

Population Estimates: A Race Impact Assessment

Executive Summary

1. This is the report of work carried out by ONS to assess if the methodology and data sources used to produce its population estimates might cause any biases in the estimates for those local authorities who have high Black and Minority Ethnic (BME) populations.
2. In summary, the various analyses underpinning this race impact assessment bring a reasonable level of reassurance on the potential for biases, while recognising that there are challenges in measuring the migration of people more generally. Current ONS plans to improve migration statistics are likely to reduce the risk of biases in the estimates and projections still further.
3. Although this Impact Assessment does bring some reassurance, it is recommended that ONS continues to make concerted efforts to improve its migration estimates (Recommendation 1). Supporting the work identified in the Migration Statistics Task Force report is crucial in this respect.
4. More work is needed to reconcile figures from survey and administrative sources, including to identify differences between long and short term migrants, in order to bring enhanced confidence that international migrants are indeed being picked up as they should be (Recommendation 2).
5. It is also recommended that ONS pursues a coherent strategy to ensure the highest possible level of response from the various ethnic groups in the 2011 Census (Recommendation 3). In particular, it will wish to consider whether a Race Impact Assessment for the Census would also be prudent.

Population Estimates: A Race Impact Assessment

Introduction

1. The Race Relations Amendment Act 2000 (RRA2000) places a duty on the Office for National Statistics (ONS) to assess its statistical products for potential impacts upon race equality. As part of this duty, there is a requirement to conduct race impact assessments (IAs) of changes to statistical policies and to monitor policies for any potentially adverse impact on the promotion of race equality.
2. This is the report of work carried out by ONS to assess if the methodology and data sources used to produce its population estimates might cause any biases in the estimates for those local authorities who have high Black and Minority Ethnic (BME) populations.
3. ONS has a Race Equality Scheme, which was recently revised and now includes an Equality Screening Tool. The Tool is designed to help assess the relevance of a particular function to equality and diversity, and its potential impact. If it is relevant, then the business area should consider an impact assessment (IA), the results of which should be made public. In this particular case, the decision to conduct an IA was taken before the Screening Tool was available but it seems likely that the tool would have suggested an IA would be beneficial.

Why has the Assessment taken place?

4. ONS population estimates and projections (which use estimates as a base) are used widely by ONS customers, including in the calculation of local government finance settlements. The Department of Communities and Local Government (DCLG) use the population estimates and projections as they are the best available on a consistent basis. If there are biases in the population estimates, such that they are significantly underestimated or overestimated for areas with high BME populations, the distribution of the available funds to those individual local authorities (LAs) might be affected.
5. Currently, the United Kingdom is witnessing a period of significant population change, most notably through high levels of international and internal migration. This makes the measurement of population more difficult, especially at a local level, and increases the risk of biases. ONS has recognised these risks and has established plans for improving its population statistics which are also considered later in this IA. However, concerns have been expressed by key stakeholders that more needs to be done, including by some local authorities, and it represents an opportune time for an impact assessment of this type to see if further actions might be appropriate.

How was the Assessment conducted?

6. The Assessment starts by considering the background to how population estimates are produced by ONS and the likely areas of greatest risk (Annex 1). The RRA 2000 states that any race impact assessment should be proportionate to the degree of relevance to race equality. Consequently, the approach taken with this IA has been to focus in particular on the migration component of population change, both international and internal, which is recognised as being the most difficult to measure reliably and therefore offers the highest level of risk. There is a brief consideration of the other components of population change, ie births and deaths, while recognising that the completeness of coverage in these areas offers less scope for bias.
7. An initial data analysis and assessment was then conducted, going into some detail (Annex 2). The analysis looks at levels of migration into/out of local authorities against percentages of the population by ethnic group to ascertain whether there is a relationship. It then considers how the mid-year population estimates for local authorities that were being used prior to the 2001 Census, compare with those based on the 2001 Census results, and plots the differences by BME proportions to see if there are signs of bias in the estimation methodology. There are some broad, high level comparisons made of international migrant numbers from the so-called A8 countries (the recent EU Accession countries) to see to what extent the International Passenger Survey is identifying such migrants. Finally, there are comparisons drawn between high levels of migration,

ethnicity and changes in patient register stocks to assess to what extent there may be the risk of bias in estimates of internal migration.

8. ONS's plans to improve its migration and population statistics and their likely impact on this IA are considered in Annex 3. Supplementary information is provided in Annex 4.

Limitations in Approach

9. The primary tool for this assessment has been the initial data analysis and this inevitably has some limitations. For example, the absence of data collected by ethnic group in some of the key data sources (especially, relevant administrative sources), as well as inconsistencies between existing sources, limited the possible analysis. It is recognised that ONS does not have control over these various administrative sources and can only attempt to influence what is collected and its consistency. However, it does make it difficult to draw definitive conclusions as a consequence (see Annex 2).

10. Also, a key comparison within the IA is against Census-based benchmarks and therefore does not cover possible causes of bias (for example, the possibility of poorer response from the non-English speaking elderly population) which may affect the Census results themselves, and consequently the base for the population estimates, if ONS's post-enumeration adjustments do not adequately compensate. The Census business area, in preparation for the 2011 Census, is considering separately the need for a Race Impact Assessment.

Summary of Findings

11. In summary, the various analyses underpinning this race impact assessment bring a reasonable level of reassurance that the potential for biases is low, while recognising that there are challenges in measuring the migration of people more generally. Current ONS plans to improve migration statistics are likely to reduce the risk of biases in the estimates and projections still further.

12. ONS uses the cohort component method to estimate the population, which starts with the Census results as a base and then requires estimation of the annual population change. Unquestionably migration is the most difficult component of population change to estimate reliably and hence local authorities where there are significant flows of migrants, both internal and international, are more at risk of quality issues associated with their population estimates. Other types of area are also at risk - for example, estimating the population reliably can be more difficult in areas where there are large student populations or where there are significant numbers of Armed Forces. Such issues were key factors underlying the decision by ONS to invest in the Improving Migration and Population Statistics Project (IMPS).

13. This race impact assessment notes that there is a relationship between high migration levels in local authorities and high BME populations. Given that migration is the most difficult component of population change to measure, this makes the risk higher that the population estimates could be under- or over-estimated in those local authority areas with high BME populations, especially at a time of significant levels of international and internal migration.

14. An analysis of the mid-year population estimates for 2001 (based on the 1991 Census results and estimated annual population change) and the subsequently revised estimates from the 2001 Census suggests that there was a very small correlation between the accuracy of the mid-year estimates for local authorities and the proportion of non-White population. Technically this relationship is still statistically significant, while at the same time being small enough that it brings a reasonable level of reassurance. Indeed, the overall effect of revising the population estimates, in the light of the 2001 Census, was to reduce the population of the identified, high BME areas, albeit by a smaller amount than in local authorities with lower BME populations. Planned improvements to migration estimates, and those already made, at a local authority level are likely to reduce the risk of bias further.

15. The assessment attempts to draw some comparisons between estimates of inflows of migrant workers from the new EU accession countries (the A8 countries) using various survey and administrative sources. There are significant issues of comparability which cannot be overcome, although the figures give some credibility to

the argument that the design and coverage of the International Passenger Survey are picking up broadly correct numbers of visitors and migrants from the A8 countries.

16. The IMPS Project is expected to result in some changes to the methodologies used at present. Work on the geographical distribution of international migrants has identified that improvements can be made and work is proceeding on developing an appropriate methodology for implementation later in 2007. The patient registers, used to estimate internal migration, are acknowledged as having limitations, but remain the best available source (compared with alternatives such as electoral registers). The IMPS project is researching whether it is possible to overcome the limitations of the patient registers by using alternative or additional sources.

17. An analysis conducted on the relationship between ethnicity and changes in the patient registers supports a conclusion that internal migration estimates are free from racial bias or that, at least, the risk of significant bias is low.

18. The population estimates cover the usually resident population and hence do not include short term migrants (see Annex 1, paragraph 1.3). ONS is investigating the possible sources for estimating the numbers of short term migrants - both overall numbers and by geographical area - and the reference for a recent ONS feasibility report (produced in January 2007) is provided in Annex 3.

Recommendations

19. Although this IA does bring a reasonable level of reassurance, the following actions would appear sensible in the light of the findings:

Recommendation 1

The greater the improvements ONS makes to the international and internal migration component estimates, down to local authority level, the lower the level of risk of bias to its population estimates. It is therefore recommended that ONS continues to make concerted efforts to improve its migration estimates. Supporting the work identified in the Migration Statistics Task Force report (see Annex 3) is crucial in this respect.

Recommendation 2

More work is needed to reconcile figures from survey and administrative sources, including to identify differences between long and short term migrants, in order to bring enhanced confidence that international migrants are indeed being picked up as they should be. This is especially important at a time of significant population change.

Recommendation 3

Population estimates produced using the cohort component method are inevitably highly dependent on the coverage and accuracy of the Census. It is recommended that ONS pursues a coherent strategy to ensure the highest possible level of response from the various ethnic groups in 2011. In particular, it will wish to consider whether an IA for the Census would also be prudent.

Annexes

[Annex 1](#) - The background to how population estimates are produced

[Annex 2](#) - Initial data analysis and assessment

[Annex 3](#) - Activity to improve migration and population statistics

[Annex 4](#) - Supporting material