



# Ireland's Housing Need & Policy Options: An Overview

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- For: Irish Institutional Property
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- **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

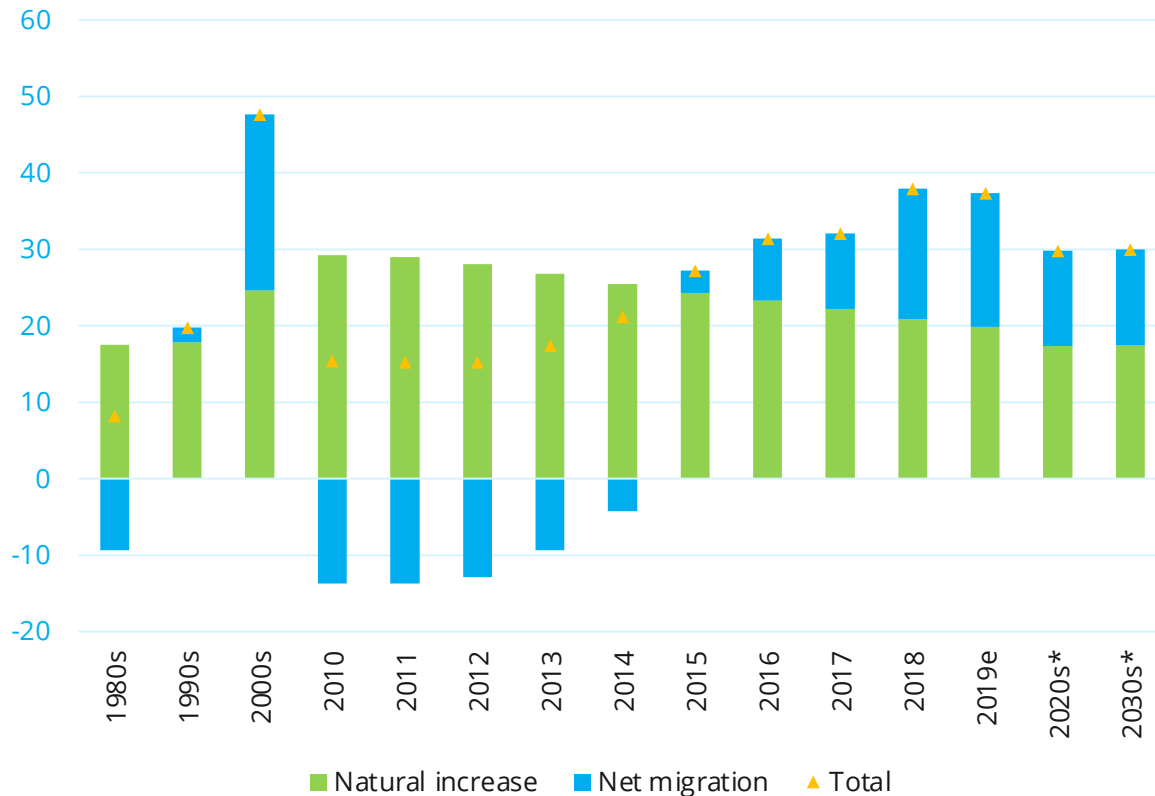


- Four principal sources of housing demand
  1. **Natural increase:** changes in the native-born population, in particular in household-forming cohorts – best measured by comparing the 25-34 year-old female cohort with an older counterpart (e.g. 65-74 or 75-84 year-olds) – largely exogenous to economic conditions
  2. **Net migration:** movement of people into the economy – in Ireland, hugely endogenous to economic conditions
  3. **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
  4. **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. urbanisation)
- These cover all tenure types – owner-occupied, private rental and social
- The spread of housing demand within the Irish economy depends on preferences (e.g. urbanisation) 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



## Estimated housing demand, by source (population increase only, 000s)



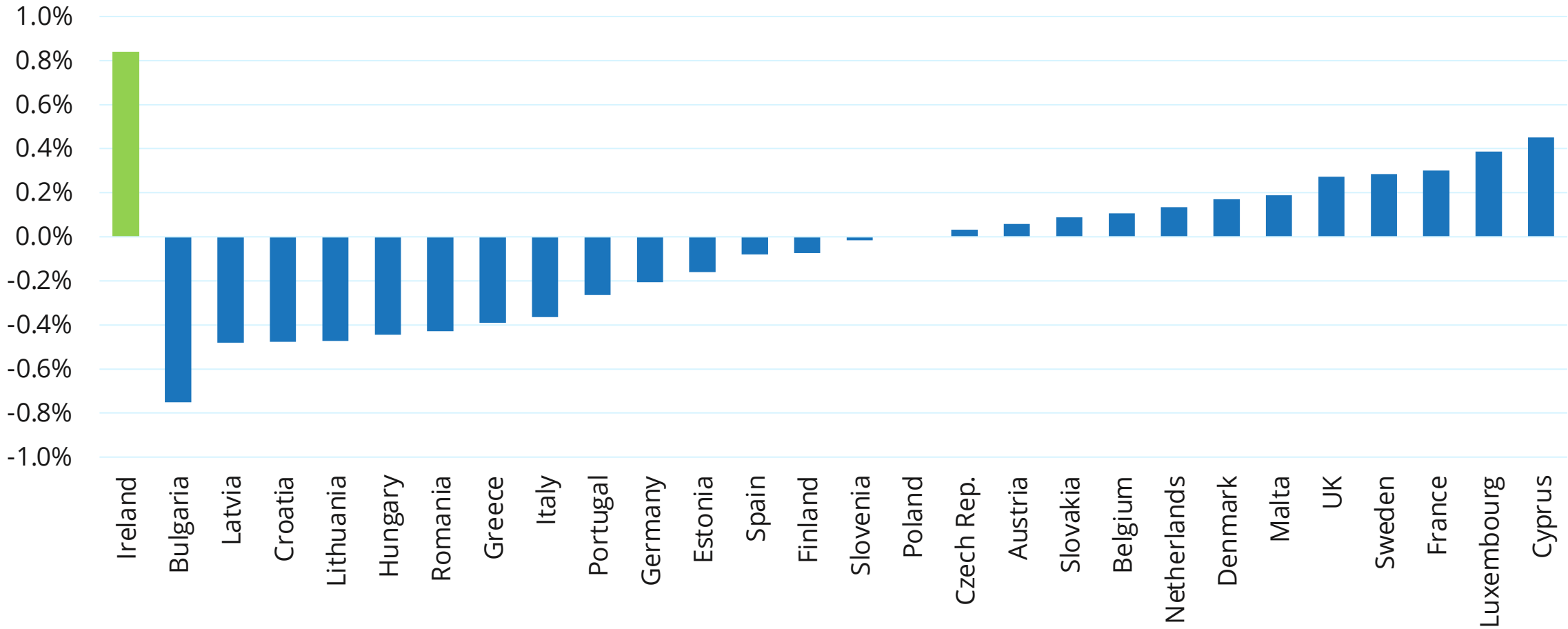
- 30,000 homes a year are needed to meet likely population changes alone
- Natural increase peaked in 2010 and will level off ~17,000 per year by 2020s
- Offsetting this is increasingly positive trends in migration
  - Emigration fell 2010-2014 and each year since 2015 has seen larger numbers of net migrants into Ireland
  - Official migration projections are relatively simplistic, with a baseline case of 30,000 per year (vs. 34,000 in 2018)

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)

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



## Natural Change, as percentage of 2017 adult population

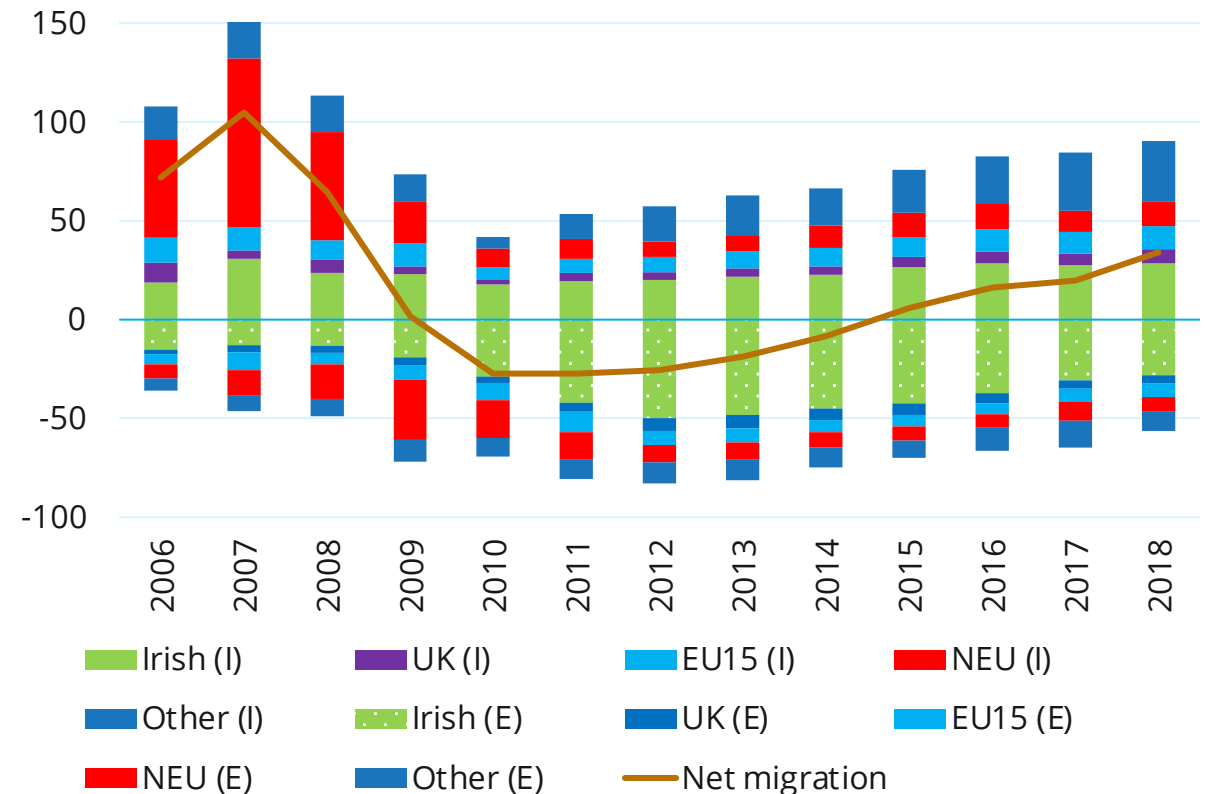


# Net migration has been positive and growing since 2015 – every extra 10,000 migrants require on average 4,000 new dwellings, principally in the cities



- Annual gross migration to Ireland between 2010 and 2018 more than doubled from 42,000 to 90,000
  - Emigration fell from 80,000 to 56,000 in the same period, resulting in a swing from net emigration of 27,000 in 2010 to net immigration of 34,000 in 2018
  - The fall in emigration is driven by fewer Irish leaving minus 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**

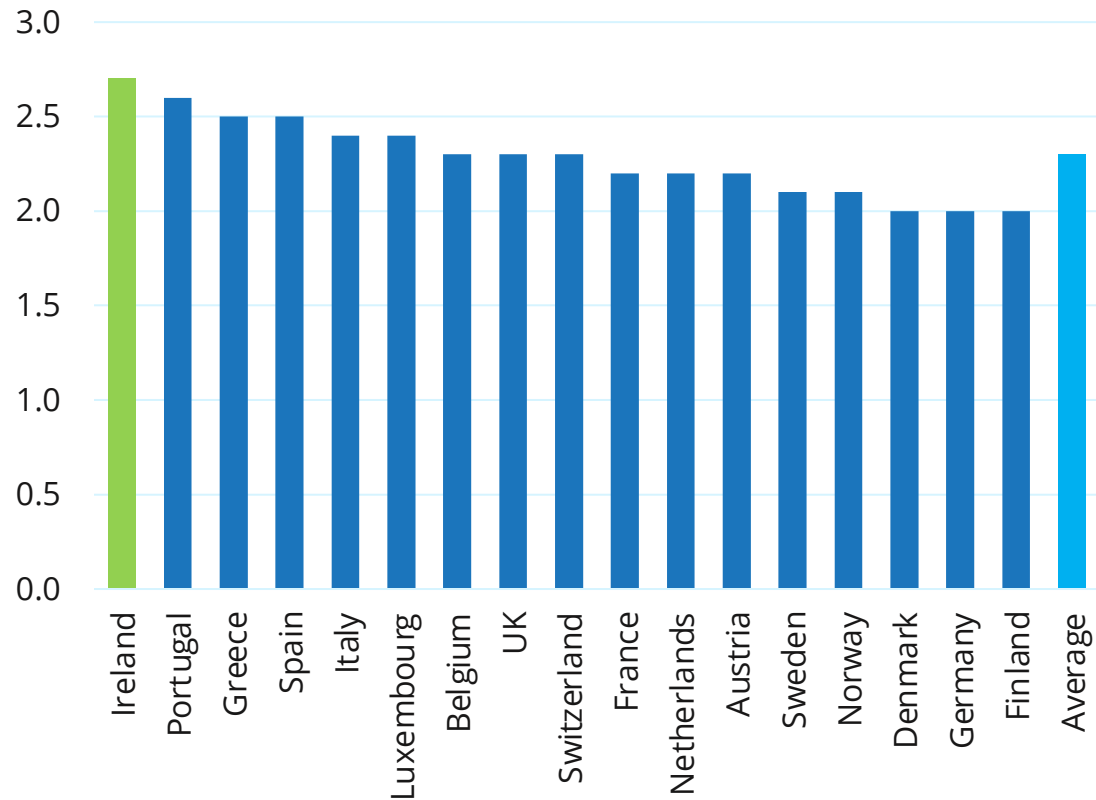


Source: Census, CSO; "NEU" refers to new (post-2003) EU Member States

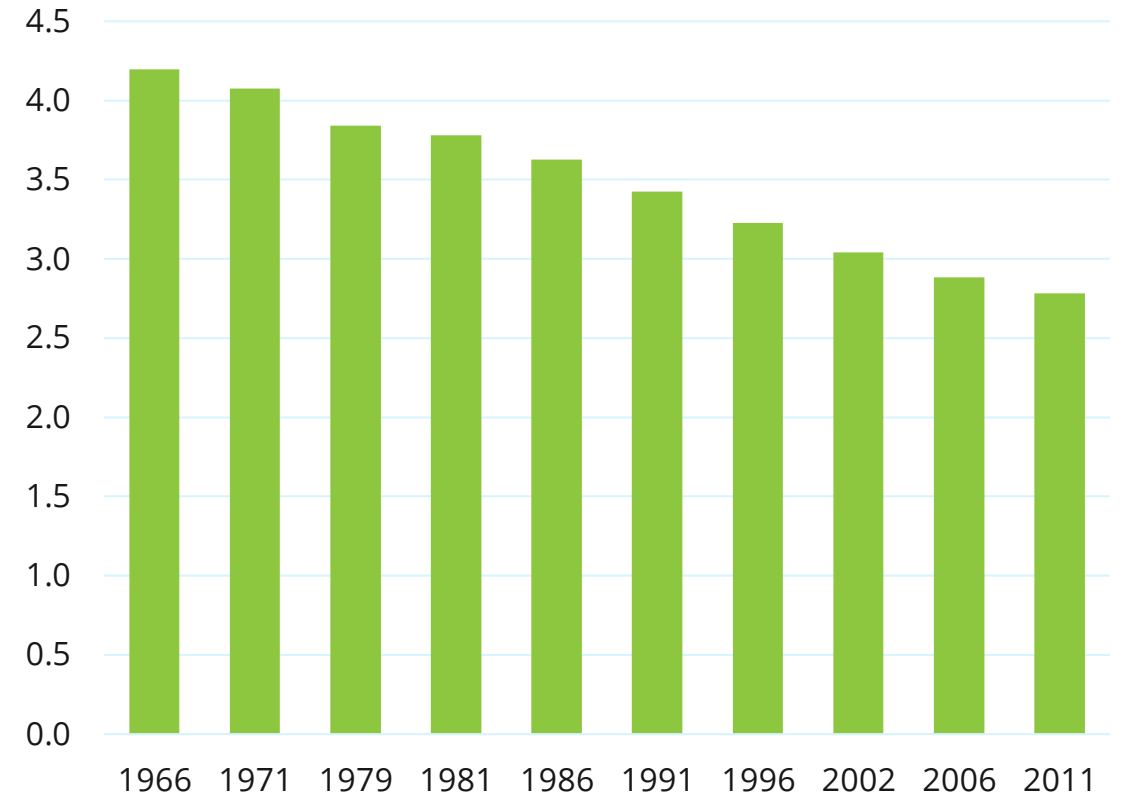
Ireland has Western Europe's largest average household size – but it has been falling steadily over the last five decades



**Average household size, by country (2014)**



**Average household size in Ireland, by year**



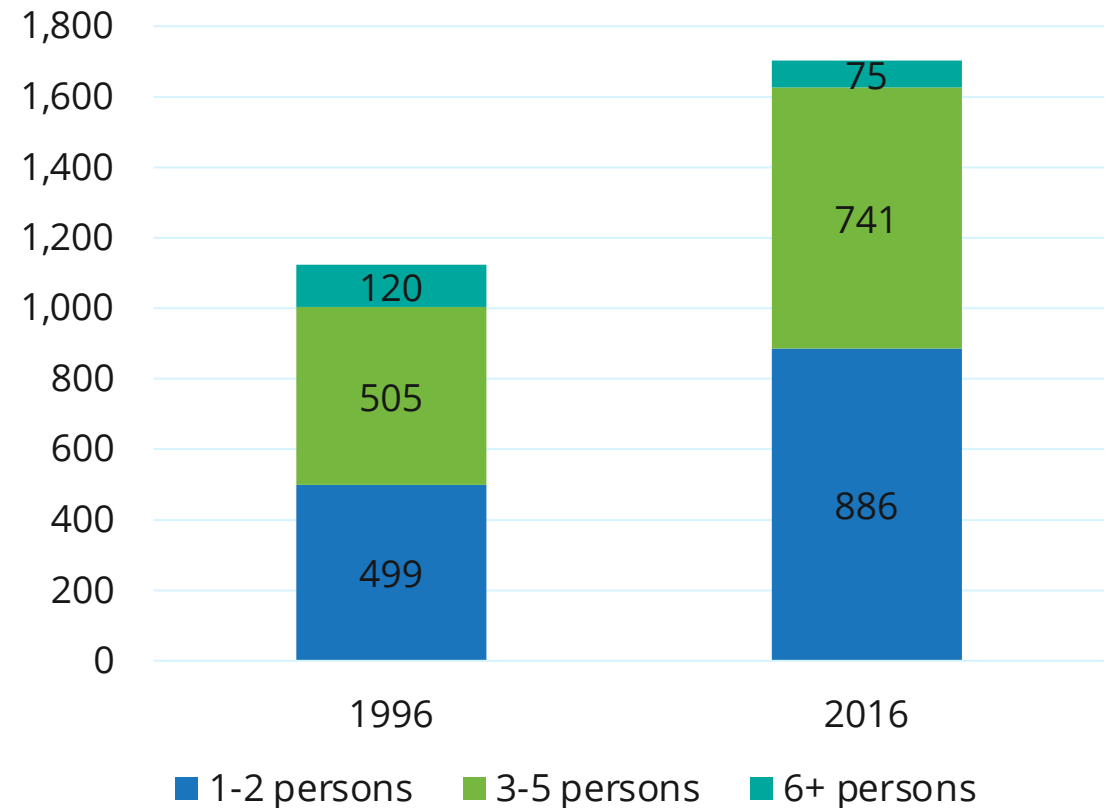
Source: Hypostat 2016; Census of Ireland (various issues)

# Two thirds of the growth in Irish households since 1996 has been 1-2 person households, 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

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



Source: Census of Ireland (various editions)

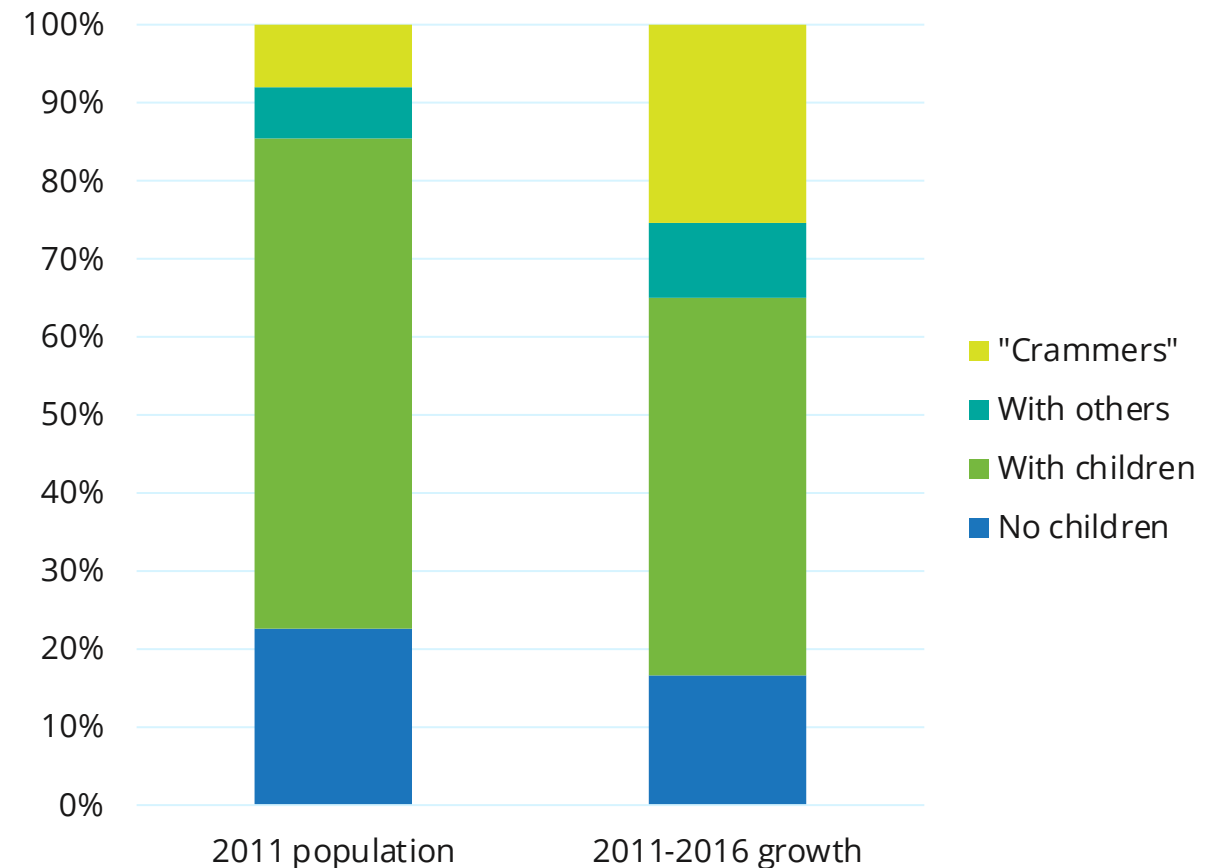


# Average household size rose between the 2011 and 2016 Censuses – but this was driven by scarcity rather than demographics



- 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 – Ireland would have required an extra 120,000 dwellings

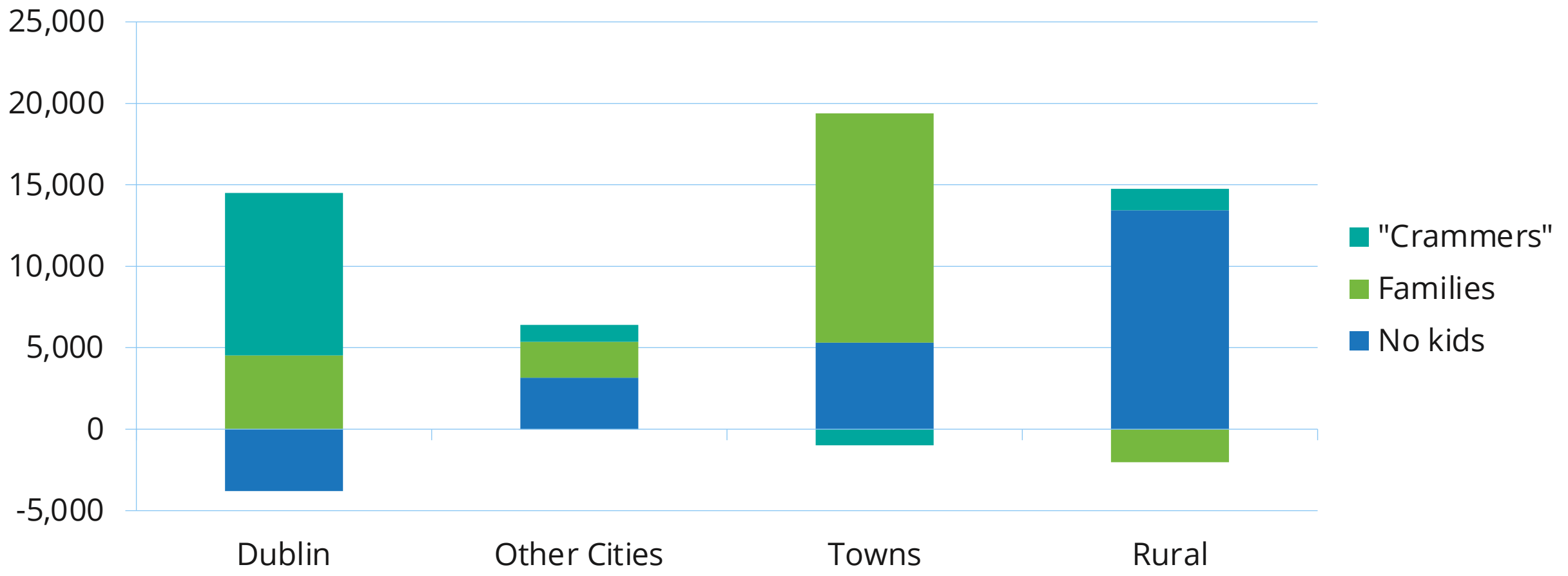
## Irish households, by type, 2011-2016



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



### Change in number of households, by broad type and size, 2011-2016

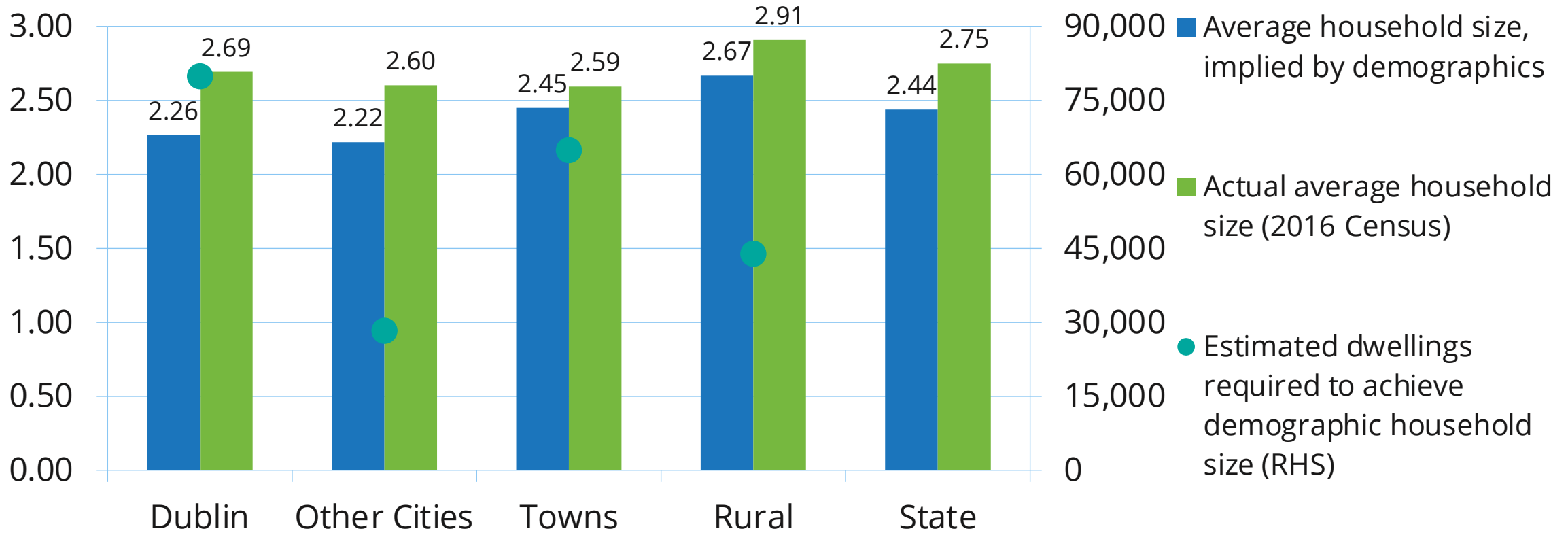


Source: Census of Ireland (various editions)

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



**Household size, actual and calculated from demographics, by region (and implied housing need), 2016**

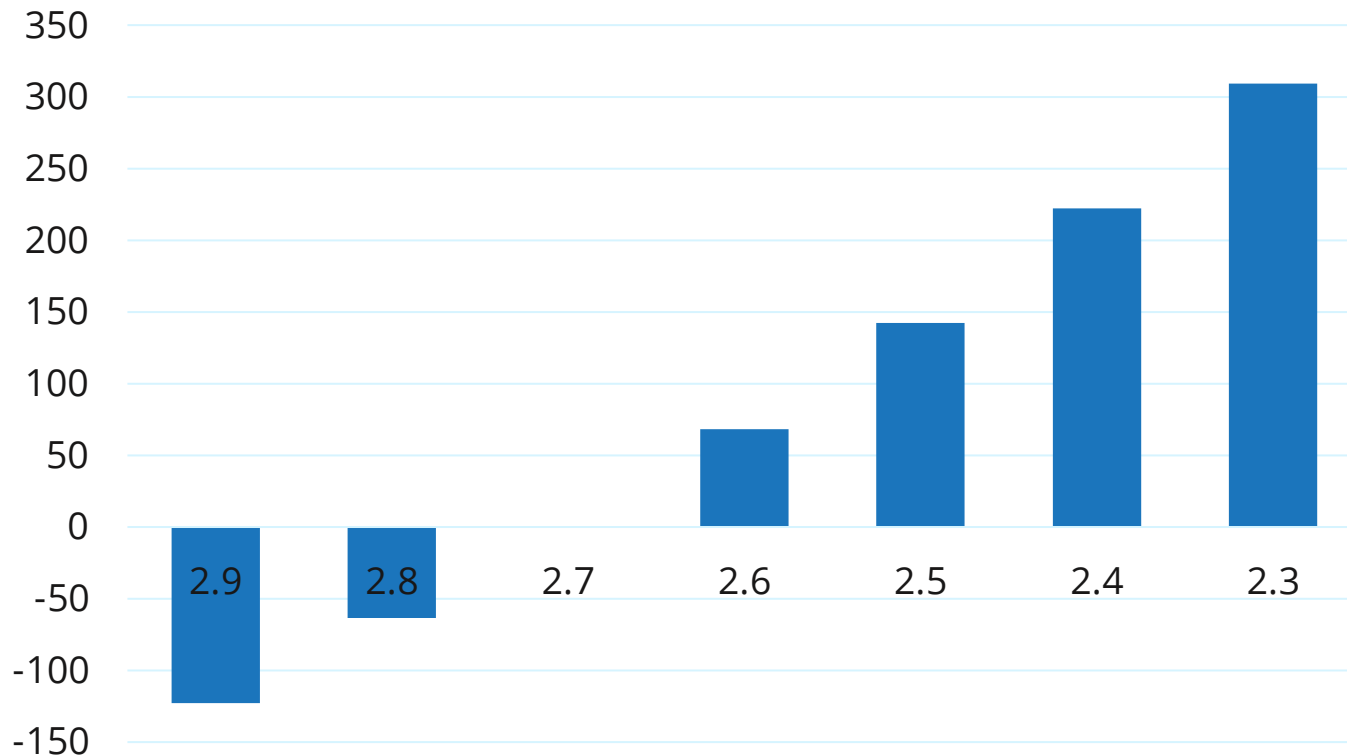


Source: Calculations, based on Census of Ireland (various editions)

If Ireland's average household size converges to the European average, it will create major demand, especially for homes for smaller households



**Number of extra dwellings required (000s) for a population of 4.8m, for different average household sizes (relative to 2.7)**



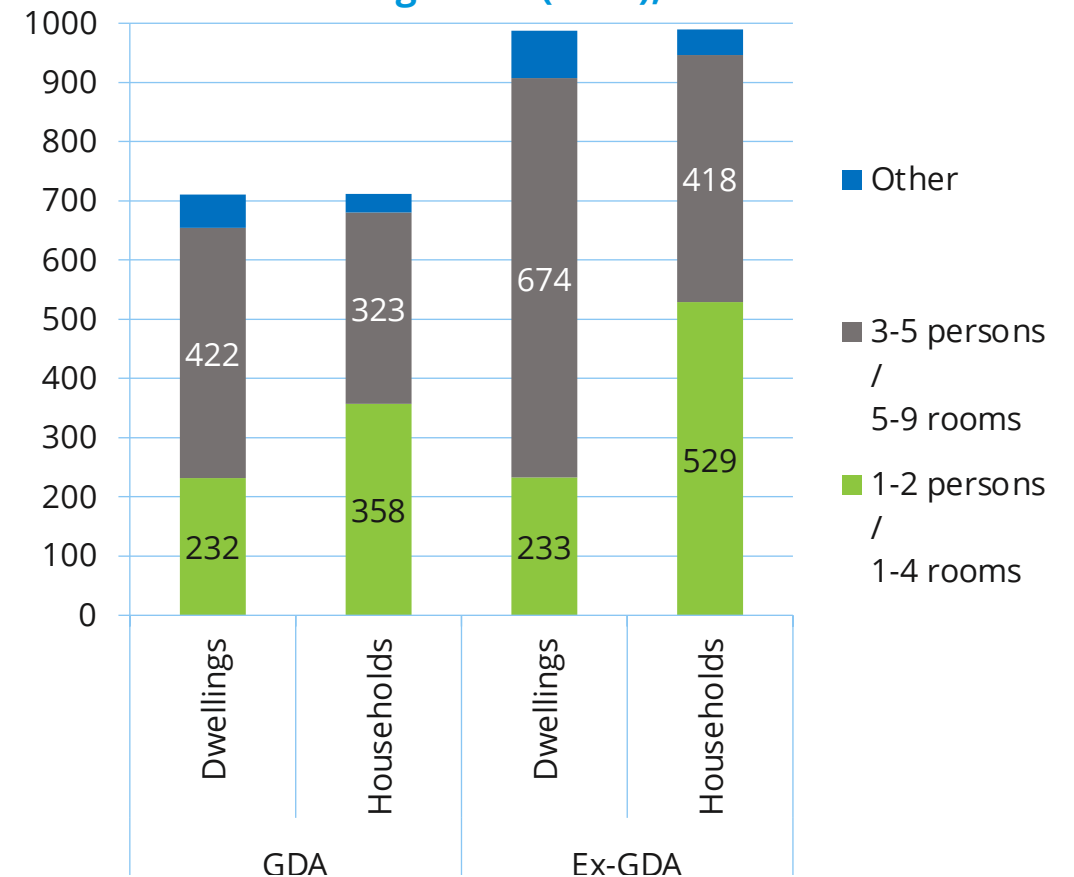
- Even with a fixed population, a rise in the fraction of 1-2 person households creates demand for a significant number of new dwellings
- Relative to a 2.7 average household size, a population of 4.8m with an average household size of 2.5 requires 142,000 extra dwellings
  - This is the equivalent of 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 apartment 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

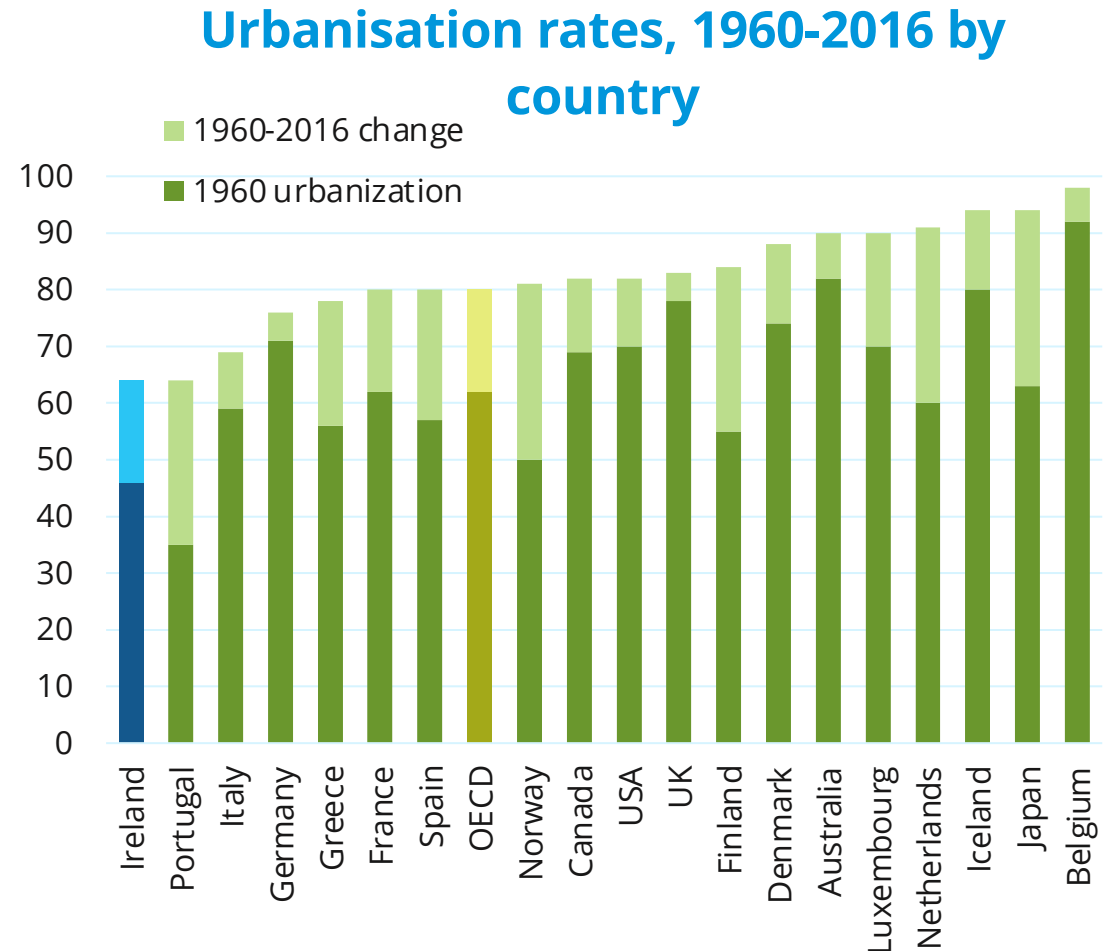
Households by number of persons and related dwelling stock (000s), 2016



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



- Urbanisation is at the heart of economic growth
  - Cities allow specialisation (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

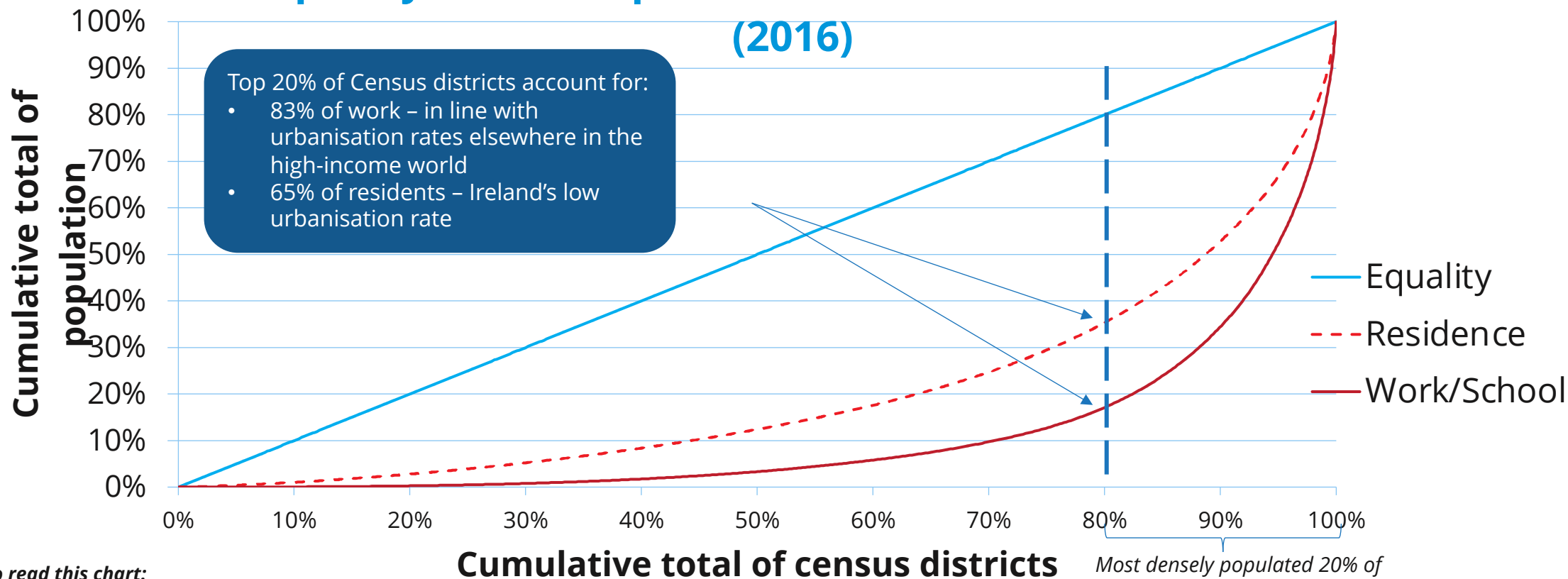


Ireland's labour market is as urbanised as other high-income countries – meaning its under-urbanisation reflects inadequate housing close to cities



## Inequality curves of place of residence and work, Ireland

(2016)



**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.

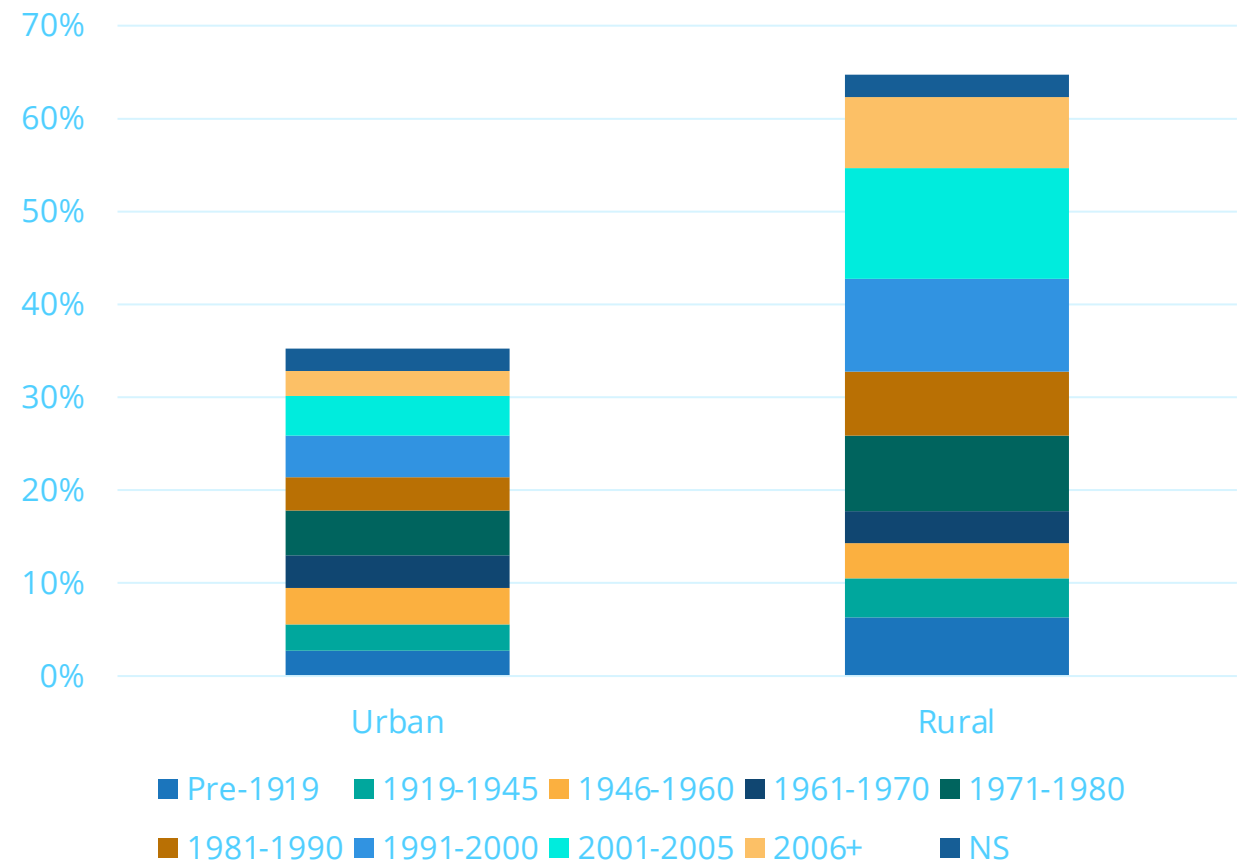
*Most densely populated 20% of Census districts (i.e. Irish cities)*

Related to urbanisation, obsolescence also creates housing need – with Ireland’s dwellings skewed to older/rural stock, over 10,000 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”

Ireland’s Dwelling Stock, by Age





For 2020-2025, demand for housing nationwide is likely to be 47,000 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
<b>Total</b>	<b>47,000</b>	<b>18,100</b>

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 47,000 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 seems unlikely that 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

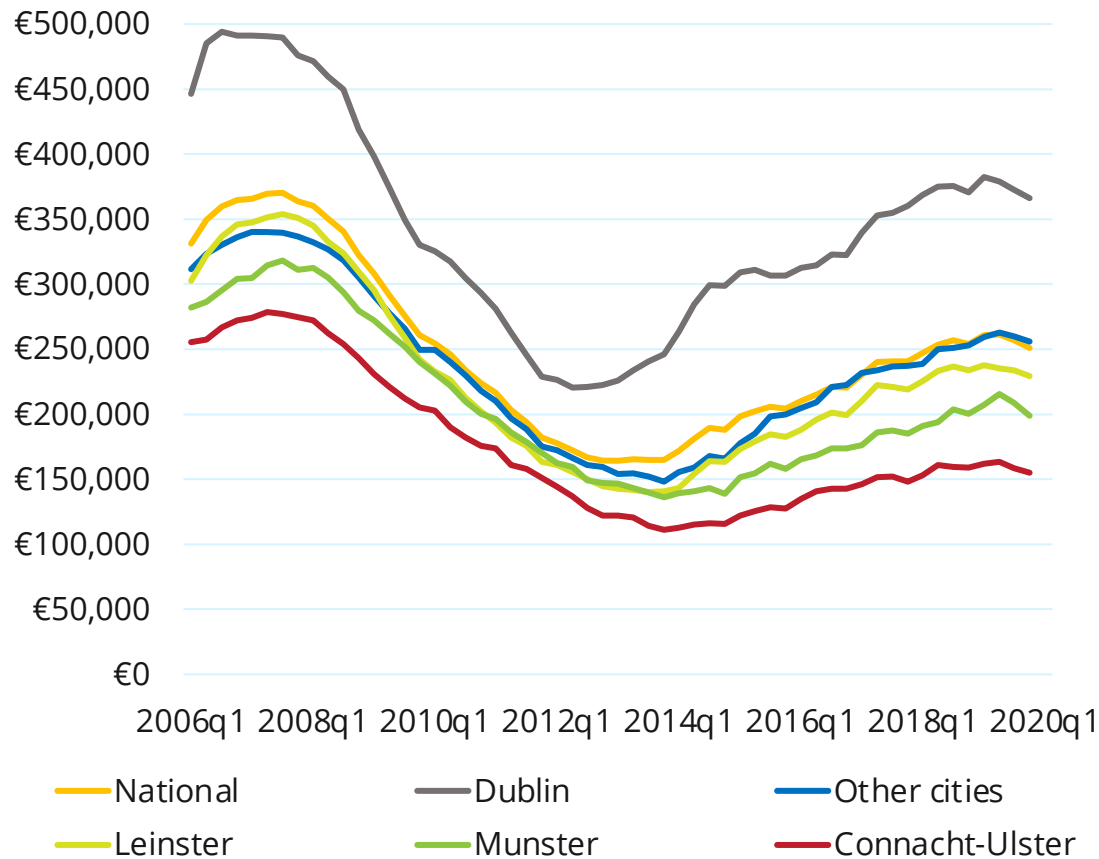


- Medium-term Need
- **Current Context**
- Policy Options

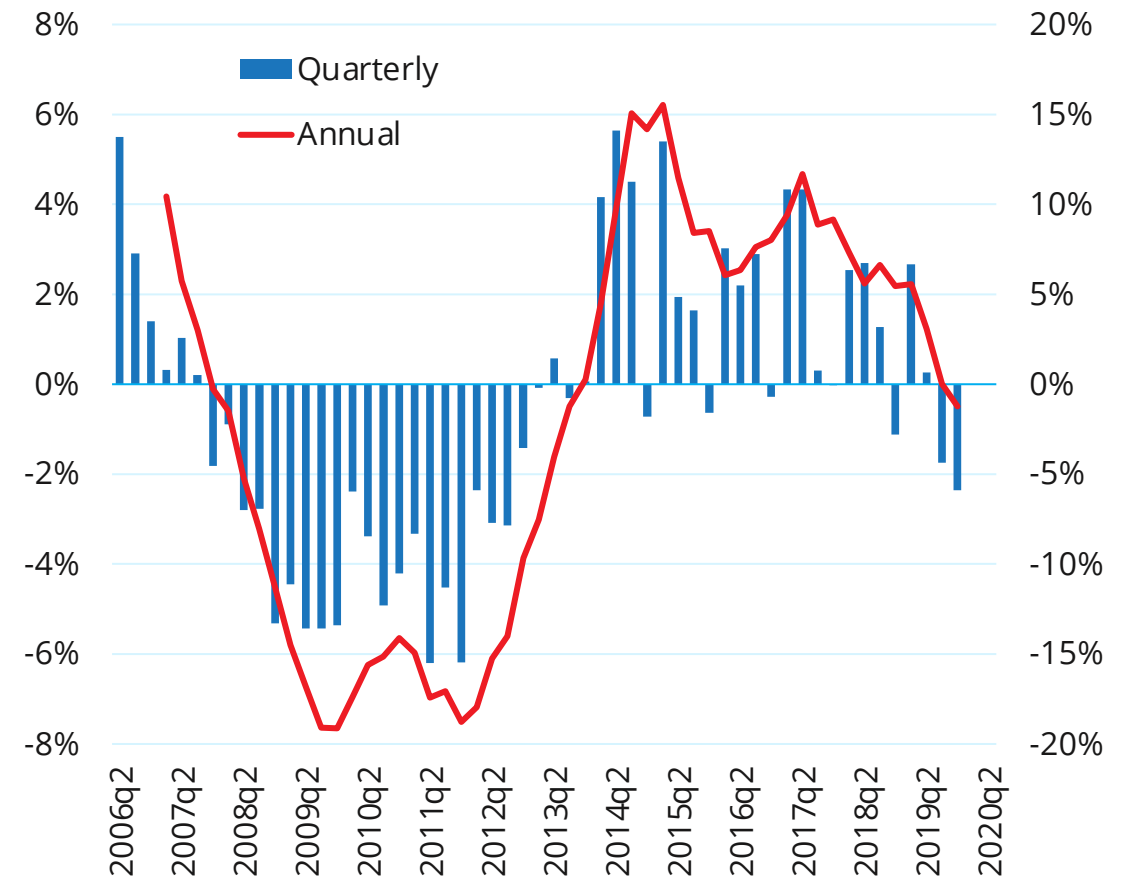
After roughly six years of strong inflation, sale prices in Ireland have now stabilised, having risen by >50% but remaining ~30% below 2007 peak levels



**Average sale price, by market**



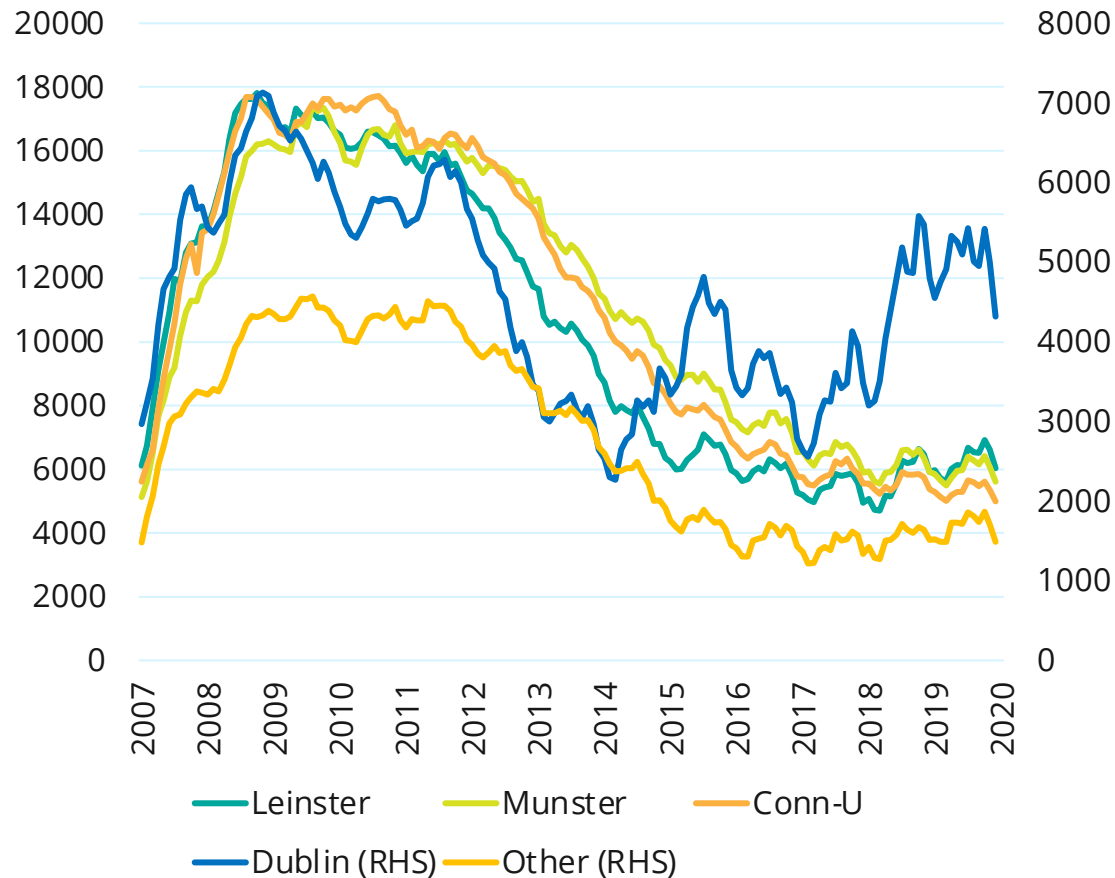
**National sale price inflation**



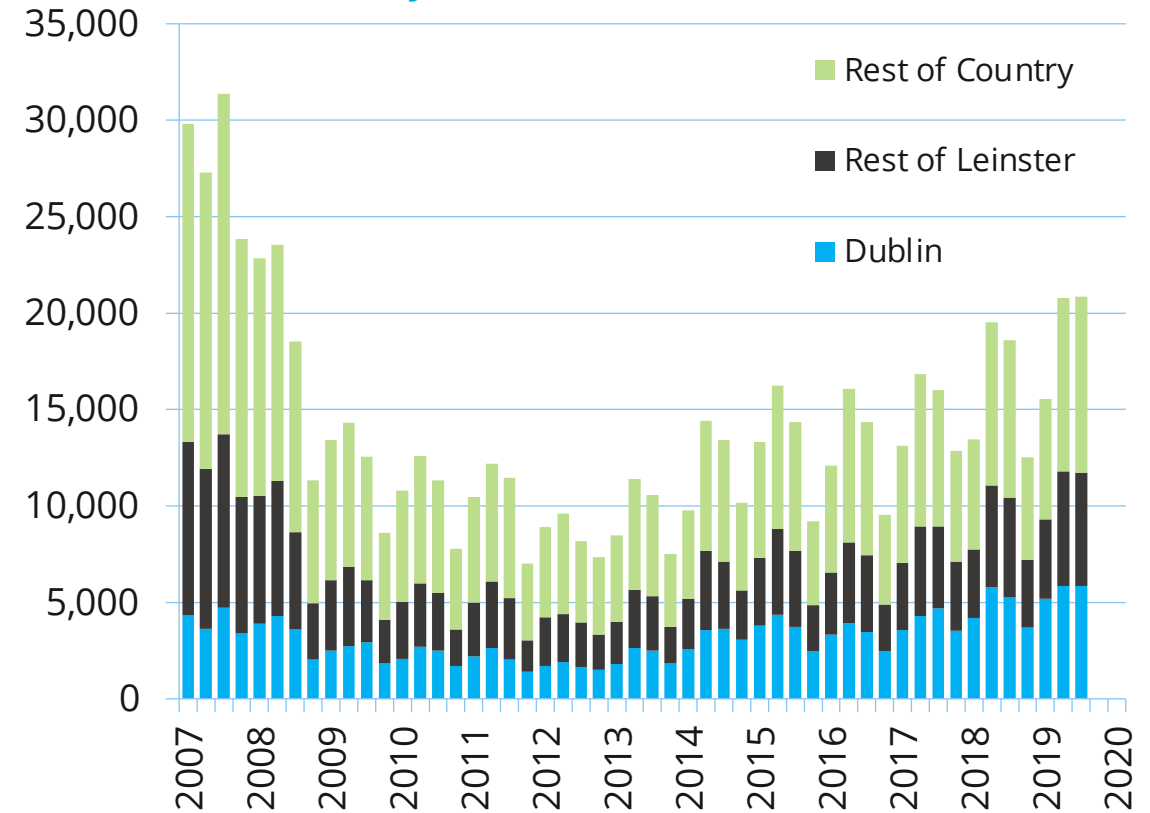
# The ending of sale price inflation comes as the stock and flow of properties available has increased significantly in recent quarters



### Stock available to sell, by region



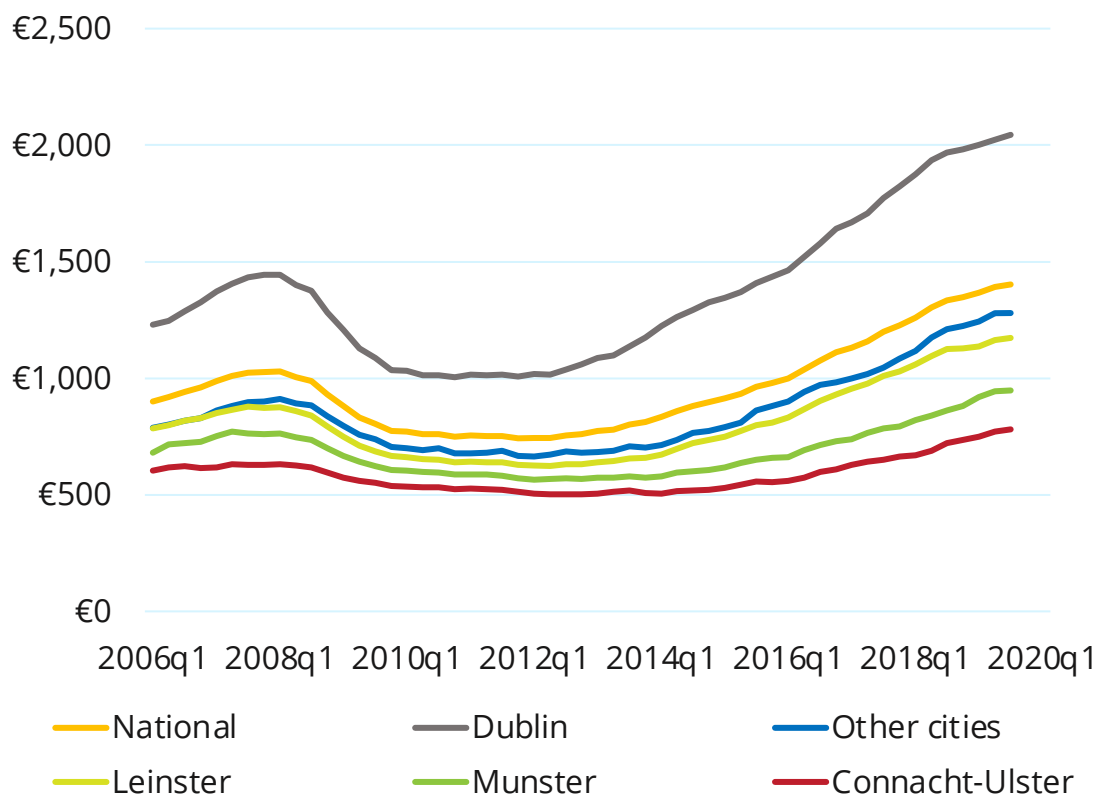
### Flow of sale listings during quarter, by market, since 2007



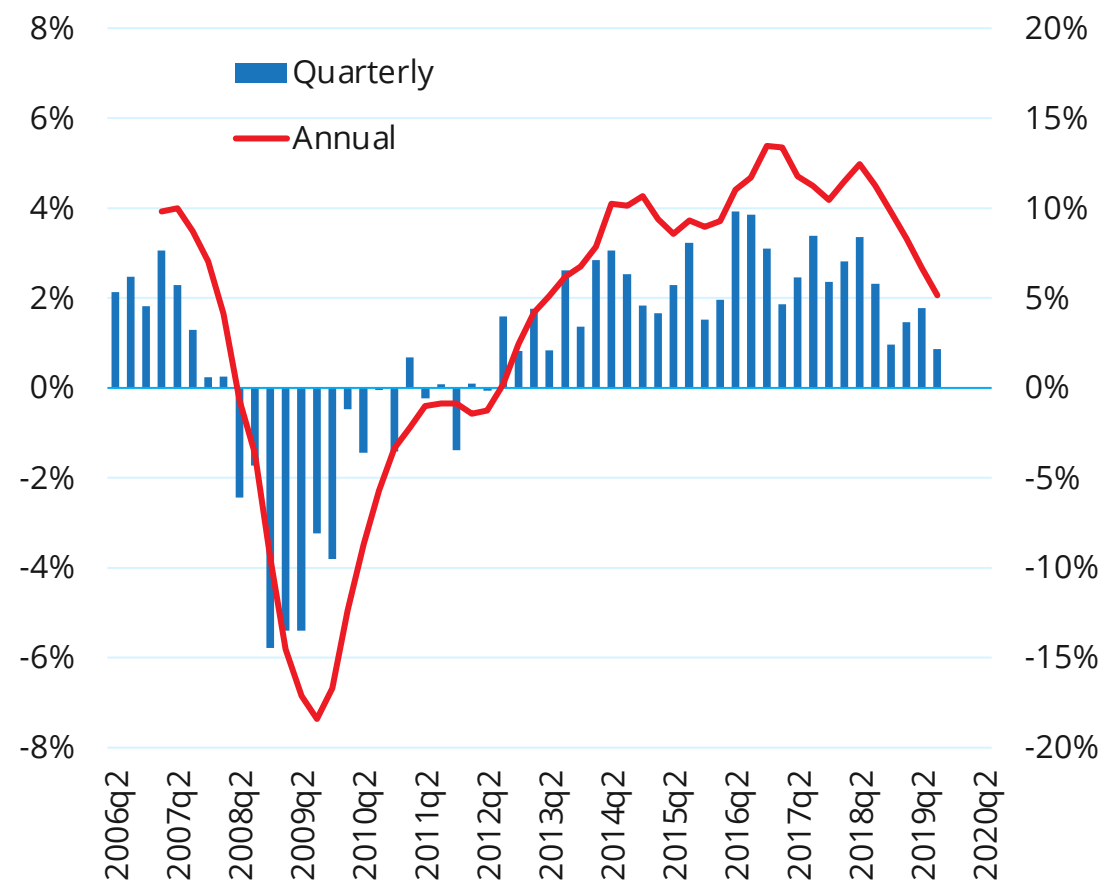
Rent inflation has slowed in 2019, but rents have risen for 29 consecutive quarters, nearly doubling in total and 35% higher than the previous peak



### Average monthly rental price, by market



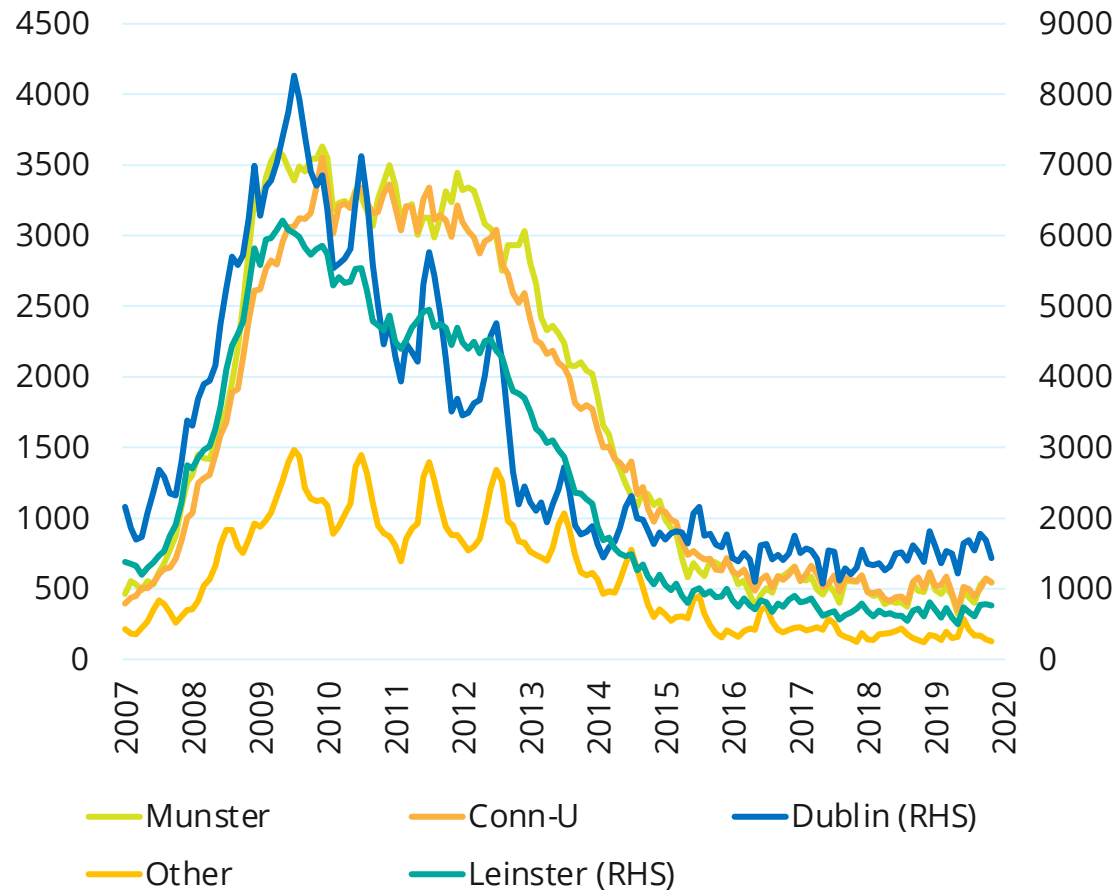
### National rental price inflation



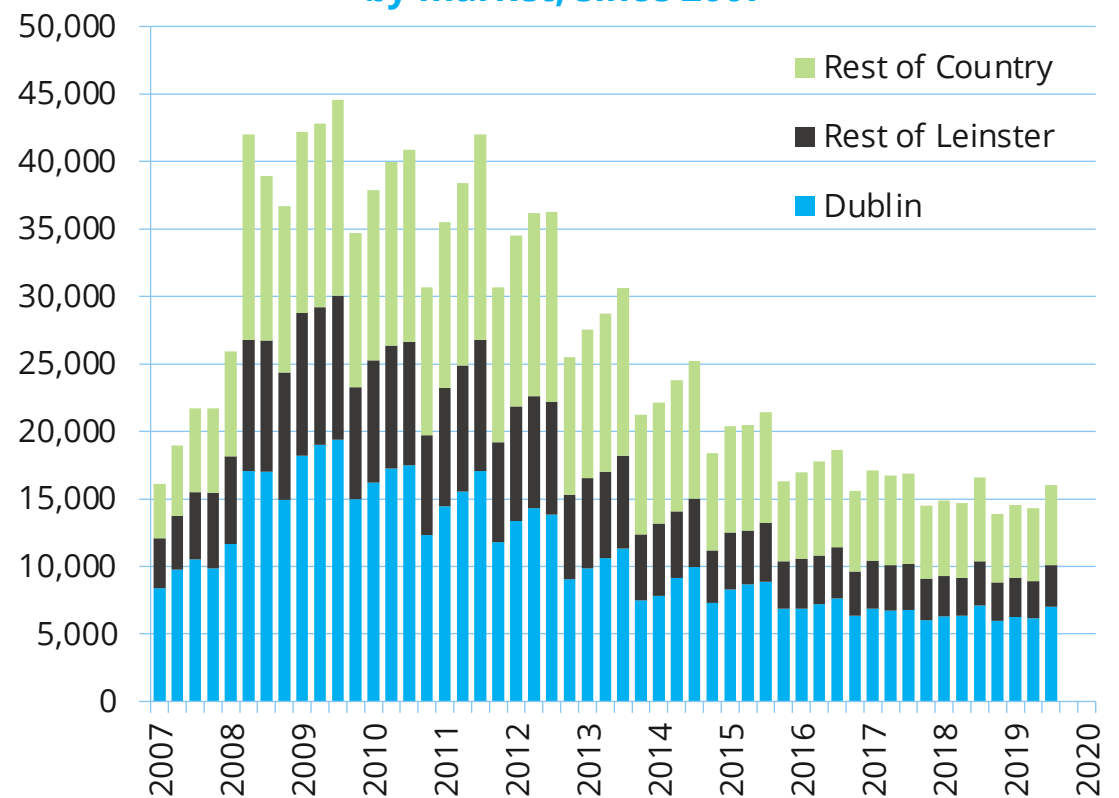
# In the private rental market, availability remains at extremely low levels



### Stock available to rent, by region



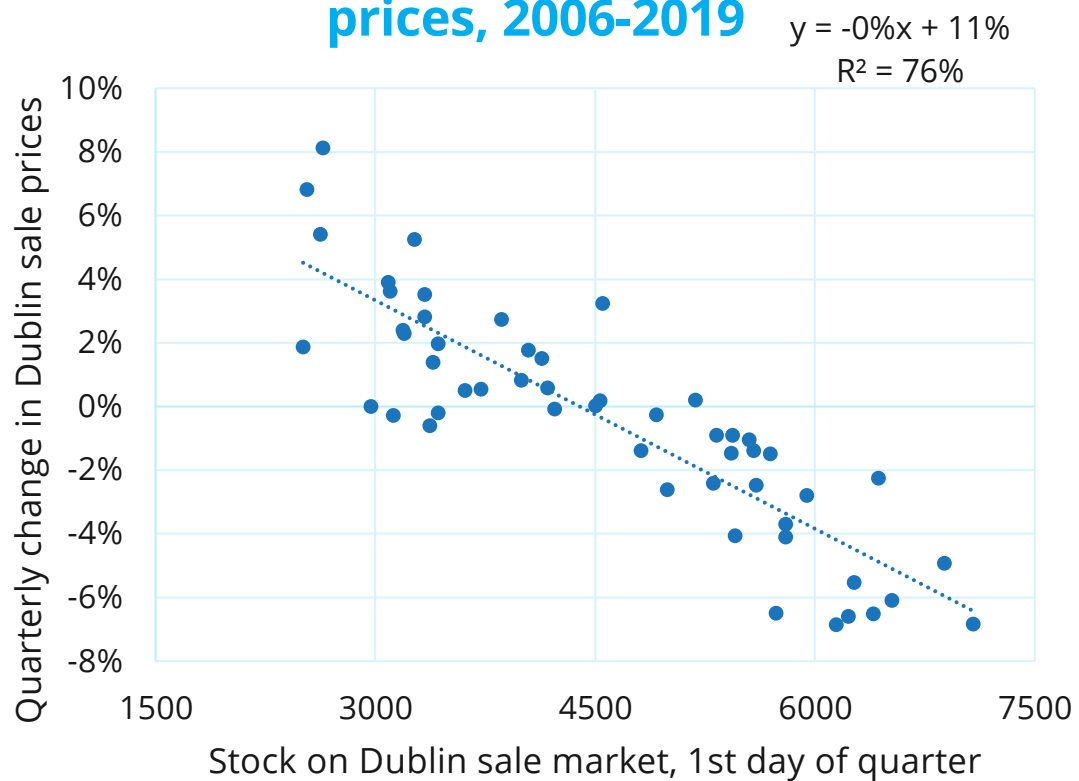
### Flow of rental listings during quarter, by market, since 2007



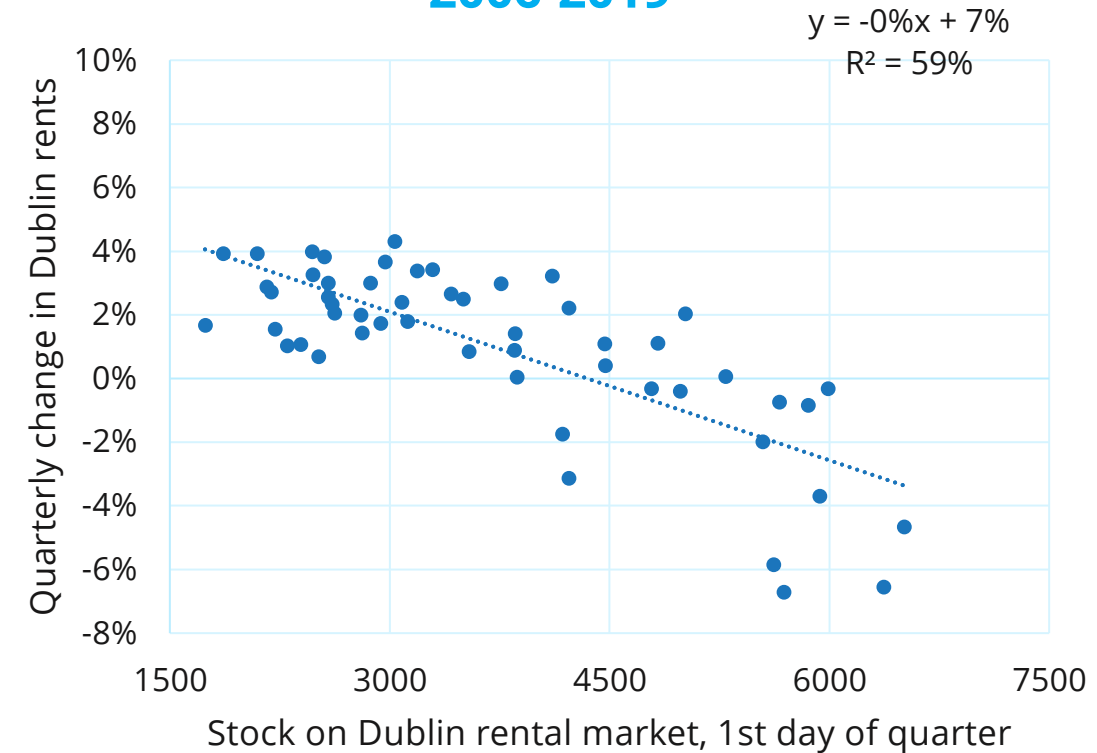
The overwhelming evidence from both sale and rental markets in Dublin is that availability is the key determinant of subsequent price changes: supply matters



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



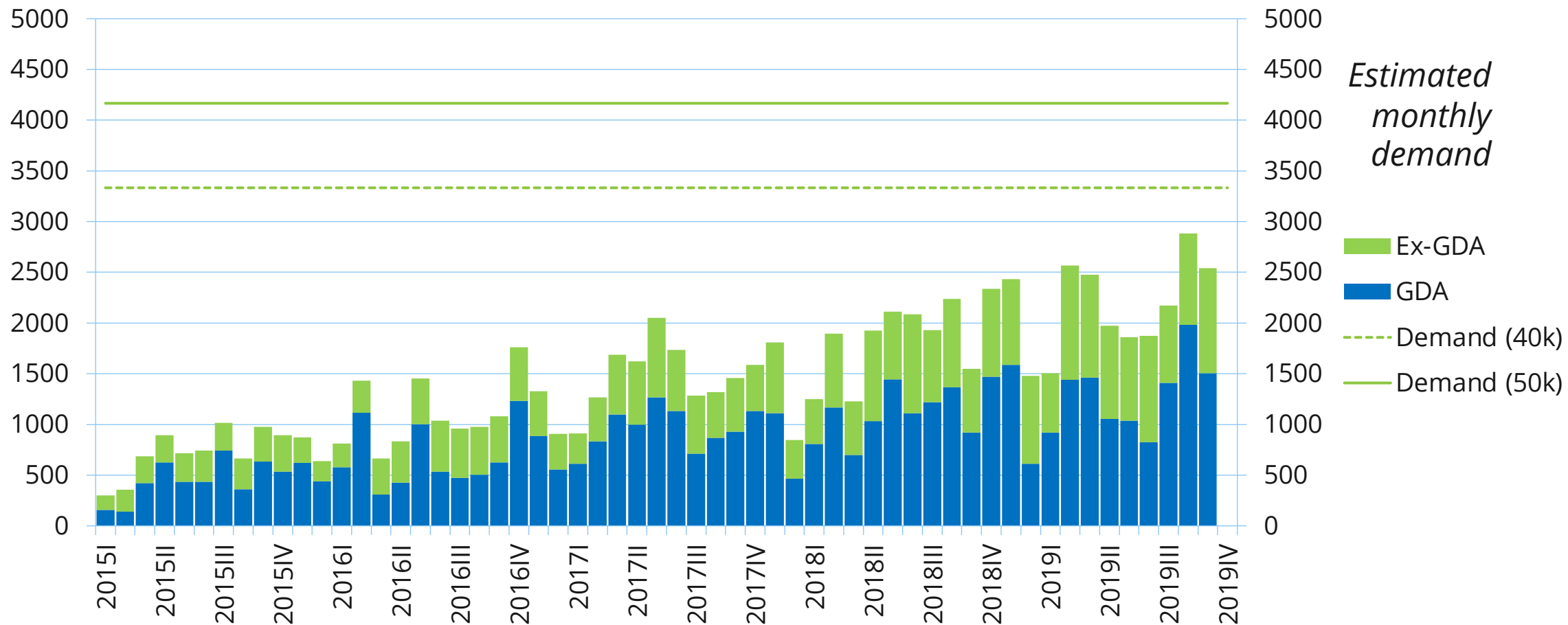
**Scatterplot of Dublin rental listings and quarterly changes in rents, 2006-2019**



But since the crash, supply (of all forms) has been inadequate – and recent improvements still fall short of underlying demand (47,000 per year)



### New dwellings commenced, by local authority and month



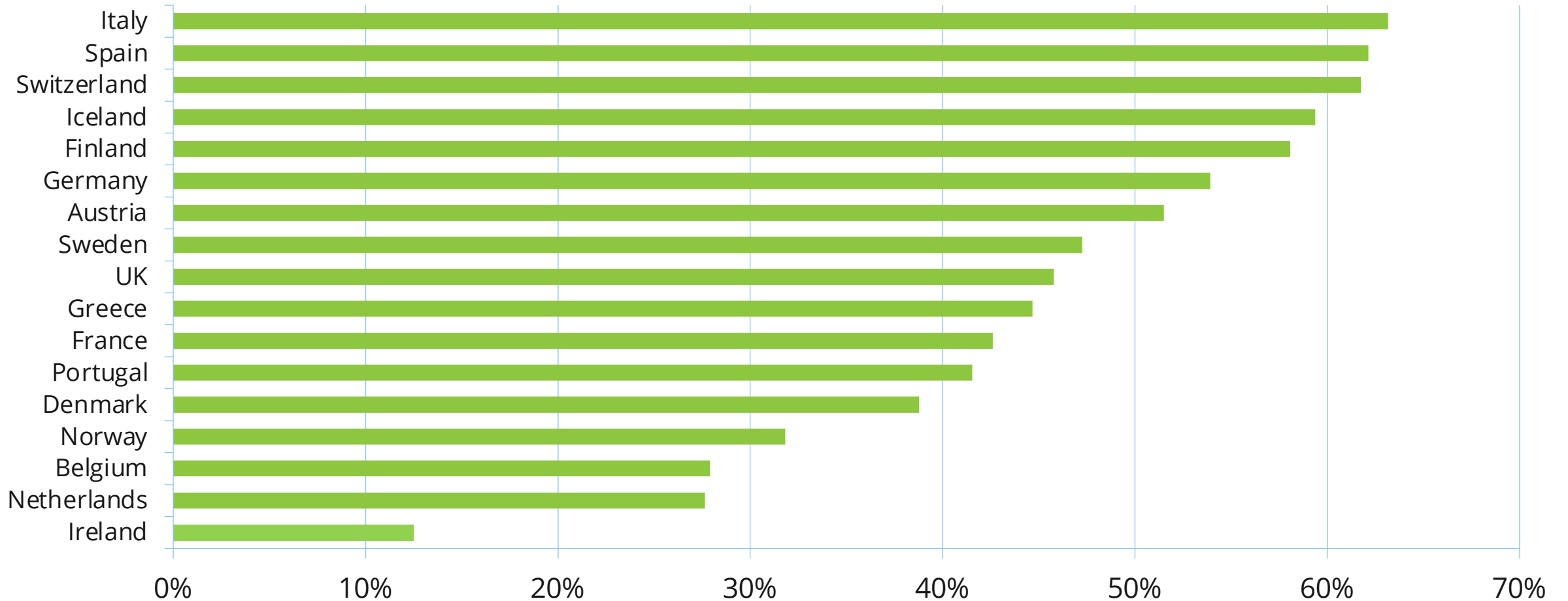
Source: Analysis of Census, CSO and Department of Housing figures



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



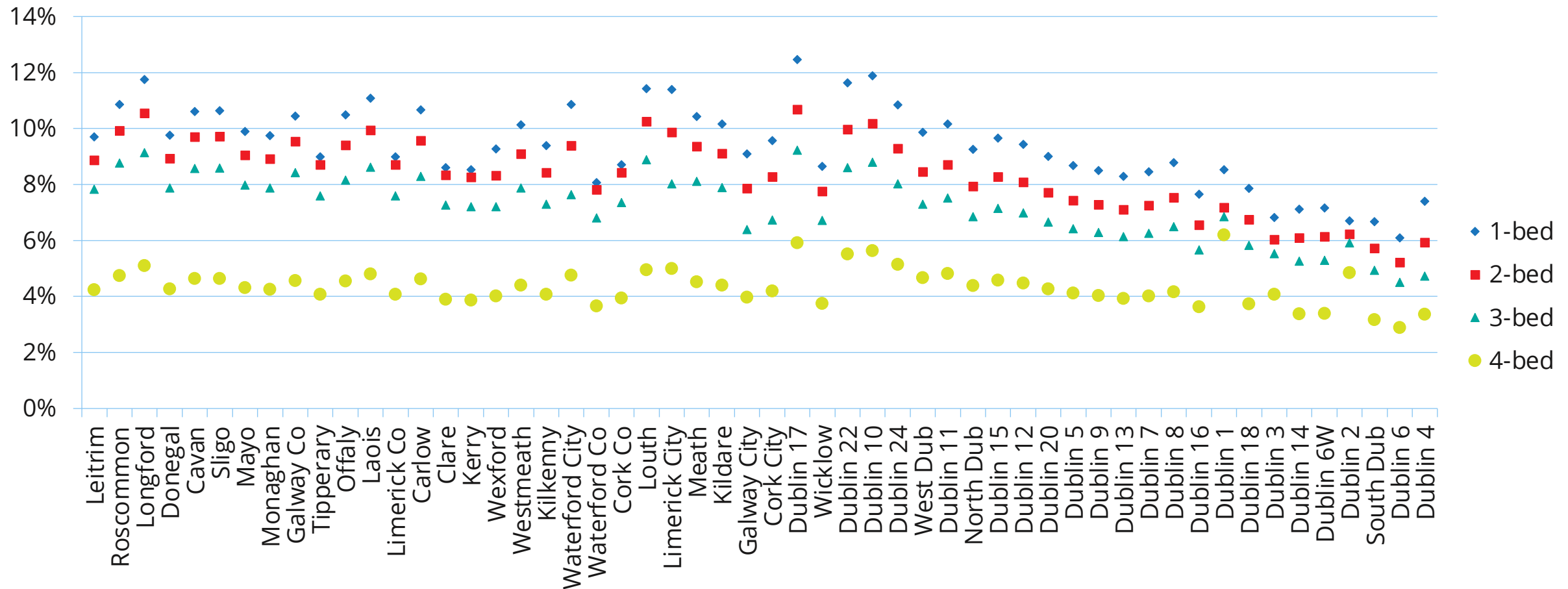
### Fraction of dwellings in apartments



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



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

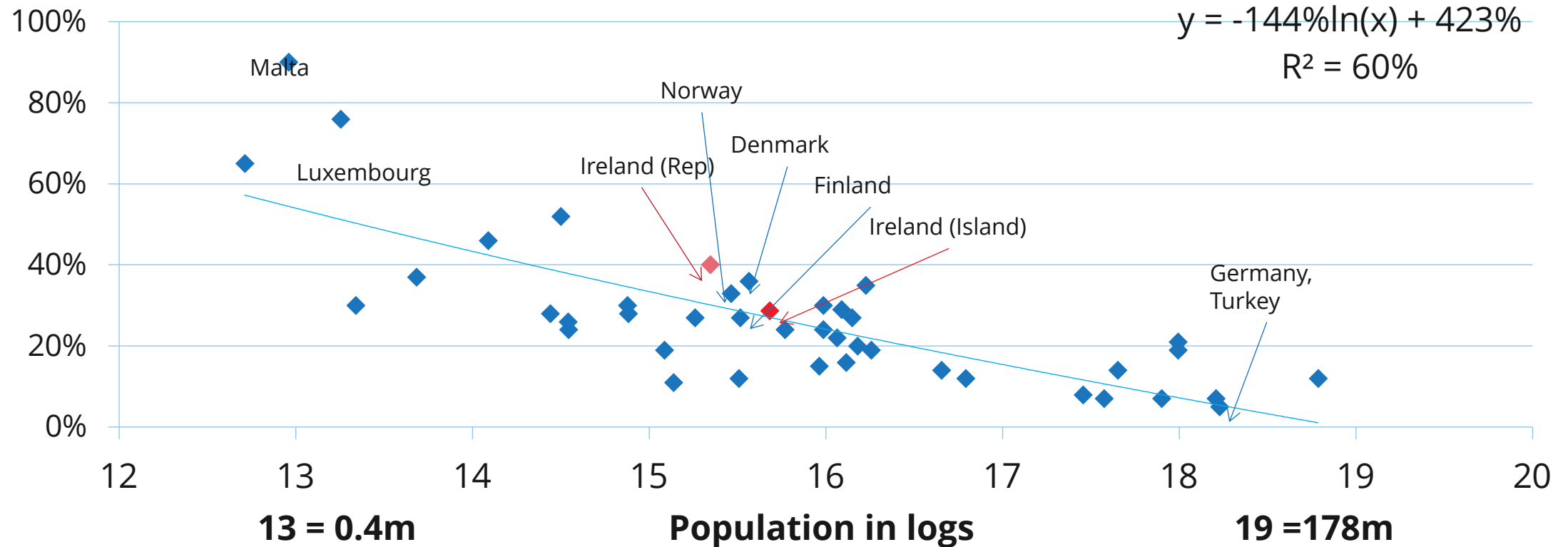


Source: Analysis of Daft.ie Report; Markets are sorted from left to right by the 2019Q2 price of a 3-bed semi-detached property  
 Note: gross yield calculated as the annual rent divided by the capital value, for particular property type-location combinations

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



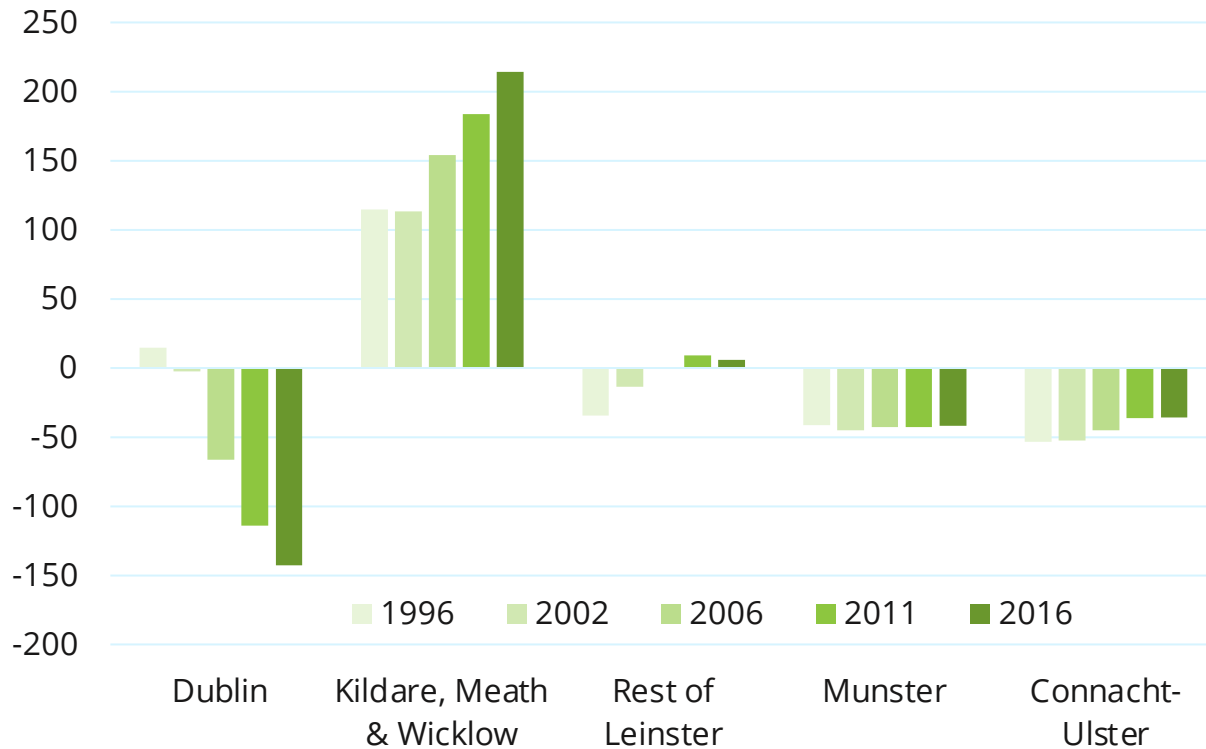
### Share of population in largest city, European countries (n=42)



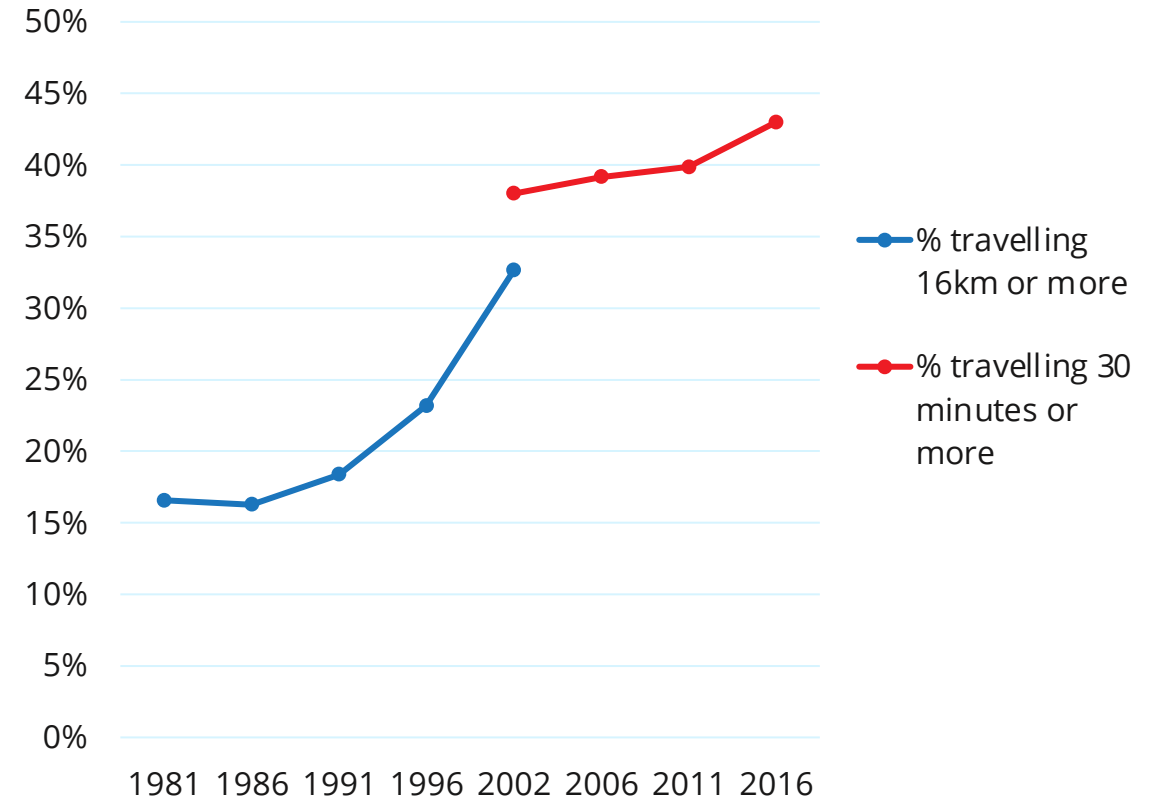
In fact, Dublin has gone from largest importer to largest exporter of people within Ireland – with consequences for commuting and quality of life



**Net difference between population by county of birth and county of residence (000s)**



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

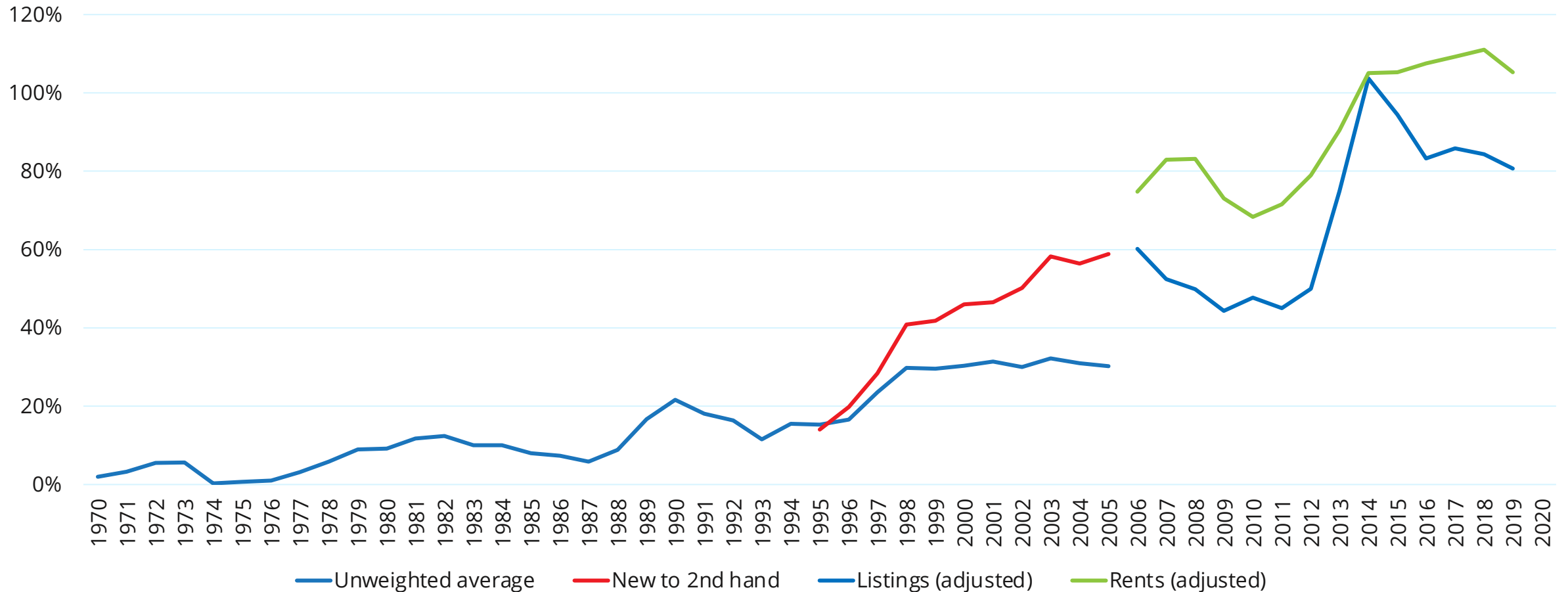


Source: Author calculations, based on various issues of the Irish census

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



### Dublin/Rural Ireland housing price premium

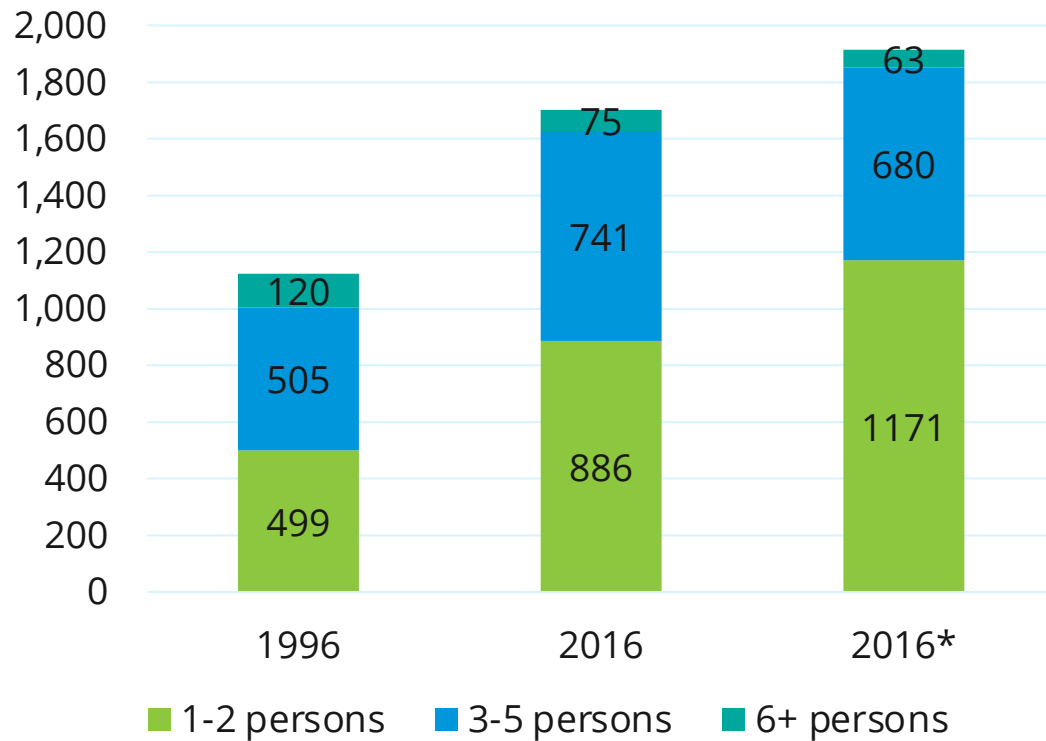


Source: Author *calculations*, based on Department of Housing statistics (1970-2005) and Daft.ie Report (2006-2019)

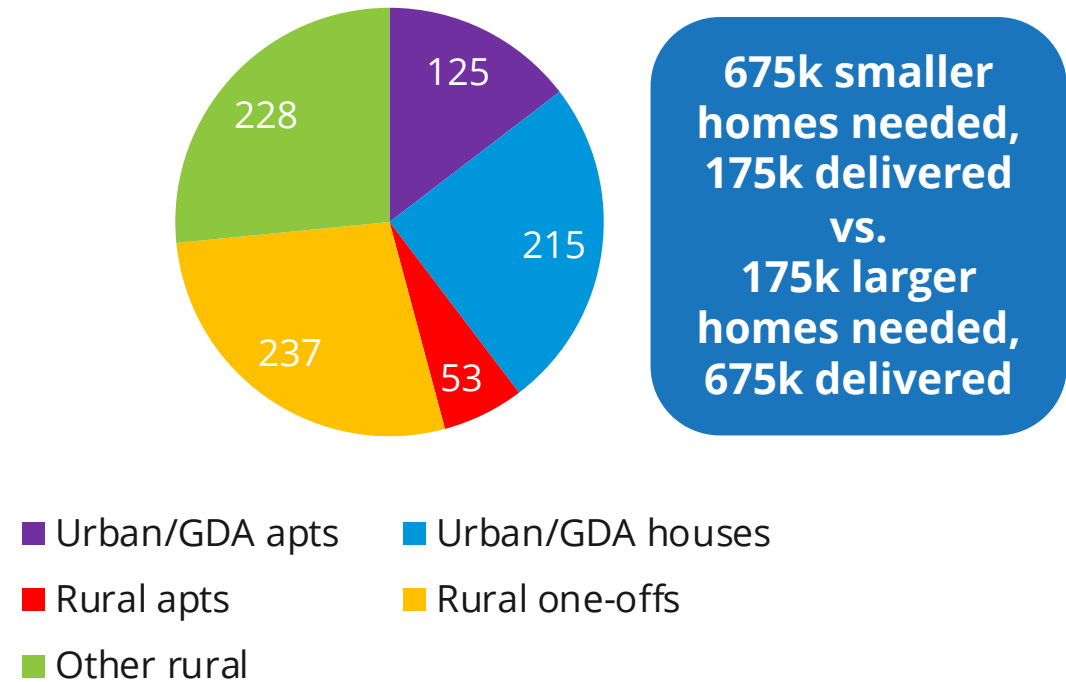
And the mix of new housing supply has been inadequate, with the new homes built increasingly out of sync with Ireland's household structure



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



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

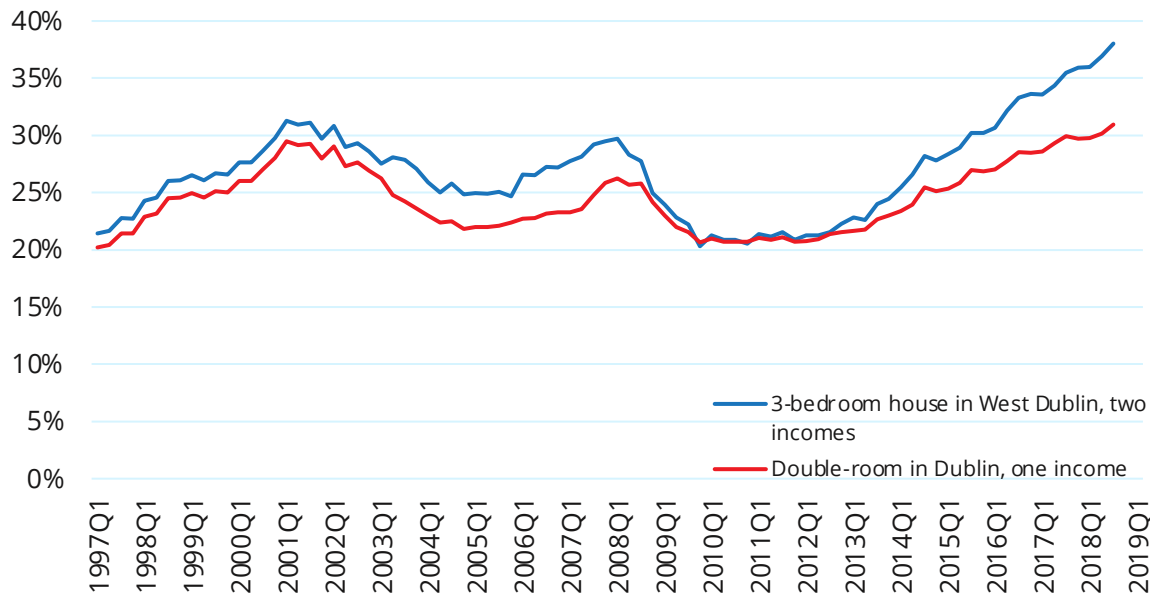


Source: Author calculations, based on CSO Census and Dept of Environment/Housing statistics

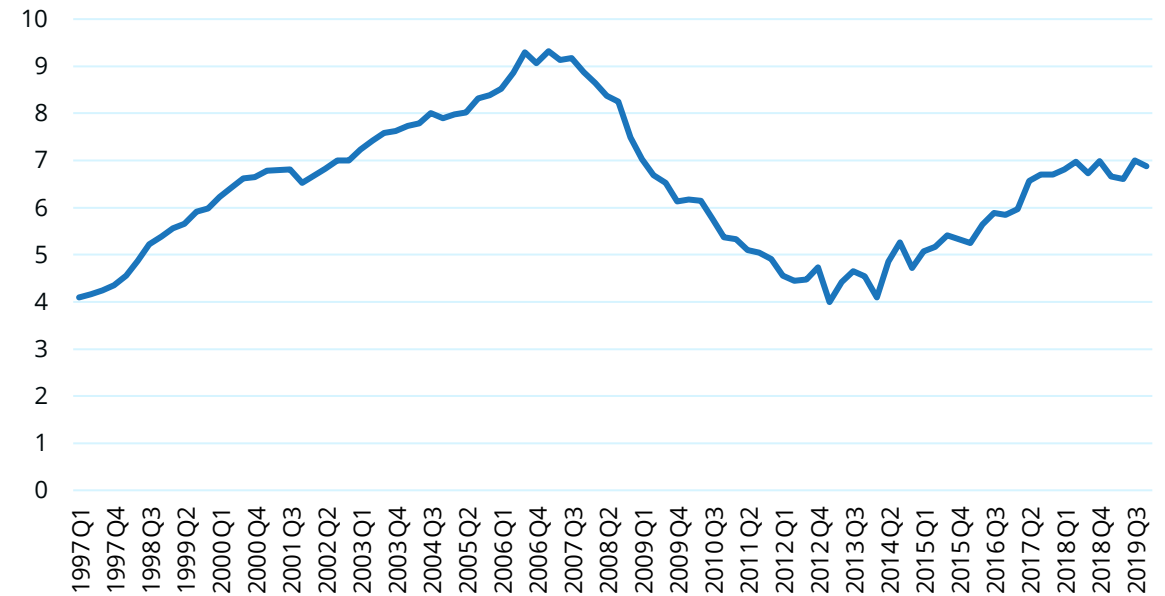
In recent years, affordability has deteriorated, with rent and sale prices rising faster than incomes.



Average rent to average income



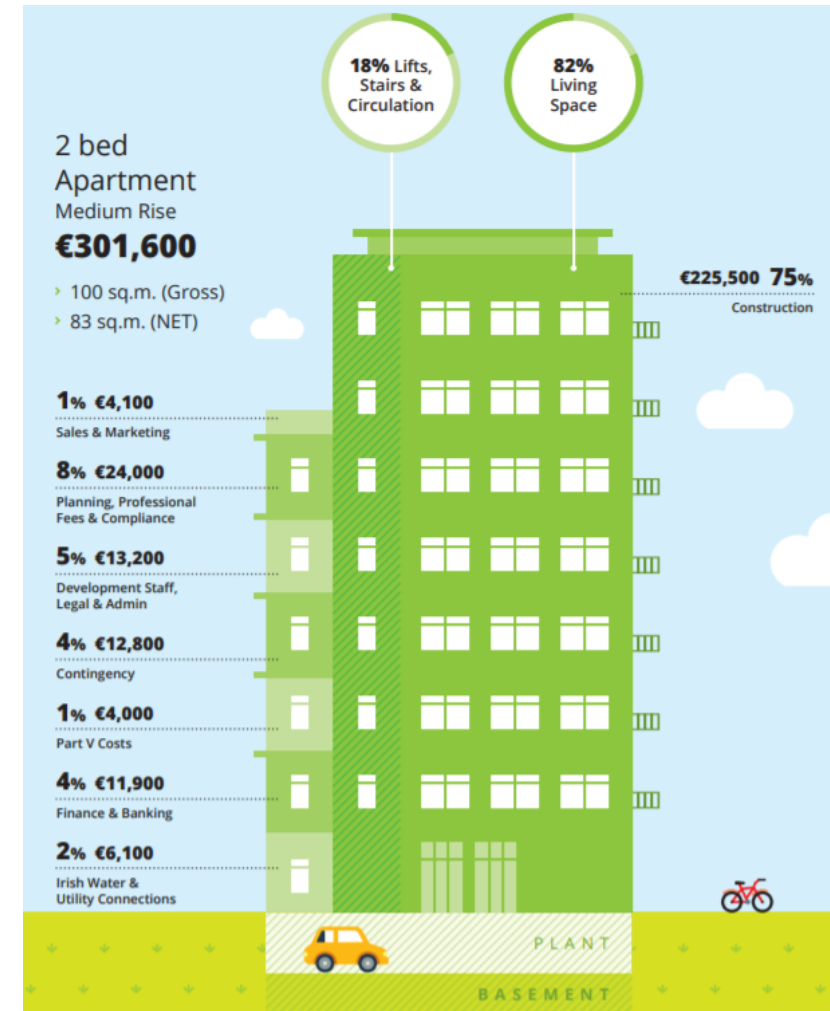
Average FTB house price to average income



# However, supply is determined by viability, not affordability – and viability is extremely challenging for apartments in Ireland



- For apartments in Dublin, construction costs are €225,000 per unit excluding site costs and land
- Costs rise to over €300,000 when legal, planning and finance costs are included (details are shown on the graphic)
- The addition of land, VAT, levies and equity sees the final cost rise to over €460,000

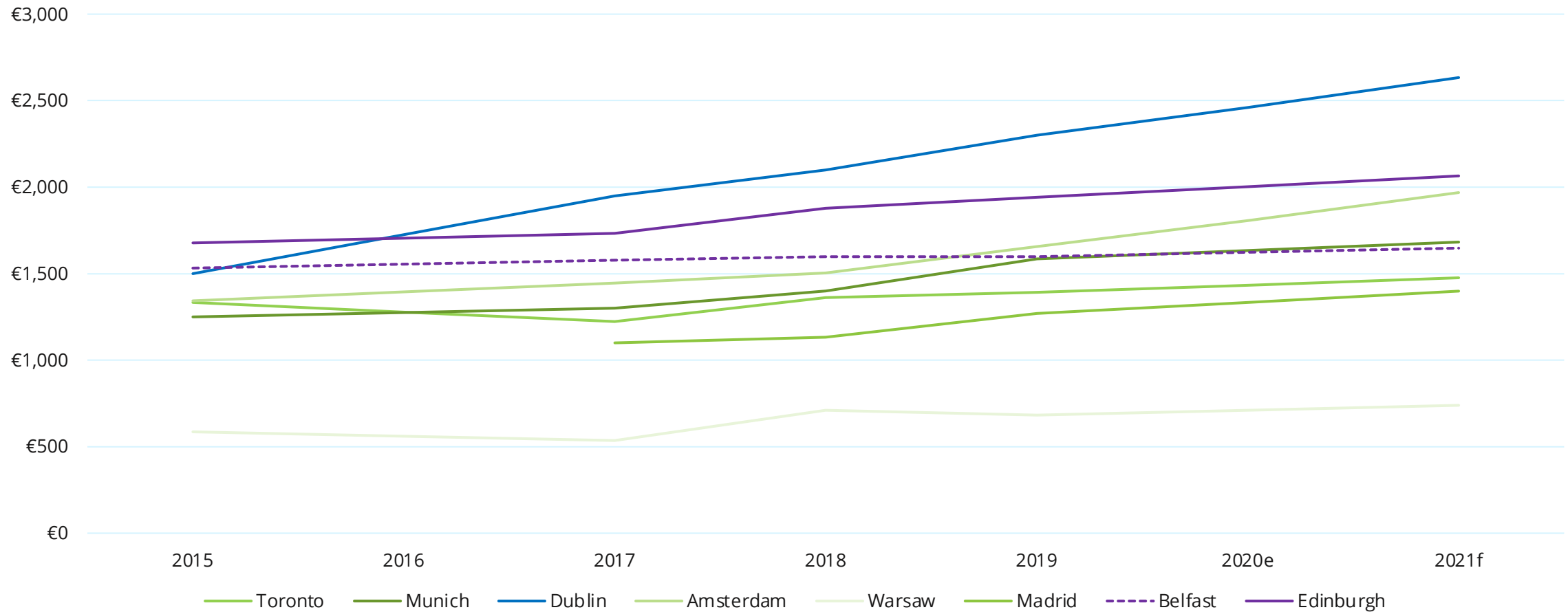




One of the main reasons supply of new apartments has been so weak is that total construction costs in Ireland are high by international standards



### Listed cost, per m<sup>2</sup> of internal space, of building mid-rise, medium-spec apartments, by city and year

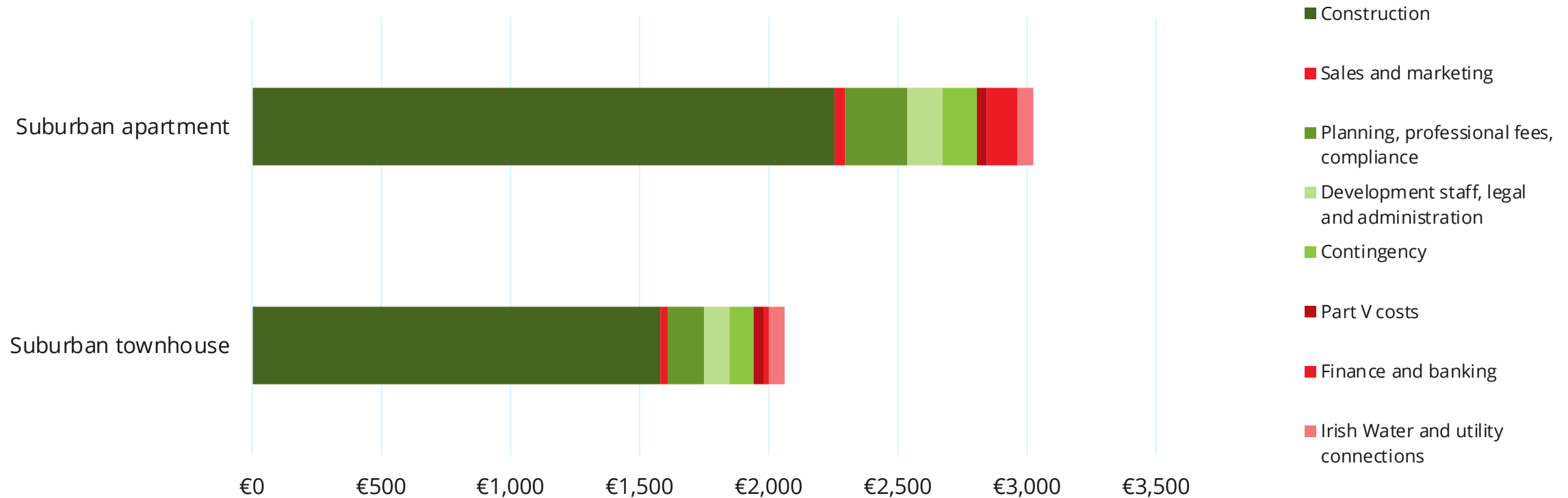


Source: Analysis of Turner & Townsend International Construction Market Survey, various issues

Build costs for suburban homes (excluding land, government tax and developer's profit) are between €2,100 and €3,000 approx. per square metre. Apartments are more expensive to build than houses.



### Build cost per m2 of suburban housing, by type in 2020 Q1

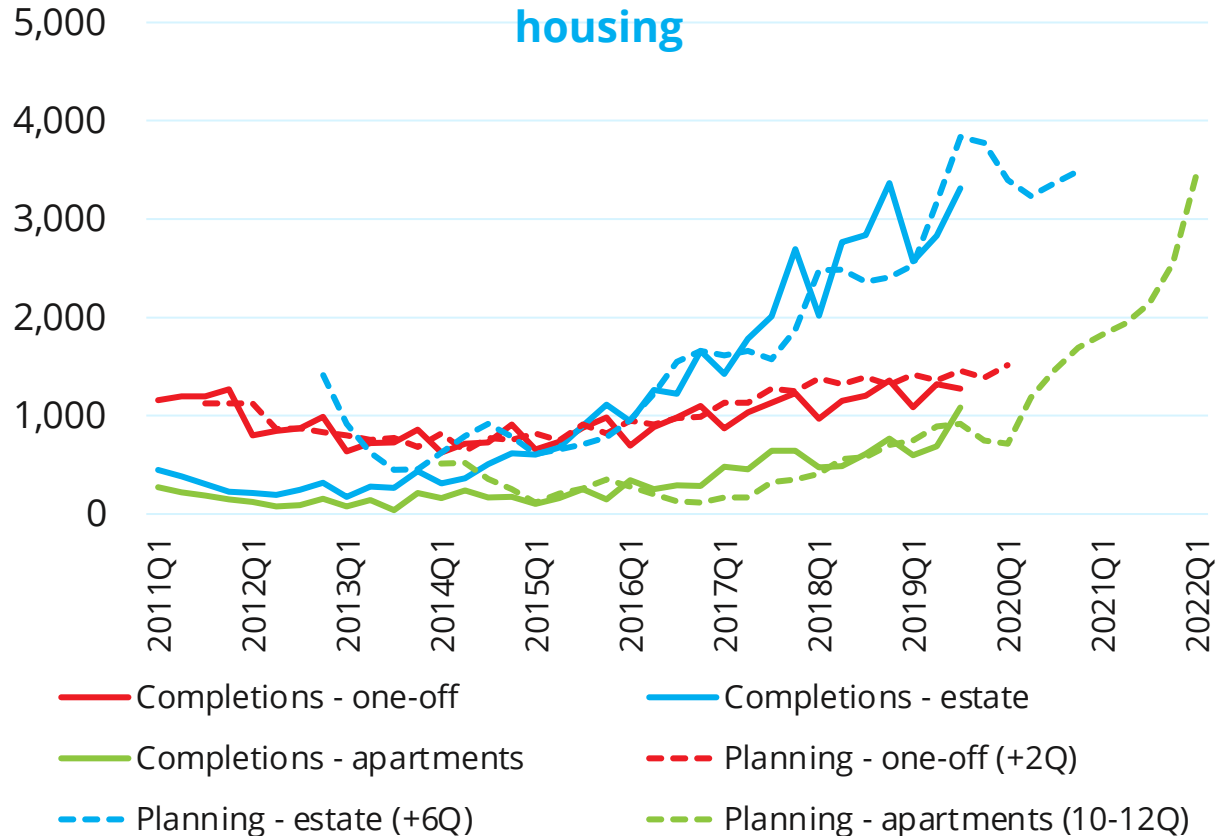


Source and notes: Figures based on analysis provided by Linesight to IIP for dwellings with 100m2 gross floor area (83m2 nett floor area for apartment dwelling types). Figures exclude site acquisition costs, cost of equity capital/profit, and tax, as well as costs relating to any abnormal ground conditions or contamination. For City Centre / Complex Build cost may be up to 20-40% higher depending on site conditions, height, specification and the like. Other assumptions available on request.

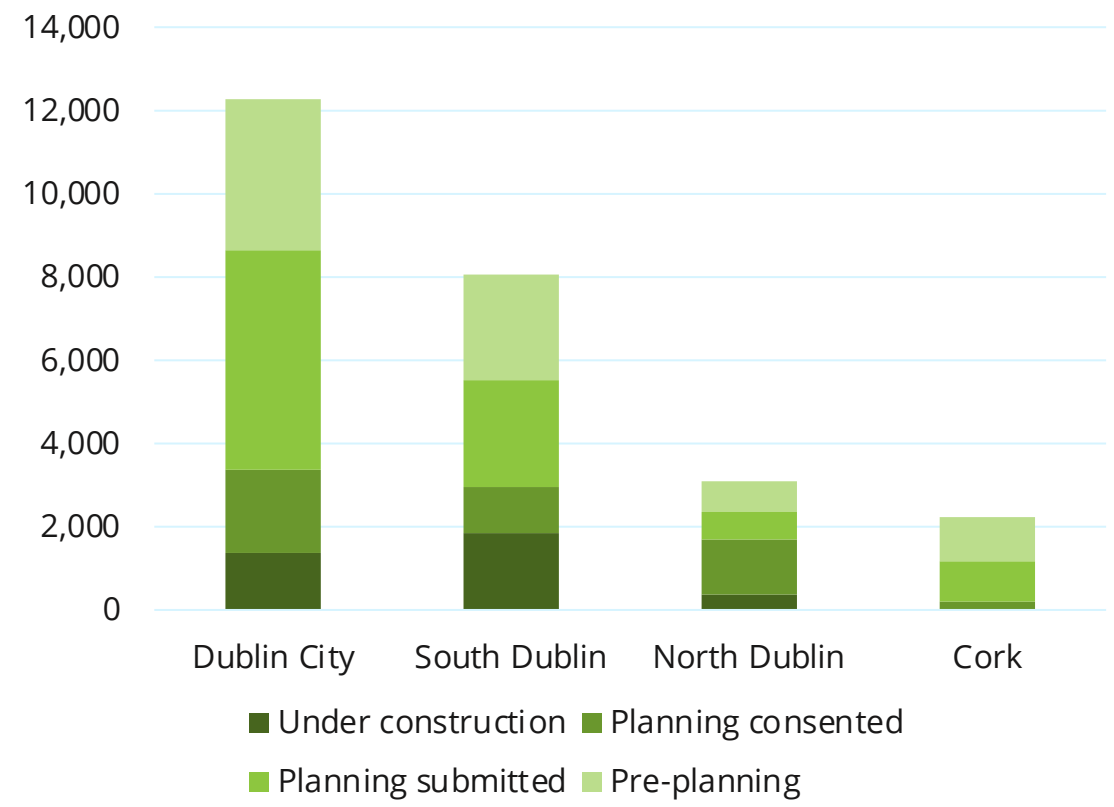
Looking ahead, permissions data suggest that new estate houses will continue to come on to the market in 2020 and 2021 and, from 2021, apartments too. But level of supply far behind projected demand.



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



**Pipeline of new apartments (as of mid-2019)**



Level of supply far behind projected demand

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



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

# Ireland has a persistent underlying medium-term need for significant additional housing – 47,000 units per year, concentrated in smaller urban homes



- To recap, there are four main sources of housing demand
  - Two relate to a growing population - natural increase and net migration
  - The other two are household size and obsolescence
  - The four sources combine to create a need for 47,000 new housing units per year
  - The bulk of new homes needed are:
    - (1) for smaller households and
    - (2) are 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 homes in or near cities mean there is a tension between viability (sale/rental prices exceeding costs) and affordability (prices being in line with incomes)



- Construction costs in Ireland are very high, compared both to average local incomes and to costs in other jurisdictions
  - The latest evidence is that, for a 2-bed apartment in Dublin's outer city / suburbs, all-in build costs are approximately €300,000 for a 83m<sup>2</sup> home
  - If it is a city centre / complex build, the same 2-bed apartment could cost up to 20-40% higher depending on site conditions, height, specification and the like
- Without public subsidy, these costs are borne by the ultimate occupants in the sale or rental price
- 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
  - 'Soft costs' of construction – including taxes – may be easier to change quickly than 'hard costs', such as labour and materials

# The importance of financial and environmental sustainability places 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 Ireland's 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. (Cost rental is a mechanism whereby rent covers the cost of construction and long-term maintenance only. Building on state land can further reduce the cost).
- 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 are Shared Equity Housing and Shared Ownership Housing



## Shared equity and shared ownership schemes Examples of how they work for the home buyer

### Shared Equity

- Buyer's deposit is 5% of property price
- Mortgage for 65%
- Equity loan 30% to cover remainder
- On repayment, equity loan is linked to market price



### Shared Ownership

- Buyer's deposit is 5% of share being bought
- Mortgage for 65%
- Rent to cover remaining 30%
- Option to 'staircase' up to full ownership



- ✓ Ownership from outset
- ✓ Buyer repays mortgage and equity loan over time

- Combination of owning and renting at outset
- Buyer can build up 100% ownership over time

# Ireland's Housing Need & Policy Options: Conclusion



- This report has examined Ireland's housing need and the policy options available to meet that need
- The composition of housing need in the medium-term will likely be driven by three factors:  
(i) falling household size (ii) urbanisation and (iii) environment sustainability
- All three factors imply a need for much greater diversity of housing options, especially for smaller households in and close to Ireland's major cities
- The current context is one of strong demand and, with the exception of owner-occupied housing for larger households, continuing weak supply
- The lack of responsiveness of new supply is ultimately a product of high construction costs, with viability (the price-cost ratio) well above normal levels of affordability (the price-income ratio) for most households and areas
- In addition to reducing costs, policy options include cost-rental, shared ownership and shared equity schemes