Pension reforms in Poland and elsewhere: the view from Paris

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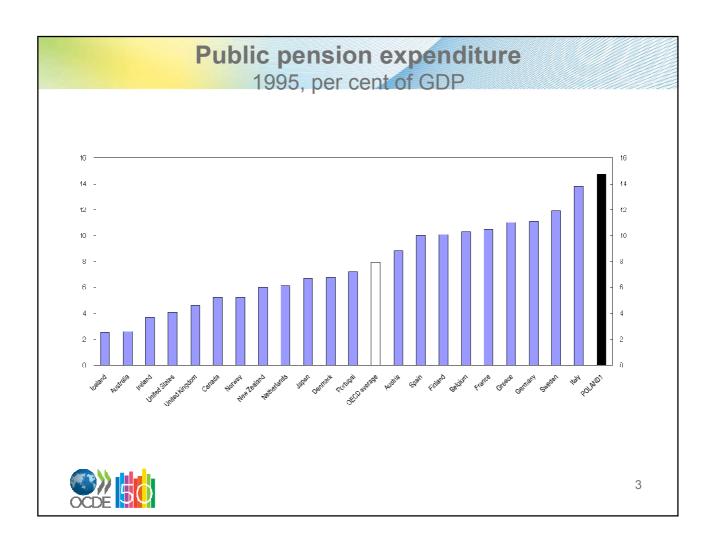


24 March 2011

Structure of retirement-income provision

		Public		Public	Private		Pu	blic		Public	Private
	Resource- tested	Basic	Minimum	Туре	Туре		Resource-tested	Basic	Minimum	Туре	Туре
Australia	ü				DC	New Zealand		ü			
Austria				DB		Norway			ü	NDC	DC
Belgium	ü		ü	DB		Poland			ü	NDC	DC
Canada	ü	ü		DB		Portugal			ü	DB	
Chile	ü		ü		DC	Slovak Republic			ü	Points	DC
Czech Republic		ü	ü	DB		Slovenia			ü	DB	
Denmark	ü	ü			DC	Spain			ü	DB	
Estonia		ü		Points	DC	Sweden			ü	NDC	DC
Finland			ü	DB		Switzerland	ü		ü	DB	DB
France			ü	DB+points		Turkey			ü	DB	
Germany	ü			Points		United Kingdom	ü	ü	ü	DB	
Greece			ü	DB		United States				DB	
Hungary				DB	DC						
Iceland	ü	ü			DB	Other major ecor	nomies				
Ireland		ü				Argentina		ü		DB	
Israel		ü			DC	Brazil				DB	
Italy	ü			NDC		China		ü		NDC/DC	
Japan		ü		DB		India				DB + DC	
Korea	ü	ü		DB		Indonesia				DC	
Luxembourg	ü	ü	ü	DB		Russian Federation		ü		NDC	DC
Mexico			ü		DC	Saudi Arabia			ü	DB	
Netherlands		ü			DB	South Africa	ü				





Standard age of entitlement to public old-age pensions, 1995

	Males	Females
Australia	65	60
Austria	65	60
Belgium	60	60
Canada	65	65
Czech Republic	60	53-57
Denmark	67	67
Finland	65	65
France	60	60
Germany	65	65
Greece	62	57
Hungary	60	56
Iceland	67	67
Ireland	66	66
Italy	62	57
Japan	60	58
Korea	60	60
Luxembourg	65	65
Mexico	65	65
Netherlands	65	65
New Zealand	62	62
Norway	67	67
Poland	65	60
Portugal	65	62.5
Spain	65	65
Sweden	65	65
Switzerland	65	62
Turkey	46-60	41-55
United Kingdom	65	60
United States	65	65



The initial reform (1):

- started January 1999
- mandatory NDC first pillar (based on Swedish system, by now also Italian) where retiree gets his pension capital divided by average life expectancy at that age
- mandatory pension funds second pillar with EET taxation
- voluntary third pillar



The initial reform (2)

- intent had been to set pensionable age at 62 both sexes but in 1998 government abandoned the idea; later just to raise the female age to 65 but that too was never done;
- contribution ceiling of 2.5 times average earnings (that cost at the time an estimated 0.4% of GDP)
- radical decline in generosity: cut of 37% in earningsrelated benefit; result is first-pillar replacement rate of around 25% and a total rate of around 50%)
- pension debt still estimated at over 200% of GDP by Plenipotentiary Office: shift to 2nd pillar cost the budget 0.7% of GDP at the start and about 1.5% after 15 years)



The initial reform (3)

- pension debt to be covered by privatisation proceeds plus, if needed, convertible bonds
- OECD called for close monitoring of the new funds, unification of 1st pillar regulations (exceptions only in medically justifiable cases) and equalising retirement ages across the sexes
- the foreseen benefits were higher national saving, later retirement, smaller black economy and deeper capital markets (and thus easier privatisation).



Gross and net replacement rates under pre- and post-reform rules, in percentage

		Gross	replace	ment rat	es		Net replacement rates					
	Pre-reform			Post-reform		Pre-reform			Post-reform			
Individual earnings :	0.5	1	1.5	0.5	1	1.5	0.5	1	1.5	0.5	1	1.5
Australia	46.2	23.1	15.4	67	41.6	33.1	55.3	30.4	21.8	80.2	53.1	41.8
Austria	90	90	85.9	80.1	80.1	76.4	98.4	99.2	95.1	90.5	90.3	86.3
Belgium	54.8	40.4	31.4	58.1	42	32.5	74.2	62.1	50.6	78.7	63.7	51.7
Czech Republic	72.1	45	32.9	79.2	49.7	36.4	86.7	58.1	44.6	95.3	64.1	49.4
Finland	69.9	66.2	65.2	66.5	56.2	56.2	75.9	71.4	72.4	73.2	62.4	63.8
France	64.7	64.7	58.4	61.7	53.3	48.5	79.7	78.2	70.8	76.2	65.7	60.2
Germany	47.9	47.9	46.5	43	43	42.6	56.4	66.6	66.4	59.2	61.3	60.3
Hungary	69.9	57.7	53.6	76.9	76.9	76.9	85.9	83.2	79.1	94.3	105.5	99.2
Italy	90	90	90	67.9	67.9	67.9	99.1	99.1	99.2	74.8	74.8	77.1
Japan	56.5	40.6	35.3	47.1	33.9	29.4	55.8	41	37	51.4	38.7	33.9
Korea	100	69.3	56	64.1	42.1	33.6	105.9	74.9	61.6	68.8	46.6	38.7
Mexico	72.5	72.5	72.5	55.3	36.1	34.5	73.4	76.5	83.2	56	38	39.6
Norway	62.5	51.9	41.9	66.2	59.3	49.8	80.4	62	52.3	76.7	69.3	60.6
New Zealand	77.5	38.7	25.8	79.3	41.1	29	77.5	38.7	25.8	79.3	41.1	29
Poland	81.2	62.9	56.8	61.2	61.2	61.2	97.1	76.9	69.7	74.4	74.9	75
Portugal	91.3	89.9	88.5	63.0	53.9	53.1	106.1	112	110.8	73.2	69.6	72
Slovak Republic	65	58.9	39.3	56.4	56.4	56.4	76.4	75.9	52.2	66.3	72.7	74.9
Sweden	82.5	78.6	76.5	76.6	61.5	75.6	84.5	80.3	81.9	79.3	64.1	81.2
Turkey	107.6	107.6	107.6	86.9	86.9	86.9	150	154.4	157.9	121.2	124.7	127.1
United Kingdom	41.1	29.7	20.6	51	30.8	21.3	51.9	39.8	28.3	63.8	40.9	29.2



Developments since then (1)

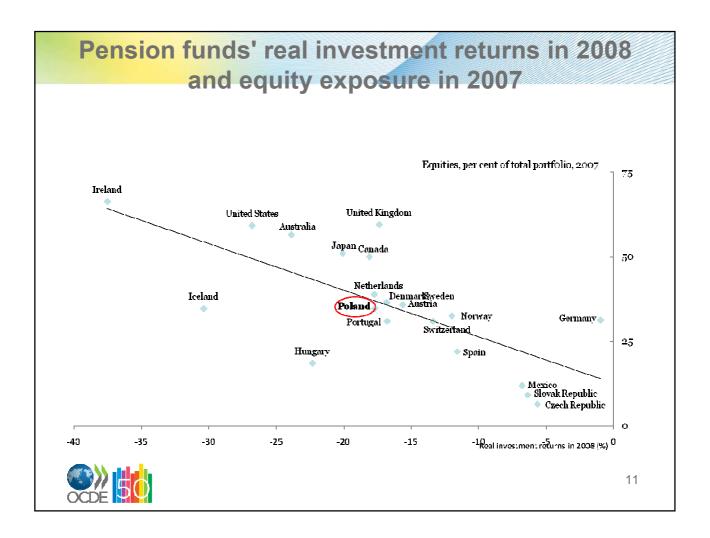
- Several backtracking moves: exclusion of military, police and judges in 2003 and miners in 2005; a higher pension indexation rate in 2004 and 2007; offset by the radical shrinkage in the bridge pensions in 2009.
- The accounting problems with the European Commission resulting in a 7-8 point difference in debt in 2008



Developments since then (2)

- transfers to 2nd pillar in PLN billions (1999-2010) 2.3, 7.5, 8.7,9.5,9.9, 10.6, 12.6, 14.9, 16.2, 19.9, 21.1, 22.5 for a total of 156 billion; OPFs were worth 213 billion in November 2010, some 5% less than what the value of contributions would have amounted to if they had merely been invested in government bonds (I have not checked the calculations made by the Office of the Economic Council)
- the funds put 30% of their portfolios in stocks and were prevented from investing more than 5% in foreign assets.

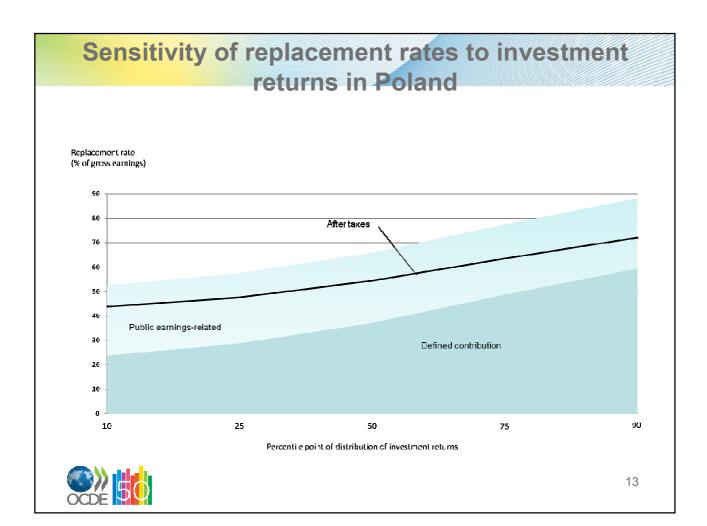




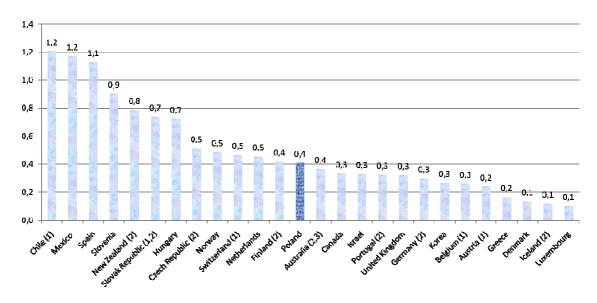
Pension funds' real investment returns and equity exposure, 2009

	Real net investment return	Equity share
Czech Republic	0.25	2.3
Slovak Republic	n. a.	3.2
Germany	7.40	6.1
Hungary	17.17	17.7
Simple average	8.92	21.7
Poland	9.52	30.2
Weighted average	6.51	39.3
United Kingdom	n. a.	39.7
United States	4.37	45.4





Pension funds' operating expenses as a share of total investments, 2009 (%)

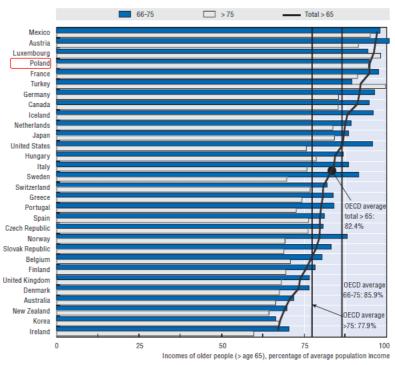


- 1. Data refer to 2008.
- 2. Data do not include investment management costs.
- 3. Data do not include self-managed superannuation funds.



Relative income of older people

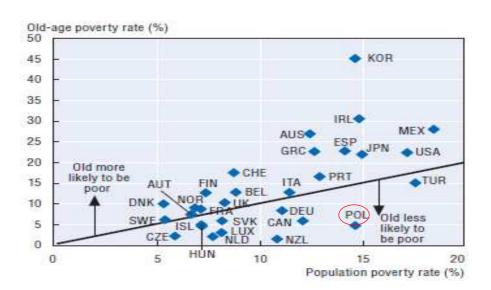
Equivalent household disposable income, mid-2000s





Note: Countries are ranked by the relative incomes of all aged over 65.

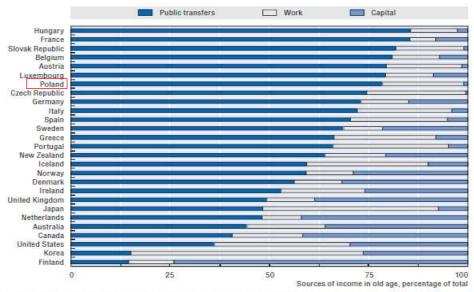
Income poverty rates by age, mid-2000s





Sources of incomes of older people

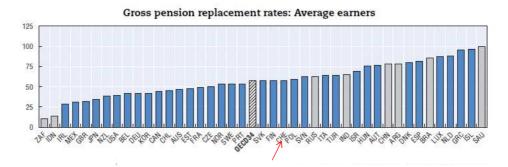
Percentage of household disposable income, mid-2000s

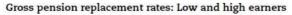


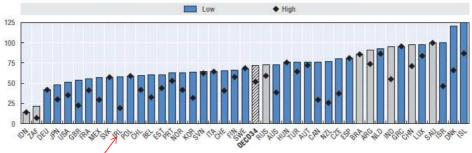
Note: Income from work includes both earnings (employment income) and income from self-employment. Capital income includes private pensions as well as income from the returns on non-pension savings.



Gross replacement rates

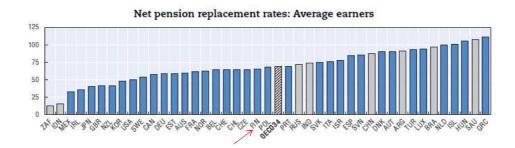


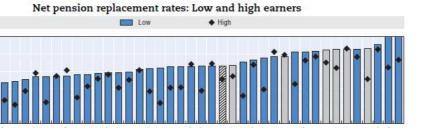






Net replacement rates







Public pension contribution rates

		Pen	sion contributio	on rate (per cer	nt of gross earn	ings)	
	1994	1999	2004	2007	2009	Employee 2009	Employer 2009
Austria	22.8	22.8	22.8	22.8	22.8	10.3	12.6
Belgium	16.4	16.4	16.4	16.4	16.4	7.5	8.9
Canada	5.2	7.0	9.9	9.9	9.9	5.0	5.0
Chile			29.8	29.8	29.8	28.8	1.0
Czech Republic	26.9	26.0	28.0	32.5	28.0	6.5	21.5
Estonia			35.0	22.0	22.0	2.0	20.0
Finland	18.6	21.5	21.4	20.9	21.6	4.5	17.1
France	21.5	16.7	16.7	16.7	16.7	6.8	9.9
Germany	19.2	19.7	19.5	19.9	19.9	10.0	10.0
Greece	20.0	20.0	20.0	20.0	20.0	6.7	13.3
Hungary	30.5	30.0	26.5	29.5	33.5	9.5	24.0
Israel			6.1	6.2	6.9	3.9	3.1
Italy	28.3	32.7	32.7	32.7	32.7	9.2	23.8
Japan	16.5	17.4	13.9	14.6	15.4	7.7	7.7
Korea	6.0	9.0	9.0	9.0	9.0	4.5	4.5
Luxembourg	16.0	16.0	16.0	16.0	16.0	8.0	8.0
Netherlands	17.9	17.9	17.9	17.9	17.9	17.9	0
Poland		19.5	19.5	19.5	19.5	9.8	9.8
Slovak Republic	28.5	27.5	26.0	24.0	18.0	4.0	14.0
Slovenia			24.4	24.4	24.4	15.5	8.9
Spain	29.3	28.3	28.3	28.3	28.3	4.7	23.6
Sweden	19.1	15.1	18.9	18.9	18.9	7.0	11.9
Switzerland	9.8	9.8	9.8	9.8	9.8	4.9	4.9
Turkey	20.0	20.0	20.0	20.0	20.0	9.0	11.0
United States	12.4	12.4	12.4	12.4	12.4	6.2	6.2
OECD34	19.2	19.3	20.0	19.8	19.6	8.4	11.2



OECD views on pension design:

How to maintain adequacy without endangering financial sustainability (1)

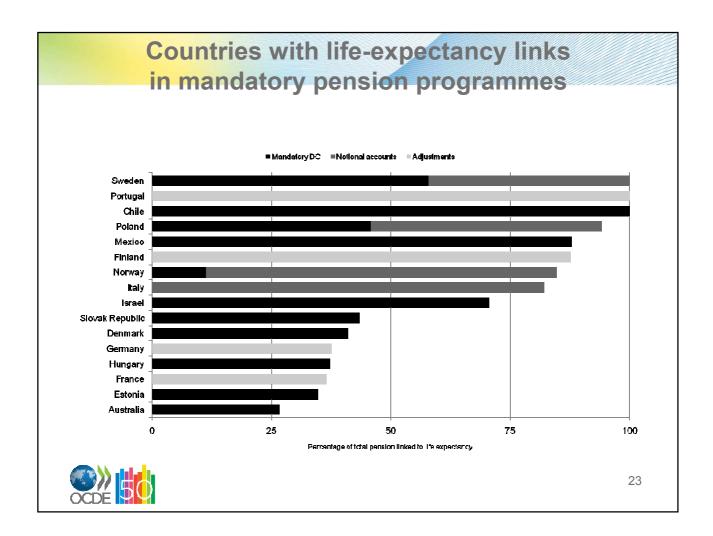
- (from 1998 Maintaining Prosperity in an Ageing Society)
 Security Through Diversity i.e. diversified provision
- Link pension eligibility age to life expectancy: few countries have done so: France, Denmark after 2027; but the combination of notional accounts (because they are based on lifetime earnings and thus fairer than finalsalary pensions) and mandatory DC funds does a pretty good job in respect of indirect linkage



Different ways of linking pensions to life expectancy

	Mandatory defined-contribution plan	Notional accounts scheme	Benefits linked to life expectancy	Qualifying conditions linked to life expectancy	DB-to-DC shift in voluntary private provision
Australia	•				
Austria					
Belgium					
Canada					•
Chile	•				
Czech Republic					
Denmark				•	
Estonia	•				
Finland			•		
France				•	
Germany			•		•
Greece					
Hungary	•				
Iceland					
Ireland					•
Israel	•				
Italy		•			
Japan					
Korea					
Luxembourg					
Mexico	•				
Netherlands					
New Zealand					
Norway	•	•			
Poland	•	•			
Portugal			•		
Slovak Republic	•				
Slovenia					
Spain					
Sweden	•	•			•
Switzerland					
Turkey					
United Kingdom					•
United States					•





OECD views on pension design:

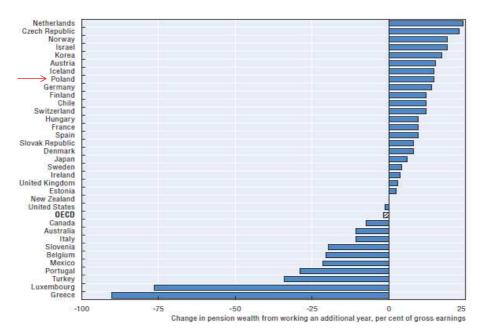
How to maintain adequacy without endangering financial sustainability (2)

- option to focus on the most vulnerable (like Canada, New Zealand, Netherlands) but Poland (along with Hungary, Slovak Republic and Italy) have tightened the link between contributions and benefits, essentially eliminating redistribution;
- actuarial neutrality i.e. neutral incentives regarding the retirement decision and thus avoidance of early retirement.



Changes in gross pension wealth for working age 60-65, men with average earnings

Percentage of annual gross earnings





Size of pension funds in OECD countries, 2009

Assets in pension funds and public pension reserve funds in OECD countries, 2009

As a % of GDP and in millions of USD

	Pensio	n funds	Public pension	reserve funds		Pensio	n funds	unds Public pension res	
	% of GDP	USD	% of GDP	USD		% of GDP	USD	% of GDP	USD
OECD members					OECD members (cont.)				
Australia	82.3	808 224	5.9	51 629	Norway ⁷	7.3	27 852	5.0	18 963
Austria	4.9	18 987	n.a.	n.a.	Poland	13.5	58 143	0.5	2 343
Belgium ¹	3.3	16 677	5.0	23 480	Portugal	13.4	30 441	5.7	13 068
Canada	62.9	806 350	8.5	108 627	Slovak Republic ¹	4.7	4 640	n.a.	n.a.
Chile	65.1	106 596	2.1	3 420.8	Slovenia	2.6	1 266	n.a.	n.a.
Czech Republic	6.0	11 332	n.a.	n.a.	Spain	8.1	118 056	5.7	83 387
Denmark ²	43.3	133 980	n.a.	n.a.	Sweden ^{1, 8}	7.4	35 307	27.2	108 785
Estonia	6.9	1 371	n.a.	n.a.	Switzerland ¹	101.2	496 957	n.a.	n.a.
Finland	76.8	182 286	n.a.	n.a.	Turkey	2.3	14 017	n.a.	n.a.
France ^{1, 3}	0.8	21 930	4.3	118 669	United Kingdom ⁹	73.0	1 589 409	n.a.	n.a.
Germany ⁴	5.2	173 810	n.a.	n.a.	United States	67.6	9 583 968	17.9	2 540 348
Greece	0.0	63	n.a.	n.a.	OECD34	67.6	16 777 792	19.6	4 642 111
Hungary	13.1	16 886	n.a.	n.a.					
Iceland	118.3	14 351	n.a.	n.a.	Other major economies				
Ireland	44.1	100 278	13.7	31 049	Argentina ¹⁰	11.5	30 105	n.a.	n.a.
Israel	46.9	95 257	n.a.	n.a.	Brazil ¹⁰	17.1	224 218	n.a.	n.a.
Italy	4.1	86 818	n.a.	n.a.	EU27			n.a.	n.a.
Japan ⁵	25.2	1 042 770	25.8	1 308 704	China ¹⁰	0.6	19 980	n.a.	n.a.
Korea	2.2	29 632	26.1	217 768	India	5.4	61 971	n.a.	n.a.
Luxembourg	2.2	1 171	n.a.	n.a.	Indonesia	2.2	9 614	n.a.	n.a.
Mexico	7.5	107 135	0.3	3 605	Russian Federation ¹¹	1.5	14 987	n.a.	n.a.
Netherlands	129.8	1 028 077	n.a.	n.a.	Saudi Arabia			n.a.	n.a.
New Zealand ⁶	11.8	13 755	7.1	8 265	South Africa ¹⁰	58.4	165 630	n.a.	n.a.

Note: "Total OECD" represents the weighted average of funds' assets as a % of GDP or total funds' assets in millions of USD for countries for which data are shown.

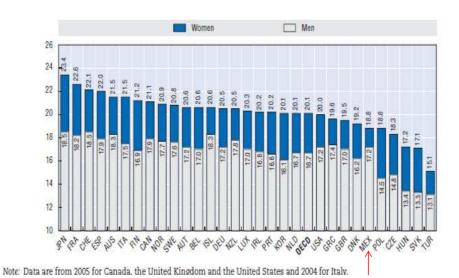


Public spending on old-age pensions

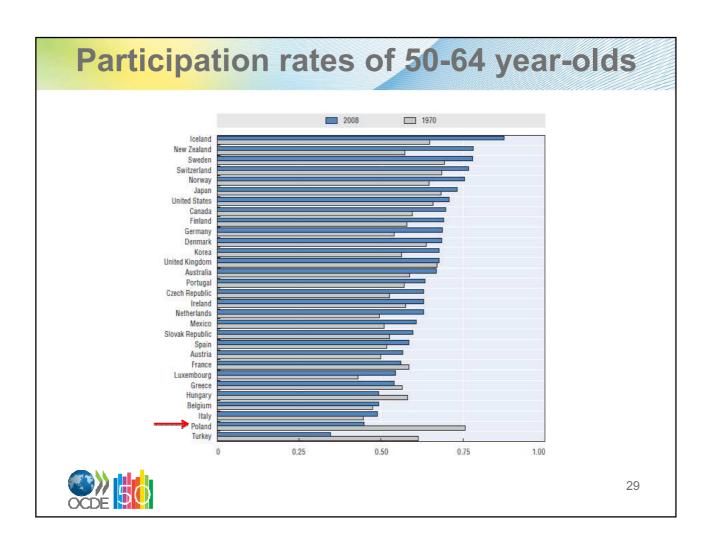
	Public expenditure on cash benefits for old-age and survivors									Total inc
	Level (% of GDP)					Change (%)	Level (% of total government spending) Level in net terms (% of GDP)		non-cash (% of GDP)	
	1990	1995	2000	2005	2007	1990-2007	1990	2007	2007	2007
Australia	3.0	3.6	3.8	3.3	3.4	11.2	8.6	10.1	3.3	4.5
Austria	11.4	12.3	12.3	12.5	12.3	7.8	22.1	25.3	10.6	12.7
Belgium	9.1	9.4	8.9	9.0	8.9	-2.9	17.4	18.3	8.0	9.0
Canada	4.2	4.7	4.3	4.2	4.2	-1.2	8.5	10.6	3.9	4.2
Chile		6.9	7.5	5.9	5.2					5.2
Czech Republic	6.1	6.3	7.5	7.3	7.4	21.8		17.5	7.4	7.7
Denmark	5.1	6.2	5.3	5.4	5.6	8.6	9.2	10.9	4.1	7.3
Estonia			6.0	5.3	5.2	5769.1		15.2	1,000	5.3
Finland	7.3	8.8	7.7	8.4	8.3	13.3	15.1	17.5	6.8	9.2
France	10.6	12.0	11.8	12.3	12.5	17.5	21.5	23.9	11.7	12.8
Germany	9.0	10.7	11.2	11.5	10.7	19.1		24.5	10.4	10.7
Greece	9.9	9.6	10.7	11.7	11.9	20.9		26.3		12.0
Hungary			7.4	8.6	9.1	12000		18.3		9.6
Iceland	2.2	2.4	2.2	2.0	1.9	-14.7		4.5	1.8	2.3
Ireland	3.9	3.5	3.1	3.4	3.6	-7.7	9.0	9.7	3.4	3.9
Israel		4.7	4.9	5.1	4.8			10.7		5.0
Italy	10.1	11.3	13.6	14.0	14.1	38.9	19.1	29.4	12.4	14.1
Japan	4.9	6.1	7.4	8.7	8.8	80.5		27.0	8.4	10.1
Korea	0.7	1.2	1.4	1.5	1.7	130.5	3.7	5.7	1.7	1.9
Luxembourg	8.2	8.8	7.5	7.2	6.5	-19.8	21.6	18.1	5.9	6.6
Mexico	0.5	0.7	0.9	1.2	1.4	202.0		7.2	1.4	1.4
Netherlands	6.7	5.8	5.0	5.0	4.7	-29.8	12.2	10.4	4.1	5.5
New Zealand	7.4	5.7	5.0	4.3	4.3	-41.8	14.0	10.9	3.5	4.3
Norway	5.6	5.5	4.8	4.8	4.7	-16.6		11.4	3.8	6.5
Poland	5.1	9.4	10.5	11.4	10.6	107.0		25.2	9.7	10.7
Portugal	4.9	7.2	7.9	10.3	10.8	119.8		7077	10.2	10.8
Slovak Republic	1,000	6.3	6.3	6.2	5.8			17.0	5.8	6.2
Slovenia			10.6	9.9	9.6			22.7	0.0	9.7
Spain	7.9	9.0	8.6	8.1	8.0	1.5		20.5	7.4	8.5
Sweden	7.7	8.2	7.2	7.6	7.2	-6.8		14.1	5.3	9.5
Switzerland	5.6	6.7	6.6	6.8	6.4	14.2	18.6	19.9	5.5	6.7
Turkey	2.4	2.7	4.9	5.9	6.1	159.2				6.2
United Kingdom	4.8	5.4	5.3	5.6	5.4	11.0	11.6	12.0	5.1	5.9
United States	6.1	6.3	5.9	5.9	6.0	-1.5	16.4	16.3	5.6	6.0
OECD	6.1	6.7	6.9	7.1	7.0	14.5		16.5	6.2	7.4
OLOD .	0.1	3.1	3.0	***	1.0	17.0		10.0	0.E	1000000



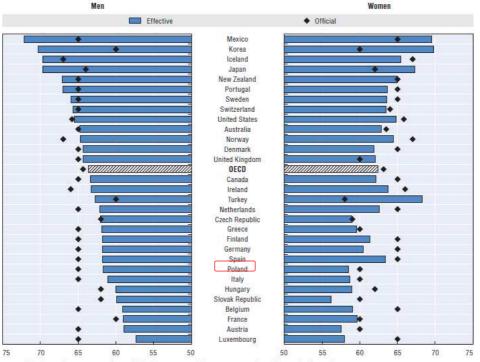
Life expectancy at 65 in 2006















Recent moves to reverse pension reform (1)

Pillars	Estonia	Hungary	Poland	Slovak Rep.	
1st Type	PAYG, points system	PAYG, DB	PAYG, NDC	PAYG, points system	
Contribution rate (% the payroll)	of 16 (employer)	24 (employer) + 1.5 (employee)	12.2	9.0	
2nd Type	FF, DC	FF, DC	FF, DC	FF, DC	
Compulsory	new entrants and younger	new entrants	new entrants and younger	not for new entrants	
Contribution rate (% the payroll)	of 2 (individual) + 4 (employer)	8.0 (employees)	7.3	9.0	
Working-age population covered	(%) 68	41	53	37	
3rd Type	voluntary	voluntary	voluntary	voluntary	
Working-age population covered	(%)	18	4	22	

Notes: FF - fully funded, DC - defined contribution, NDC - Notional Defined Contributions.



Recent moves to reverse pension reform (2)

Pillars	Estonia	Hungary	Poland	Slovak Rep.
1st Financial balance (% of GDP)	-1.2	-2.4	-1.0	-2.0
Current estimated transfers from 2nd the state (% of GDP)	1.0	1.3	1.6	1.2
Accumulated assets (% GDP)	7.3	9.6	13.3	4.7
3rd Accumulated assets (% GDP)	0.6	3.0	0.0	1.7
Memorandum items (% of GDP)				
Public debt, 2009 (OECD definition)	12.3	85.2	59.0	39.8
Public debt, 2009 (Maastricht definition)	7.2	78.4	51.0	35.3
Budget deficit of the general government, 2009	-1.8	-4.4	-7.3	-7.9

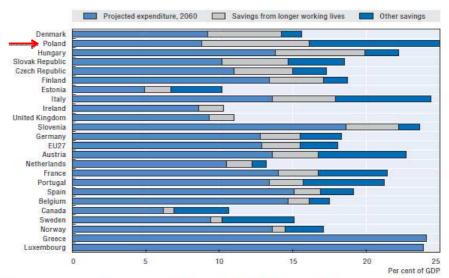


Switching and reforms: replacement rates

		Replaceme	Changes in pensions (%)			
		Switcher		Non- switcher	Total	Public
	Public	Private	Total	Public	pension	pension
Estonia	25.9	15.0	40.9	29.2	-28.5	+13.1
Hungary	44.4	31.4	75.8	60.1	-20.8	+35.2
Poland-men	28.7	30.2	59.0	45.9	-22.3	+59.6
Poland-women	21.1	22.1	43.2	33.7	-22.1	+59.6
Slovak	26.0	31.6	57.5	51.9	-9.7	+100.0



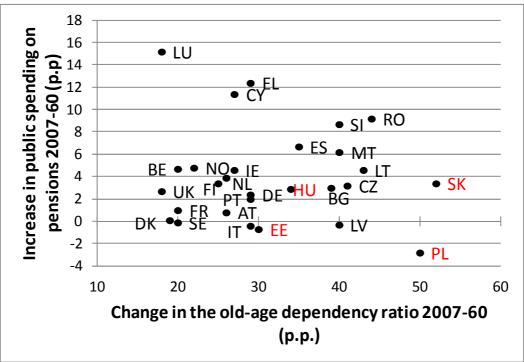
Decomposition of different effects on European Commission's projected pension expenditure in 2060



Note: Luxembourg alone reports increased spending as a result of the coverage-ratio and employment-rate effects. Greece, Ireland, Luxembourg and the United Kingdom report increased spending result from the benefit-ratio effect.



Demographics and future public pension spending





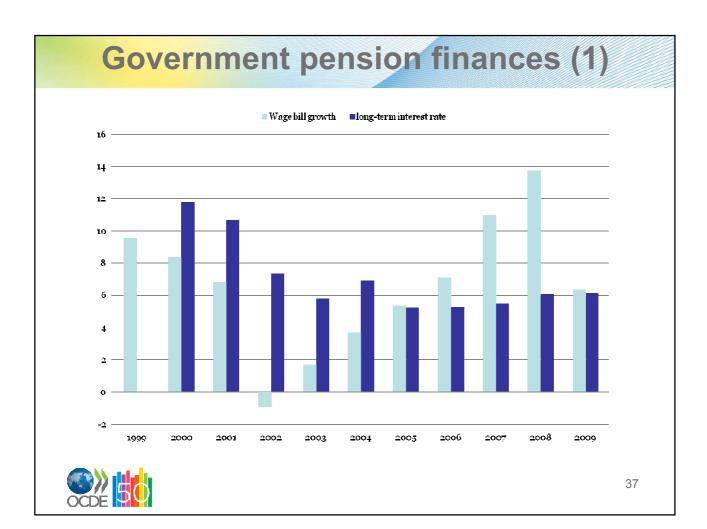
What is the outlook for pension adequacy?

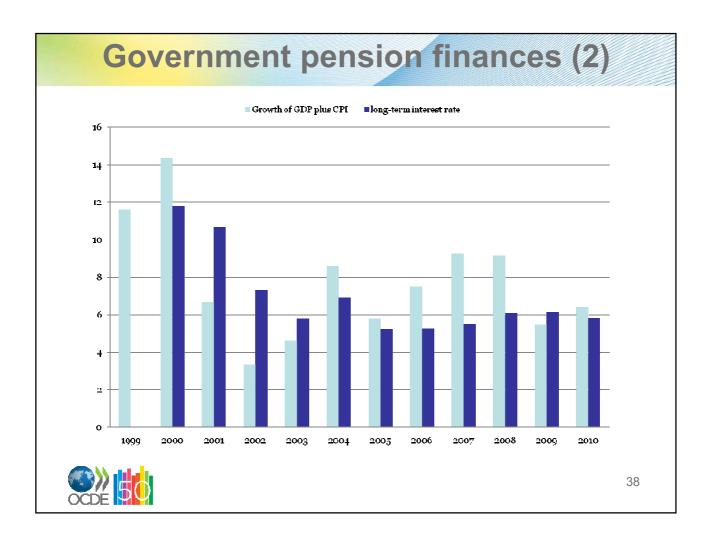
European Commission 2009 estimate of 2060 first-pillar benefit ratio for Poland: 23.6% (59.4% in 2010)

If the second-pillar OFEs earn the same returns as the government offers (the rate of growth of the wage bill), then the total benefit ratio would be 37.6%, a cut of 37%

 Our calculations show that the corresponding cuts were 20% for Estonia, 26% for Hungary and 50% for the Slovak Republic







Government pension finances (3)

	Needed adjustment (S2)	Initial budget position	Long-term cost of ageing
EC, Sustainability Report 2009	3.2	4.4	-1.2
After government proposal	2.4	3.5	-0.9
Impact of government proposal	-0.6	-0.9	0.3



Summary of our conclusions and recommendations for Poland (1)

- Equalise the pensionable age across the two sexes (as Estonia is doing by 2016).
- Move to unify pension provision systems, in particular by phasing out KRUS and making pensions for miners etc closer to actuarially neutral.
- Do not blame OFEs for poor investment performance (which is not out of line with their foreign peers), but regulate their management fees based on international comparisons and allow them to invest more abroad to gain the benefits of portfolio diversification.
- Trying to solve the problem of public finance sustainability by radically shrinking the second tier of the system has obvious costs in terms of poverty among old-age pensioners, whose incomes will fall sharply relative to working-age Poles, with replacement rates of around 50%, compared to 58% in Slovak Rep. and 76% in Hungary (only Estonia at 41% among those reversing reforms is worse).



Summary of our conclusions and recommendations for Poland (2)

- Partially reversing pension reform will also cost Poland in terms of risk spreading and capital market development (including prices received for future privatisations). It will also undermine the population's trust in the system, since the first pensions paid by the OPFs have just started to be paid.
- There is no alternative for achieving sustainability but to restrain current spending and/or raise taxes, preferably by eliminating tax expenditures (on farming activities, the lump-sum income tax, social security contributions of the self-employed), establishing market-value based property taxes, taxing capital gains on rented properties and raising taxes on environmental externalities such as through a carbon tax.



For further information

- E.R. Whitehouse (2010), "Decomposing Notional Defined-Contribution Pensions: Experience of OECD Countries' Reforms", OECD Social, Employment and Migration Working Papers, No. 109.
- OECD (2011), Pensions at a Glance: Retirement-Income Systems in OECD and G20 Countries, OECD Publishing, Paris.
- A. Chlon-Dominczak and J. Stachura (2007), "Pension Schemes and Projection Models in EU-25 Member States: Poland", *European Economy Occasional Papers*, Number 35, November.
- OECD (2012, forthcoming), *Economic Surveys: Poland*, OECD Publishing, Paris.

