Population Growth – Migration or Birth rate?

Summary
1 No remotely credible fall in the birth rate will prevent the UK population reaching 70 million in 25 years at the latest. The only way to curb population below this level is to make a sharp cut in net immigration from the present level of 160,500 a year to about 40,000.

Introduction
2 The latest (2008-based) Office for National Statistics (ONS) population projections show the population of the UK reaching 70 million in 2029. Some suggest that such projections are unreliable because changes in the birth rate are unpredictable. (The technical term is the Total Fertility Rate (TFR) which is the average number of children that a woman would have if she experienced current fertility rates throughout her child bearing years).

3 Apart from the “baby boom” when the TFR for the UK peaked at 2.95, the TFR has fluctuated between quite narrow limits since the mid 1970s as the following graph illustrates. Since 2001 it has been increasing, partly because of immigration.

4 Since the TFR started to increase at the turn of the century both natural change (births minus deaths) and immigration have contributed substantially to population growth.

5 Life expectancy has increased fairly steadily over the past half century. It is therefore reasonable to project this forward as the ONS has done in their 2008 based principal projection as illustrated by the following graph.
6 As regards the future, the latest official population projections are based on an assumed TFR of 1.85 and net immigration of 180,000 a year.

7 To examine the effect of changes in the birth rate, the following graph holds the death rate and net immigration the same as the principal projection published by the ONS and varies the TFR.

8 The present TFR for the UK is 1.96 but the principal projection took the more cautious assumption of 1.85. The lowest curve shows the effect of taking a TFR of 1.65 - the lowest it has
ever been in the 20th and 21st century. It shows that, even at this level of births, the present rate of immigration will bring our population to 70 million in about 2033.

9 The recent increase in the birth rate appears to have been due mostly to increases in the birth rate of the UK-born population, although the birth rate is also sustained by the higher fertility of foreign-born women (who have a TFR of 2.49 compared to 1.84 for UK born women - 35% higher [1]). They contributed 24% of all births in England and Wales in 2008. If the TFR remained at the most recent published level, say 1.95, that would bring the UK population to 70 million in 2026.

10 It follows that even a fall in the birth rate to the lowest level experienced for over a century would, however unlikely, not prevent the population reaching 70 million in the next 25 years. The only way to do so would be by a severe cut in net immigration.

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