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# Updating top income shares for Ireland 2000-2009 

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The main series of estimates for top income shares for the Republic of Ireland presented in Nolan (2007), covers (most of) the period 1922-2000 (see Table 12.5). This is based on the distribution of taxpayers by income range in terms of what the published income tax statistics refer to as 'total income', and using an income control total derived from the National Accounts personal income aggregate with certain adjustments. Data published since these original estimates now allow figures to be derived up to 2009, but in doing so the availability of additional information from both the income tax statistics and the national accounts mean that some improvements in the way these estimates are constructed can also be implemented.

As far as the income tax statistics are concerned, from 1989 onwards the published income distribution statistics have been expanded to include not only the 'total income' figures presented up to that point, but also the corresponding distributional figures on the basis of what is termed 'gross income'. The new estimates from 2000 relate now to the concept of 'gross income.' As explained in Nolan (2007), 'gross income' includes employee superannuation contributions and is thus a more comprehensive income measure than 'total income' which excludes them. Nolan (2007) also included estimates of top income shares using gross income from 1980 to 2000 (see Table 12.6). These figures were derived employing the same income control total as in the longer series based on 'total income'. This was calculated by taking the personal sector income aggregate from the National Accounts, deducting employers' social insurance contributions and social transfers, and taking $80 \%$ of the resulting figure to reflect the fact that not all of the income of the personal sector goes to households, some goes to 'private non-profit institutions'.

Additional information is now published in the Irish National Accounts which provides more detail on the components of the personal sector aggregate; in addition, the likelihood is that a substantial proportion of social transfers is now within the tax net, which would not have been the case in earlier years. The adjustments applied to the personal sector income aggregate in arriving at the income control total for calculation of top income shares can thus be derived in a somewhat different way for the most recent period. First, rather than deducting all social transfers we deduct half the total - on the basis that social insurance payments, which are most likely to be recorded in the income tax statistics, make up approximately that proportion (the remainder being means-tested social assistance and tax-exempt universal payments). Secondly, imputed rent can now be deducted, interest paid by households (deducted in calculating net interest and aggregate personal income) can be added back in, and the National Accounts adjustments for financial services (FISIM), applied in producing the personal sector aggregate can be eliminated. Finally, comparison of the total this produces with the total income reported in the income tax statistics suggests that a smaller adjustment factor for the element going
to 'private non-profit institutions' would be appropriate: we have applied $95 \%$ rather than $80 \%$, the necessarily rather arbitrary figure used heretofore. In producing the new estimates for 2000-2009, the personal income control total is thus
$95 \%$ of [Personal Income minus ( $0.5 *$ transfers) minus employers SI contributions minus imputed rent plus interest paid before FISIM]

The control total for the number of tax units has been updated by using the same method as described in Nolan (2007) for the years up to 2000, making use of new data published from the Censuses of Population carried out in 2006 and 2011. The number of tax units is estimated for each Census year as the number of adults (aged 18 or over) minus the number of married women; this is then interpolated for inter-Censal years. This does not take into account the fact that some married couples file as separate tax units.

While on a somewhat different basis, the new estimates for 2000 can be compared with the previous ones based on 'total income' (see Table 1): the estimated share of the top $1 \%$ is identical up to the first decimal, at $10.3 \%$, the share of the top $0.5 \%$ is very close, at $7.4 \%$ versus $7.3 \%$, and there is some difference for the top $10 \%$, where the new estimate is $33.9 \%$ whereas the previous figure was $36.1 \%$. This suggests that combining the new series from 2000 onwards with the previously-published figures up to that date, at least for the top $1 \%$ and $0.5 \%$, will capture the major fluctuations over time; the new series can then be extended as new figures are produced each year by the Revenue Commissioners and National Accounts.

## Reference

Nolan, Brian (2007). Long-Term Trends in Top Income Shares in Ireland; in A. B. Atkinson and T. Piketty (editors) Top Incomes over the Twentieth Century. A Contrast Between Continental European and English-Speaking Countries, Oxford: Oxford University Press, chapter 12, pp. 501-530.

Table 1. Comparison between previous and revised series. Ireland (21 May 2012) ${ }^{(\mathrm{a})}$

| year | Income control Nominal million Euros old new | Number <br> old | units <br> new | Top 10\% income share | Top 1\% income share \% old | Top 0.5\% income share | Top 10\% income share | Top 1\% income share \% new | Top 0.5\% income share |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2000 | 44,926 51,448 | 2,076 | 2,076 | 36.07 | 10.30 | 7.28 | 33.87 | 10.32 | 7.42 |

Note:
(a) Differences in series in grey.

