

Comparability of Income Data across Households/Individuals and over Time

Rolf Aaberge
Research Department
Statistics Norway

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Purpose

Estimate

a distribution of income

that mirrors

the distribution of economic well-being

Two sources to comparability problems of incomes within a country

- Comparability of income components over time
- Implications of non-income differentials between individuals

Capital income, tax reforms and income shifting behaviour

- Does it make sense to use yearly tax reported *dividends* and *capital gains* as a measure of the *return from equities* ?

Table 2.1. The composition of gross income with respect to wage earnings, self-employment income, capital income and public transfers in 1986 and 1996. Percent

Decile	Year	Wage earnings	Selfemployment income	Capital income	Public transfers
1	1986	29.3	3.5	4.5	62.6
	1996	29.3	2.6	0.8	67.4
2	1986	52.3	7.1	4.1	36.5
	1996	31.4	5.9	2.2	60.5
9	1986	81.3	8.0	4.4	6.2
	1996	80.4	8.1	3.1	8.5
10	1986	68.5	20.5	6.8	4.3
	1996	64.2	12.9	18.4	4.6
All	1986	72.1	10.5	4.5	12.9
	1996	68.5	8.3	6.0	17.3

Source: Table 3.4 in the E.R.White Paper (Figures produced by Statistics Norway)

An alternative measurement of the return from equities

- An alternative measure should capture the contribution from investments in stocks to the household's long term consumption possibilities
- Imputed total return to equities = 0.089 times the estimated market values of the stocks (Hicksian income)

Trend in mean tax reported and imputed return to stocks

- Imputed return was about 4-6 times higher than tax reported return before the 1992 tax reform
- Imputed and reported return were of the same magnitude after the 1992 tax reform

Trend in Income Inequality, 1986-1998



Table 2.3. Trend* in income inequality when income is measured according to Standard income and Hicksian income. 1986-1998

	Income inequality, Standard income	Income inequality, imputed real return (Hicksian income)
Year	Gini coefficient	Gini coefficient
1986	0.224 (0.002)	0.233 (0.002)
1992	0.230 (0.003)	0.241 (0.003)
1993	0.240 (0.005)	0.235 (0.004)
1998	0.249 (0.003)	0.237 (0.003)
Average of (1986-92)	0.229 (0.001)	0.233 (0.001)
Average of (1993-98)	0.250 (0.001)	0.241 (0.001)
Percentage change, (1986-92) - (1993- 1998)	9.07 %	3.27 %

Heterogeneity of prices and measurement of poverty

Two strategies:

- **Transform the income measure by relevant price indices and compare individual-specific price-adjusted incomes**
- **Account for price differences at the aggregation stage**

Region-specific and country-specific poverty lines

- The Norwegian municipalities (435) are classified according to regional location and the level of housing prices
- Region-specific poverty lines are determined as half of the median equivalent income in each group (21 groups)

Poverty lines

The country-specific poverty line is equal to NOK 83 200

Region-specific poverty lines vary from NOK 73 000 to NOK 93 800

Table 2. Poverty rates for Norway by urban and rural municipalities, 2001*

	Rural municipalities	Urban municipalities	Oslo	Total population
Country-specific poverty line (defined as half of the median equivalent income)	2.9	3.2	6.0	3.2
Region-specific poverty lines (defined as half of the median equivalent income in each group)	2.2	3.5	8.3	3.3

*Urban and rural municipalities include 232 and 203 local jurisdictions, respectively

Conclusions

- To improve comparability of income data use imputed rather than tax-reported returns from stocks
- Accounting for variation in housing prices across regions is crucial for obtaining reliable estimates of income inequality and poverty