

Distributional National Accounts for Australia, 1991-2018

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A recent literature led by researchers affiliated with the World Inequality Database (Atkinson and Morelli 2018; Bozio et al. 2018; Garbinti et al. 2018; Piketty et al. 2018, 2020; Piketty et al. 2019) has attempted to provide a more complete picture of the distribution of income through allocating all of the income as measured in national accounts to individual members of society. The guiding principles for these ‘distributional national accounts’ are to allocate the entirety of national income to individuals, and to do so according to who are the ‘beneficial recipients’ of the income.

By doing so, a more accurate picture of the distribution of income is possible compared with traditional inequality studies using household survey or tax records data, which typically only capture cash incomes, thereby missing important components such as in-kind benefits from government-provided goods and services, imputed rents on owner-occupied housing, and retained earnings of companies. By accounting for these income components, the distributional national accounts approach therefore generates estimates of individuals’ incomes that are on average larger than obtained from household surveys or income tax data and which should more accurately reflect the distribution of all (cash and in-kind) income.

In this paper we attempt to produce statistics on the distribution of income in Australia as measured by the national accounts. Our approach is guided by Alvaredo et al. (2020), which details the income concepts and methods of implementation adopted by the World Inequality Database (WID). The guidelines are, however, not completely prescriptive because of the substantial variation across countries in institutional features and data availability. Our approach is therefore considerably influenced by the particular institutional features of Australia and the nature of the available data, including the relative strengths and weaknesses of alternative data sources.

Four main national income concepts are identified in Alvaredo et al. (2020) as being of interest: pre-tax factor income; pre-tax post-replacement income; post-tax disposable income; and post-tax national income. Pre-tax factor income approximately corresponds to total income accruing to capital and labour, where all of national income is attributed to capital and labour. Pre-tax post-replacement income is the same as pre-tax factor income, but with an adjustment made to account for the public pension system by allocating pension payments to recipients and deducting the contributions used to fund them (such that it still sums to national income). Post-tax disposable income deducts all taxes attributable to individuals and adds cash transfers. Consistent with the principle of distributed income aggregating to national accounts totals, the total value of taxes deducted equals the total value of taxes collected by government (not just income taxes). However, government expenditure is not allocated to individuals and thus the sum of post-tax disposable income is less than national income. Post-tax national income addresses this deficiency by distributing all of government expenditure, inclusive of items not readily attributable to individuals, such as national defence.

We produce estimates of the distribution of the National Accounts measure of national income in Australia for the period 1991 to 2018. We document the shifts in income shares over the period, contrasting changes in the distribution of pre-tax and post-tax national income and the fortunes of Australians by sex, age, education, immigrant status and area of residence. We then compare Australia to the US and France. Finally, we compare our new inequality estimates with traditional household survey based estimates.

Key Words

Income inequality, national accounts, survey data, tax data, redistribution