

Old-age income inequality

Key Results

On average in the OECD, the Gini of disposable income equals 0.306 among people aged over 65. The highest value is observed for Costa Rica (0.500) and the lowest in Czechia (0.198). Two other measures of income inequality, the P90/P10 and the P50/P10 ratios, paint a similar picture across countries as the coefficient of linear correlation between the Gini and both percentile ratios are very high at 0.95 and 0.87, respectively. Income inequality tends to be lower among the elderly than in the total population. For the Gini this holds for just under two-thirds of OECD countries and by 0.009 on average.

According to the latest available figures, the Gini of disposable income for people aged over 65 was very high in Costa Rica (0.500), Mexico (0.451), Chile (0.441), the United States (0.409) and Türkiye (0.402). By contrast, Czechia (0.198), the Slovak Republic (0.208), Belgium (0.213), Slovenia (0.245), the Netherlands (0.248) and Norway (0.249) have the lowest Gini values (Table 7.4). Such a range means that there are huge differences in the level of old-age income inequality across OECD countries.

The Gini indices of income inequality in 2020 (or latest available) at older ages display a similar pattern across countries as those at working ages. Among the OECD countries, the linear cross-country correlation between these two age groups is very high at 94%. In 23 OECD countries, income inequality (measured by the Gini index) among older people is lower than for the total population. The largest difference equalling 0.050 between the two Ginis is found in Czechia, followed by Lithuania and the Netherlands.

Important factors that limit income inequality in old-age relative to income inequality during the working age are first-tier pension benefits, other redistributive features of earnings-related pension schemes and ceilings on pensionable earnings (Chapter 3). Yet, older people are more unequal than the total population in 14 countries, most notably Korea, Mexico and the United States.

P90/P10 and P50/P10 ratios

The coefficient of correlation between the Gini and both the 90/10 and the 50/10 percentile ratios are very high (0.95 and 0.87, respectively), indicating a very similar country ranking of income inequality as for the Gini. Also, the age pattern follows mostly the one observed for the Gini.

On average in the OECD, a person at the 90th percentile of the disposable income distribution among the over-65-year-olds has an income equal to 4.0 times the one at the tenth percentile. At the fiftieth percentile, the income is 1.9 times the P10 level. Among OECD countries, the highest P90/P10 ratios for older people are again in Costa Rica (10.1), Mexico (8.1), the United States (6.7) and Chile (6.6). For the P50/P10 ratio Costa Rica and Mexico rank highest, followed by the United States.

Belgium (2.4), Czechia (2.3), Denmark (2.3) and the Netherlands (2.4) are the only countries reporting a P90/P10 ratio below 2.5. Denmark and the Netherlands (both 1.4) report the lowest P50/P10 ratios with Australia, Belgium, Czechia, Estonia, Finland, Iceland, New Zealand and the Slovak Republic at 1.5.

Change of inequality over time

Income inequality among people older than 65 has barely changed on average since 2000 based on the Gini index. The same is true for income inequality for the total population (Figure 7.4). However, there are substantial country differences. Inequality among older people decreased markedly since 2000 in Greece, Israel, Mexico and the Slovak Republic (by around 0.05 or more in the Gini index). At the other end of the country range, New Zealand and (albeit from a very low level) Sweden report large increases in inequality since 2000 (0.06 and 0.10 respectively).

Definition and measurement

Gini and percentile ratios are core measures of inequality, here based on the distribution of equivalised household disposable income. The Gini index is defined between 0 (complete equality between all) and 1 (complete inequality, i.e. one person receives all income). Percentile ratios indicate the ratio of incomes of two persons who are at different positions in the disposable income distribution. The P90/P10 ratio compares the income at the 90th percentile to the one at the tenth percentile while the P50/P10 uses accordingly the 50th percentile in the numerator. See OECD Income Distribution Database for more details on definitions and data sources.

Further reading

OECD (2023), *Income Distribution Database*, <http://www.oecd.org/social/income-distribution-database.htm>.

OECD (2017), *Preventing Ageing Unequally*, OECD Publishing, Paris, <https://doi.org/10.1787/9789264279087-en>.

Table 7.4. Income inequality by age: older vs. total population, 2020 or latest available year

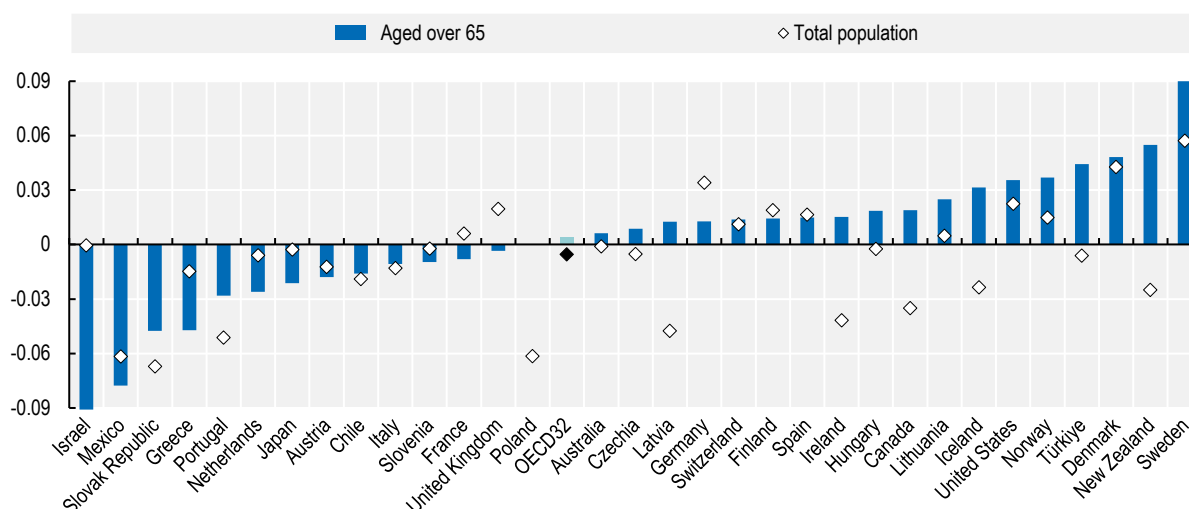
Gini coefficient, P90/P10 and P50/P10 ratios of the distribution of equivalised disposable household income

	Gini		P90/P10 ratio		P50/P10 ratio			Gini		P90/P10 ratio		P50/P10 ratio	
	Aged over 65	Total population	Aged over 65	Total population	Aged over 65	Total population		Aged over 65	Total population	Aged over 65	Total population	Aged over 65	Total population
Australia	0.319	0.318	3.4	4.3	1.5	2.2	Korea	0.376	0.331	5.3	4.8	2.2	2.4
Austria	0.268	0.272	3.4	3.5	1.9	2.0	Latvia	0.344	0.343	4.3	5.2	1.8	2.5
Belgium	0.213	0.248	2.4	3.0	1.5	1.8	Lithuania	0.307	0.357	3.6	5.0	1.7	2.3
Canada	0.278	0.280	3.3	3.5	1.8	1.9	Luxembourg	0.268	0.290	3.6	3.8	1.9	2.0
Chile	0.441	0.460	6.6	7.2	2.5	2.5	Mexico	0.451	0.420	8.1	6.6	2.8	2.6
Colombia							Netherlands	0.248	0.297	2.4	3.4	1.4	1.9
Costa Rica	0.500	0.487	10.1	10.1	2.8	3.0	New Zealand	0.313	0.320	3.4	4.2	1.5	2.1
Czechia	0.198	0.255	2.3	3.0	1.5	1.7	Norway	0.249	0.285	2.6	3.1	1.6	1.9
Denmark	0.254	0.268	2.3	3.0	1.4	1.8	Poland	0.255	0.265	3.2	3.3	1.8	1.9
Estonia	0.284	0.305	3.2	4.4	1.5	2.3	Portugal	0.344	0.327	4.4	4.5	1.9	2.2
Finland	0.254	0.273	2.6	3.2	1.5	1.8	Slovak Republic	0.208	0.222	2.5	2.9	1.5	1.8
France	0.275	0.292	3.0	3.5	1.7	1.9	Slovenia	0.245	0.238	2.9	3.0	1.7	1.8
Germany	0.270	0.296	3.3	3.7	1.8	2.1	Spain	0.310	0.329	4.1	5.0	2.1	2.5
Greece	0.285	0.320	3.6	4.2	1.9	2.2	Sweden	0.298	0.286	3.1	3.4	1.6	2.0
Hungary	0.245	0.280	2.7	3.4	1.6	1.9	Switzerland	0.326	0.316	4.0	3.8	2.0	2.0
Iceland	0.275	0.250	2.6	2.8	1.5	1.7	Türkiye	0.402	0.415	5.8	5.6	2.4	2.3
Ireland	0.284	0.282	3.3	3.4	1.7	1.9	United Kingdom	0.319	0.355	3.9	4.3	2.0	2.1
Israel	0.346	0.340	5.2	5.1	2.4	2.5	United States	0.409	0.375	6.7	5.4	2.7	2.4
Italy	0.323	0.331	4.1	4.6	2.0	2.3							
Japan	0.339	0.334	4.8	5.2	2.4	2.6	OECD	0.306	0.315	4.0	4.3	1.9	2.1

Notes: Data are for 2020 except for some countries; see note of Table 7.1 for details.

Source: OECD Income Distribution Database, www.oecd.org/social/income-distribution-database.htm (June 2023 version).StatLink  <https://stat.link/dgt9vs>**Figure 7.4. Change in income inequality over time among the older and the total population**

Change in Gini of disposable income between 2000 and 2020 or latest available year



Note: Disposable income here refers to equivalised disposable household income. Data are for 2020 except for some countries; see note of Table 7.1 for details. Historical data for Belgium, Estonia, Korea and Luxembourg are not comparable due to breaks in series and are not shown here. Data for Colombia and Costa Rica are unavailable.

Source: OECD Income Distribution Database, www.oecd.org/social/income-distribution-database.htm (June 2023 version).StatLink  <https://stat.link/94wkfl>



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