

Key results

The OECD average for net replacement rates of an average earner from mandatory (public and private) schemes is 62%. Among the nine OECD countries where voluntary private pensions are widespread, and Israel and Mexico, when voluntary private pensions are taken into account for a full career of contributions, the average net replacement rate is 70% compared with 47% when only mandatory schemes are taken into account.

For the 17 OECD countries where the calculations cover only public pensions, the net replacement rate for a full-career average earner is 73% on average. For the 10 OECD countries with public and mandatory private provision, but no voluntary schemes the average net replacement rate is 61%. In the 11 countries where voluntary pensions are modelled the average net replacement rate is 47% from mandatory schemes and reaches 70% for a worker choosing to contribute for the whole career.

For the other major economies, although there is a wide variation between country and across earnings level, there is a smaller difference between gross and net replacement rates as pensions are not normally liable for any taxation.

Mandatory private pensions

Twelve countries have mandatory private pensions, including a subset of four countries – Denmark, the Netherlands, Sweden and the United Kingdom – having private pensions that ensure near-universal coverage and so are described as “quasi-mandatory”.

In the Netherlands and Switzerland, private pensions are defined benefit while in the other countries they are defined contribution.

Voluntary private pensions

Replacement rates are shown for 11 countries where voluntary private pensions have broad coverage. For the other economies South Africa also has a significant voluntary

scheme. It is assumed that workers with voluntary private pensions spend a full career in the scheme.

The rules that have been modelled are in the “Country Profiles” available at <http://oe.cd/pag>. In ten of the 11 countries, a defined contribution plan is modelled, with a defined benefit schemes applying in Japan.

In general, both the defined contribution and defined benefit schemes pay a constant gross replacement rate with earnings. (Data on actual contribution rates by earnings are not available for most countries, and so an average or typical rate is assumed across the earnings range). However, progressive tax rules mean that the net replacement rate differs across the earnings range. Whilst the increase in gross replacement rate is generally constant across earnings the net replacement rate tends to increase more with earnings as the previous work earnings are taxed at much higher rates as individuals move up the earnings distribution.

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. Details of the rules that national tax systems apply to pensioners can be found in the online Country Profiles available at <http://oe.cd/pag>.

Table 4.5. Gross and net pension replacement rates from mandatory (public and private) and voluntary pension schemes
Percentage of individual earnings

	Gross mandatory public and private			Net mandatory public and private			Total gross with voluntary			Total net with voluntary		
	0.5	1	2	0.5	1	2	0.5	1	2	0.5	1	2
Australia	62.7	31.3	31.3	70.3	40.5	39.1						
Austria	74.1	74.1	57.3	84.4	87.1	67.6						
Belgium	67.5	43.4	29.2	83.0	61.9	43.9	70.9	52.2	51.9	86.8	74.2	81.3
Canada	53.2	38.8	22.3	62.0	46.4	28.4	70.9	63.3	46.8	76.4	72.0	55.3
Chile	41.9	31.2	31.3	51.6	38.5	36.6						
Colombia*	100.0	74.8	74.8	104.3	73.1	71.5						
Costa Rica	73.1	71.9	68.0	77.3	76.0	73.2						
Czech Republic	81.2	49.0	32.9	100.0	65.2	45.7						
Denmark	125.1	80.0	61.3	124.7	84.0	71.4						
Estonia	47.6	27.9	18.1	52.0	33.7	23.5	70.6	52.4	43.4	77.1	59.3	49.6
Finland	56.6	56.6	56.6	63.8	63.2	64.3						
France	60.2	60.2	51.9	71.3	74.4	64.5						
Germany	46.5	41.5	33.0	57.9	52.9	41.9	60.2	55.7	47.2	75.0	70.2	58.3
Greece	84.7	72.6	66.5	94.1	83.6	77.5						
Hungary	62.5	62.5	62.5	94.0	94.0	94.0						
Iceland	72.9	51.8	51.8	81.3	59.7	59.9						
Ireland	59.4	29.7	14.9	67.5	39.9	24.0	89.9	60.2	45.3	100.3	73.0	61.5
Israel	61.7	41.5	20.7	67.0	51.2	29.6	81.6	56.5	28.2	88.9	68.3	39.5
Italy	74.6	74.6	74.6	78.4	81.7	84.6						
Japan	43.2	32.4	26.9	49.5	38.7	31.6	66.3	55.4	50.0	75.9	60.8	55.3
Korea	43.1	31.2	18.6	45.8	35.4	22.5						
Latvia	43.4	43.4	43.4	55.4	55.3	52.9						
Lithuania	31.5	19.7	13.8	44.0	30.7	22.8	52.0	35.3	26.9	72.8	55.0	44.5
Luxembourg	90.4	76.6	69.7	98.9	88.7	80.2						
Mexico	80.9	61.2	53.6	82.0	68.6	64.3	91.1	78.5	70.9	92.2	88.0	85.0
Netherlands	73.1	69.7	68.0	84.7	85.3	81.0						
New Zealand*	65.9	39.8	19.9	68.0	43.3	23.7	87.7	60.6	39.9	92.9	67.5	47.8
Norway	60.6	46.0	28.9	76.3	55.7	36.2						
Poland	31.8	30.6	30.0	39.1	36.5	36.8						
Portugal	76.3	74.9	72.5	88.5	90.3	89.7						
Slovak Republic*	62.6	53.1	46.7	76.2	69.4	64.3						
Slovenia*	62.3	42.0	41.4	87.3	63.3	59.2						
Spain	73.9	73.9	67.0	80.1	80.3	74.7						
Sweden	61.4	53.3	67.2	65.1	56.2	75.3						
Switzerland	53.1	44.1	23.0	62.2	54.8	29.3						
Turkey	73.3	73.3	73.3	94.8	103.3	110.8						
United Kingdom	70.6	49.0	38.2	79.2	58.1	47.7						
United States	49.6	39.2	27.9	61.0	50.5	39.0	91.8	81.3	70.0	111.7	95.8	83.2
OECD	64.5	51.8	44.4	74.4	62.4	54.9	70.1	57.6	50.4	80.8	69.1	62.2
Argentina	99.0	76.1	64.6	114.1	88.9	86.5						
Brazil	88.4	88.4	84.8	95.7	97.3	102.3						
China	90.6	71.6	62.1	114.9	92.4	81.0						
India	56.4	56.4	37.7	64.0	64.0	43.0						
Indonesia	55.3	55.3	55.3	60.6	60.6	60.6						
Russian Federation	56.9	47.2	42.3	65.4	54.2	48.6						
Saudi Arabia	59.6	59.6	59.6	66.2	66.2	66.2						
South Africa	29.8	14.9	7.4	29.8	16.2	8.8	32.8	32.8	32.8	35.4	38.8	42.6
EU27	63.6	53.4	48.1	75.7	66.7	60.8				78.7	69.9	65.0

Note: *Low earners in Colombia, New Zealand, the Slovak Republic and Slovenia are at 66%, 60%, 53% and 55% of average earnings, respectively, to account for the minimum wage level. The OECD average refers to the average of all 38 OECD countries.

Source: OECD pension models.

StatLink  <https://stat.link/scxdj3>



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