
9. Penzijní reformy (ve východní Evropě)

9.1. Smysl reforem

Parametry penzijního systému

- náklady (podíl soukromých+veřejných výdajů na HDP) → příspěvková sazba
- typologie (veřejný x soukromý; průběžný x fondový)
- efektivita (podíl chudoby mezi starými?); pokrytí (% pojištěné populace)
- průměrný náhradový poměr; zásluhovost (vazba mezi příspěvkem a dávkami)
- věk odchodu do důchodu → vliv na trh práce
- saldo důchodového pojištění (deficit x přebytek)
- odlišné prognózy populačního stárnutí

→ PENZIJNÍ SYSTÉMY JSOU MIMOŘÁDNĚ HETEROGENNÍ

Nutnost reformy?

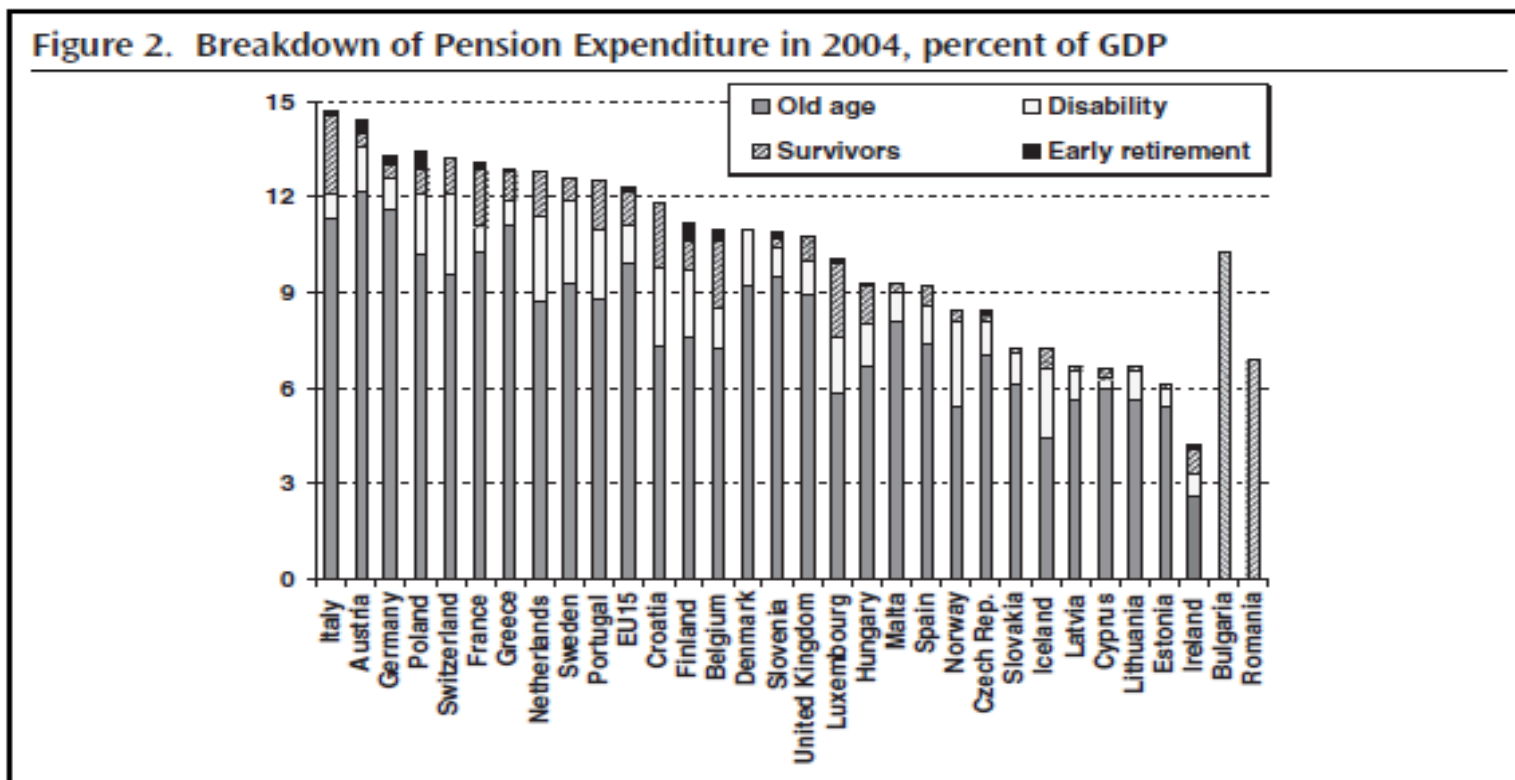
1. Co je špatné na existujícím systému?
2. Co je cílem reformy?
3. Jaká jsou rizika implementace?

Proč reformovat evropské penzijní systémy?

- snížení (veřejných) výdajů na penze?
 - zvýšení zásluhovosti?
 - vyrovnaní příjmů a výdajů PS?
 - boj s důsledky populačního stárnutí?
 - protože „všichni“ tvrdí, že je nutné reformovat?
 - diverzifikovat riziko?
-

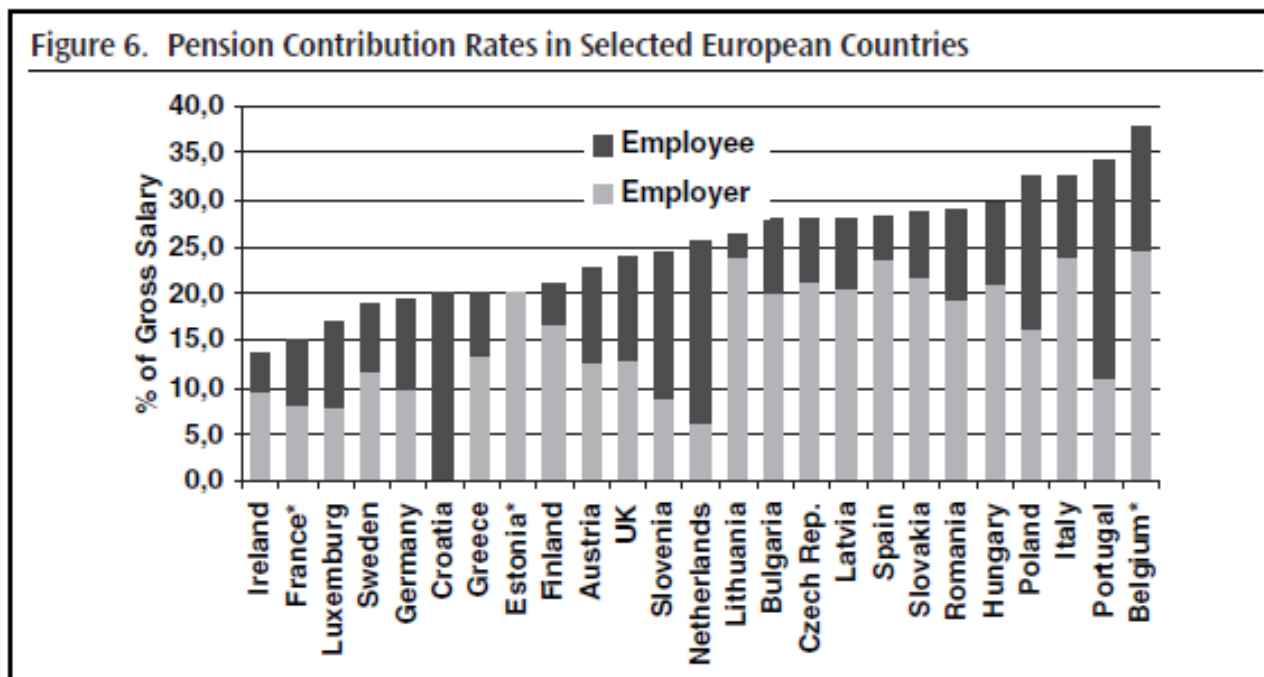
1: Podíl penzijních výdajů na HDP

2: Skladba penzijních výdajů

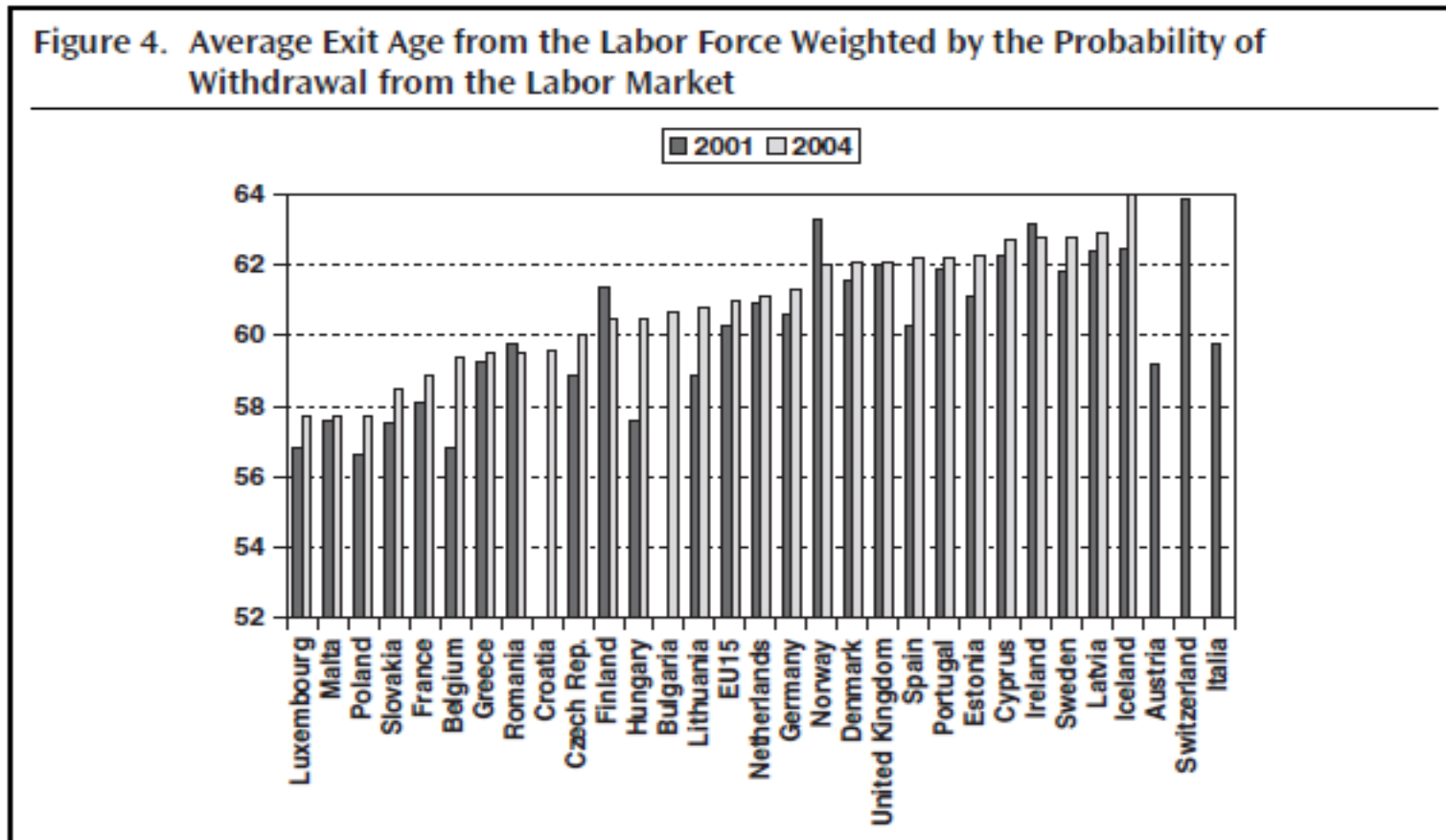


Source: Eurostat; based on LFS.

3: Příspěvková sazba



4: Věk odchodu z trhu práce



Source: Eurostat; based on LFS.

Zdroj: WorldBank (2008)

5: Valorizace (indexace) důchodů

Table 6. Indexation of Pensions in Selected European Countries

Country	Prices	Gross Earnings	Net Earnings	Mixed		Other
				Prices	Earnings	
Austria						Discretionary
Belgium	X					
Denmark						Discretionary
Finland				80	20	
France	X					
Germany			X			
Iceland						Min. of price or earnings
Ireland	X					
Italy	X					
Luxembourg	X					
Netherlands		X				No legal requirement
Spain	X					
Sweden						Gross earnings less growth norm of 1.6%
Switzerland				50	50	
United Kingdom	X					
Czech Republic*				100	33	
Estonia				50	50	
Hungary				50	50	
Latvia				50	50	
Lithuania**	X					Discretionary
Poland	X					Discretionary (from 2008 to be amended to mixed indexation)
Slovak Republic				50	50	
Slovenia			X			
Bulgaria				50	50	
Romania	X					
Croatia				50	50	

Zdroj: WorldBank (2008)

Dva typy penzijních reforem

a) Parametrické

$$PŘÍJMY = VÝDAJE$$

$$t \bullet Nw \bullet w = Nb \bullet B$$

b) Systémové

- NDC (notional defined contributions)
 - zavedení fondového pilíře
-

Parametrické reformy

Table 1: Countries that made parametric reforms between 1995/96 and 2005

Retirement Age	Contribution Rate	Contribution Requirement	Benefit Indexation	Pension Formula
Austria	Czech Rep.	Austria	Austria	Austria
Belgium	Denmark	Belgium	Germany	Belgium
Cyprus	Finland	Czech Rep.	Greece	Czech Rep.
Czech Rep.	Germany	Denmark	Hungary	Finland
Denmark	Hungary	Finland	Spain	France
Estonia	Ireland	France	Slovak Rep.	Greece
Finland	Italy	Germany		Hungary
Germany	Latvia	Ireland		Italy
Greece	Lithuania	Italy		France
Hungary	Malta	Slovak Rep.		Luxembourg
Italy	Netherlands	Slovenia		Portugal
Latvia	Portugal	Spain		Slovak Rep.
Lithuania	Slovak Rep.			Slovenia
Portugal	U.K.			Spain
Slovak Rep.				U.K.
U.K.				

Source: Based on analysis of 'Social Programmes throughout the World', various editions, and 'MISSOC Tables', various years; International Social Security Association (2006).

Systemové reformy

Table 2: Countries that have made systemic reforms

NDC	Funded Second tier of mandatory scheme	NDC First tier of mandatory scheme
Italy	Estonia Hungary Latvia Lithuania (voluntary) Poland Slovak Rep. Slovenia (supplementary) Sweden	Sweden Latvia Poland

Source: Based on analysis of European Commission (2006).

DB → DC

Defined-benefit (DB) pension. A pension in which the benefit is determined as a function of the worker's history of pensionable earnings. The formula may be based on the worker's final wage and length of service, or on wages over a longer period, for example the worker's full career. Full matching of funds and obligations is in principle preserved by adjusting funds to meet anticipated obligations.

Defined-contribution (DC) pension. A pension in which the benefit is determined by the value of assets accumulated in the worker's name over his or her career. The benefit may take the form of a lump sum, or a series of payments, or an annuity, but in all cases is determined by the size of worker's lifetime pension accumulation. Full matching of funds and obligations is in principle preserved by adjusting obligations to available funds.

NDC

NDC = A recent innovation internationally, notional defined-contribution plans parallel traditional defined-contribution plans in the sense that a pension entitlement is accumulated, but differ from a funded system in two important respects:

- a) the interest rate is set by government rules (NDC plans are public programs), not market returns
- b) the accumulation is only notional, in that the system is not fully funded and may be entirely PAYG

Zdroj: Barr-Diamond: Reforming pensions (2008)

Švédská reforma (1998)

Sweden is one of few countries in Europe to have introduced a comprehensive pension reform. In 1998, Sweden passed legislation that transformed its public pension system to a notional defined-contribution (NDC) plan— that is, a defined-contribution plan financed on a pay-as-you-go basis. In addition, a second tier of funded individual accounts was introduced. The reform had broad political support with more than 80 per cent of the votes in parliament.

A. Sundén. The Swedish Experience with Pension Reform. Oxford Review of Economic Policy 2006 22(1):133-148

Povinný fondový pilíř

Model Světové Banky

- 1) Veřejný PAYG DB pilíř
- 2) Soukromý fondový DC pilíř (povinný)
- 3) Dobrovolné soukromé připojištění

Chilská reforma (1981)

70-léta; Chile → velké množství DB PAYG systémů, nespolehlivé dávky, velké rozdíly mezi pojistnými plány

1981 → zavedení povinného fondového pilíře pro zaměstnance

2009 → hodnocení: nejednoznačné

8.2. Penzijní reformy ve východní Evropě

Zdroj: Kasek-Laursen-Skrok: Sustainability of Pension Systems in the New EU Member States and Croatia. WorldBank WP 128/2008

Demografie a trh práce ve východní Evropě

Table 5. Basic Demographic and Labor Market Characteristics by Gender

	Life Expectancy at Age of 60 (2003)		Average Exit Age from the Labor Force (2004)		Employment Rate 15–64 (2005)		Ratio of Estimated Female to Male Earned Income (HDR 2005)
	Men	Women	Men	Women	Men	Women	
Czech Rep.	17.3	21.4	61.3	58.9	73.3	56.3	0.64
Estonia	15.4*	21.3*	n.a.	n.a.	67.0	62.1	0.64
Hungary	15.9	20.8	60.3	60.7	63.1	51.0	0.62
Lithuania	16.2	21.9	n.a.	n.a.	66.1	59.4	0.68
Latvia	15.4	20.6	n.a.	n.a.	67.6	59.3	0.62
Poland	17.1	22.0	60.0	55.8	58.9	46.8	0.62
Slovenia	17.9	23.1	n.a.	n.a.	70.4	61.3	0.62
Slovakia	16.4	21.0	60.3	57.0	64.6	50.9	0.65
Bulgaria	16.1	19.9	62.1	59.5	60.0	51.7	0.67
Romania	16.3	20.0	60.4	58.8	63.7	51.5	0.58
Croatia	16.2**	20.7**	n.a.	n.a.	61.8***	47.8***	0.56

Zdroj: WorldBank (2008)

Situace v postkomunistické Evropě

- Pokles porodnosti, prodlužování délky života (populační stárnutí + demografická dividendy)
 - Všechny země východní Evropy prováděly parametrické reformy
 - Většina z nich však zašla dále a odklonila část příspěvků do fondových soukromých fondů
 - Přesun do nového systému je obvykle povinný pro mladší ročníky
-

Skladba penzijních systémů ve východní Evropě

Table 2. Structure of Pension Systems in the EU10+1 Countries

	Main Reforms	Statutory Schemes	
		PAYG	
		Financed from Social Security Contributions and Taxes	Funded
Czech Republic	1993–1995, 2003	DB	None
Estonia	1993, 1999–2002	DB, similar to German system	Mandatory fully funded DC (2002)
Hungary	1998	DB	Mandatory fully funded DC (1999)
Latvia	1995, 1998, 2000	NDC based	Mandatory fully funded DC (2001)
Lithuania	1995, 2003–2004	DB, flat-rate & earnings-related part	Voluntary fully funded DC (2004)
Poland	1998	NDC based	Mandatory fully funded DC (1999)
Slovenia	3 pillar reform rejected 1999, existing pillar strengthened thereafter	DB	None
Slovakia	1993, 2004	DB, Points accumulation system	Mandatory fully funded DC (2004)
Bulgaria	2000	DB, individual point accumulation system	Mandatory fully funded DC (2002)
Romania	2001	DB, individual point accumulation system	Mandatory fully funded DC (planned)
Croatia	1999–2002	DB, earnings related (for those only in PAYG); DB, half of the benefit is flat, years service related & second half earnings related (for those in PAYG and second pillar)	Mandatory fully funded DC (2002)

Proč východní Evropa systémově reformovala?

„The introduction of such mixed systems has been motivated mainly by **risk diversification** (spreading of wage bill and political risk to include financial market risk), but also the provision of **greater incentives to contribute** through a closer link between contributions and benefits, **increased individual choice, capital market development and expected higher rates of return.**“

„It is also sometimes hoped that the inflow of pension funds portfolio invested in private equities will boost aggregate investment rates, and improves prospects for economic growth rate in the future.“

Náklady reformy....

*„At the same time, the switch from pure PAYG to mixed systems involves **greater individual risks** (investment risk), potentially **higher transaction costs** (fees to fund managers), and **transition costs** to the PAYG systems as part of contributions are diverted to private savings and partially invested in non-governmental financial instruments while current pensioners must still be fully financed from the PAYG system.“*

Časování reformy...

„The countries which have adopted mixed systems have sought to limit these transition costs through making the switch mandatory only for younger people and phasing in gradually higher contribution rates to the funded pillar.

For example, Hungary began the funded pillar with a 6 percent contribution rate compared to the current 8 percent.

Given the concern in the EU10+1 countries for maintaining fiscal discipline, none of the countries opted for an immediate or complete shift to the second pillar such as Mexico or Kazakhstan did.“

Základní charakteristika smíšených (reformovaných) systémů

Table 3. Basic Characteristics of Mixed Old-age Pension Systems

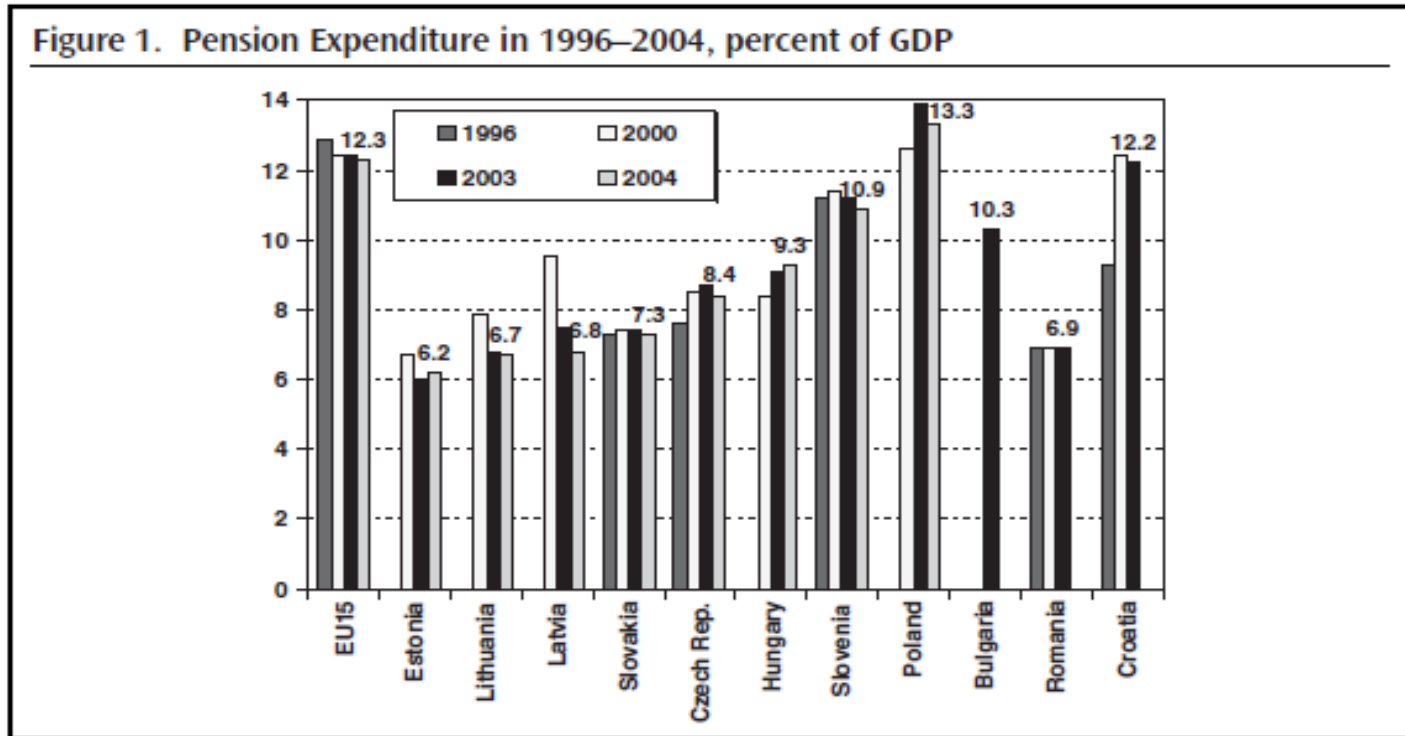
Country	Total Contributions	First Pillar	Funded	Starting Date	Type of Pension
Hungary	26.5	18.5	8.0	1998	Mandatory
Poland	19.52	12.22	7.30	1999	Mandatory (< 30)
Latvia	20.0	18.0, gradually decreasing to 10.0 by 2010	2.0, gradually rising to 10.0 by 2010	2001	Mandatory (< 30)
Estonia	22.0	16.0	6.0 (of which 4 come from PAYG contribution)	2002	Mandatory (< 18)
Lithuania	26.0	22.5, gradually decreasing to 20.5 by 2007	3.5, gradually rising to 5.5 by 2007	2004	Optional 2. pillar
Slovakia	18.0	9.0	9.0	2005	Mandatory (< 18)
Bulgaria	32.0	27.0	5.0	2002	Mandatory (< 42)
Romania	29.25	29.25	2.0 gradually rising to 6.0 by 2012	Expected in 2008	Mandatory (< 35)

Zdroj: WorldBank (2008)

Hodnocení penzijních reforem

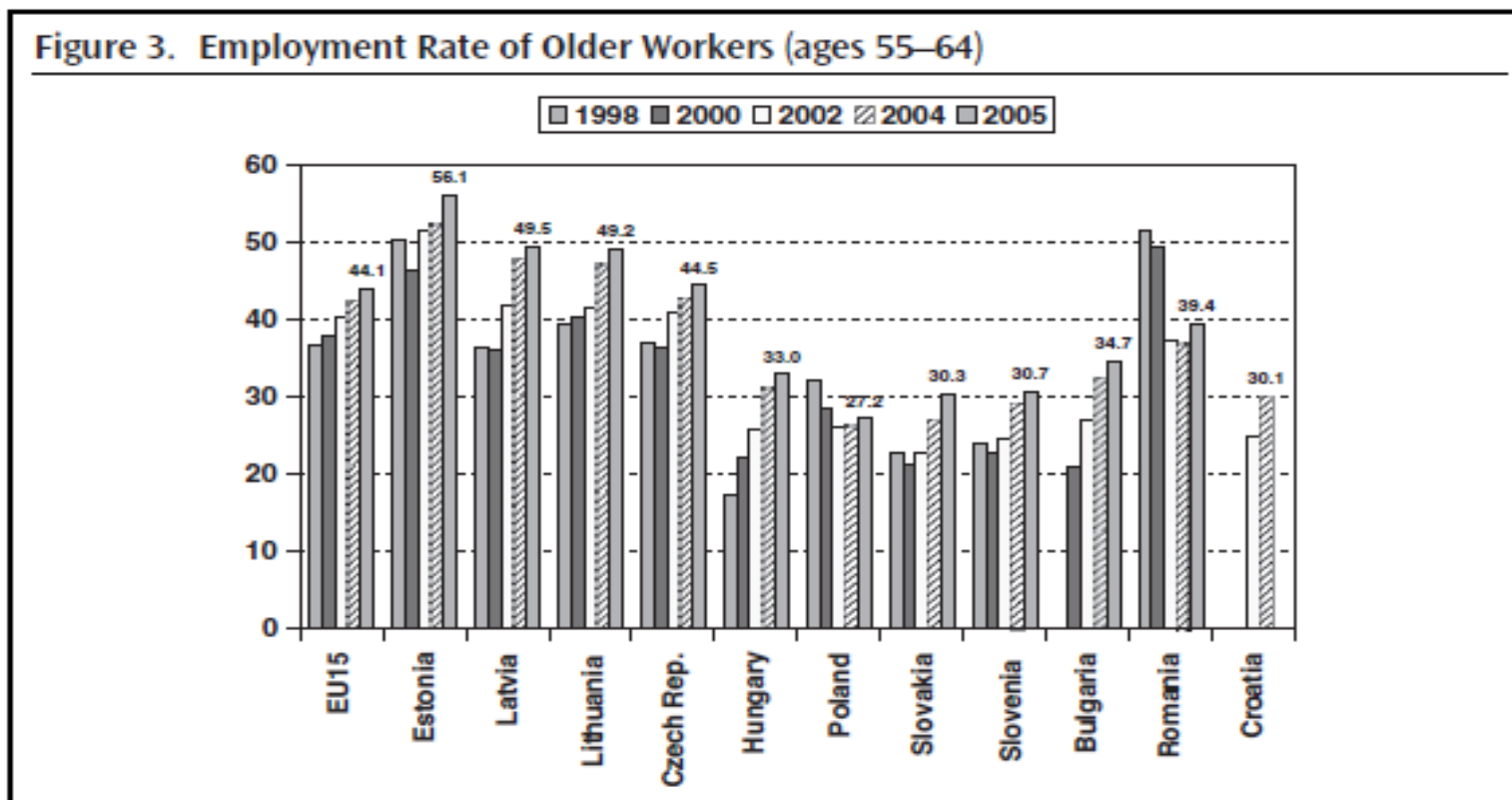
1. Co bylo cílem reformy?
 2. Jak úspěšně byla implementována?
 3. Jaké jsou její dopady na základní parametry PS?
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1: Dopad na výši penzijních výdajů



Source: Eurostat. For BG, RO and HR—national agencies.

2: Dopad na míru zaměstnanosti starších pracovníků



Source: Eurostat; based on LFS.

3: Dopad na náhradový poměr

Table 4. Gross Replacement Rates in Mid-1990s and Mid-2000s, Percent

	Gross Replacement Rates			
	Year		Year	
Czech Rep.	48.6	1996	40.7	2005
Estonia	25.0	1995	28.8	2005
Hungary	57.9	1996	39.8	2005
Latvia	62.8	1994	33.1	2005
Lithuania	n.a.	—	30.9	2005
Poland (1)	55.4	1995	51.6	2004
Slovakia	42.5	1994	44.7	2005
Slovenia	68.7	1996	44.3	2005
Bulgaria	31.0	1995	42.9	2004
Romania	43.1	1994	27.6	2005
Croatia	48.6	1997	32.4	2005

Křížové dotace pro OSVČ

	2003	2004	2003	2004	2003	2004
	Employers' Actual Social Contributions		Employees' Social Contributions		Social Contributions by Self- and Non-employed Persons	
% of Total SSC						
Czech Republic	69.7	69.2	24.4	24.2	5.9	6.7
Estonia	97.3	97.4	2.7	2.6	0.0	0.0
Latvia	73.3	71.1	22.4	24.8	4.3	4.1
Lithuania	90.0	89.8	8.7	9.0	1.3	1.3
Hungary	72.5	72.4	27.1	27.0	0.5	0.6
Poland	37.1	37.6	45.0	45.9	18.0	16.5
Slovenia	38.0	38.0	52.6	52.6	9.4	9.4
Slovakia	67.4	64.8	22.2	23.6	10.5	11.6
Bulgaria	73.0	72.0	19.0	19.0	5.0	5.0
Romania	65.0	n.a.	32.9	n.a.	2.1	n.a.
Croatia	n.a.	0.0	n.a.	92.0	n.a.	8.0
% of Total Employment	Employers		Employees		Self-employed	
Czech Republic	4.1	4.2	84.4	83.3	11.5	12.5
Estonia	2.7	2.9	92.4	91.4	4.8	5.7
Latvia	3.4	3.3	90.1	90.4	6.5	6.3
Lithuania	2.1	2.3	82.8	82.4	15.1	15.3
Hungary	5.3	5.2	86.7	87.1	8.0	7.7
Poland	4.0	4.0	76.0	76.9	20.0	19.0
Slovenia	3.7	3.3	88.3	89.6	8.0	7.1
Slovakia	2.4	2.8	91.4	90.3	6.1	6.9
Bulgaria	3.6	3.9	86.6	86.7	9.8	9.5
Romania	1.6	2.0	73.1	76.4	25.3	21.7
Croatia	5.0	5.3	78.8	78.6	16.2	16.1

Source: Eurostat; and staff calculations.

Zdroj: WorldBank (2008)

Výnosy soukromých fondů

Czech Republic	non-weighted, net	1.1	1996–2004
Estonia	internal real rate of return	2.6	2002–2004
Hungary	non-weighted, net	2.9	1998–2004
	weighted, net	1.5	
Latvia	internal real rate of return	1.7	2001–2004
Poland	weighted	4.8	1999–2004
Slovakia	non-weighted	1.8	2005
Slovenia	non-weighted	0.9	2003–2004
Bulgaria	weighted	5.9	2002–2004
Croatia	weighted	6.6	2002–2004

Výnosnost penzijních systémů

Table 9. Implicit Individual IRR of the Pension Systems in the EU10+1 Countries, 2006

Data	Czech Rep.	Estonia	Hungary	Latvia	Lithuania	Poland	Slovakia	Slovenia	Bulgaria	Romania	Croatia
Overall pension contribution rate, % (2006)	28,00	20,00	26,50	28,07	26,10	32,52	28,75	24,35	28,00	29,00	20,00
Normal pension age (men), years	63	63	62	62	63	65	62	65	63	63	65
Life expectancy at the retiring age (men), years	15	14	15	14	14	14	15	14	14	14	13
Anticipated replacement rates (Whitehouse, 2007)	44,4%	51,6%	75,4%	58,2%	53,4%	56,9%	48,6%	44,3%	49,7%	43,7%	38,4%
Assumptions											
Real earnings growth (per year)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Price inflation (per year)	2,5%	2,5%	2,5%	2,5%	2,5%	2,5%	2,5%	2,5%	2,5%	2,5%	2,5%
Real rate of return on defined-contribution pensions	3,5%	3,5%	3,5%	3,5%	3,5%	3,5%	3,5%	3,5%	3,5%	3,5%	3,5%
IRR	-0,48%	-0,04%	1,15%	-0,61%	-1,10%	-1,50%	-0,90%	-0,52%	-1,28%	-2,33%	-1,35%

Note: The overall contribution rates include old-age, invalidity/disability, and survivors' pensions and other special contributions. In case of Estonia, IRR is overestimated because the overall pension contribution rate does not include invalidity pension (it is under overall contribution for sickness and maternity).

Source: MISSOC Database, CSOs, Eurostat; Whitehouse (2007), and staff calculations.

9.4. Implementace penzijních reform

How not to implement: Hungarian pension reforms

I. Guardiancich (2008) TIGER Working Paper

„In the case of Hungary, its retirement system is a paradigmatic case of poor and hasty institutional design. The expectations of involved actors failed to adapt, as neither policymakers nor private pension providers play by the rules of the game. The former indulge in extreme political budget cycles and the latter cannot self-regulate, thereby distorting competition.“

„Furthermore, institutional complementarities are not gainfully exploited, since unfortunate policy solutions rendered the mandatory funded pillar costly, inefficient and disadvantageous with respect to the public scheme.“

How not to implement: Hungarian pension reforms

I. Guardiancich (2008) TIGER Working Paper

„As a consequence, Hungarian pensions are once again in dire need of a structural overhaul. However, at the time of writing, October 2007, a coherent solution is still nowhere in sight and the many weaknesses of PM Ferenc Gyurcsány’s government do not bode well.“

„Policymakers shall learn a lot from the Hungarian experience, since it clearly shows that correct implementation may be every bit as problematic as a successful legislative phase.“

How not to implement: Hungarian pension reforms

I. Guardiancich (2008) TIGER Working Paper

The funds' average annual net real rate of return was 2.1% during 1998-2004 (Orbán and Palotai, 2005: 12-13)

The reasons for such poor performance were a wildly swinging Budapest Stock Exchange, which got seriously shaken by the Russian, American and other crises, excessive conservatism on a very sharp market, and disclosure requirements, which prompted herding behaviour and short-termism.

Distribuční efekty – reforma Slovensko

„The 2004-05 Slovak reform substantially redistributed income across genders, cohorts and education levels such that the SSW of old women with elementary education fell by more than 4 average annual earnings while the SSW of young men with university education rose by more than 7 average annual earnings.“

Distribuční efekty – reforma Maďarsko (1997)

The reform was clearly beneficial for women born between 1942-44 whose SSW rose by as much as 2 average annual earnings (Figure H.3). For the younger women, higher accrual and lower contributions did not compensate for the postponed retirement, and their SSW fell by approximately 0.4 (upper secondary education) and 0.8 (university education) average annual earnings.

Men close to retirement lost between 0.7 (elementary education) to 1.66 (university education) average annual earnings. Younger cohorts lost gradually less, those just entering the labor market lost about 4 times less than their counterparts close to retirement.