

### Key results

Pension wealth relative to individual earnings measures the total discounted value of the lifetime flow of all retirement incomes in mandatory pension schemes at the point of retirement age. For average earners, pension wealth for men is 9.6 times and for women 10.9 times annual individual earnings on average in OECD countries. Gross pension wealth relative to annual individual earnings is higher for women because of their longer life expectancy.

Replacement rates give an indication of the pension promise relative to individual earnings, but they are not comprehensive measures; they look only at the benefit level relative to individual earnings at the point of retirement. For a full picture, life expectancy, retirement age and indexation of pension benefits must also be taken into account. Together, these determine for how long the pension benefit is paid, and how its value evolves over time. Pension wealth – a measure of the stock of future flows of pension benefits – takes account of these factors. It can be thought of as the lump-sum needed to buy an annuity giving the same flow of pension payments as that promised by mandatory retirement-income schemes relative to individual earnings.

In defined benefit systems there is often no or a weak link between the replacement rate and the expected duration of benefit withdrawal. As a result pension wealth increases with longevity gains when retirement ages are held constant. In defined contributions systems there is a more direct link between the size of the benefit and the expected duration of benefit withdrawals. In these systems the pension wealth measure is equal to the accumulated assets and therefore independent of longevity increases as these automatically reduce the benefits. Gross pension wealth at individual earnings equal to average worker earnings is highest in Luxembourg at 17.8 for men and 20.4 times for women. It is only slightly lower in the Netherlands at 17.2 for men and 19.6 for women. The lowest pension wealth is found in the United Kingdom at around 4 times (annual) individual earnings for both men and women, due to relatively low replacement rates.

Higher individual replacement rates mean that pension wealth relative to individual earnings tends to be higher for low earners than for average earners as well, at least when abstracting from differences in life expectancy across income levels. For men with individual earnings equal to half-average earnings, pension wealth is 11.7 times their earnings on average, compared with 9.6 times the individuals' earnings of average wage workers. Similarly, for women with low earnings, pension wealth of 13.3 compares with 10.9 times individual earnings for average earners. In the countries where pension wealth for low earners is highest (Denmark, Luxembourg and the Netherlands), its value is between 18 and 21 times individual earnings for men and slightly above 20 to 24 times individual earnings for women.

### Impact of life expectancy

In countries where the duration in retirement is shorter and where pension benefits are defined benefit, such as Hungary, the Slovak Republic and Turkey, the individual pension wealth is smaller. The effect is the opposite in Switzerland and some of the Nordic countries (in DB systems), where life expectancies are high. Similarly, since women's life expectancy is longer than men's, pension wealth for women is higher in all countries that use unisex mortality tables or that have defined benefit systems. This is simply because in that case the same level of pension benefits can be expected to be paid over a longer retirement period. In addition, some countries still have lower retirement ages for women; this extends the payment period even further. Pension wealth is also affected by pension ages. A low retirement age in a defined benefit system such as in Luxembourg increases the pension wealth at a given level of benefit.

### Impact of indexation

Pension wealth might be affected by indexation rules. Although most OECD countries now index pensions in payment to prices, there are exceptions: Germany, Ireland, Luxembourg and the United Kingdom for example link their defined benefit or point's systems to average earnings. Since earnings tend to grow faster than prices pension wealth is higher with generous indexation procedures, for a given level of replacement rate. For the non-OECD countries there is great variation with South Africa at only 1.4 and 1.8 times individual earnings for average earners for men and women compared to 17.3 for men in Brazil and 16.9 for women in India.

### Definition and measurement

The calculation of pension wealth uses a uniform real discount rate of 2%. Since the comparisons refer to prospective pension entitlements, the calculations use country-specific mortality rates by age and sex at the year of retirement. Pension wealth is expressed as a multiple of gross annual individual earnings.

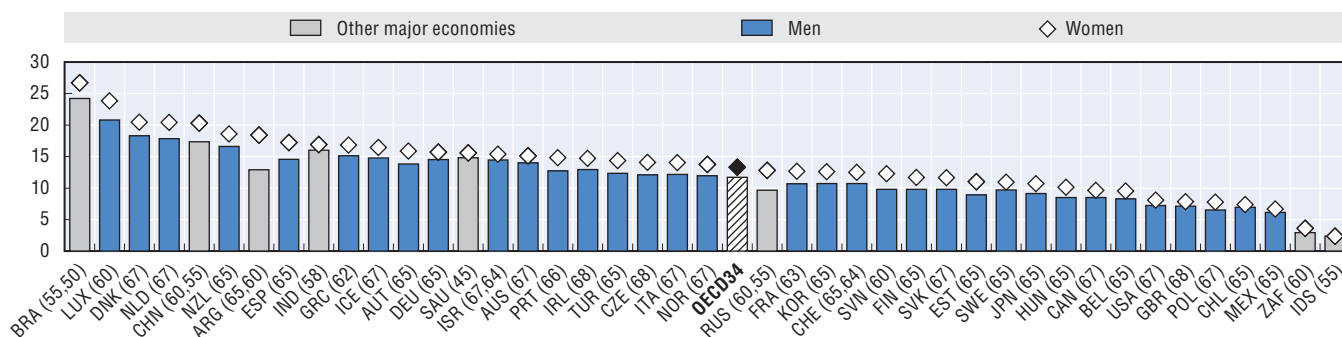
## 6.11. Gross pension wealth by earnings

	Individual earnings, multiple of mean						Individual earnings, multiple of mean						
	Men			Women			Men			Women			
	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	14.0	7.8	5.8	15.1	8.2	5.8	Norway	11.9	9.4	7.3	13.8	10.8	8.4
Austria	13.8	13.8	13.7	15.8	15.8	15.7	Poland	6.5	6.5	6.5	7.7	7.7	7.7
Belgium	8.3	8.1	6.1	9.5	9.3	7.1	Portugal	12.7	11.8	11.6	14.8	13.6	13.4
Canada	8.5	6.2	4.3	9.6	7.0	4.8	Slovak Republic	9.8	8.6	8.2	11.6	10.2	9.8
Chile	6.9	5.8	5.8	7.4	5.8	5.8	Slovenia	9.8	8.5	7.9	12.2	10.6	9.9
Czech Republic	12.1	7.5	6.0	14.0	8.7	6.9	Spain	14.6	14.6	14.6	17.2	17.2	17.2
Denmark	18.3	11.3	9.1	20.4	12.6	10.1	Sweden	9.7	9.7	11.4	10.9	10.9	12.9
Estonia	8.9	7.2	6.7	11.0	8.9	8.3	Switzerland	10.7	7.7	5.1	12.5	9.0	6.0
Finland	9.8	9.8	9.8	11.7	11.7	11.7	Turkey	12.3	12.3	12.3	14.3	14.3	14.3
France	10.7	10.4	9.1	12.6	12.3	10.7	United Kingdom	7.1	3.6	2.4	7.8	3.9	2.6
Germany	14.5	14.5	14.5	15.7	15.7	15.7	United States	7.2	5.7	4.7	8.0	6.4	5.3
Greece	15.1	12.7	11.9	16.8	14.1	13.2	<b>OECD34</b>	<b>11.7</b>	<b>9.6</b>	<b>8.6</b>	<b>13.3</b>	<b>10.9</b>	<b>9.9</b>
Hungary	8.5	8.5	8.5	10.1	10.1	10.1	<b>Other major economies</b>						
Iceland	14.8	12.1	11.9	16.4	13.4	13.2	Argentina	12.9	11.3	10.7	18.4	14.9	13.7
Ireland	12.9	6.5	4.3	14.7	7.3	4.9	Brazil	24.2	17.3	17.3	26.7	14.5	14.5
Israel	14.5	10.7	7.1	15.3	11.1	7.4	China	17.3	13.7	12.4	20.3	16.2	14.8
Italy	12.2	12.2	12.2	14.0	14.0	14.0	India	16.0	16.0	16.0	16.9	16.9	16.9
Japan	9.1	6.6	5.7	10.7	7.7	6.7	Indonesia	2.3	2.3	2.3	2.3	2.3	2.3
Korea	10.7	7.2	5.3	12.6	8.4	6.3	Russian Federation	9.6	9.6	9.6	12.8	12.8	12.8
Luxembourg	20.8	17.8	16.8	23.8	20.4	19.3	Saudi Arabia	14.8	14.8	14.8	15.6	15.6	15.6
Mexico	6.1	4.5	4.2	6.6	4.5	4.2	South Africa	2.9	1.4	1.0	3.6	1.8	1.2
Netherlands	17.8	17.2	16.9	20.4	19.6	19.4	EU28	12.3	10.4	9.5	14.1	11.9	11.0
New Zealand	16.6	8.3	5.5	18.5	9.3	6.2							


Source: OECD pension models.

StatLink  <http://dx.doi.org/10.1787/888933301153>

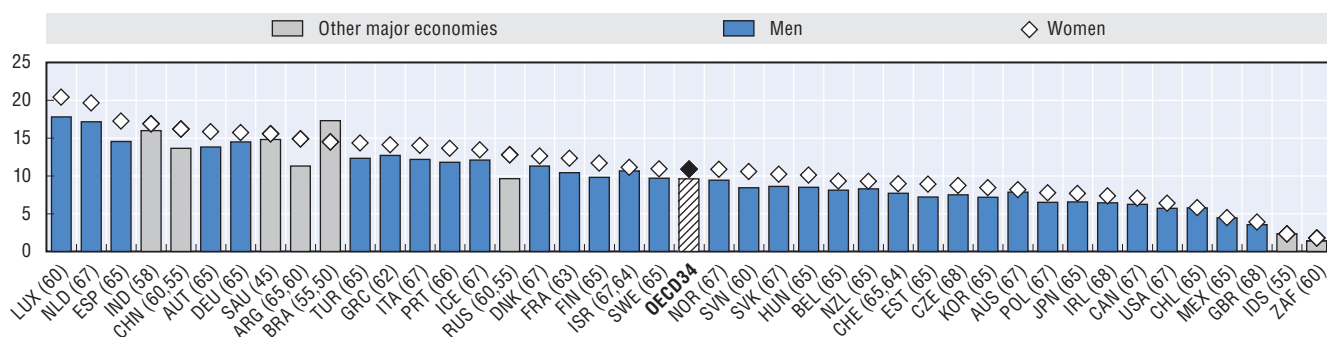
## 6.12. Gross pension wealth for lower earners by gender




Source: OECD pension models.

StatLink  <http://dx.doi.org/10.1787/888933300721>

## 6.13. Gross pension wealth for average earners by gender



Source: OECD pension models.

StatLink  <http://dx.doi.org/10.1787/888933300739>



**From:**  
**Pensions at a Glance 2015**  
OECD and G20 indicators

**Access the complete publication at:**  
[https://doi.org/10.1787/pension\\_glance-2015-en](https://doi.org/10.1787/pension_glance-2015-en)

**Please cite this chapter as:**

OECD (2015), "Gross pension wealth", in *Pensions at a Glance 2015: OECD and G20 indicators*, OECD Publishing, Paris.

DOI: [https://doi.org/10.1787/pension\\_glance-2015-19-en](https://doi.org/10.1787/pension_glance-2015-19-en)

This document, as well as any data and map included herein, are without prejudice to the status of or sovereignty over any territory, to the delimitation of international frontiers and boundaries and to the name of any territory, city or area. Extracts from publications may be subject to additional disclaimers, which are set out in the complete version of the publication, available at the link provided.

The use of this work, whether digital or print, is governed by the Terms and Conditions to be found at <http://www.oecd.org/termsandconditions>.