

### Key results

The OECD average for net replacement rates of an average earner from public schemes alone is 50%, compared with 68% with mandatory private pensions included. When voluntary private pensions, under typical rules, are added, the average net replacement rate is 77% for an average earner.

The personal tax system plays an important role in old-age support. Pensioners often do not pay social security contributions and, as personal income taxes are progressive and pension entitlements are usually lower than earnings before retirement, the average tax rate on pension income is typically less than the tax rate on earned income. In addition, most income tax systems give preferential treatment either to pension incomes or to pensioners, by giving additional allowances or credits to older people. Therefore, net replacement rates are usually higher than gross replacement rates.

For the 12 OECD countries where the calculations cover only public pensions, the replacement rate for an average earner is 76% on average. For the 14 OECD countries with data for public and mandatory private provision, the average replacement rate is 72%. For all 34 OECD countries, including public, mandatory private and voluntary private pensions, the average replacement rate is 75%. Overall net replacement rates are between 10% and 12% higher than the corresponding gross replacement rate figures.

For the other major economies there is a wide variation between country and across earnings level. The exception to the latter is the Russian Federation which has identical net replacement rates across all the earnings ranges.

### Mandatory private pensions

The first group of 14 countries has mandatory private pensions or private pensions that have near-universal coverage and so are described as “quasi-mandatory” (Denmark, the Netherlands and Sweden).

In Iceland, the Netherlands and Switzerland, private pensions are defined benefit while in other countries, they are defined contribution. Net replacement rates from mandatory private schemes for average earners range from 23% to 41% in six of the

14 countries. But they are significantly above this range in Chile, Denmark, Iceland, Israel and the Netherlands and much lower in Norway.

Between the combination of some countries having private pensions designed to cover earnings above the ceiling of the public scheme and the tax system in place no country has the same replacement rate across the earnings levels. This is the reason that replacement rates from private plans increase with earnings across the range in Chile, Iceland, Mexico, the Netherlands, Norway and the Slovak Republic. It also explains why replacement rates for workers on 150% of average earnings are much higher in Sweden.

The pattern in Switzerland is complex. Again, low earners have a lower replacement rate to take account of public benefits. But the ceiling on earnings that must be covered by the occupational plans is relatively low.

### Voluntary private pensions

Replacement rates are shown for nine countries where voluntary private pensions are widespread: covering between 40% and 65% of the workforce (see the indicator of “Coverage of private pensions”).

The rules that have been modelled are in the “Country profiles” in Part III. In all nine countries, a defined-contribution plan is modelled.

In general, the defined-contribution schemes pay a constant 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 the difference in taxation rules means that the net replacement rate differs across the earnings range, but generally increases as earnings increase. Belgium is the exception due to ceilings on pensionable earnings that qualify for tax incentives. Germany also falls into this category but the ceiling is just above the 150% earnings range.

II.2. NET PENSION REPLACEMENT RATES: PUBLIC AND PRIVATE SCHEMES

**Net pension replacement rates from public, mandatory private and voluntary private pension schemes**

Percentage of individual earnings

	Public			Mandatory private			Voluntary DC			Total mandatory			Total with voluntary		
	0.5	1	1.5	0.5	1	1.5	0.5	1	1.5	0.5	1	1.5	0.5	1	1.5
<b>OECD members</b>															
Australia	42.6	14.8	3.9	39.9	44.1	43.2				82.5	58.9	47.1			
Austria	91.3	89.9	84.6							91.3	89.9	84.6			
Belgium	74.9	52.1	42.5				19.4	19.3	15.9	74.9	52.1	42.5	94.3	71.4	58.4
Canada	70.9	50.4	35.0				35.7	39.9	41.5	70.9	50.4	35.0	106.6	90.3	76.5
Chile	23.2	4.6	0.0	51.1	59.7	62.7				74.4	64.3	62.7			
Czech Republic	93.5	62.2	47.0				13.1	13.9	14.2	93.5	62.2	47.0	106.7	76.1	61.1
Denmark	70.8	32.6	20.8	61.1	57.2	60.0				131.9	89.8	80.8			
Estonia	46.0	31.0	25.1	27.5	27.3	26.3				73.4	58.3	51.4			
Finland	72.0	65.2	64.4							72.0	65.2	64.4			
France	69.4	60.4	53.1							69.4	60.4	53.1			
Germany	54.8	56.0	55.6				22.1	22.6	22.4	54.8	56.0	55.6	76.9	78.6	78.0
Greece	113.6	111.2	106.8							113.6	111.2	106.8			
Hungary	56.4	62.1	60.5	39.9	43.9	42.8				96.3	106.0	103.2			
Iceland	60.5	15.7	5.3	78.6	85.4	86.3				139.0	101.1	91.7			
Ireland	60.8	31.3	22.5				39.5	40.7	43.8	60.8	31.3	22.5	100.3	72.0	66.4
Israel	40.0	21.9	15.8	63.0	56.4	40.9				103.0	78.2	56.7			
Italy	72.0	71.7	71.8							72.0	71.7	71.8			
Japan	52.7	39.7	34.9							52.7	39.7	34.9			
Korea	69.8	47.5	37.3							69.8	47.5	37.3			
Luxembourg	103.1	94.0	90.9							103.1	94.0	90.9			
Mexico	30.9	4.2	3.0	27.3	28.0	30.3				58.2	32.2	33.3			
Netherlands	65.6	33.1	21.7	38.8	66.7	74.7				104.5	99.8	96.4			
New Zealand	78.9	41.1	29.0				14.9	15.5	16.4	78.9	41.1	29.0	93.9	56.6	45.4
Norway	66.3	52.4	40.4	6.6	8.0	8.8	9.8	13.6	20.2	72.9	60.3	49.2	82.7	74.0	69.5
Poland	33.2	33.2	33.3	34.9	35.0	35.0				68.1	68.2	68.3			
Portugal	73.4	69.2	70.5							73.4	69.2	70.5			
Slovak Republic	30.8	33.6	34.6	37.4	40.9	42.1				68.3	74.5	76.7			
Slovenia	82.5	85.4	86.2							82.5	85.4	86.2			
Spain	82.3	84.9	85.4							82.3	84.9	85.4			
Sweden	44.8	31.0	24.1	22.3	22.6	48.5				67.0	53.6	72.6			
Switzerland	63.2	38.2	26.8	15.5	25.9	19.4				78.6	64.1	46.2			
Turkey	107.3	93.1	96.0							107.3	93.1	96.0			
United Kingdom	62.0	37.4	26.8				42.3	43.1	43.6	62.0	37.4	26.8	104.3	80.5	70.3
United States	61.0	47.3	44.1				45.8	46.6	48.4	61.0	47.3	44.1	106.8	93.9	92.5
<b>OECD34</b>	<b>65.3</b>	<b>50.0</b>	<b>44.1</b>							<b>81.3</b>	<b>67.6</b>	<b>62.4</b>	<b>96.9</b>	<b>77.0</b>	<b>68.7</b>
<b>Other major economies</b>															
Argentina	106.0	91.3	87.8							106.0	91.3	87.8			
Brazil	96.6	96.6	98.9							96.6	96.6	98.9			
China	106.4	86.8	80.1							106.4	86.8	80.1			
India	108.2	74.1	63.9							108.2	74.1	63.9	108.2	74.1	63.9
Indonesia	14.7	14.9	14.9							14.7	14.9	14.9			
Russian Federation	40.2	40.2	40.2	19.9	19.9	19.9				60.1	60.1	60.1	40.2	40.2	40.2
Saudi Arabia	107.2	107.6	108.0							107.2	107.6	108.0			
South Africa	15.7	0.0	0.0				34.3	37.1	39.0	15.7	0.0	0.0	50.0	37.1	39.0
EU27	67.2	58.1	53.2							81.1	73.2	69.6			

DC: Defined contribution.

Source: OECD pension models.

StatLink  <http://dx.doi.org/10.1787/888932372374>



**From:**  
**Pensions at a Glance 2011**  
Retirement-income Systems in OECD and G20 Countries

**Access the complete publication at:**  
[https://doi.org/10.1787/pension\\_glance-2011-en](https://doi.org/10.1787/pension_glance-2011-en)

**Please cite this chapter as:**

OECD (2011), "Net Pension Replacement Rates: Public and Private Schemes", in *Pensions at a Glance 2011: Retirement-income Systems in OECD and G20 Countries*, OECD Publishing, Paris.

DOI: [https://doi.org/10.1787/pension\\_glance-2011-19-en](https://doi.org/10.1787/pension_glance-2011-19-en)

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