

Key results

Whilst the gross replacement rate gives a clear indication of the design of the pension system, the net replacement matters more to individuals, as it reflects their disposable income in retirement in comparison to when working. For average earners with a full career, the net replacement rate from mandatory pension schemes at the normal retirement age averages 59% across the OECD, which is ten percentage points higher than the average gross replacement rate. This reflects the higher effective tax and social contribution rates that people pay on their earnings than on their pensions in retirement, mostly due to the progressivity of tax systems, some tax advantages to pensions and lower social contributions on pension benefits. Net replacement rates vary across a large range, from around 30% in Lithuania, Mexico and the United Kingdom to 90% or more in Austria, Luxembourg, Portugal and Turkey for average-wage workers. For low earners (with half of average worker earnings), the average net replacement rate across OECD countries is 68% while it is 55% for high earners (150% of average worker 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 only pay health contributions and receive preferential treatment under the income tax. Tax expenditures and the progressivity of income taxes coupled with gross replacement rates of less than 100% also mean that pensioners have a lower income tax rate than workers. As a result, net replacement rates are generally higher than gross replacement rates.

For average earners, the net replacement rate across the OECD averages 59% for mandatory schemes, from a low of 28% in the United Kingdom to a high of 94% in Turkey and 90% in Austria, Luxembourg and Portugal. Moreover, the pattern of replacement rates across countries is different on a net rather than a gross basis.

On average, for average earners, the net replacement rate is ten percentage points higher than the gross replacement rate. The difference is over 30 percentage points in Hungary and Turkey and around 15-20 percentage points in Belgium, France, Portugal, the Slovak Republic and Slovenia. In Hungary, the Slovak Republic and Turkey, pension income is neither liable for taxes or social security contributions, whilst in Belgium and Portugal they are much lower because of either higher tax allowances or much lower contribution levels.

For low earners, the effect of taxes and contributions on net replacement rates is slightly 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 any additional concessions granted to pensions or pensioners under their personal income tax.

The difference between gross and net replacement rates for low earners is eight percentage points on average. The Czech Republic, Germany, Hungary, Slovenia and Turkey have much higher replacement rates for low earners on a net basis than in gross terms. The net replacement rate for workers earning 150% of the average is highest in Turkey. The lowest replacement rates for high earners are found in Ireland, Mexico, New Zealand, Switzerland and the United Kingdom where workers earning 150% of the average will receive pensions that amount to less than one-third of their net earnings when working. In addition to the higher contribution levels in the occupational system for higher earners in Sweden, the net replacement rates are furthermore affected by the fact that pension income and work income are taxed differently and at different rates.

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 19% for average earners in South Africa to 95% in India.

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>.

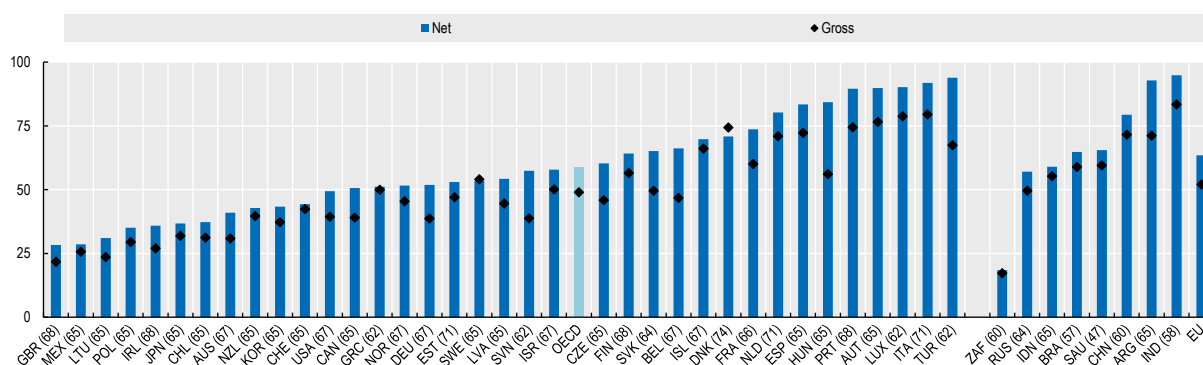
Table 5.5. Net pension replacement rates by earnings

Individual earnings, multiple of mean for men (women where different)																
Pension age		0.5		1		1.5		Pension age		0.5		1.0		1.5		
Australia	67	75.5	(72.2)	41.0	(37.3)	43.8	(39.8)	New Zealand	65	79.8		42.8		30.3		
Austria	65	89.7		89.9		89.6		Norway	67	57.0		51.6		43.0		
Belgium	67	70.7		66.2		48.3		Poland	65	(60) 35.9	(36.3)	35.1	(27.3)	34.7	(26.8)	
Canada	65	58.3		50.7		39.7		Portugal	68	88.0		89.6		89.0		
Chile	65	44.6	(42.6)	37.3	(34.4)	37.9	(34.9)	Slovak Republic	64	71.7		65.1		63.3		
Czech Republic	65	91.6		60.3		47.9		Slovenia	62	62.8	(65.8)	57.5	(60.0)	53.7	(53.5)	
Denmark	74	104.5		70.9		63.3		Spain	65	78.6		83.4		82.8		
Estonia	71	65.6		53.1		49.0		Sweden	65	60.7		53.4		68.9		
Finland	68	65.1		64.2		64.9		Switzerland	65	(64) 54.3	(52.8)	44.3	(43.0)	31.7	(30.8)	
France	66	71.4		73.6		69.0		Turkey	62	(60) 86.2	(82.3)	93.8	(89.6)	98.7	(94.2)	
Germany	67	56.1		51.9		51.4		United Kingdom	68	51.0		28.4		20.2		
Greece	62	57.6		51.1		50.3		United States	67	61.2		49.4		42.7		
Hungary	65	(62) 84.3	(78.4)	84.3	(78.4)	84.3	(78.4)	OECD	66.1	(65.7)	68.3	(67.6)	58.6	(57.6)	54.7	(53.7)
Iceland	67	80.5		69.8		69.8										
Ireland	68	60.5		35.9		26.7										
Israel	67	(62) 81.1	(69.2)	57.8	(49.0)	42.4	(35.9)	Argentina	65	(60) 102.8	(95.5)	92.8	(85.2)	88.8	(81.4)	
Italy	71	92.0		91.8		94.4		Brazil	57	(52) 100.1		64.8	(50.6)	64.8	(50.5)	
Japan	65	45.9		36.8		33.3		China	60	(55) 98.5	(84.0)	79.4	(67.7)	73.6	(63.2)	
Korea	65	60.8		43.4		32.6		India	58	94.8	(91.3)	94.8	(91.3)	94.8	(91.3)	
Latvia	65	55.2		54.3		52.2		Indonesia	65	58.2	(55.8)	59.0	(56.7)	58.6	(56.3)	
Lithuania	65	48.4		31.0		25.3		Russian Federation	64	(59) 71.7	(66.6)	57.0	(52.0)	51.6	(46.6)	
Luxembourg	62	99.0		90.1		85.9		Saudi Arabia	47	65.4		65.4		65.4		
Mexico	65	35.6		28.6	(26.7)	28.6	(26.7)	South Africa	60	34.5		18.5		12.9		
Netherlands	71	78.0		80.2		78.5		EU28	66.3	(65.9)	69.8	(69.7)	63.5	(63.0)	60.4	(59.9)

Source: OECD pension models.

StatLink  <https://doi.org/10.1787/888934041554>

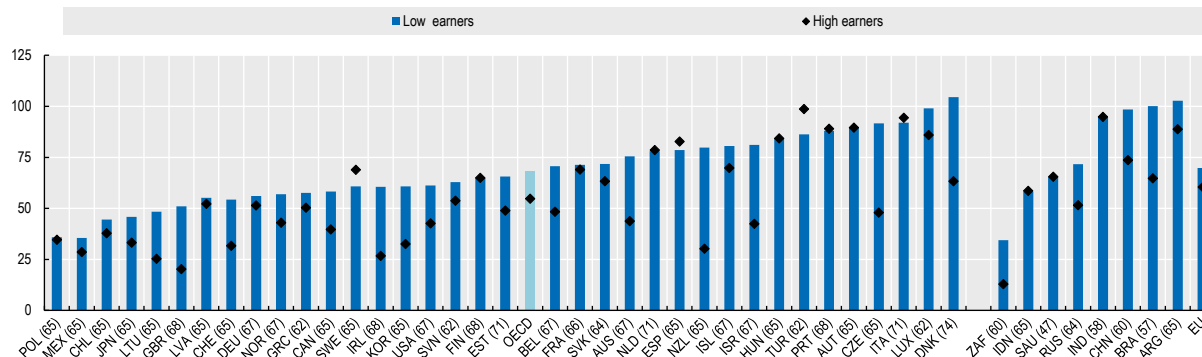
Figure 5.4. Net pension replacement rates: Average earners



Source: OECD pension models.

StatLink  <https://doi.org/10.1787/888934041573>

Figure 5.5. Net pension replacement rates: Low and high earners



Source: OECD pension models.

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