

## MEASURES OF INCOME INEQUALITY

Income inequalities are one of the most visible manifestations of differences in living standards within each country. High income inequalities typically imply a waste of human resources, in the form of a large share of the population out of work or trapped in low-paid and low-skilled jobs.

### Definition

Income is defined as household disposable income in a particular year. It consists of earnings, self-employment and capital income and public cash transfers; income taxes and social security contributions paid by households are deducted. The income of the household is attributed to each of its members, with an adjustment to reflect differences in needs for households of different sizes (i.e. the needs of a household composed of four people are assumed to be twice as large as those of a person living alone).

Income inequality among individuals is measured here by five indicators. The Gini Coefficient is based on the comparison of cumulative proportions of the population against cumulative proportions of income they receive, and it ranges between 0 in the case of perfect equality and 1 in the case of perfect inequality. The mean log deviation is the average value of the logarithm of the ratio of mean income to the income of each decile. The squared coefficient of variation is the variance of average income of each decile, divided by the square of the average income of the entire population. The P90/P10 ratio is the ratio of the upper bound value of the ninth decile (i.e. the 10% of people with highest income) to that of the first. The P50/P10 ratio is the ratio of median income to the upper bound value of the first decile. The mean log deviation and interdecile ratios have a lower value of 1 and no upper bound, while the squared coefficient of variation has a lower bound of 0 and upper bound of infinity.

### Comparability

Data used here were provided by national experts applying common methodologies and standardised definitions. In many cases, experts have made several adjustments to their source data to conform to standardized definitions. While this

### Overview

There is considerable variation in income inequality across OECD countries. Inequality as measured by the Gini coefficient is lowest in Denmark and Sweden and highest in Mexico and Turkey. It is above-average in Poland, Portugal and the United States, and below-average in the remaining Nordic and many Continental European countries. The Gini coefficient for the most unequal country (Mexico) is double the value of the most equal country (Denmark). Overall, the different measures of income inequalities provide similar ranking across countries.

From the mid-1980s to the mid-2000s, inequality rose in 19 out of 24 countries. The increase was strongest in Finland, New Zealand and Portugal. Declines occurred in France, Greece, and Turkey, as well as Ireland and Spain (where trend data are limited to 2000). Income inequality generally rose faster from the mid-1980s to the mid-1990s than in the following decade.

approach improves comparability, full standardisation cannot be achieved. Also, small differences between periods and across countries are usually not significant.

Results refer to different years. "Mid-2000s" data refer to the income earned in 2004 in all countries except Australia and New Zealand (2003/04); Hungary and the United Kingdom (2004/05); Switzerland (2004/05); Canada, Denmark, Netherlands and the United States (2005); and Korea (2006). "Mid-1990s" data refer to the income earned in 1995 in all countries except Austria and Italy (1993); Australia (1994/95); Denmark, France, Greece, Ireland, Japan, Mexico and Turkey (1994); and the Czech Republic, Luxembourg and New Zealand (1996). "Mid-1980s" data refer to the income earned in 1985 in all countries except Austria, Belgium, Denmark and Sweden (1983); France, Italy, Mexico, Turkey and the United States (1984); Finland, Luxembourg, New Zealand and Norway (1986); Ireland (1987); and Greece (1988). "Mid-1980s to Mid-1990s" data refer to changes from around 1990 to the mid-1990s for the Czech Republic, Hungary and Portugal and to the western Länder of Germany. "Mid-1990s to Mid-2000s" data refer to changes from the mid-1990s to around 2000 for Austria, Belgium, the Czech Republic, Ireland, Portugal and Spain (where 2005 data, based on EU-SILC, are not deemed to be comparable with those for earlier years), and to changes from 2000 to 2005 for Switzerland.

### Source

- Förster, M. and M. Mira d'Ercole (2005), *Income Distribution and Poverty in OECD Countries in the Second Half of the 1990s*, OECD Social Employment and Migration Working Papers, No. 22, OECD, Paris.

### Further information

#### Analytical publications

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- Kayizzi-Mugerwa, S. (2001), *Globalisation, Growth and Income Inequality: The African Experience*, OECD Development Centre Working Papers, No. 186, OECD, Paris.
- OECD (2004), *Income Disparities in China: An OECD Perspective*, OECD, Paris.
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- OECD (2008), *Growing Unequal? Income Distribution and Poverty in OECD Countries*, OECD, Paris.
- Uchimura, H. (2005), *Impact of Changes in Social Institutions on Income Inequality in China*, OECD Development Centre Working Papers, No. 243, OECD, Paris.

### Websites

- OECD Social and Welfare Statistics, [www.oecd.org/statistics/social](http://www.oecd.org/statistics/social).
- OECD work on income distribution and poverty, [www.oecd.org/els/social/inequality](http://www.oecd.org/els/social/inequality).



### Income inequality

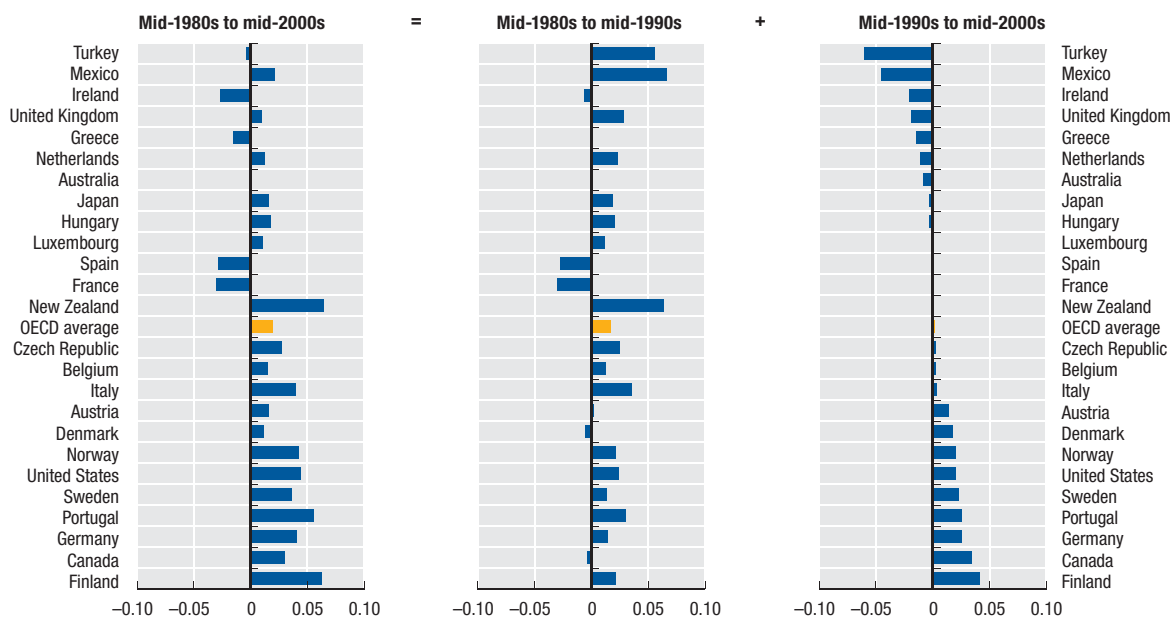
Different summary measures, mid-2000s

	Gini coefficient		Mean Log Deviation		Standard Coefficient of Variation		Interdecile ratio P90/P10		Interdecile ratio P50/P10	
	Level	Rank	Level	Rank	Level	Rank	Level	Rank	Level	Rank
Australia	0.30	16	0.17	15	0.39	9	3.95	15	2.09	18
Austria	0.27	4	0.13	8	0.33	3	3.27	10	1.82	7
Belgium	0.27	9	0.13	6	0.30	1	3.43	14	1.97	14
Canada	0.32	18	0.18	17	0.59	17	4.12	17	2.14	20
Czech Republic	0.27	5	0.12	4	0.38	8	3.20	5	1.74	2
Denmark	0.23	1	0.10	2	0.60	18	2.72	1	1.75	3
Finland	0.27	7	0.13	7	0.81	24	3.21	6	1.86	11
France	0.28	13	0.14	9	0.37	7	3.39	13	1.82	8
Germany	0.30	15	0.16	14	0.45	13	3.98	16	2.08	17
Greece	0.32	21	0.18	16	0.43	12	4.39	21	2.18	21
Hungary	0.29	14	0.14	10	0.48	15	3.36	12	1.78	6
Iceland	0.28	12	0.16	13	0.54	16	3.10	4	1.76	4
Ireland	0.33	22	0.19	18	0.79	22	4.41	22	2.29	22
Italy	0.35	25	0.24	23	1.10	25	4.31	20	2.11	19
Japan	0.32	20	0.20	20	0.41	11	4.77	25	2.43	26
Korea	0.31	17	0.20	22	0.35	5	4.73	24	2.50	27
Luxembourg	0.26	3	0.12	3	0.30	2	3.25	8	1.86	10
Mexico	0.47	30	0.41	28	2.70	28	8.53	30	2.86	30
Netherlands	0.27	8	..	..	..	..	3.23	7	1.86	12
New Zealand	0.34	23	..	..	..	..	4.27	19	2.06	16
Norway	0.28	11	0.16	12	0.46	14	2.83	3	1.77	5
Poland	0.37	26	0.26	24	0.71	20	5.63	26	2.42	25
Portugal	0.42	28	0.31	26	1.13	26	6.05	28	2.35	24
Slovak Republic	0.27	5	0.13	5	0.37	6	3.26	9	1.86	13
Spain	0.32	19	0.20	21	0.41	10	4.59	23	2.32	23
Sweden	0.23	2	0.10	1	0.65	19	2.79	2	1.72	1
Switzerland	0.28	10	0.15	11	0.34	4	3.29	11	1.83	9
Turkey	0.43	29	0.32	27	1.45	27	6.49	29	2.67	28
United Kingdom	0.34	23	0.20	19	0.71	21	4.21	18	1.99	15
United States	0.38	27	0.29	25	0.81	23	5.91	27	2.69	29
OECD average	0.31	..	0.19	..	0.66	..	4.16	..	2.09	..

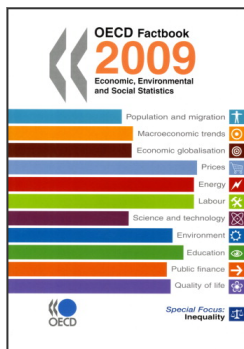
StatLink <http://dx.doi.org/10.1787/544701673235>

### Trends in income inequality

Percentage point changes in the Gini coefficient



StatLink <http://dx.doi.org/10.1787/538878202736>



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