

Research Notes

*Revisions to Population, Migration and the Labour Force,
2007-2011*

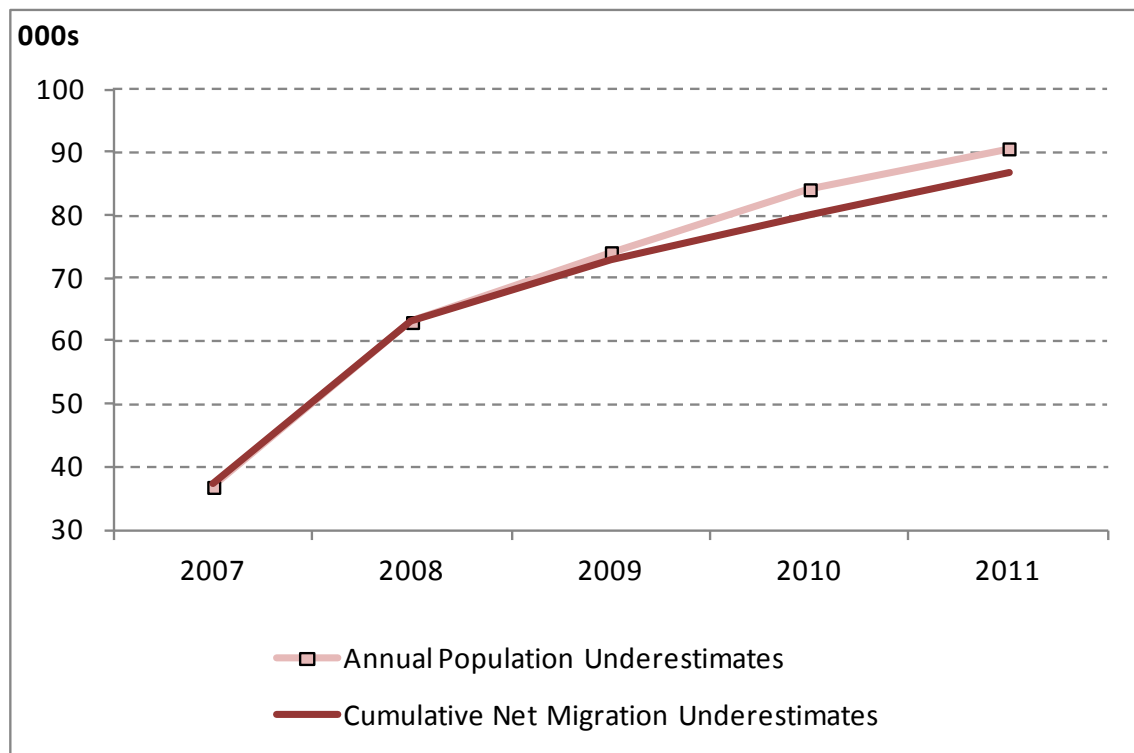
Kevin Timoney

Revisions to Population, Migration and the Labour Force, 2007-2011

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Census 2011 has led to substantial revisions to the inter-censal population estimates published by the Central Statistics Office (CSO). These revisions are attributed mainly to the underestimation of migration flows for the years 2007-2011; data from the previous *Census* from 2006 were not revised. Adjusted natural increases for the period (based on vital statistics) accounted for the remaining differences between revisions to annual population and cumulative migration. Figure 1 shows the annual population underestimations for 2007-2011, mainly comprising cumulative net migration. In total, the April 2011 population was revised upwards in *Census 2011* by 90,600.

FIGURE 1 Underestimates of Population and (Cumulative) Net Migration, 2007-2011



Sources: CSO (2011, 2012a).

Revisions to immigration

While there were revisions to both outward and inward migration levels, the change was more dramatic for immigration. In particular for the period 2007-2009, the number of people migrating to Ireland under the age of 25 was 76,900

higher than previously estimated. Changes to the methodology for inter-censal estimation of immigration are documented by the CSO (2012a), whereby the *Quarterly National Household Survey (QNHS)* data were complemented with population-wide statistical databases, such as Personal Public Service (PPS) numbers and social welfare records. The technique for estimating emigration was also updated to account for the number of work permits issued, and the amount of UK National Insurance numbers issued to Irish nationals.

Closer examination of the revised gross migration flows reveals the unprecedented volume of inward migration seen during the early inter-censal years. Table 1 reveals the nationality of these immigrants as mainly “EU-12” (member states joining the EU since May 2004), and returning Irish nationals. Immigration was previously underestimated for 2007-2011 by 65,800 for EU-12 citizens, and 30,000 for Irish nationals. Gross immigration of Irish, EU-12 and all other nationalities are also shown. Since 2009, returning Irish nationals have outnumbered immigrants from EU-12 countries.

TABLE 1 Immigration, Revisions and Gross Data by Origin, 2007-2011

	2007	2008	2009	2010	2011	Total 2007-2011
Revisions to Immigration by Origin, 000s						
Irish	10.7	7.6	4.6	4.6	2.5	30.0
EU-12	32.6	21.0	7.6	3.5	1.1	65.8
Rest of World ¹	-1.8	1.1	4.1	3.1	7.3	13.8
Total	41.5	29.7	16.3	11.2	10.9	109.6
Immigration by Origin, 000s						
Irish	30.7	23.8	23.0	17.9	19.6	115.0
EU-12	85.3	54.7	21.1	9.3	10.1	180.5
Rest of World ¹	35.1	35.0	29.5	14.7	23.6	137.9
Total	151.1	113.5	73.6	41.9	53.3	433.4

¹ All countries excluding Ireland and EU-12.

Sources: CSO (2011, 2012a), *Population and Migration Estimates*.

Revisions to Emigration

Unlike immigration, the revisions to emigration for Irish and EU-12 nationals were small, with a combined 1,100 fewer leaving Ireland according to *Census 2011*. However, as detailed in Table 2, emigration by all other nationalities for 2007-2011 was underestimated by 23,800. Gross emigration data shows emigrating Irish nationals as a share of total emigrants rose to 53 per cent during the year to April 2012; this is above the average share of 40 per cent for the period since *Census 2006*. The recent trend of large annual increases to emigration by Irish nationals has not been replicated amongst the non-Irish nationalities.

TABLE 2 Emigration, Revisions and Gross Data by Origin, 2007-2011

	2007	2008	2009	2010	2011	Total 2007-2011
	Revisions to Emigration by Origin, 000s					
Irish	-0.2	-0.3	0.8	1.2	1.8	3.3
EU-12	-1.8	-1.6	0.4	-0.1	-1.3	-4.4
Rest of World ¹	6.1	5.7	5.6	2.8	3.6	23.8
Total	4.1	3.8	6.8	3.9	4.1	22.7
	Emigration by Origin, 000s					
Irish	12.9	13.1	19.2	28.9	42.0	116.1
EU-12	12.6	17.2	30.5	19.0	13.9	93.2
Rest of World ¹	20.8	18.7	22.3	21.3	24.7	107.8
Total	46.3	49.0	72.0	69.2	80.6	317.1

¹ All countries excluding Ireland and EU-12

Source: CSO (2011, 2012a)

Overall, the underestimation of net migration for 2007-2011 was 26,700 for Irish nationals, 70,200 for EU-12 countries (both net inward migration) and 10,000 net outward migration of all other nationalities, combining to 86,900 net inward migration for the period. 2010 and 2011 saw net outward migration of 27,400 and 27,300 respectively, and preliminary CSO estimates for 2012 suggest this has widened further to 34,400. The vast majority of net emigrants are Irish nationals, estimated at 25,900 in 2012. Since peaking at 247,700 in 2008, the revised population of EU-12 citizens living in Ireland has fallen to an estimated 229,400 for 2012. As a share of the total population, EU-12 nationalities comprised 5.5 per cent in 2008, compared to 5 per cent in 2012.

Revisions to the Labour Force

The labour force data based on the *QNHS* have also been revised for the intercensal period. The definitions of indicators used in the survey were updated to align with those of the EU Commission, and the weighting procedure was further refined (CSO, 2012b). The weighting adjustment aims to rectify previous limitations which considerably underestimated the non-Irish national population.

Table 3 details the 2011 population by age group, with the change of population since *Census 2006* and the post-census revisions also shown. As noted by the CSO (2012b), those aged 20-24 have an above-average unemployment rate, which stood at 29 per cent for the third quarter of 2012.

Although the sizes of most age cohorts have increased since 2006, falling fertility rates during the 1980s and higher net emigration have decreased the number of

young adults in Ireland during the inter-censal period. The reduced age cohorts were for those aged 15-19, 20-24 and 25-29, falling by 9,900, 48,900 and 12,300 respectively.

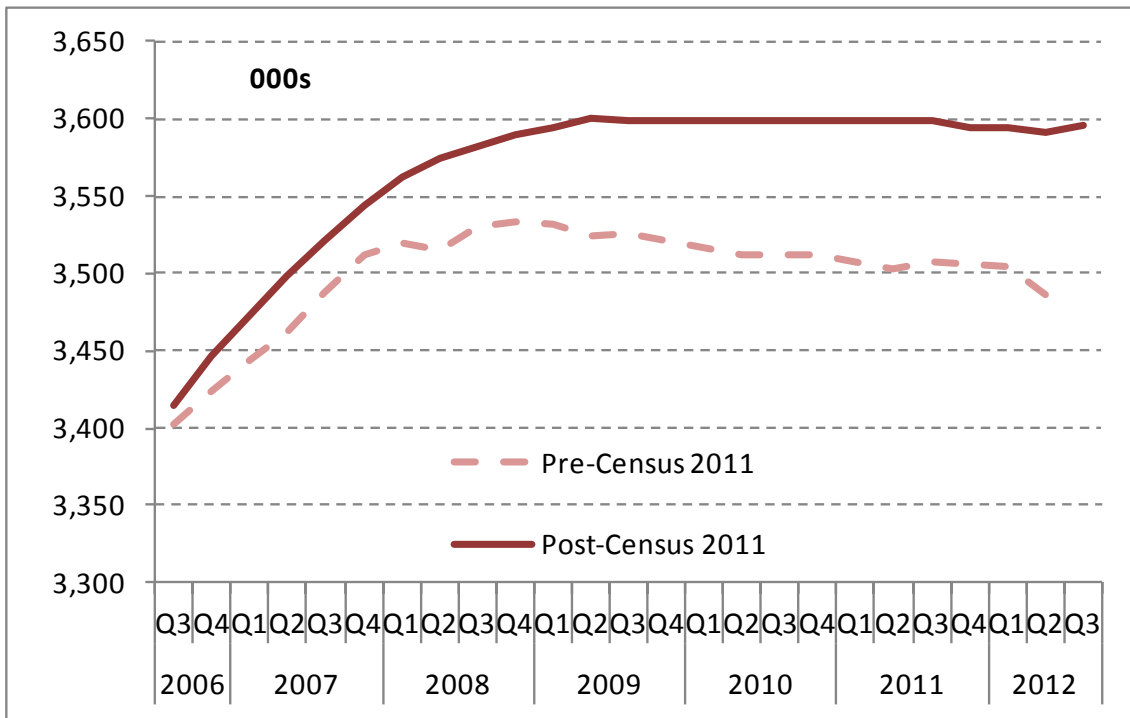
TABLE 3 Population by Age Group in 2011, Post-census Revisions and Change Since 2006

	Population According to <i>Census 2011</i>	Revisions to <i>Population and Migration Estimates 2011</i>	Change of Population, <i>Census 2006-2011</i>
Age	000s		
0-4	356.0	-11.0	53.7
5-9	319.6	3.1	31.1
10-14	301.0	1.9	26.8
15-19	281.0	11.9	-9.9
20-24	298.6	49.1	-48.9
25-29	362.9	-1.0	-12.3
30-34	393.4	5.2	45.5
35-39	363.1	15.5	42.7
40-44	329.3	8.9	29.5
45-49	304.1	0.5	30.3
50-54	273.7	0.8	27.3
55-59	243.4	-0.4	19.5
60-64	217.1	-1.3	37.3
65-69	172.1	1.6	30.9
70-74	130.1	3.1	12.6
75-79	101.4	3.2	10.0
80-84	69.8	2.0	5.4
85+	58.2	-2.4	10.4
Total	4,574.9	90.6	341.9

Source: CSO (2006, 2011, 2012).

Following *Census 2011* the working-age population (those aged 15 and over) for the second quarter of 2011 was revised upwards by 96,400, to 3,599,100 (an increase of 2.8%). Overall, the population aged under 45 was revised upwards by 89,200, and by 7,200 for those aged 45 and above. Figure 2 shows the working-age population since the third quarter of 2006; the latter half of the year were revised as *Census 2006* was conducted in April. The rate of decline is shown to be smaller than was previously estimated, remaining broadly stable at 3,600,000 since the second quarter of 2009.

FIGURE 2 Working-Age Population (Aged 15 Years and Over), Q3 2006-Q3 2012



Sources: CSO (2012b).

Based on the revised series for working-age population, the estimates of both employment and unemployment have been adjusted upwards. For employment, the differences range from 20,300 (1 per cent) in 2007 to 39,400 (2.2 per cent) in 2011. Due to the concentration of some of the population revisions in age groups at high risk of unemployment, there are higher estimates for both the unemployment level and rate. For the second quarter of 2012, revisions estimated an additional 14,500 adults that were unemployed in the country, while the seasonally adjusted unemployment rate increased to 14.9 per cent from 14.8 per cent previously published (CSO, 2012b and 2012c). The revisions also show that the seasonally adjusted participation rate fell below 60 per cent in the second and third quarters of 2012, representing a nine-year low.

Conclusion

Revisions to the annual *Population and Migration Estimates* for 2007-2011 have highlighted the extent of gross inward migration flows that took place in the latter stages of the expansionary years. In total, 109,600 (more than a quarter of all immigrants for 2007-2011) were previously absent from population estimates. The underestimation of emigration was far less pronounced. The labour force implications are higher estimates of employment, unemployment and the unemployment rate over the revisions horizon, and a broadly stable working-age population over the past three years. The revisions were largely concentrated in age groups characterised by high unemployment and emigration levels. Given the

broadly static labour market prospects alluded to in this *Commentary*, high flows of net outward migration are likely to persist for several years to come.

References

- CSO, 2011. Population and Migration Estimates, April 2011, 15 September 2011.
- CSO, 2012a. Population and Migration Estimates, April 2012 (with revisions from April 2007 to April 2011), 15 September 2011.
- CSO, 2012b. Revisions to labour market estimates, November 2012, Information Notice, 29 November 2012.
- CSO, 2012c. Quarterly National Household Survey, Quarter 3 2012, Statistical Release, 29 November 2012.