

National Statistician's Annual Article on the Population: a Demographic Review

Jil Matheson
National Statistician

Introduction

This article is the third in an annual series providing an overview of the current population of the UK. Two years ago the first annual article provided a summary of the UK's relatively fast population growth in the previous five years; it noted that life expectancy had continued to rise, and that fertility rates had been increasing and, by 2006, were at their highest level since 1980. The population was shown to be increasingly diverse and mobile, making it more challenging to measure population changes accurately. Last year's article focused on the demographic and other characteristics of the older population, and presented trends in mortality leading to the growth of the older population during the second half of the 20th century. The report described the impact of an ageing population on changes in health expectancy, employment and incomes of older people.

This article provides an update on all components of UK population change using the most recent statistics available, noting the effects on both UK population growth and structure. The UK entered recession in the second quarter of 2008¹ and the article includes a short section on demographic changes during economic recession. The article considers in some detail the recent trend of migration to the UK from the so-called 'Accession' countries of Central and Eastern Europe since the expansion of the European Union in May 2004. This article complements the (November 2009) annual cross-government Migration Statistics publication², which covers migration patterns in more detail. The article concludes by highlighting the challenging task of measuring population change in modern societies, and some of the progress made and underway to improve this measurement.

This is the third in a series of annual demographic reports of the UK, providing an overview of the latest statistics on the population. This year's article also includes a short section on economic recessions, and a summary of migration following the enlargement of the European Union (EU) in May 2004.

In addition to providing a statistical summary of the impact of migration from the 'Accession' countries, mention is made of flows during the current recession. There is discussion of how this complex recent migration has challenged traditional definitions of *migration*, and how this impacts on the need for ONS and other government agencies to measure these flows accurately.

Overview of the UK Population

Population growth and age structure of the population

In 2008 the population of the UK was 61.4 million.³ This was a nine per cent increase from 56.3 million a quarter century ago in 1983. Projections based on past demographic trends indicate that it will rise to 71.6 million by 2033 (an increase of 17 per cent in the next 25 years compared with 2008)⁴ (Table 1).

The UK population was 61.4 million in 2008; this is a nine per cent increase from 56.3 million 25 years ago.

Between 1983 and 2008 the proportion of people in the UK aged under 16 fell from 21 per cent to 19 per cent of the total population. The proportion of people aged 16 to 64 increased from 64 to 65 per cent, while the share of those aged 65 and over also increased slightly to 16 per cent. Most striking however, was the growth in the number of very old people: in 1983 there were 0.6 million people aged 85 and over (one per cent of the total population), which by 2008 had more than doubled to 1.3 million (two per cent) (Table 1).

The number of people aged 85 and over rose from 0.6 million in 1983 to 1.3 million in 2008.

The latest national population projections are based on the estimated population at the middle of 2008 and a set of demographic trend-based assumptions about future fertility, mortality and migration. They indicate that population ageing will continue into the future. By 2033 the number and proportion in the ‘oldest old’ population (85 and over) is projected to more than double again, reaching 3.3 million, representing five per cent of the total population. The number of people aged 65 and over is projected to increase by about 6.5 million to 16.4 million, while the number of people aged between 16 and 64 will only increase by 2.5 million. Based on these projections, the population aged 65 and over will account for 23 per cent of the total population in 2033, while the proportion of the population aged between 16 and 64 is expected to fall from 65 per cent to 59 per cent. This is due to increasing numbers of people from the 1960s baby boom, who are currently of working age, but who will be entering retirement age. They will be replaced by smaller numbers of people in the working population. Figure 1 shows the changing age structure of the UK over time.

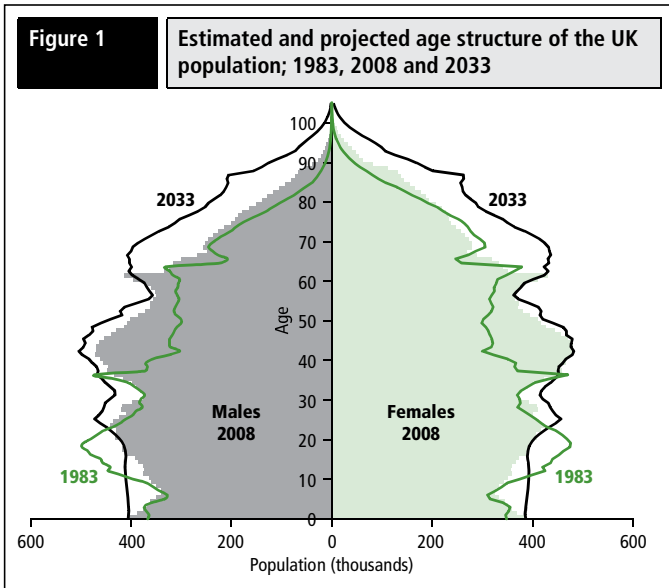
It is projected that by 2033 the number of people aged 85 and over will rise to 3.3 million, or around five per cent of the population.

Figure 2 shows the estimated and projected ratios of the number of people of working age to the number of people above state pension

Table 1 Estimated and projected population and percentage of population by age group, UK, 1983–2033

	1983		2008		2033	
	population (millions)	%	population (millions)	%	population (millions)	%
0–15	12.1	21	11.5	19	12.8	18
16–64	35.8	64	39.9	65	42.4	59
65–84	7.8	14	8.6	14	13.1	18
85 and over	0.6	1	1.3	2	3.3	5
All	56.3	100	61.4	100	71.6	100

Source: Mid-year estimates 1983 and 2008, ONS, GROS, NISRA; 2008-based National Population Projections, Office for National Statistics



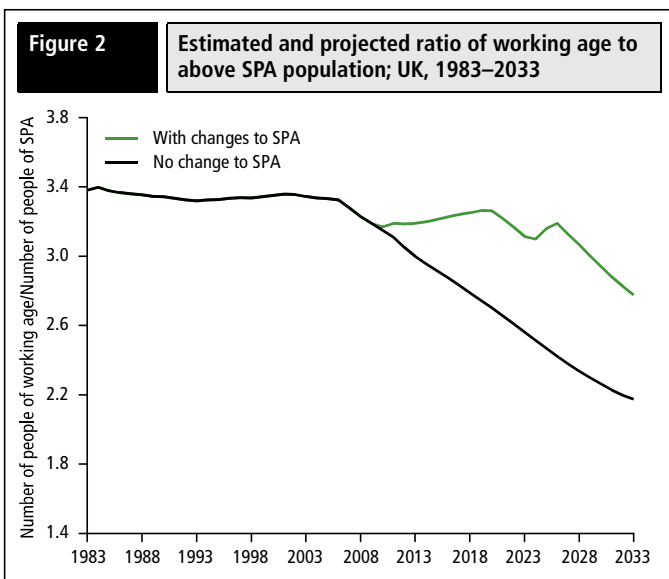
Source: Mid-year estimates 1983 and 2008, ONS, GROS, NISRA; 2008-based National Population Projections, Office for National Statistics

age (SPA) in the UK, allowing for the already-planned phased changes in SPA to be introduced by the UK Government between 2010 and 2046⁵. The figure covers the quarter century before 2008 and the quarter century projected from 2008 to 2033. By 2033, there will be about 2.8 people of working age to each person above SPA. Without the planned changes in SPA, this figure would have been projected to fall to around 2.2 people. It should of course be noted that not everyone chooses to retire at SPA. The ratio is a demographic ratio based solely on age and does not take into account people who cease to work before SPA or indeed those who choose to continue to work above SPA.

Characteristics of the UK population

Ethnicity

Table 2 shows that in 2008 the mixed ethnic groups White and Black Caribbean, White and Asian, and White and Black African had the



Source: Mid-year population estimates 1983–2008, ONS, GROS, NISRA; 2008-based National Population Projections, Office for National Statistics

Table 2

Population by ethnic group and age band: UK, 2008

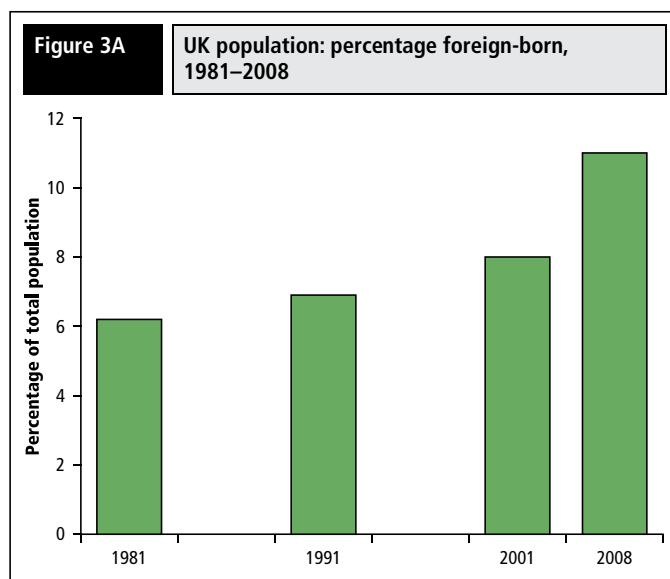
Ethnic group	Size of ethnic group (%)	Population (in thousands)			Percentage distribution by age		
		0–15	16–64	65 and over	0–15	16–64	65 and over
White British	83.8	8,875	31,812	8,482	18	65	17
White Irish	0.4	11	178	69	4	69	27
Other White	4.8	384	2,084	338	14	74	12
White and Black Caribbean	0.4	135	103	4	56	43	2
White and Black African	0.2	52	45	1	53	46	1
White and Asian	0.3	98	84	4	53	45	2
Other Mixed	0.3	60	88	3	40	58	2
Indian	2.1	249	896	102	20	72	8
Pakistani	1.7	338	616	39	34	62	4
Bangladeshi	0.6	131	221	13	36	61	4
Other Asian	0.9	114	364	24	23	73	5
Black Caribbean	1.1	125	411	82	20	66	13
Black African	1.4	276	535	19	33	64	2
Other Black	0.1	30	48	5	37	57	6
Chinese	0.4	31	213	12	12	83	5
Other	1.5	184	680	40	20	75	4
Total	100.0	11,091	38,376	9,238	19	65	16

Source: Annual Population Survey, January–December 2008

youngest age structures of all ethnic groups in the UK, with about half of the people in these groups aged under 16 years. Among other ethnic groups, the Chinese had the largest percentage of people aged 16–64, and the White Irish had the oldest age structure, with about one in four people aged 65 and over. The absolute sizes of the ethnic groups are shown for comparative purposes. The numbers in the table do not add up to the total UK population owing to a degree of non-response to the ethnic group question.

Country of birth

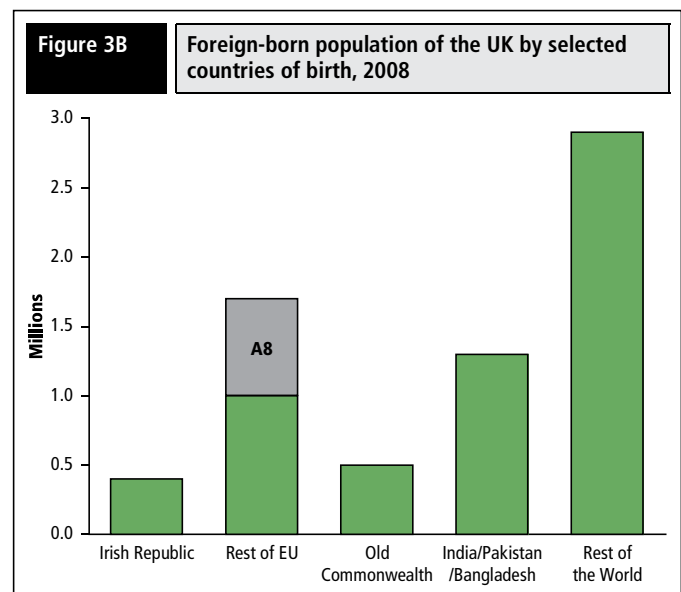
In 1981, the Census showed that just over six per cent of the UK population had been born abroad. By 2001, this had risen to over eight per cent, and in 2008 people born abroad represented about 11 per cent (6.7 million) of the total UK population (see **Figure 3A**).



Source: Census (1981, 1991, 2001), Annual Population Survey (January–December 2008)

In 1981 just over 6 per cent of the UK population had been born abroad; by 2008 this had risen to around 11 per cent.

Between 2001 and 2008, the estimated number of people resident in the UK who were born in the eight central and Eastern European countries that joined the European Union in May 2004 (known as the 'A8' countries) rose from 114,000 to over 689,000. Despite this recent rise, this group still accounts for only ten per cent of the total foreign-born population of the UK (see **Figure 3B**). It should be



Notes: A8 countries: Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Slovakia, Slovenia. Cyprus and Malta also joined the EU in May 2004 with these A8 nations.

Rest of EU: Austria, Belgium, Denmark, Finland, France, Germany, Greece, Italy, Luxembourg, Netherlands, Portugal, Spain, Sweden. Bulgaria and Romania joined the EU on 1 January 2007

Old Commonwealth countries: Australia, Canada, New Zealand, South Africa

Rest of the World: All remaining countries including New Commonwealth

noted that country of birth is not necessarily directly equivalent to nationality.

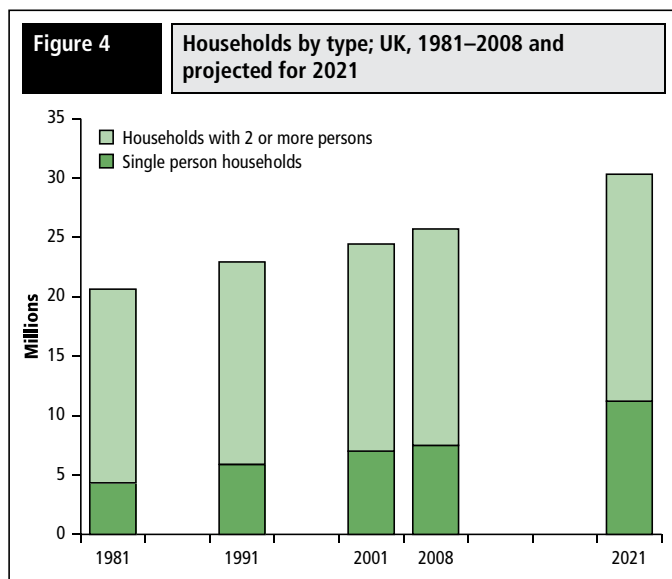
Between 2001 and 2008 the estimated number of people resident in the UK born in the A8 (central and Eastern European "Accession" countries) rose from 114,000 to 689,000; in 2008 this accounted for ten per cent of the total foreign-born population of the UK and one per cent of the total UK population.

Households and families

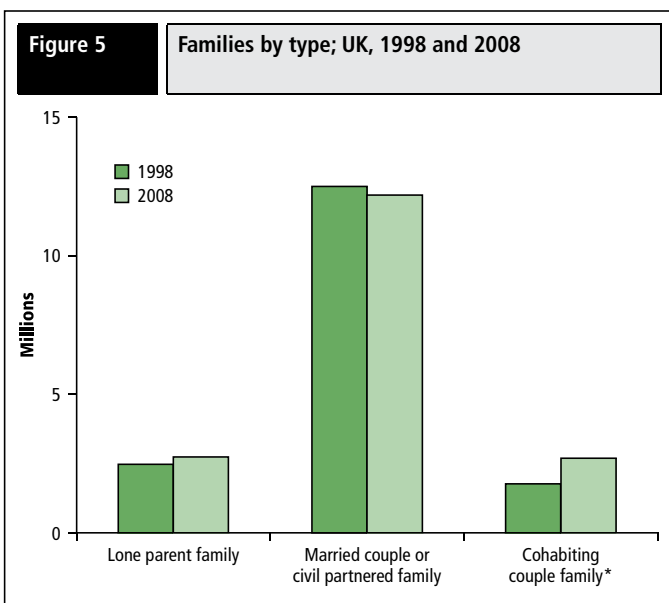
There were 25.7 million households⁶ in the UK in 2008, a rise of almost 25 per cent since the 1981 Census (Figure 4), though the population grew by only nine per cent over the same period. While the number of multi-person households (that is, households containing more than one person) rose by just 12 per cent over this period, the number of single person households rose by 73 per cent (from 4.3 million to 7.5 million). Much of this rise in single person households is a result of people of working age being increasingly likely to live alone. In 1981, approximately two-thirds of single person households consisted of people over state pension age, but by 2008 this had fallen to approximately half; this is partly a result of better survival of couples to old age. It is projected that the number of households in the UK will rise to 30 million by 2021. This growth is driven by an increase in single person households, accounting for almost two thirds of the increase. The increase in single person households is larger for older ages, particularly for those aged 75 and over. It also relates to changes in partnership behaviour, so that by 2021 single person households will account for over one third of all households.

There were 25.7 million households in the UK in 2008, a rise of almost 25 per cent since 1981.

In 2008, there were an estimated 17.6 million families⁷ living in the UK (Figure 5). Over the last decade, the number of married couple families has fallen from 12.5 to 12.2 million (a fall of 2.5 per cent), while the number of lone parent families has risen from 2.5 million to 2.7 million (a rise of ten per cent). The largest change has been for cohabiting couple families, which has increased from 1.8 million to 2.7 million (up by 53 per cent). The number of civil partnered families is far smaller than the number of married couple families. There have been approximately



Source: Censuses, ONS, GROS and NISRA; Household Estimates, Communities and Local Government, Scottish Executive; Labour Force Survey, ONS



* Includes same-sex couple families
Source: Labour Force Survey, ONS

34,000 civil partnerships formed and fewer than 250 dissolved between the end of 2005 (when civil partnerships first became possible) and the end of 2008.

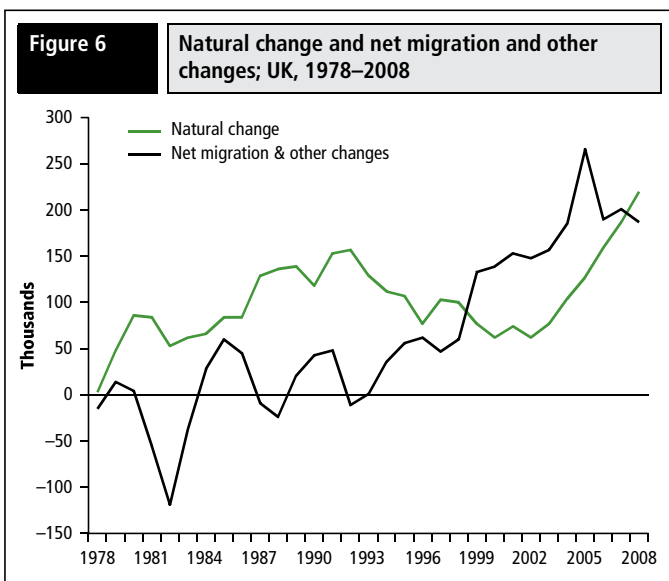
It is projected that by 2021 over one third of all households will be single person households.

In the decade to 2008 the number of cohabiting couple families in the UK has increased from 1.8 million to 2.7 million.

Components of total population change

Increases in births, decreases in deaths and changes in international migration into and out of the UK have all contributed to population change in recent years.

Figure 6 shows the contribution to population growth of natural change (the difference between births and deaths) and net migration



Source: Mid-year population estimates 1978–2008, ONS, GROS, NISRA

(the difference between long term migration into and out of the UK). Natural change was the largest contributor to population growth until the year to mid 1999. From mid 1999 to mid 2007 net migration was the main driver of population change, and then in the year to mid 2008, for the first time in nearly a decade, natural change was again the main contributor to population growth.

From 1999 to 2007 net migration was the main driver of population change in the UK; however, in 2008 natural change (the difference between births and deaths) was again the main contributor to population growth.

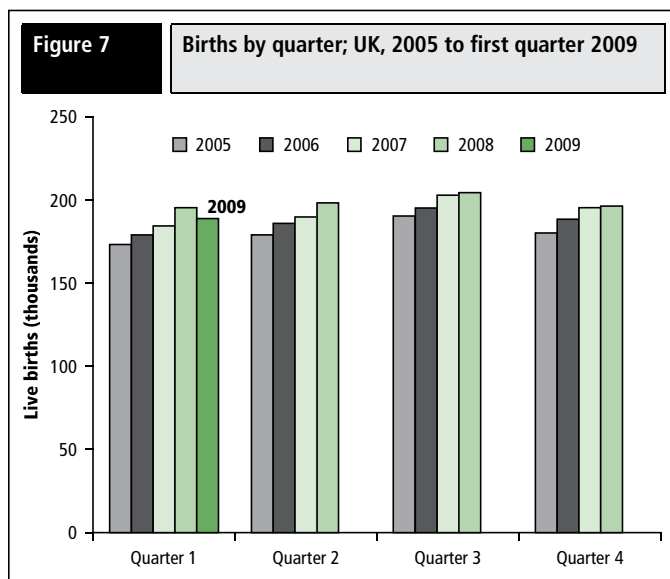
Natural change

In 2008 there were 794,000 live births in the UK, an increase of nearly 3 per cent from 772,000 in 2007 and 19 per cent from 669,000 in 2002. **Figure 7** shows that the numbers of births in each calendar quarter increased between 2005 and 2008. In contrast, the number of births in the first quarter of 2009 was lower than in the first quarter of 2008: a later section discusses whether this fall could relate to the economic recession.

The Total Fertility Rate (TFR) (see **Box one**) in the UK has risen to 1.96 children per woman in 2008 from a record low of 1.63 children per woman in 2001. This is the highest TFR since 1973, but is still below the replacement level of 2.1, and continues to be much lower than the rates seen during the 1960s baby boom (the TFR for the UK peaked at 2.95 children in 1964). The recent rise in the TFR has occurred in all four countries of the UK (**Figure 8**). Over the last 40 years the TFR for Northern Ireland has remained higher than for the UK as a whole, reaching 2.11 in 2008 (though it has converged towards the other UK countries in the last three decades or so). The level of fertility in Northern Ireland has therefore returned to replacement level, whereby the population replaces itself through natural change.

The total fertility rate in the UK has risen from a record low of 1.63 children per woman in 2001 to 1.96 children per woman in 2008.

Table 3 shows estimated UK TFRs for foreign born and UK born women for 2004 to 2008. These TFRs provide evidence that the recent increase in UK fertility rates is due mainly to increasing fertility among UK born women. However, non-UK born women, who have higher fertility in all age groups, have made up an increasing share of women of childbearing



Source: Birth registrations

Box one

Fertility measures and data used in this article

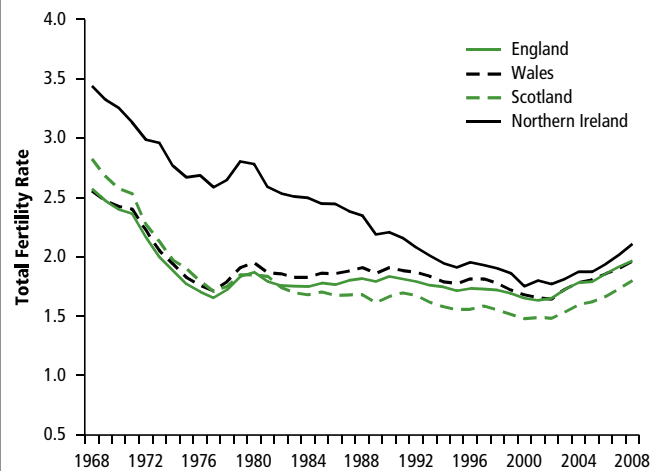
Age-Specific Fertility Rate (ASFR)

ASFRs are a measure of fertility specific to the age of the mother, and are useful for comparing the reproductive behaviour of women at different ages. They are calculated by dividing the number of live births in a year to mothers of each age group by the number of females in the mid-year population of that age. Rates can be expressed per 1,000 women in the age group.

Total Fertility Rate (TFR)

The TFR is the average number of children that a group of women would have if they experienced the age-specific fertility rates for a particular year throughout their child-bearing life. For example, a TFR of 1.86 in 2006 means that a group of women would have an average of 1.86 children each during their lifetime based solely on 2006's age-specific fertility rates. This measure reflects the current intensity of childbearing and the rate at which the population is replacing itself.

Figure 8 Total Fertility Rates; UK countries, 1968–2008



Source: Birth registrations and ONS, GROS, NISRA mid-year population estimates

age, which has also contributed to raising the overall TFR over this period.

Two children remains the most common family size in England and Wales. Nearly four in 10 women reaching age 45 in 2008 (that is, those born around 1963) had a completed family size of two children. The

Table 3 Estimated Total Fertility Rates (TFRs) for UK born and foreign born women; UK, 2004 to 2008

	2004	2005	2006	2007	2008
UK born women	1.68	1.68	1.75	1.79	1.84
Foreign born women	2.48	2.45	2.42	2.51	2.49
UK all women	1.78	1.79	1.86	1.92	1.96

Source: Birth registrations and Annual Population Survey

Box two

Age-standardised mortality rates/ratios

Age-standardised rates make allowances for differences in the age structure of the population, over time, between sexes and across areas.

In Figure 9 the age-standardised mortality rate for a particular year is that which would have occurred if the observed age-specific rates for the year had applied in a given standard population. For these analyses the European Standard Population has been used. This is a hypothetical population standard that is the same for both males and females allowing standardised rates to be compared for each sex and between sexes.

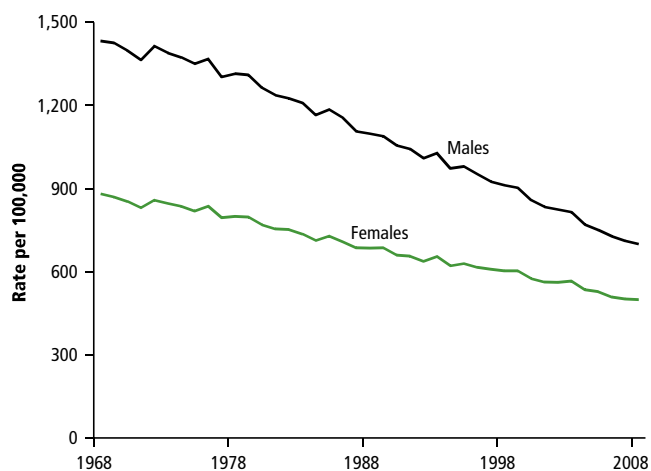
proportion of women having three or more children has fallen; from four in 10 women born in 1933 to three in 10 women born in 1963. Childlessness has been on the increase in recent years: one in five women born in 1963 remained childless by 2008, compared with one in eight women born around 1933.

One in five women born in 1963 remained childless by 2008, compared with one in eight born around 1933.

In 2008, there were 580,000 deaths registered in the UK, 277,000 for males and 303,000 for females. The age-standardised mortality rates (see **Box two**) were 700 for males and 499 for females respectively per 100,000 people (**Figure 9**). The apparent paradox between the higher number of female deaths and the lower female mortality rate is a result of the higher number and proportion of older women in the population compared to older men. Between 1968 and 2008 mortality rates have declined by 51 per cent for males and 43 per cent for females. Female mortality rates have been consistently lower than male mortality rates throughout the 40 year period, but male mortality rates have fallen at a faster rate (mainly due to a faster decline in male mortality from circulatory diseases)⁸, hence the decreasing gap between male and female mortality.

Period life expectancy at birth in the UK has risen steadily over the past 25 years (**Figure 10** and **Box three**). This measure is based on the

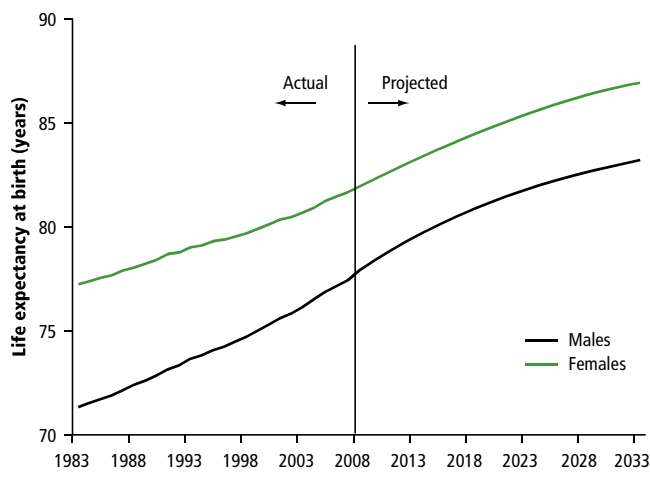
Figure 9 Age-standardised mortality rates by sex; UK, 1968 to 2008



Source: ONS, GROS, NISRA

Figure 10

Actual and projected period life expectancy at birth; UK, 1980–82 to 2033



Source: ONS, GROS, NISRA

sum of age-specific mortality rates present in a population at any one time. Estimates based on mortality rates for 2006–2008, and compared to mortality rates for 1981–1983, indicate that life expectancy at birth for boys has risen by more than six years to 77.4 years and by over four years for girls to 81.6 years. Allowing for the projected mortality improvements assumed in the 2008-based population projections, period life expectancy at birth is projected to reach 83.2 years for boys and 86.9 years for girls by 2033. The projections assume that the difference in life expectancy at birth for males and females will reduce from 4.2 years in 2008 to 3.7 years in 2033.

Life expectancy at birth in the UK has risen steadily to 77.4 years for men and 81.6 years for women in 2006–08, and is expected to continue to rise.

Migration

In 2008, an estimated 590,000 long-term international migrants arrived to live in the UK for a year or more, compared with 574,000 in 2007 (see **Figure 11**). Non-British citizens accounted for 86 per cent of those immigrating. These figures reflect a continuation of the level of immigration seen since 2004, when the A8 ‘Accession’ countries joined the European Union. In 2008 427,000 people emigrated, an increase of 86,000 since 2007, but only slightly higher than the 2006 figure of 398,000. Net migration, the difference between immigration and emigration, was 163,000, its lowest level for five years due to increased levels of emigration.

The number of British citizens emigrating from the UK for a year or longer in 2008 has remained at a similar level to 2007, at around 173,000, compared to 207,000 in 2006 (see **Figure 12**). The estimated number of emigrating non-British citizens dropped in 2007, but has increased in

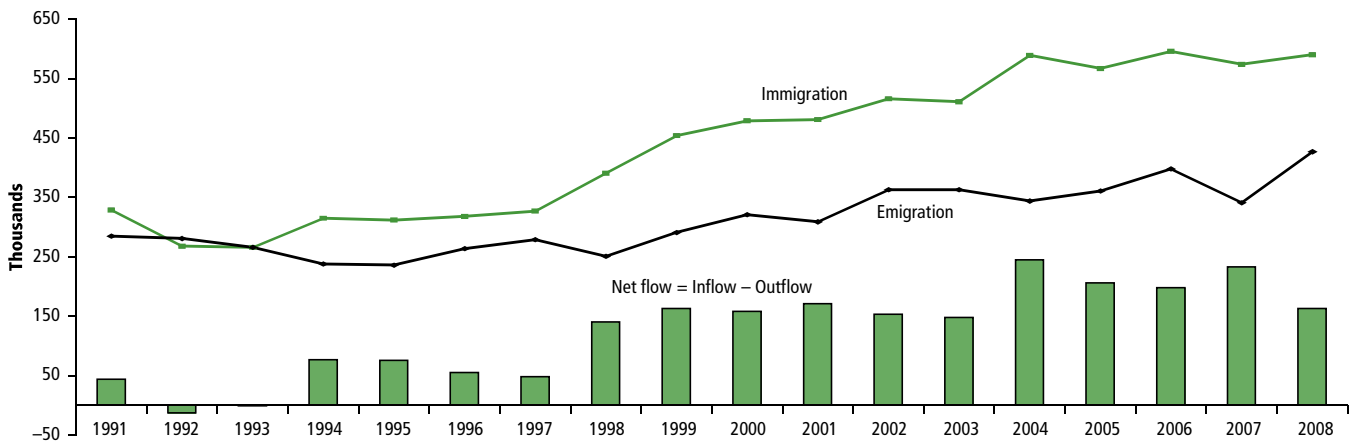
Box three

Period life expectancy at birth

The number of years a new born child would live if he or she experienced the age specific mortality rates of the given area and time period over the course of their life.

Figure 11

Total International long-term migration to and from the UK; 1991 to 2008



Source: ONS Long Term International Migration

2008 to a record high of 255,000. This is the first year since 1999 that more non-British than British citizens have emigrated from the UK.

In 2008 net migration (the difference between immigration and emigration) was 163,000, its lowest level for five years, due to increasing levels of emigration.

In 2008 a record high of 255,000 non-British citizens emigrated from the UK; this is the first year since 1999 in which more non-British than British citizens emigrated.

Impact of recession on the UK's demography

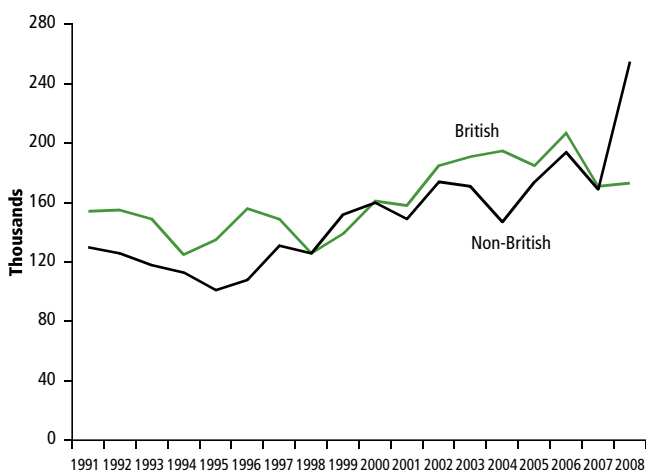
Drawing conclusions about the effects of the current recession on demography, including fertility, mortality, migration and family dynamics remains premature. However, the sections below show observed demographic trends during earlier recessions.

Fertility

The impact of past recessions on fertility is not clear-cut, either in the UK or internationally, because fertility is affected by a much broader range

Figure 12

Emigration from the UK, by British and non-British citizenship, 1991–2008



Source: ONS Long term International Migration

of factors than the economic climate alone. **Figure 13** shows three earlier recessions identified by declines in year-on-year GDP change. Falls in fertility occurring in the years after each recession were generally either a continuation of previous trends, as in the 1970s, or were declines that continued well into periods of economic recovery, such as in the 1990s. There is therefore no simple relationship historically evident between recession and fertility.

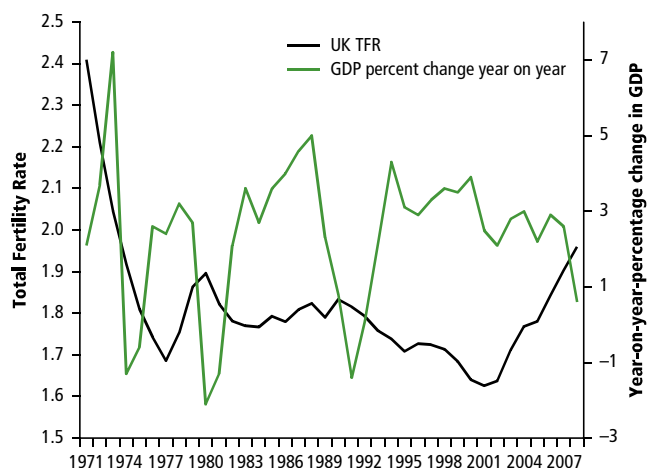
Historically, the relationship between recession and fertility in the UK is unclear.

Even if it could be demonstrated that previous recessions have had an impact on fertility, the outcome would not necessarily be the same in 2009, because other factors have changed. For example, the proportion of non-UK born women in the UK has risen, and the financial and practical support for childbearing (in terms of tax credits, maternity leave etc) has increased since the time of the last recession around 1990.

One argument is that an economic downturn could depress fertility. For example, women may focus more on their employment in order to

Figure 13

Change in Total Fertility Rate (TFR) and year-on-year change in Gross Domestic Product (GDP); UK, 1971–2008



Gross Domestic Product data is only available up to 2008 at the time this article went to print. Data for 2009 will be available on 26 January 2011
Source: ONS National Accounts and Birth Registrations

keep their jobs, while tight family finances and uncertainty may mean decisions are made to delay childbearing or not have additional children⁹. An alternative view is that unemployment or lower wages will decrease the opportunity costs of childbearing, making a recession an optimal time to choose childbearing over employment. This hypothesis is supported by the US economist Gary Becker¹⁰.

Demographers participating in the National Population Projections (NPP) Expert Panel¹¹ were mainly of the view that the recession would have a small downward impact on UK fertility. They cited uncertainty of employment and lower household incomes as key factors that could dampen period fertility in the short-term, particularly among younger women. The panel was generally not convinced by a counter-argument that fertility could rise owing to falls in the opportunity cost of childbearing.

Any impact of the recession on fertility could vary for different sub-groups of the population. For example, research in the Netherlands¹² showed that the fertility of the more highly educated was more influenced by consumer confidence than that of other groups.

Birth registration data up to the fourth quarter of 2008 showed continued rises in births, but the first quarter of 2009 showed a small drop compared to the first quarter of 2008 (see Figure 7). Given the nine-month time lag between conception and birth, any impact of recession on births may lag. It is too early to say whether the fall in births in early 2009 is a blip or a real change. A short term impact on period fertility would have a much smaller effect on long-term completed family size. This is because the short term effects may relate to postponing rather than forgoing births. A short term downward effect on fertility would also not necessarily imply a fall in the TFR, but could result in the TFR stabilising or rising more slowly than over the past five years.

Mortality

More research is needed to understand the channels through which economic expansions and recessions affect population health and age-specific mortality rates. There may be small fluctuations in mortality rates as a result of economic changes, but these are likely to have only a small impact when considering that other factors, notably diet, nutrition, environmental conditions, smoking patterns and medical advances, are all drivers of the overall change in mortality rates.

Migration

It is not straightforward predicting the impact of the current global recession on migration. Within the UK there was a reduced number of local moves in the year to mid 2008¹³. In England and Wales the numbers of moves declined by three per cent. There was a decline in inflows in all regions except London, and a decline in outflows for all regions (see Table 4).

In the year to mid-2008 local moves within England and Wales declined by three per cent.

Regarding international migration, members of the NPP Expert Advisory Panel that met in April 2009 generally thought that the current global recession would have a small downward impact on both immigration and emigration in 2009 compared to 2007, and that the impact of the recession upon migration to and from the UK could last up to five years¹¹.

Recently published analyses of the likely impact of the current recession upon migration flows to and from the UK differ in their predictions. For example, work conducted by academics at University College London on behalf of the Equality and Human Rights Commission¹⁴, based on

Table 4

Internal migration in the year up to 30 June 2007 and in the year up to 30 June 2008, England and Wales

	Inflows			Outflows		
	Inflow 2006–07	Inflow 2007–08	% Change	Outflow 2006–07	Outflow 2007–08	% Change
North East	39.5	38.5	-2.5%	39.5	39.4	-0.3%
North West	99.2	95.2	-4.0%	104.8	103.2	-1.5%
Yorkshire and The Humber	92.6	90.7	-2.1%	95.6	94.2	-1.5%
East Midlands	109.7	105.8	-3.6%	100.3	98.3	-2.0%
West Midlands	92.8	90.4	-2.6%	100.6	98.4	-2.2%
East	144.8	140.0	-3.3%	126.8	120.8	-4.7%
London	167.0	168.2	0.7%	248.4	238.8	-3.9%
South East	226.1	214.4	-5.2%	202.1	194.3	-3.9%
South West	136.5	130.1	-4.7%	107.9	104.1	-3.5%
Wales	56.5	53.5	-5.3%	49.2	48.3	-1.8%

Source: ONS Internal migration

an assessment of the impact of the recessions of the 1970s, 1980s and 1990s upon migration flows, concluded that a short-term period of falling immigration can be expected, before immigration levels rise again to pre-recession levels. Moreover, after an initial short burst of increased emigration, the report concluded that there is likely to be a period of decreased emigration of both British and non-British nationals.

Families

Many aspects of family life can be affected by a recession. However, the most commonly asked questions tend to focus on family transitions (formation and dissolution). For example: will divorce rates rise, will there be a fall in marriages, and will young people be less likely to move out of their parental homes?

To date, the statistical response to these questions has been that it is uncertain how family transitions (such as marriage and divorce) are affected by recession. As noted above, it is difficult to identify relationships between family trends and economic fluctuations because of the many factors involved. Furthermore, if identified, it is very difficult to know whether any association is due to cause or coincidence.

There are limits to both our understanding and the current literature. It is known that for families some demographic factors are associated with some economic factors. For example, poor economic circumstances (unemployment, receipt of benefits and low income) are correlated with increased likelihood of divorce¹⁵. For the question about young people living with their parents, there are attitudinal data available that indicate how young people might respond to a recession. For example, in England in 2006–07, 35 per cent of 25 to 29-year-olds living with their parents stated that they were still doing so because they could not afford to buy or rent¹⁶. However, it is important to remember that existing information is limited and does not permit direct conclusions to be made about links between economic and demographic trends.

Divorce rates rose during the last recession, increasing by five per cent between 1990 and 1992. However, divorce rates remained fairly stable during (and after) the recession in the early 1980s (which began in the first quarter of 1980 and lasted four calendar quarters). The divorce rate actually fell between 1980 and 1981, and then returned in 1982 to the same level as 1980. Looking at the long-term divorce trend, rises during the early 1990s were marginal compared with the step change in the 1970s where divorce rates more than doubled over the decade, perhaps

affected by liberalisation of the divorce laws in the late 1960s. In fact, a similar rise (compared with that during the 1990s recession) is shown between 2000 and 2002 (a period of constant growth).

Currently, the provisional divorce rate for 2007 (in England and Wales) is at its lowest level since 1981, and has fallen over the last three years. It remains to be seen whether this rate will continue to fall, and it will continue to be very difficult to attribute any change to a specific event such as the current recession. This is also the case for marriage rates in England and Wales, which have fallen since the early 1970s.

Recent migration from an enlarged European Union (EU)

On 1 May 2004 the EU expanded to include ten new member states, namely Cyprus, Malta and eight Central and Eastern European countries, collectively known as the accession eight or A8 countries. These are: the Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Slovakia and Slovenia. Joining the EU meant that there were fewer restrictions for citizens of these accession countries wishing to enter or work in the UK. Citizens of Cyprus and Malta, being part of the Commonwealth, already had fewer restrictions on their travel and rights to work in the UK than their A8 counterparts before 2004. In any case the populations of these two island nations are relatively small. In contrast, the impact of lifting restrictions for A8 countries' citizens was expected to be greater. On 1 January 2007 a further two countries, Bulgaria and Romania, acceded to the EU; however restrictions were placed on access to work for citizens from these two countries by the UK authorities.

Table 5 shows the estimated number of people living in the UK born in each of the A8 countries for the period 2001 to 2008. Confidence intervals, explained in **Box four**, are shown to provide an indication of the uncertainty of the estimate.

The number of UK residents born in A8 countries increased six fold between 2001 and 2008, with the sharpest increases of at least 100,000 per year after 2004. Those born in Poland, Slovakia and Lithuania formed the largest contributions to this rise in A8 born population living in the UK. Conversely, the number of people born in Estonia and Slovenia living in the UK has remained low since 2001. Polish-born residents made up more than half of A8-born residents in 2001 and this proportion had increased to almost three quarters in 2008. The 2008 level of 689,000 A8-born UK residents (see **Table 5**) represented just over one per cent of the total UK population of 61.4 million.

Box four

Standard error is an indication of the accuracy of an estimate and how much a sample estimate is likely to differ from the true value because of random effects. A confidence interval provides an estimated range of values in which an actual data value is likely to fall. The confidence interval provided is a 95 per cent confidence interval. This means that across the dataset as a whole, the confidence intervals are expected to contain the true values around 95 per cent of the time. It is obtained as: $1.96 \times \text{standard error}$

Polish-born residents made up more than half of A8-born residents in 2001; by 2008 this had increased to almost three quarters.

In 2008 half of the total A8-born residents in the UK were young adults aged 16 to 29.

The age distribution of A8 born residents changed between 2004 and 2008. **Figure 14** shows the numbers and proportions of those born in A8 countries in each age group in both 2004 and 2008. The proportion of 0 to 15 year olds within the overall A8-born population within the UK increased by five percentage points and the estimated number in this age group rose from 11,000 to 75,000. This increase is a result of children born in A8 countries migrating with their families. Of the age categories in this figure, the most notable is the 16–29 group: this group increased from an estimated 65,000 in 2004 to 347,000 in 2008, with the proportion in this age group rising from 39 per cent to half of the total. The number of those born in the A8 countries aged 65 and over decreased from 39,000 in 2004 to 30,000 in 2008. Of those aged 65 and over residing in the UK in 2004, four fifths had arrived before 1950, mainly Poles and Czechoslovaks who settled in the UK after the Second World War.

The changing age distribution between 2004 and 2008 of A8-born residing in the UK is broadly consistent with the age distribution of A8 citizens immigrating over the same period: the bulk of the immigrants are young adults of working age.

Long-term immigration (using the UN definition of an intended stay of 12 months or greater) by A8 citizens rose each year between 2004 and 2007, before a decrease occurred in 2008, as shown in **Table 6**. Similarly,

Table 5

UK residents born in A8 countries; 2001 to 2008 (thousands)

Country	2001		2002		2003		2004		2005		2006		2007		2008	
	Estimate	CI	Estimate	CI	Estimate	CI	Estimate	CI	Estimate	CI	Estimate	CI	Estimate	CI	Estimate	CI
Czech Republic	14	5	15	5	17	5	16	5	21	6	24	6	26	7	26	7
Estonia	2	2	1	1	2	2	3	2	5	3	4	3	5	3	5	3
Hungary	12	4	15	5	14	5	14	5	11	4	16	5	21	6	26	7
Latvia	4	2	4	3	6	3	7	3	14	5	19	6	21	6	28	7
Lithuania	9	4	12	4	13	5	22	6	32	7	52	9	56	10	57	10
Poland	67	10	68	10	75	11	95	12	162	16	262	21	405	26	497	29
Slovakia	6	3	5	3	8	4	10	4	27	7	51	9	55	10	48	9
Slovenia	:	:	1	1	2	2	1	1	2	2	2	2	:	:	1	1
Total	114	13	121	14	137	15	167	16	274	21	430	27	589	31	689	34

Notes: Totals may not sum due to rounding

":=" = negligible or rounded to zero. Estimates for Slovenia in 2001 and 2007 are not considered robust

Source: Annual Local Area Labour Force Survey/Annual Population Survey

Figure 14A Age distribution of UK residents born in A8 countries; 2004 and 2008, Thousands

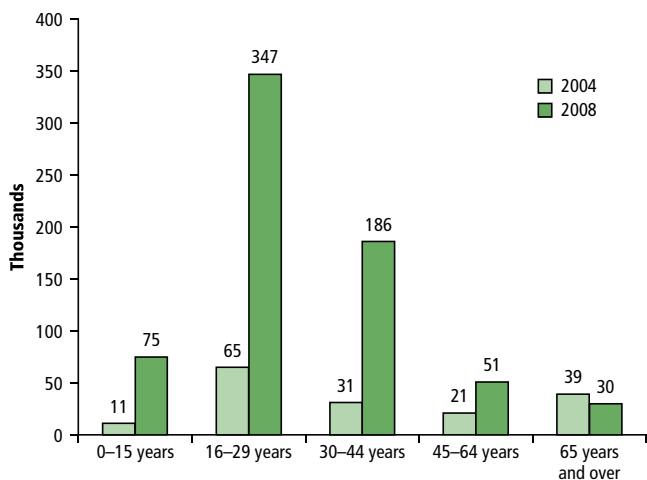
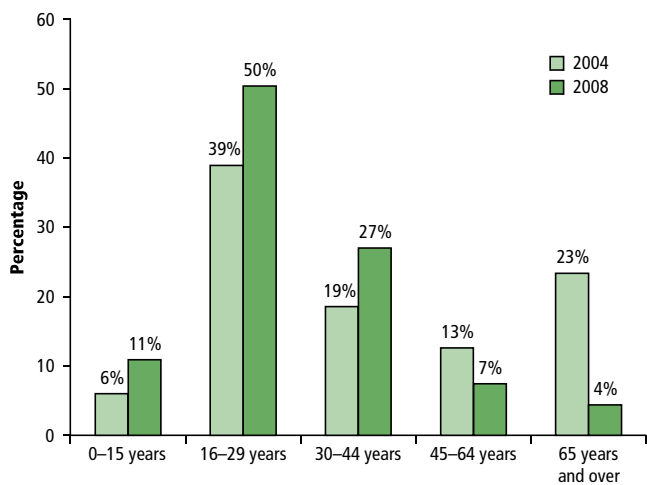


Figure 14B Age distribution of UK residents born in A8 countries; 2004 and 2008, Percentages



Source: Annual Population Survey

long-term emigration from the UK by A8 citizens increased steadily between 2004 and 2007, and more than doubled between 2007 and 2008 to 69,000. This increase in emigration by A8 citizens coincided with the start of the contraction in the UK economy, but it is not possible to determine whether this was the result of recession, or whether it would have happened anyway. This outflow was around 27 per cent of the 255,000 non-British citizens emigrating from the UK during 2008. As a result of the decrease in immigration and increase in emigration, net

Table 6 Long-term international migration by A8 citizens to UK; 2004 to 2008, Thousands

Year	Immigration	Emigration	Net migration
2004	53	3	49
2005	76	15	61
2006	92	22	71
2007	112	25	87
2008	89	69	20

Source: ONS Long Term International Migration

migration of A8 citizens to the UK decreased to 20,000 in 2008, the lowest level since before accession.

The bulk of A8 immigrants are young adults of working age.

Net migration (the difference between immigration and emigration) of A8 citizens to the UK decreased to 20,000 in 2008, the lowest level since before accession.

Between 2004 and 2008 residents born in A8 countries became more widely dispersed across the UK, as can be seen in Figure 15. In 2004, 63 per cent of those born in A8 countries lived in London and the South East, compared with 35 per cent in 2008. In all other regions the proportions of A8 born long term migrants resident increased over the same period.

Between 2004 and 2008 there was an increased geographical dispersion of A8 migrants across the countries and regions of the UK, with the proportion resident in London declining.

Births to A8 born mothers in UK

Between 2001 and 2004 the number of live births to A8 born women living in the UK almost doubled, reaching 3,804 in 2004 (see Figure 16 and Table 7). Following EU enlargement in 2004, births to A8 born women increased even faster. In 2008, there were nearly 26,000 live births to A8 born women in the UK, reflecting the rise in the number of A8 born women of childbearing age. This represents a nearly seven-fold increase in such births since 2004, though it was still only 3.2 per cent of all births in the UK in 2008.

Numbers of births to A8-born mothers rose nearly seven-fold between 2004 and 2008, though representing only 3.2 per cent of all births in the UK in 2008.

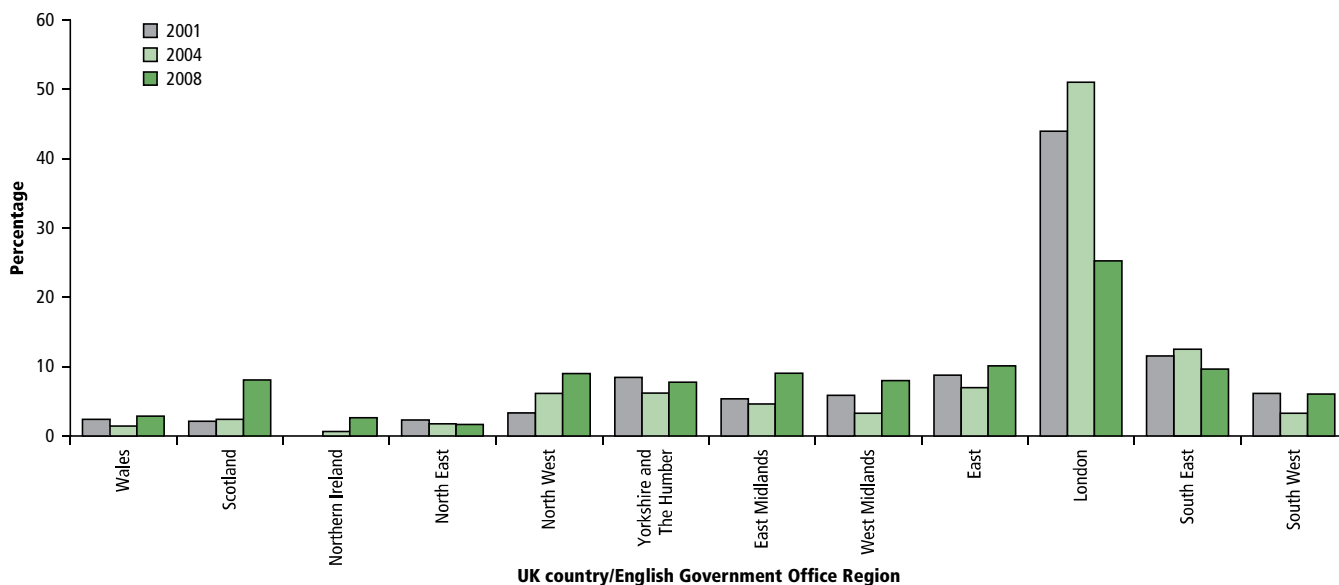
Data sources for A8 migrant data

A number of other sources also provide information on A8 migrants in the UK: the Worker Registration Scheme (WRS), National Insurance Number (NINo) allocations to foreign nationals, and the Annual Population Survey (APS) based on the Labour Force Survey (LFS).

However, these administrative and survey sources were not specifically designed for measuring levels of international migration. As a result the data these sources collect do not match the definitions used for ONS migration statistics. Therefore, the data are not directly comparable, although it is possible to use these sources to look for trends and patterns across the range of information available on A8 migration. Box five sets out who is covered by each source and highlights key issues affecting comparisons with long-term international migration estimates.

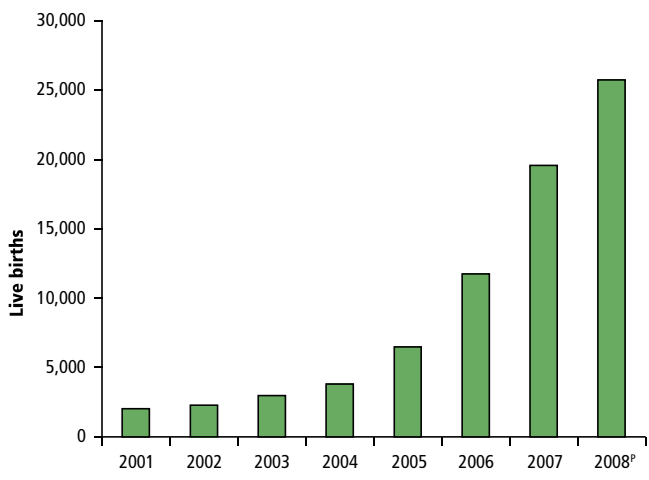
The WRS covers nationals of A8 countries who have moved to the UK to work since 1 May 2004 (the scheme excludes self-employed workers). Figure 17 shows the number of approved applicants since the scheme began, with the data for 2004 being based on the eight months from May to December 2004. Overall, the data show that numbers of A8 migrants registering to work increased up to 2006, before numbers fell slightly in 2007 and more significantly in 2008. The number of applicants is down 47 per cent from 90,490 in the first half of 2008 to 47,955 for the same period in 2009. It should be noted that with WRS data the same person can be counted more than once owing to a requirement to register for each job.

Figure 15 Percentage of A8 born residents in each UK country and English Government Office Region, 2001, 2004 and 2008



Source: Annual Local Area Labour Force Survey for 2001 and Annual Population Survey for 2004 and 2008

Figure 16 Live births in UK to women born in A8 countries, 2001–2008^P



Note: ^P Figures for 2008 are provisional

The number of A8 migrants registering with the Worker Registration Scheme in the UK increased up to 2006, before declining. The number of applicants is down 47% in the first half of 2009 compared to the same period in 2008.

Table 7 Live births to women born in A8 countries; 2001–2008^P, UK (numbers and percentages)

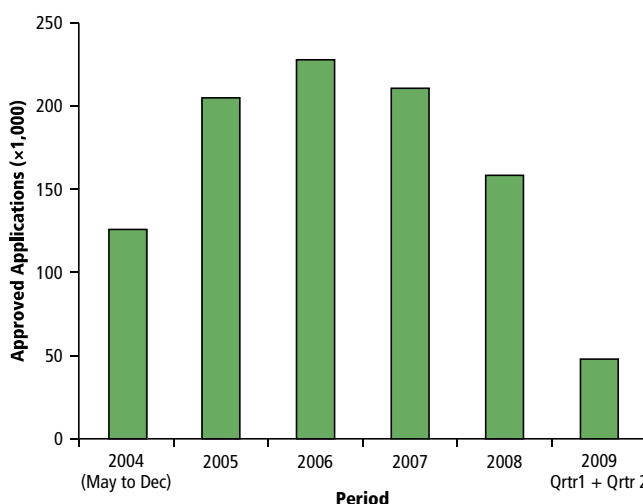
	2001	2002	2003	2004	2005	2006	2007	2008 ^P
Number of births to A8 born women	2,009	2,282	2,976	3,804	6,493	11,754	19,570	25,747
Percentage of all live births	0.3	0.3	0.4	0.5	0.9	1.6	2.5	3.2

^P Figures for 2008 are provisional

Source: Birth Registrations

Another indicator of trends in A8 migration to the UK is the number of NINOs allocated to A8 nationals. Any foreign national aged 16 and over wishing to work (or claim benefits) in the UK is required to register for a NINO. The difference between the numbers shown in **Figure 18** and the WRS registration numbers in **Figure 17** highlights the issue of obtaining a consistent estimate of A8 migration across the various sources. NINO allocations show the large increase in A8 migrants to the UK following EU accession in 2004. However, the number of registrations in 2004 is considerably lower than numbers recorded by the WRS. This is potentially due to a delay between arriving in the UK and submitting an application for a NINO. Except for 2004, the NINO data show consistently higher numbers than the WRS which may be explained by both the wider coverage of the NINO data (including self-employed persons) and a delay between a person entering the country and registering for a NINO

Figure 17 Workers Registration Scheme approved applications; UK, 2004–2008 plus first two quarters of 2009



Source: UK Border Agency

Box five

Other sources of A8 migrant data

Source:	Worker Registration Scheme (WRS)	National Insurance Number (NINo) Allocations	Annual Population Survey (APS)
Covers:	Long and short-term international migrants working as employees in the UK. (i.e. staying for more than 1 month)	All foreign nationals, aged 16+, intending to work or claim benefits in the UK	UK population resident in private households (0.1% sample survey) whose country of birth is non-UK or nationality is non-British.
Key Issues:	<ul style="list-style-type: none"> Recorded by date of application not by date of entry into the UK Includes only persons working as employees Includes short-term migrants No de-registration required for those who leave the UK or employment 	<ul style="list-style-type: none"> Includes all registrations regardless of intended length of stay in the UK Published by date of registration not by date of entry into the UK Does not include returning migrants who already have a NINo Includes only immigrants intending to work or claim benefits Includes employed and self-employed immigrants No dependents included 	<ul style="list-style-type: none"> Does not cover persons not resident in private households Migrants are not defined by intended or actual length of stay in the UK; they are defined by Country of Birth and/or Nationality Includes some short-term migrants Shows the stock of migrants present at any one time rather than in-flow over specific period. Excludes interviewed students in halls of residence

(for example, a foreign student applying to work after finishing a study course).

Overall both NINo and WRS data show a similar trend of increasing numbers of A8 nationals entering the UK following EU accession in 2004, followed by a decline in 2008. The pattern indicated by both these administrative sources is the same as the one identified by ONS estimates of long-term A8 migration, but the numbers of NINo and WRS registrations are higher as they will contain some short-term migrants.

Understanding patterns of short term international migration

Accurate measurement of migration has long been the key challenge in the estimation of population change in and around the UK. Recent

rapid changes to the level, and geographical distribution within the UK, of international migration, associated with EU enlargement, have led to questioning of the validity of existing approaches to measurement. In addition, these changes have raised some fundamental questions about the definition of who is a migrant. Traditionally annual ONS migration reports highlight long-term migration². New sources were needed to produce estimates of short-term migration.

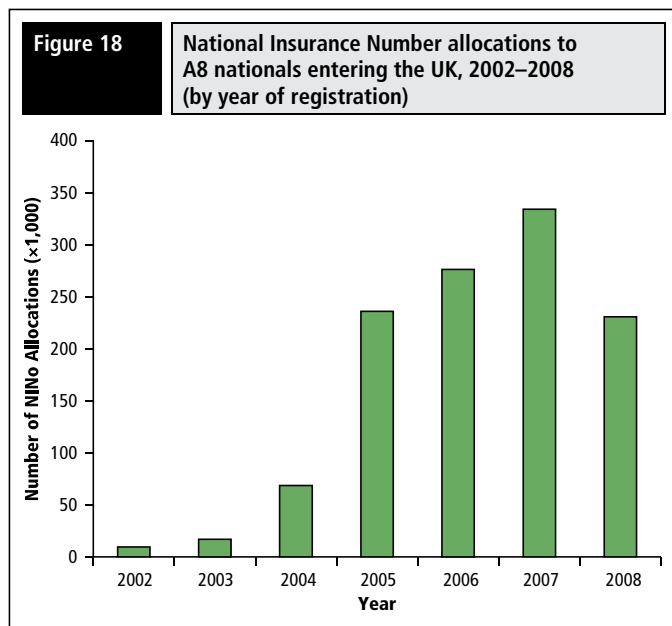
A new feature of migration patterns over the accession period has been the increased number of moves made for less than 12 months. In the year to mid-2004 (immediately prior to accession) there were an estimated 113,000 international moves to England and Wales for between one and 12 months for employment reasons. By the year to mid-2006 this had increased by 84 per cent to 208,000. Over the same period the number of moves made for any reason increased by 28 per cent. All moves for less than 12 months are excluded from official estimates of long-term migration, based on the UN usual residence definition.

The recent availability of counts of international migrants from administrative sources has highlighted the issue of migrant definitions. Counts are only produced as a by-product of administrative processes, and the definition of who is counted as a migrant is inconsistent with the definition used for ONS migration estimates. NINo allocations will for example include anyone intending to work or claim benefits regardless of how long they stay.

ONS recognised the challenge of migrant definitions in the Report of the Inter-departmental Taskforce on Migration Statistics¹⁷. The report identified the need for accurate estimates of the number of people entering, leaving and present in the country for different durations and reasons. Short-term migration estimates produced by ONS and described in this paper have been developed to address this need.

In addition to producing short-term migration estimates, ONS research has addressed the challenges of employing alternative definitions to those currently used. These include:

- Alternative definitions for moves made for less than one year
- Having consulted with users there was a consensus that the UN



Source: Department for Work and Pensions

definition of short-term migration did not meet all needs. The UN defines short-term migration as moves made for between three and 12 months for work or study; this was seen as too narrowly defined.

- *Estimation of the population present (stock) in addition to migration flows*
The number of short-term moves made to the UK in any 12 month period is unlikely to be equal to the number of short-term migrants present at any point in time in that period. By definition, short-term migrants are only present for a fraction of a year.
- *Circular migrants returning to the UK for a number of short stays*
While some short-term migrants may move to the UK temporarily and then return to their home country and never again travel to the UK, others will return home and then again move to the UK for subsequent stays. Typically seasonal agricultural workers may return each summer. Migrants are unlikely to re-register with administrative sources when they return to the UK.

Research has already been published by ONS to meet some of these challenges¹⁸. For example, England and Wales estimates of short-term migration are published on a range of definitional bases, and average stock estimates have been developed to indicate the population present over the course of the year. Circular migration remains particularly difficult to estimate using surveys and existing administrative sources. The e-Borders system discussed later should enable such migration patterns to be identified as all individuals moving into and out of the country will be recorded.

In and outflows of short-term migrants by reason of visit/departure

Experimental estimates of short-term migration show that the total number of foreign residents staying in the UK for between one and 12 months increased between mid-2004 and mid-2006, before falling slightly in the year to mid-2007 (see **Figure 19**). The increase coincides with EU enlargement in May 2004. Between mid-2004 and mid-2005 total inflows increased by 14 per cent with inflows for employment reasons increasing by 63 per cent. Further increases were recorded in mid-2006, followed by a seven per cent decrease in the year to mid-2007. This fall is largely driven by a reduction in the number of migrants, particularly those from A8 countries, staying in the UK for between three and 12 months. The flows of short-term migrants are nearly double those of long term migrants.

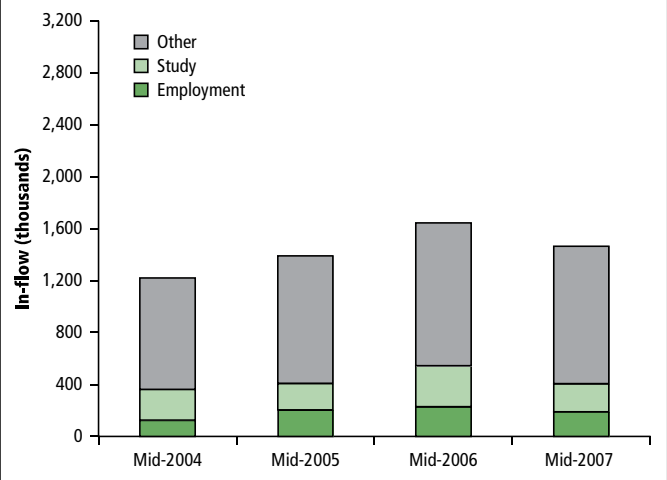
Short-term migration (of less than 12 months) of foreign residents to the UK increased between mid-2004 and mid-2006, before falling in the year to mid-2007.

When considering all reasons for visit, there are more UK residents making short-term visits abroad (see **Figure 20**) than short-term migrants from abroad entering the UK in each period (Figure 19). For both inflows and outflows the majority of visits in each period are for reasons other than employment or study, for example visiting friends and tourism. These estimates are based on International Passenger Survey (IPS) interviews conducted at the end of people's stays.

Over the period mid-2004 to mid-2007 there were more UK residents making short-term visits abroad than short-term migrants from abroad entering the UK.

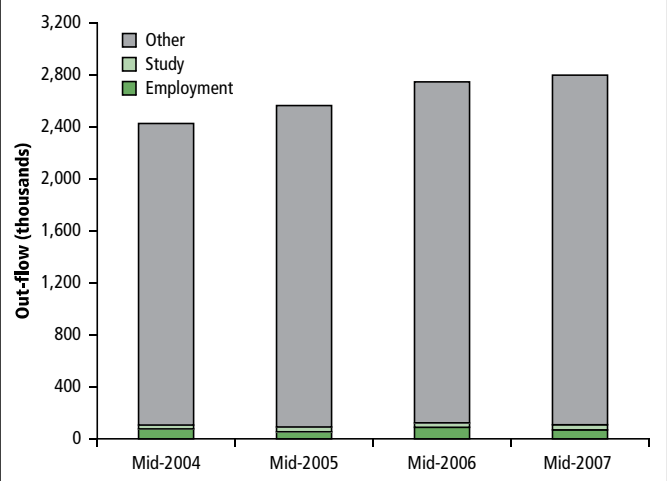
For both inflows and outflows, the majority of short term visits in the period mid-2004 to mid-2007 were for reasons other than employment or study, for example, visiting friends and tourism.

Figure 19 Inflow of overseas residents into the UK staying for 1–12 months by reason for visit



Source: International Passenger Survey

Figure 20 Outflow of UK residents from the UK for 1–12 months by reason for visit



Source: International Passenger Survey

Improving the measurement of migration

Improvements to population and migration statistics have been actively pursued since measurement issues were identified before the 2001 Census. The National Statistics Quality Review (NSQR)¹⁹ of international migration statistics was commissioned even before 2001 Census data identified issues with migration estimation. Several improvements were subsequently implemented, including enhanced methods for the distribution of international migration flows down to regions and local authorities. This initial programme of improvements was limited to those that could be made from existing data sources. In 2006 the report from the Interdepartmental Task Force on Migration Statistics made a number of recommendations for improving migration statistics, emphasising the greater use of data from across different branches of government. This was given added impetus by the 2008 Treasury Sub-Committee report, *Counting the Population*²⁰.

A cross-government approach to improving migration statistics has resulted in improved reporting arrangements, more timely and comprehensive migration indicators, development of short-term migration estimates, and improved sampling of migrants from the IPS. From May 2010 student data from the Higher Education Statistics

Agency (HESA) will be incorporated into methodology for estimation of internal migration by students. At the same time, innovative statistical modelling techniques which make use of timely administrative data will be implemented to improve the measurement of the local distribution of international migration. In the medium term further enhancements can be expected from the incorporation of other administrative sources, including School Census data and data from DWP.

In the longer term the UK Border Agency's e-Borders system is expected to provide better information on the movement of people across UK Borders from 2014. Along with other administrative sources, including the Points-Based System being introduced to regulate entry to the UK from outside the European Economic Area (EEA), this will provide a more comprehensive range of data sources to measure migration. Moreover, the Beyond 2011 Census project has been established to identify options for producing population statistics after the 2011 Census. The work being undertaken on administrative sources will be critical for determining the most suitable way forward.

Conclusion

This article has provided an overview of the latest demographic statistics available for the UK. The population continues to grow and in 2008 reached 61.4 million, with a 17 per cent increase projected over the next quarter century. The expectation is that there will be an increase in the number and proportion of 'oldest old' (85 and over) and a modest increase in the number (but declining percentage) of those of working age. The number of people in the UK population born abroad has risen from 6 per cent in 1981 to 11 per cent in 2008. Between 2001 and 2008 the number of people from the eight Central and Eastern European countries (dominated by those born in Poland, with Lithuania and Slovakia also significant) that joined the EU in May 2004 rose from 114,000 to 689,000; however they still accounted for only 10 per cent of the total non UK-born population and just over one per cent of the total UK resident population.

Natural change (the difference between births and deaths) was more important than migration for population growth in the years up to 1999. From 2000 until 2007 net migration (the difference between long term migration into and out of the UK) was the biggest driver of population change. However, in the year to mid-2008 natural change was again the main contributor to population growth. More births, fewer deaths and a reduced level of net migration accounted for this.

In the last ten years there was a fall of 350,000 in the number of married couple families, and a rise of 260,000 in the number of lone parent families. Over the same period the number of cohabiting couple families has risen by 900,000.

This article has reviewed the complex and often conflicting evidence for the historic and current relationship between recession and demographic components such as fertility, mortality and migration. The views of the NPP Expert Panel of demographers are that the current recession is likely to have a small and temporary effect on both fertility and net migration; however, the relationship with mortality in the current recession is unclear.

Difficulties in measuring the often short-term migrations associated with EU enlargement have challenged some of the more traditional definitions of *migration*. The article describes recent steps taken within the government statistical community to improve the measurement of population statistics and in particular those of migration. New methods confirmed that there was greater geographical dispersion of the A8-born migrants across the UK in 2008 compared to 2004.

The UK's demography is complex. The forthcoming 2011 Census will provide a valuable and detailed update to our understanding of the population. The components of population change (fertility, mortality, net international migration and internal migration) need to be understood both domestically and placed more broadly within an international context. Similarly, key characteristics such as age, ethnicity, families and households can be compared with other developed countries. This will be the theme for next year's National Statistician's article.

Acknowledgements

I am grateful to a range of colleagues in the ONS Centre for Demography for their contribution to this article and to statisticians in ONS and the wider Government Statistical Service for contributing data, analysis and experience. In particular I would like to acknowledge the contribution of Folkert van Galen, Jim Newman and Chris W Smith in coordinating the work leading to this article.

References

- Office for National Statistics (2009) The impact of the recession on the labour market. Available at: www.statistics.gov.uk/downloads/theme_labour/Impact-of-recession-on-LM.pdf
- Office for National Statistics (2009) Migration statistics annual report 2009, available at: www.statistics.gov.uk/StatBase/Product.asp?vlnk=507
- Office for National Statistics (2009) Information on latest UK Population Estimates available at: www.statistics.gov.uk/CCI/nugget.asp?ID=6
- Office for National Statistics (2009) Information on latest UK national population projections available at: www.statistics.gov.uk/statbase/Product.asp?vlnk=8519
- State pension age will be equalised at 65 for both men and women between 2010 and 2020 and will rise to 68 between 2023 and 2046. The Pensions Act 2007 received Royal Assent on the 26 July 2007. Pension age will be raised to 68 for both men and women over the 22 year period from 2024. Information on Pensions Reform: Office of Public Sector (2007). Pension Act 2007. Chapter 22. Available at: www.opsi.gov.uk/Acts/acts2007/ukpga_20070022_en_1
- A household is defined as a person living alone or a group of people (not necessarily related) living at the same address who share cooking facilities and share a living room or sitting room or dining area.
- A family is defined as a married or cohabiting couple, with or without children, or lone parents with children. Children may be of any age, but cease to be part of their parental family when they form a family of their own. A family could also consist of a grandparent or grandparents with grandchild(ren) if the parents of the grandchild(ren) are not usually resident in the household. For further information and analysis, see Office for National Statistics (2007) Focus on Families. Available at: www.statistics.gov.uk/focuson/families/
- Office for National Statistics (2009) Ageing and mortality in the UK: National Statistician's annual article on the population, *Population Trends* 134, page 17.
- "Will the economic downturn lower birth rates?" Carl Haub, Population Reference Bureau, US, 8 January 2009.
- Gary Becker, a well-known economist, quoted in the Los Angeles Times, 17 December 2008. Professor Becker was awarded the 1992 Nobel Prize for Economics. See: Becker, G., Murphy, K., and Tamura, R. 'Human Capital, Fertility and Economic Growth' in *Journal of Political Economics* (1990) vol. 98 No. 5 pt. 2. See also: Becker, G. 'An Economic Analysis of Fertility' in National Bureau for Economic Research, *Demographic and Economic Change in Developed Countries*: 209-40 (Princeton, N.J.: Princeton University Press).

- 11 Office for National Statistics (2009) Information on National Population Projections Expert Advisory Panel available at: www.statistics.gov.uk/downloads/theme_population/NPP2008/NatPopProj2008.pdf (see section 11).
- 12 Liefbroer, A. and van Imhoff, E. (2005) “Does the macro-economic climate influence fertility behaviour? An analysis of the Netherlands 1972–2002”. Presentation at ‘Postponement of Childbearing in Europe’ conference. Available at: www.oeaw.ac.at/vid/meeting_postponement_prog.shtml
- 13 Office for National Statistics (2009) Internal migration estimates for local and unitary authorities in England and Wales, year to mid-2008, *Population Trends* 137, pp 107–123.
- 14 See ‘Immigration in the United Kingdom: The Recession and beyond’ (March 2009) at: www.equalityhumanrights.com/uploaded_files/raceinbritain/immigration_report_presentation.pdf
- 15 Clarke, L. and Berrington, A. (1999) Socio-demographic predictors of divorce. In, Simons, J. (ed.) *High Divorce Rates : The State of the Evidence on Reasons and Remedies: Reviews of the Evidence on the Causes of Marital Breakdown and the Effectiveness of Policies and Services Intended to Reduce its Incidence*. London, UK, Lord Chancellor’s Department. (Lord Chancellor’s Department Research Series, 1 2/99). Available at: www.oneplusone.org.uk/Publications/ReviewPapers/1%20-%20Socio-demographic%20predictors%20of%20divorce.pdf
- 16 CLG, Communities and Local Government (2008) Housing in England 2006/07 [based on the Survey of English Housing].
- 17 Office for National Statistics (2006) Report of the Inter-Departmental Taskforce on Migration Statistics. Available at: www.statistics.gov.uk/statbase/product.asp?vlnk=14731
- 18 ONS Improving Migration and Population Statistics report on Short-term migration, September 2008. Available at: www.ons.gov.uk/about-statistics/methodology-and-quality/imps/updates-reports/mid-2006-short-term-migration-estimates-for-england---wales.pdf
- 19 Overview of the National Statistics Quality Review programme available at: www.statistics.gov.uk/downloads/theme_other/ReviewofQualityReviewProgramme.pdf
- 20 Treasury Sub Committee report on Counting the Population (2008) available at: www.publications.parliament.uk/pa/cm200708/cmselect/cmtreasy/183/183.pdf