

### Key results

For average earners, the net replacement rate across the OECD averages 66%, which is 11 percentage points higher than the gross replacement rate. This reflects the higher taxes and contributions that people paid on their earnings when working than they pay on their pensions in retirement. Net replacement rates again vary across a large range, from under a third in Mexico to over 100% in the Netherlands for average earners.

For low earners (with half of mean earnings), the average net replacement rate across OECD countries is 82%. For high earners (150% of mean earnings) the average net replacement rate is 60%, lower than for low earners. As with gross replacement rates, the differences with earnings reflect progressive features of pension systems, such as minimum benefits and ceilings on pensionable earnings.

The previous indicator of the “Tax treatment of pensions and pensioners” showed the important role that the personal tax and social security contribution systems play in old-age income support. Pensioners often do not pay social security contributions and receive preferential treatment under the income tax. Progressivity of income taxes coupled with gross replacement rates of less than 100% also mean that pensioners pay less in income tax than workers. As a result, net replacement rates are usually higher than gross replacement rates.

For average earners, the pattern of replacement rates across countries is different on a net rather than a gross basis. For example, the Belgian and German pension systems have considerably higher net replacement rates than gross. This is due, first, to favourable treatment of pension income under social security contributions. Second, because replacement rates are relatively low compared with OECD countries and personal income taxes are strongly progressive in these countries, people pay much less in income tax when retired than they did when working. This is despite the fact that the very generous tax treatment of pension income in Germany is gradually being withdrawn. In the case of Slovenia the difference between gross and net is a consequence of the pension formula; pension benefits are calculated in net terms directly. In contrast Sweden move lower down the figure on a net basis. This is because Sweden taxes pension income and earnings at different rates due to the Earned Income Tax Credit. Tax concessions for pensioners have also been re-introduced since 2009.

For low earners, the effect of taxes and contributions on net replacement rates is more muted than for workers higher up the earnings scale. This is because low income workers typically pay less in taxes and contributions relative to average earners. In many cases, their retirement incomes are below the level of

the standard reliefs in the personal income tax (allowances, credits, etc.). Thus, they are often unable to benefit fully from additional concessions granted to pensions or pensioners under the personal income tax.

The difference between gross and net replacement rates for low earners is 11 percentage points on average. Belgium, Germany, Norway, Slovenia and Turkey have much higher replacement rates for low earners measure on a net basis than in gross terms.

The net replacement rate for workers earning 150% of the average is highest in Turkey, the Netherlands and Hungary. The lowest replacement rates are in the United Kingdom, New Zealand and Mexico. In all countries, workers earning 150% of the average will receive pensions that amount to less than a third of their net earnings when working.

For non-OECD countries, there is very little variation in net replacement rates within countries across the earnings range. However, there is considerable difference between countries, ranging from 11% for average earners in South Africa to 110% in Saudi Arabia. As with the gross rates, the EU27 average net replacement rate for average earners is 71%, markedly higher than the OECD34 figure.

### Definition and measurement


The net replacement rate is defined as the individual net pension entitlement divided by net pre-retirement earnings, taking account of personal income taxes and social security contributions paid by workers and pensioners. Otherwise, the definition and measurement of the net replacement rates are the same as for the gross replacement rate (see the previous indicator).

Details of the rules that national tax systems apply to pensioners can be found in the on-line country profiles at [www.oecd.org/pensions/pensionsataglance.htm](http://www.oecd.org/pensions/pensionsataglance.htm).

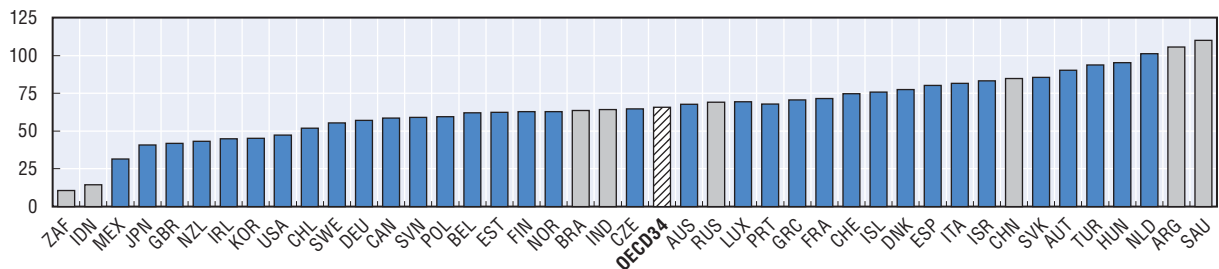
## 4.7. Net pension replacement rates by earnings

Individual earnings, multiple of mean for men (women where different)				
	Median earner	0.5	1.0	1.5
<b>OECD members</b>				
Australia	75.6 (70.0)	100.5 (95.6)	67.7 (61.9)	54.3 (48.2)
Austria	89.9	91.2	90.2	86.2
Belgium	63.9	80.7	62.1	44.6
Canada	64.4	90.7	58.6	40.8
Chile	54.1 (44.1)	62.5 (53.2)	51.8 (41.6)	47.7 (37.2)
Czech Republic	73.4	99.1	64.7	51.6
Denmark	82.4	117.5	77.4	67.4
Estonia	67.1	79.7	62.4	55.5
Finland	62.4	71.3	62.8	63.2
France	72.3	75.9	71.4	60.9
Germany	57.8	55.2	57.1	56.1
Greece	79.6	92.5	70.5	65.0
Hungary	94.4	94.4	95.2	96.1
Iceland	77.8	93.3	75.7	73.3
Ireland	52.2	75.5	44.8	34.6
Israel	95.5 (85.9)	108.5 (98.8)	83.2 (74.7)	59.1 (53.0)
Italy	82.0	83.9	81.5	83.3
Japan	42.5	54.3	40.8	35.7
Korea	49.1	64.8	45.2	34.2
Luxembourg	70.5	87.1	69.4	66.8
Mexico	45.3	56.2	31.5 (30.7)	31.3 (28.9)
Netherlands	103.8	104.8	101.1	97.2
New Zealand	51.7	81.7	43.2	30.6
<b>OECD members (cont.)</b>				
Norway	63.8	91.1	62.8	51.3
Poland	59.8	61.3	59.5	59.1
Portugal	65.6	77.7	67.8	68.4
Slovak Republic	86.1	88.1	85.4	84.7
Slovenia	59.0	80.8	59.0	57.0
Spain	79.8	79.5	80.1	79.8
Sweden	55.3	68.8	55.3	72.9
Switzerland	77.8 (76.6)	78.4 (77.7)	74.7 (73.5)	49.1 (48.3)
Turkey	94.9	103.9	93.6	97.2
United Kingdom	48.0	67.2	41.8	30.5
United States	49.9	58.7	47.3	42.9
<b>OECD34</b>	<b>69.1 (68.3)</b>	<b>81.7 (80.9)</b>	<b>65.8 (65.0)</b>	<b>59.7 (53.8)</b>
<b>Other major economies</b>				
Argentina	112.4 (103.9)	134.6 (126.1)	105.6 (97.1)	98.4 (90.1)
Brazil	63.1 (57.4)	60.2 (54.7)	63.5 (57.7)	70.3 (64.0)
China	89.7 (70.8)	106.4 (85.3)	84.7 (66.3)	78.2 (60.9)
India	68.7 (64)	85.9 (80.9)	64.1 (59.2)	58.2 (53.5)
Indonesia	14.4 (13.2)	14.4 (13.2)	14.4 (13.2)	14.5 (13.4)
Russian Federation	72.4 (64.9)	83.2 (75.6)	69.1 (61.6)	64.5 (56.9)
Saudi Arabia	109.9 (96.2)	109.9 (96.2)	109.9 (96.2)	109.9 (96.2)
South Africa	12.9	19.7	10.7	7.5
EU27	72.7 (72.3)	81.6 (81.2)	70.6 (70.3)	65.6 (65.3)


Source: OECD pension models.

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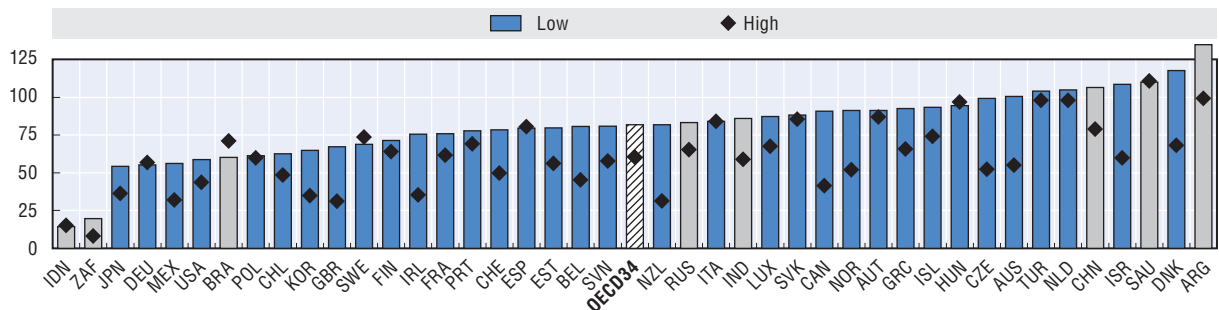
## 4.8. Net pension replacement rates: Average earners




Source: OECD pension models.

StatLink  <http://dx.doi.org/10.1787/888932907357>

## 4.9. Net pension replacement rates: Low and high earners



Source: OECD pension models.

StatLink  <http://dx.doi.org/10.1787/888932907376>



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