

# The Average Household Size Question: Impacts on Housing Demand Projections, Household Formation and Quality of Life

Main Message: Ireland has a small housing stock relative to the size of its population, which may be contributing to a delay or suppression of household formation amongst younger age cohorts compared to other countries.



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# 1.1 What is Average Household Size?

**Average Household Size** is an indicator of the size of a country's occupied housing stock relative to its population.

$$\text{Average Household Size} = \frac{\text{Private Household Population}^*}{\text{Occupied Dwellings}}$$

**Headship Rate** is the proportion of individuals that list themselves as head of household. The Headship Rate is the reciprocal of household size, i.e. as Average Household Size declines the Headship Rate rises.

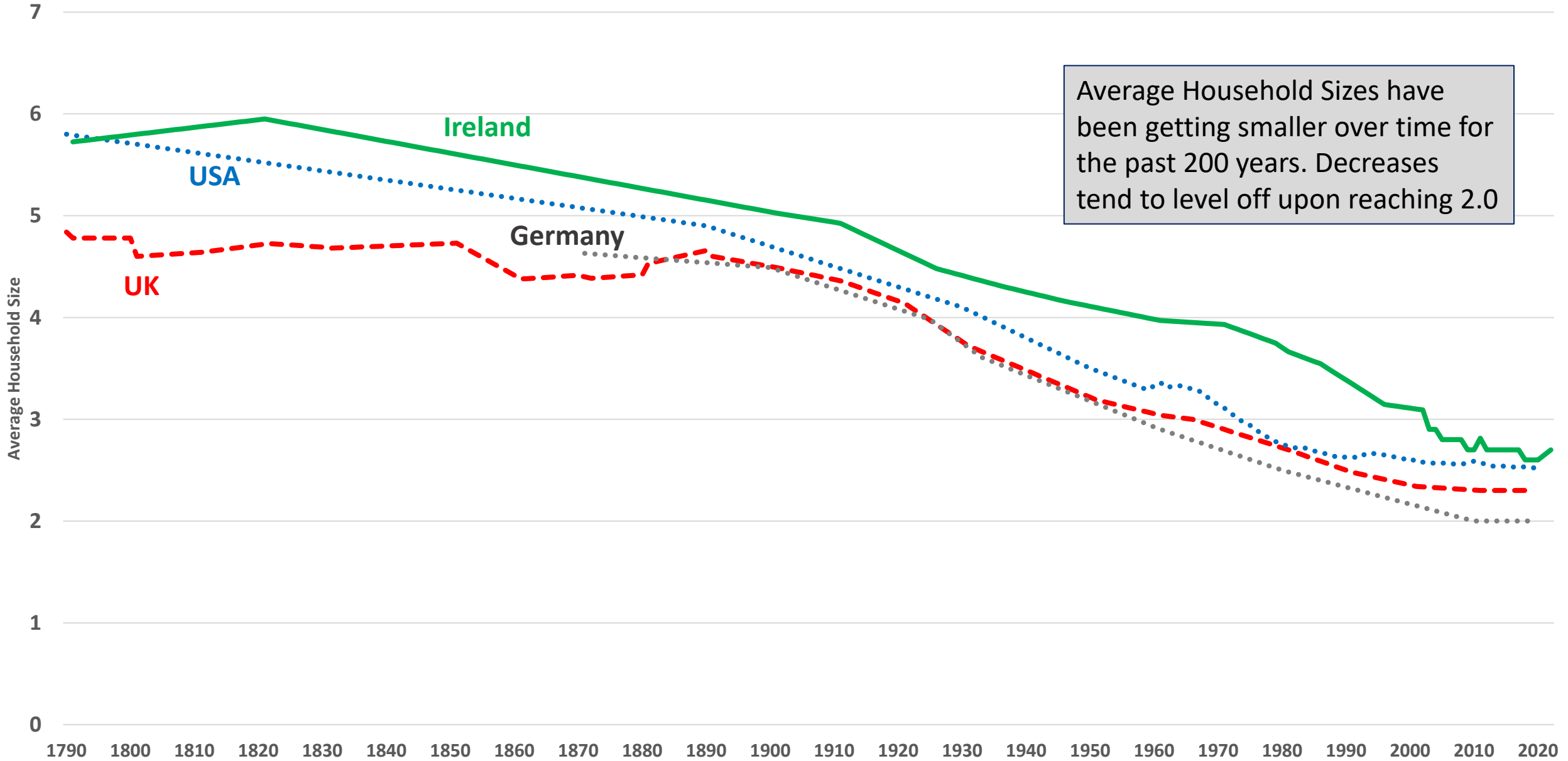
## 1.2 Two figures to remember:

2.7 → 2.0

Average Household Size in Ireland,  
Croatia

Average Household Size in Denmark,  
Finland, Germany, Norway, Sweden

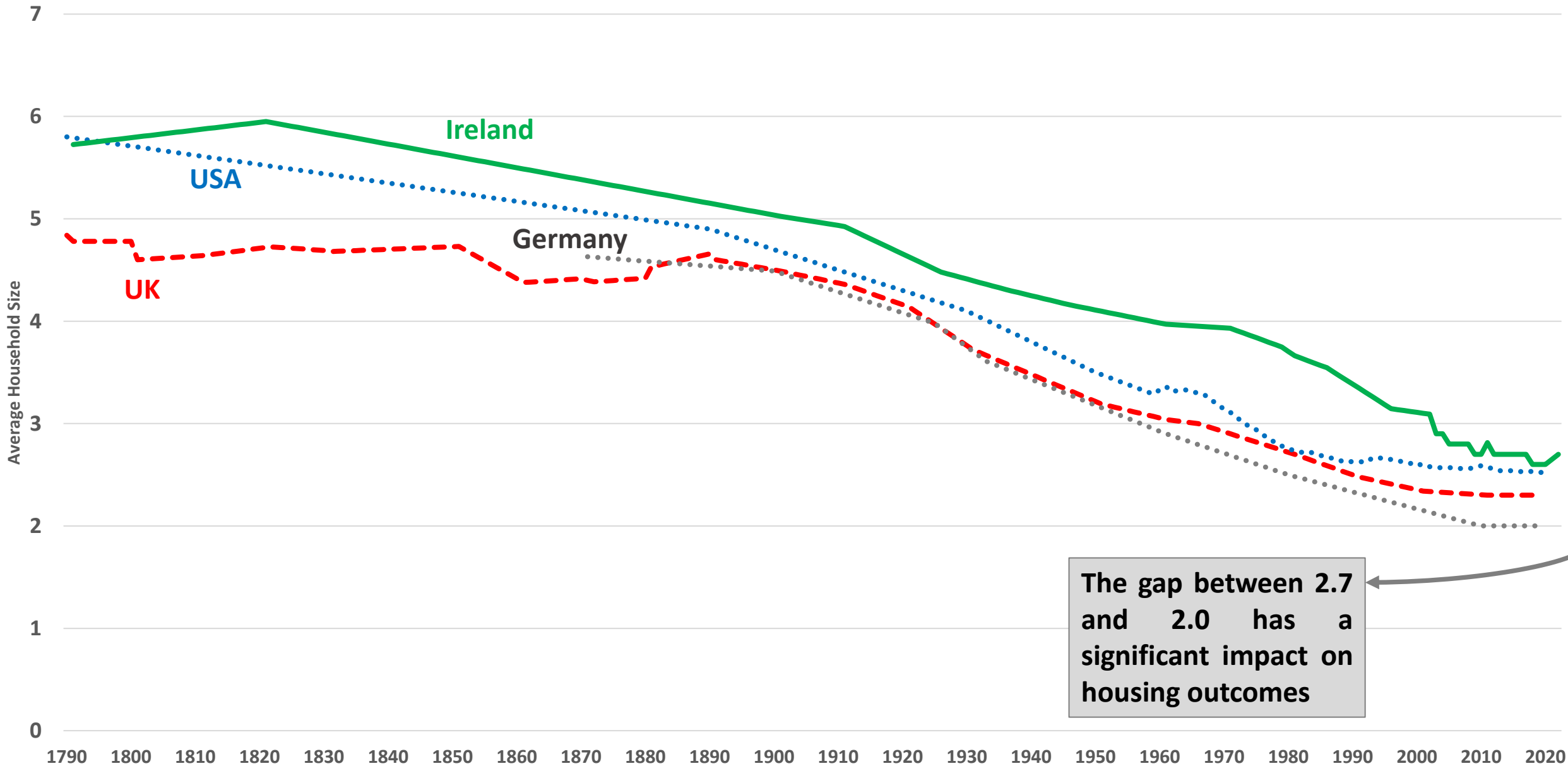
# 1.3 Average Household Size 1790 to 2022



Sources: Eurostat, Keilman, Kobrin, Laslett, Ó Gráda, Shimizu & Gray, UN and US Census Bureau  
Note that the Irish estimates for 1821-1911 are based on data for four counties only. For the period 1790-1980 UK figures relate to England and Wales only.

--- UK    ..... USA    ..... Germany    — Ireland

# 1.3 Average Household Size 1790 to 2022



The gap between 2.7 and 2.0 has a significant impact on housing outcomes

Sources: Eurostat, Keilman, Kobrin, Laslett, Ó Gráda, Shimizu & Gray, UN and US Census Bureau  
Note that the Irish estimates for 1821-1911 are based on data for four counties only. For the period 1790-1980 UK figures relate to England and Wales only.

# 1.4 Why does Average Household Size matter?

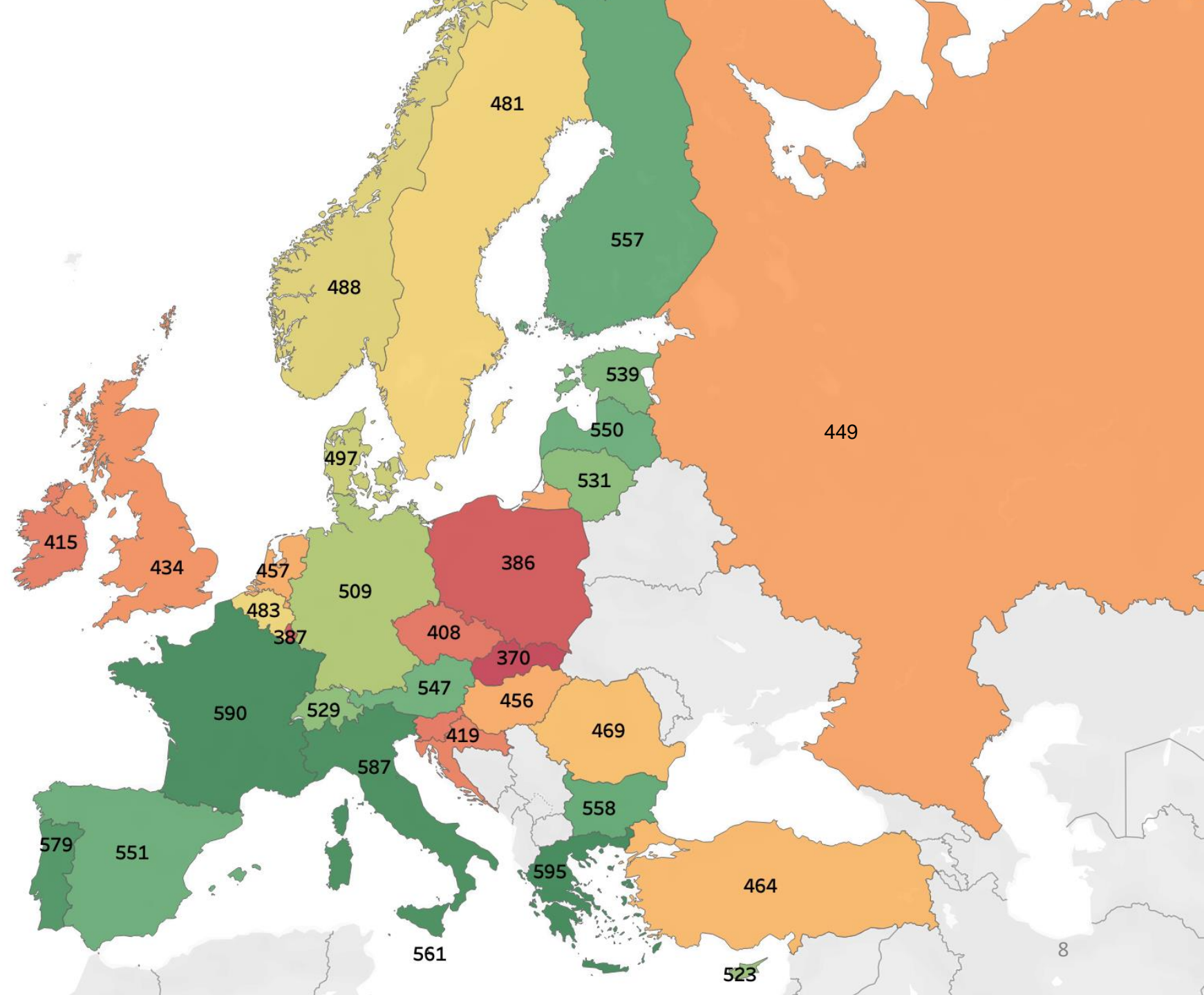
Average Household Size is an indicator of the size of a country's occupied housing stock.

**Benchmarking Average Household Size:** Ireland has an Average Household Size of 2.7 and one of the smallest housing stocks in Europe.

The top six European countries with the most positive outcomes in the housing market i.e., where young people are more likely to reach milestones, such as moving out of the parental home or starting their own families at younger ages, have Average Household Sizes of 2.0 to 2.1:

1. Denmark
2. Finland
3. Germany
4. Netherlands
5. Norway
6. Sweden

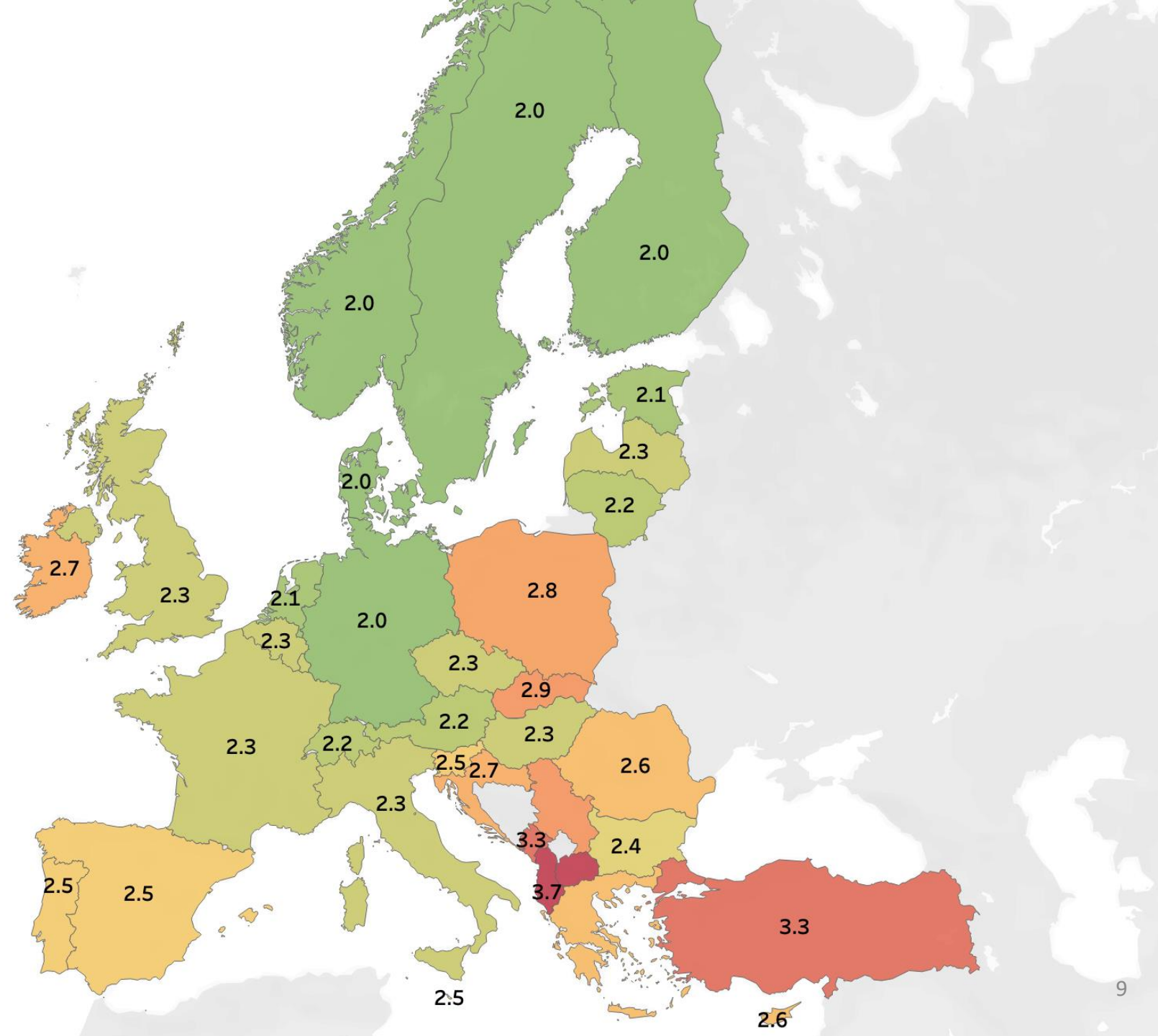
# Dwellings per 1,000 inhabitants in Europe



Sources: OECD, CSO



# Average Household Size in Europe



## 2. Housing demand projections (required annual new home construction levels)

Author (Date)	Upper Estimate	Note on average household size assumption
Davy (2021)	<b>67,000</b>	
Lyons (2021)	<b>60,800</b>	Household size of <b>1.9</b> in 2051.*
Lyons (2020)	<b>47,000</b>	Household size falls to <b>2.25</b> by 2040.**
Conefrey & Staunton, Central Bank (2019)	<b>47,000</b>	Household size falls to circa <b>2.3</b> by 2051 <sup>^</sup> .
Bergin & García-Rodríguez, ESRI (2020)	<b>43,500</b>	Household size falls to circa <b>2.3</b> by 2040 <sup>^</sup> .
EY (2020)	<b>36,000</b>	Household size falls to <b>2.37</b> by 2040.
Bergin & García-Rodríguez, ESRI (2020)	<b>33,000</b>	Household size remains at circa <b>2.7</b> until 2040 <sup>^</sup> .

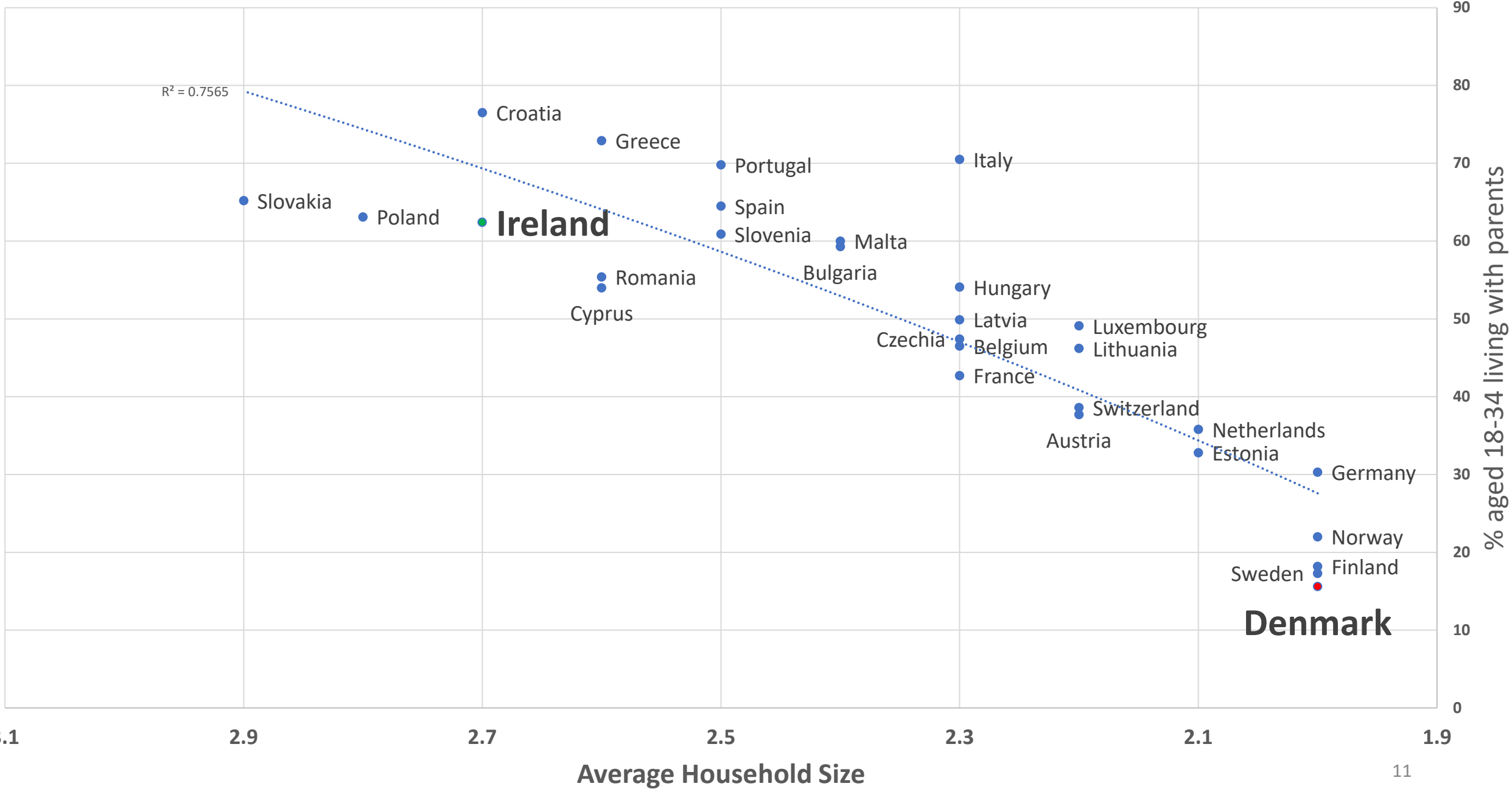
\*Obsolescence rate of 0.8% per year is assumed.

\*\*Obsolescence rate of 0.6% per year is assumed.

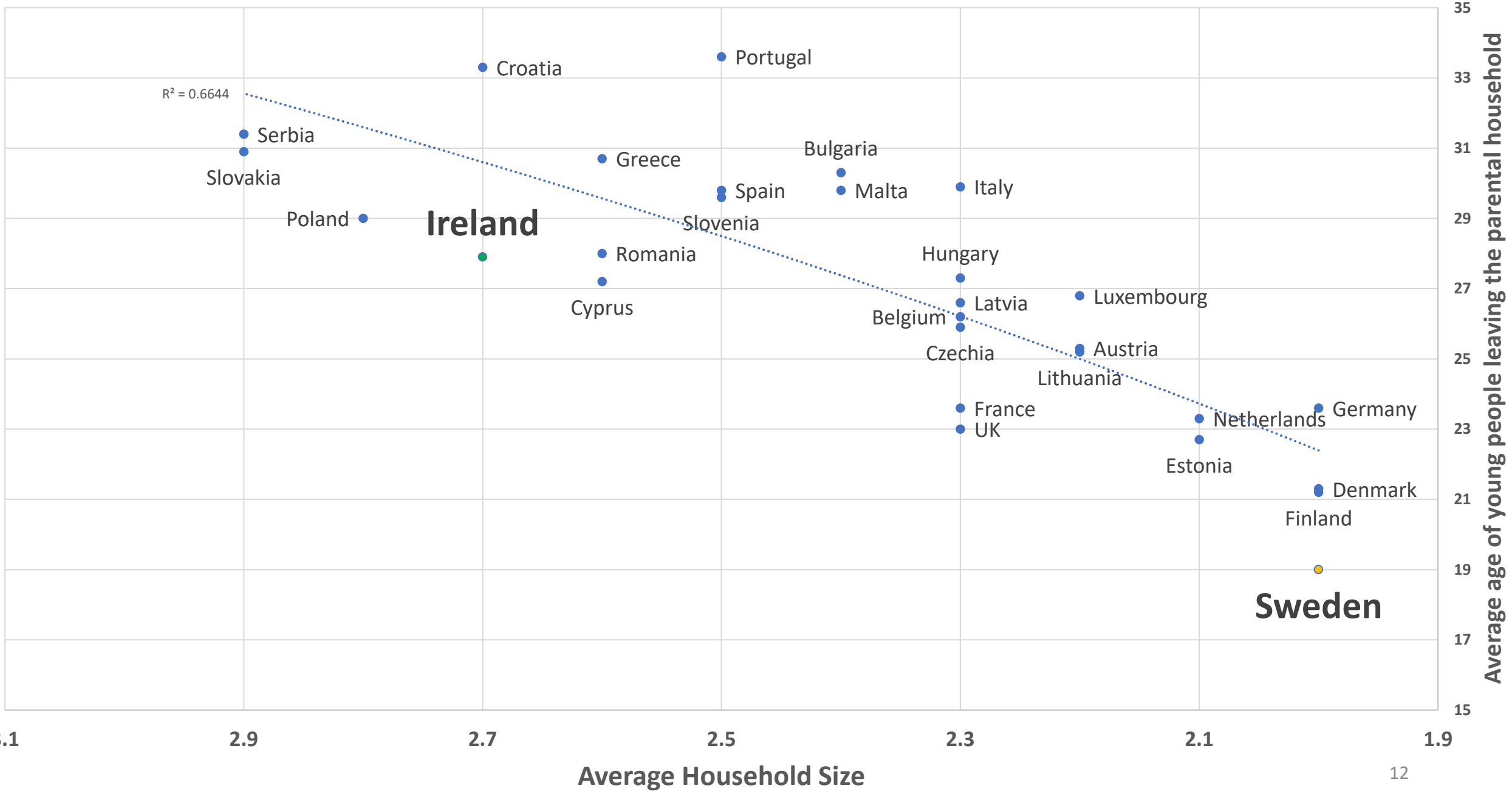
<sup>^</sup>Convergence with UK Headship Rates rather than an Average Household Size target.

Sources: Bergin & García-Rodríguez (2020), Conefrey & Staunton (2019), EY (2020), Lyons (2021) and RTE (2021)

# Over 62% of 18-34 year-olds in Ireland live with their parents, compared to 16% of Danes

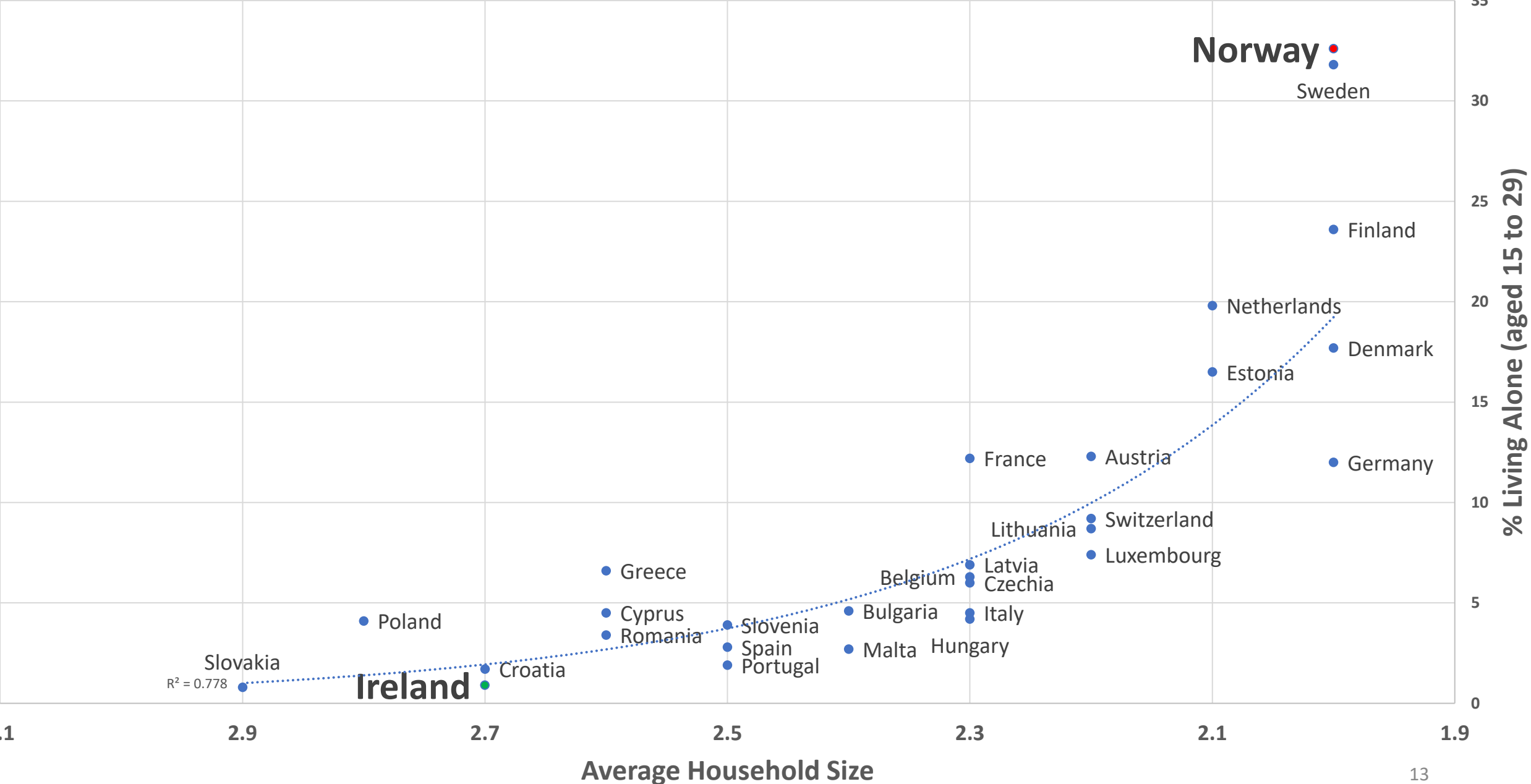


# The average Irish person moves out of the parental home at 28, nine years after the average Swede



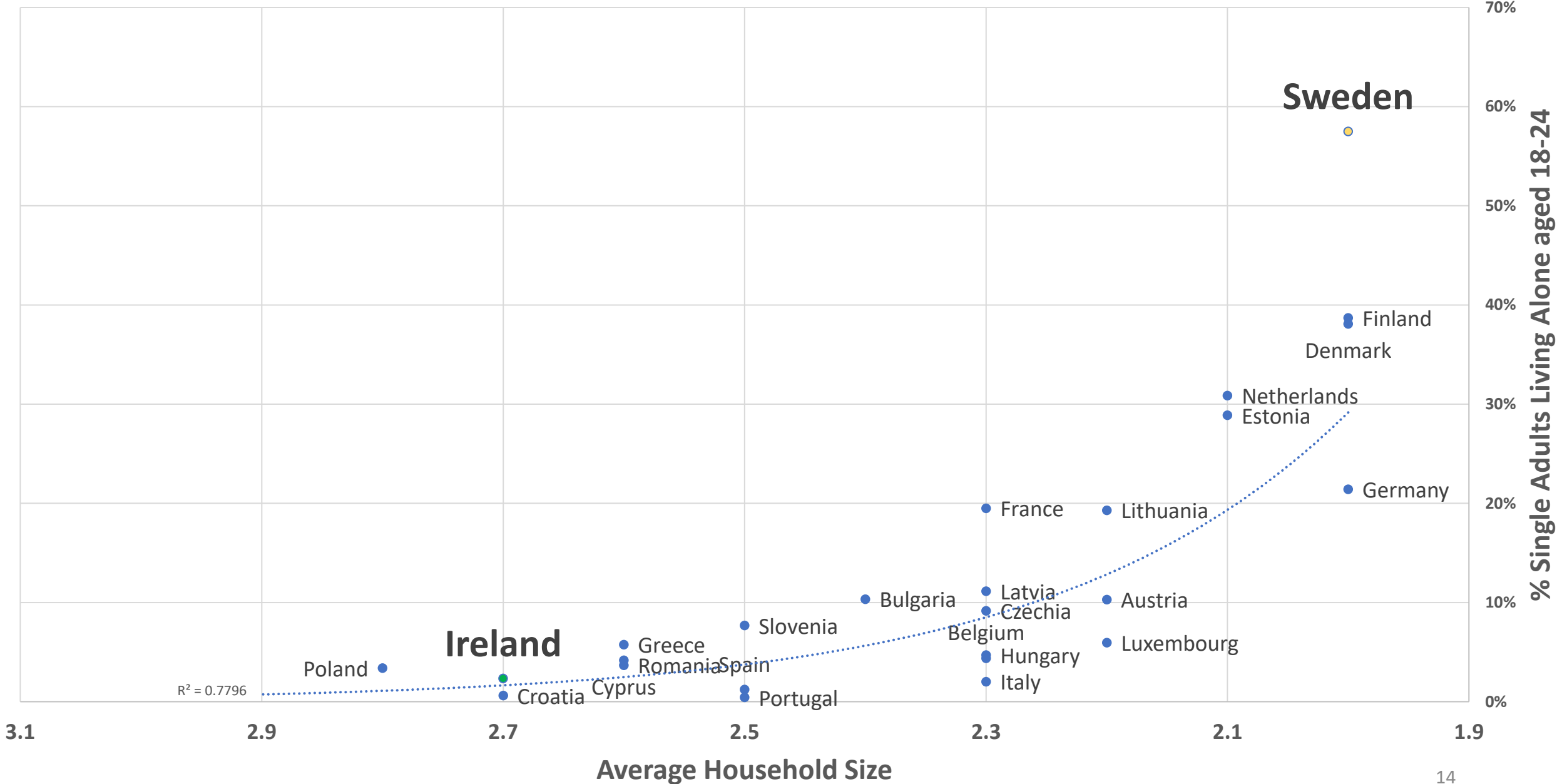
Sources: Eurostat, CSO, ONS

# Less than 1% of people in Ireland aged 15-29 live alone, compared to 33% in Norway

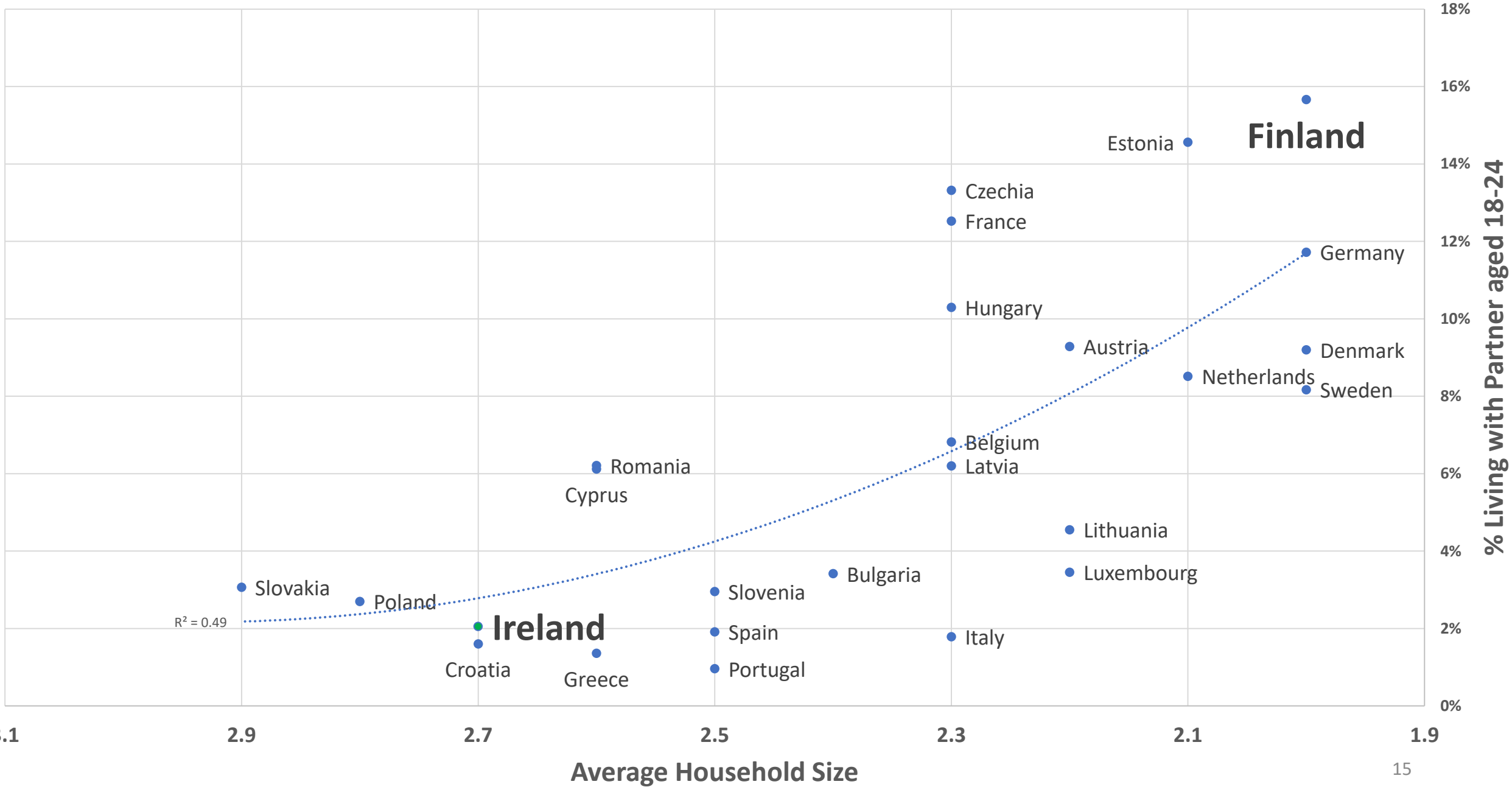


Sources: Eurostat, CSO

# 2% of Irish people aged 18-24 live alone, compared with 57% of Swedes

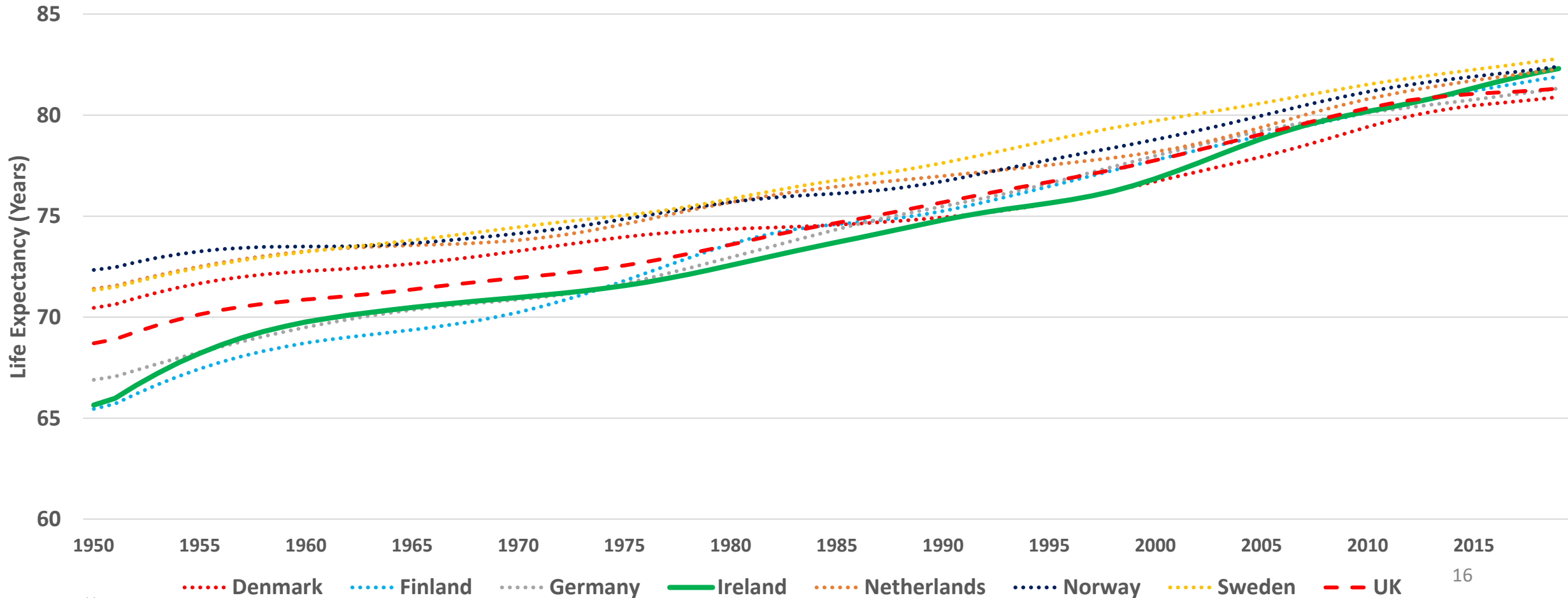


# 2% of Irish people aged 18-24 live with a Partner, compared with 16% of Finns



# 4. Ireland has similar demographics to countries with better housing outcomes

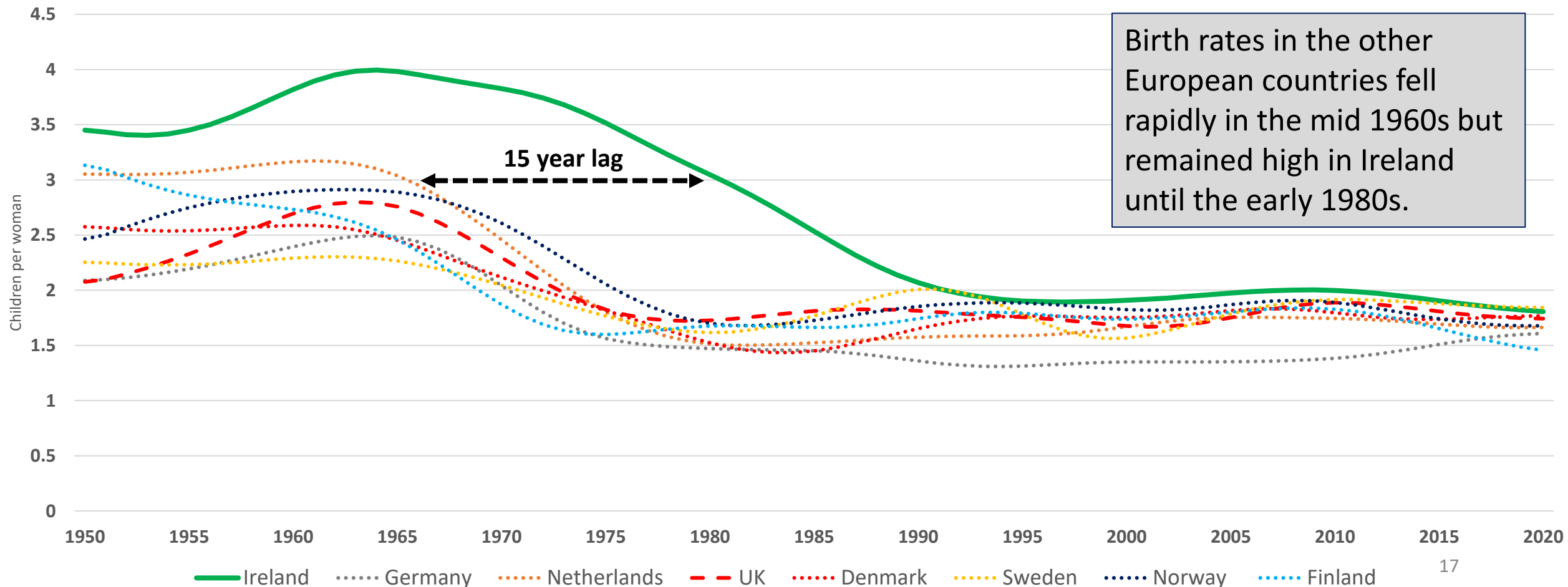
Life Expectancy





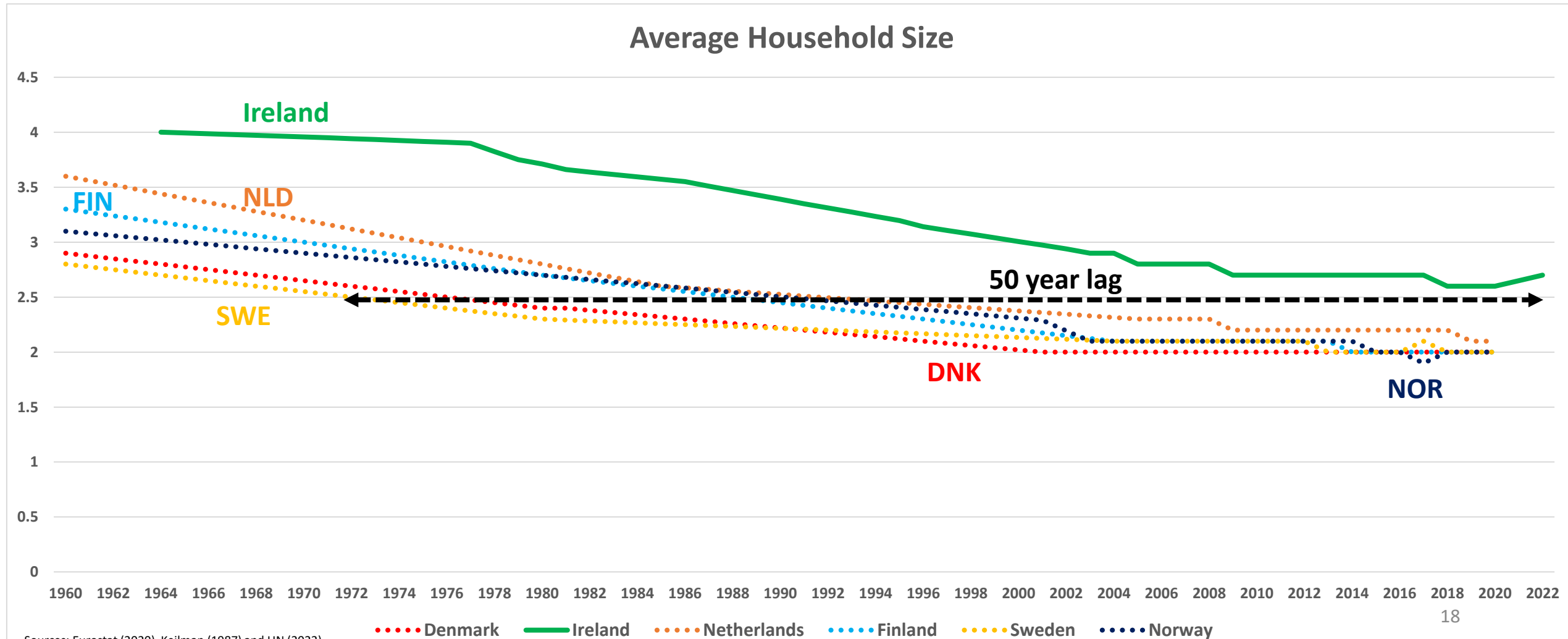
# Ireland was 15 years behind schedule in reaching the demographic transition

## Children per Woman

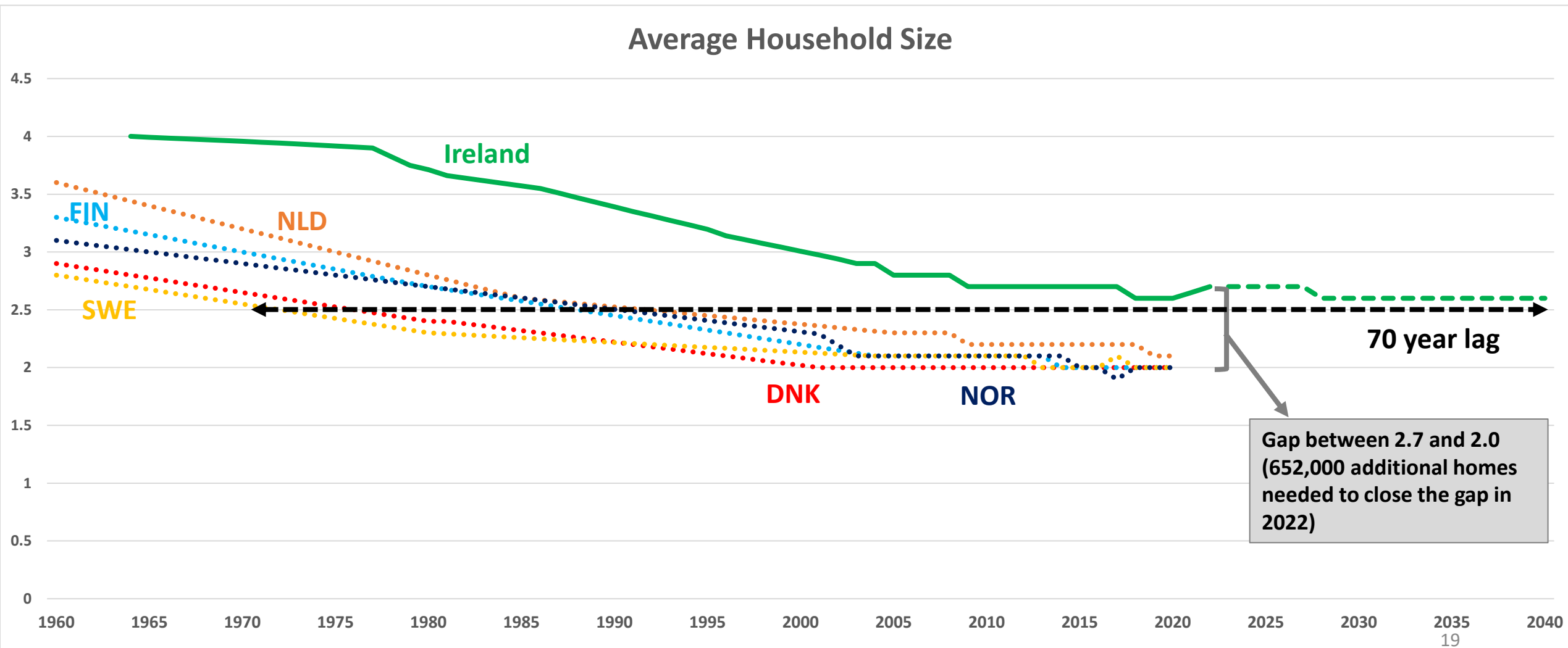


Birth rates in the other European countries fell rapidly in the mid 1960s but remained high in Ireland until the early 1980s.

# However, Ireland is 50 years behind schedule in the size of its housing stock relative to population



# ... and will be 70 years behind schedule in 2040



Sources: Eurostat (2020), Keilman (1987) and UN (2022)

Denmark Ireland Netherlands Finland Sweden Norway Ireland (projected)

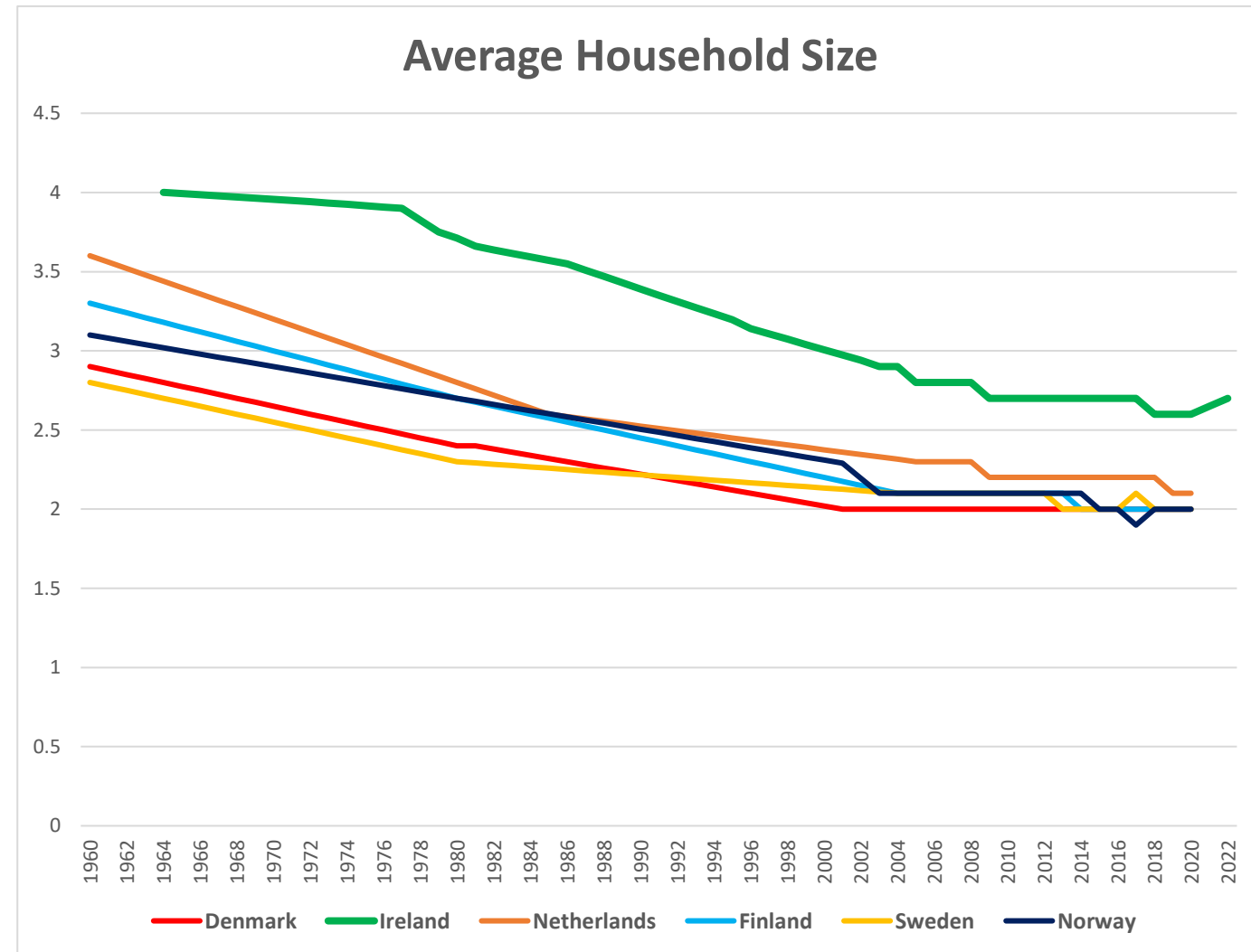
# Ireland's Average Household Size of 2.7 is similar to the level of Scandinavia in 1971 and the UK in 1981

Ireland's household ratio of 2.7 is similar to the level of:

- Scandinavia in the early 1970s,
- the UK in 1981 and,
- the USA in 1985.

Ireland is a 'normal' western country, where the population:

- lives longer
- marries and has children later
- has fewer children
- gets divorced



# 5. Health Factors

The built environment has an impact on public health. Crowded indoor settings contribute to the transmission of many infectious diseases. This can be observed in the context of the COVID-19 pandemic:

1. **British Columbia:** Differences in household size distribution alone can cause significant differences in incidence of COVID-19.
2. **Massachusetts:** Higher Average Household Sizes were significantly associated with higher COVID-19 case rates across towns and cities.
3. **UK:** Household size has been shown to be an important risk factor for both severe and non-severe COVID-19, even after adjustment for potential confounders such as deprivation, prior morbidity and age.

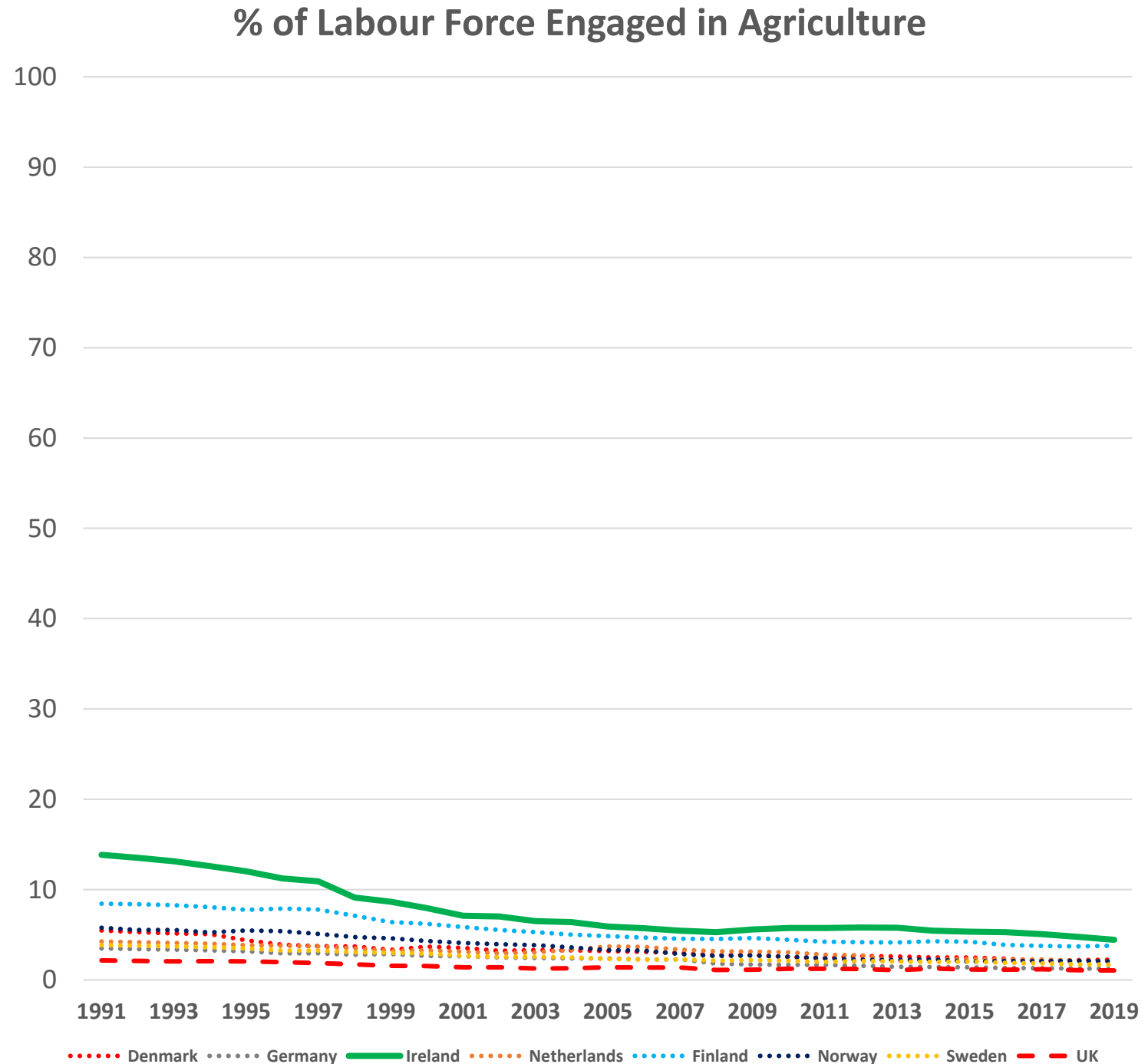
# 6. Social and Psychological Factors

Homes satisfy a range of social and psychological needs. Where households cannot form there are detrimental effects on three values in particular:

- 1. Territory:** Occupied homes are the primary territory in people's lives. Homes offer security, control, a locus in space and privacy. It's the place where people spend much of their time and with the people who are most important to them. The home is the most appropriate physical framework for family and family life and provides the spatial framework of the occupier's life and through its familiarity can foster a sense of belonging, stability and rootedness.
- 2. Identity:** The importance of home as a symbol of identity is reflected in the pride that people take in their dwellings and the significance in how the home is presented. Through the investment of time and energy the occupier pours identity into the home. Homes reflect one's ideas and values, and act as an indicator of personal status. Physical settings and artefacts (e.g., house façade and the interior design) reflect and shape people's understandings of who they are as individuals and as members of groups.
- 3. Social and cultural space:** Every aspect of home meanings is socially and culturally located. From housing design to the way homes are organised, to the ways they are adjusted to the ways of life of occupiers, functioning as social space and so on. Homes also act as a locus for relationships with family and friends, and as a centre for activities.

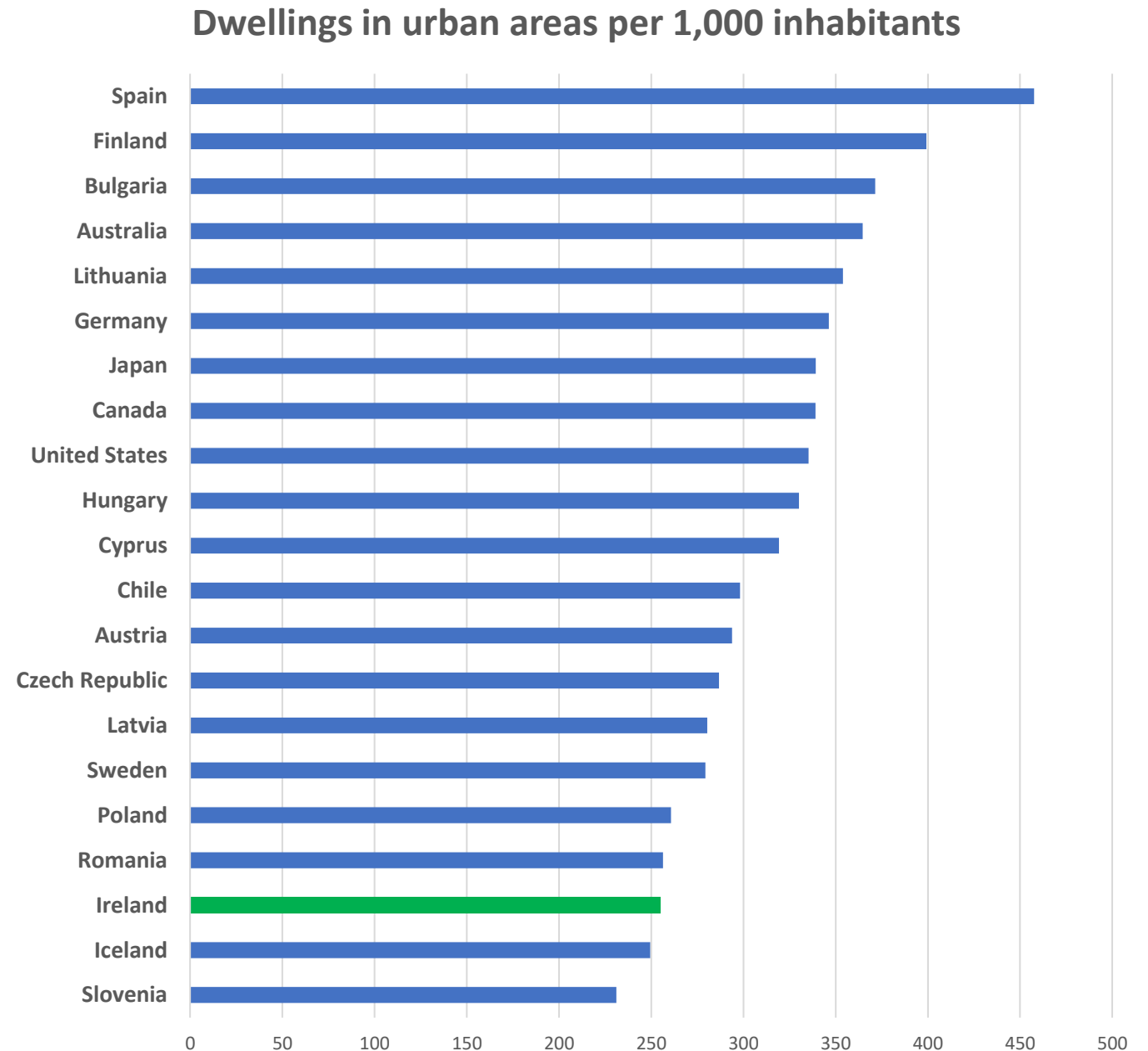
# 7.1 Urbanisation

- Ireland has a modern labour force with a well developed services sector.
- Similar to other western countries, less than 5% of the Irish workforce was employed in agriculture in 2019.



## 7.2 Urbanisation

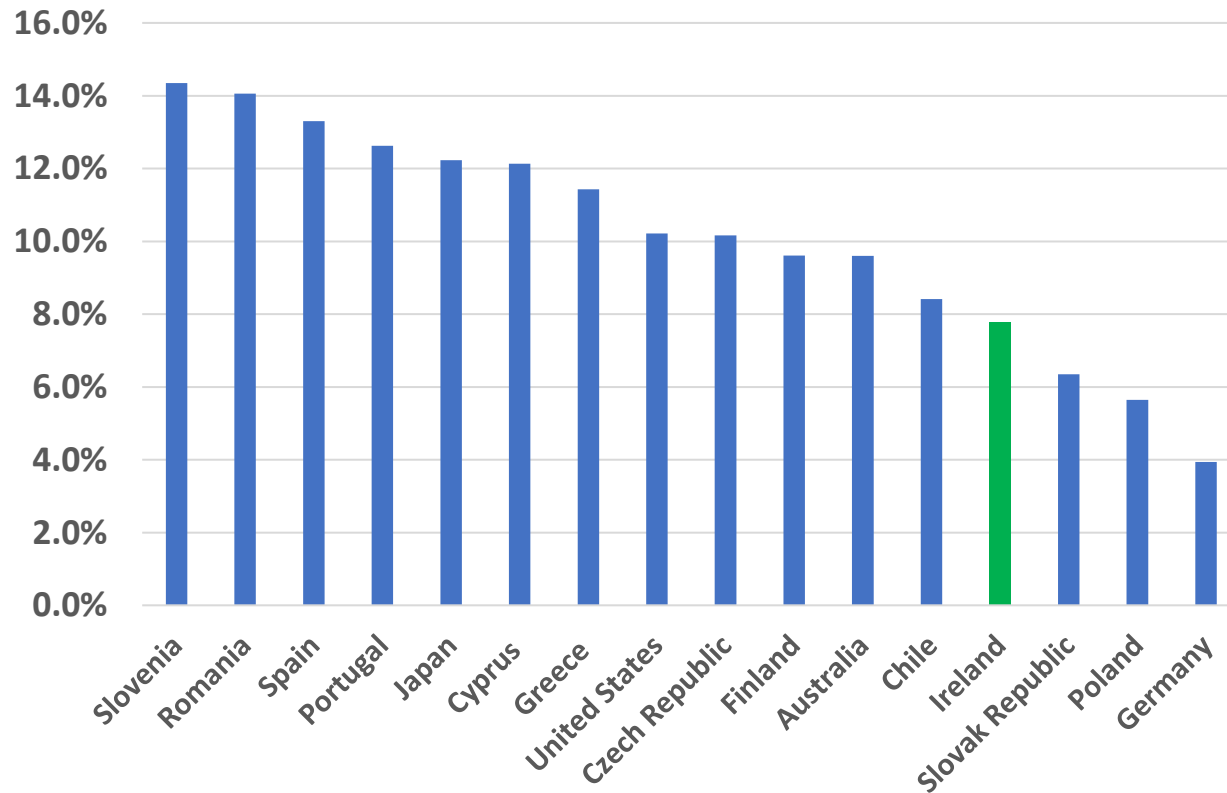
- However, the number of homes in general in Ireland, and homes in urban areas in particular, is low.
- High density dwellings in urban areas doesn't necessarily mean apartments.





# 8. Vacant Dwellings

Vacancy rate in urban areas (2020 or most recent year available)



- Ireland's vacant home figure stood at 230,000 in 2011, falling to 166,752 in 2022.
- There are higher vacancy rates in rural areas.
- **Dept. Finance (2022):** Overall vacancy levels are low in Ireland and in line with a functioning housing market. The categories and duration of vacancies suggest that vacancy is predominately short-term, with the most common reason being refurbishment.

# 9. Rent Prices

- Falling rents are linked with an increased rate of household formation.
- Most new entrants to the housing market tend to be renters. Therefore the cost of renting plays an important role in determining whether a person chooses to enter the market.
- Rising rents reduce household formation rates until there is a supply response.
- The impact of affordability on household formation takes the form of students staying at home during higher education, employed people continuing to reside in their childhood home or a rise in the number of adults sharing rental accommodation.

# 10. Conclusion

- Ireland's Average Household Size is high and the number of dwellings per capita is low, particularly in urban areas, and this is having negative social impacts.
- Countries with lower Average Household Sizes tend to have more positive housing outcomes.

What level of new home construction per year is necessary?

- 652,000 additional dwellings are required to reduce Ireland's Average Household Size from 2.7 to 2.0 in 2022.

Country	Average Household Size	Annual construction of housing units needed from 2023 to 2032 for Ireland to attain this Average Household Size by the end of 2032*
<b>Northern Ireland</b>	2.4	53,000
<b>Scotland</b>	2.1	90,000
<b>Germany, Nordics</b>	2.0	100,000



# 11. Case Study



- Sweden's Million Programme 1965-1974
- Over one million homes were built over a ten-year period (100,000 new homes per year).
- The country had a population of 8 million people at the time.









**Thank you**

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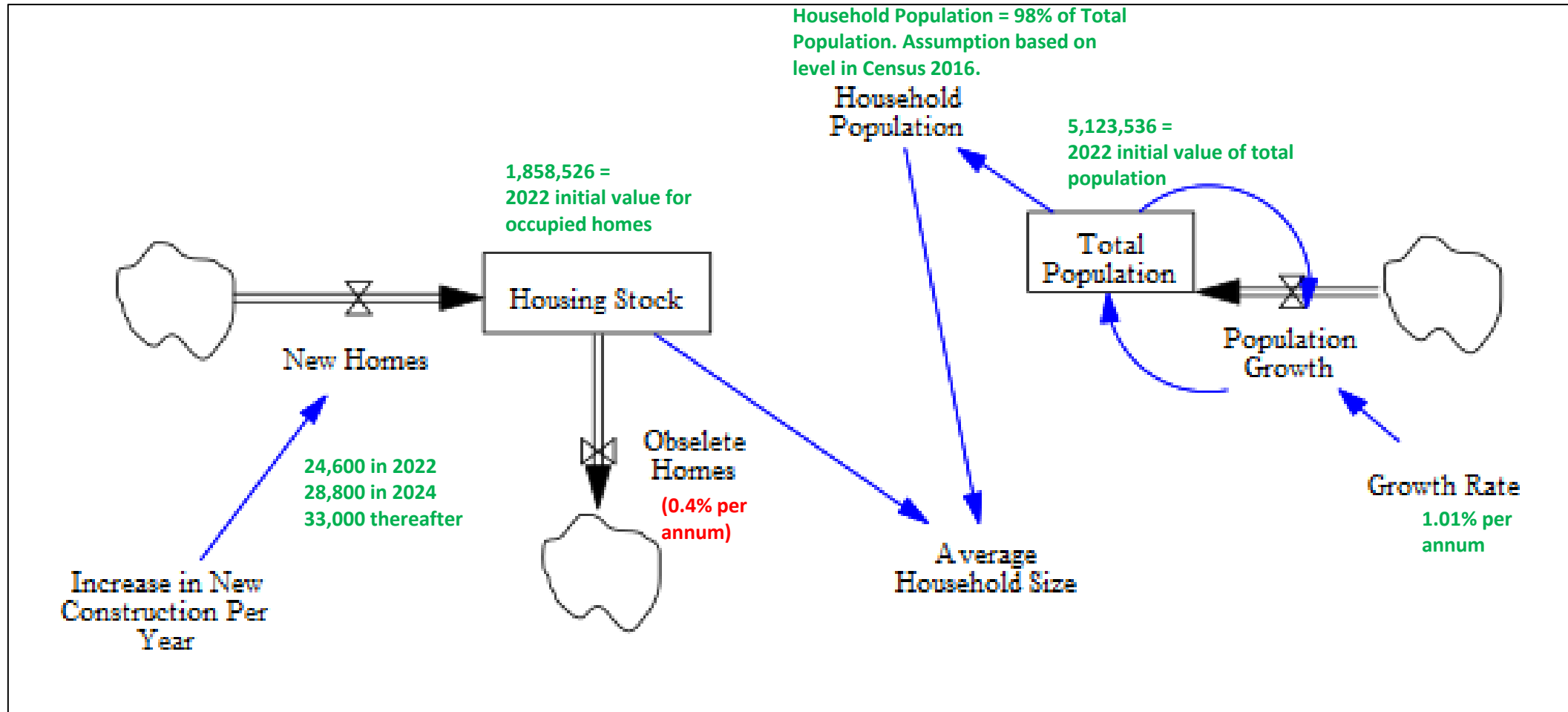
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# Appendices



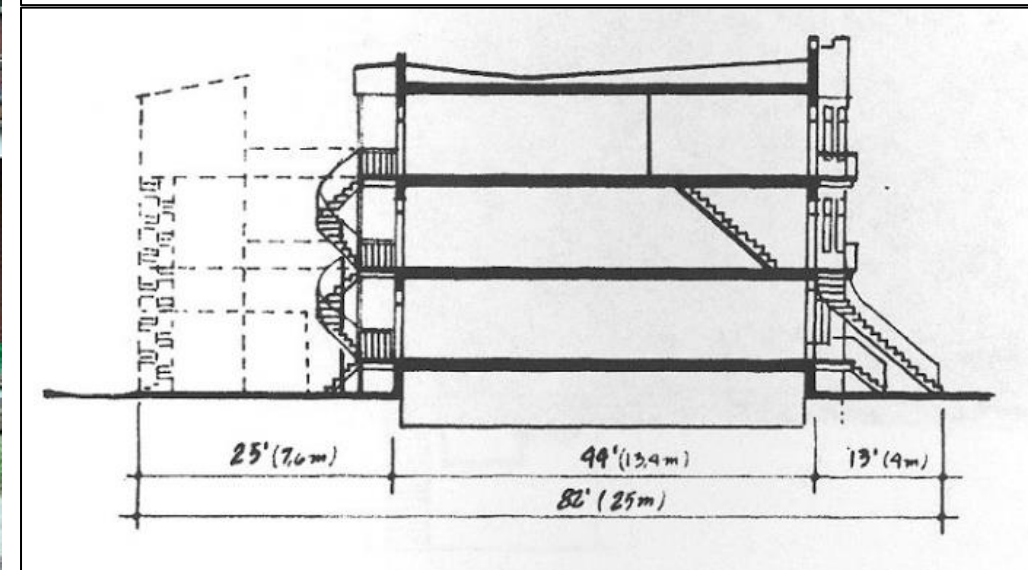
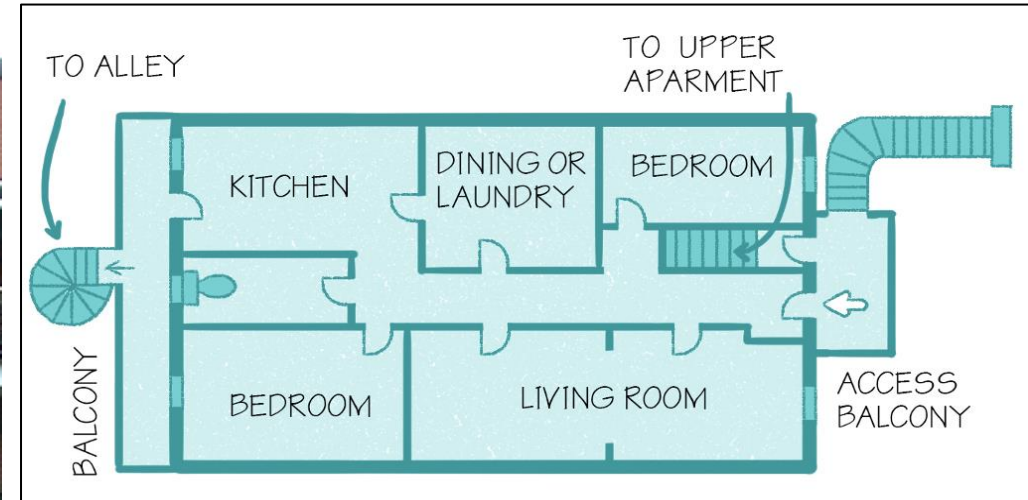
# A. Stock and Flow model diagram



## B. Explanation of Model Variables

Variable	Initial Value	Note
<b>Household Population</b> (Private Household Population)	98%	Estimate of Household Population as 98% of Total Population is based on the proportion living in private households in Census 2016.
<b>Housing Stock</b> (Occupied Homes)	1,858,526	1,858,526 occupied homes according to Census 2022.
<b>New Homes</b>	24,600	Housing for All targets the delivery of 24,600 homes in 2022 (Housing for All Q1 2022 Progress Report).
<b>Obsolete Homes</b>	0.4%	0.4% per annum was the lowest obsolescence rate used by Lyons (2021).
<b>Population Growth</b>	1.01%	Growth rate based on the CSO's M1F1 forecast. Note that population growth has been on the high end of the CSO's 2016 projections. These projections have broadly underestimated immigration and overestimated fertility.
<b>Total Population</b>	5,123,536	Total population according to Census 2022.

# C. Street-Oriented (Own Front Door) Low Rise High Density Example 1 – Montréal Triplex or 'Triple-Decker' Apartments



Sources: [bloomberg.com/news/features/2021-08-04/looking-to-rent-in-montreal-get-to-know-the-plex](https://www.bloomberg.com/news/features/2021-08-04/looking-to-rent-in-montreal-get-to-know-the-plex); [wallsofthecity.blogspot.com/2013/08/vernacular-housing-in-montreal-three.html](https://wallsofthecity.blogspot.com/2013/08/vernacular-housing-in-montreal-three.html); [brickmasonry.blogspot.com/2014/04/residential-3-stories-typical-montreal.html](https://brickmasonry.blogspot.com/2014/04/residential-3-stories-typical-montreal.html)



# D. Street-Oriented (Own Front Door) Low Rise High Density Example 2 - Back-to-Back Houses, McGrath Road, London





## E. Street-Oriented (Own Front Door) Low Rise High Density Example 3 - Detached Houses, Civita, San Diego



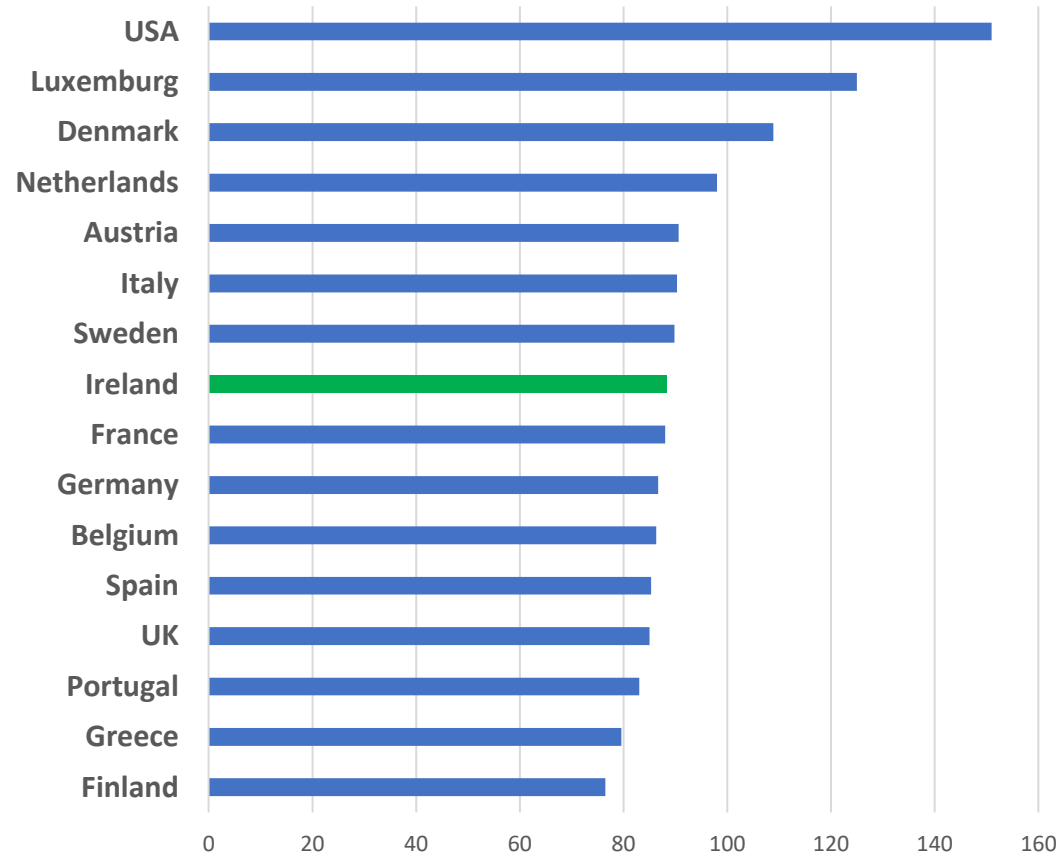


## F. Street-Oriented (Own Front Door) Low Rise High Density Example 4 - Detached Town Houses, Somerset Green, Houston

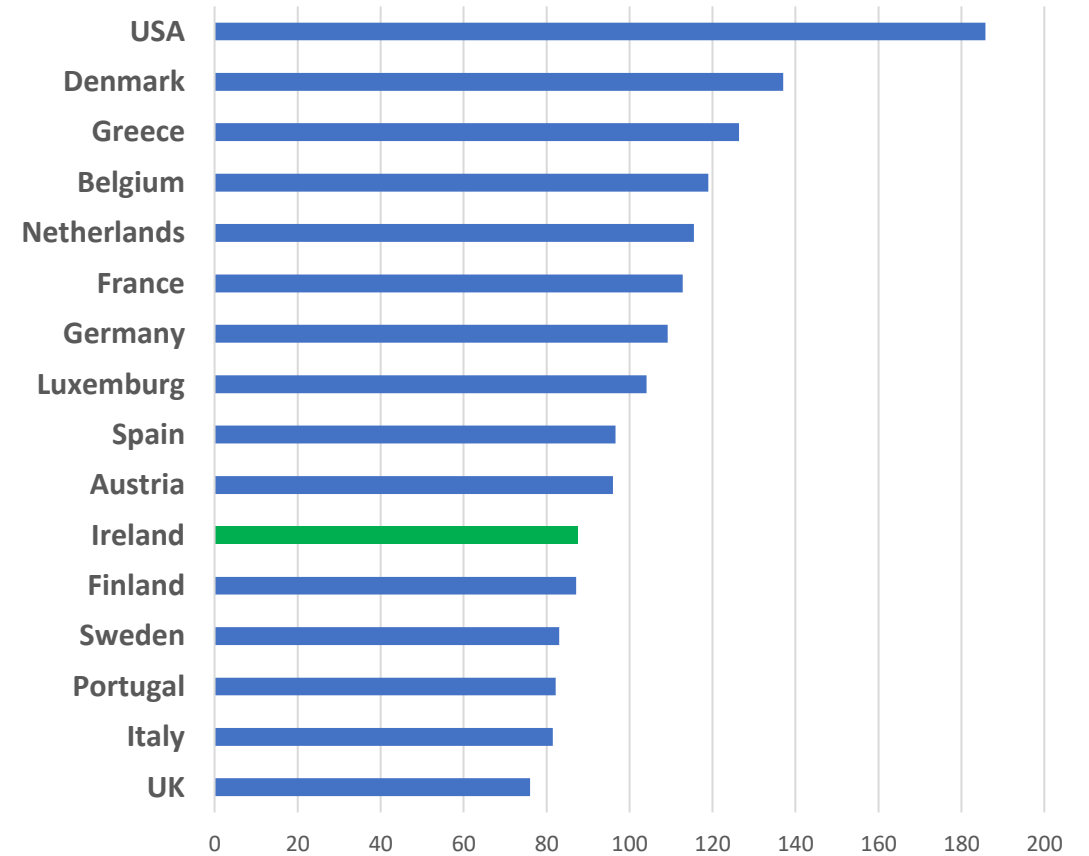


# G. Average Dwelling Size (Square Metres)

## All Homes



## New Homes



# H. Share of young adults aged 18-34 living with their parents

