

## Frequently Asked Questions – births and fertility

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## **GENERAL**

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Office for National Statistics, August 2009.

## **UK BIRTHS – GENERAL**

### **1. For how many years has the number of births been rising?**

In the UK, the number of births has been rising for the past 6 years.

In 2008 there were 794,383 live births in the UK. This has risen from 772,245 live births in 2007 and from a low point of 668,777 in 2002.

### **2. Why has the number of births been rising?**

Changes in the number of births result from three factors: changes in fertility rates and changes in both the size and age structure of the female population.

The UK Total Fertility Rate has risen from 1.63 children per woman in 2001 to 1.96 in 2008, meaning that the likelihood of a woman giving birth during a year has increased.

At the same time, the total number of women in the key childbearing ages (15 to 44) living in the UK has increased, by 1.8 per cent between 2001 and 2008, meaning there are more women who could potentially have a birth.

Both these factors have led to the increase in the overall number of births. This increase would have been larger if changes in the age structure of the population had not had a negative impact on the number of births (see question 3).

### **3. Why has the number of women of childbearing age been increasing?**

Between 2001 and 2008, the total number of women in the key childbearing ages (15 to 44) living in the UK increased by 1.8 per cent. This is a result of net international in-migration to the UK.

Data from the Annual Population Survey show that the number of women of childbearing age living in the UK who were born outside the UK increased between 2004 and 2008. This increase is due to international migration. The increase in women born outside the UK has driven the overall increase in the number of women of childbearing age.

In contrast, the number of UK born women of childbearing age decreased slightly between 2004 and 2008. This is due to the numbers of women reaching age 45 (and therefore 'leaving' the childbearing population) being greater than the numbers of women reaching age 15 (and 'entering' the childbearing population). This trend is likely to continue, as the large cohorts of women born in the mid-1960s are reaching their mid-forties.

In contrast to the long-term trend, the total number of women of childbearing age in the UK fell slightly between mid-2007 and mid-2008. This was due to the continuing changes in the population of UK born women, as described above.

### **4. What are the impacts of the rising number of births?**

Increasing numbers of births will have a wide range of impacts. For example in the short-term there will be impacts on maternity and child health services, and in the medium-term on schools provision due to increased numbers of children in the population.

In the long-term, increasing numbers of births will act to increase the population of working age and similarly the number of women of childbearing age and hence births in the future (ignoring any effects of migration on the population).

However, it should be noted that in the long-term, the level of fertility in the UK is still below the replacement level of around 2.1; for a population to replace itself (in the absence of migration), each woman needs to have around two children. This means that the level of fertility in the UK is still having a downwards effect on population size in the long-term - recent increases in fertility have simply reduced the size of this downward effect.

## **CONTRIBUTION OF BIRTHS TO UK POPULATION CHANGE**

### **5. What contribution are births making to population change?**

Between mid-2007 and mid-2008, natural change (the difference between the numbers of births and deaths) accounted for 54 per cent of UK population growth. Net migration and other changes accounted for the remaining 46 per cent. This is the first time in a decade that natural change has contributed over half of population growth in a 12 month period. This natural change was predominantly due to an increase in births.

Natural change has increased over the mid-year periods from 2000-01 to 2007-08. This is due both to increases in the number of births and falls in the number of deaths. However the larger change has been seen in births, which increased from 674,000 in 2000-01 to 791,000 in 2007-08. In contrast the number of deaths has fluctuated, but fell overall from 599,000 in 2000-01 to 570,000 in 2007-08.

### **6. Are the number of births and the level of net migration related?**

The number of births is affected by several factors (see question 2) and levels of net migration (recent and further in the past) may impact on these factors. For example, immigration of women of childbearing age (or younger) will act to increase the population who could potentially have a birth, while emigration will decrease this population. Second, if immigrants have higher fertility rates on average than the resident population, this will have an upward impact on the total fertility rate and hence the number of births. See questions 13, 24 and 25 for further information.

However, migration is not the only factor influencing the number of births – changes in fertility rates and the age structure of the resident population can also have a large impact on the number of births.

### **7. If net international migration fell, should we expect fewer births as a result?**

If net international migration among women of childbearing age (or younger) fell, this would have a downward impact on the number of women of childbearing age. This would in turn act to decrease the number of births if fertility rates remained stable. Assuming net migration of women in this age group remained above zero, migration would still be having an upward, though smaller, influence on the number of births. Only if net migration in this age group fell below zero (more women emigrated than immigrated; and fertility rates remained stable) would migration have a downward effect on population size and thus number of births.

If immigration of non-UK born women fell or emigration of non-UK born women increased, this could have a small downward impact on fertility rates (and hence the number of births), because women born outside the UK currently have higher fertility rates on average than UK born women (see question 24).

The latest figures on UK births show a small fall in the number of births in the first quarter of 2009 compared with all four quarters of 2008. It is too early to ascertain the causes of this drop but plausible possibilities include impacts of the economic recession on fertility rates, and changes in the number of UK born women of childbearing age (see question 3), as well as any impacts of changes in international migration.

Data link:

- Quarterly UK births for the UK and constituent countries can be found in Table 2.1 of Health Statistics Quarterly ([www.statistics.gov.uk/StatBase/Product.asp?vlnk=6725](http://www.statistics.gov.uk/StatBase/Product.asp?vlnk=6725)) or Table 2.1 of Population Trends ([www.statistics.gov.uk/statbase/Product.asp?vlnk=6303](http://www.statistics.gov.uk/statbase/Product.asp?vlnk=6303)).

## UK FERTILITY - GENERAL

### 8. What does the Total Fertility Rate (TFR) show?

The TFR is the average number of live children that a group of women would bear if they experienced the age-specific fertility rates of the calendar year in question throughout their childbearing lifespan. It represents a snapshot of the level of fertility during the year in question. The UK TFR of 1.96 in 2008 does not mean that a woman now entering her childbearing years will have 1.96 children, since fertility rates are likely to change over time.

The TFR is a standardised measure which controls for variations in the age distribution of women of childbearing age over time. However, as a 'period' measure, the TFR is influenced by changes in the timing of childbearing within women's lives as well as any changes in completed family size. For example if women start to postpone fertility to older ages, this has a dampening effect on the TFR during that period, but will not necessarily mean that the women in question will have fewer children in total.

### 9. Why has the UK TFR been increasing since 2001?

Recent increases in the TFR have been driven mainly by faster increases in fertility rates for women in their thirties and forties, continuing the long-term trend that started in the late 1970s. In addition, there has also been a reversal in fertility trends among younger women over the past six years, with rates starting to increase at age 25-29 and to a lesser extent at age 20-24 (in contrast to falling rates for women in their twenties during the 1990s).

There is no single explanation underlying these changes in fertility, which are likely to have resulted from a combination of factors. Possible causes may include less postponement of childbearing among women currently in their twenties, changes in support for childbearing (e.g. changes in tax credits and maternity leave) and the impact of international migration on fertility. These are discussed further in the article "Fertility assumptions for the 2006-based national population projections" in Population Trends 131: [www.statistics.gov.uk/cci/article.asp?ID=2087](http://www.statistics.gov.uk/cci/article.asp?ID=2087).

#### Data link:

- The Total Fertility Rate for the UK and constituent countries can be found in Table 2.2 of Health Statistics Quarterly ([www.statistics.gov.uk/StatBase/Product.asp?vlnk=6725](http://www.statistics.gov.uk/StatBase/Product.asp?vlnk=6725)) or Table 2.2 of Population Trends ([www.statistics.gov.uk/statbase/Product.asp?vlnk=6303](http://www.statistics.gov.uk/statbase/Product.asp?vlnk=6303)).

### 10. Why was the TFR so much higher in the 1960s than it is now?

During the 1960s, women were having children earlier in life, which acted to push the TFR upwards to just below 3 children per woman. In England and Wales, the average age at first birth was around 24 during the 1960s, compared with 27.5 in 2008.

In England and Wales, women born in 1940 (who were in their twenties during the 1960s) had on average 1.89 children by their 30th birthday, whereas this had nearly halved to 0.99 children by age 30 among women born in 1975. In contrast, the postponement of childbearing to later ages since the mid-1970s has led to downward pressure on the TFR.

In addition, women of childbearing age during the 1960s were generally having larger families than those childbearing 20 years later. For example, women born in 1940 had on average 2.36 children during their lifetimes while those born in 1960 had only 1.98 children and those born in 1975 are projected to have 1.88 children on average (figures relate to England and Wales). This is partly due to a rise in the proportion of women remaining childless - only 11 per cent of women

born in 1940 had no children compared with 19 per cent of women born in 1960. For women born in 1965 and 1970, the proportion projected to remain childless is 19 per cent and 18 per cent respectively.

Note: figures in this section relate to England and Wales rather than the UK as a whole, since figures on mean age at first birth and proportions childless are not available for the UK. This is because information on birth order (first, second, third births etc) is not collected or processed in the same way throughout the UK.

### **11. Why was the TFR so low in 2001?**

The UK TFR fell gradually during the 1990s, from 1.83 in 1990 to 1.63 by 2001. This was largely due to changes in the timing of childbearing. In contrast to women born in the 1940s who were having children earlier in life (see answer to question 10), women born in the 1950s and 1960s have been delaying their childbearing to older ages and this has had a downward impact on the TFR. (As a 'period' measure, the TFR is influenced by changes in the timing of childbearing within women's lives as well as any changes in completed family size).

In addition, women born during the 1960s and 1970s were having smaller families on average than those born earlier (see figures in answer to question 10).

### **12. Why has the mean age of mothers at birth been rising?**

The standardised mean age of mothers at childbirth in the UK has been increasing since the mid-1970s, from 26.7 years in 1976 to 29.3 in 2008. This reflects women delaying childbearing to older ages in recent years (see questions 10 and 11). Despite small increases in fertility among women in their twenties in recent years, the mean age has continued to rise slowly, because fertility rates for women in their thirties and forties have risen faster than those of younger women.

#### Data link:

- Mean age of mother at births for the UK and constituent countries can be found in Table 2.2 of Health Statistics Quarterly ([www.statistics.gov.uk/StatBase/Product.asp?vlnk=6725](http://www.statistics.gov.uk/StatBase/Product.asp?vlnk=6725)) or Table 2.2 of Population Trends ([www.statistics.gov.uk/statbase/Product.asp?vlnk=6303](http://www.statistics.gov.uk/statbase/Product.asp?vlnk=6303)).

## **BIRTHS TO UK AND NON-UK BORN MOTHERS (ENGLAND AND WALES)**

The questions and answers in this section refer to England and Wales.

### **13. Is the rising number of births due to international migration?**

The number of births to both UK born and non-UK born women has been rising in the last few years.

Between 2007 and 2008, the number of births in England and Wales to women born in the UK increased by 1.5 per cent to 537,854 births in 2008. Over the same period the number of births to foreign-born women increased by 6.5 per cent to 170,834 births in 2008.

Of the total increase in births (18,698) between 2007 and 2008, over half (56 per cent) were births to non-UK born mothers. This is lower than between 2006 and 2007, when two-thirds (66 per cent) of the change was due to non-UK born mothers.

The rise in the number of births to women born in the UK can be attributed to rising fertility rates among UK born women. However, the rise in births is not as high as it might otherwise have been, due to falling numbers of UK born women aged 30-39 in the population.

In contrast, the rise in the number of births to non-UK born women can be attributed to the increase in the population of women born outside the UK particularly at the ages where fertility is highest. For example at age 30-34, the proportion of women who were born outside the UK rose from 15 per cent in 2004 to 22 per cent in 2008. This is partly due to in-migration and partly because the number of UK born women in this age group has been falling.

### **14. Why do birth statistics refer to births to ‘women born outside the UK’ rather than births to ‘migrants’?**

Country of birth of mother is generally used when looking at birth statistics because this information is collected at birth registration, unlike migration history, ethnicity or nationality.

The country in which a person was born does not change over time. This is in contrast to nationality, migration history and self-reported ethnicity, which may change over time. Therefore country of birth is a more robust variable when analysing time trends.

However, it is important to note that country of birth is not an exact proxy for recent international migration. Women born outside the UK who have been living in England and Wales for a number of years will be included in the non-UK born group, but are not recent in-migrants (though they were in-migrants some years earlier). However, some UK born women living in England and Wales will be recent in-migrants (if they recently spent more than 12 months abroad).

### **15. What proportion of births occurs to women born outside the UK and how is this changing over time?**

In England and Wales, 24.1 per cent of births were to mothers born outside the UK in 2008. This has risen from 16.5 per cent in 2001 and 19.5 per cent in 2004.

Between 2007 and 2008, the number of births to women born in the UK increased by 1.5 per cent, to 537,854 births in 2008. Over the same period the number of births to foreign-born women increased by 6.5 per cent, to 170,834 by 2008. Of the total increase in births (18,698) between 2007 and 2008, more than half (56 per cent) were births to non-UK born mothers. Because the

number of births is increasing relatively faster among non-UK born women, the proportion of all births that are to non-UK born women is rising.

Data link:

- Numbers of births to UK born and non-UK born women in England and Wales can be found in [www.statistics.gov.uk/statbase/Product.asp?vlnk=14408](http://www.statistics.gov.uk/statbase/Product.asp?vlnk=14408) - see 'FM1 Chapter 9: Parents' birthplace', table 9.1.

## **16. Why has the proportion of births in England and Wales to mothers born outside the UK been rising?**

Changes in the number of births result from three factors: changes in the size and age structure of the female population and changes in fertility rates. Comparing UK born women with non-UK born women there are some differences in these three factors.

The number of women of childbearing age who were born outside the UK increased between 2004 and 2008, as a result of international migration. In contrast, the number of UK born women of childbearing age decreased slightly. This was due mainly to the numbers of women reaching age 45 (and therefore 'leaving' the childbearing population) being greater than the numbers of women reaching age 15 (and 'entering' the childbearing population), a trend that is likely to continue in the short-term.

These differing trends meant that in 2008 women born outside the UK made up around 16 per cent of the female population of childbearing age, compared with 13 per cent in 2004. This population change has contributed to the rising proportion of births to women born outside the UK.

Foreign-born women living in England and Wales also continue to have higher fertility than UK born women at all ages. In 2008, the estimated Total Fertility Rate for non-UK born women was 2.51 children compared with an estimated 1.84 children for women born in the UK.

In summary, the rising proportion of births to mothers born outside the UK can be attributed to women born outside the UK making up an increasing share of the childbearing population in England and Wales, while continuing to have relatively higher fertility than UK-born women on average.

## **17. Is the proportion of births to women born outside the UK the same as the proportion of the population born outside the UK?**

In England and Wales, 24.1 per cent of births were to mothers born outside the UK in 2008. However it is estimated that only 16 per cent of the female population of childbearing age was born outside the UK.

The proportion of births to mothers born outside the UK is higher than the proportion of the female population of childbearing age born outside the UK for two reasons:

- Fertility is higher among the non-UK born – in 2008 the estimated TFR for the non-UK born was 2.51 compared with 1.84 for women born in the UK.
- The age structure of the population of women born outside the UK differs from that of UK born women. Within the age range 15 to 44, the largest proportions of non-UK born women fall in the two age groups with the highest fertility (25-29 and 30-34). However the proportions of UK born women in these high fertility ages groups are currently

relatively low due to the low numbers of births around the late 1970s (when these women were born).

### **18. Which countries were mothers born outside the UK mainly born in?**

Pakistan has been the most common country of birth for non-UK born mothers each year between 2001 and 2008. In general, the top 10 has been fairly stable, with Pakistan, India, Bangladesh, Nigeria, Somalia, Germany and South Africa featuring in the top 10 in all seven years. Three countries – Republic of Ireland, the United States and Jamaica have dropped out of the top ten between 2001 and 2008, while three countries have entered – Poland, Ghana and Sri Lanka. The fastest recent increase has been in births to mothers born in Poland, which climbed from 9<sup>th</sup> place in 2005 to 2<sup>nd</sup> place by 2008.

#### Data link:

- Live births for the 10 most common countries of birth for non-UK born mothers in England and Wales can be found at [www.statistics.gov.uk/statbase/Product.asp?vlnk=14408](http://www.statistics.gov.uk/statbase/Product.asp?vlnk=14408) - see 'Mothers' country of birth: further tables and commentary', table 2.

### **19. Why has the number of births to mothers born in Poland increased so much in recent years?**

The number of births to women born in Poland has increased from 3,403 births in 2005 to 16,101 in 2008.

Poland was one of the 10 countries that joined the EU in May 2004. This gave Polish citizens the right to live and work in the UK. As a result, the number of people born in Poland who are resident in the UK has increased. Figures on the population by country of birth show that the number of people (all ages) born in Poland who are living in the UK has increased from an estimated 93,000 in 2004 to 439,000 in 2008.

If the number of women born in Poland that are living in England and Wales increases, then it follows that the number of births to Polish born women is likely to increase. However, the fact that the number of births that are occurring to Polish born mothers is increasing does not necessarily imply that Polish born women have higher fertility than UK born women; just that there are more of these women living in England and Wales than previously. (Total Fertility Rates for women born in individual countries such as Poland are not currently available – see question 28 for further details).

### **20. Is Poland likely to overtake Pakistan as the most common country of birth for non-UK born mothers in England and Wales in 2009?**

ONS does not project future numbers of births by mothers' country of birth. It is therefore not possible to answer this question until 2009 birth registration data are available in 2010.

### **21. How does the proportion of births to non-UK born mothers vary between subnational areas within England and Wales?**

In 2008, the Government Office Region (GOR) in England with the highest percentage of live births to mothers born outside the UK was London (55 per cent). The North East had the lowest percentage of live births to mothers born outside the UK (9.5 per cent). London has consistently

shown the highest percentage and the North East the lowest percentage of live births to mothers born outside the UK since 2001.

Of the Local Authorities in England, the London borough of Newham recorded 75 per cent of births to mothers born outside the UK, the highest percentage in 2008, followed by Brent (73 per cent). Outside London, the Unitary Authority of Slough had the highest percentage of live births to mothers born outside the UK (57 per cent), followed by Luton (50 per cent). The area with the lowest percentage of births to mothers born outside the UK in 2008 was Teesdale, with 2.3 per cent.

In Wales, the percentage of live births in 2008 to mothers born outside the UK was 9.8 per cent. Within Wales, Cardiff had the highest percentage of births to mothers born outside the UK (24 per cent) and Torfaen had the lowest (3.2 per cent).

Data link:

- Live births by birthplace of mother and area of usual residence in England and Wales can be found at [www.statistics.gov.uk/statbase/Product.asp?vlnk=14408](http://www.statistics.gov.uk/statbase/Product.asp?vlnk=14408) - see 'Mothers' country of birth: further tables and commentary', tables 3a to 3h.

**22. Why does the proportion of births to non-UK born mothers vary so much between local authorities?**

The main reason for geographical variations in the proportion of births to mothers born outside the UK is variation in the proportion of people living in those areas who were born outside the UK. Other things being equal, areas where a high proportion of women of childbearing age were born outside the UK are likely to have higher numbers of births to women outside the UK.

The composition of the non-UK born population in terms of country of birth also varies considerably between local authorities. This will affect the numbers of births to non-UK born women if there are differences in fertility between women born in different countries. There is some evidence that women born in certain countries have higher fertility than others - in particular, women born in Pakistan and Bangladesh tend to have higher fertility than UK born women or women born in other countries who are living in England and Wales (see question 28). Therefore areas that are home to an above-average proportion of women born in countries associated with higher fertility are likely to have an above-average proportion of births to non-UK born mothers.

**23. Can statistics on births by mother's country of birth by local authority be used as an accurate proxy for where immigrants settle in England and Wales?**

No – for three key reasons.

- Statistics on births to non-UK born mothers can only give a very rough indication of where women of childbearing age are resident. They will not give an accurate representation of where the overall non-UK born population is resident (men and women of all ages).
- It is not possible to deduce the number of non-UK born women living in an area from the number of births to non-UK born women. This is partly because some immigrant groups will have higher or lower fertility than others (see question 28).
- Non-UK country of birth does not necessarily equate to recent immigration (see question 14). Recent immigrants may settle in different areas to those who entered England and Wales many years ago

## FERTILITY AND INTERNATIONAL MIGRATION (ENGLAND AND WALES)

The questions and answers in this section refer to England and Wales.

### 24. Do women born outside the UK have higher fertility than UK born women?

Estimated Total Fertility Rates for England and Wales (2004 to 2008) show that women born outside the UK have higher fertility on average than those born in the UK. In 2008, the estimated TFR for non-UK born women was 2.51 children (compared with an estimated 1.84 children for women born in the UK).

It should be noted that figures for women born outside the UK represent the average fertility of women born in a wide variety of countries. In 2001, the Total Fertility Rate for all women born outside the UK was 2.2 but this varied from 1.6 for those born in East Africa to 4.7 for women born in Pakistan (these figures are based on denominators from the 2001 Census - see question 28 for details).

The TFR provides a snapshot of the level of fertility in a particular year and does not necessarily represent the average number of children that a group of women will have over their lifetime. Estimated TFRs for UK born and non-UK born women will be sensitive to changes in the timing of fertility within women's lives. Research in other countries (e.g. in France: Toulemon, 2004) has noted that immigrant women typically have low fertility prior to immigration, followed by high fertility immediately after immigration. If this were also the case in England and Wales, the estimated TFR for non-UK born women could be inflated by this timing effect.

#### Data link:

- Estimated Total Fertility Rates for UK born and non-UK born mothers in England and Wales, 2004-2008, can be found at [www.statistics.gov.uk/statbase/Product.asp?vlnk=14408](http://www.statistics.gov.uk/statbase/Product.asp?vlnk=14408) - see 'Mothers' country of birth: further tables and commentary', table 1.
- Comparable figures for the United Kingdom for 2004 to 2007 can be found in Table 1 of the Population Trends article 'Have women born outside the UK driven the rise in UK births since 2001?' [www.statistics.gov.uk/cci/article.asp?ID=2243](http://www.statistics.gov.uk/cci/article.asp?ID=2243)
- 2001 Total Fertility Rates by country of birth of mother, for England and Wales, can be found at [www.statistics.gov.uk/statbase/Product.asp?vlnk=14408](http://www.statistics.gov.uk/statbase/Product.asp?vlnk=14408) - see 'FM1 chapter 9: Parents' birthplace', table 9.5.

### 25. Is the rise in the Total Fertility Rate (TFR) in England and Wales due to international migration?

In brief, the rise in the TFR in England and Wales is mainly due to increasing fertility among women born in the UK. However non-UK born women, who have higher fertility, are making up an increasing share of the population, which is also acting to push the overall TFR upwards.

The estimated TFR for women born in the UK has risen steadily from 1.68 in 2004 to 1.84 in 2008. Hence there has been a clear rise in fertility among the UK born, who make up most of the female population of childbearing age (84 per cent in 2008). The increase in the overall TFR is therefore mainly due to the rising fertility of UK born women.

In contrast, there has been little change over the past four years in the estimated TFR for non-UK born women in England and Wales. However, non-UK born women continue to have higher fertility than UK born women at all ages. In 2008, the estimated Total Fertility Rate for non-UK

born women living in England and Wales was 2.51 children (compared with an estimated 1.84 children for women born in the UK).

Non-UK born women are making up an increasing share of the childbearing population in England and Wales. Between 2004 and 2008, the proportion of women of childbearing age who were born outside the UK grew from 13 per cent to 16 per cent. Because this group has higher fertility on average than those born in the UK, their increasing population share is also helping to push the overall TFR upwards, even though their fertility is fairly stable.

Note that comparing TFRs for women born in the UK with those born outside the UK can help to illustrate the impact of in-migration on the TFR. However it is not possible to quantify the impact of out-migration on the TFR.

## **26. At what age are fertility rates highest for UK born and non-UK born mothers?**

Over the past five years, fertility rates have been highest in the 30-34 age group for both UK born and non-UK born women living in England and Wales. (This is based on estimated age-specific fertility rates underlying the estimated Total Fertility Rates).

## **27. Why are the TFRs for UK born and non-UK born women described as ‘estimated’? How reliable are estimated TFRs for UK born and non-UK born women?**

The estimated TFRs for UK born and non-UK born women living in England and Wales are calculated using birth registration data as the numerators and populations by country of birth from the Annual Population Survey (APS) as the denominators. The APS has been used to obtain estimates of the female population by five-year age group and UK/non-UK country of birth. Like any survey estimates, these are subject to sampling error.

Coefficients of variation for the estimated populations by five-year age group are less than 1 per cent for UK born women and range between 3 and 6 per cent for women born outside the UK (only rising above 5 per cent for 15-19 year olds, where the non-UK born population is smaller). Estimates with coefficients of variation below 5 per cent are considered to be precise and those between 5 and 10 per cent reasonably precise.

TFRs estimated using population denominators from surveys may differ slightly from actual published TFRs. For example, the overall 2008 TFR estimated using this method is 1.96, compared with the actual 2008 TFR of 1.97 (which uses the mid-year population estimate as the denominator). This is because the population denominators derived from the Annual Population Survey are produced before mid-year population estimates are available, so can differ slightly. The 2008 Annual Population Survey estimates are weighted to the 2004-based National Population Projections, as the last reweighting was completed in 2007, but they will be reweighted to mid-2008 population estimates in early 2010.

The Annual Population Survey could underestimate the proportion of people born overseas for the following reasons:

- It excludes students in halls of residence who do not have a UK resident parent
- It excludes people in most other types of communal establishment (e.g. hotels, boarding houses, hostels, mobile home sites etc)
- It excludes certain people who have been resident in the UK for less than six months
- It is weighted to population estimates that exclude migrants staying for less than 12 months.

## **28. Are estimated TFRs available for women born in specific countries?**

TFRs for women born in specified country groupings are currently available for 2001 only. These figures use populations from the 2001 Census as denominators. TFRs in 2001 varied from 1.6 for UK born women and those born in East Africa to 4.7 for women born in Pakistan.

Such detailed estimates for more recent (non-Census) years are not currently available. It is likely that survey estimates of populations from individual countries of birth or country groupings (for females by five-year age group) would not be sufficiently precise to give reliable estimates of fertility for those groups.

### Data link:

- 2001 Total Fertility Rates by country of birth of mother, for England and Wales, can be found at [www.statistics.gov.uk/statbase/Product.asp?vlnk=14408](http://www.statistics.gov.uk/statbase/Product.asp?vlnk=14408) - see 'FM1 chapter 9: Parents' birthplace', table 9.5.

## **29. Why are fertility rates estimated by mother's country of birth rather than mother's ethnic group or nationality?**

Fertility rates are estimated by mother's country of birth because this information is collected at birth registration (see question 14), unlike ethnic group or nationality. A key advantage of country of birth is that it does not change over an individual's lifetime, as self-reported ethnic group and nationality can.

Care is needed in interpreting figures relating to country of birth – they cannot be used as a proxy for these other variables. For example, the category "UK born women" will include second and third generation migrants (born to earlier in-migrants) who will often not be of White British ethnicity. Similarly the category "non-UK born women" will include some UK nationals and is likely to include some women of White British ethnicity, e.g. those born to UK service people stationed abroad.

## GENERAL

### 30. Where can I find more information on births and fertility in the UK?

For data and information covering all parts of the UK, the best place to start is the publication hub 'Live Births and Stillbirths' page, which has links to a wide range of publications:

[www.statistics.gov.uk/hub/population/births-and-fertility/live-births-and-stillbirths/index.html](http://www.statistics.gov.uk/hub/population/births-and-fertility/live-births-and-stillbirths/index.html)

For England and Wales, the latest (annual) births data can be found at:

[www.statistics.gov.uk/statbase/Product.asp?vlnk=14408](http://www.statistics.gov.uk/statbase/Product.asp?vlnk=14408)

More detailed births data can be found in the annual FM1 Birth Statistics reports:

[www.statistics.gov.uk/StatBase/Product.asp?vlnk=5768&Pos=&ColRank=1&Rank=240](http://www.statistics.gov.uk/StatBase/Product.asp?vlnk=5768&Pos=&ColRank=1&Rank=240)

The flagship ONS journals *Population Trends* and *Health Statistics Quarterly* both contain regular tables with information on births by year and quarter for the UK and constituent countries.

*Population Trends*: [www.statistics.gov.uk/statbase/Product.asp?vlnk=6303](http://www.statistics.gov.uk/statbase/Product.asp?vlnk=6303)

*Health Statistics Quarterly*: [www.statistics.gov.uk/StatBase/Product.asp?vlnk=6725](http://www.statistics.gov.uk/StatBase/Product.asp?vlnk=6725)

These journals also contain regular updates and more in-depth articles on births and fertility – some recent examples are below:

- 'Have women born outside the UK driven the rise in UK births since 2001?' Tromans, N., Natamba, E. and Jefferies, J. (2009). *Population Trends* 136 pp 28-42.
- 'Patterns of fatherhood in England and Wales, 1964-2007.' (2009) *Population Trends* 136 pp 103-107.
- 'Annual Update: Births in England and Wales, 2007'. (2008) *Population Trends* 134 pp 85-89.
- 'Birthweight and gestational age by ethnic group, England and Wales 2005: introducing new data on births.' (2008) *Health Statistics Quarterly* 39 pp 22-31.
- 'Have national trends in fertility between 1986 and 2006 occurred evenly across England and Wales?' Tromans, N., Natamba, E., Jefferies, J. and Norman, P. (2008) *Population Trends* 133 pp 7-19.
- 'Fertility assumptions for the 2006 based national population projections.' Jefferies, J. (2008) *Population Trends* 131 pp 19-27.

### 31. What is the likely impact of the recession on UK births?

It is too early to say whether the economic recession will have any impact on the number of births in the UK, in particular because of the 9 month time lag between conception and birth. There are plausible mechanisms by which recession could have either a downward or an upward effect on births and at this stage it is not possible to tell which mechanisms will prevail or indeed whether there will be any clear effect. The impacts of past recessions on UK births have not been clear cut.

The latest figures on UK births show a small fall in the number of births in the first quarter of 2009 compared with all four quarters of 2008. It is too early to tell whether this fall will be sustained or to ascertain its causes - the direct impact of the economic recession on fertility rates is one plausible explanation, but changes in the number of UK born women of childbearing age (see question 3) and changes in international migration may also have a part to play.

Data link:

- Quarterly UK births for the UK and constituent countries can be found in Table 2.1 of Health Statistics Quarterly ([www.statistics.gov.uk/StatBase/Product.asp?vlnk=6725](http://www.statistics.gov.uk/StatBase/Product.asp?vlnk=6725)) or Table 2.1 of Population Trends ([www.statistics.gov.uk/statbase/Product.asp?vlnk=6303](http://www.statistics.gov.uk/statbase/Product.asp?vlnk=6303)).

Please direct any queries on births to [Vsob@ons.gsi.gov.uk](mailto:Vsob@ons.gsi.gov.uk) and more complex queries on fertility or these Frequently Asked Questions to [Fertility@ons.gsi.gov.uk](mailto:Fertility@ons.gsi.gov.uk).

Office for National Statistics, August 2009.