

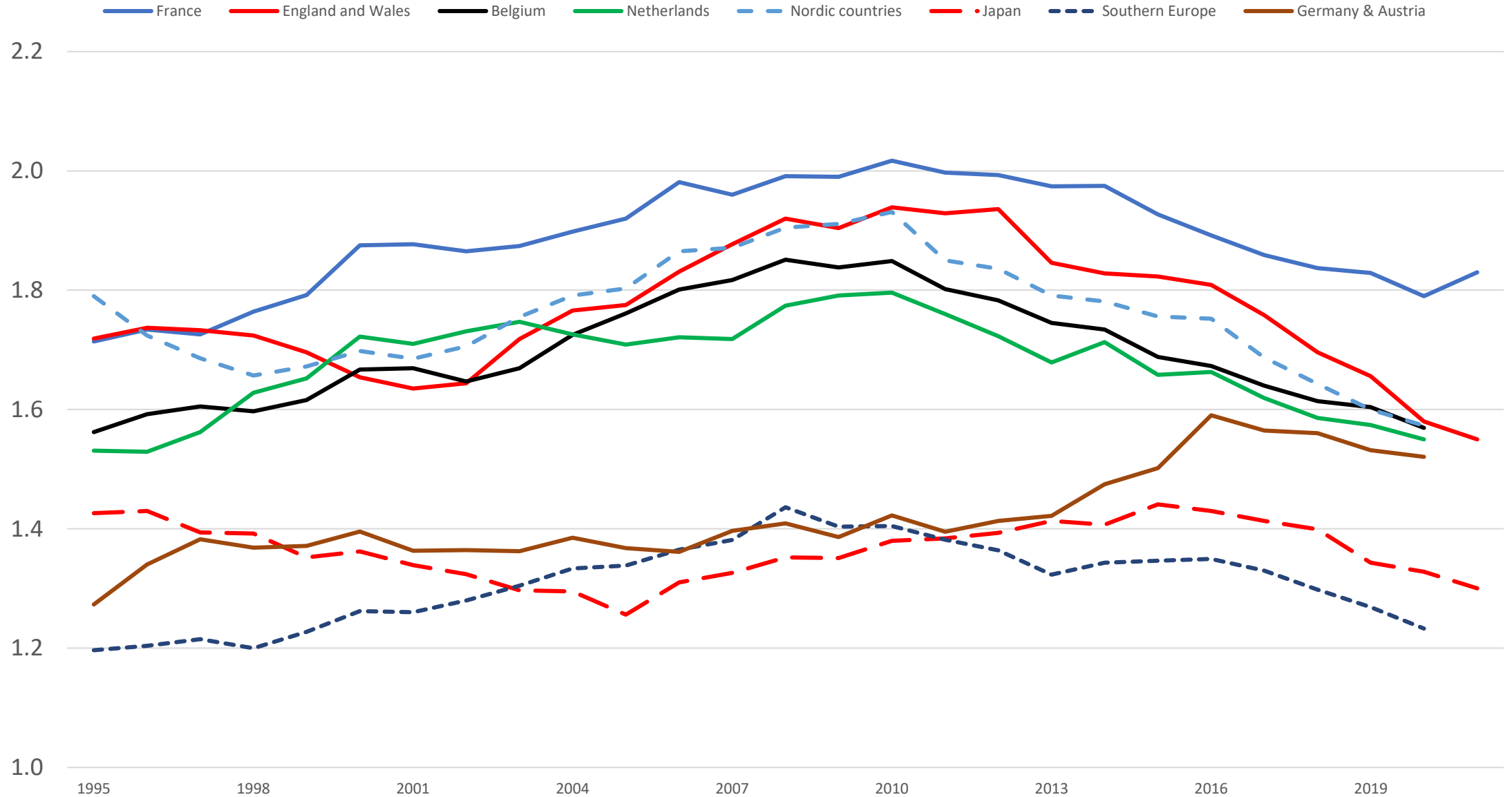
Declining European Birth Rates

John Ermisch
Nuffield College, Oxford

Fall in birth rates is widespread

- The Total Fertility Rate (TFR) is a summary indicator
- The TFR indicates the average number of children a woman would have if she were subject to the age-specific birth rates in a given year
- Figure 1 shows the similarity of movements in the TFR in Northwest Europe (France, Belgium, Netherlands and England and Wales) and the Nordic countries (Sweden, Norway, Denmark and Finland), particularly the decline since 2010

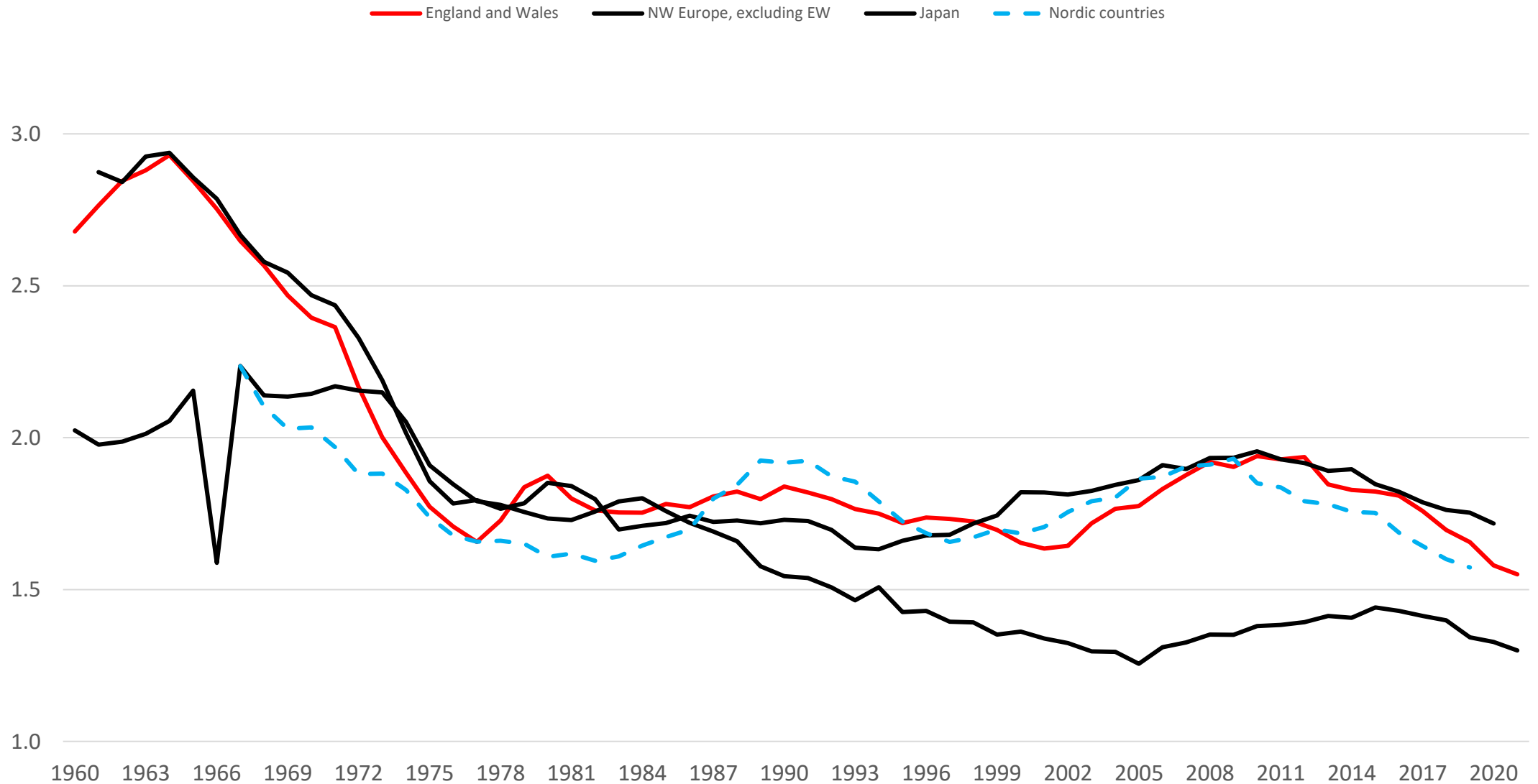
Figure 1: TFR's in Europe and Japan



Japanese fertility more like Southern Europe and Germany

- Japanese fertility much lower than that in Northwest Europe and the Nordic countries, and fluctuated less over past 30 years
- Japan and Southern Europe (Italy, Spain and Portugal) are at similar levels and both experienced TFR declines since 2015
- German and Austrian fertility was at a similar level to Japanese TFR until 2013, but had a recovery since then and then a small decline since 2016
- **Similarities across Northwest Europe and Scandinavia suggest there are common influences on the post-2010 decline in fertility at play**

Figure 2: Longer term perspective on the TFR



Are there differences by social groups?

- European example: England and Wales
- Figure 3 shows that the TFR fell in all groups defined by combination of parents' and own education*
- Figure 4 shows that the average age when a woman has children increased in all groups

**Note: High education for parents means a qualification beyond secondary school; High education for women means degree or higher qualification*

Figure 3: Total Fertility Rate by Parents' and Woman's Own Education Level (parents' education listed first)

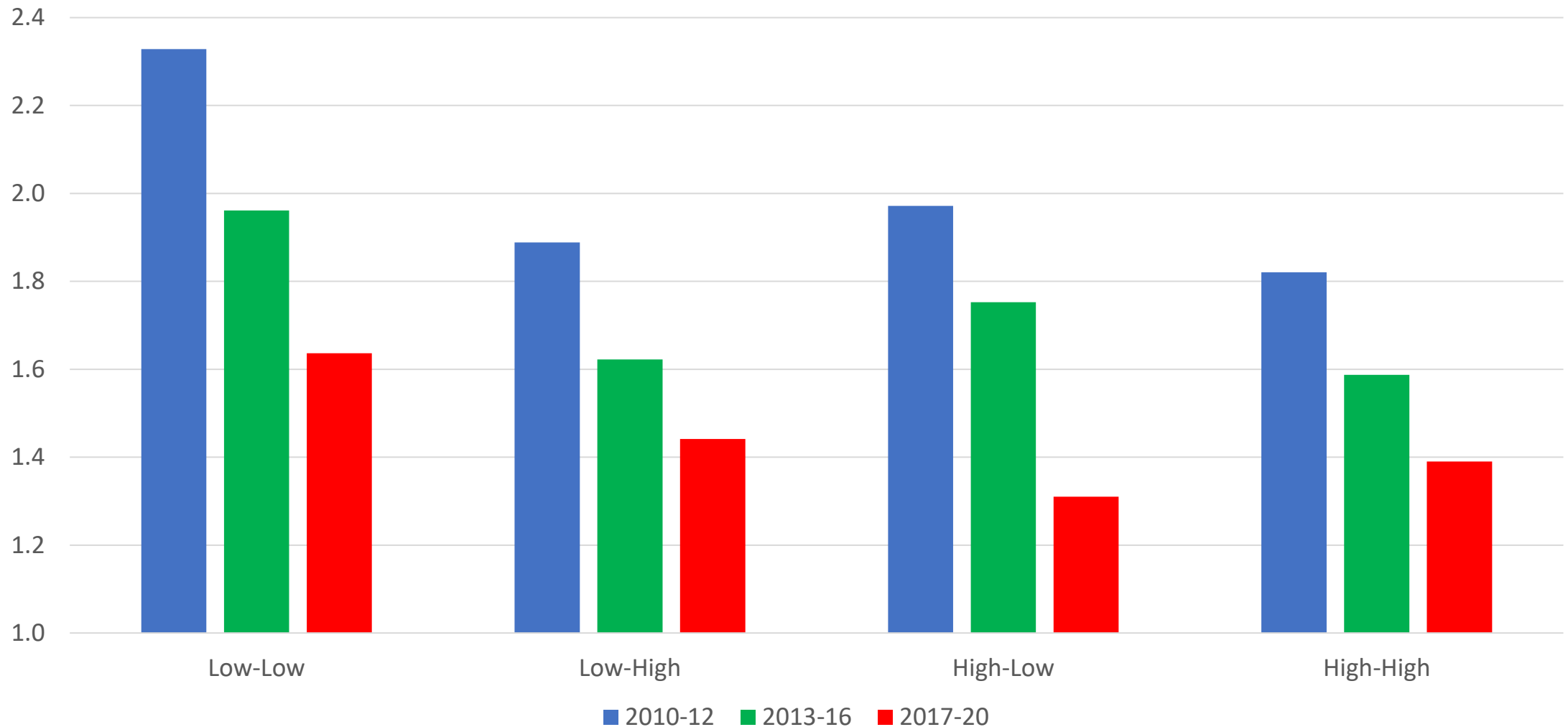
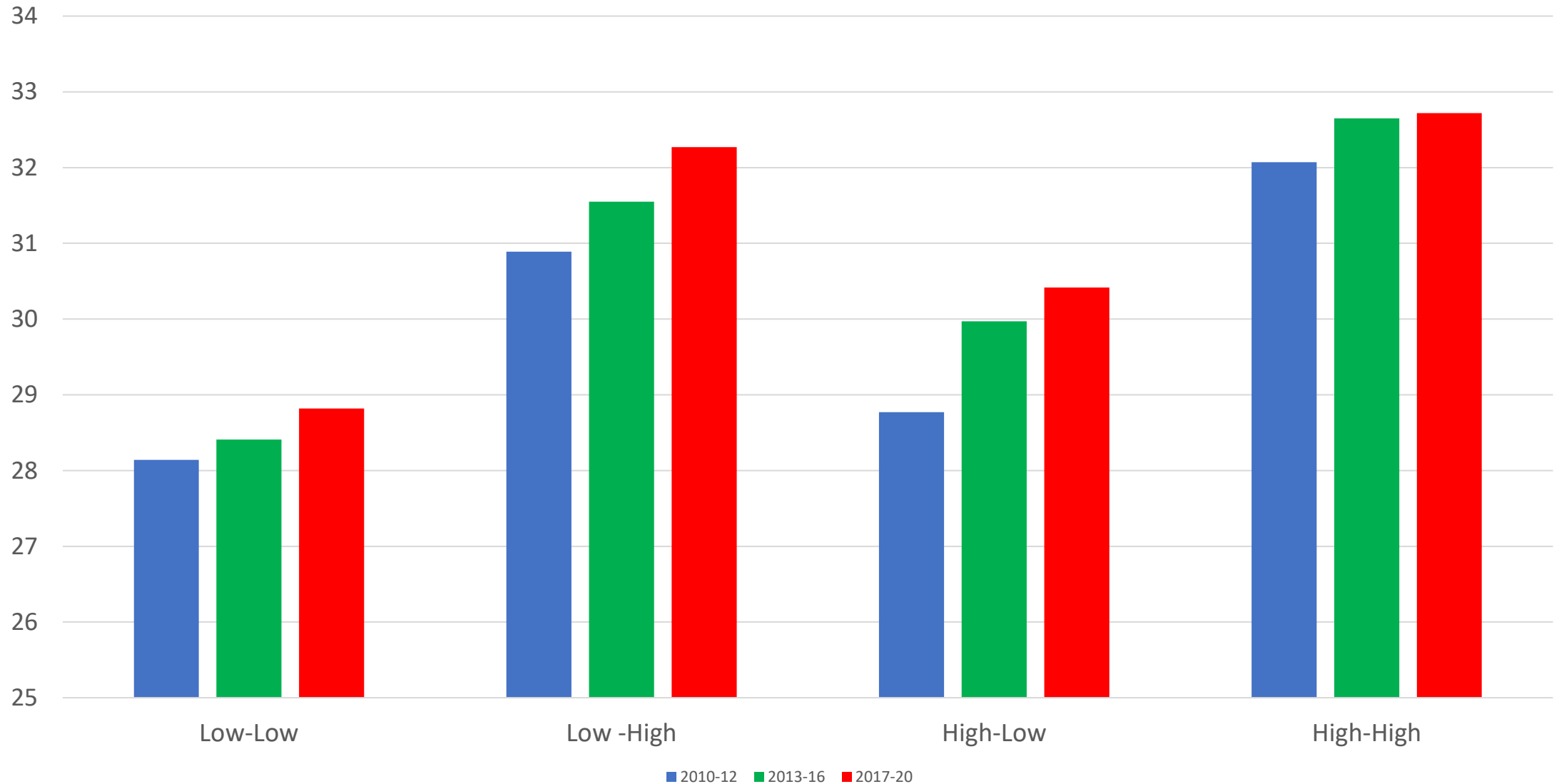


Figure 4: Mean age at childbirth by Parents' and Woman's Own Education (parents' education listed first)



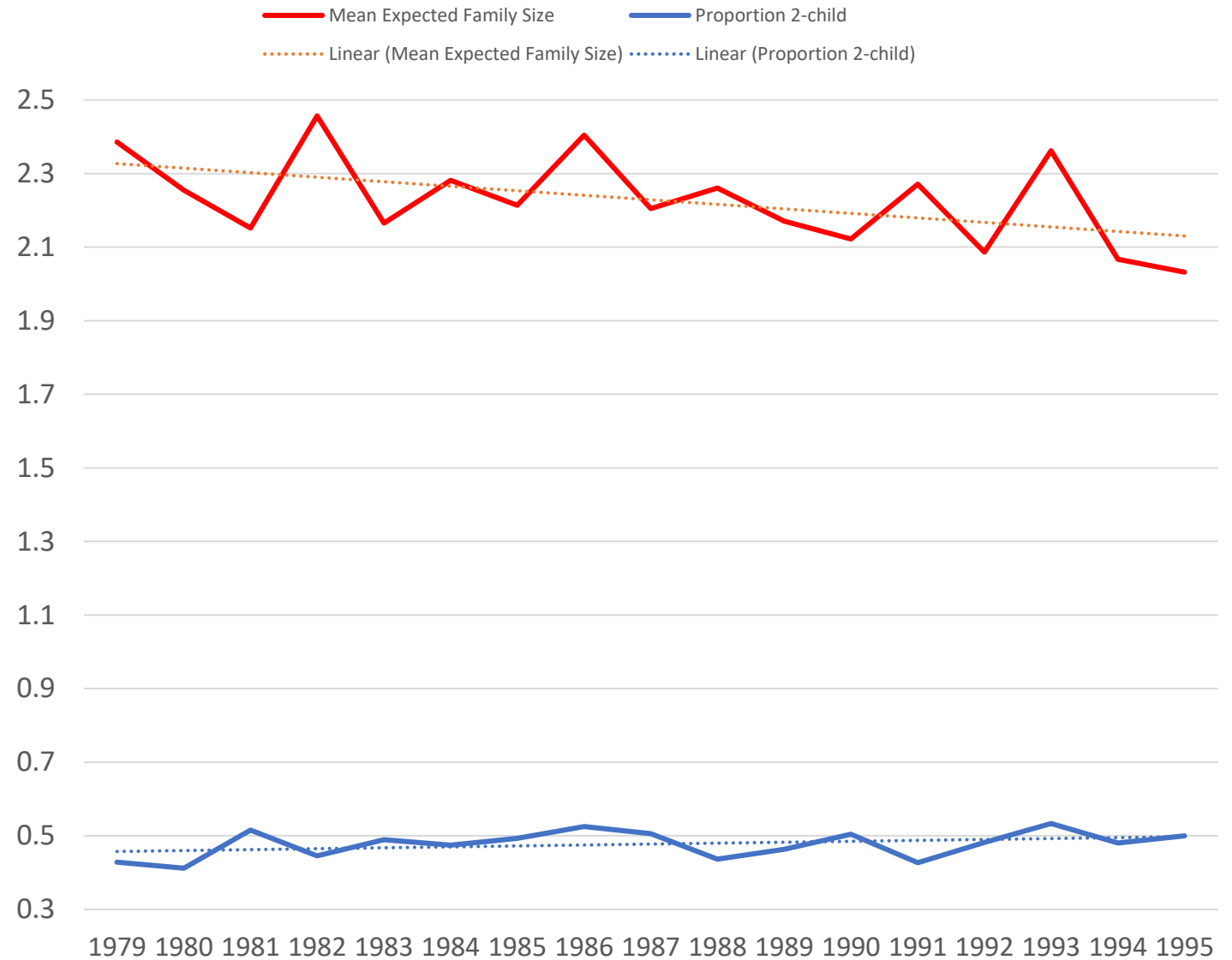
Why might the European TFR's be falling since 2010?

1. Less unplanned fertility—i.e., a lower proportion of women having more children than they wanted because of contraceptive failure.
2. Declining 'ideal or desired family size'. Answers to questions like "Generally speaking, what do you think is the ideal number of children for a family?" suggest ideal size is relatively stable in Europe, with a convergence on the two-child family for about 60% of women and a mean just above two.
 - Pattern of *Expected family size* in UK is similar (Figure 5).
 - Also, 10% expect to remain childless, vs. 20% actual

Figure 5: Expected number of children (UK) by women's birth year*

Slight fall in mean size and a stable 50% expecting 2 children

*Responses of women when age under 30



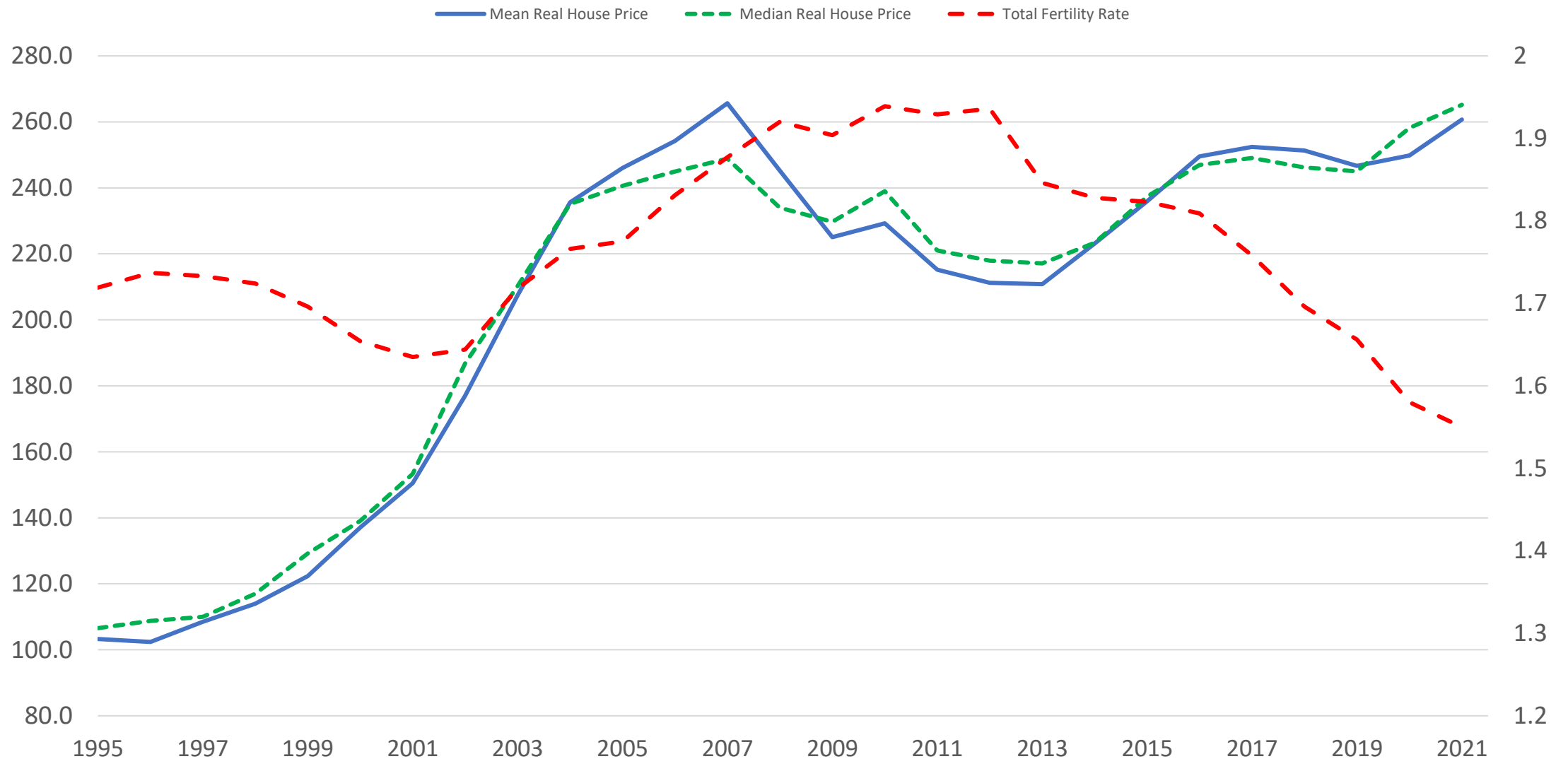
Constraints and postponement

3. Increasing constraints on childbearing: e.g.
 - a. higher costs of housing;
 - b. more partnership dissolution during main childbearing ages;
 - c. higher unemployment, lower & unstable earnings for people in their twenties
 - d. a higher cost of parent's time and of child-care.
4. Postponement in motherhood, perhaps to recover later?
 - It has recovered before (see 1995-2010 in Figure 1).

What are the common influences on fertility across many European countries and social groups?

- One may be higher housing costs for young people (i.e., higher rents and house prices)
- The processes of leaving the parental home, entering partnerships, having children and residential mobility are interlinked and affected by housing costs
- In England and Wales, there is evidence from analysis of individual longitudinal data that higher house prices
 - Postpone the age at leaving home and therefore first partnerships
 - Reduce birth rates, leading to postponement of motherhood and lower fertility

Figure 6: Real House Prices (000's) and the TFR (RH scale), England and Wales



Changes in real house prices (CPI deflated prices)

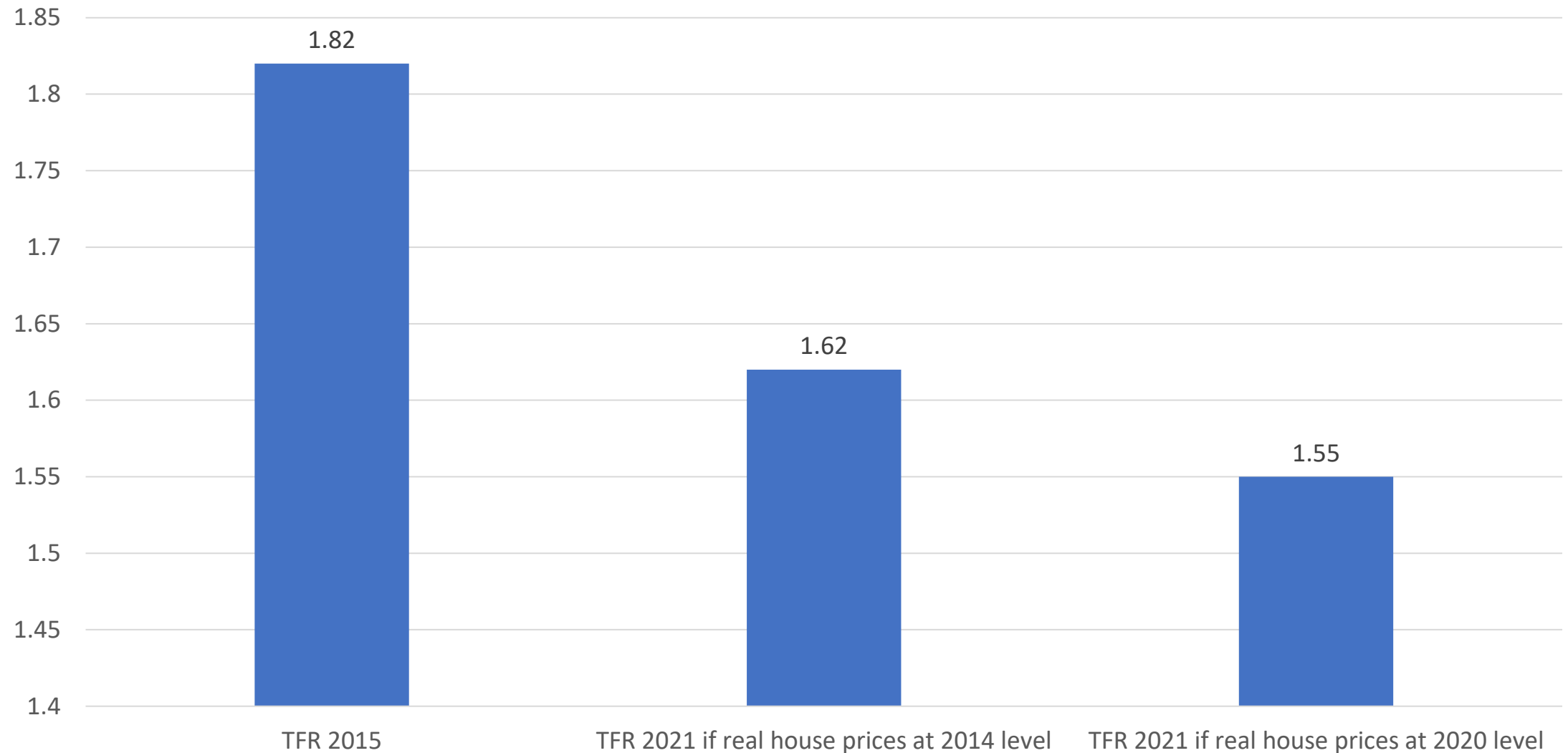
- Figure 6 shows a coincidence of rise in real house prices and the fall in TFR in England and Wales during 2010-21.
- Between 2010 and 2021 real house prices rose by
 - 14% in Belgium, 11% in France, 22% in the Netherlands and 22% in the United Kingdom.
- In three of the Nordic countries real house price inflation was even larger (35% in Denmark, 40% in Norway and 60% in Sweden)
- But it was only 2% in Finland, where the TFR fell most since 2010 among the Nordic countries, from 1.87 in 2010 to 1.37 in 2020.

Implications of statistical analysis of individual longitudinal data for England and Wales over 2010-2021

- Estimated models allow a counterfactual simulation
- What would the TFR in 2021 have been if real house prices had remained the same as in 2014? Model predicts TFR=1.62*
- This can then be compared to the actual 2021 TFR of 1.55, which is influenced by real house prices around 2020.
- Figure 7 indicates that the best guess is that about one quarter of the 2015-21 TFR decline of 0.27 can be accounted for by the real house price change (1.55-1.62/-0.27).

*the predicted TFR in 2021 if real house prices had remained the same as in 2014 has a 95% confidence interval of 1.5 to 1.75 , so that contribution of house price change to the decline could be as little as zero or as much as 75%.

Figure 7: Contribution of real house price change to decline in the TFR during 2015-21, England and Wales



Policies and fertility

- Do tax and transfer policies disproportionately favour older people over young people and families?
- Are there labour market reforms (e.g., parental leave) that could make childbearing and careers more compatible?
- Do housing policies disproportionately favour existing owners (e.g., overly restrictive planning policies)?
- What can we do to adjust better to shrinking labour forces and rising pensioner populations (e.g., more education, more openness to immigration)?