The distribution of welfare spending and taxation in Australia

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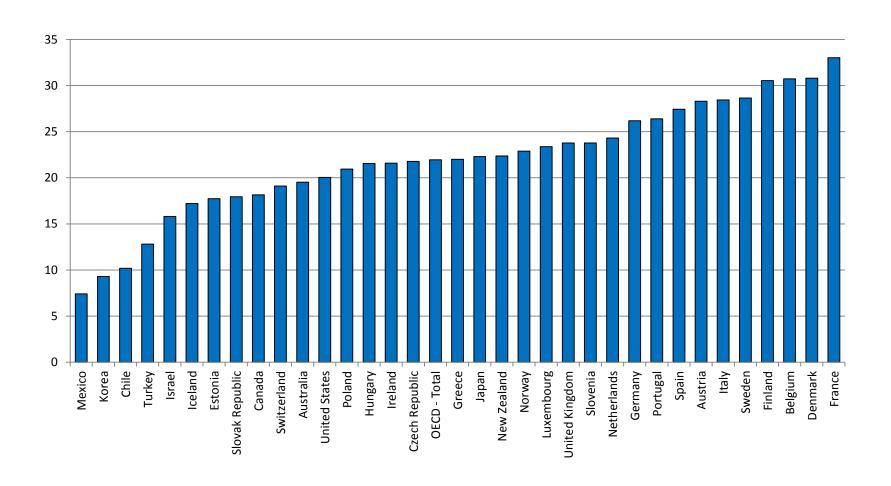
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Outline

- Background: Expenditure control and distributional impacts
- Levels of spending and the distribution of spending across countries
- The impact of publicly provided services and indirect taxes - from disposable income to final income
- Longer run inequality lengthening the time period.
- Issues for further research

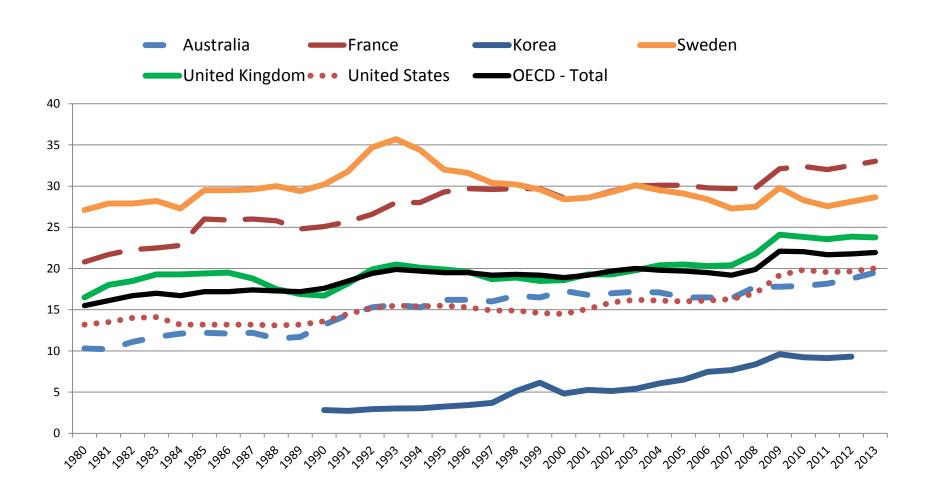
Public social expenditure, OECD countries 2013

% of GDP



Trends in public social spending

Social spending as % of GDP, 1980 to 2013



Types of redistribution in welfare states

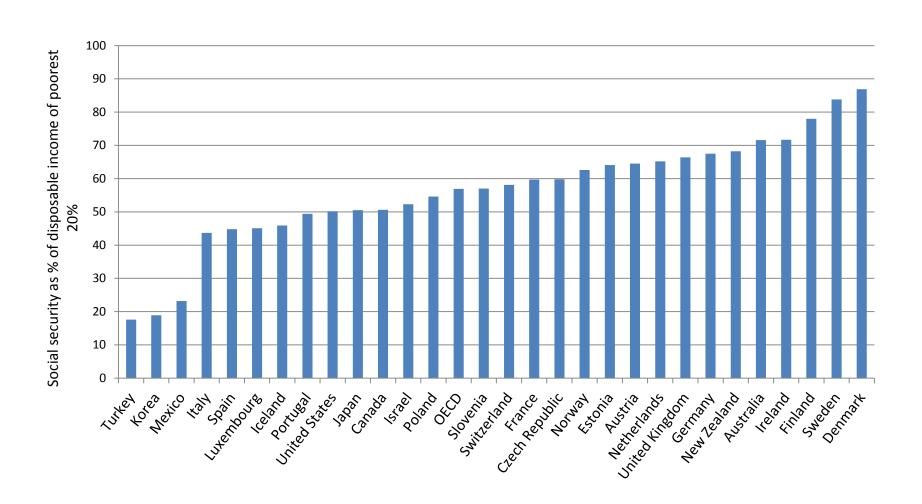
- The design features of social protection differ in important respects two of the most important features relate to the *funding* i.e. the different ways in which programmes are financed and *structure* of benefits i.e. the relationship between benefits received and the past or current income of beneficiaries.
- Redistribution can be between rich and poor (Robin Hood) or across the lifecycle (the piggy bank)
 - Insurance (against unemployment, disability, sickness etc.)
 - Savings (for retirement)
- All welfare states are a mix of the two, but the mix varies. Australia is closer to the "Robin Hood" end of the spectrum than any other country.
- Private provision also redistributes across the lifecycle.
- Point in time, static analysis treats all measured redistribution as if it were between rich and poor.
- Taking account of redistribution across the life course, the level of redistribution between rich and poor is less than it appears, but is still strongly associated with progressivity of benefit structure.

Who benefits under different welfare states?

- A "pure" social insurance system is status maintaining contributors get out what they have put in, and you have to be a contributor to benefit.
- On average, social insurance systems are more expensive and therefore appear more "generous", but this can be generosity to the middle classes and the well-off.
- Universal and income-tested schemes are therefore likely to be relatively more generous to the lifetime poor and to those who have not contributed or been able to contribute to social insurance schemes, particularly young people, women and migrants.
- However, one of the central issues in the literature is that more encompassing welfare states provide higher levels of benefits because the middle class have a stake in the system.
- Does targeting undercut political support for generosity to the poor?

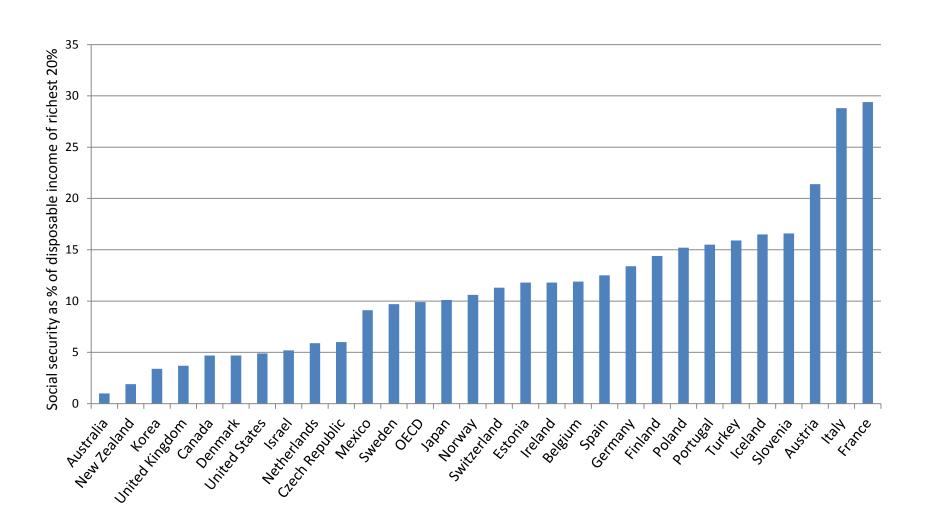
Social security benefits as % of household disposable income of poorest quintile, 2010 or nearest year

Source: Calculated from Table 5, OECD , 2014, http://www.oecd-ilibrary.org/economics/economic-growth-from-the-household-perspective-5jz5m89dh0nt-en



Social security benefits as % of household disposable income of richest quintile, 2010 or nearest year

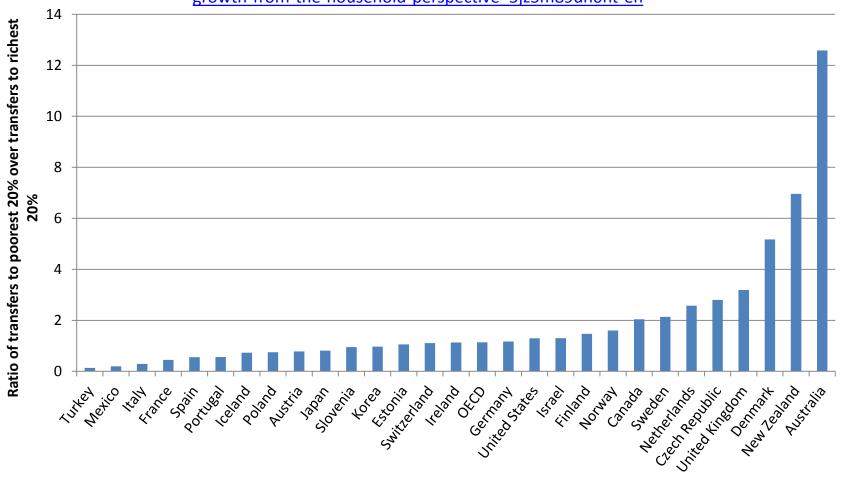
Source: Calculated from Table 5, OECD , 2014, http://www.oecd-ilibrary.org/economics/economic-growth-from-the-household-perspective_5jz5m89dh0nt-en



Australia's social security system is more targeted to the poor than any other OECD country

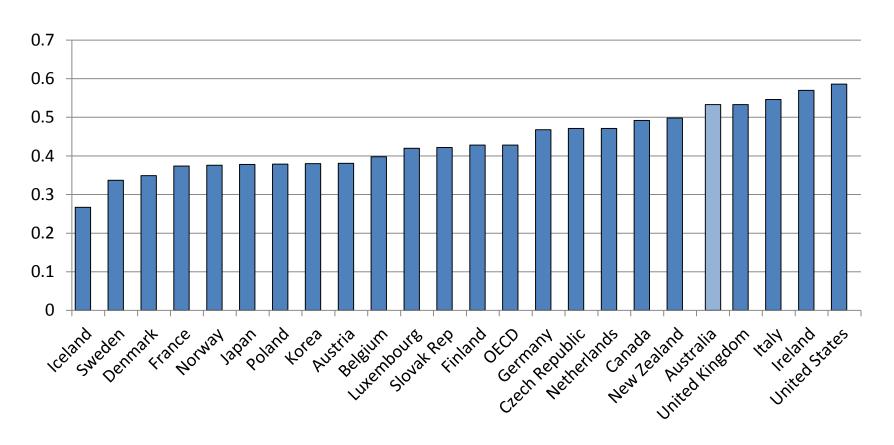
Ratio of transfers received by poorest 20% to those received by richest 20%

Source: Calculated from Table s 3 and 5, OECD , 2014, <a href="http://www.oecd-ilibrary.org/economics/econ



The progressivity of direct taxes is highest in the English speaking countries and lowest in the Nordic countries

Concentration coefficient for direct taxes around 2005

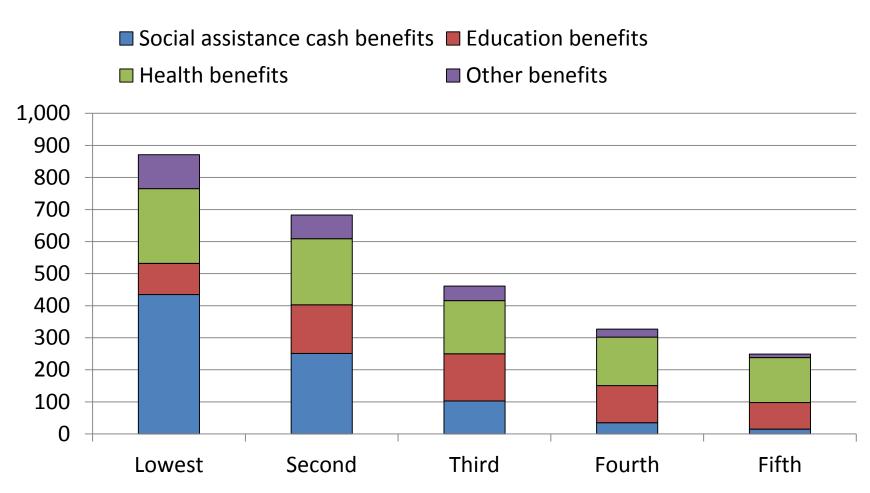


Assessing the impact of government benefits and taxes

- International studies of the impact of government cash and non-cash benefits and direct and indirect taxes have been undertaken for some considerable time. The UK Central Statistical Office has published such estimates since the 1960s with figures available online for results from 1977 onwards. Their approach influenced the ABS in undertaking their first study based on the 1984 Household Expenditure Survey.
- In March 1987, the Australian Bureau of Statistics (ABS) released its first study on *The Effects of Government Benefits and Taxes on Household Income* (ABS Catalogue No. 6537.0), which presented the results of a study of the effects of government benefits and taxes on the distribution of income of households in 1984, based primarily on data collected in the 1984 Household Expenditure Survey, supplemented by relevant data from other sources.
- The Australian Bureau of Statistics subsequently published further studies using data from the Household Expenditure Surveys for 1988-89, 1993-94, 1998-99, 2003-05 and 2009-10 (Catalogue No. 6537.0).

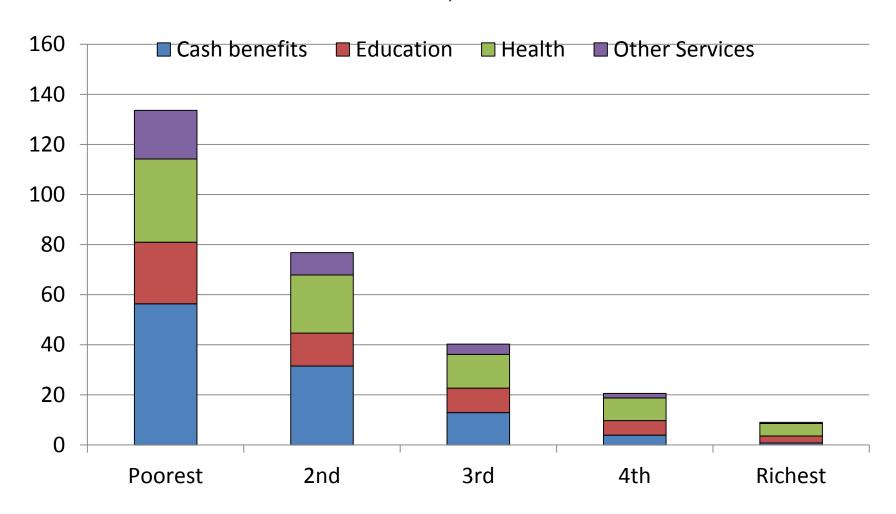
Who gets what?

All benefits (\$pw) received by quintiles of equivalised private income, Australia, 2009-10



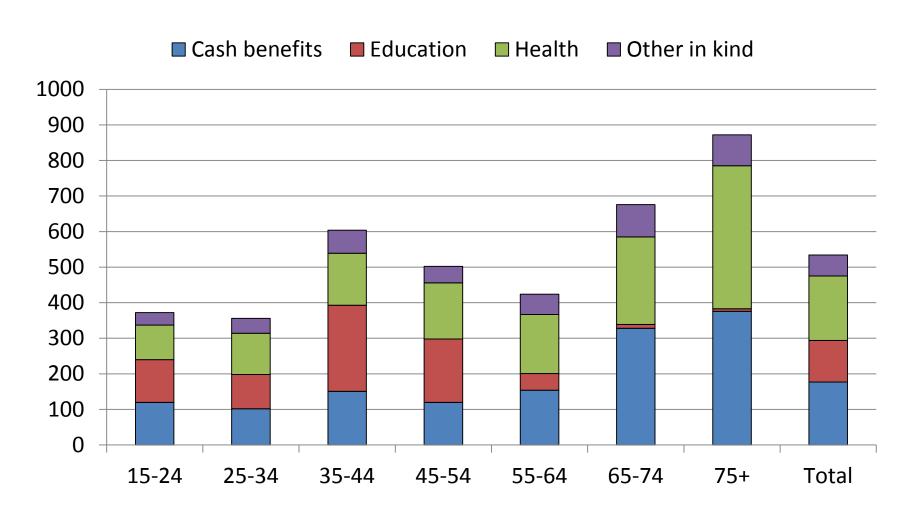
Who gets what?

Benefits received as % of private income by quintiles of equivalised private income, Australia, 2009-10

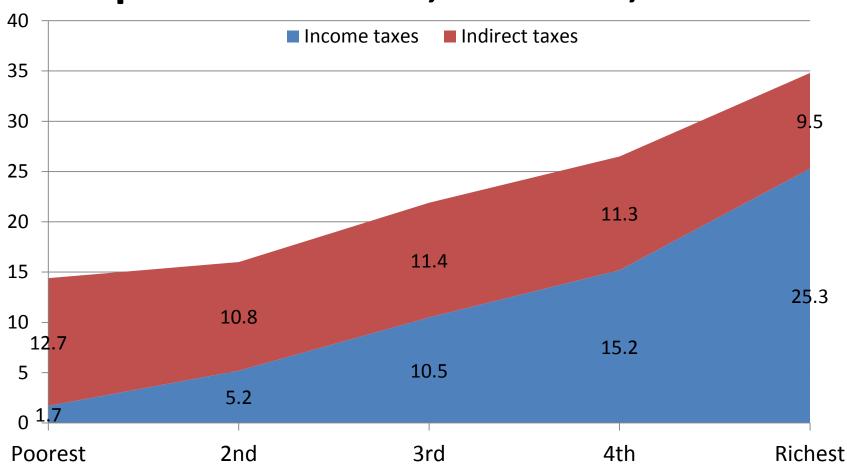


Who gets what?

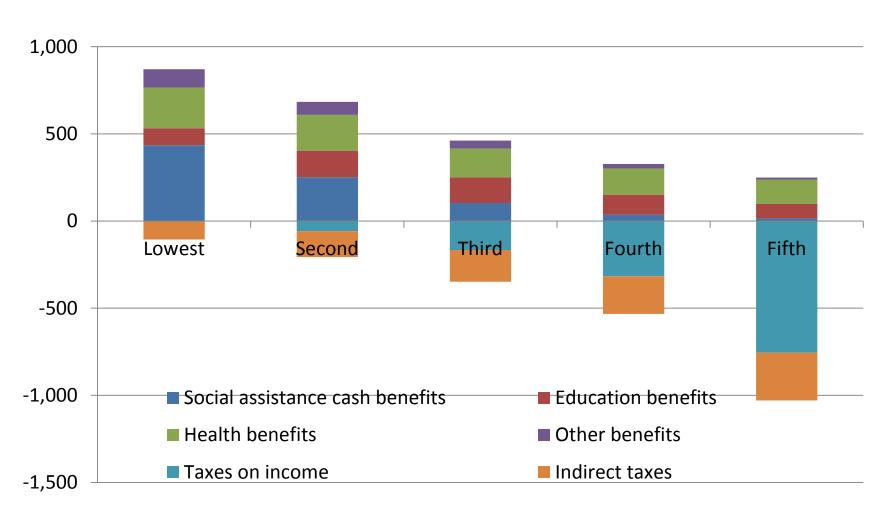
Benefits received (\$pw) by age of reference person, Australia, 2009-10



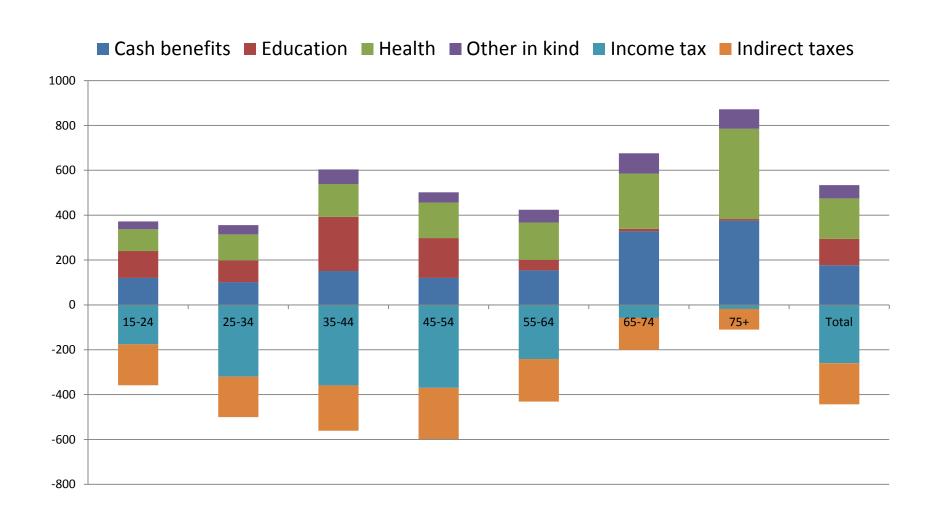
Direct and indirect taxes as per cent of income by quintiles of equivalised disposable income, Australia, 2009-10



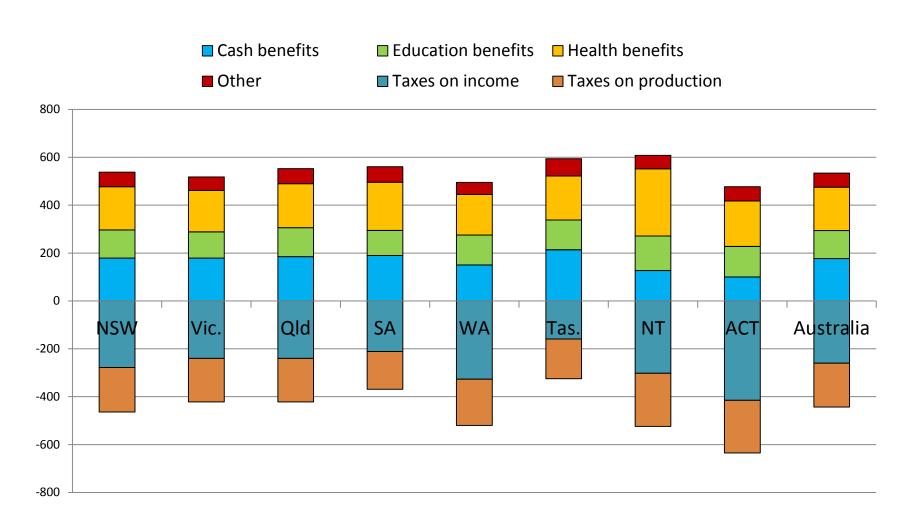
Benefits received and taxes paid (2009-10 \$pw) by quintiles of equivalised private income, Australia, 2009-10



Benefits received and taxes paid (2009-10 \$pw) by age of reference person, Australia, 2009-10

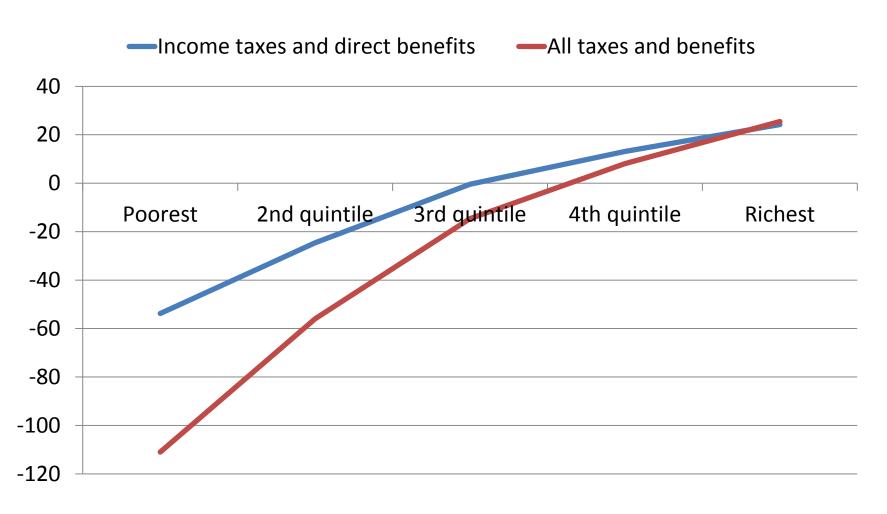


Benefits received and taxes paid (2009-10 \$pw) by State/Territory, Australia, 2009-10



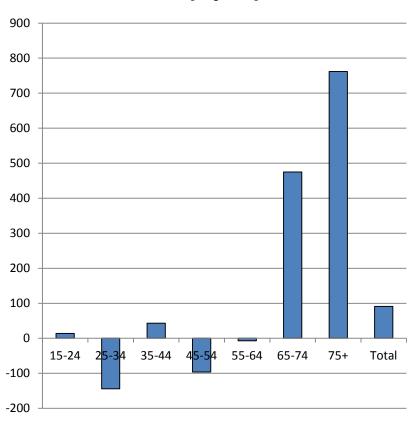
Average tax rates by quintile, 2009-10

Taxes as % of equivalised disposable income; cash and non-cash benefits treated as negative taxes

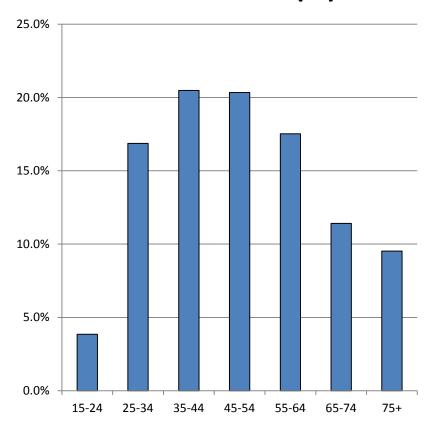


Net transfers (\$pw) by age of household reference person and share of households by age, Australia 2009-10

Net transfers (\$pw)



Share of households (%)



Impacts of taxes and benefits on income distribution, Australia and United Kingdom, 2009-10

| | Distribution | Weight | Impact |
|-------------------|--------------|--------|--------|
| Cash benefits | | | |
| Australia | 14.7 | 10.4 | -7.5 |
| United Kingdom | 3.4 | 17.6 | -9.3 |
| Direct taxes | | | |
| Australia | 48.7 | 15.3 | -1.1 |
| United Kingdom | 16.3 | 23.3 | -1.1 |
| Non-cash benefits | | | |
| Australia | 1.85 | 21.0 | -2.0 |
| United Kingdom | 1.47 | 21.4 | -3.1 |
| Indirect taxes | | | |
| Australia | 2.41 | 10.7 | +0.9 |
| United Kingdom | 2.51 | 15.3 | +1.3 |

Notes: Distribution is the ratio of the benefits received by the poorest quintile to those received by the richest quintile and the ratio of the taxes paid by the richest quintile to those paid by the poorest quintile, respectively. Weight is the level of benefits and taxes as a percentage of final income. Impact is the difference between the Q5 to Q1 ratio as a result of adding each income component. Households are ranked by equivalised disposable income using the modified OECD equivalence scale. In Australia, non-cash benefits are added before indirect taxes are deducted, while in the United Kingdom indirect taxes are deducted first. Source: Calculated from Office for National Statistics, *The Effects of Taxes and Benefits on Household Income*, 2009/10 and Australian Bureau of Statistics, *Government Benefits*, *Taxes and Household Income*, 2009-10.

Income mobility

- An important issue in assessing trends in income inequality is the relationship between inequality and income mobility. For example, discussions of the widening income inequality in the United States sometimes note that to get a broader perspective on these trends, one must look at the opportunity for upward mobility, which has sometimes been seen as a defining characteristic of that country's economy (United States Department of the Treasury, 2007).
- Research shows that the distribution of lifetime incomes is more equal than a one-time snapshot implies because a household's relative position in the income distribution can change over time. Concerns about income inequality at a particular point in time may be lessened if low incomes are temporary and income mobility provides individuals with the opportunity to improve their economic situation over time. In addition, different policy prescriptions might be appropriate for assisting those who are persistently low-income as compared to those whose incomes are only temporarily low.

Income mobility

- But individual incomes are more dynamic than group incomes even if most people on average are better-off than similar groups in the past, individuals rise up and fall down the income ladder. Around 3 per cent of the population have a major worsening in finances each year.
- Wilkins and Warren (2012) estimate that, on average, individuals moved 21.7 percentiles, or slightly more than two deciles, between 2001 and 2009. Just over 28 per cent of people moved up more than 20 percentiles, and 20 per cent moved down more than 20 percentiles. That is, over nine years, 52 per cent of people stayed within 20 percentiles of where they were in the income distribution, while 48 per cent moved more than 20 percentiles.
- In considering income mobility by initial location in the income distribution, they found that 55.5 per cent of those in the bottom quintile in 2001 were also in the bottom quintile in 2009; 20.9 per cent were in the second quintile, 11.9 per cent were in the third quintile, 6.2 per cent were in the fourth quintile and 5.5 per cent were in the top quintile. Most people do not move more than one quintile, but equally, relatively few remain in the same quintile. However, the proportions remaining in the top and bottom quintiles are relatively high, at 55.5 per cent for the bottom quintile and 46 per cent for the top quintile.

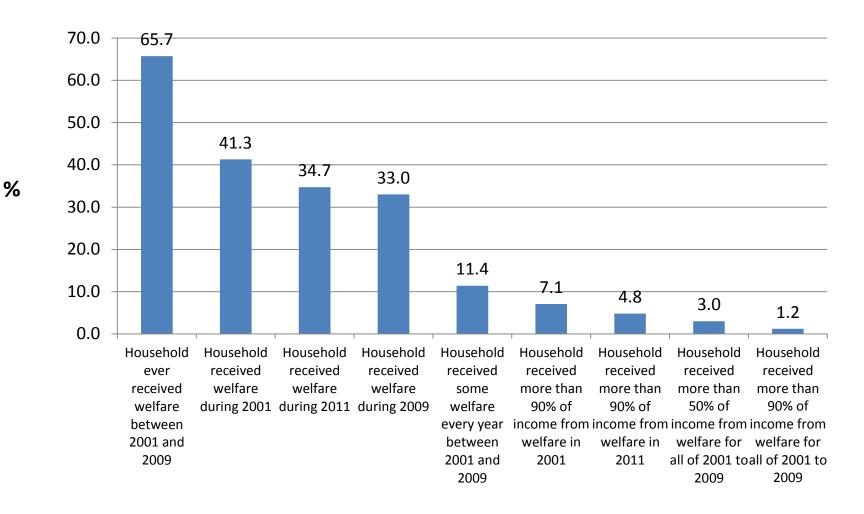
Income mobility

- OECD (2008) analysed poverty dynamics over a three year period in the early 2000s, in the case of Australia using HILDA data for 2002-2004. In this period Australia had the highest level of entries into poverty (defined as 50 per cent of median income) of the 18 countries studied and as result also had the highest share of the population ever experiencing poverty (around 25 per cent).
- However, Australia had a higher than average rate of exits from poverty so the persistence of poverty the share of those who ever experienced a spell of poverty who stayed poor for all three years was just at the OECD average (28 per cent), which was significantly more than the least persistent countries (the Netherlands and Denmark at around 13-15 per cent), but less than the most persistent countries (Canada, Ireland and the United States at 36 per cent) (OECD, 2008).
- However, in terms of movements between quintiles Australia had the fourth lowest share of people who stayed in the bottom income quintile over a three year period and the second lowest share of those who stayed in the top quintile (OECD, 2008).

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Welfare receipt over time

% of working age households receiving income support payments by period Source: Calculated from HILDA Statistical Reports 7 and 9 https://www.melbourneinstitute.com/hilda/Reports/statreport.html

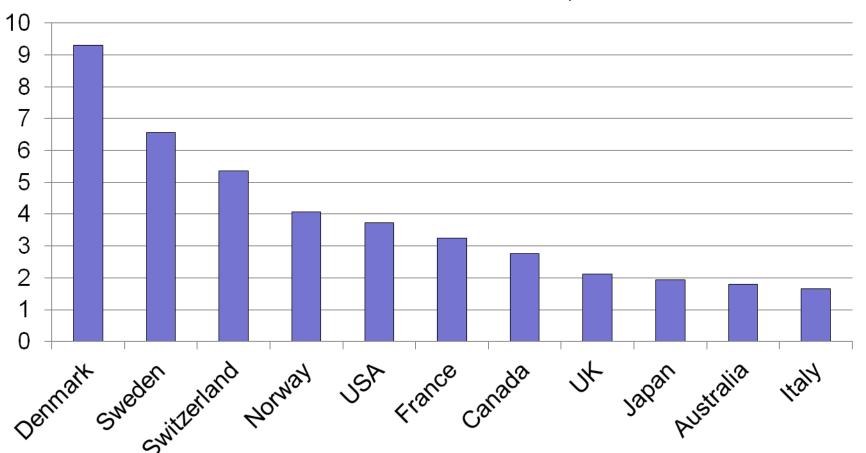


The complicating role of wealth

- In 2011, average wealth in Australia, at USD 397,000, was second highest in the world – after Switzerland and ahead of Norway. Its median wealth of USD 222,000 is the highest in the world.
- The composition of wealth is heavily skewed towards real assets, which amount on average to USD 323,000 and form 65% of total household assets. The level of real assets per adult in Australia is now the second highest in the world, after Norway.
- Compared to the rest of the world, very few Australians have net worth less than USD 1,000. This reflects such factors as relatively low credit card and student loan debt.
- The proportion of those with wealth above USD 100,000 is the highest of any country eight times the world average. With 1,861,000 people in the global top 1%, Australia accounts for 4.1% of the members of that wealthy group, despite having just 0.4% of the world's adult population.

Wealth distributions vary widely across countries

Ratio of mean to median net worth, 2011



Income measures and concepts are important

- <u>Inequality is lower the longer the time period over which it is measured</u> between 2001 and 2009 the Gini coefficient went from 0.306 in 2000, 0.300 in 2003, 0.312 in 2007 and 2008 and 0.299 in 2009; inequality over a two-year period varied between 0.286 and 0.295; inequality over a four year period varied between 0.273 and 0.282; inequality over the 9 years was 0.263.
- <u>Broader measures of resources also suggest lower inequality</u>, particularly the addition of non-cash benefits (health, education, community services) even after subtracting indirect taxes. For example, the 90/10 ratio for disposable income in 2009-10 was 3.9 to 1, but for "final income" it was 2.65 to 1.
- <u>Inequality is mainly reduced by raising the bottom not reducing the top:</u>
 - Direct taxes and cash transfers increase the incomes of the 10th percentile by 231% and lower the income of the 90th percentile by 19%;
 - The net effect of Indirect benefits and taxes is to raise the 10th percentile by a further 50% and raise the 90th percentile by 1%.

Issues for further research

- Lifetime distributions of benefits and taxes
- Wealth and the welfare state
- Risks vs. disadvantage
- Risks and resilience

Additional Material

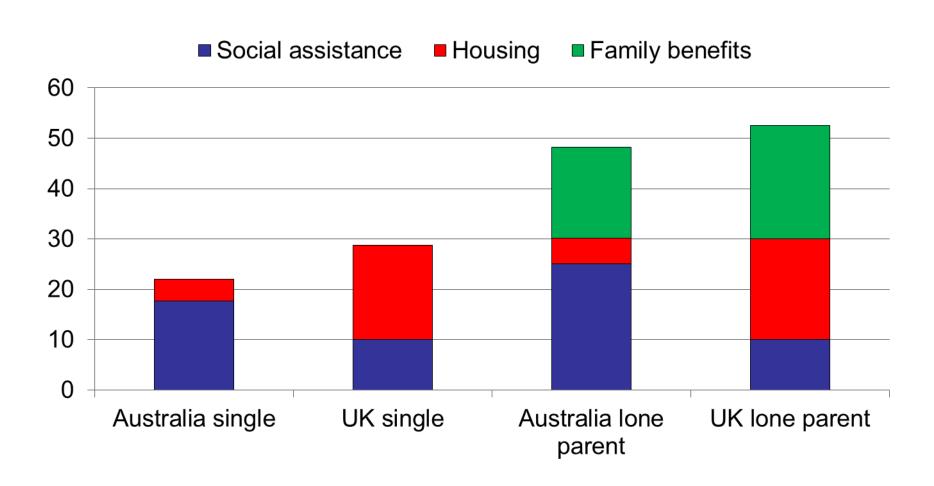
Imputed rents from owner-occupied housing and public housing

- In 2009-10, imputed rent is estimated to raise average household incomes from \$848 per week to \$905 per week, an increase of 6.7 per cent overall. For owners without a mortgage the increase in average income was around 20 per cent, while for those renting from State or Territory housing authorities the increase was 17 per cent.
- In 2009-10, the addition of imputed rent to equivalised household disposable income in Australia was estimated to reduce the Gini coefficient from 0.328 to 0.309, a reduction of 0.019 Gini points.

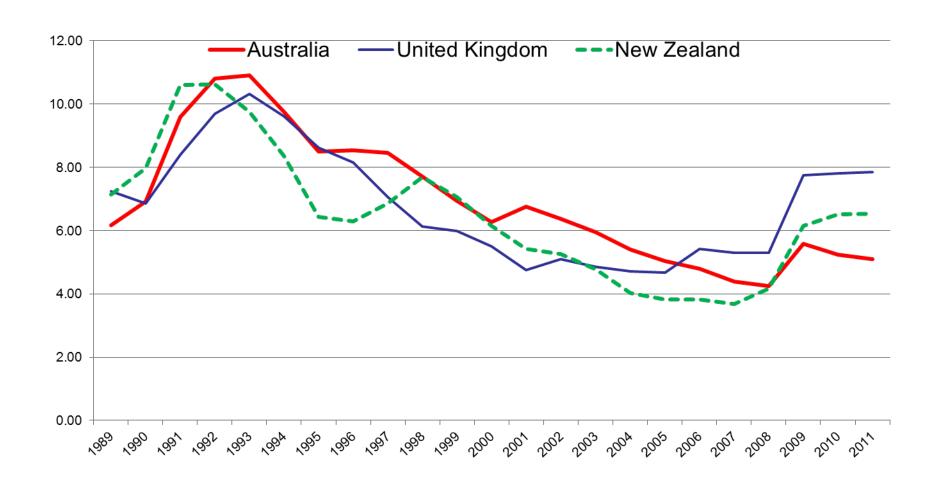
Imputed rents from owner-occupied housing and public housing

- This reduction in inequality was exceeded in nine of the 25 countries of Europe in Atkinson and Marlier (2008), while the increase in mean income was lower than in all but seven European countries.
- The result that imputed rent has a relatively minor impact on mean income in Australia reflects the fact that imputed rents in both the ABS and Eurostat studies not only includes imputed rent from owner-occupied housing, but also includes the value of public housing subsidies, which are much more significant in a large number of European countries.
- For example, in 2009-10 only 3.9 per cent of Australian households were public renters, with a further 5 per cent paying reduced rents or living rent free. In contrast nearly 18 per cent of the UK population lived in households not paying market rents and nearly one quarter in Hungary, with nine other European countries having higher shares of reduced rent tenants than Australia.
- It is likely to be this factor that explains Australia's relatively low ranking in the contribution to average incomes despite its very high level of housing wealth.

Level of benefits for different household types as % of average wage, 2011

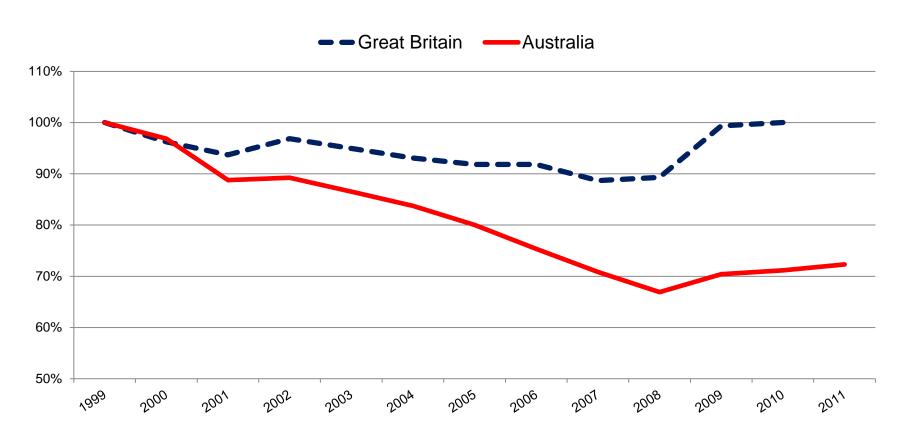


Trends in unemployment rates, Australia, New Zealand and the United Kingdom, 1989 to 2011



Australia and Great Britain – on different paths?

% of working age population receiving income support – 1999=100

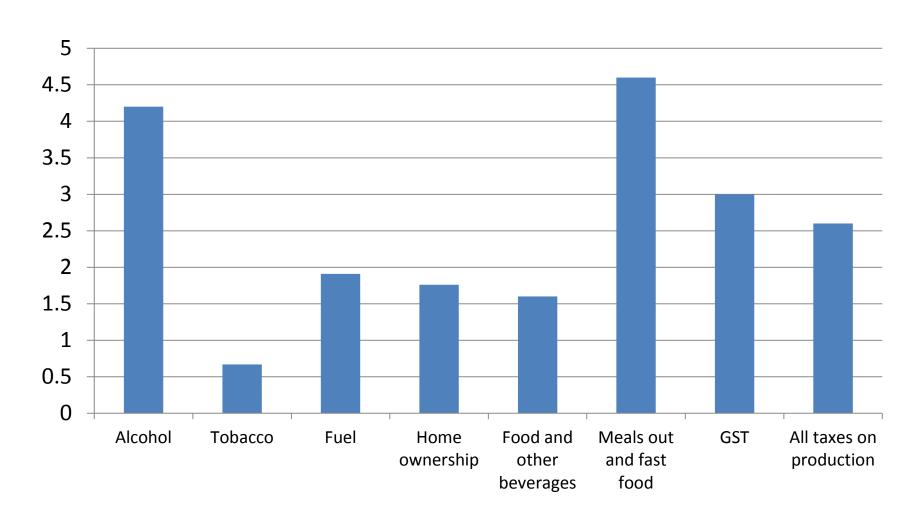


The responsiveness of benefit receipt to falls in unemployment varies across countries

Between 1999 and 2005, for every 1.0
 percentage point fall in the unemployment
 rate, benefit receipt fell by 0.73 percentage
 points in Australia, 0.56 percentage points in
 New Zealand and 0.38 percentage points in
 the United Kingdom.

Which taxes are least progressive?

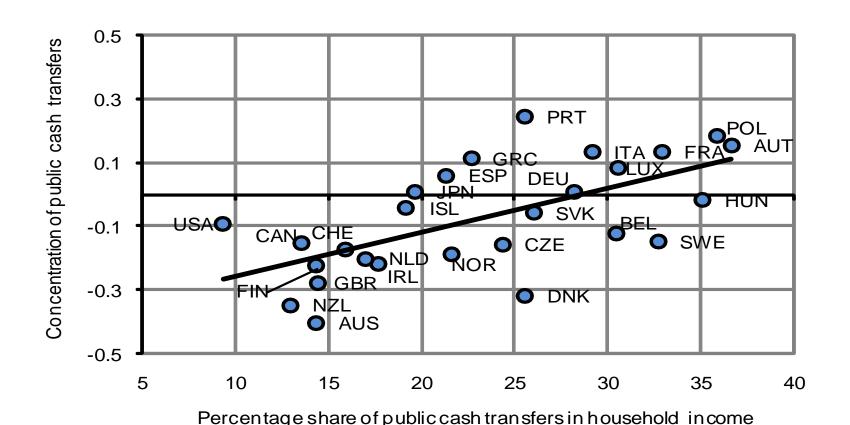
Ratio of taxes paid by richest 20% to taxes paid by poorest 20%



Effects of different income rankings on distribution of benefits and taxes, Australia, 2009-10

| Private income | Social assistance benefits in cash | Taxes on income | Social transfers in kind | Taxes on production |
|-------------------|---|-----------------|--------------------------------|---------------------|
| Private income | | | | |
| Lowest quintile | \$435 | \$1 | \$455 | \$105 |
| Highest quintile | \$15 | \$756 | \$234 | \$273 |
| Ratio* | 29.00 | 756.00 | 1.94 | 2.60 |
| Gross income | | | | |
| Lowest quintile | \$281 | \$2 | \$319 | \$89 |
| Highest quintile | \$45 | \$809 | \$363 | \$309 |
| Ratio* | 6.24 | 404.50 | 0.88 | 3.47 |
| Disposable income | | | | |
| Lowest quintile | \$323 | \$15 | \$442 | \$114 |
| Highest quintile | \$22 | \$731 | \$239 | \$275 |
| Ratio* | 14.68 | 48.73 | 1.85 | 2.41 |
| Final income | | | | |
| Lowest quintile | \$224 | \$38 | \$293 | \$142 |
| Highest quintile | \$43 | \$745 | \$305 | \$263 |
| Ratio* | 5.21 | 19.61 | 0.96 | 1.85 |

Level and concentration of public cash transfers in OECD countries, mid-2000s



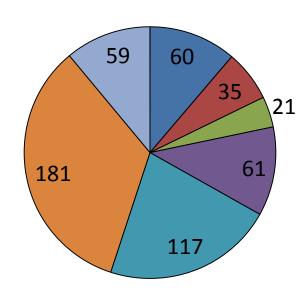
Average benefits (\$pw) received by type, Australia, 2009-10

■ Age pension

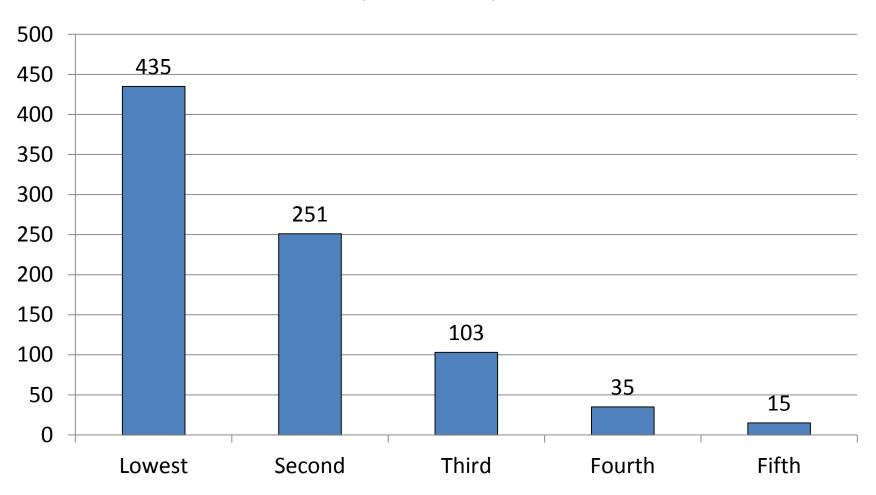
- Family payments
- Disability pension
- Other cash benefits

■ Education

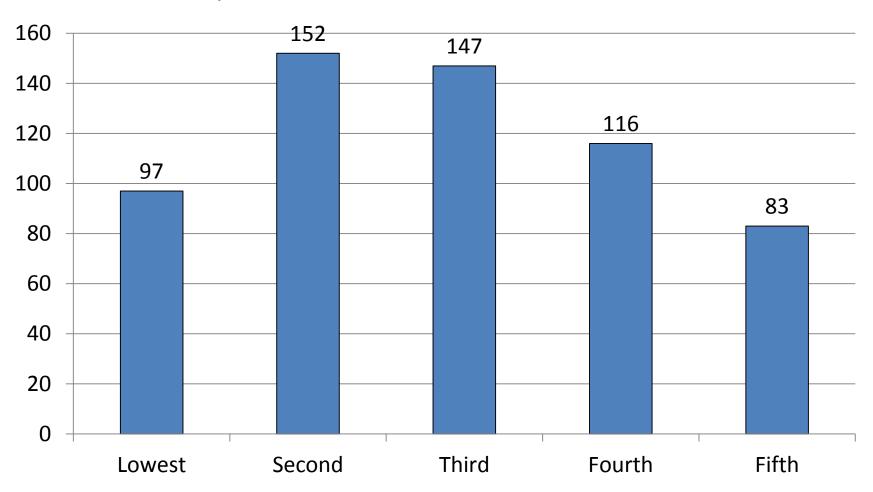
- Health
- Other non-cash benefits



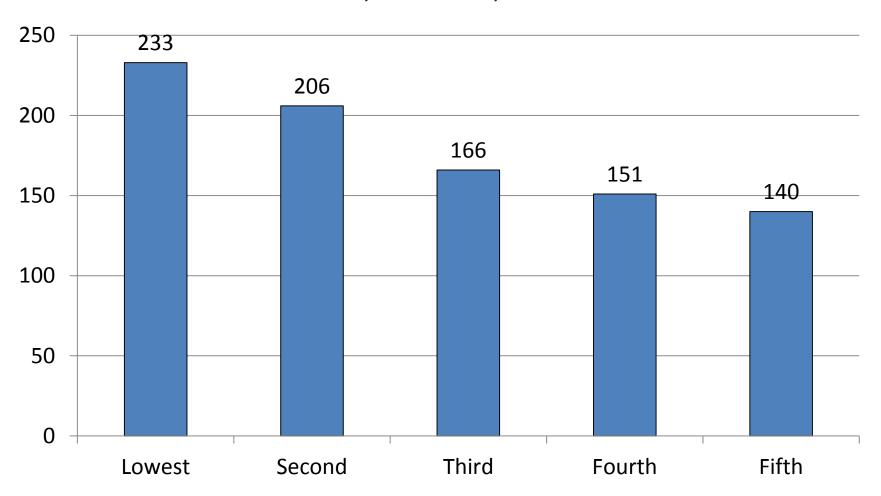
Cash benefits (\$pw) received by quintiles of equivalised private income, Australia, 2009-10



Education benefits (\$pw) received by quintiles of equivalised private income, Australia, 2009-10

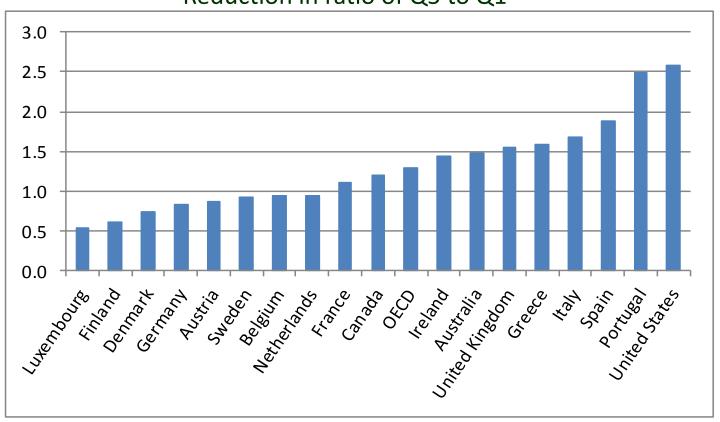


Health benefits (\$pw) received by quintiles of equivalised private income, Australia, 2009-10



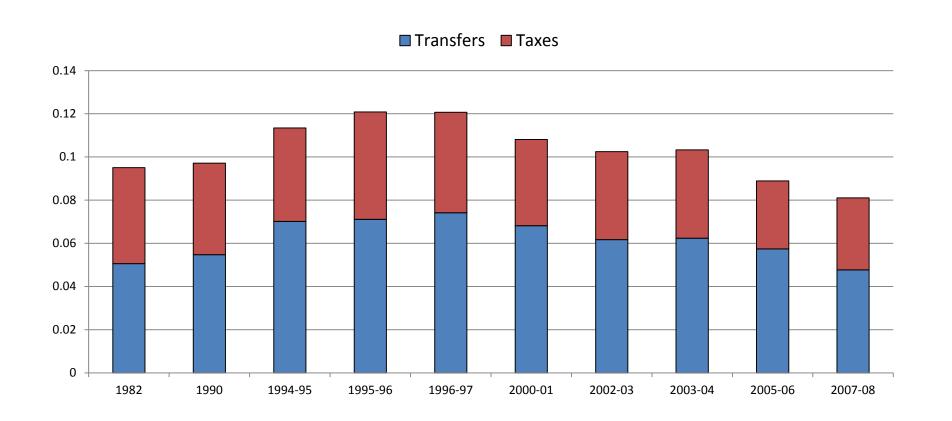
Reduction in inter-quintile share ratio after inclusion of non-cash benefits, selected OECD countries, around 2000

Reduction in ratio of Q5 to Q1



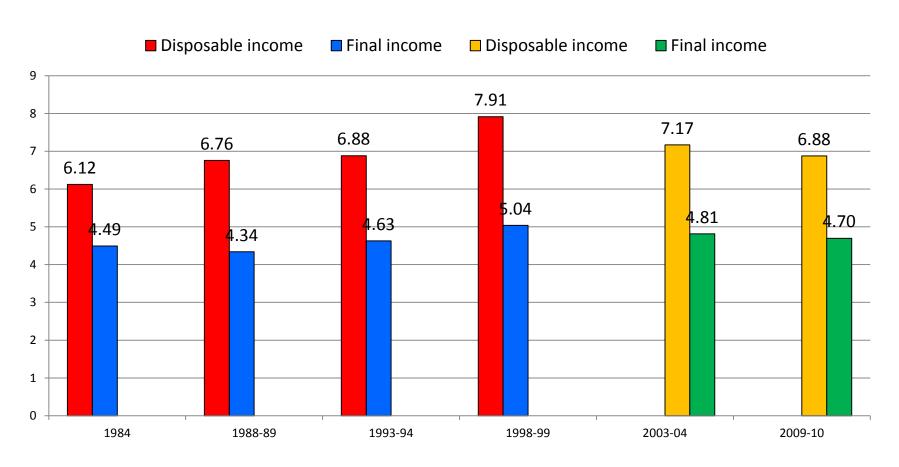
Reduction in inequality among income units of working age, Australia, 1982 to 2007-08

Point difference in Gini coefficient



Income disparities by income concept, Australia, 1984 to 2009-10

Ratio of Q5 to Q1



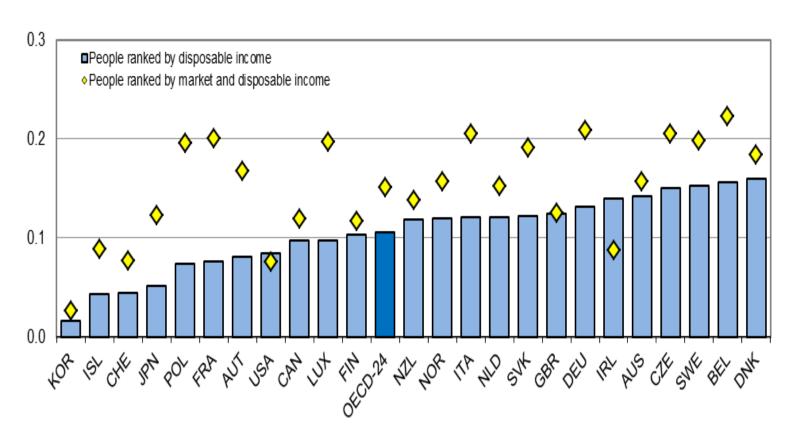
How do you rank?

The counterfactual

- Any assessment of the distributional impact of the welfare state involves a comparison of the observed distribution with a counterfactual - the hypothetical distribution existing in the absence of the policies evaluated.
- As argued by Layard (1977) and Reynolds and Smolensky (1977), to the extent that
 the welfare state displaces private savings or other activities, the standard
 approach exaggerates market or private income inequality and then exaggerates
 the amount of redistribution achieved by the welfare state.
- In countries with generous public pensions, the standard approach implies that middle class individuals are plunged into market income poverty on retirement simply because it is the government, rather than the market, that provides their pensions: generous earnings-related public pensions are then measured as being very effective at reducing inequality, in part because they restore middle-income retirees to their pre-retirement ranking.
- Effects of this sort are not so much behavioural as mechanical.

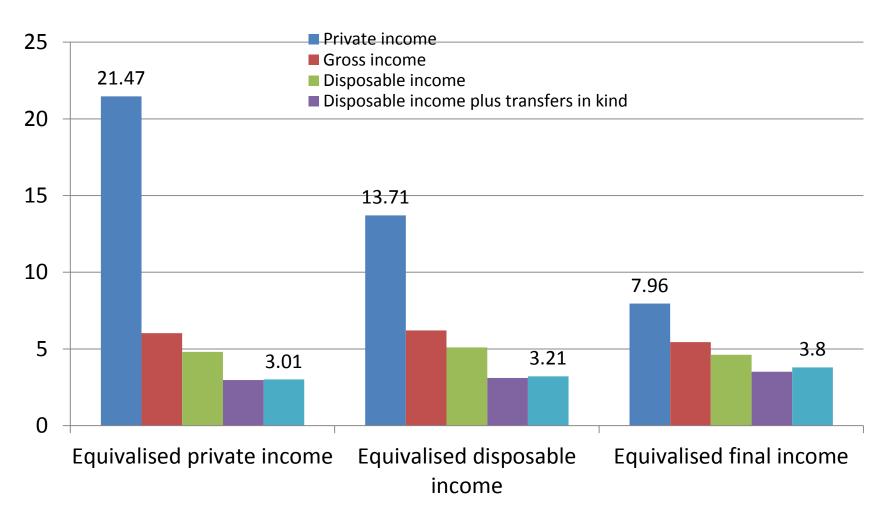
Differences in inequality before and after taxes and transfers in OECD countries

Point difference in concentration coefficients, mid-2000s



Income disparities under different income rankings, Australia, 2009-10

Q5/Q1



Why does re-ranking occur?

- In moving from private to gross income, not all low-income households receive cash transfers, so rankings change (due to non-take-up or incomes unreliable), and in moving to disposable income, some payments are not taxable.
- Non-cash benefits are not allocated on the basis of income, so people with similar cash incomes can receive different non-cash benefits, which can be very valuable

Inequality is lower the longer the time period over which it is measured

