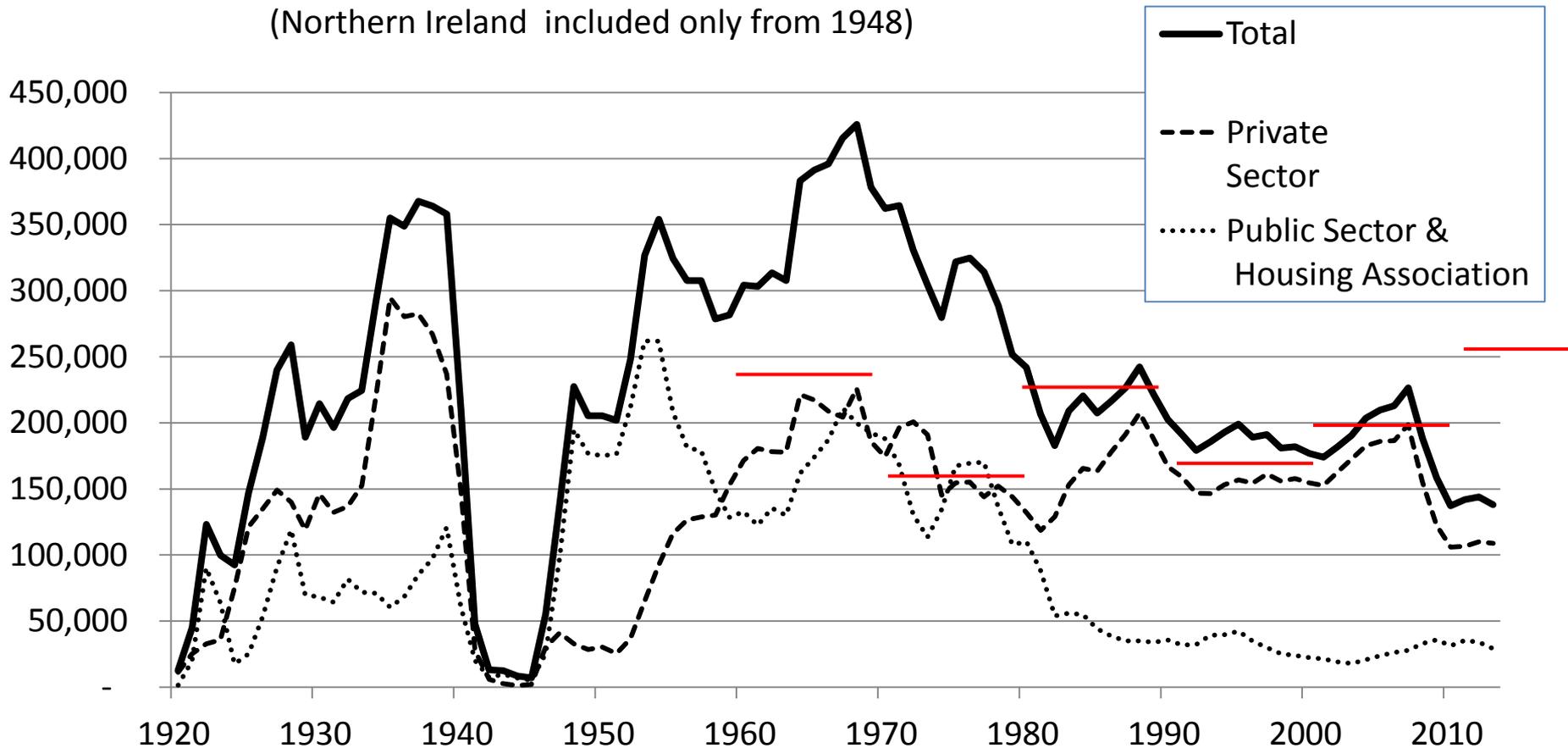


Explaining changes in household size

Ludi Simpson (University of Manchester), and Ann Berrington (University of Southampton)

New house building in UK each year 1920 to 2013

(Northern Ireland included only from 1948)



Annual average growth in number of households (source: DCLG Live Table 401)

Sources: From 1946: DCLG live tables. Earlier: Scottish Housing, and AE Holmans 2005

Aims

- Quantify the contributions of each driver of housing demand

$\Sigma_{a,s,r}$ (household population x headship rate)

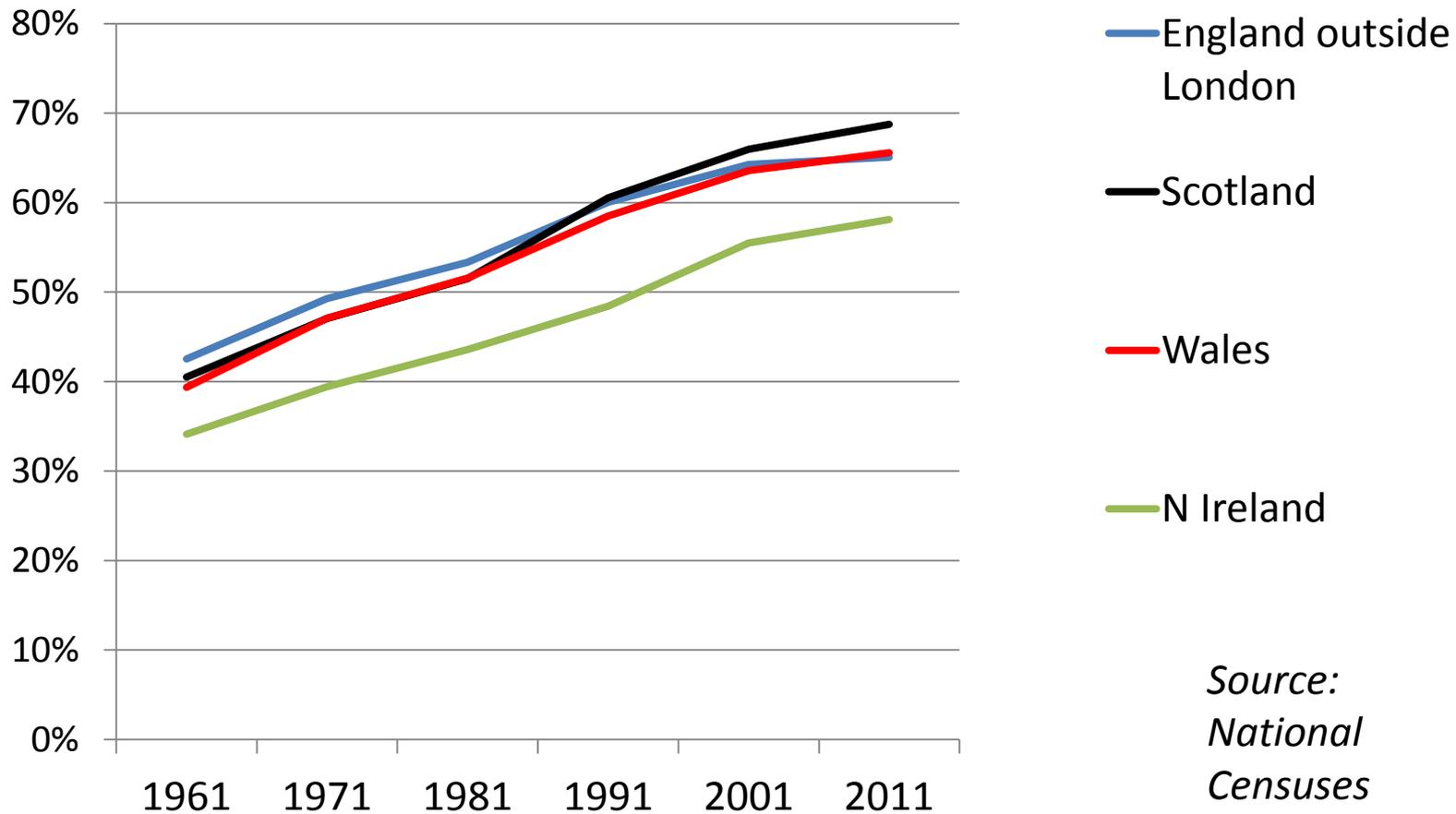
- Household population change
 - Population growth
 - Age and sex composition
 - Partnership ('relationship') status
- Household headship rates among adults
 - Young 15-34; middle 35-59; older 60+
- Implications for household projections

Cautions

- Policy is mostly focused on changed behaviour
 - Household representative rates
 - Changes in relationship status
- Projected households indicate *effective* demand
 - Additionally there is suppressed demand: concealed families, delayed partnerships
- Full government analysis of 2011 census awaited
 - Analysis using 2012-based projections is provisional

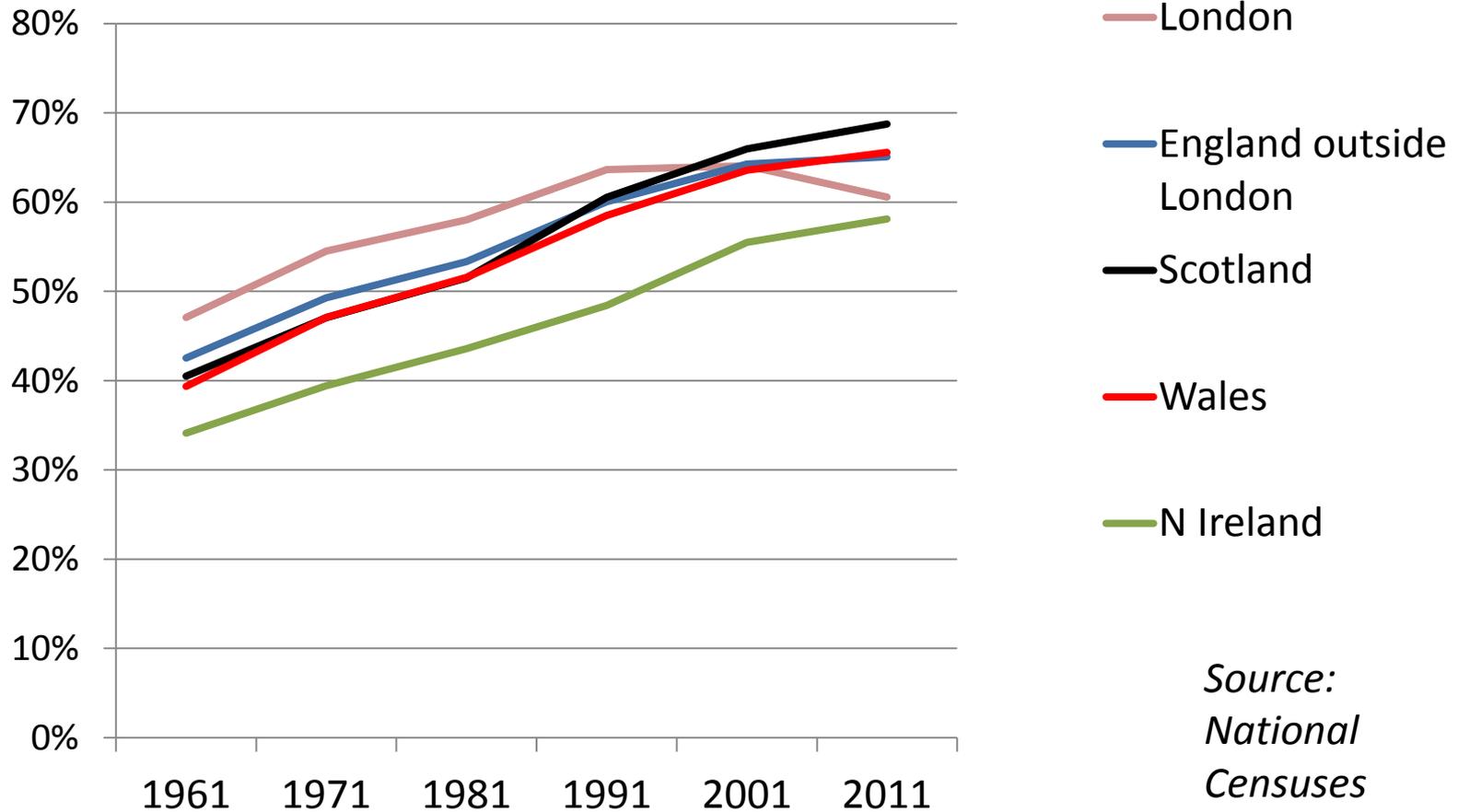
1- and 2-person households 1961-2011

% of all households



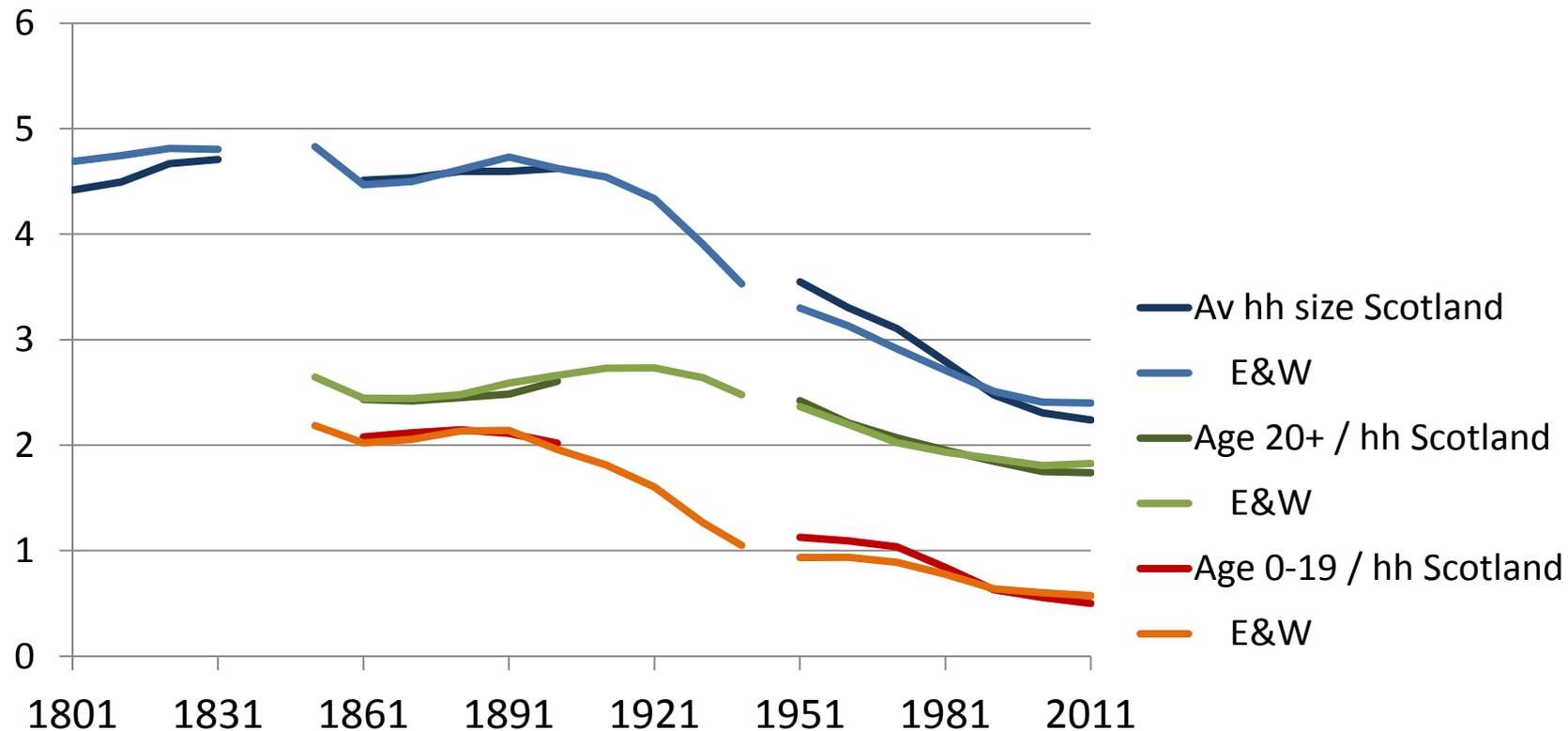
1- and 2-person households 1961-2011

% of all households



Average household size and adults per household, 1801-2011

England & Wales, Scotland



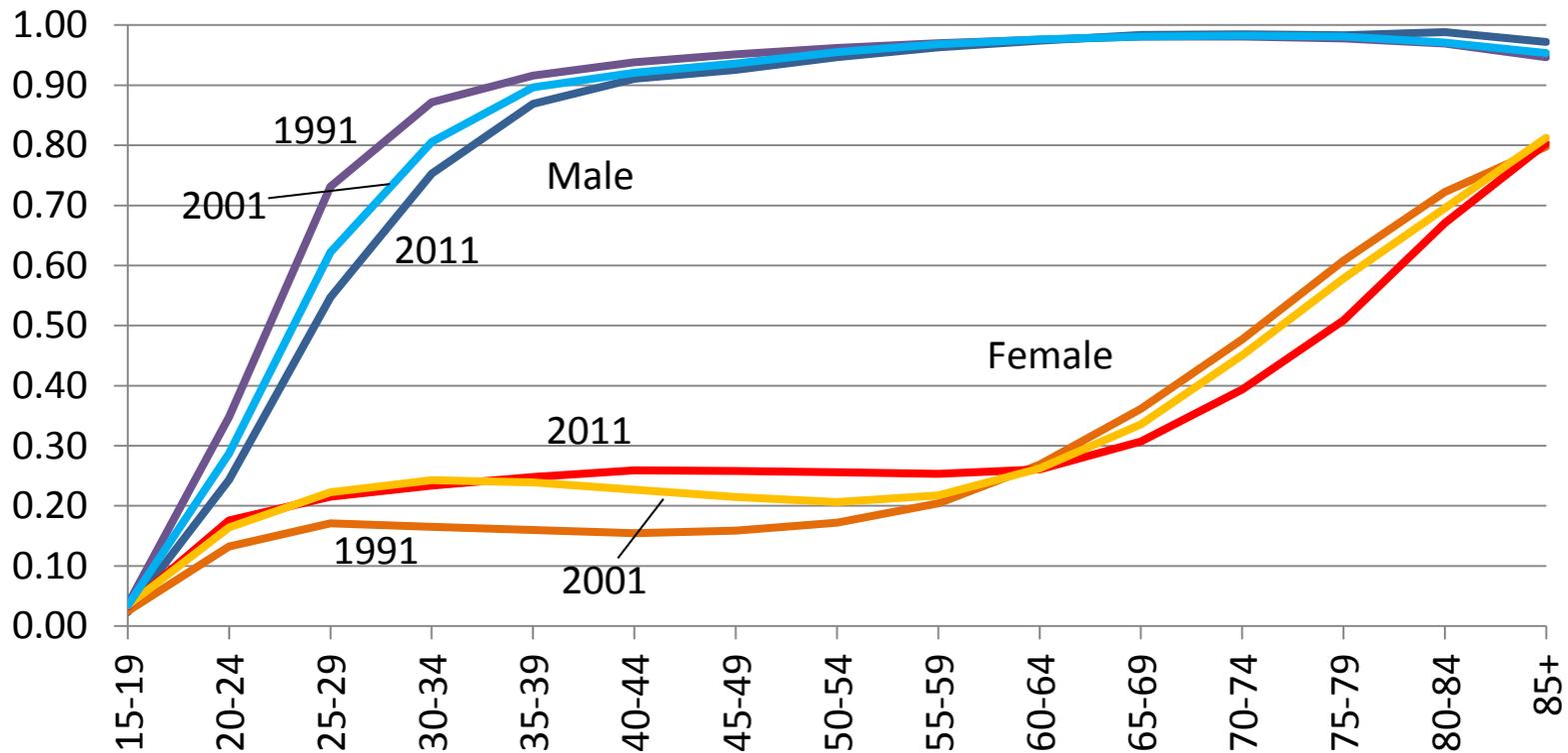
Source A.E. Holmans 2005,
updated with 2011 Census

Four household projection frameworks in the UK, 2011 or 2012-based

	Population sub-groups	Household types	Rate	Past data to estimate trend of rates
England	90 age-sex-relationship status	17, including 0/1/2+ children	Household representative	5-point 1971-2011 logistic and dampened logistic models averaged (Stage 1)
Wales	32 age-sex	12, HH size included to 5+	Household membership / Household size	2-point exponential model 2001-2011
Scotland	16 age	7, HH size included to 3+	Household representative	Average of two 2-point exponential models, 2001-11 and 1991-01
N Ireland	28 age-sex	18, HH size included to 7+	Household membership / Household size	2-point exponential model 2001-2011

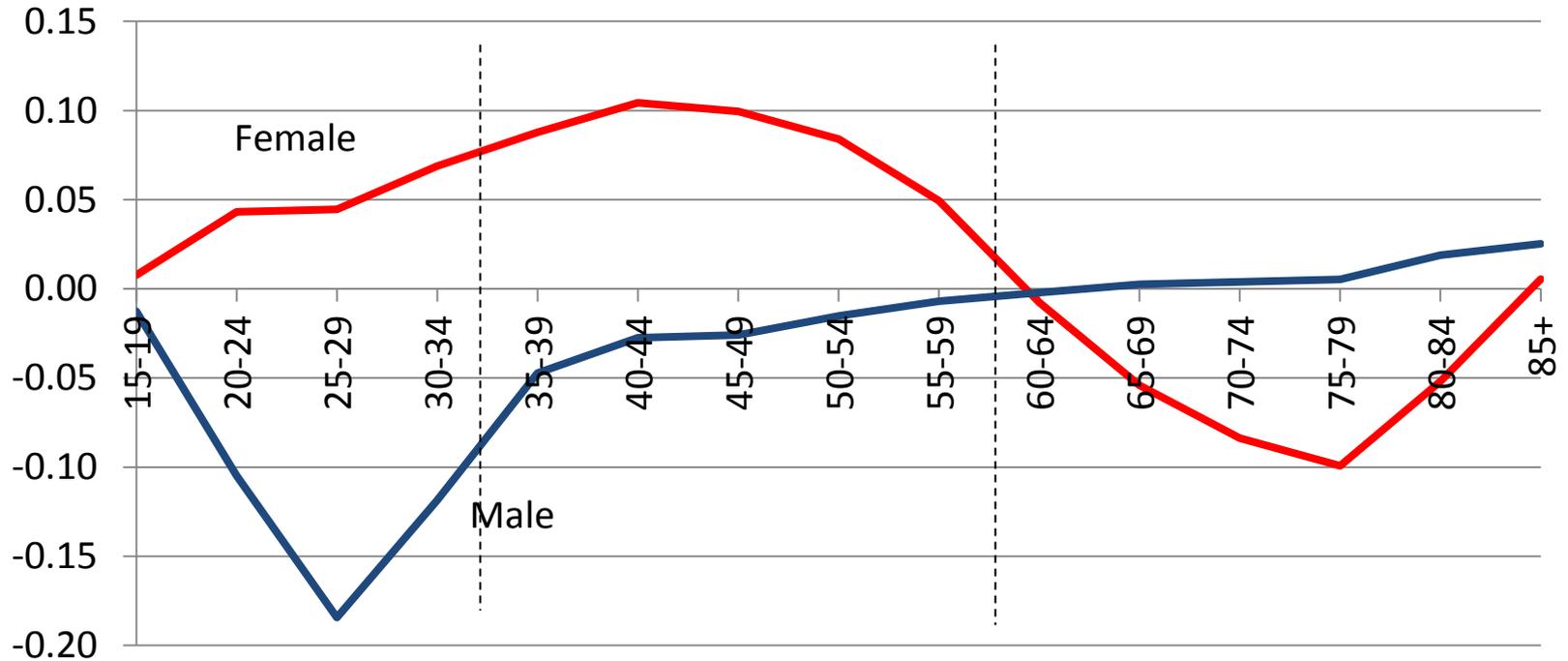
Sources: DCLG, WG, NRS, NISRA methodology documents

England Household Representative Rates 1991, 2001 and 2011, Stage 1 projections (aggregated across relationship groups)



Source: [DCLG 2012-based household projections: detailed data for modelling and analytical purposes](#)

England Household Representative Rates: change 1991 to 2011 (aggregated across relationship groups)

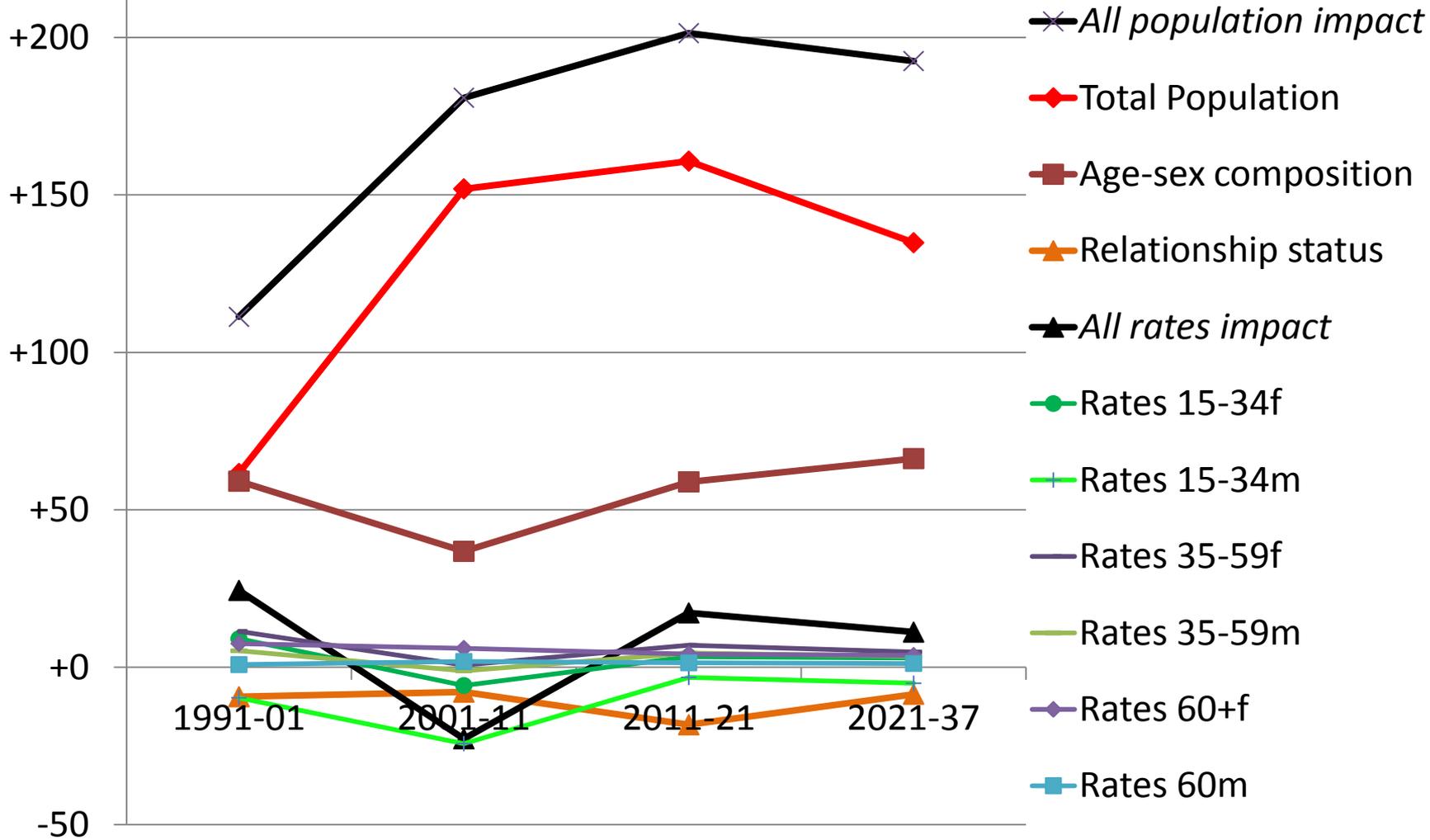


Decomposition of household change

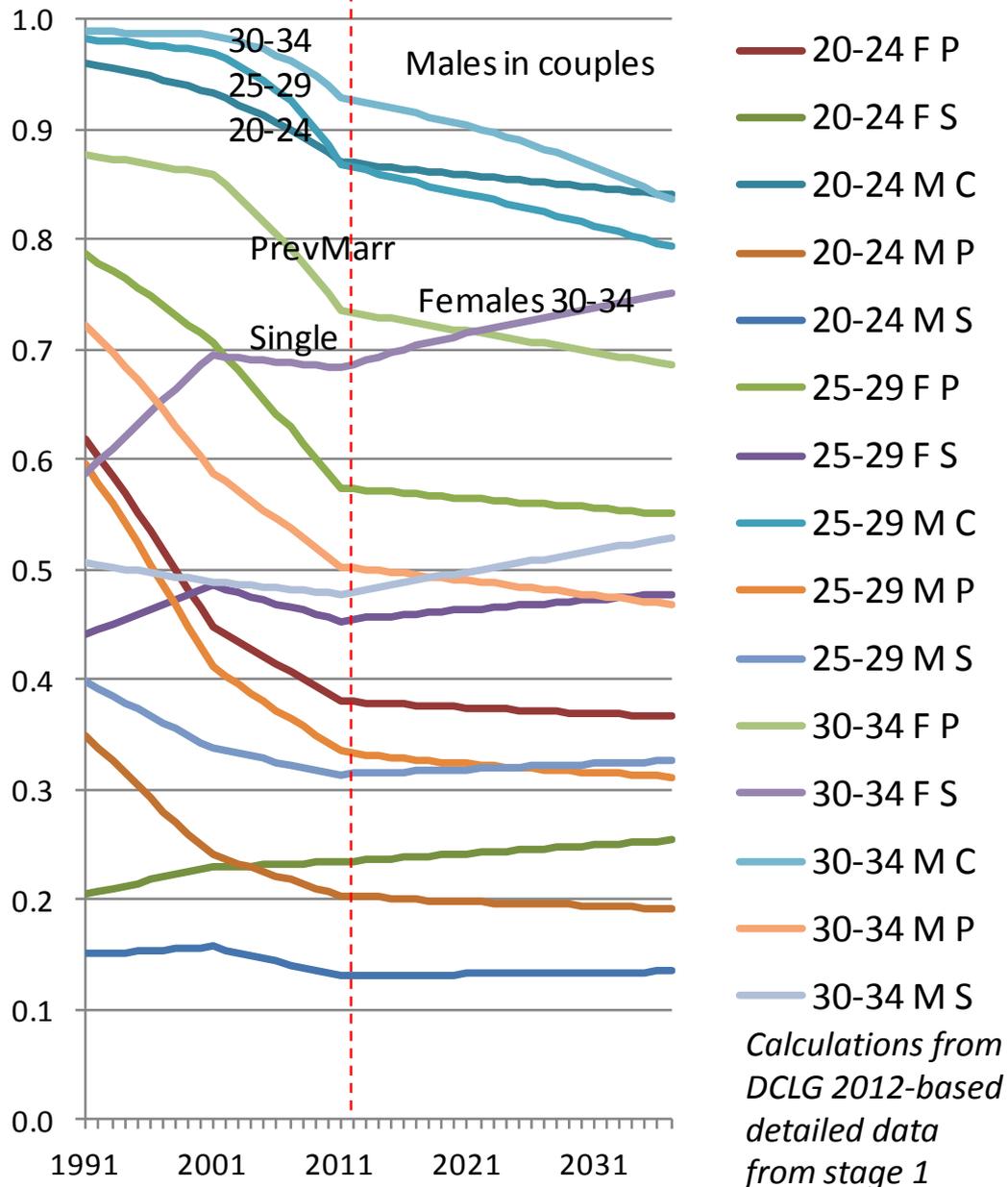
Thousands	1991-2001		2001-2011		Av hh size
	Households	Incremental change	Households	Incremental change	
Start households	19,166		20,523		2.37
Start rates with total pop End	19,781	+615	22,042	+1,519	2.37
with age sex End	20,372	+591	22,410	+368	2.33
with relationship status End	20,278	-94	22,331	-79	2.34
<i>Household change due to population change</i>		+1,113		+1,808	
End population and End rates 15-34f	20,369	+91	22,273	-58	2.34
15-34m	20,272	-97	22,030	-243	2.37
35-59f	20,386	+114	22,037	+7	2.37
35-59m	20,439	+52	22,026	-11	2.37
60+f	20,514	+75	22,086	+60	2.36
60+m	20,523	+8	22,104	+18	2.36
<i>H'hold change due to representative rates change</i>		+244		-227	
Households at End	20,523	+1,357	22,104	+1,581	2.36

England. Calculations from DCLG 2012-based detailed data from stage 1

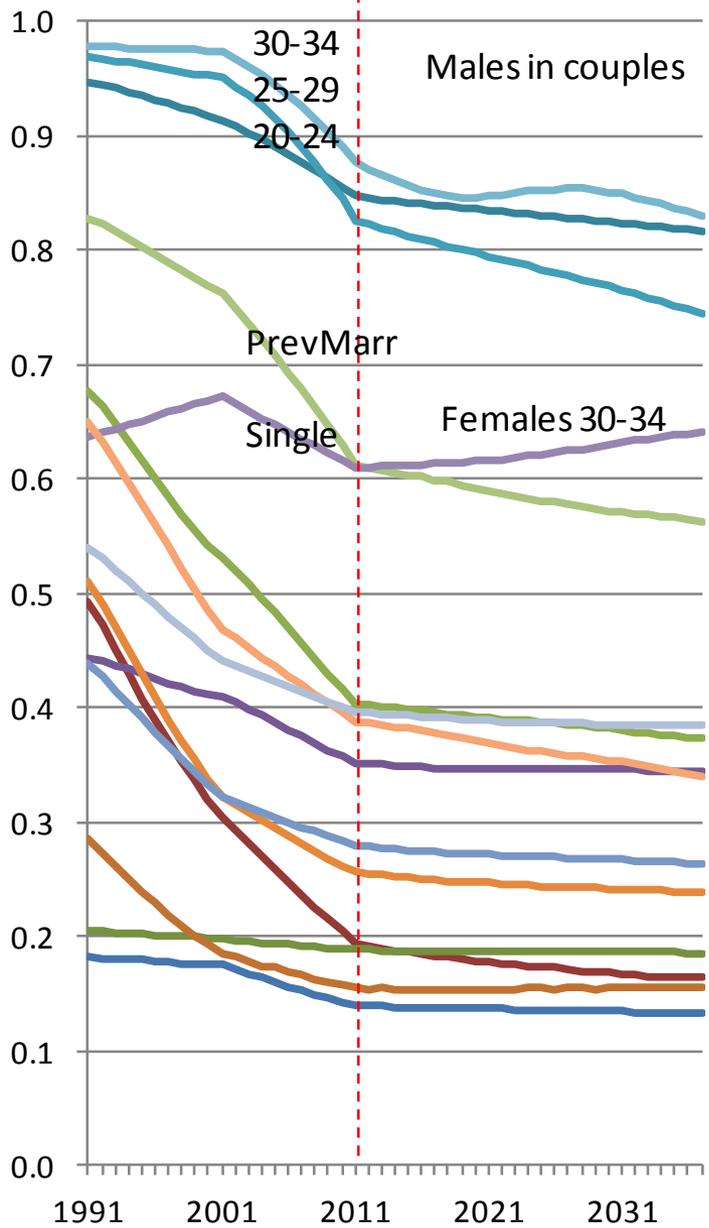
Decomposition of household change England, thousands per annum



England Household Representative Rates, ages 20-34



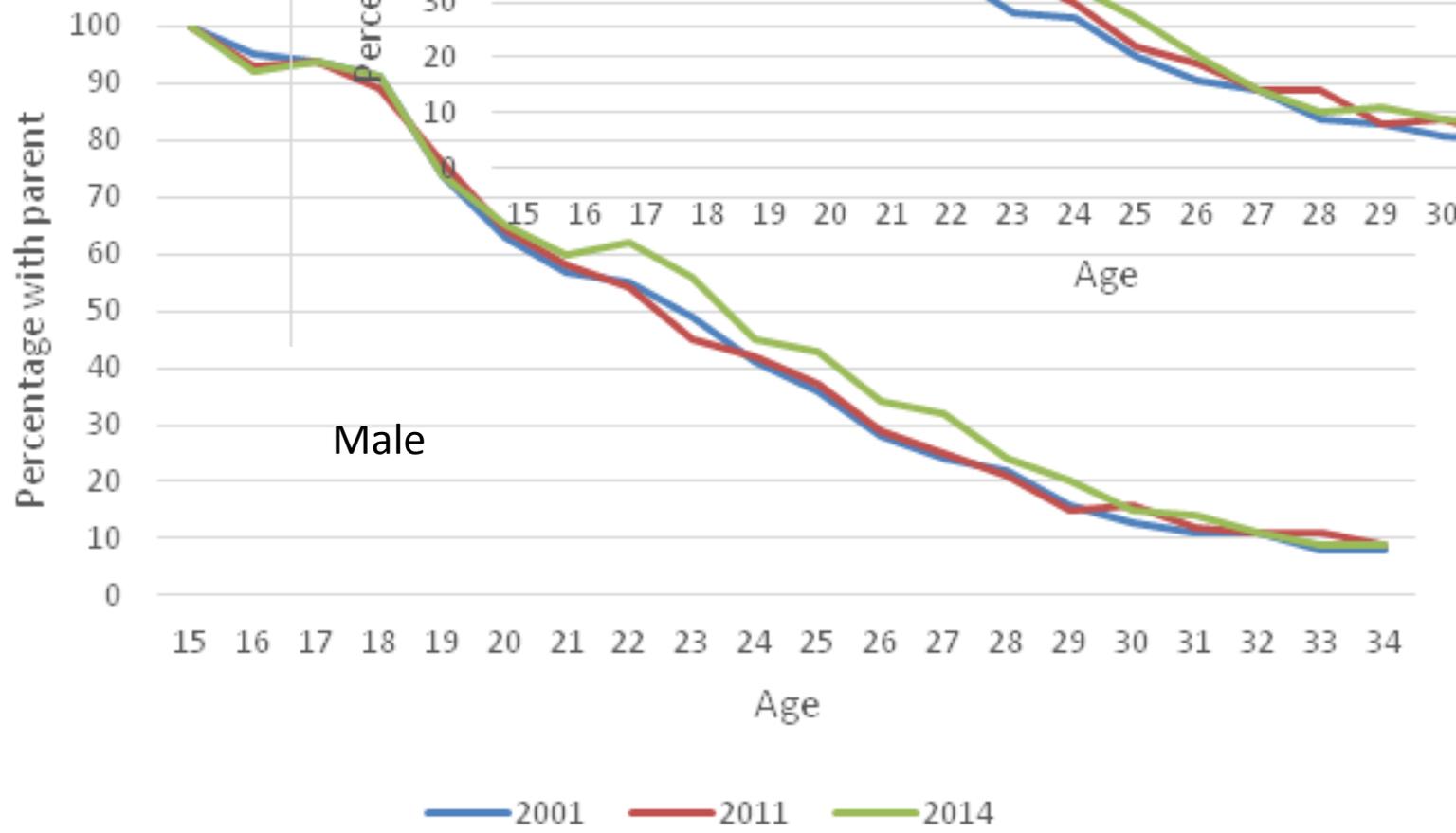
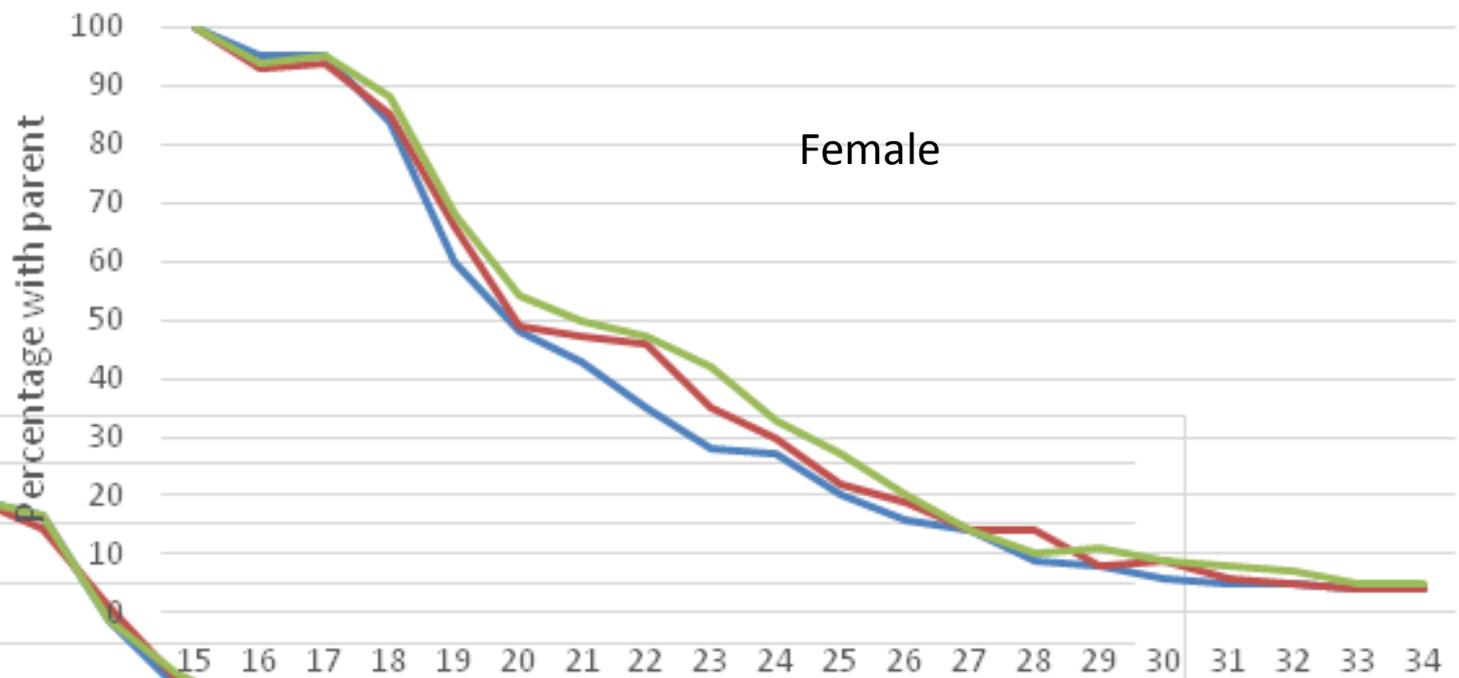
London Household Representative Rates, ages 20-34



Supporting and extending evidence

- Concealed families measured by census (Alan Holmans)
 - 0.935m in 1951 to 0.170 in 2001; 0.289m in 2011
 - Mainly but not only young couples under 25
- Shift from home-ownership to private renting
 - All ages but especially young adults 20-34
- Young people living with parents (ONS from LFS)
 - Increase has continued 2011-2014

% living with parent, UK



Source: ONS, from LFS, includes those in their own families

Implications for household projections

- Uncertainty demands that the 2011 census analysis be completed
 - All is provisional until then
- A long-term reduction in young people's household formation
 - Not the biggest driver of increased household demand, but most related to policy
 - Acceleration in 2000s of trends apparent in 1990s, deepening in 2010s
- Re-instate concealed families in the projections
 - Conceptually straightforward – an extra 'household type'
 - Are data for localities available?
- Relationship status is relevant but:
 - What is stable about the representative rates in each relationship group?
 - Latest projections of relationship status are 2008-based
 - Intended to be de facto marital status but it is not
- Acknowledge uncertainty of current trends with standard sets of variant scenarios

Concealed lone parent and couple families increasing again

Table 2. Households and Concealed Families 1951 to 2011

	<u>Households</u>	<u>Concealed Families</u>	<u>Households plus Concealed Families</u>
			(thousands)
1951	13,259	935	14,194
1961	14,724	702	15,426
1971	16,871	426	17,297
1981	No census data		
1991	20,213	273	20,486
2001	21,825	170	21,995
2011	23,740	289	24,036

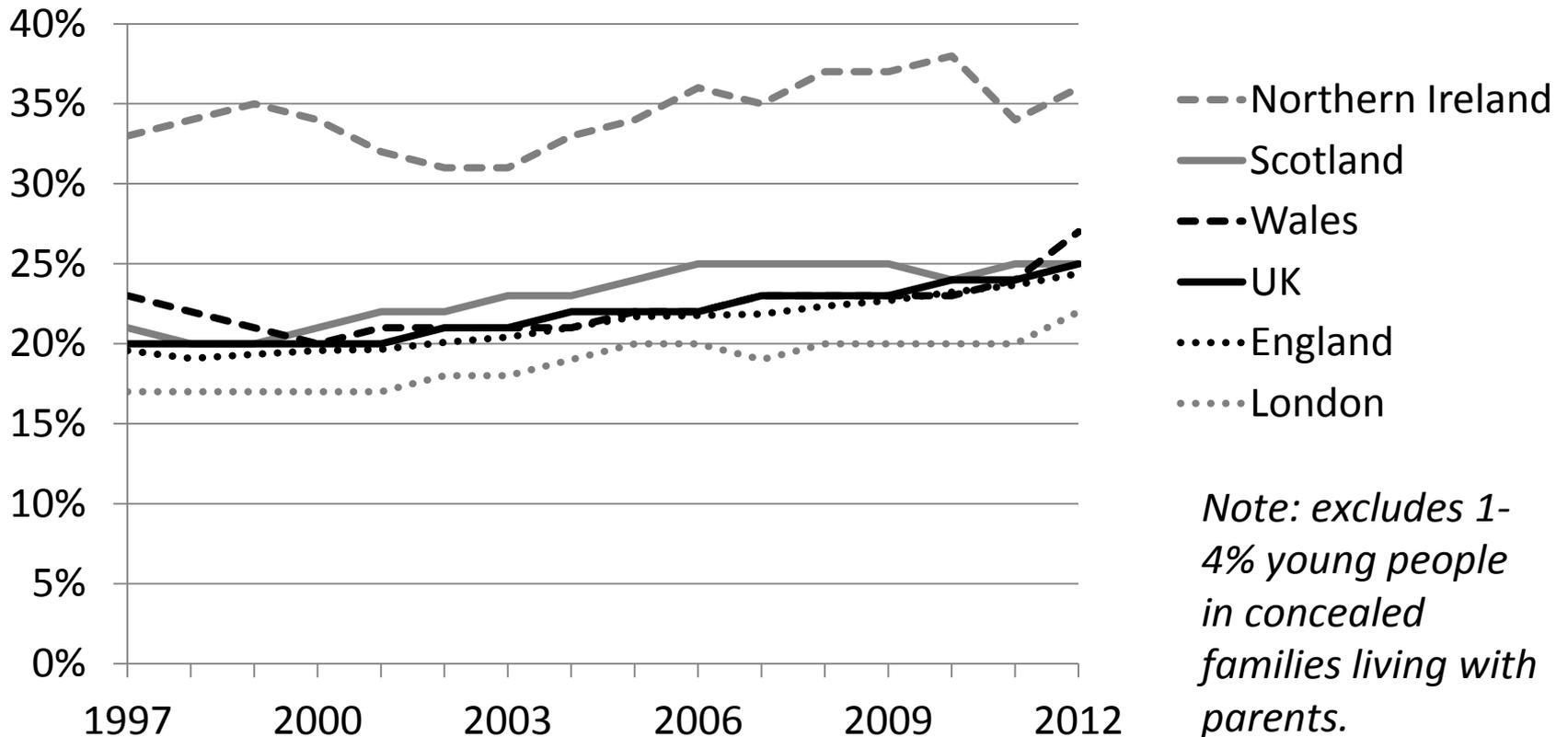
13% of all families with reference person aged under 25 are concealed in other households (16% in London).

Less than 2% for all ages (3.5% London)

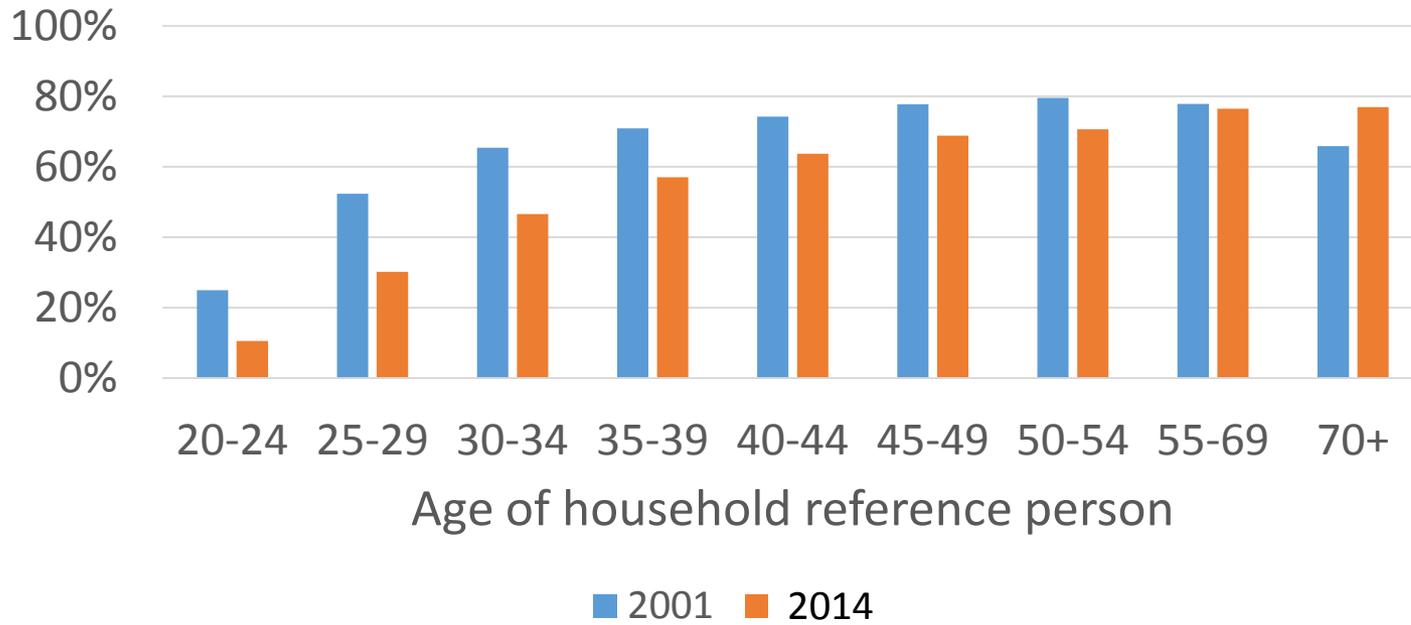
Young people living with parents

Young adults aged 20-34 living with their parents, %

Source: ONS (2014) from LFS, 3-year average centred on year shown



Percentage **owner occupier**, UK: 2001 and 2014



Percentage **private renting**, UK: 2001 and 2014

