

Fertility, ethnicity and religion: recent trends in the UK

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General project

Demographic characteristics by ethnic and religious groups & projections

with D. Coleman (co-I)



Fertility, ethnicity and religion: recent trends in the UK

- Why fertility estimates by ethnic and religious groups?
 - how ethnicity and religion may impact on fertility?
 - social and cultural composition of the UK population, changes and future expectations
 - To develop plausible fertility assumptions for population projection models
- No direct methods available



Introduction

- Ethnic groups show differences in fertility
 - For the UK, fertility rates by ethnic groups up to 2001
 - need to create / update existing rates, inter-censuses rates

- Religious affiliation may support childbearing (norms supporting childbearing, rejecting contraception/abortion)
 - No estimates available by religious groups for the UK
 - Few reports on fertility estimates by religion (e.g. for Austria (Goujon et al.2005,), for Europe (Kaufman, 2007))



Introduction

- Here LFS data (2001-2006) is used together with the Own Child Method to produce fertility estimates by ethnic and religious groups from 1987 to 2006 at national level.
- Ethnic and religious group
 - of the mother only
 - 2001 census definitions (LFS 2001 to 2006)



Introduction

■ Outline

- The OCM and method refinements
- TFR trends and ASFRs patterns by ethnic groups, 1987-2006.
Is there convergence between ethnic groups?
- UK born and foreign born, impact on fertility.
Does country of up-bringing impact on reproductive behaviour?
- TFR by religious groups.
Does religion matter?



Own Child Method

- LFS data, household survey, yearly
- Surveys pooled across years
- Matching children to mothers within household
- Allowing reverse survival calculations
 - 15 years estimates (14 prior to the survey)
- Berthoud, 2001; Coleman and Smith, 2005

Total Period Fertility Rate (TFR)

Good agreement of ONS data with LFS-OCM data

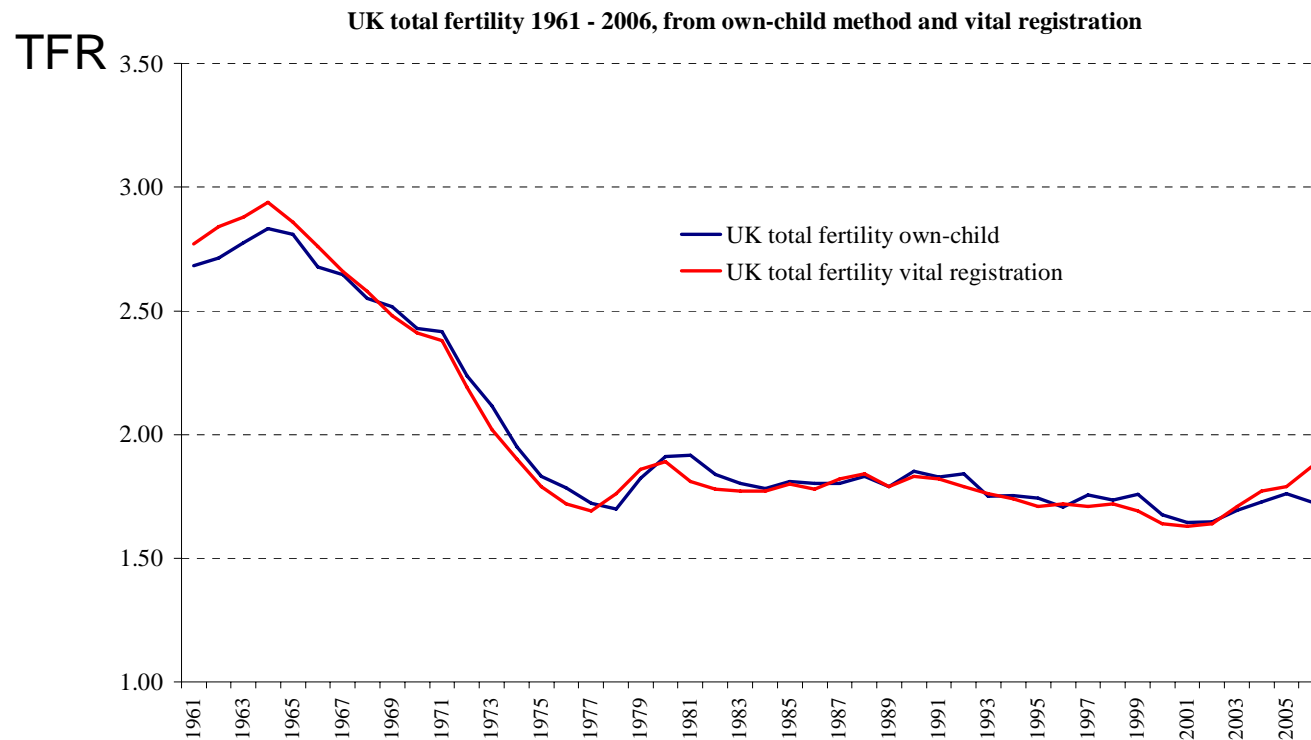


Figure 1. Total fertility from own-child method from LFS compared with ONS registration statistics, 1961 - 2006

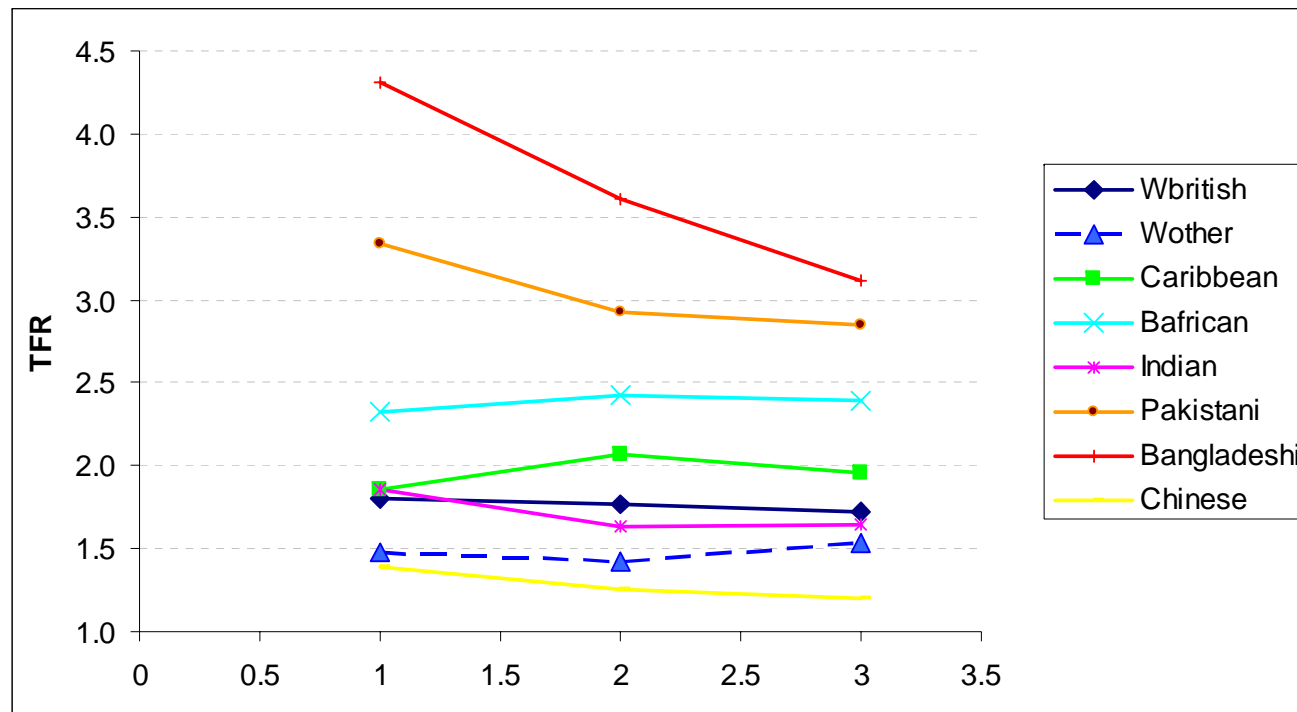
Total Period Fertility Rate is the average number of children that women would have if they experienced the ASFRs for a particular year throughout their childbearing lives



Refined Own Child Method

- Retro-correction for mortality
- Reverse survival table
 - using the ONS England & Wales death rates
 - by age and sex between 1986 and 2006.
- Matching children to women within family unit instead of household to minimise possible mismatching
- Correct for small underestimations
 - Variation 1.25% for all women 2000-2006
 - 0.37% due to mortality correction
 - underestimation vary across groups (1 to 2.7%)

Fertility trends by ethnicity



Total Period Fertility rate by ethnic group, 1987-2006



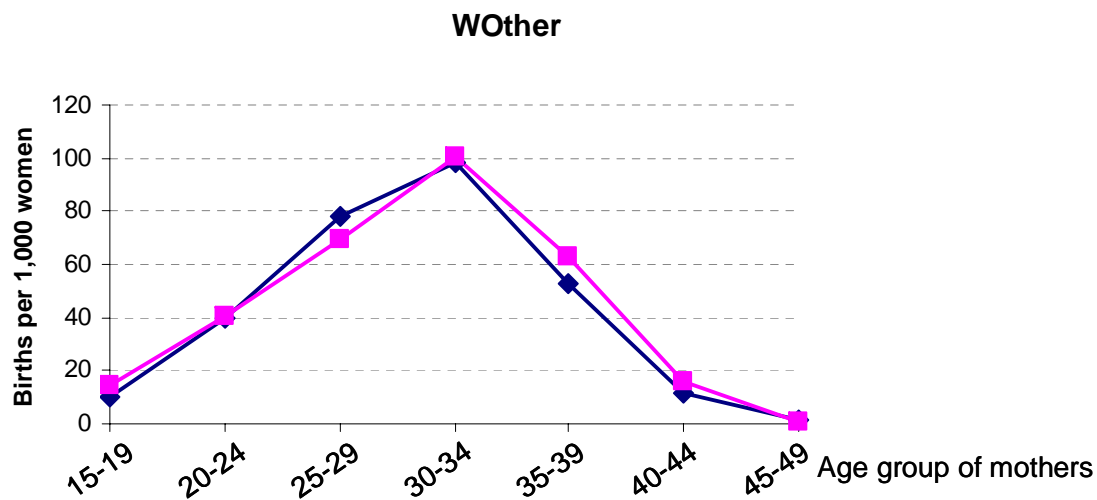
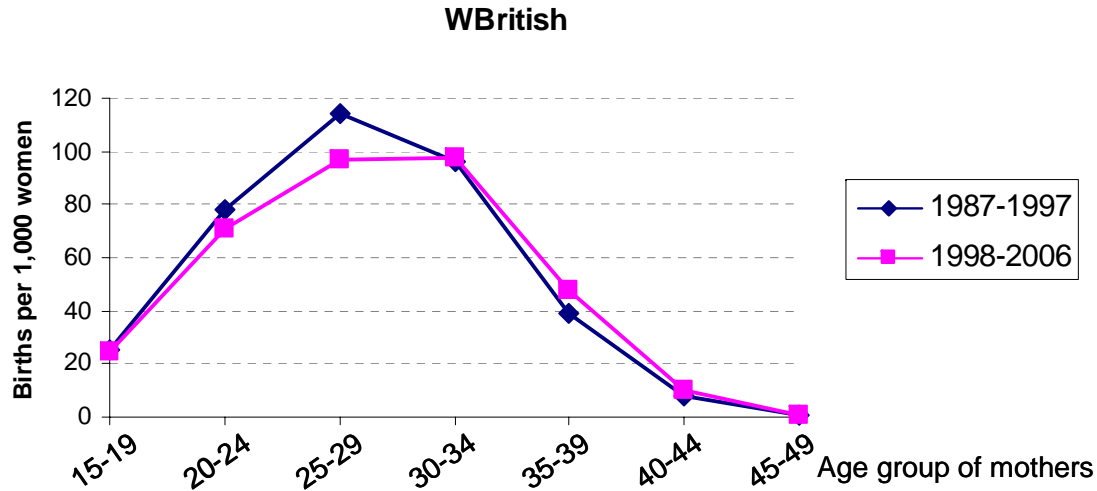
■ Fertility estimates for women of mixed origin

- Small numbers
- Mixed population: majority children

Group	Period	TFR	CI95% UL	CI95% LL
Mix-Africa	1987-2006	1.640	1.915	1.366
Mix-Asia	1987-2006	1.659	1.870	1.448
Mix-Carib	1987-2006	1.949	2.155	1.743
Mix-Other	1987-2006	1.460	1.668	1.251
Mix-Total	1987-2006	1.724	1.837	1.612

1987-2006 ALL UK TFR: 1.78

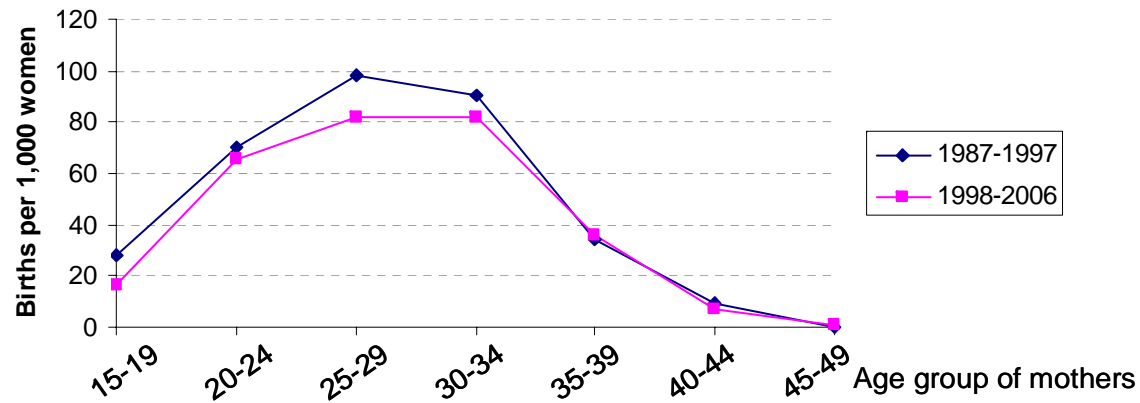
Age Specific Fertility Rates of women by ethnicity



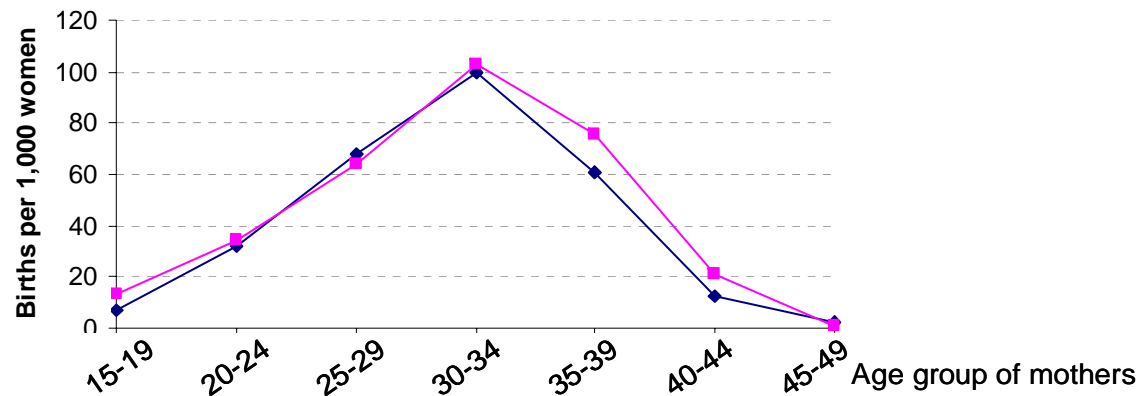
Delayed childbearing

White other UK-born versus foreign born

White Other UK-born women

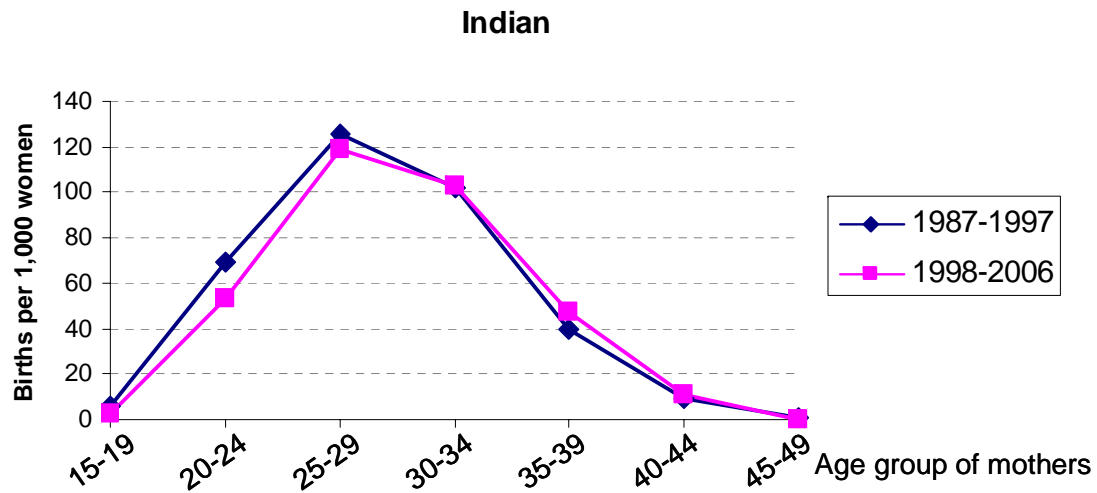


White Other foreign-born women (2/3 in 2002-2006)



immigration
and
delayed childbearing

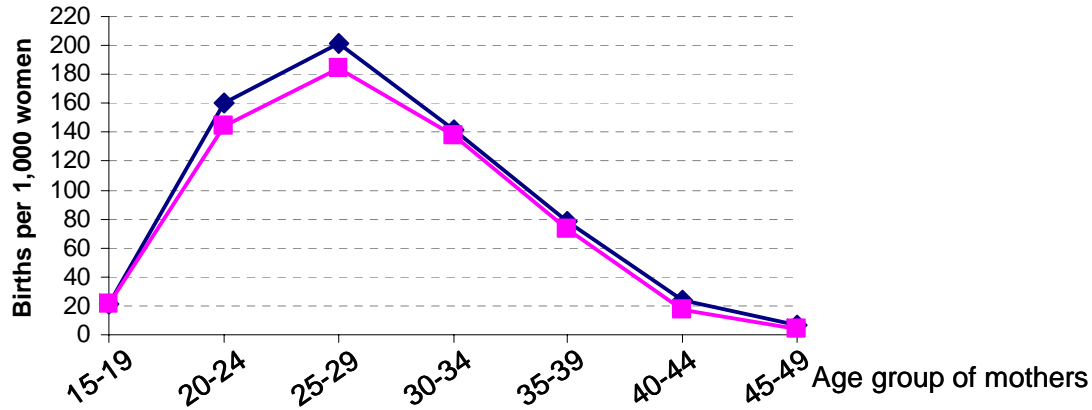
Age Specific Fertility Rates of women by ethnicity



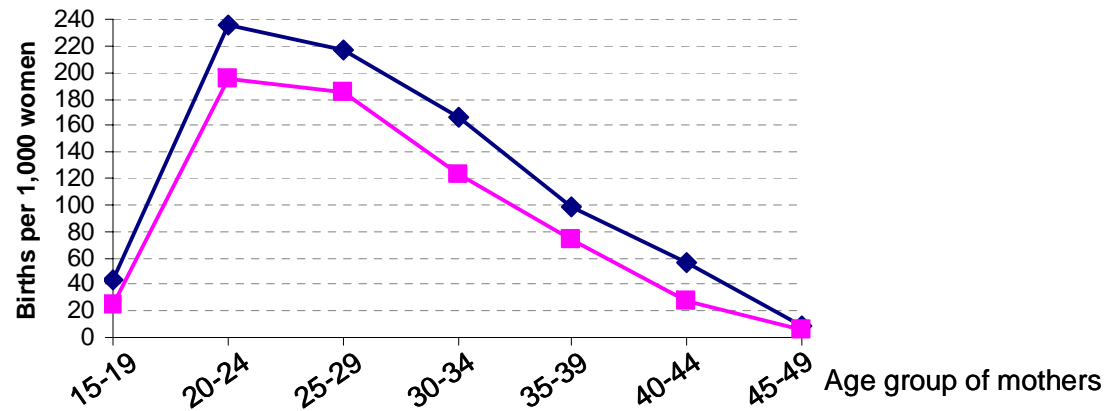
Fertility decrease and delayed childbearing

Age Specific Fertility Rates of women by ethnicity

Pakistani

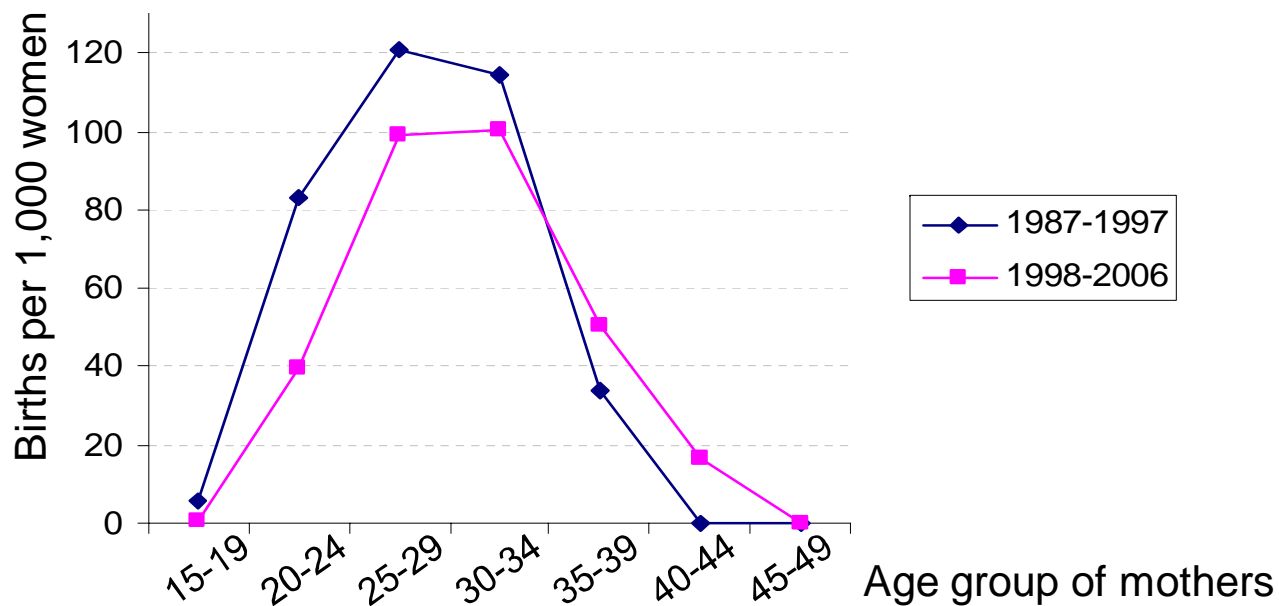


Bangladeshi

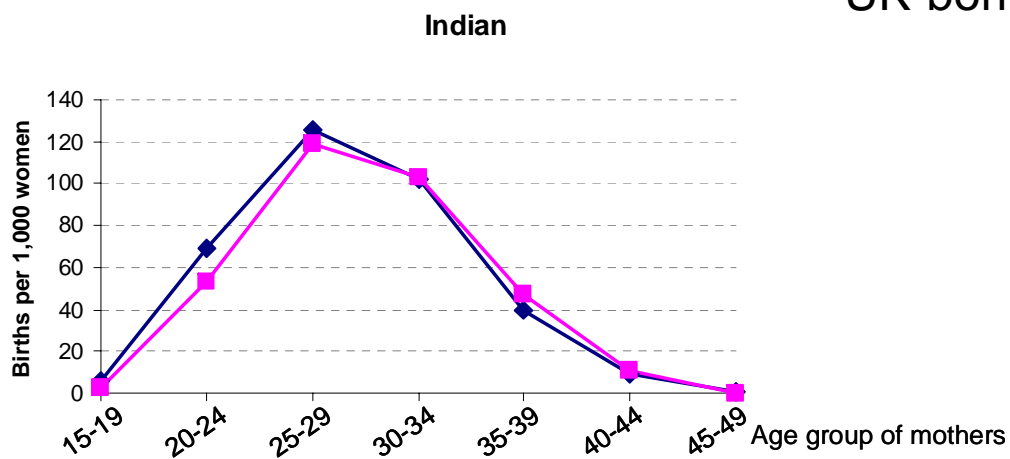


Fall in fertility
at all ages

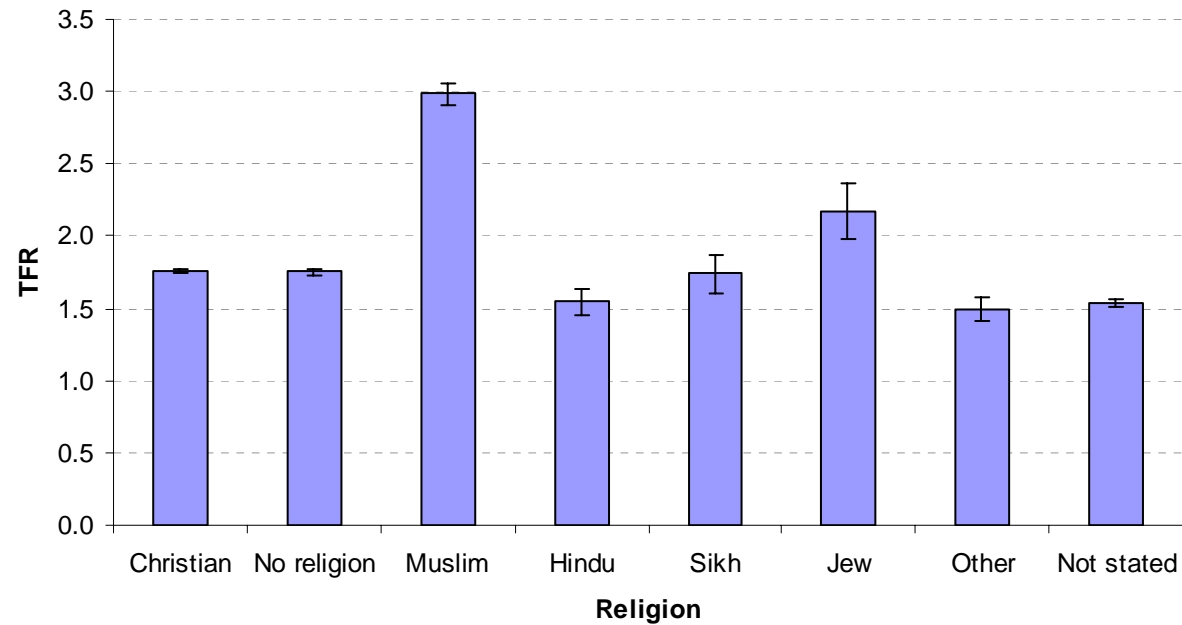
Delayed fertility of the Indian UK-born...



UK-born Indian women: 5 years ASFRs

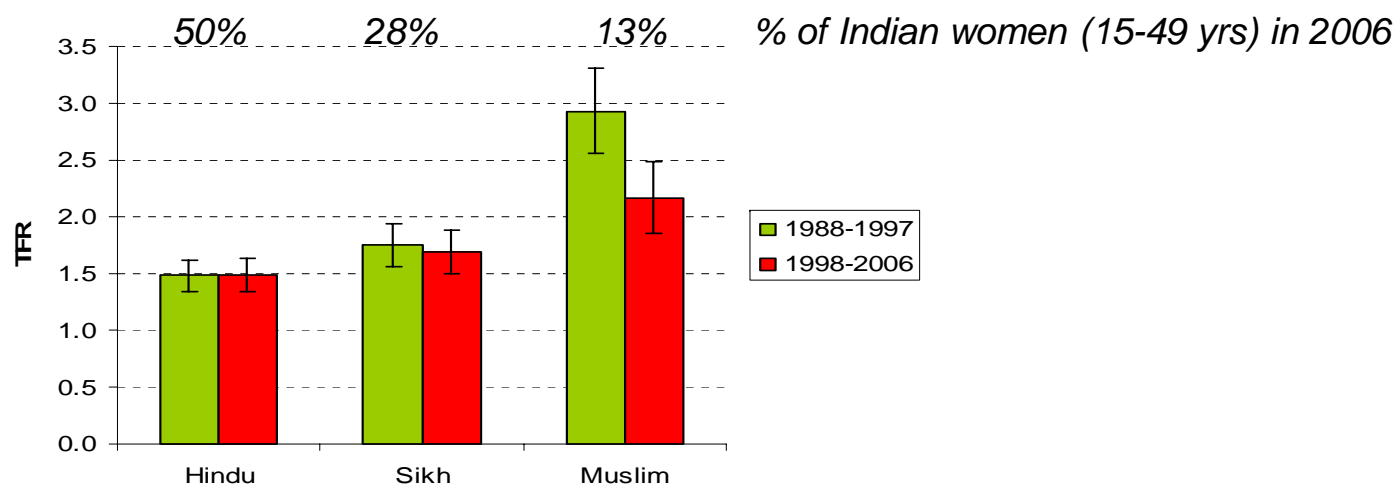


Fertility and religion



TFR average 1988-2006 by religious groups

Crossing Indian ethnicity and religion



TFR for Indian ethnic group by main religious denomination*

*Only the main religious groups are represented

Comparison of TFR for All Muslim with Indian Muslim, 1988-2006

Period	All Muslim	Indian Muslim
1988-1997	3.1	2.9
1998-2006	3.0	2.2



Conclusions (Method, Religion)

- LFS-OCM has been refined and provides good estimates for inter census fertility rates by ethnic and religious groups.

- Differences exist in the TFR by religious groups
- No evidence for Christian faith supporting higher fertility compared to non-religious.

- Recent relatively low TFR of Indian Muslim compared to all Muslim women, suggests ethnicity more than religion influences fertility behaviour.
 - socio-economic differences by ethnicity within Muslim group?
 - Cultural influence of the region of origin (of immigrant generation) on fertility behaviour independent of the religious affiliation?
 - Difference in the duration of settlement?



Conclusions (ethnicity)

- Converging TFR between ethnic groups, albeit at different speeds.
- Preliminary results for UK-born women by ethnicity further support the “converging trends” hypothesis.
- Ethnic fertility assumptions:
 - with stable flow of migration by ethnic groups the UK-born proportion of the main ethnic minorities will increase
 - preliminary results of fertility estimates by UK-born women suggest that less differences across groups (migration been constant) should be expected in the future decades.

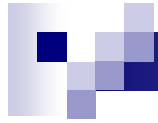


Ongoing and future work

- Finalise the fertility estimates
 - by ethnicity & by religious denominations
 - Explore other sources

- Other components of population projection models
 - Base population by sub-group
 - Mortality
 - Estimation of migration flows by ethnic groups

- Run projections



Thank you

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