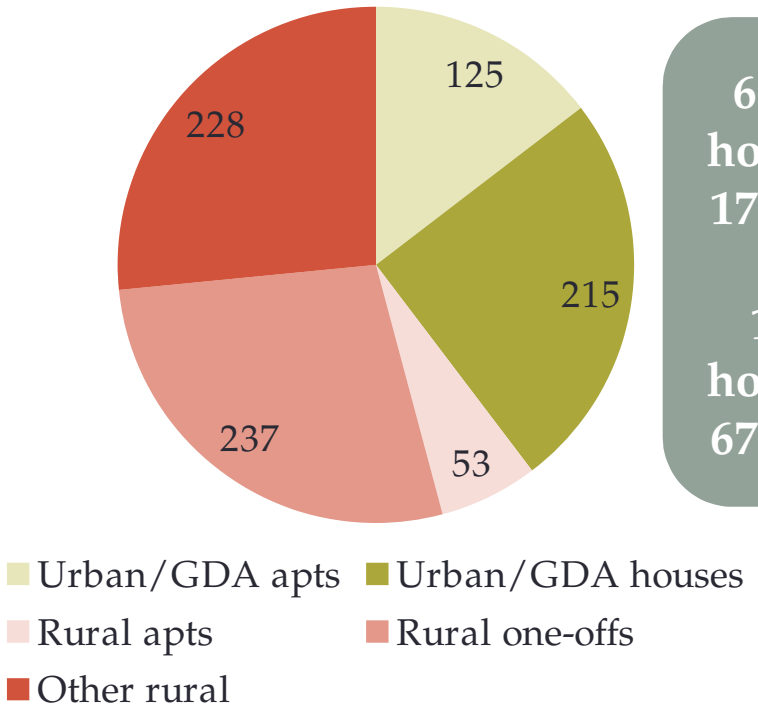


And the mix of new housing supply has been inadequate, with the new homes built increasingly out of sync with Ireland's household structure

Number of households (000s), by size and Census year



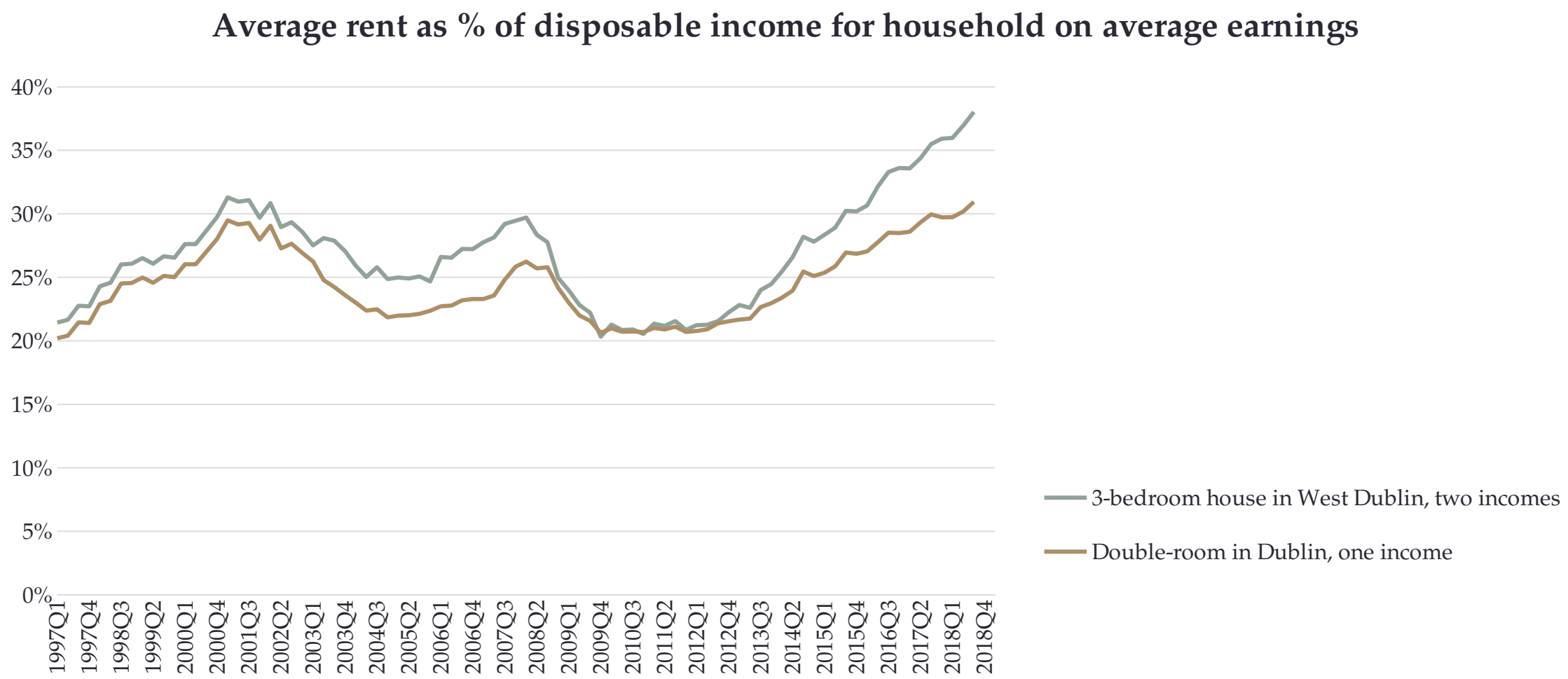
New dwellings completed in Ireland, 1996-2015 (thousands)



675k smaller homes needed, 175k delivered vs. 175k larger homes needed, 675k delivered

Source: Author calculations, based on CSO Census and Dept of Environment/Housing statistics

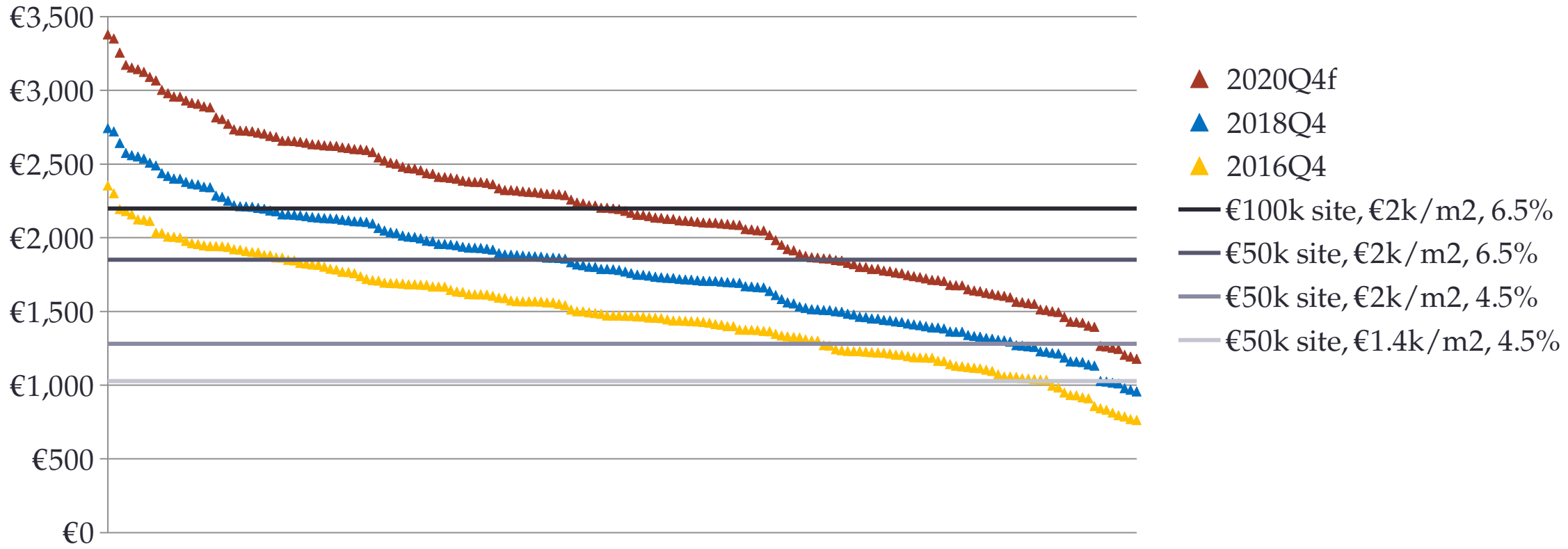
In the rental segment, with little change in average earnings since 2008, rental affordability is now slightly worse than the Celtic Tiger peak



Source: Identify analysis of CSO, OECD and Daft.ie figures; further notes below

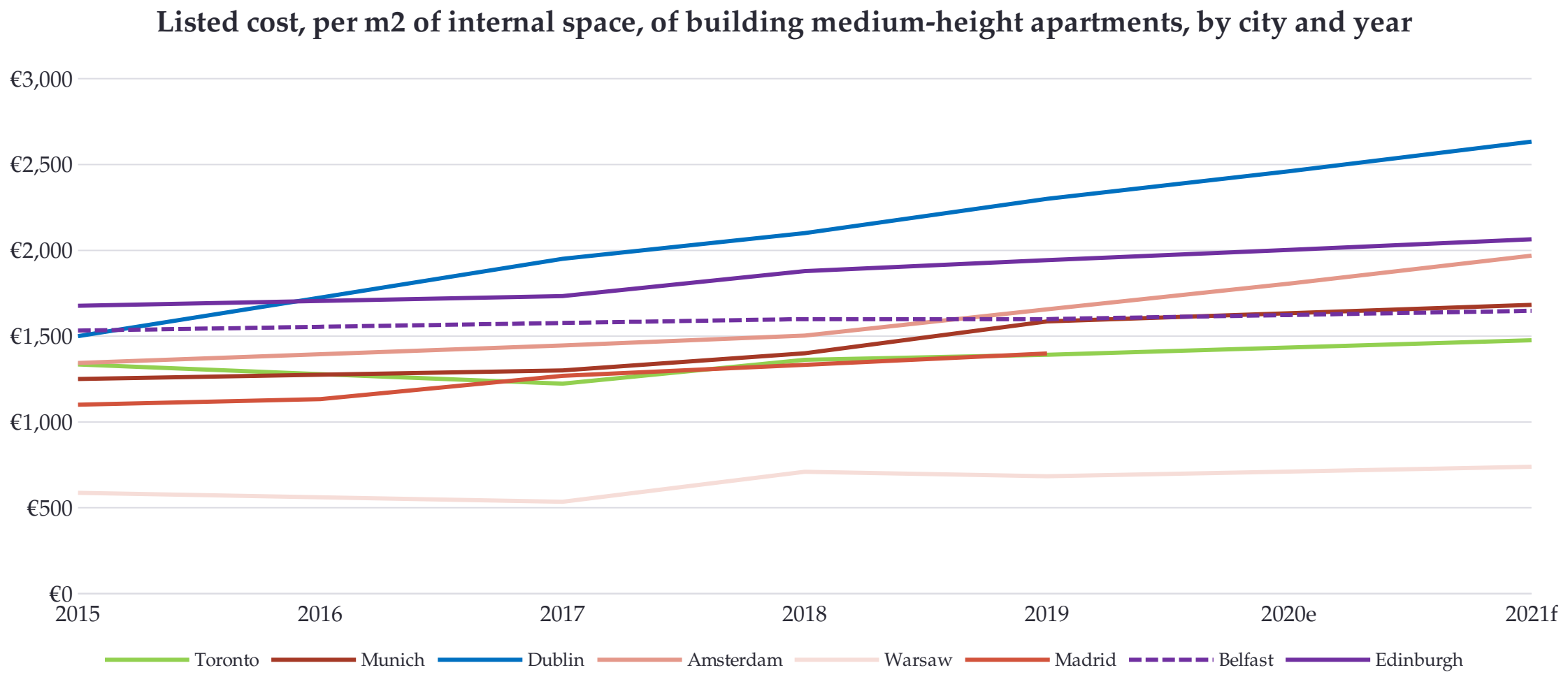
However, supply is determined by viability, not affordability – and, using standard financing models, viability has been extremely challenging for apartments in Ireland

Break-even and market monthly rents for medium-rise 2-bed apartments, by micro-market and year/finance model



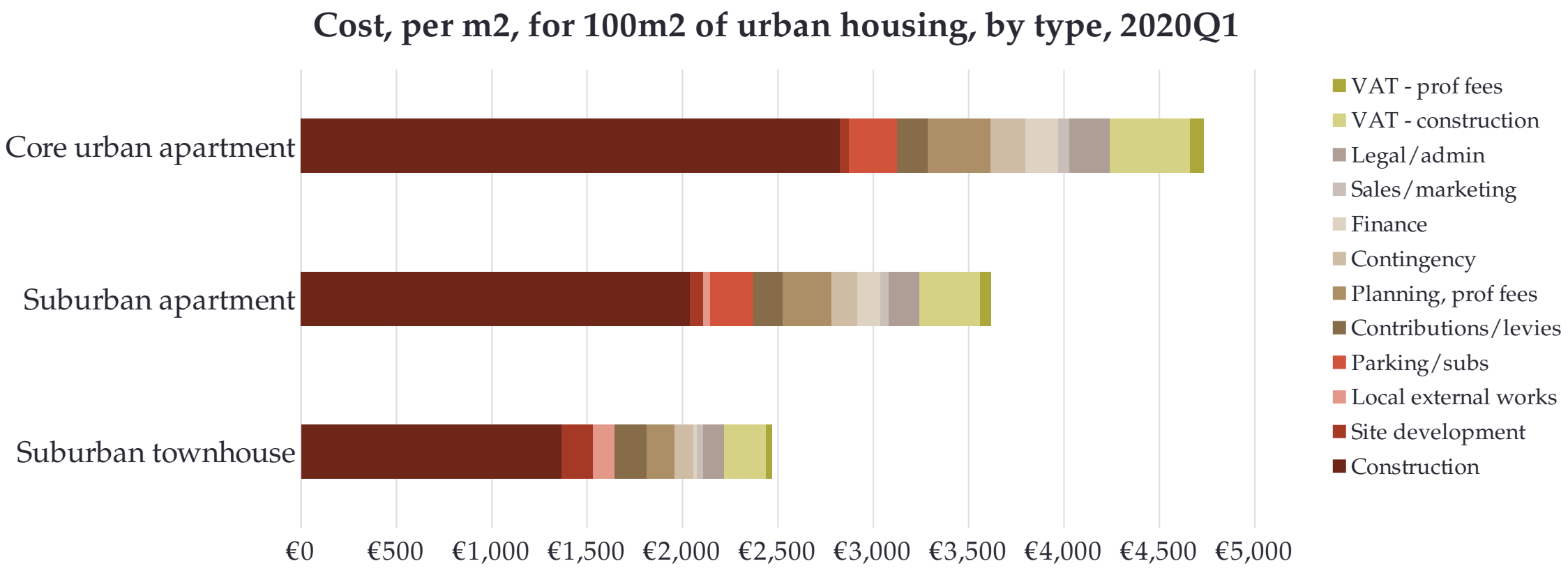
Note: This graph shows average monthly rents for two-bedroom apartments across 172 micro-markets in Dublin, Meath, Kildare, Cork and Galway, as well break-even rents for the same dwellings, based on different site costs, construction costs and required annual gross yields. 2020Q4 rents are assumed to be 12% higher than 2018Q4 rents.

One of the main reasons supply of new apartments has been so weak is that Irish construction costs are now among the highest in the world



Source: Analysis of Turner & Townsend International Construction Market Survey, various issues

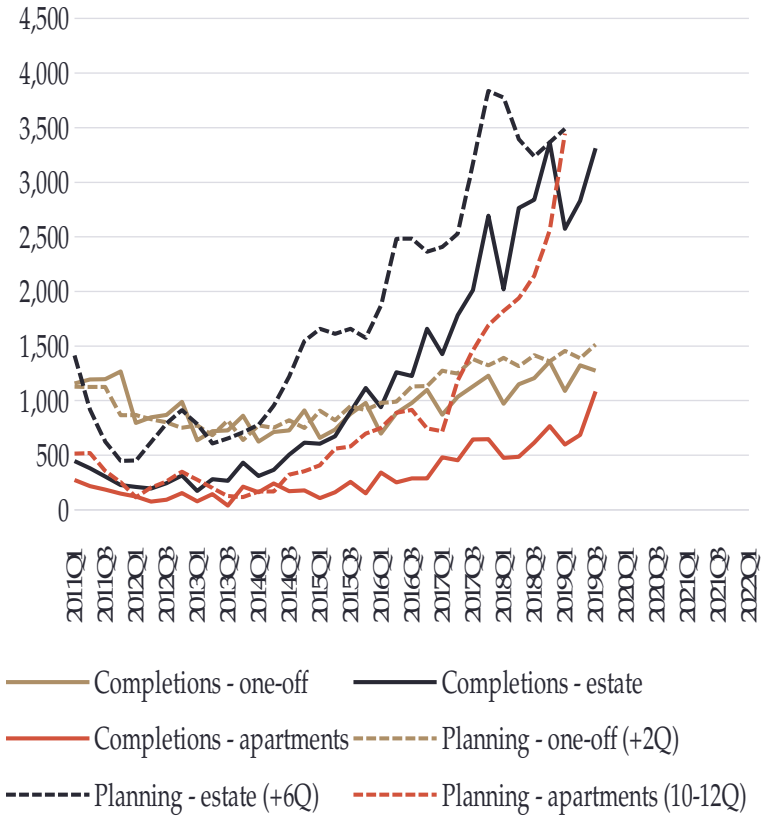
All-in build costs for apartment homes – excluding site purchase, profit and Part V – are currently between €3,500 and €4,750 per square metre



Source and notes: Figures based on analysis provided by Linesight to IIP, for three dwellings with 100m2 gross floor area (83m2 nett floor area for apartment dwelling types). Figures exclude site acquisition costs, cost of equity capital/profit, and Part V, as well as costs relating to any abnormal ground conditions or contamination. The figure include VAT on construction and professional fees but exclude VAT on sales. The figures also assume that Siteworks Bond and taking in charge will be fully refunded by the Council. Other assumptions available on request.

Looking ahead, permissions data suggest that new estate houses will continue to come on to the market in 2020 and 2021 – and, from 2021, apartments too

Dwellings completed and units granted permission (lagged), by quarter and type of housing



Pipeline of new apartments (as of mid-2019)

Source: Analysis of CSO and Department of Housing figures; LIV Consulting

Structure

- Medium-term Need
- Current Context
- **Policy Options**

Ireland has a persistent underlying medium-term need for significant additional housing – close to 50,000 units per year, concentrated in smaller urban homes

- There are four main sources of housing demand
  - Two relate to a growing population - natural increase and net migration - and mean that over 30,000 new homes are needed per year in the 2020s and 2030s
  - Two others - household size and obsolescence - add at least 15,000 additional homes and mean the bulk of new homes needed are (1) for smaller households and (2) concentrated in and near the main cities
- There are three main segments in the housing system: owner-occupied, private rental and social housing
  - The owner-occupied sector looks largely in balance, with a significant increase in construction since 2015 meaning that supply appears to be meeting demand
  - The other sectors, however, still look chronically under-supplied and account for the majority of the ~25,000-unit shortfall between completions and underlying need

Higher up-front costs for smaller and more urban homes mean that there is a tension between viability – rents above costs – and affordability – rents in line with incomes

- Construction costs in Ireland are very high, compared both to local incomes and to costs in other jurisdictions
  - The latest evidence is that, for city-centre apartments, all-in build costs – excluding site costs and profit – are close to €475,000, for a 83m2 home
- These costs are borne by the ultimate occupants in the sale or rental price, in any non-subsidised housing model, including non-profit housing
- In other words, high construction costs present a challenge between viability and affordability
  - The higher costs are, the less affordable new homes will be
  - The higher costs are, the higher the break-even rent denoting viability
- Very high construction costs require urgent addressing by policymakers – but, even with political will, it is unlikely to be fixed within 3-5 years

The importance of financial and environmental sustainability place significant constraints on government policies to boost housing supply

- The Celtic Tiger bubble/crash episode provides a stark warning about the potential consequences of getting around high construction costs through increasing leverage
  - The typical deposit paid by a first-time buyer fell from 25% in 2000 to less than 5% by 2006 – with a dramatic increase in the ratio of mortgage credit to household income
  - The subsequent dramatic rise and fall in property prices has led to the adoption of Central Bank rules that limit the leverage individual households can take on for property purchase
- At the same time, the move towards energy self-sufficiency to address the climate challenge affects the potential to reduce build costs
  - Nearly Zero Energy Building (NZEB) standards impose up-front costs for significant future benefits
  - This creates a capital market policy puzzle: if the amount of debt an individual household can taken on is capped, how will investment take place in assets with high social returns, such as NZEB?

In the context of high costs, rent controls would have serious negative consequences for new supply – a cost-rental approach is recommended instead for alleviating this burden

- Ireland's housing context over coming decades will be defined by the climate challenge, demographic change, and the drive towards greener, denser living
- Private rental and social rental will be central modes of tenure in meeting its substantial housing needs over coming decades
  - Those housing needs will also be increasingly differentiated over the life-cycle, from purpose-built student and co-living accommodation for younger households to independent and assisted living complexes for older households
- Given high costs, controls on rent levels for newly built homes will significantly exacerbate the shortage of non-owner-occupier housing
- Policy should instead focus on cost-rental schemes, where high costs are shared with the taxpayer for households with insufficient incomes
- If home ownership remains a policy priority, then Shared Equity and Shared Ownership housing schemes are also open to policymakers

Where home-ownership is a policy priority, two further policy options worth exploring are Shared Equity Housing and Shared Ownership Housing

Shared Equity Housing

Under a Shared Equity Housing scheme, a non-profit owns a portfolio of homes, often in a Community Land Trust. To be eligible to join the scheme, there is usually a maximum income threshold. Resales are restricted and the fraction of the equity on resale that goes to the occupant is related to the share that they purchased on moving in.

Shared Ownership Housing

Under a Shared Ownership Housing scheme, the purchaser buys a share of their home, from 25% up, and pays rent to a housing association for the remaining share. This rent can be at below-market rates, especially for those on lower incomes. Options for 'staircasing' – an occupant increasing the share they own over time – are usually made available.