NET PENSION WEALTH

Key results

As with gross pension wealth, net pension wealth relative to individual net earnings measures the total discounted value of the lifetime flow of all retirement incomes in mandatory pension schemes at retirement age. For average earners, net pension wealth for men is 11.8 times and for women 13.1 times annual individual net earnings on average in OECD countries. Net pension wealth relative to annual individual earnings is higher for women because of their longer life expectancy. The main determinants of differences across countries are differences in the net replacement rate, in the length of the retirement period measured by remaining life expectancy at the normal retirement age, and in indexation rules.

Replacement rates give an indication of the pension promise relative to individual earnings, but they are not comprehensive measures of cumulated pension payments; they look only at the benefit level relative to individual earnings at the point of retirement, or more generally at a given, later age. For a full picture, life expectancy, normal 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. Net pension wealth – a measure of the stock of future discounted flows of pension benefits after taxes and social contributions – takes account of these factors. It can be thought of as the total net benefits that will be received on average from the mandatory retirement-income schemes.

In defined benefit systems there is often no or a weak link between the replacement rate and the expected duration of benefit withdrawal. Of course, in the long run, ensuring financial sustainability imposes a trade-off between the replacement rate and the duration of retirement. When retirement ages and pension benefits are held constant, pension wealth increases with longevity gains. In defined contribution 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.

Net pension wealth at individual earnings equal to average worker earnings is highest in Luxembourg at 22.4 times annual individual net earnings for men and 24.5 times for women. The lowest pension wealth is found in Mexico at 5.3 times for both men and women, due to low replacement rates.

Higher individual replacement rates and the increased tax allowance for many pensioners mean that net pension wealth relative to individual net earnings tends to be higher for low earners than for average earners as well, at least as the estimations here abstract from differences in life expectancy across income levels. For men with individual earnings equal to half-average earnings, net pension wealth is 13.7 times their net earnings on average, compared with 11.8 times for average wage workers. Similarly, for women with low earnings, net pension wealth of 15.2 compares with 13.1 times individual earnings for average earners.

For higher earners net pension wealth is on average 10.9 for men and 12.1 for women, only slightly lower than that for average earners, with Luxembourg again highest and the United Kingdom lowest.

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.

For the non-OECD countries there is great variation with South Africa at only 5.0 times individual earnings for average earners for men and 6.2 for women compared to 20.1 and 19.1 times individual earnings for men and women in Brazil.

Definition and measurement

Net pension wealth is the present value of the flow of pension benefits, taking account of the taxes and social security contributions that retirees have to pay on their pensions. It is measured and expressed as a multiple of net annual individual earnings in the respective country.

Taxes and contributions paid by pensioners are calculated conditional on the mandatory pension benefit to which individuals are entitled at different levels of earnings. The calculations take account of all standard tax allowances and tax reliefs as well as concessions granted either to pension income or to people of pension age.

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*.

4.15. Net pension wealth by earnings

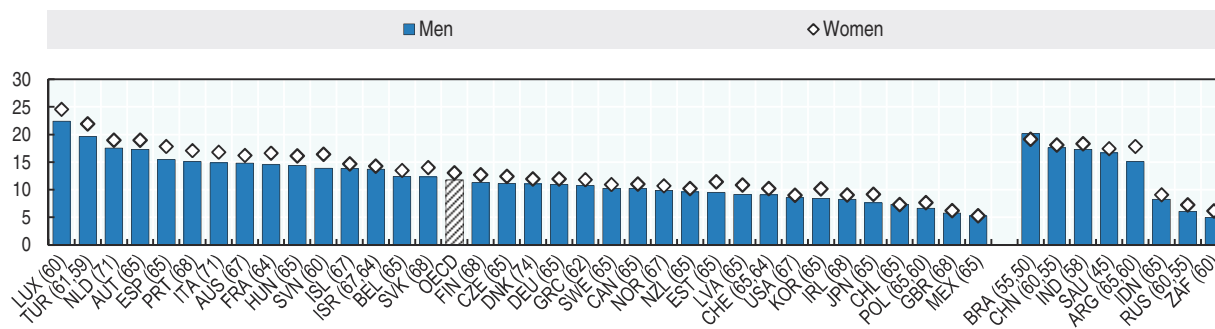| OECD members	Individual earnings, multiple of mean						OECD members(cont.)	Individual earnings, multiple of mean					
	0.5	1.0	1.5	0.5	1.0	1.5		0.5	1.0	1.5	0.5	1.0	1.5
	Men			Women				Men			Women		
Australia	20.9	14.8	12.7	23.3	16.2	13.6	New Zealand	17.9	9.6	6.8	19.1	10.2	7.2
Austria	17.4	17.3	17.1	19.0	19.0	18.8	Norway	13.2	9.9	8.3	14.3	10.7	9.0
Belgium	11.7	12.4	9.4	12.8	13.5	10.2	Poland	6.4	6.6	6.5	7.9	7.7	7.6
Canada	11.9	10.2	7.4	12.8	11.0	7.9	Portugal	15.5	15.1	14.8	17.7	17.1	16.7
Chile	8.8	7.3	7.4	9.2	7.3	7.4	Slovak Republic	12.5	12.4	12.3	14.2	14.0	14.0
Czech Republic	16.4	11.1	9.0	18.3	12.4	10.1	Slovenia	14.1	13.9	13.3	16.7	16.4	15.7
Denmark	15.5	11.1	10.5	16.7	11.9	11.3	Spain	15.0	15.4	15.4	17.3	17.8	17.8
Estonia	12.2	9.5	8.4	14.6	11.4	10.2	Sweden	11.7	10.3	12.8	12.4	10.9	13.6
Finland	11.6	11.3	11.3	13.1	12.7	12.7	Switzerland	11.7	9.1	6.4	13.1	10.2	7.1
France	13.7	14.5	13.7	15.7	16.6	15.7	Turkey	19.1	19.7	20.4	21.3	21.9	22.7
Germany	11.8	10.9	10.8	12.9	12.0	11.8	United Kingdom	10.5	5.8	4.1	11.2	6.2	4.4
Greece	12.2	10.8	10.9	13.4	11.8	11.9	United States	10.5	8.6	7.4	11.0	9.0	7.8
Hungary	14.4	14.4	14.4	16.1	16.1	16.1	**OECD**	**13.7**	**11.8**	**10.9**	**15.2**	**13.1**	**12.1**
Iceland	15.9	13.9	14.2	16.8	14.7	15.0							
Ireland	13.7	8.3	6.3	15.0	9.1	6.9	Argentina	16.4	15.1	14.8	19.4	17.8	17.4
Israel	18.4	13.7	10.0	19.4	14.3	10.4	Brazil	24.4	20.1	20.1	30.4	19.1	19.1
Italy	14.8	14.9	15.0	16.8	16.8	16.9	China	22.1	17.6	16.3	22.8	18.1	16.8
Japan	10.0	7.6	6.7	12.0	9.2	8.1	India	17.3	17.3	17.3	18.3	18.3	18.3
Korea	12.0	8.5	6.3	14.3	10.1	7.6	Indonesia	8.2	8.2	8.3	9.1	9.1	9.2
Latvia	8.5	9.1	9.1	10.1	10.8	10.7	Russian Federation	8.3	6.1	5.2	10.4	7.3	6.1
Luxembourg	24.9	22.4	21.2	27.3	24.5	23.2	Saudi Arabia	16.7	16.7	16.7	17.4	17.4	17.4
Mexico	6.3	5.3	5.2	6.7	5.3	5.2	South Africa	9.3	5.0	3.5	11.6	6.2	4.3
Netherlands	18.4	17.6	17.5	19.8	19.0	18.9	EU28	14.5	12.7	12.0	16.1	14.2	13.4

Source: OECD pension models.

4.16. Net pension wealth for lower earners by gender
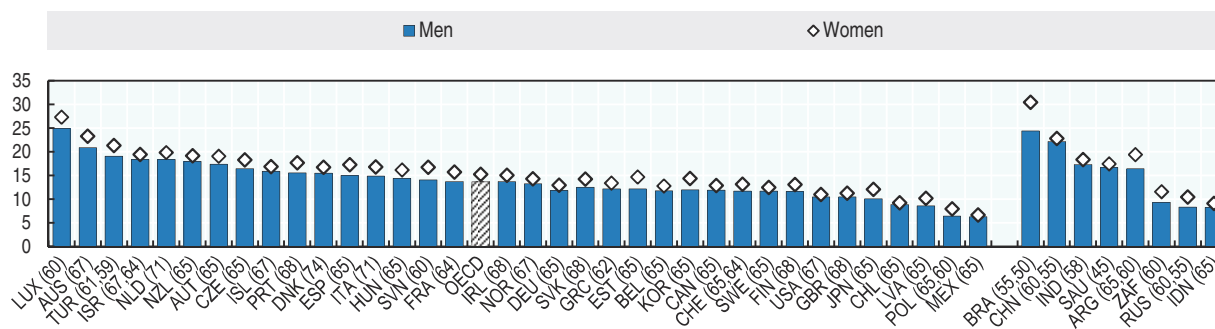
Source: OECD pension models.

4.17. Net pension wealth for average earners by gender

Source: OECD pension models.