Factors driving Irelands Housing Need

David Duffy
Residential Property Research Programme

- 2 Year Research Programme
- Funded by NAMA and IBF
- ESRI undertake research and publish findings
- Year 1 focus on demand
Outline

- Forecasts for new household formation
  - Population forecasts
  - Headship
  - Alternative assumptions
- Where will the dwellings be needed?
- Costs and new household formation
Population forecast

ESRI Demographic model

- Population forecasts based on
  - life expectancy, fertility, births, and deaths (CSO)
  - migration, education
- Population in each year by single year of age and gender
Population forecast

Recovery Scenario, MTR

- 2011: 4.6m
- 2020: 4.84m
- 2025: 5.01m
- 2030: 5.16m
Population Structure, aged over 25 yrs

Thousands

2011 2020 2025 2030

25 - 29 yrs 30 - 34 yrs 35 - 39 yrs 40 - 44 yrs 45 - 49 yrs 50 - 54 yrs 55 - 59 yrs 60 - 64 yrs 65 yrs +
Headship and Household formation

- Headship rates measured by the proportion within each age group identified as head of household or household reference person.
- Projected forward based on trend between Census 2002 and 2011 (UN, ONS).
Headship shows steady rise
Scenarios for New Household Formation in Ireland

Number of households, 000s

- Headship Trend Census 2002 to 2011
- Constant headship
Alternative Scenarios for New Household Formation in Ireland

Number of households, 000s

- Headship Trend Census 2002 to 2011
- Constant headship
- Net emigration
- Net immigration
## Alternative Scenarios for New Household Formation in Ireland

<table>
<thead>
<tr>
<th>Scenario</th>
<th>Number of Households, 2030</th>
<th>Increase, 2011-2030</th>
<th>Annual average Increase, 2011-2030</th>
</tr>
</thead>
<tbody>
<tr>
<td>Base: Headship constant at 2011 rates</td>
<td>2.01 million</td>
<td>356,000</td>
<td>19,400</td>
</tr>
<tr>
<td>Trend in headship: Census 2002-2011</td>
<td>2.14 million</td>
<td>481,000</td>
<td>25,600</td>
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<tr>
<td>Trend in headship: Census 2006-2011</td>
<td>2.29 million</td>
<td>635,000</td>
<td>33,300</td>
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<tr>
<td>Converge to 2011 headship rates in England and Wales by 2030</td>
<td>2.15 million</td>
<td>499,000</td>
<td>26,500</td>
</tr>
<tr>
<td>Higher Immigration, +15,000 per annum</td>
<td>2.26 million</td>
<td>607,000</td>
<td>31,900</td>
</tr>
<tr>
<td>Higher Emigration, +15,000 per annum</td>
<td>2.01 million</td>
<td>355,000</td>
<td>19,000</td>
</tr>
</tbody>
</table>
Residential construction

- Under a range of scenarios over 20,000 new households, on average, will be formed each year over the long term.

- Even with forecast growth, the level of new house completions will be lower than demand in the short-run.
House completions
County Level Analysis

- There is significant difference across the country with respect to housing market and economic performance
  - This implies that there is no such thing as a national housing market.
- Analysis at the county level considered the requirement for additional housing due to population growth and modelled key housing variables (see Morgenroth, 2014).
Population Projections

- Constructed using ESRI's county population model (IC-POP).
- The future population is equal to the current population (base 2011) plus the natural increase (births-deaths) plus net migration.
- Population projections are calculated applying assumptions about mortality (same as CSO), fertility (unchanged from 2011), and internal migration (towards the large cities) and international migration (ESRI MTR Recovery Scenario).
- Applying the average county household size (assumed to be declining at the same rate based on ESRI MTR), the number of households is calculated.
Where will the households be?
Projecting Housing Needs

- Using the projections it is possible to estimate the required housing stock.
  - Census 2011 identified a significant excess in vacant dwellings (vacancies are never zero).
  - There has been some construction.
  - There is a normal rate of obsolescence (properties become structurally unsound or are destroyed/damaged by fire etc.).

- Assuming no completions from 2013, accounting for initial number of vacant units, depreciation and a normal vacancy rate, calculate the number of properties required.

- Bulk of requirement (60%) in Dublin and Dublin commuter belt (26%)
Household formation and tenure choice

- Our context is Ireland's property crash
  - Falling rents and falling prices
- We model housing market behaviour of young Irish people
  - Whether to form a household
  - What type of tenure to choose
National House prices
January 2005 =100
% change in nominal house prices

1995 Q1 – 2007 Q1

2007 Q2 – 2013 Q4
Affordability: Prices and Rents

- PRTB Rent Index
- CSO National House Price Index
Household growth continued in spite of housing market boom and bust

- Census 2011: Number of households increase by 187,112 from Census 2006
- Number of households renting increase by 152,000
- Homeownership rate falls from 74.7% to 69.7%
Strategy

- Focus on those aged from 20 to 39 (5 yr age groups)
  - This allows us to identify distinct behaviours from each age-group
- QNHS Data pooled over years 2001-11
  - Provides large samples
- Tenure choice as a function of the relative costs of renting and owning
  - Difference of user cost of housing and average rents
  - User cost: function of price expectations, mortgage costs, taxation and depreciation
User cost of housing vs. rents, 2001-2013
Results - Formation

- Find expected negative relationship between affordability and formation rates
  - If rent rises or incomes fall, forming a household becomes less affordable
- Highest formation rates among women, migrants, employed, those in relationships
- Decomposition of change in formation rates:
  - Pre-crash: change in distribution of characteristics
  - Post-crash: change in behaviour
Results - Tenure

- Identify the tenure equation using the relative cost of renting and owning
- Find expected positive relationship between cost difference and renting
  - Renting more likely when the user cost rises or rents fall
  - Equivalently, negative relationship with owning
- New entrants to housing market tend to be renters
Conclusions

- Household growth continued in spite of housing market boom and bust
- Demographics alone cause 20,000 households to form per year
- Incentives favoured renting rather than owning post-crash
  - Cost and perceptions
  - Irish young people respond to incentives, switch to renting
- Fall in homeownership rate partly attributable to household formation
  - Entrants to the housing market tend to be renters
- Rents have begun to rise since 2012
  - Household formation rate has fallen slightly in 2013
- Price expectations have reversed
  - Underpin demand for owner-occupied housing
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