

**Key results**

Private pensions play a significant role in over one-third of OECD countries. For mandatory schemes, the OECD average for gross replacement rates of an average earner from public schemes alone is 42%, compared with 52% with private pensions included. For the nine OECD countries where voluntary private pensions are widespread the average replacement rate is 56% for an average earner choosing to contribute for the whole career, while it is 58% – which is also the total OECD average – when Israel and Mexico are also included compared with 38% when only mandatory schemes are considered. If the full-career average-wage earner only starts contributing in a voluntary scheme from age 45, the replacement rate is 43% on average among these nine countries.

Table 4.2 shows the interplay between mandatory public, mandatory private and voluntary pension schemes. As shown in the previous indicator, the average replacement rate from mandatory schemes for a full-career average earner is equal to 52%: for the 17 OECD countries where the calculations of entitlements only cover mandatory public pensions, the average replacement rate for an average worker earner is 60%; for the 10 OECD countries with both public and mandatory private provision but no voluntary, the average replacement rate is 53%; and for the last 11 countries with significant voluntary pensions, the replacement rate from the mandatory component alone is 38%.

**Mandatory private pensions**

Mandatory private pensions exist in 12 countries including Denmark, the Netherlands, Sweden and the United Kingdom where private pensions have near-universal coverage, and are described as “quasi-mandatory”.

In the Netherlands and Switzerland, private pensions are mainly defined benefit, whilst in the other countries they are defined contribution. Replacement rates from mandatory private schemes range from 7% in Norway and 12% in Costa Rica and Sweden to 51% in Denmark and 52% in Iceland. In Sweden the contribution rate for the private pension increases from 4.5% below to 30% above the ceiling for the public scheme, hence the total replacement rate is higher for high earners than average earners.

**Voluntary private pensions**

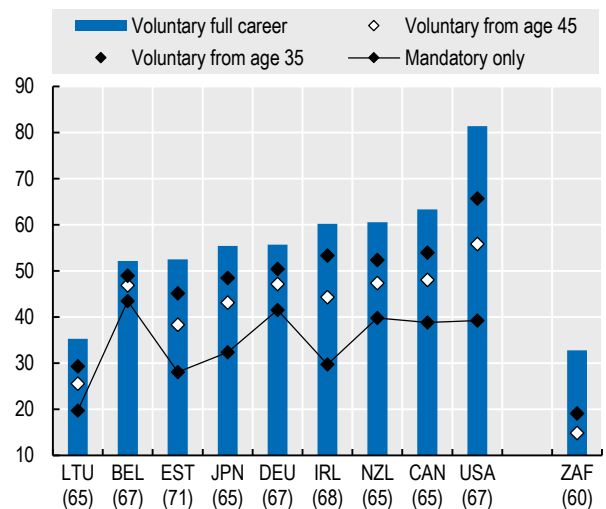
Voluntary private pensions are shown for nine countries where voluntary private pensions have broad coverage (either assets are above 25% of GDP or coverage is above 75%). Voluntary private pensions include both voluntary occupational and voluntary personal plans. In Estonia the FDC scheme was previously mandatory, but since January 2021 it has become voluntary, with the possibility of re-joining 10 years after opting out. In addition withdrawals of funds have also been permitted, with one-quarter of funds having been withdrawn thus far (Chapter 1). In Japan, a defined benefit plan is modelled, with the others having defined contribution schemes. In addition, the housing account in Mexico and the severance account in Israel have been added as if they are not utilised during the working career, they are then transferred to the pension accounts at retirement.

When voluntary private pensions are taken into account for the whole career in Belgium, Canada, Estonia, Germany, Ireland,

Israel, Japan, Lithuania, Mexico, New Zealand and the United States the average replacement, for these 11 countries, is 58% for an average earner compared with 38% when only mandatory schemes are considered. The voluntary component has the largest impact on the replacement rate, more than 30 and 40 percentage points, in Ireland and the United States, respectively.

The length of the contribution period clearly has an impact on the total replacement rate. The chart below compares the full-career full-contribution case with the full-career case but with contributions in the voluntary scheme from age 35 and 45 only, perhaps a more appropriate scenario. The schemes in Israel and Mexico are not considered as contributions are mandatory at all ages to severance and housing accounts respectively.

**Gross replacement rate including voluntary contributions from different ages, percentage**



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

Among these nine countries, only contributing from age 35 (45) reduces the gross replacement rate by 7 (13) percentage points on average compared with the full-contribution case. Contributing to the voluntary scheme from age 35 generates the highest replacement rates in the United States, at 66%, above the OECD average for a full career worker.

Table 4.2. Gross pension replacement rates from mandatory public, mandatory private and voluntary private pension schemes  
Percentage of individual earnings

	Mandatory Public			Mandatory private (DB & DC)			Total mandatory			Voluntary (DB & DC)			Total with voluntary		
	0.5	1	2	0.5	1	2	0.5	1	2	0.5	1	2	0.5	1	2
Australia	31.4	0.0	0.0	31.3	31.3	31.3	62.7	31.3	31.3						
Austria	74.1	74.1	57.3				74.1	74.1	57.3						
Belgium	67.5	43.4	29.2				67.5	43.4	29.2	3.4	8.7	22.7	70.9	52.2	51.9
Canada	53.2	38.8	22.3				53.2	38.8	22.3	24.5	24.5	24.5	70.9	63.3	46.8
Chile	10.8	0.0	0.0	31.1	31.2	31.3	41.9	31.2	31.3						
Colombia*	100.0	74.8	74.8				100.0	74.8	74.8						
Costa Rica	61.3	60.1	56.2	11.8	11.8	11.8	73.1	71.9	68.0						
Czech Republic	81.2	49.0	32.9				81.2	49.0	32.9						
Denmark	74.6	29.5	10.7	50.5	50.5	50.5	125.1	80.0	61.3						
Estonia	47.6	27.9	18.1				47.6	27.9	18.1	27.6	27.6	27.6	70.6	52.4	43.4
Finland	56.6	56.6	56.6				56.6	56.6	56.6						
France	60.2	60.2	51.9				60.2	60.2	51.9						
Germany	46.5	41.5	33.0				46.5	41.5	33.0	14.1	14.1	14.1	60.2	55.7	47.2
Greece	84.7	72.6	66.5				84.7	72.6	66.5						
Hungary	62.5	62.5	62.5				62.5	62.5	62.5						
Iceland	21.1	0.0	0.0	51.8	51.8	51.8	72.9	51.8	51.8						
Ireland	59.4	29.7	14.9				59.4	29.7	14.9	30.5	30.5	30.5	89.9	60.2	45.3
Israel	20.4	10.2	5.1	41.3	31.3	15.6	61.7	41.5	20.7	19.8	15.0	7.5	81.6	56.5	28.2
Italy	74.6	74.6	74.6				74.6	74.6	74.6						
Japan	43.2	32.4	26.9				43.2	32.4	26.9	23.1	23.1	23.1	66.3	55.4	50.0
Korea	43.1	31.2	18.6				43.1	31.2	18.6						
Latvia	43.4	43.4	43.4				43.4	43.4	43.4						
Lithuania	31.5	19.7	13.8				31.5	19.7	13.8	20.6	15.6	13.1	52.0	35.3	26.9
Luxembourg	90.4	76.6	69.7				90.4	76.6	69.7						
Mexico	38.6	15.2	7.6	35.1	46.0	46.0	80.9	61.2	53.6	17.3	17.3	17.3	91.1	78.5	70.9
Netherlands	58.4	29.2	14.6	14.7	40.5	53.4	73.1	69.7	68.0						
New Zealand*	65.9	39.8	19.9				65.9	39.8	19.9	21.8	20.8	20.0	87.7	60.6	39.9
Norway	54.1	39.4	22.5	6.5	6.6	6.4	60.6	46.0	28.9						
Poland	31.8	30.6	30.0				31.8	30.6	30.0						
Portugal	76.3	74.9	72.5				76.3	74.9	72.5						
Slovak Republic*	62.6	53.1	46.7				62.6	53.1	46.7						
Slovenia*	62.3	42.0	41.4				62.3	42.0	41.4						
Spain	73.9	73.9	67.0				73.9	73.9	67.0						
Sweden	49.5	41.3	23.9	12.0	12.0	43.3	61.4	53.3	67.2						
Switzerland	33.3	22.1	12.0	19.8	22.1	11.0	53.1	44.1	23.0						
Turkey	73.3	73.3	73.3				73.3	73.3	73.3						
United Kingdom	43.3	21.6	10.8	27.4	27.4	27.4	70.6	49.0	38.2						
United States	49.6	39.2	27.9				49.6	39.2	27.9	42.1	42.1	42.1	91.8	81.3	70.0
<b>OECD</b>	<b>55.6</b>	<b>42.2</b>	<b>34.4</b>				<b>64.5</b>	<b>51.8</b>	<b>44.4</b>				<b>70.1</b>	<b>57.6</b>	<b>50.4</b>
Argentina	99.0	76.1	64.6				99.0	76.1	64.6						
Brazil	88.4	88.4	84.8				88.4	88.4	84.8						
China	90.6	71.6	62.1				90.6	71.6	62.1						
India	46.7	46.7	28.0	9.6	9.6	9.6	56.4	56.4	37.7						
Indonesia	33.1	33.1	33.1	22.2	22.2	22.2	55.3	55.3	55.3						
Russian Federation	56.9	47.2	42.3				56.9	47.2	42.3						
Saudi Arabia	59.6	59.6	59.6				59.6	59.6	59.6						
South Africa	29.8	14.9	7.4				29.8	14.9	7.4	32.8	32.8	32.8	32.8	32.8	32.8
EU27	58.6	47.4	40.6				63.6	53.4	48.1				65.4	55.3	50.6

Note: DB=defined benefit; DC = defined contribution. \*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. Contribution rates for voluntary pensions in Belgium vary by earnings level, see country profile for more details. The OECD average refers to the average of all 38 OECD countries.

Source: OECD pension models.



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