Key Results

On average in the OECD, the Gini of disposable income equals 0.302 among people aged over 65. The highest value is observed for Mexico (0.500) and the lowest in the Czech Republic (0.185). 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 0.93 and 0.84, respectively. Income inequality tends to be lower among the elderly than in the total population. For the Gini this holds for more than two-thirds of OECD countries and by 0.015 points on average.

According to the latest available figures, the Gini of disposable income for people aged over 65 were very high in Mexico (0.500), Chile (0.441), Korea (0.419) and the United States (0.411). By contrast, the Czech Republic (0.185), the Slovak Republic (0.202), Belgium (0.222), Norway (0.225), Denmark and Finland (both 0.233) as well as the Netherlands (0.235) have the lowest Ginis. Such a range means that there are huge differences in the level of old-age income inequality across OECD countries.

In 25 OECD countries, income inequality for the total population (measured by the Gini index) is higher than among older people. The largest difference equalling 0.068 for the Ginis is found in the Czech Republic, followed by Greece, the Netherlands and Belgium. Important factors that explain a lower level of inequality in old-age are first-tier pension benefits, other redistributive features of earnings-related pension schemes and ceilings on pensionable earnings (Chapter 4). Yet, older people are more unequal than the total population in 11 countries, most notably Korea and Mexico.

Except for the Russian Federation, income Ginis for people over 65 in G20-countries lie far above the OECD average. The age pattern is similar to the OECD average except for China and India where Ginis for the over-65s markedly exceed those for the total population.

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 (0.93 and 0.84, 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 3.8 times the one at the 10th percentile. At the 50th percentile, the income is 1.8 times the P10 level. Among OECD countries, highest P90/P10 ratios for older people are again in Mexico (9.5), Korea (7.0) and Chile (6.6). For the P50/P10 ratio, the United States replaces Chile among the three OECD countries with the highest inequality. Percentile ratios are extremely high in China where P90/10 and P50/P10 ratios are equal to 29.0 and 8.9, respectively.

The Czech Republic (2.2), Denmark (2.3), the Netherlands and the Slovak Republic are the only countries reporting a P90/P10 ratio below 2.5. Along with Australia,

those countries also report the lowest P50/P10 ratios of 1.3 or 1.4.

Change of inequality over time

Income inequality at ages over 65 has, on average, barely changed over recent decades. For the 19 countries with available data, the average Gini index has been stable between the mid-1990s and 2016 or the latest available data. This was also the case since the mid-2000s for the OECD-33. There was an increase of income inequality for the total population among OECD-19 countries since the mid-1990s, with an average Gini increase of 0.011.

While the average movements in inequality at older ages were moderate in the OECD, there are substantial country differences. Inequality among older people decreased markedly since the mid-1990s in Greece, Israel and Turkey (by more than 0.05). Such a large decline is also recorded in the Slovak Republic but over the shorter period since the mid-2000s. At the other end of the country range, New Zealand and Sweden report large increases in inequality since the mid-90s, as well as Australia, Denmark and the Unites States to a lesser extent and Lithuania over the shorter time span.

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 10th 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 (2019), *Income Distribution Database*, http://www.oecd.org/social/income-distribution-database.htm (accessed on 15 September 2019).

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

Table 7.4. **Income inequality by age: older vs. total population, 2016 or latest available year**

Gini coefficient, P90/P10 and P50/P10 ratios of the distribution of equivalised disposable household income
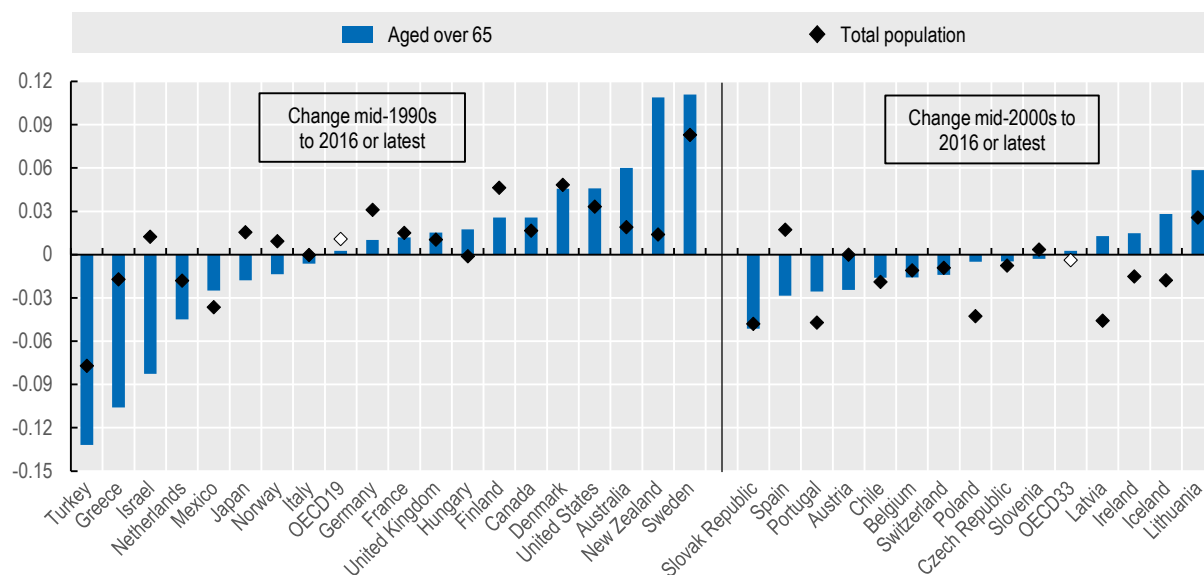
	Gini		P90/P10 ratio		P50/P10 ratio			Gini		P90/P10 ratio		P50/P10 ratio	
	Aged over 65	Total population	Aged over 65	Total population	Aged over 65	Total population		Aged over 65	Total population	Aged over 65	Total population	Aged over 65	Total population
Australia	0.325	0.330	3.1	4.3	1.4	2.1	Mexico	0.500	0.458	9.5	6.7	3.2	2.5
Austria	0.262	0.284	3.3	3.5	1.8	2.0	Netherlands	0.235	0.285	2.4	3.4	1.4	1.9
Belgium	0.222	0.266	2.6	3.3	1.5	2.0	New Zealand	0.354	0.349	3.8	4.3	1.6	2.1
Canada	0.291	0.310	3.5	4.1	1.8	2.1	Norway	0.225	0.262	2.6	3.1	1.6	1.9
Chile	0.441	0.460	6.6	7.2	2.5	2.5	Poland	0.250	0.284	3.1	3.7	1.8	2.0
Czech Republic	0.185	0.253	2.2	3.0	1.4	1.7	Portugal	0.346	0.331	4.3	4.5	1.8	2.2
Denmark	0.233	0.261	2.3	2.9	1.3	1.8	Slovak Republic	0.202	0.241	2.4	3.1	1.4	1.9
Estonia	0.283	0.314	3.2	4.7	1.5	2.3	Slovenia	0.252	0.244	3.2	3.1	1.8	1.9
Finland	0.233	0.266	2.7	3.1	1.6	1.8	Spain	0.300	0.341	3.7	5.3	1.9	2.6
France	0.273	0.291	3.0	3.4	1.7	1.9	Sweden	0.296	0.282	3.1	3.3	1.6	2.0
Germany	0.260	0.294	3.2	3.8	1.8	2.0	Switzerland	0.298	0.296	3.9	3.6	2.0	1.9
Greece	0.279	0.333	3.3	4.7	1.8	2.4	Turkey	0.376	0.404	5.0	5.7	2.1	2.3
Hungary	0.254	0.282	2.8	3.3	1.6	1.9	United Kingdom	0.336	0.357	3.9	4.3	1.9	2.1
Iceland	0.271	0.255	2.8	3.0	1.5	1.7	United States	0.411	0.390	6.9	6.2	2.7	2.7
Ireland	0.284	0.309	3.2	3.8	1.5	1.9	**OECD**	**0.302**	**0.317**	**3.8**	**4.3**	**1.8**	**2.2**
Israel	0.357	0.344	5.6	5.4	2.5	2.7							
Italy	0.307	0.328	3.8	4.5	1.9	2.3	Other G20 countries						
Japan	0.351	0.339	5.0	5.2	2.4	2.5	Brazil	0.440	0.470	5.5	8.7	1.9	3.0
Korea	0.419	0.355	7.0	5.8	2.7	2.8	China	0.545	0.514	29.0	23.0	8.9	7.8
Latvia	0.342	0.346	4.1	5.3	1.7	2.5	India	0.536	0.495	13.2	9.4	3.7	2.9
Lithuania	0.340	0.378	4.0	5.8	1.8	2.6	Russian Federation	0.292	0.331	3.6	4.6	1.8	2.2
Luxembourg	0.285	0.304	3.7	4.0	1.9	2.1	South Africa	0.600	0.620	12.5	25.6	2.4	4.8

Notes: Data are for 2016 except for some countries; see note of Table 7.1 for details.
Source: OECD Income Distribution Database, *http://www.oecd.org/social/income-distribution-database.htm* (September 2019 version).

StatLink https://doi.org/10.1787/888934042219

Figure 7.4. **Change in income inequality over time: older vs. total population**

Change in Gini of disposable income between mid-1990s or mid-2000s and 2016 or latest available year

Note: Disposable income here refers to equivalised disposable household income. Except for some countries, most recent data are for 2016 while mid-1990s data are for 1995 and adjusted for a break in series. Where mid-1990s data are unavailable mid-2000s data are shown, which are for 2005 except for some countries. See note of Table 7.1 for details. Historical data for Estonia, Korea and Luxembourg are not comparable due to breaks in series and are not shown here.
Source: *OECD Income Distribution Database, http://www.oecd.org/social/income-distribution-database.htm* (September 2019 version).

StatLink https://doi.org/10.1787/888934042238