#### **Key results**

"Average earnings" are an important metric underlying the presentation of system parameters and the results of pension modelling. The distribution of earnings is used to calculate composite indicators, such as the progressivity of pension systems, the structure of the retirement-income package and weighted averages.

The table reports average earnings levels according to the OECD's average-wage (AW) measure for the year 2008. (Only one country, Turkey, is not yet able to supply earnings data on the broader basis and so the modelling is based on the old, APW measure of average earnings.) Earnings are defined as gross wages before deductions of any kind (including personal income taxes and social security contributions), but including overtime pay and other cash supplements paid to employees.

Average earnings are displayed in national currencies and in US dollars (both at market exchange rates and at purchasing power parities, PPP). The PPP exchange rate adjusts for the fact that the purchasing power of a dollar varies between countries: it allows for differences in the price of a basket of goods and services between countries. The Economist regularly produces a popular and easy-to-understand version of PPP – the "Big-Mac" index – which shows how currencies differ from the level that would mean the burger cost the same worldwide (see www.economist.com/markets/bigmac/).

Earnings across the OECD countries averaged USD 40 600 in 2008 at market exchange rates. At PPP, average earnings were USD 34 900. The lower figure for PPP earnings suggests that many OECD countries exchange rates with the US dollar were higher than the rate that would equalise the cost of a standard basket of goods and services.

Average earnings for the other major economy countries are not based on the AW or another consistent basis as such a series is unfortunately not available. Data have been collected from national sources and thus vary between average individual income, average covered wage and average wage for a particular group of workers as available.

### Mean and median earnings

Most of the results presented in this report are based around mean earnings. However, many of the key indicators are shown also using estimates of "median" earnings, that is the level below and above which half of workers' earnings lie. The table also shows, from the OECD Earnings Distribution Database, median earnings as a percentage of mean earnings. There is significant variation between countries. The

broad distribution of earnings in Turkey and Mexico means that the median is only around three-fifths of mean earnings. In contrast, the median is nearly 90% of the mean in Canada, Denmark, Finland and Sweden and as high as 95.5% in Iceland.

The table also looks at the top and bottom ends of the earnings distribution. For the lowest decile of earnings (10% of workers earn less than this), the average for the OECD29 is below 50% of mean earnings, a level which is used as the case of a "low earner" in the main indicators. The top decile – 10% of workers earn more than this – averages 166% for the OECD29. In the main results, a "high earner" is assumed to be an individual with 150% of mean earnings.

### Definition and measurement

The "average-worker" series (AW) was adopted from the second edition of *Pensions at a Glance* (OECD, 2007). This concept is broader than the previous benchmark of the "average manual production worker" (APW) because it covers more economic sectors and includes both manual and non-manual workers. The new AW measure was introduced in the OECD report *Taxing Wages* and also serves as the benchmark for *Benefits and Wages*. The third edition of *Pensions at a Glance* (OECD, 2009) also included a comparison of replacement rates under the old and new measures of earnings for eight countries where the results were significantly different.

### References

D'Addio, A.C. and H. Immervoll (2010), "Earnings of Men and Women Working in the Private Sector: Enriched Data for Pensions and Tax-Benefit Modelling", Social, Employment and Migration Working Paper, No. 108, OECD Publishing, Paris.

OECD (2007), Benefits and Wages, OECD Publishing, Paris.

OECD (2007), Pensions at a Glance: Public Policies across OECD Countries, OECD Publishing, Paris.

OECD (2009), Pensions at a Glance: Retirement-Income Systems in OECD Countries, OECD Publishing, Paris.

OECD (2009), Taxing Wages 2007-2008, OECD Publishing, Paris.

### Average earnings and points of the earnings distribution, 2008

National currency and USD at market price and purchasing-power-parity exchange rates

	OECD me	OECD measures of average earnings		Exchange rate with USD		P	
	National currency (AW)	USD, market exchange rate	USD, PPP	Market rate	PPP	Lowest decile	)
OECD members							
Australia	60 400	50 400	40 900	1.20	1.48	49.5	
Austria	38 800	56 800	45 600	0.68	0.85	48.1	
Belgium	39 700	58 100	45 600	0.68	0.87	60.4	
anada	43 000	40 200	34 800	1.07	1.23	44.6	
hile	5 826 000	11 200	15 900	522.46	365.73		
zech Republic	274 500	16 100	20 000	17.08	13.70	49.3	
enmark	359 300	70 500	43 800	5.10	8.20	60.9	
stonia	157 000	14 700	18 100	10.69	8.67		
nland	37 300	54 500	40 400	0.68	0.92	62.3	
ance	32 700	47 800	37 200	0.68	0.88	55.1	
ermany	41 400	60 500	50 600	0.68	0.82	43.4	
reece	23 900	35 000	34 100	0.68	0.70	42.8	
ingary	2 338 800	13 600	18 300	172.47	127.86	37.8	
eland	4 068 000	46 200	34 100	88.00	119.34		
eland	40 900	59 700	43 400	0.68	0.94	45.2	
rael	112 400	31 300	31 300	3.59	3.59		
aly	26 300	38 500	32 800	0.68	0.80	56.1	
pan	5 000 500	48 400	42 700	103.39	117.03	52.4	
orea	33 500 000	30 400	42 600	1 100.86	785.78	39.9	
ixembourg	48 400	70 700	53 300	0.68	0.91	48.9	
xico	76 000	6 800	10 200	11.15	7.45	27.4	
etherlands	43 500	63 600	51 700	0.68	0.84	51.7	
w Zealand	46 700	32 800	31 300	1.43	1.49	51.2	
orway	440 000	77 900	50 700	5.65	8.68	63.2	
land	33 700	14 000	18 300	2.41	1.84	39.2	
ortugal	16 100	23 500	25 100	0.68	0.64	40.9	
ovak Republic	8 700	12 700	16 200	0.68	0.54	45.1	
ovenia	15 800	23 100	25 100	0.68	0.63		
oain	23 200	33 900	32 100	0.68	0.72	52.3	
veden	352 500	53 400	39 900	6.60	8.84	56.0	
vitzerland	74 500	68 700	47 500	1.08	1.57	56.6	
rkey	18 800	14 500	20 600	1.30	0.91	42.0	
nited Kingdom	33 600	61 500	53 100	0.55	0.63	39.6	
nited States	40 300	40 300	40 300	1.00	1.00	36.7	
CD34		40 600	34 900			48.2	
ther major economies							
rgentina	33 700	10 600	18 600	3.17	1.81		
azil	16 500	9 000	11 300	1.83	1.46		
hina	28 900	4 200	7 600	6.95	3.80		
ndia	154 400	3 500	9 600	43.51	16.01		
idonesia	13 100 000	1 400	2 400	9 698.96	5 454.52		
ussian Federation	207 500	8 300	14 500	24.85	14.33		
audi Arabia	32 600	8 700	10 700	3.76	3.04		
outh Africa	114 300	13 800	24 700	8.26	4.64		
U27		37 300	31 100				

Note: Average earnings are not available on the AW measure for Turkey, for which the APW (average production worker) definition is used. Average earnings are rounded to the nearest 100 and exchange rates rounded to decimal places.

AW = Average wage; PPP = Purchasing power parity.

Source: OECD (2009), Taxing Wages 2007-2008; OECD Main Economic Indicators; OECD Earnings Distribution Database; see D'Addio, A.C. and H. Immervoll (2010), "Earnings of Men and Women Working in the Private Sector: Enriched Data for Pensions and Tax-Benefit Modelling", Social, Employment and Migration Working Paper, No. 108, OECD Publishing, Paris.

StatLink http://dx.doi.org/10.1787/888932372450

# PART II Chapter 6

# Private Pensions and Public Pension Reserves

The range of indicators of private pensions and public pension reserves is greatly expanded in this edition of Pensions at a Glance.

The first of these eight indicators looks at the proportion of the working age population covered by private pensions. It distinguishes between mandatory, quasi-mandatory and voluntary schemes and between occupational provision, through an employer-provided or industry-wide scheme, and personal provision, arranged by an individual with a pension provider.

The institutional structure of private pensions is examined next. This shows the type of vehicle that is used to provide pensions, distinguishing between private pension funds, book reserves and insurance contracts. This indicator also examines pension types, split between defined-benefit, defined-contribution and mixed or hybrid schemes.

There then follows an analysis of pension gaps. This illustrates the amount that individuals would need to save in voluntary private pensions to achieve a specific level of income in retirement.

The fourth indicator reports assets in private pensions and public reserves for 2009. The way these assets are invested is explored in the fifth indicator. There then follows an analysis of the investment performance of private pensions and public pension reserves in 2008 and 2009.

The seventh indicator looks at operating expenses of private pension schemes and the fees charged to pension members in mandatory defined-contribution plans.

The final indicator focuses on defined-benefit occupational pension schemes. It examines how the assets in these schemes compare with their current and future liabilities in the form of pension payments. Funding ratios of 2 100 exchange-listed companies' schemes are presented for 2007, 2008 and 2009, disaggregated by the country of domicile of the company.



#### 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

### Please cite this chapter as:

OECD (2011), "Earnings: Averages and Distribution", in *Pensions at a Glance 2011: Retirement-income Systems in OECD and G20 Countries*, OECD Publishing, Paris.

DOI: <a href="https://doi.org/10.1787/pension\_glance-2011-36-en">https://doi.org/10.1787/pension\_glance-2011-36-en</a>

This work is published under the responsibility of the Secretary-General of the OECD. The opinions expressed and arguments employed herein do not necessarily reflect the official views of OECD member countries.

This document and any 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.

You can copy, download or print OECD content for your own use, and you can include excerpts from OECD publications, databases and multimedia products in your own documents, presentations, blogs, websites and teaching materials, provided that suitable acknowledgment of OECD as source and copyright owner is given. All requests for public or commercial use and translation rights should be submitted to rights@oecd.org. Requests for permission to photocopy portions of this material for public or commercial use shall be addressed directly to the Copyright Clearance Center (CCC) at info@copyright.com or the Centre français d'exploitation du droit de copie (CFC) at contact@cfcopies.com.

