

# Three pillar pension system in Poland

## „Security through/under Diversity”



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The Price of Social Security or Social Security at all Costs?  
Tokio, 24 March 2014



# Agenda

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## Demography

Reform of 1999

Performance of Open Pension Funds

Recent changes



# Demography

		Projection				
	2002 census	2010	2020	2030	2040	2050
Total population (mln)	38,2	39,0	39,4	38,5	36,8	35,0
Life expectancy at birth men	70,3	72,0	74,2	75,6	77,0	78,5
Life expectancy at birth women	78,4	79,4	80,7	81,9	83,2	84,7
Life expectancy 65- year men	14,3	14,7	15,4	16,1	17,0	17,9
Life expectancy 60- year women	22,1	22,7	23,6	24,5	25,6	26,8
Pre-productive age	8,9	7,4	7,7	6,9	5,8	5,6
Productive age	23,6	25,2	23,3	22,1	20,8	17,8
Post-productive age	5,7	6,4	8,4	9,5	10,3	11,6



# Demography under new system

	Dependency ratio			Pension expenditure % of GDP			Required primary surplus % GDP	
	2000	2050	Change	2000	2050	Change	Debt constant	Debt reduced
France	27,2	50,8	23,6	12,1	15,8	3,7	5,9	6,6
Germany	26,6	53,2	26,6	11,8	16,9	5,1	4,3	4,7
Italy	28,8	66,8	38,0	14,2	13,9	-0,3	4,9	5,9
Poland	20,4	55,2	34,8	10,8	8,3	-2,5	-1,0	-1,0
Spain	27,1	65,7	38,6	9,4	17,4	8,0	4,8	5,2
Sweden	29,4	46,3	16,9	9,2	10,8	1,6	1,0	1,1
UK	26,6	45,3	18,7	4,3	3,6	-0,7	0,8	1,1
US	21,7	37,9	16,2	4,4	6,2	1,8	2,7	3,2
OECD	23,8	49,9	26,1	7,4	10,6	3,2		



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# Dimensions of pension system

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- **Social** dimension of pension system is its **goal** – not to leave anybody outside.
- **Means** to reach this goal are strictly **economic**.
- Misunderstanding of the two above (or perceiving social dimension as mean and economic as goal) leads to failure.
- From economic point of view voluntary contributions bring too high risk. From social point of view there is no risk, as intergenerational solidarity acts.



# Optimal pension system

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Optimal pension system meets two criteria:

- Steady inter-generational division – Nash equilibrium
- Allocation of income with the lowest cost of operation – Pareto optimum (includes negative external effects)

Polish system strives to reach steady state



# Reform of 1999

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Potential risk of the old system

- Lower economic growth
- Increased public debt
- Unsustainability of the system
- Unemployment
- Lower gross replacement rate
- Cost for workers

	1981	1982	1986	1987	1990	1992	1998
Contribution rate (simulation for old system)	15,5%	25%	33%	43%	38%	43%	45%





# Reform of 1999

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Ageing population

Early retirement  
regulations

Unsustainable  
system  
of DB

NDC/FDC



# Basic rules of the new system

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Assets are attached to concrete person - Individual Pension Account

Contributor is entitled to calculated benefits (not DB)

Annuities – relies on the sum of collected assets and age

Transition costs – in terms of budgetary deficit – should have been covered from privatization

Tax regime - EET system – exempt-exempt-tax – contributions and income from pension savings are tax exempt, but future pensions not

Life-cycle income allocation



# Old vs new system

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Old system	New system
All funds together	Separation of pension fund
Financed by taxes	Based on savings & insurances
No personalization	Personalized
No relation between contributions and benefits	Strong relation between



# Groups of contributors

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- Due to the fact, that different groups of working population meet different scale of risks they were divided

	<b>Under 30 in 1999</b>	<b>Between 30 and 50 in 1999</b>	<b>Over 50 in 1999</b>
Risk	Profitable changes, no risk	Profits, little risk	Risk related to relativ short period of left contributions
	Automatically in the new system	Either NDC or NDC/FDC	Left in the old system



# Institutions of Pension System

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ZUS Social Insurance Institution – state run administration – manages Social Insurance Fund (FUS)

PTE - Pension Fund Society asset manager of Open Pension Funds (OFE)



# Three pillars

<b>Criteria for classification</b>	First pillar	First pillar - subaccount	Second pillar	Third pillar
Status of the scheme	Universal	Universal	Universal	Supplementary
Participation in the scheme	Compulsory	Compulsory	Compulsory	Voluntary
Social objective	Basic level of benefits	Basic level of benefits	Basic level of benefits	Higher level of benefits
Management	Public	Public	Private	Private
Financing	From current contributors	From current contributors	Funded	Funded
Calculation of benefits	Indexed contribution	Indexed contribution	Capitalised contribution	Capitalised contribution



## Three pillars (ctd.)

<b>Criteria for classification</b>	First pillar	First pillar – subaccount	Second pillar - private	Third pillar
Inheritance	No	Yes	Yes	Yes
Contributions' taxation	No	No	No	Depends on the product
Benefits' taxation	Yes	Yes	Yes	Depends on the product
Benefits payment	ZUS	ZUS	ZUS	Depends



# Contributions

Total contribution – 19,52% of gross salary (half-half by employee and employer)		
Before 1st of February 2014		
ZUS – 12,22 %	Pension Funds – 7,3%	
After 1st of February – decision to stay with Pension Funds		
ZUS 12,22%	ZUS – subaccount 4,38%	Pension Funds – 2,92%
After 1st of February – decision to stay with state run ZUS		
12,22%	ZUS – subaccount 7,30%	Pension Funds – 0,00%





# Benefits

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- Benefits are paid by ZUS
- Capital is build on:
  - Initial capital (for those who started contributing)
  - Contributions
- 10 years prior to retirement age funds from pension funds are gradually transfered (at retirement age personal capital equals 0 at pension funds) – so called safety net for the case of risk on financial markets



# Benefits

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- Monthly benefits depend on:
  - Accrued capital (contribution plus funds' economic results)
  - Retirement years based on statistical life expectancy



# Initial capital

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- As there was no personalization of accrued capital – it has to be calculated somehow how high the initial capital should be.
- It was made according to assumptions of: economywide average wage, years of activity, years to retirement, individual assessment base (similar calculation to the one made for DB in previous system before 1999)



# First pillar – two accounts

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- PAYG system accrued in FUS and administered by ZUS. Potential deficits covered by state budget.
- 100% state guarantee
- Lifelong retirement benefits
- Two individual accounts



# First pillar – two accounts

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- Individual ZUS account (12,22% of gross salary) and individual ZUS sub-account (4,38% or 7,30%)
- There are no financial assets on both accounts – only liabilities against pensioners/contributors
- Assets on sub-account can be inherited within 3 years period after retirement
- Valorization:
  - Account – based on real CPI and
  - Sub-account – annually based on average nominal growth of GDP within last 5 years (minimum value 0, while in OFE it can be negative)



# Second pillar

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- Individual accounts in private pension funds (OFE) invested on capital market
- Free choice of now 14 OFE, can be changed at any moment (after law change in 2013 – in April one has to decide whether to move to ZUS or divide his/her assets between ZUS and OFE – 4 months for decision – after that the next „transfer window” in 2016)
- Fully inherited
- Benefits paid jointly with benefits from the first pillar by ZUS
- OFE have two roles:
  - Social security
  - Investment actor on capital market



# Second pillar

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- Strict regulations on:
  - Portfolio investment possibilities
  - Investments structure (even harsher since reform of late 2013) – investments limits
  - Cost of contributing (presently not more than 1,75% of contribution)
  - Cost of asset management – maximal amount 15,5 mln PLN when assets reach at least 45 bln PLN
  - Information policy (similar to investment entities)
- Guarantee by Guarantee Fund (0,3% of assets paid by every OFE)
- OFE pays to ZUS 0,4% of every received contribution



# Third pillar

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- Complementary, based on capital
- TAX profits only in the long run
- Two forms:
  - Group – Occupational Pension Programs (PPE) – freely by employer based on agreement of at least one employer with pension fund , basic contribution paid by employer (max. 7% of employee's salary) might be complemented by employees
  - Individual – Individual Pension Accounts (IKE/IKZE) – contributions not larger than 3x (IKE) and 1,2x(IKZE) of average economywide pay, only one account for a person, profits are tax exempt (IKE) or taxed 10% (IKZE)





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# Performance of FDC

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- 51,5% of assets invested in governmental bonds
- Assets accumulated by January 2014 – 289bln PLN (Polish companies listed on Warsaw Stock Exchange – 629bln PLN in January 2014)

## Portfolio:

GB	Bank deposits	Equities	Other bonds	Other
45%	2,5%	42%	9,5%	1%

# Rate of Returns of chosen Pension Funds

Nominal RoR 1999-2009	Annual RoR	Nominal RoR 1999-2009	Annual RoR	Annual inflation rate 4,3%
137,1	3,2	155,6	4,5	
140,0	3,4	142,2	3,6	
149,8	4,1	165,6	5,2	
141,0	3,5	164,2	5,1	
153,0	4,3	176,2	5,8	
149,2	4,1	149,8	4,1	
142,5	3,6			



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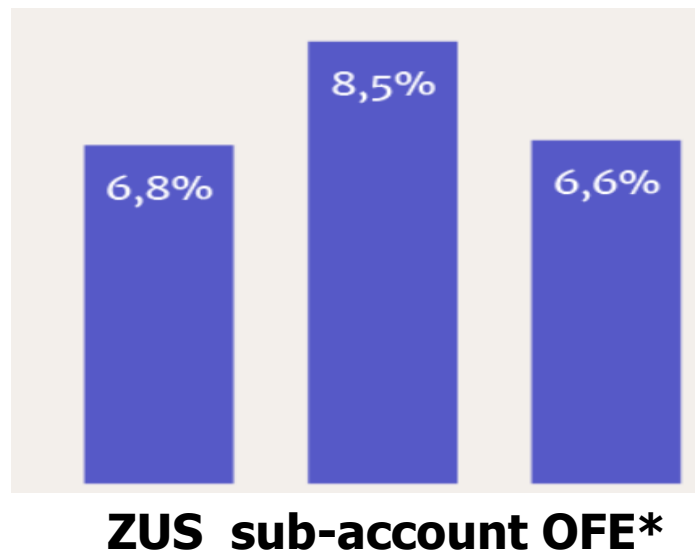


# Changes of 2014

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- Government decided that the part of assets invested in GB must be written-off and returned to ZUS (which makes 51,5% of total assets accumulated by OFE)
- Impact on Stock Exchange was merely visible
- Commercials of Pension Funds were prohibited
- Discussion over cost efficiency/ share of profits – pension funds accumulated high profits and were not more efficient in terms of financial management (high cost of marketing)

# Efficiency of ZUS vs OFE



Graph shows returns/valorization over the period 2000-2012, in case of OFE after deduction of costs of management.



# Threats to the system in Poland

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- Market segmentation – rich/poor
- Pushing the tax-alike contributions back
- Budget savings
- Frequent small changes
- Difficulty for financial institutions to act as an agent in social security system (it differs from raw investment/insurance activity)
- Lack of acceptance of the new role by public social security institutions
- Permanently high share of government bonds in portfolios of pension funds



# Special threats

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- Farmers - the Agricultural Social Insurance Fund (*Kasa Rolniczego Ubezpieczenia Społecznego* KRUS) – benefits from social insurance for farmers – only approx. 5% of the fund is financed by contribution
- Special groups entitled to early retirement age – miners, soldiers etc.
- Hard to estimate migration flows





# Where are we going – Ageing Report of EC (2012)

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- Across EU Member States, the **effective economic old age dependency ratio** is projected to range from less than 55% in Denmark, the United Kingdom, Norway and Ireland to **more than 90%** in Hungary, Slovakia, **Poland** and Romania in 2060.
- **Public pension expenditure** in the EU27 is projected to increase by 1.5 p.p. of GDP over the period 2010-2060 to a level of 12.9% of GDP [...] however **decreases** in Denmark, Italy, Estonia and **Poland by 2,2pp**
- One of the lowest **fertility rates – 1,3** (till 2050 – population decreases by 14%)

Still....



# Fiscal Sustainability Report 2012

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Overall, Poland appears not to face a risk of fiscal stress in the short run. As a consequence, sustainability challenges to the Polish pension system remain on the low side.

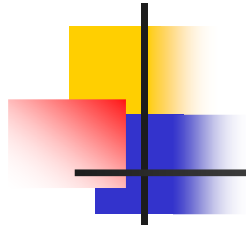
- Public pension expenditures in the Polish pension system are supposed to decrease in the long-run.
- The main reasons are the larger share of notional defined contribution (NDC) pensioners in comparison to defined-benefit (DB) system pensioners, restrictions in early retirement, as well as a shift from first pillar public pensions to mandatory private pillar schemes.
- A recently adopted increase in the statutory **retirement age to 67** in 2040 for both men and women.
- 2012 European Council recommendation: Poland should further **restrict early retirement options** and take steps to **integrate special schemes** (e.g. for miners) in the general scheme.



# Common European Pension Scheme?

- Big differences between countries in the EU

Country	Type	Country	Type
BE	DB	LU	DB
BG	DB	HU	DB
CZ	DB	MT	Flat rate + DB
DK	DB	NL	DB
DE	PS	AT	DB
EE	DB	PL	NDC
IE	Flat rate + DB	PT	DB
EL	Flat rate + DB	RO	PS
ES	DB	SI	DB
FR	DB + PS	SK	PS
IT	NDC	FI	DB
CY	DB	SE	NDC
LV	NDC	UK	DB
LT	DB	NO	NDC



Thank you for your attention

ご清聴ありがとうございました