Labour Force Survey – 2007 Reweighting Project

Reweighted Labour Force Survey (LFS), Annual LFS (ALALFS) and Annual Population Survey (APS) microdata were published on 14th May 2008. The microdatasets have been weighted to the latest (2007/08) population estimates whereas previously they were based on population totals published in 2003. Initial analysis of the microdata indicated that there were significant changes in certain estimates, particularly at the local authority level, which may have implications for the monitoring of progress against Local Public Service Agreement targets.

The changes in the estimates are primarily due to overall differences between the 2003 and 2007 population totals used to weight the data for each local authority. For the last reweighting exercise the microdata were weighted to Census 2001 population estimates published in Spring 2003. In Autumn 2003 these estimates were revised but it was too late to incorporate them into the reweighting without significantly delaying the project. Therefore, it was decided that the weights already produced using the Spring 2003 estimates would be retained and that projections from the pre-revised Census would then be used to weight subsequent datasets until 2007.

Up-to-date population estimates that are in line with the revised Census figures have been used in the current reweighting project. Please follow the link provided below to access up-to-date information on population estimates: http://www.statistics.gov.uk/statbase/Product.asp?vlnk=601&More=N.

Analysis of the 2007 reweighted microdata produces aggregates at the UK level that are approximately 900,000 above the estimates produced from the datasets weighted to the 2003 population totals. When analysis is conducted at lower levels of geography, the largest changes can be seen for local authorities that have experienced the largest revisions in their population totals. The differences are largest for estimates of levels i.e. actual numbers of people in a category. There has been less of an impact on rates and proportions as differences in the population estimates have produced changes in both numerators and denominators. Larger changes in rates and proportions may be evident, however, where the underlying base for a subgroup is relatively small, which reflects the larger sampling error for these estimates.

Users should also be aware that the underlying weighting methodology was changed for the 2007 reweighting exercise, which is another factor that has contributed to changes in the reweighted estimates. The raking ratio estimation method used prior to 2007 has been replaced with calibration weighting within a Generalised Regression (GREG) framework using the Statistics Canada Generalised Estimation System (GES). The change in methodology has had a minimal impact on estimates at higher levels of geography but changes may be apparent when estimates at lower levels of geography such as local authority are examined.

Due to differences in the population totals used and changes in the underlying weighting methodology adopted for the 2007 reweighting project, estimates generated using the microdata published on 14th May 2008 should not be compared with those produced from microdatasets released prior to this date. An article describing the changes in the weighting methodology together with a detailed examination of the impact of reweighting on key estimates at the local authority level will be published in the Economic and Labour Market Review in November 2008.