



Socio-economic context of pension system reforms in CEE countries: Can we find economic explanation for the observed changes in funded pension systems?

dr Agnieszka Chłoń-Domińczak (SGH)

dr Kamila Bielawska (UG)

dr Dariusz Stańko (SGH)

World Bank BBL, Washington, March 6th, 2014

Outline

- Pension reforms and reversals in CEE countries in two decades: from late 1990s until 2013
- Socio-economic context of pension systems:
 - Demography
 - Labour markets
 - Pension systems
- Performance of funded schemes
- Fiscal situation
- Conclusions

Main questions

- Are there convergent or divergent developments with regards to the socio-economic context of pension systems?
- Were pension reversals caused by deteriorating socio-economic conditions, unsatisfactory investment performance or a result of political economy decisions?
- What are lessons learnt from the reform experiences and what is the impact of recent changes for the overall performance of pension systems?

Selected features of pension systems in 8 CEE countries

	Public pension scheme	Retirement age	Mandatory funded contributions	Enactment date	Who participates
Bulgaria	DB	60/55 →63/60	2% ↗ 5%	2002	Mandatory for all workers <42
Estonia	DB	60/55 →63/63	6% (4% +2%)	2002	Mandatory for new entrants
Latvia	Notional accounts	60/55 →62/62	2% ↗ 8%	2001	Mandatory for new and workers < 30, voluntary for 30-50
Lithuania	DB	60/55 →62.5/60	2.5% ↗ 5.5%	2004	Voluntary for current and new workers
Hungary	DB	60/55 →62/62	6% ↗ 8%	1998	Mandatory for new entrants
Poland	Notional accounts	65/60 (60/55) → 67/67	7.3%	1999	Mandatory for new and workers < 30, voluntary for 30-50
Romania	DB	62/57 →65/60	2% ↗ 3%	2008	Mandatory for new and workers < 35, voluntary for 36-45
Slovak Republic	Points	60/53-57 →62/62	9%	2005	Mandatory for born after 1983

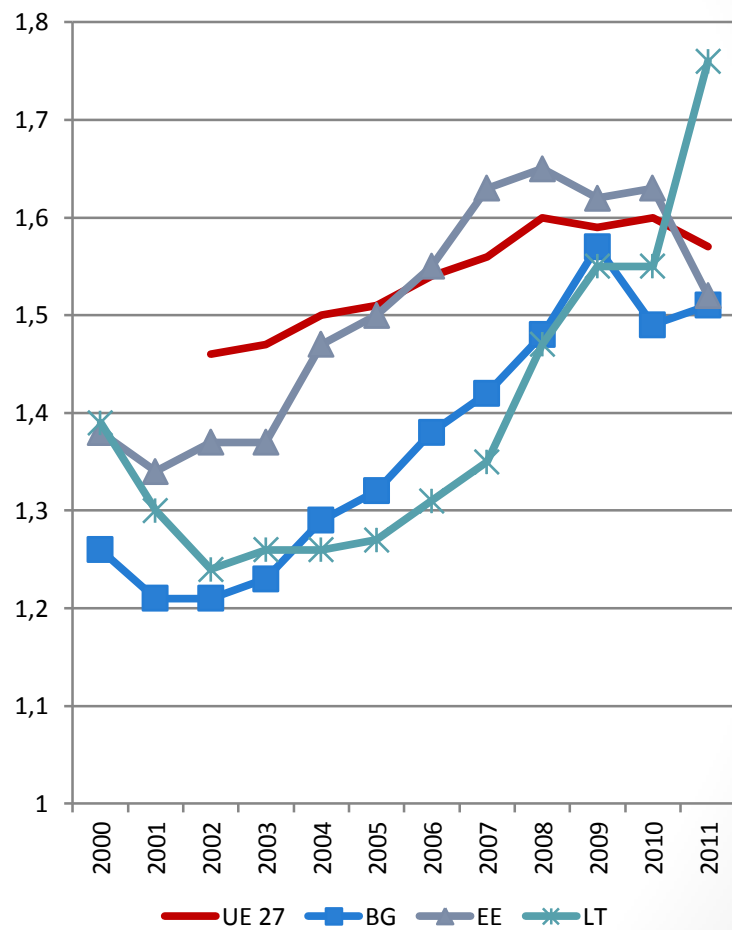
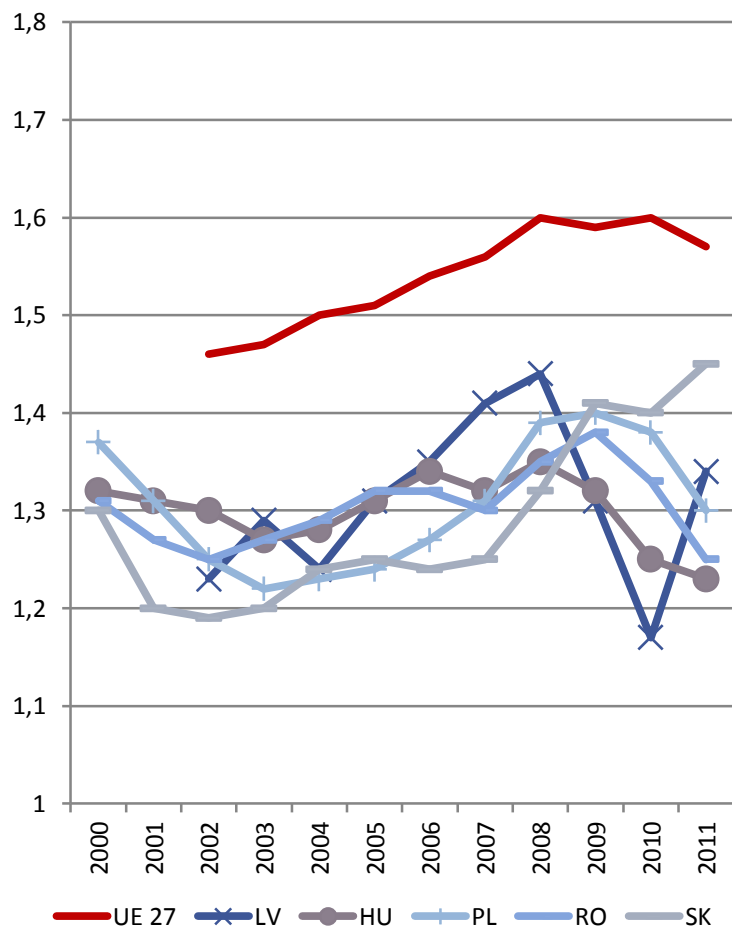
Source: A.Schwartz and O.Arias, *The Inverting Pyramid* (2014)

Changes in funded DC schemes after 2008

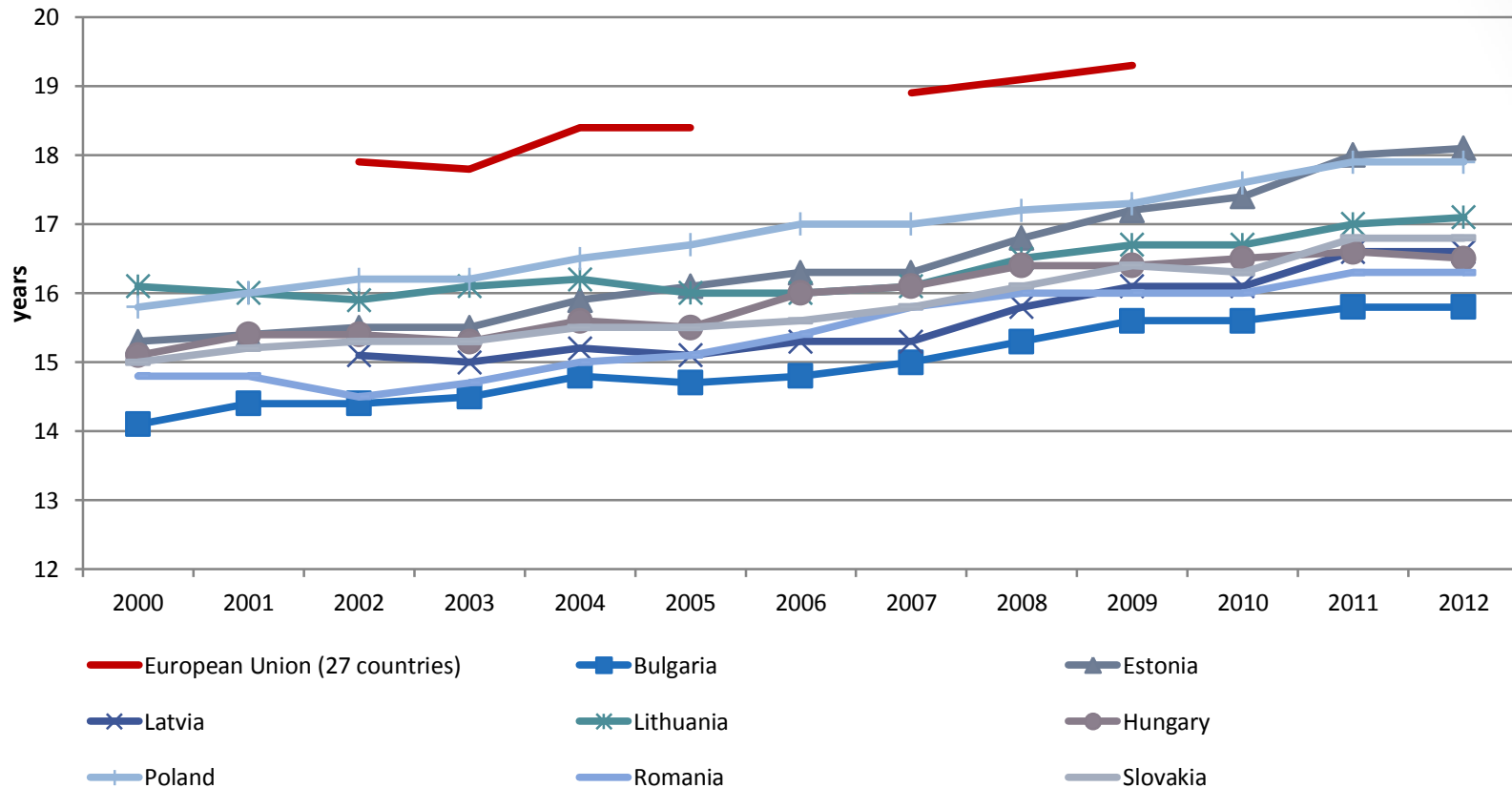
	Reversals
Bulgaria	No change.
Estonia	Temporary reduction with off-set. 6% contribution rate cut to 0% between June 2009 and January 2011 and shifted to PAYG. Gradual increase from 2011. Rate set at 3% in January 2011 and 6% in January 2012. In 2014-2017 at 8% to offset missed contributions
Latvia	Partial reduction. 8% contribution rate reduced to 2% in May 2009. Rates increased to 4% from 2013
Lithuania	Partial reduction. 5.5% contribution rate reduced to 2% in July 2009. Rates further lowered to 1.5% in January 2012 and 2.5% in 2013. Change to 3% (2%+ 1%) January 2014, voluntary participation. Additional contribution at 2% in 2016-2019.
Hungary	Permanent reversal. Contribution rate reduced to 0% in January 2011 assets transferred to the mandatory PAYG system.
Poland	Permanent reduction and partial reversal. Contribution rate reduced to 2.3% in May 2011. From February 2014 contribution at 2.92%, in February 2014 assets invested in government bonds transferred to PAYG scheme and redeemed. In 2014 system made opt-out and opt-in in specified time slots. Assets from FF transferred gradually to PAYG 10 years prior to retirement.
Romania	Temporary reduction. Reduction in planned growth path of contribution rate from 2% to 6%. Rate froze at 2%, started to increase from 2011 at annual rate of 0,5pp.
Slovakia	Permanent reduction. 9% contribution reduced to 4% in 2013. Funded scheme opt-out and opt-in system.

Source: A.Schwartz and O.Arias, *The Inverting Pyramid* (2014) updated by authors

Demography - fertility

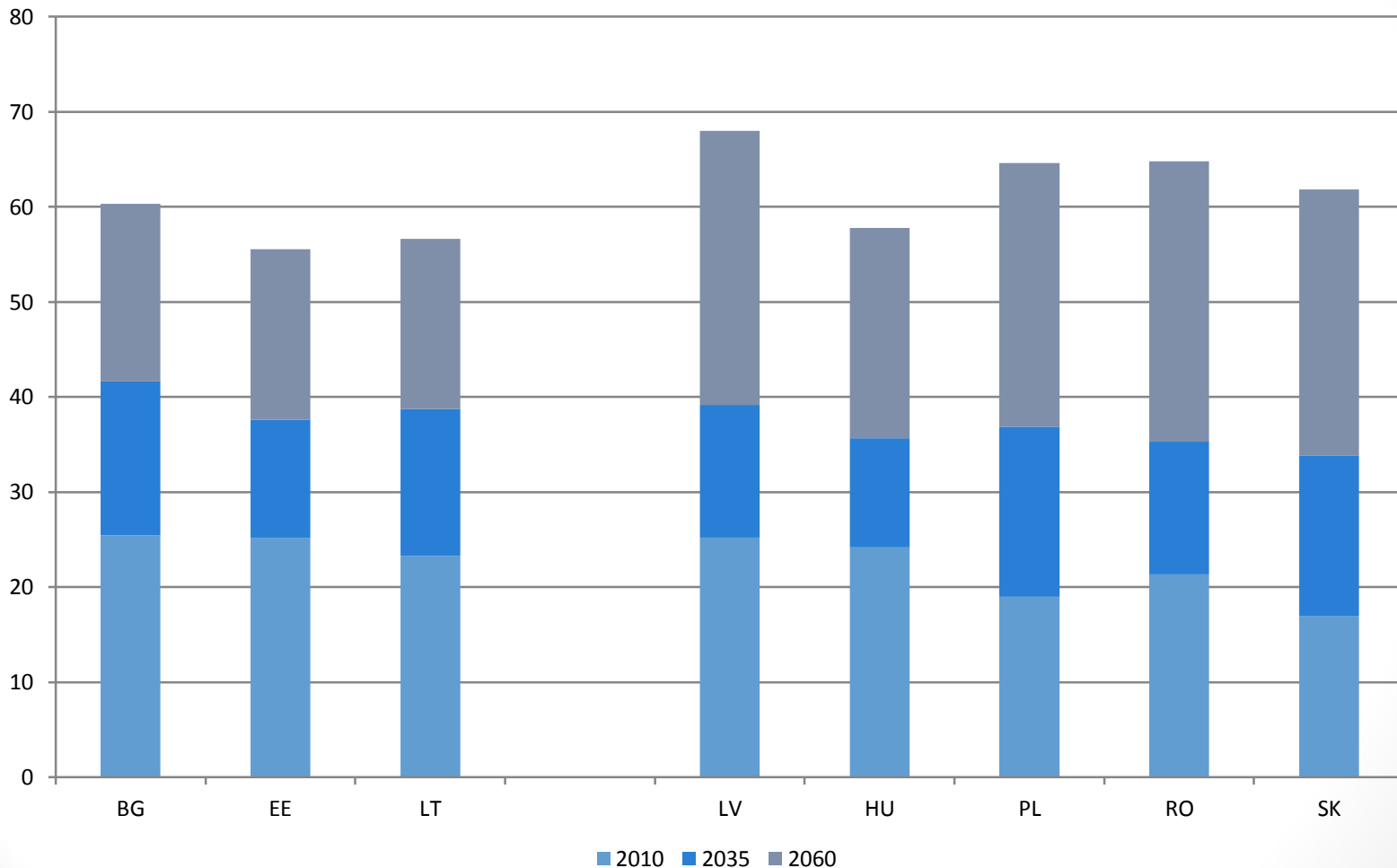


Demography – life expectancy



- Between 2000 and 2012 life expectancy at 65 increased on average by 1.7 years (2.8 years in Estonia and 1 year in Lithuania)
- Increases in retirement age are merely catching up with demographic change

Demography – dependency rate

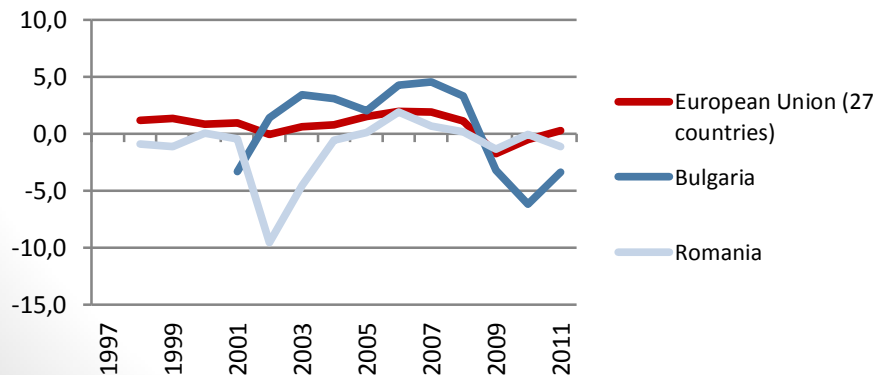
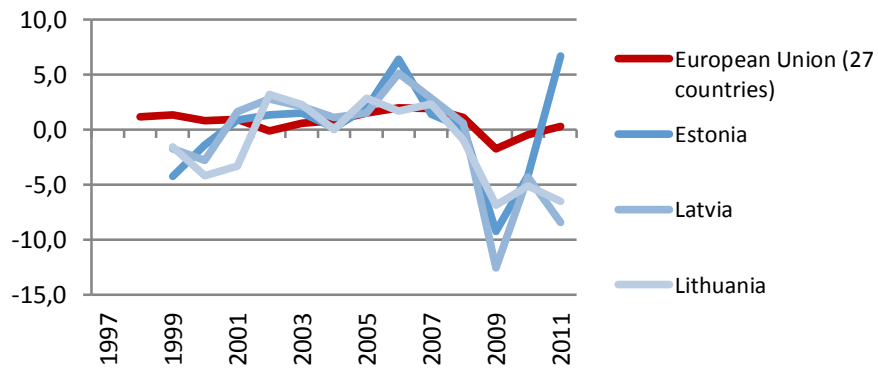
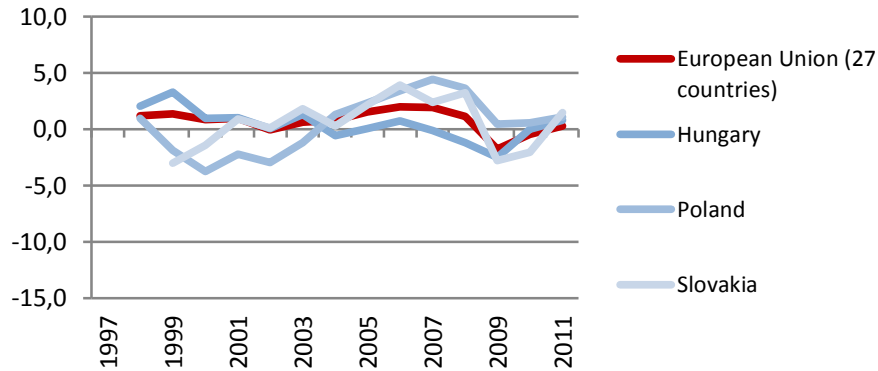


Source: EUROSTAT Population Projection

Demography - summary

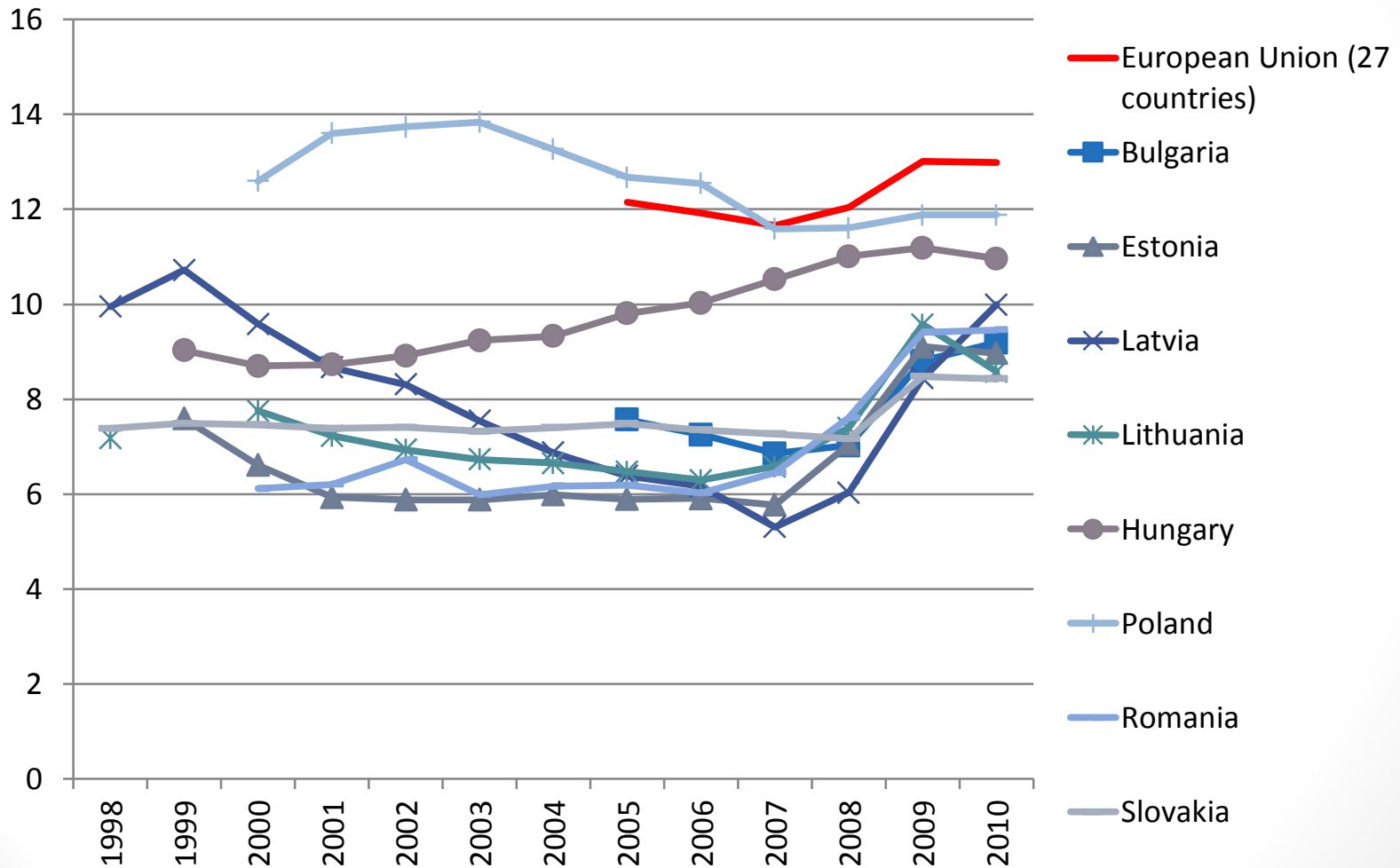
- All CEE countries will face significant increase in demographic dependency rate
- It will be particularly acute in those countries that currently have low fertility levels, after 2035
- Retirement ages remain lower than in „old” EU countries, which is partially explained by shorter lives....
- ... but changes in retirement age are slower than the actual increase of life expectancy

Employment changes



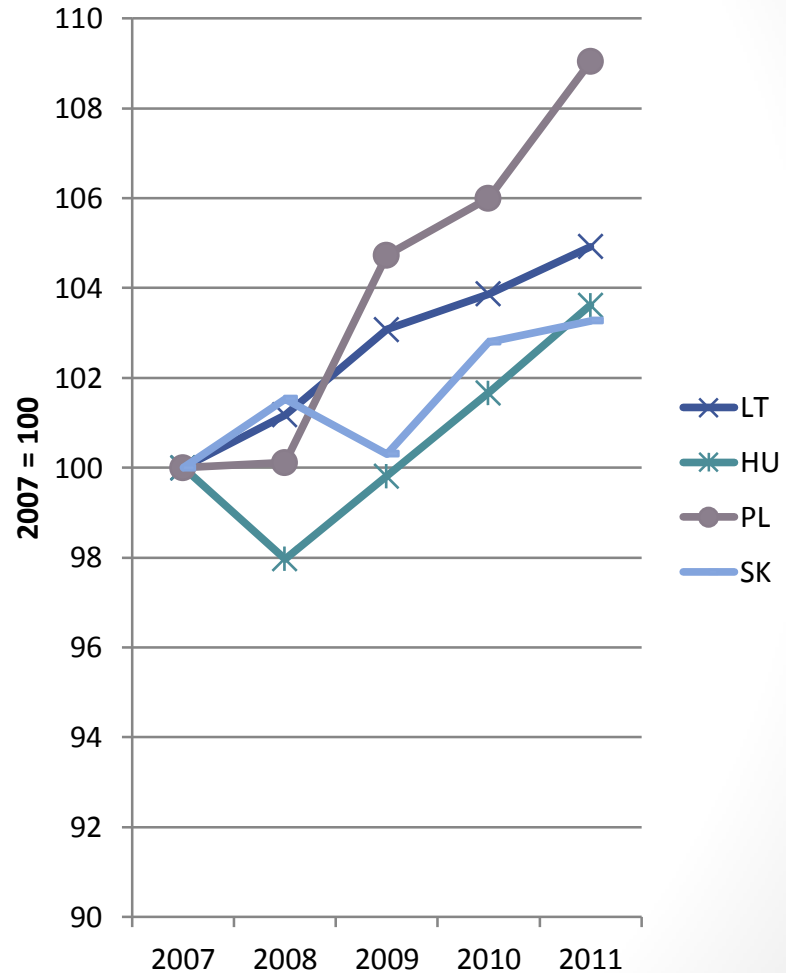
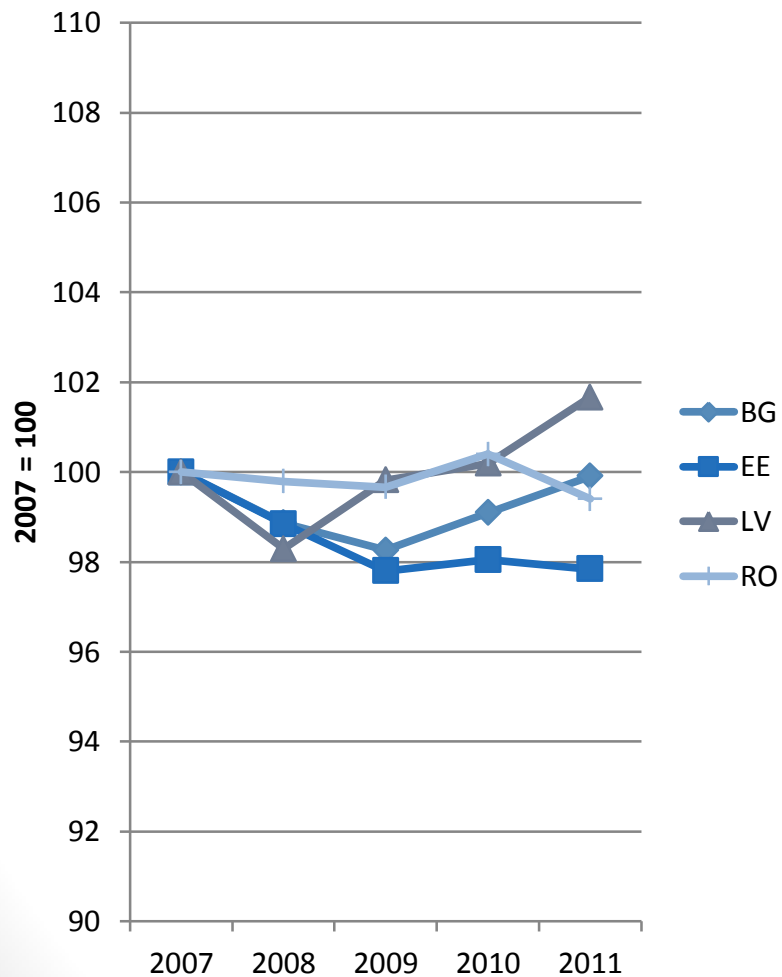
- Divergent labour market developments:
 - Initial decline and later increase in PL and SK
 - Increase and decline in HU
 - Cyclical changes in Baltic countries
- Loss in contribution revenues after the crisis caused by declining employment

Pension expenditure



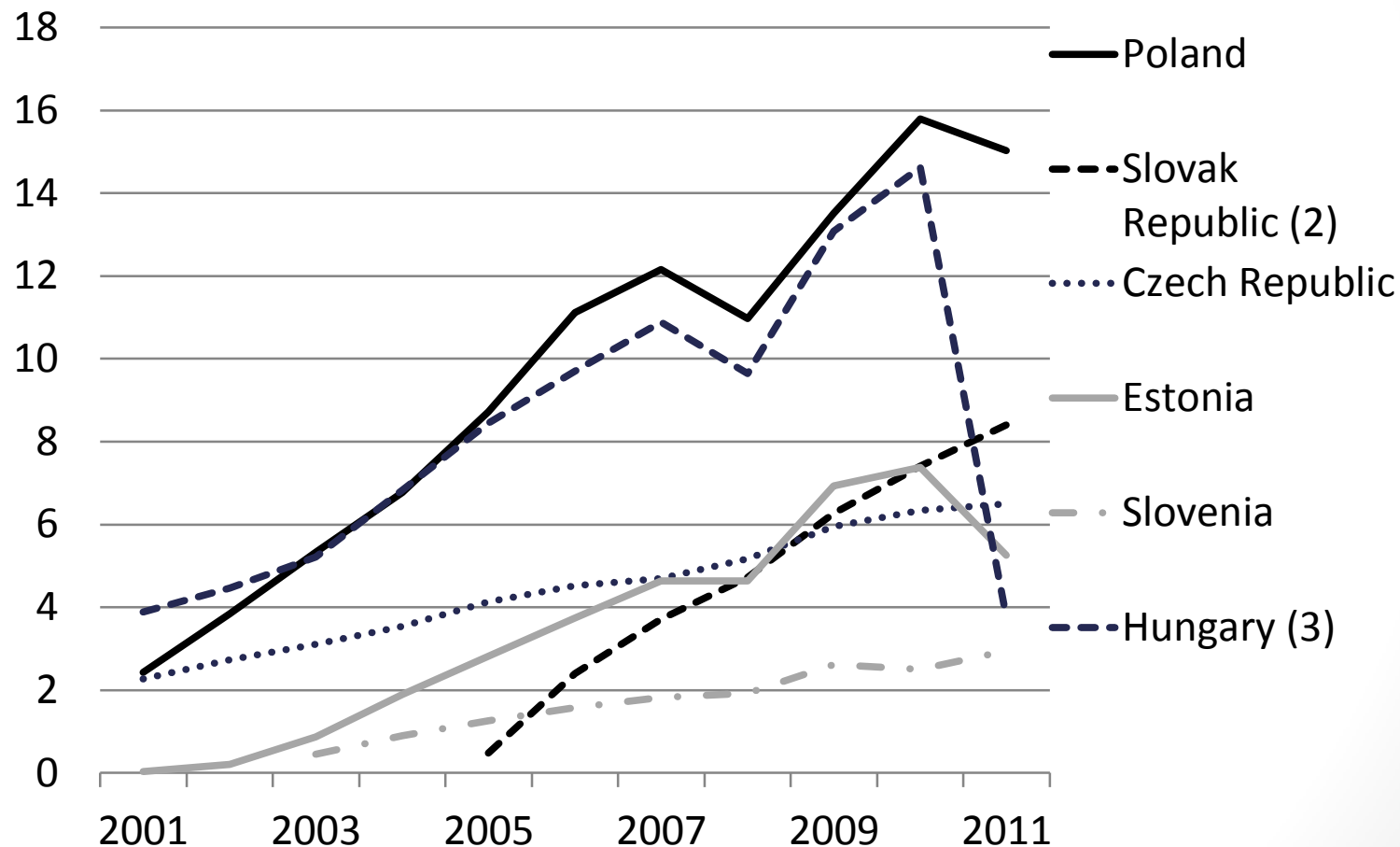
Source: EUROSTAT Espress database

Old-age pensioners



Source: EUROSTAT Espress database

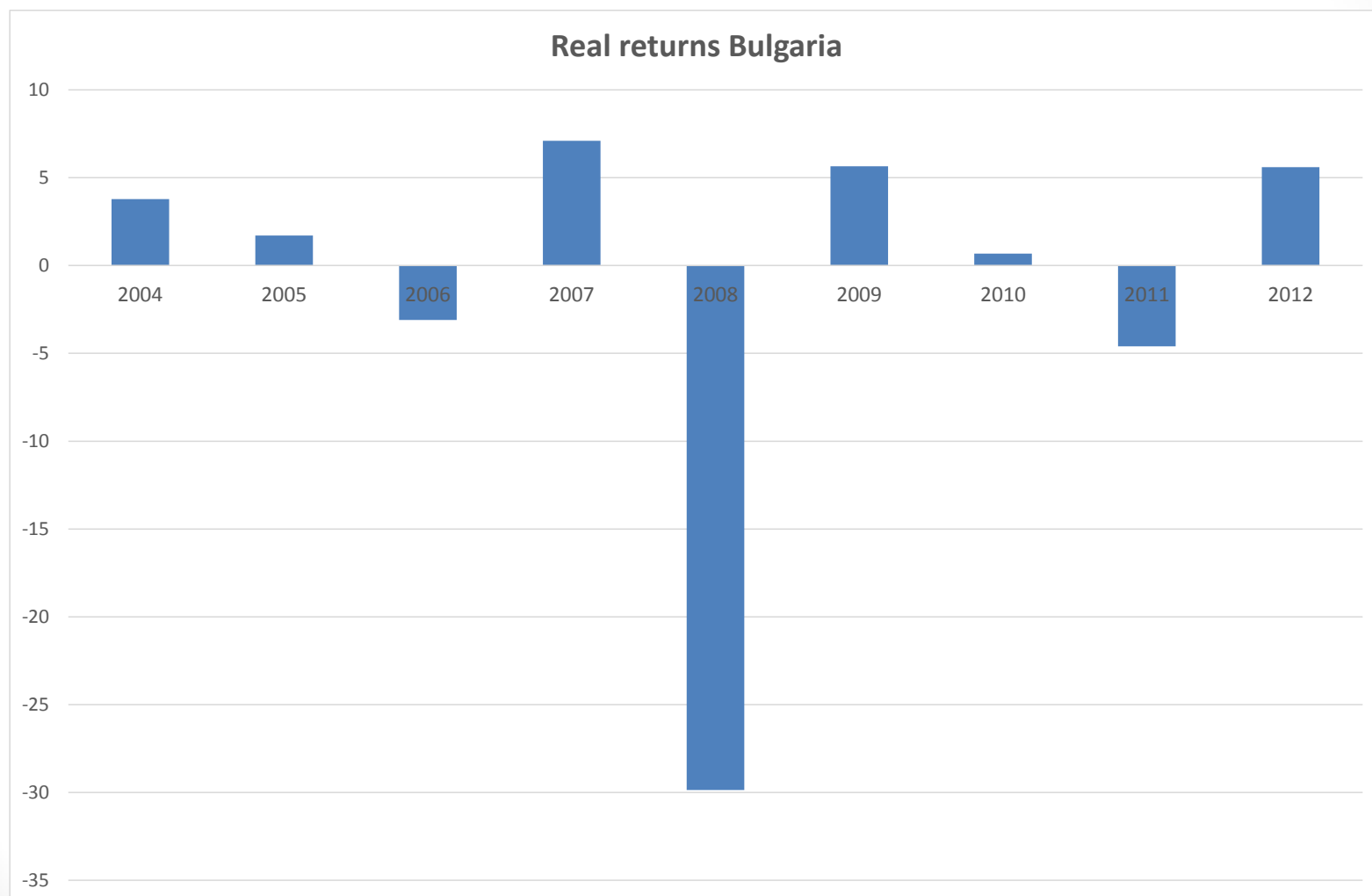
Trends in pension fund assets



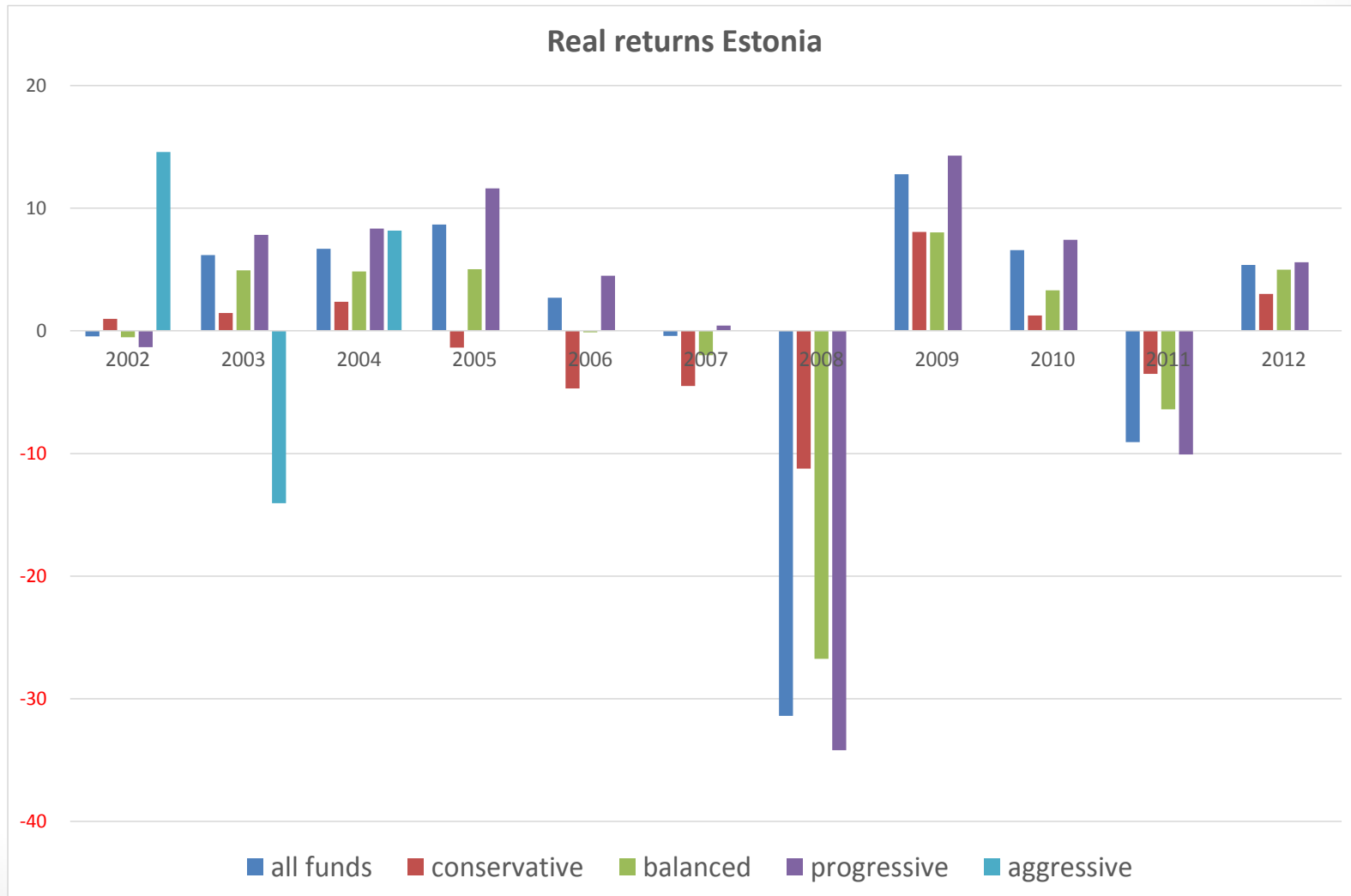
Investment returns in CEE funded pension pillars

Country	Type of funds	Calculated since	Real rate of return (%)		Duration (in years)
			accumulated till 2012	average p.a.	
Bulgaria	mandatory pfs	1.07.2004	-17,67	-2,06	9,33
Estonia	all funds	2.07.2002	-1,01	-0,10	10,50
	conservative	2.07.2002	-9,14	-0,91	10,50
	balanced	2.07.2002	-9,62	-0,96	10,50
	progressive	2.07.2002	3,52	0,33	10,50
	aggressive	1.01.2010	4,92	1,61	3,00
Latvia	conservative	7.01.2003	-11,54	-1,22	10,00
	balanced	7.01.2003	-15,29	-1,65	10,00
	aggressive	7.01.2003	-16,22	-1,75	10,00
Lithuania	conservative	15.06.2004	-7,56	-0,84	9,38
	stable	15.06.2004	0,03	0,00	9,38
	balanced	15.06.2004	-1,99	-0,21	9,38
	aggressive	15.06.2004	-7,72	-0,85	9,38
Hungary	classic	1.01.1998	n/appl.	3,39	7,25
	conservative	22.03.2005	35,66	2,05	15,00
	balanced	22.03.2005	28,73	1,70	15,00
	growth	22.03.2005	11,81	0,75	15,00
Poland	mandatory pfs	1.09.1999	110,48	5,74	13,33
Romania	mandatory pfs	21.05.2008	29,80	5,97	4,50
Slovak Rep.	conservative	22.03.2005	-3,21	-0,42	7,75
	balanced	22.03.2005	-10,33	-1,40	7,75
	aggressive	22.03.2005	-11,96	-1,63	7,75
	indexed	2.04.2012	1,31	1,75	0,75

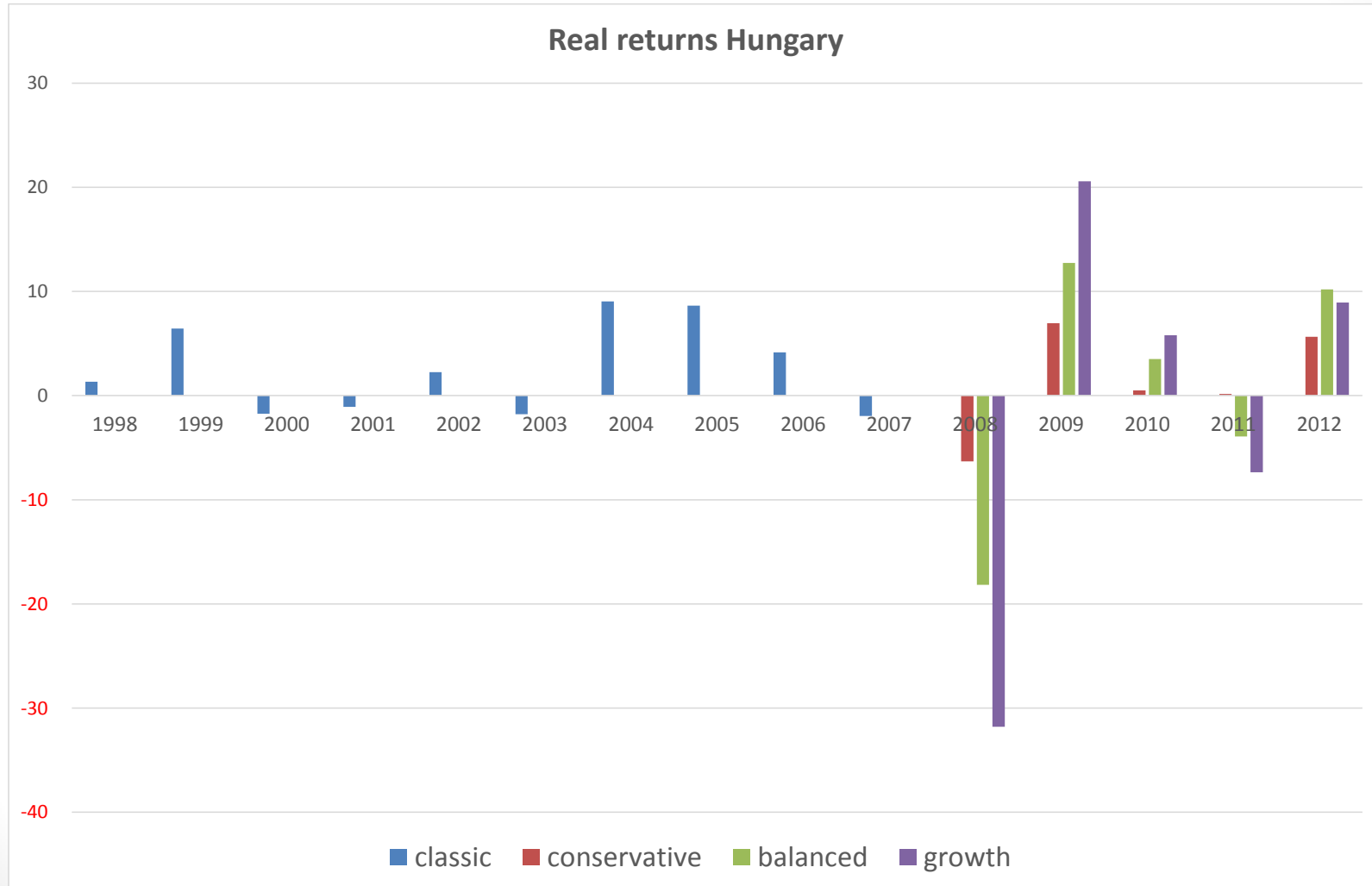
Bulgaria



Estonia



Hungary



Poland

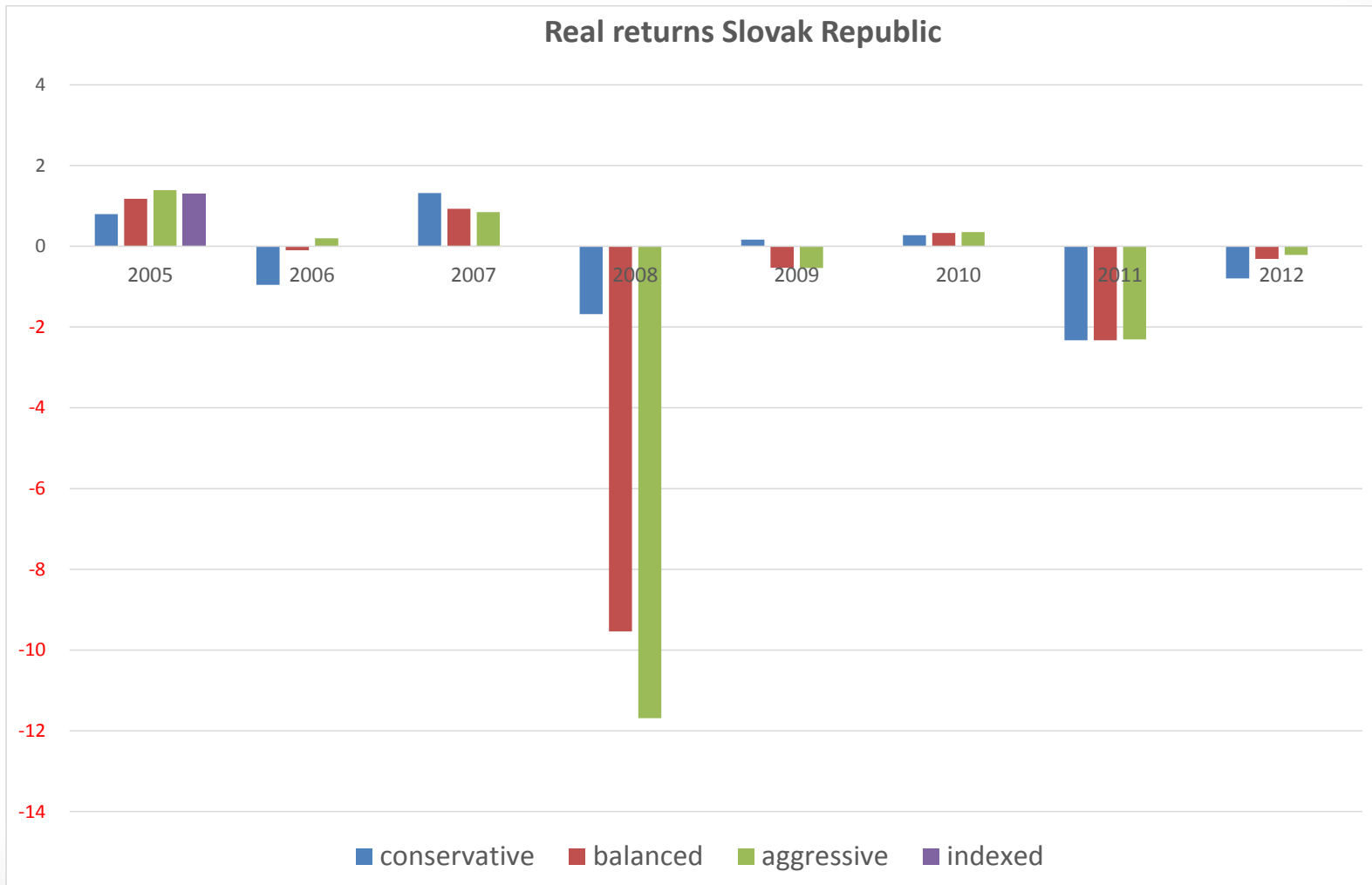


Romania

Real returns Romania



Slovak Republic



Accumulated real returns (investment) in CEE funded pension pillars

- Generally not satisfactory – either minus or low positive values
 - Problem with asset allocation (investment limits, return guarantees, local market capacities)
- Only three funded pension systems with satisfactory results – Hungary, Poland and Romania
 - Actual investment performance cannot serve as a justification for pension reversals done in first two countries

Transition costs (% GDP) before the 2009

Country	Min.	Max.
Hungary	0,2	1,7
Poland	0,3	1,7
Latvia	0,8	1,6
Bulgaria	0,4	0,8
Estonia	0,7	1,5
Lithuania	0,3	0,7
Slovakia	0,6	1,6
Romania	0,2	0,4

The concept of financing the transition costs

- Three sources of covering the transition costs:
 - financing from taxes and other budgetary revenues (burden for working generation),
 - financing from savings in the existing PAYG system (burden for retired generation),
 - through an increase of the general government debt (burden for future generations).

The choice of the source for financing the transition costs is a crucial decision in terms of the reform success or failure.

Planned sources for covering the transition cost in analyzed countries

Country	Increase of GGS revenues (taxes, social security contributions)	Savings in existing I pillar of pension system	Privatization revenues
Hungary		x	
Poland		x	x
Latvia	x	x	
Bulgaria	x	x	
Estonia	x	x	
Lithuania		x	x
Slovakia	x	x	
Romania	x	x	

	2004	2005	2006	2007	2008	2009	2010	2011	2012
General government deficit/surplus (% of GDP)									
Hungary	-6,5	-7,9	-9,4	-5,1	-3,7	-4,6	-4,3	4,3	-1,9
Poland	-5,4	-4,1	-3,6	-1,9	-3,7	-7,4	-7,9	-5,0	-3,9
Latvia	-1,0	-0,4	-0,5	-0,4	-4,2	-9,8	-8,1	-3,6	-1,2
Bulgaria	1,9	1,0	1,9	1,2	1,7	-4,3	-3,1	-2,0	-0,8
Estonia	1,6	1,6	2,5	2,4	-2,9	-2,0	0,2	1,2	-0,3
Lithuania	-1,5	-0,5	-0,4	-1,0	-3,3	-9,4	-7,2	-5,5	-3,2
Slovakia	-2,4	-2,8	-3,2	-1,8	-2,1	-8,0	-7,7	-5,1	-4,3
General government debt (% of GDP)									
Hungary	59,5	61,7	65,9	67,0	73,0	79,8	81,8	81,4	79,2
Poland	45,7	47,1	47,7	45,0	47,1	50,9	54,8	56,2	55,6
Latvia	15,0	12,5	10,7	9,0	19,8	36,9	44,4	41,9	40,7
Bulgaria	37,0	27,5	21,6	17,2	13,7	14,6	16,2	16,3	18,5
Estonia	5,0	4,6	4,4	3,7	4,5	7,2	6,7	6,2	10,1
Lithuania	19,3	18,3	17,9	16,8	15,5	29,3	37,9	38,5	40,7
Slovakia	41,5	34,2	30,5	29,6	27,9	35,6	41,0	43,3	52,1

Economic and fiscal situation of CEE countries after reform implementation

Specification	Country
Economic slowdown or recession in years following reform implementation	Poland (2000 – 2001) Romania (2009 – 2010)
GGS deficit above 3% GDP	Poland, Hungary
GGS deficit close to 3% GDP	Slovakia
GGS deficit below 3% GDP or GGS surplus	Latvia, Bulgaria, Estonia, Lithuania, Romania

Expectations and facts about financing transition costs

- In all countries transition costs were higher than expected (highest difference in Hungary) ...
- ... but were not the main drivers of GGS excessive deficits
- Expected privatization revenues were used also for other purposes
- Only few countries successfully implemented changes in existing PAYG part of pension system in line with reform projections (Estonia, Bulgaria, Latvia)
- Reasonable fiscal policy was run by countries with tight national fiscal rules

Summary – context of reform reversals

	Fertility	Dependency rate	Employment	Pension expenditure	Pensioners	Performance of funded pillar	Government deficit	Government debt	Pension system changes after crisis
Bulgaria	-	-	+	-	+	-	-	+	no change
Estonia	-	-	+	-	+	-	+	+	Temporary reduction with off-set
Latvia	--	--	-	-	-	-	--	-	Partial reduction
Lithuania	-	-	--	-	+	-	--	-	Partial reduction
Hungary	--	-	-	--	-	+	-	--	Permanent reversal
Poland	--	--	++	--	-	+	--	--	Permanent reduction and partial reversal
Slovakia	--	--	++	-	-	-	--	--	Permanent reduction

Conclusions

- Each of the analysed countries is characterised by different combination of socio-economic factors taken into account
- Reversals of pension reforms were caused by a set of socio-economic factors, including most importantly
 - poor fiscal situation
 - rising pressure from current pension system expenditure
- Countries that introduced permanent changes also faced pressures from rising expenditure and number of beneficiaries in the pension system
- Performance of pension funds had little impact on reversal decisions
- Permanent reversals and reductions were made in countries with highest demographic pressures foreseen in next decades

Thank you

Research included in this presentation was financed from research grant number UMO-2012/05/B/HS4/04206 from National Science Centre in Poland