

### Key results

Private pensions play a large and growing role in providing incomes for old age. This is illustrated with calculations of gross pension replacement rates which distinguish the contributions of public and private sectors. The OECD average for replacement rates of an average earner from public schemes alone is 41%, compared with 54% with mandatory private pensions included. When voluntary private pensions, under typical rules, are added, the average replacement rate is 68% for an average earner.

For the 13 OECD countries where the calculations of mandatory entitlements cover only public pensions, the replacement rate for an average earner is 58% on average. For the 13 OECD countries with public and mandatory private provision, the average replacement rate is 59%. For all 34 OECD countries, including public, mandatory private and voluntary private pensions, the average replacement rate is 61%.

This shows the interplay between different scheme types. Australia, Denmark, Iceland and Israel have highly targeted public programmes, so very low public replacement rates for middle and high earners are topped up with mandatory private pensions. In Chile, Mexico, Poland, the Slovak Republic and Sweden, part of public provision was replaced by reforms with mandatory private pensions. Canada, Ireland, the United Kingdom and the United States have long had relatively low public pensions and widespread voluntary provision.

Of the other major economies public pensions are mandatory in Argentina, Brazil, China, India, the Russian Federation and Saudi Arabia. South Africa has voluntary private schemes, with the public pension being withdrawn for average earners and above, because of its means-tested component. Indonesia's system is entirely mandatory private with no public component.

### **Mandatory private pensions**

The first group of 13 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. Replacement rates from mandatory private schemes for average earners range from 22% to 39% in eight of the 13 countries. But they are significantly above this range in Denmark, Iceland, Israel and the Netherlands and much lower in Norway.

In six countries, replacement rates are the same for workers earning between 50% and 150% of the average worker earnings. However, some countries have private pensions designed to cover earnings above the ceiling of the public scheme. This is the reason that replacement rates from private plans increase with earnings across the range in Chile, the Netherlands and Norway. 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”). It is assumed that workers with voluntary private pensions spend a full career in the scheme. Voluntary private pensions include both voluntary occupational and voluntary personal.

The rules modelled are in the “Country profiles” in Chapter 9. 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.) Belgium is the exception due to ceilings on pensionable earnings that qualify for tax incentives. Germany also falls into this category with a ceiling equal to 150% of average worker earnings. In Norway, as with the mandatory defined-contribution plan, replacement rates increase with earnings because the private schemes are designed to offset some of the redistribution in public retirement benefits.


#### 4.4. Gross 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	1.0	1.5	0.5	1.0	1.5	0.5	1.0	1.5	0.5	1.0	1.5	0.5	1.0	1.5
<b>OECD members</b>															
Australia	52.4	13.6	0.6	38.7	38.7	38.7				91.1	52.3	39.4			
Austria	76.6	76.6	74.0							76.6	76.6	74.0			
Belgium	58.2	41.0	30.2				15.1	15.1	11.2	58.2	41.0	30.2	73.3	56.2	41.4
Canada	63.1	39.2	26.1				33.9	33.9	33.9	63.1	39.2	26.1	97.0	73.1	60.1
Chile	20.4	4.8	0.0	36.9	37.2	37.3				57.3	41.9	37.3			
Czech Republic	71.8	43.5	34.1				39.2	39.2	39.2	71.8	43.5	34.1	111.0	82.8	73.4
Denmark	68.0	30.6	18.1	52.6	47.9	46.4				120.7	78.5	64.4			
Estonia	40.4	27.4	23.0	24.8	24.8	24.8				65.2	52.2	47.9			
Finland	64.1	54.8	54.8							64.1	54.8	54.8			
France	64.8	58.8	47.5							64.8	58.8	47.5			
Germany	42.0	42.0	42.0				16.0	16.0	16.0	42.0	42.0	42.0	58.0	58.0	58.0
Greece	75.4	53.9	46.7							75.4	53.9	46.7			
Hungary	73.6	73.6	73.6							73.6	73.6	73.6			
Iceland	25.9	6.5	4.3	65.8	65.8	65.8				91.7	72.3	70.1			
Ireland	73.4	36.7	24.5				43.0	43.0	43.0	73.4	36.7	24.5	116.4	79.7	67.5
Israel	44.5	22.2	14.8	59.3	51.1	34.1				103.7	73.4	48.9			
Italy	71.2	71.2	71.2							71.2	71.2	71.2			
Japan	49.8	35.6	30.8							49.8	35.6	30.8			
Korea	59.2	39.6	29.2							59.2	39.6	29.2			
Luxembourg	77.7	56.4	53.0							77.7	56.4	53.0			
Mexico	30.7	3.8	2.5	24.7	24.7	24.7				55.5	28.5	27.2			
Netherlands	59.1	29.5	19.7	35.3	61.1	69.7				94.4	90.7	89.4			
New Zealand	81.1	40.6	27.0				14.1	14.1	14.1	81.1	40.6	27.0	95.3	54.7	41.2
Norway	57.9	45.7	34.3	5.5	6.8	7.2	8.3	11.3	16.5	63.4	52.5	41.6	71.6	63.8	58.1
Poland	24.5	24.5	24.5	24.3	24.3	24.3				48.8	48.8	48.8			
Portugal	67.5	54.7	54.1							67.5	54.7	54.1			
Slovak Republic	45.9	37.6	35.1	28.3	28.3	28.3				74.2	65.9	63.4			
Slovenia	62.0	39.2	36.7							62.0	39.2	36.7			
Spain	73.9	73.9	73.9							73.9	73.9	73.9			
Sweden	48.6	33.9	25.7	21.7	21.7	42.2				70.2	55.6	67.9			
Switzerland	49.3	32.0	21.4	14.9	23.1	15.4				64.3	55.2	36.8			
Turkey	73.5	64.5	64.5							73.5	64.5	64.5			
United Kingdom	55.2	32.6	22.5				34.5	34.5	34.5	55.2	32.6	22.5	89.7	67.1	57.0
United States	49.5	38.3	33.4				37.8	37.8	37.8	49.5	38.3	33.4	87.4	76.2	71.2
<b>OECD34</b>	<b>57.4</b>	<b>40.6</b>	<b>34.5</b>							<b>70.1</b>	<b>54.0</b>	<b>48.0</b>	<b>88.9</b>	<b>67.9</b>	<b>58.6</b>
<b>Other major economies</b>															
Argentina	115.2	90.4	82.1							115.2	90.4	82.1			
Brazil	55.4	57.5	61.7							55.4	57.5	61.7			
China	97.9	77.9	71.2							97.9	77.9	71.2			
India	75.6	55.8	49.2							75.6	55.8	49.2			
Indonesia				14.1	14.1	14.1				14.1	14.1	14.1			
Russian Federation	30.6	30.6	30.6	17.3	17.3	17.3				47.9	47.9	47.9			
Saudi Arabia	100.0	100.0	100.0							100.0	100.0	100.0			
South Africa	0.0	0.0	0.0				54.5	54.5	54.5	0.0	0.0	0.0	54.5	54.5	54.5
EU27	59.2	47.0	41.3							69.0	57.6	53.0			

DC = Defined contribution.

Source: OECD pension models.

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