End to Age of Naivety: Pension Reforms in Post-Transition Countries

Konec období naivity: penzijní reformy v post-tranzitivních zemích

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Introduction

This article includes primarily our understanding of how to reform pension systems have evolved significantly over the past 30 years. "Concepts" that initially evolved in Latin America traversed the Atlantic Ocean and found their way to new Europe. Here they were used as a generally prescribed "remedy" for ailments of the newly emerged transition economies. However, present economic and political situation (partially exacerbated by the financial and economic crisis 2008 – 2009) shows that these "concepts" might have been implemented too early on in the transition process. Initial enthusiasm for dramatic changes and reforms is cooling and we are entering a period of post-transitional disillusionment – "end to age of naivety". The following article aims at highlighting some of the new challenges to reformed pension systems and proposes topics for further research and discussion. The article is based on the presentation that was presented on the Conference "Social Europe – Problems and Perspectives", organized by University of Finance and Administration, Prague at November 27th, 2009.

Basic principles behind pension reforms

Demographic development is generally a key driving factor behind pension reforms around the world. Following two graphs[1] show a contrasting demographic structure of Czech population in 1945 and projection for 2060. This kind of expected demographic evolution is quite typical for countries in northern hemisphere (but not limited to).

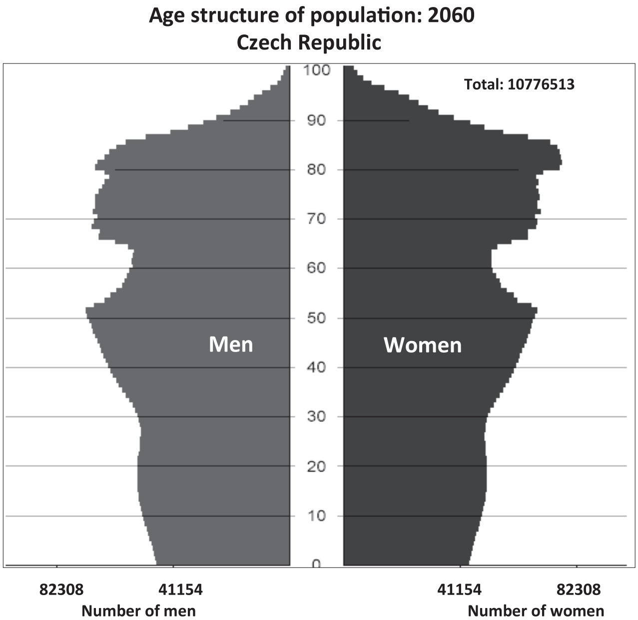
As the number of pensioners relative to the number of workers (system dependency ratio) increases throughout the world, it is becoming more difficult to keep the prevailing Pay-As-You-Go (PAYGO) systems alive.

In the PAYGO system workers contribute to a pension fund that is drawn on by current retirees, with the expectation that their pensions will be paid in turn by tomorrow's workforce.

1 Source: Czech Statistic Office, http://www.czso.cz/csu/redakce.nsf/i/stromy_zivota_do_roku_2066

Graph 1: Demographic Tree, Czech Republic 1945

Graph 2: Demographic Tree, Czech Republic 2060



Basically we can state that:
p/w = (L/R)*cr,

where:	**p**	average pension benefit
	w...........................	average wage in economy
	L	number of workers paying pension contributions
	R	number of pension benefit recipients (retirees)
	cr...........................	contribution rate of pay-a-roll paid by workers.

because it applies that:
L/R = (p/w)/cr

There are basically only two choices and their combinations of how to solve the problem of increasing dependency ratio (1/(L/R)) or (R/L):
Pensions must be cut or
Already high payroll taxes must be increased

The first is probably politically unacceptable; the second would cause further misallocation in the labor market, increase tax avoidance, and create a disincentive to work and hire. Hence, other systemic options of reforming existing PAYGO must be considered.

Chile: Pioneer in paradigmatic pension reform

In 1980 Chile was the first country with maturing PAYGO system in place that decided to switch from PAYGO to fully funded (FF) model of financing its compulsory general social security scheme. The government-financed PAYGO pension system was replaced with a new structure: a privately administered, national system of mandatory retirement savings that guaranteed a minimum pension to all eligible individuals (determined by means testing).

Instead of paying a social security tax, employees deposit 10 % of their monthly wages in an individual investment account under their name, at any one of licensed private pension funds. The money that accrues in the account during the employee's active career, along with the returns on the investments made by the pension funds, will be used to cover the employee's retirement benefits. As of June 2009 the 5 administrators had approx. 8,5 million affiliates and 4,4 million active contributors and were managing assets worth approx. $100 billion, or more than 70 % of Chile's GDP. Example of Chile shows that it is possible to reform a maturing PAYGO system without bankrupting the state and over long-term significantly increase ratio of private pension savings over GDP.

World Bank endorsement of Chilean-style reform in 1994

A turning point in the development of pension reforms movement came in 1994 with the publication of World Bank study: ***Averting the Old Age Crisis: Policies to Protect the Old and Promote Growth.***[2] This report was the first comprehensive and global examination of old age security. It identified three main functions of old age financial security:

2 *http://wwwwds.worldbank.org/external/default/WDSContentServer/WDSP/IB/1994/09/01/000009265_3970311123336/Rendered/PDF/multi_page.pdf*

- Redistribution
- Saving
- Insurance

In addition, the report assessed policy options to be evaluated based on (i) impact on the ageing population and (ii) impact on the economy as a whole. Key conclusion based on these criteria suggested that financial security for the old, and economic growth would be best served if governments relied on a system consisting of three separate parts:

- Publicly managed system with mandatory participation and a limited goal of reducing poverty among the old
- Privately managed mandatory savings system
- Voluntary savings system

This report made the global policy approach toward ageing more appealing to a broader array of countries without forfeiting the key element of privately managed funded accounts. It offered a more flexible advice, rather than a simple advocacy of the Chilean approach and created room for continuation of the state social security system.

During next two decades more than 20 countries in Latin America and Central and Easter Europe (mostly since 1998) decided to follow in the tracks of Chile and reformed their general pension system. Most of these countries simply followed the three pillar architecture combining original PAYGO principle in first pillar with newly established mandatory fully funded second pillar and various structures in voluntary funded third pillar. The following tables and chart describe the situation in Latin America and CEE.

Graph 3: Number of pension reforms across the world

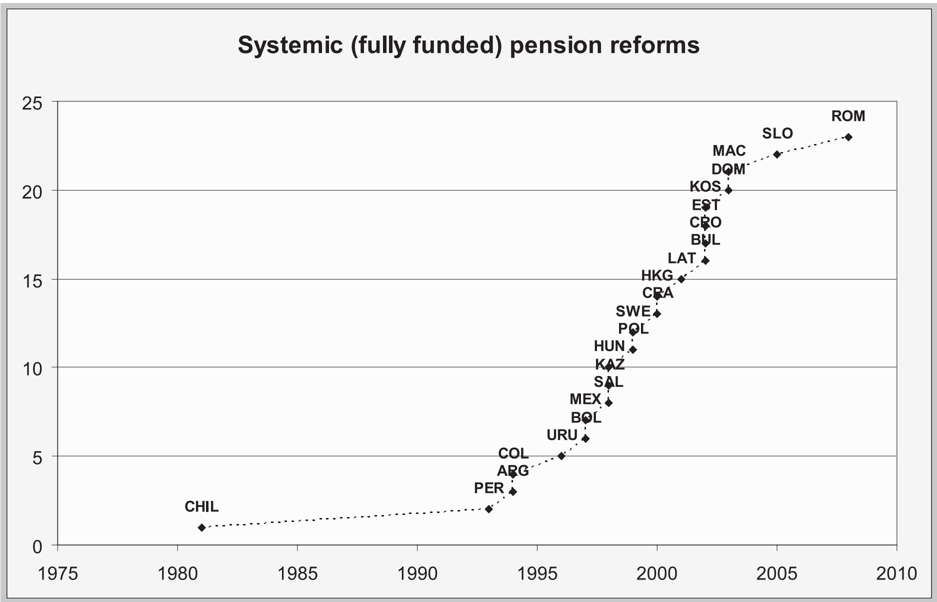


Table 1: Pension reforms in Latin America

Characteristics	Chile	Peru	Argentina	Colombia	Uruguay	Bolivia	Mexico	El Salvador	Costa Rica
Public mandatory tier	Phased out	Traditional PAYG, alternative to private tier	Traditional PAYG, complementary to private tier	Traditional PAYG, alternative to private tier	Traditional PAYG, complementary to private tier	Close down	Close down	Phased out	Traditional PAYG, complementary to private tier
Private mandatory tier	Individually fully funded	Individually fully funded	Individually fully funded	Individually fully funded	Individually fully funded	Individually fully funded	Individually fully funded	Individually fully funded	Individually fully funded
	Mandatory for new entrants to labour market. Other workers may opt to switch from the public tier	Mandatory membership for all workers either in the public tier or in the private one	All workers may redirect their contribution to the private tier	Mandatory membership for all workers either in the public tier or in the private one	Mandatory for workers earning over ceiling (800 USD), optional for lower earning groups and workers above age 39 years	Mandatory for all workers	Mandatory for all workers	Mandatory for new entrants to labour market and affiliates up to age 35. Older workers may opt to switch from the public tier	Mandatory for all workers
	Individual CR: 10%	Individual CR: 8%	Individual CR: 7,5%	Individual CR: 10%	Individual CR: 7,5%	Individual CR: 10%	Individual CR: 6,5%+state subsidy	Individual CR: 10%	Individual CR: 1%+employers´ contr. rate 6,5%
	from 1981	from 1993	from 1994	from 1994	from 1996	from 1997	from 1997	from 1998	from 2001
Reform type	Substitutive	Parallel	Mixed	Parallel	Mixed	Substitutive	Substitutive	Substitutive	Mixed

Note: In this table, individual contribution rates to the private tier exclude commissions and disability and survivors insurance.
Source: Katherine Mueller: Public-Private Interaction in the Structural Pension Reform in Eastern Europe and Latin America. In Insurance and Private Pensions Compendium for Emerging Economies, Book 2, Part 2:2)c, OECD, 2001 and own update.

Table 2: Pension reforms in Central and Eastern Europe

Characteristics	Kazahstan	Hungary	Poland	Latvia	Bulgaria	Croatia	Estonia	Macedonia	Slovakia	Romania
Reform type	Sustitutive	Mixed	Mixed	Mixed	Mixed	Mixed	Mixed	Mixed	Mixed	Mixed
Target retirement age	58/63	62/62	60/65	62/62	60/63	60/65	63/63	62/64	62/62	60/65
Public mandatory tier										
Design	Closed down	Traditional PAYG scheme, private tier complementary	NDC scheme, private tier complementary	NDC scheme, private tier complementary	PAYG scheme with pension points; private tier complementary	PAYG scheme with pension points; private tier complementary	Traditional PAYG scheme, private tier complementary	Traditional PAYG scheme, private tier complementary	PAYG scheme with pension points; private tier complementary	Traditional PAYG scheme, private tier complementary
Modifications of pension rights		Reduced accrual rates	Individual contribution adjustment	Individual contribution adjustment	Reduced accrual rates	Reduced accrual rates	Reduced accrual rates	Reduced accrual rates	Shift to the points´ system	Reduced accrual rates
Benefit indexation	Only minimum pension is indexed. Remaining part is kept at nominal value	50% prices 50% wages	80% prices 20% wages	mixed price/wage indexation	mixed price/wage indexation	50% prices 50% wages	50% prices 50% wages	80% prices 20% wages	50% prices 50% wages	mixed price/wage indexation
Private mandatory tier										
Design	Individually fully funded	Individually fully funded	Individually fully funded	Individually fully funded	Individually fully funded	Individually fully funded	Individually fully funded	Individually fully funded	Individually fully funded	Individually fully funded
Participation options	Mandatory for all workers.	Mandatory for new entrants to labour market and optional for other workers to redirect part of their contri-bution to the private tier.	Mandatory for workers below 30 years of age and optional between ages 30 and 49 to redirect part of their contri-bution to the private tier.	Mandatory for workers below 30 years of age and optional between ages 30 and 49 to redirect part of their contri-bution to the private tier.	Mandatory for all workers up to 42 years of age to redirect part of their contribution to the private tier.	Mandatory for workers below 40 years of age and optional between ages 40 and 49 to redirect their contribution to the private tier.	Mandatory for persons born after 1983, voluntary membership possible for those born before.	Mandatory for new entrants to labour market and optional for other workers to redirect part of their contri-bution to the private tier.	Mandatory for new entrants to labour market and optional for other workers to redirect part of their contri-bution to the private tier.	Mandatory for new entrants to labour market and optional for other workers to redirect part of their contri-bution to the private tier.
Contribution rates	Individual CR: 10%	Individual CR: 8%	Individual CR: 7,3%	Individual CR: to be gradually increased to 9%	Individual CR: 2% rising to 5% by 2007	Individual CR: 5%	Individual CR: 6%	Individual CR: 7%	Individual CR: 9%	Individual CR: to be gradually (in 8 years) increased to 6%
Implementation	1998	1998	1999	2001	2002	2002	2002	2003	2005	2008

Note: In Bulgaria mandatory occupational pension funds were established from 2001, covering mandatory early retirement system for workers working in hard of hazardous conditions. In Slovakia workers working in hard of hazardous conditions have to be covered mandatory by III. pillar pensions since year 2005.

Source: own modification based on Mueller: The making of Pension Reform Privatization in Latin America and Eastern Europe (2003) and Chlon-Dominczak: Evaluation of Reform Experiences in Eastern Europe (2005).

Need for pension reform viewed through public finance sustainability

Due to social, economic and most often political reasons, parameterization of pension systems in most transition economies share similar "ailments". Cangiano, Cotarelli, Cubeddu (1998)[3] have summarized these parametric inconsistencies into six main areas of concern:

a) High system dependency ratios – Number of pensioners over number of employed contributors. This ratio was higher for transition countries when compared to other more advanced economies. High unemployment rates are likely the key driving factor behind this imbalance.

b) Low retirement age – Formally highly "pro-social" policies of pre-transition countries enabled retirement of worker at ages significantly lower to those in more industrialized countries. On top of this, many countries encouraged early retirement.

c) High replacement ratios in some countries – Replacement ratio shows proportion (in percentage) of received pension benefit to income earned prior to pension. In comparison to average replacement ratio in industrialized countries, many transition countries pay over-generous pensions that cannot be financially justified.

d) Exposure to the expected demographic shocks and as a consequence a growing financial imbalance – Sharp decline in birth rates and subsequent adverse development of demographics tree placed significant strain on financing of existing PAYGO.

e) High contribution rates and weak link between contributions paid and pension benefits, and resulting limited incentive to compliance – Without significant reform, mixture of above mentioned problems required transition countries to maintain high contribution rates (form of a social tax) for employed workers. As there was a limited link (sometimes none) between contributions paid and subsequent entitlement to pension benefits, a "Catch 22" effect was created. Here workers and employers found ways of avoiding or minimizing pension contributions, when in turn led to increase problems for financing of the pension system.

f) Significant inter-generational and intra-generational inequalities – These relate to imbalance between paid contributions and pension benefits received for women (who typically retired earlier) and men, self-employed (incentivized to make a minimal contribution) and regular employees who paid contributions based on this wage. Furthermore, as overall imbalance in financing of the pension system developed, new entrants onto the job market could expect to pay higher contribution rates and receive lower pension benefits than current pensioners.

However, this mixture of above mentioned complex factors can be summarized into a single problem facing most transition economies – sustainability of public finance with (desired) welfare and social parameters implicitly included. Sustainability of public finance related to PAYGO pension system here refers to increasing burden of gap between cur-

3 *CANGIANO, M.; COTARELLI, C.; CUBEDDU, L. (1998). Pension Developments and Reform in Transition Economies, IMF Working Paper, WP/98/151 (Washington: IMF), pp. 18-22.*

rent/future contributions and current/future liabilities that will need to be financed or even subsidized from state budget – so called "implicit gap"

Reform of transitional pension system and transition costs

Ailments of existing PAYGO systems have led governments to re-think their pension frameworks. In general, there are three main paths in reforming a pension system:

a) Reform of existing PAYGO system
b) Shift to mandatory fully funded system
c) Adopt a combination of the two (a multi-pillar system)

Opting for (b) and (c) in essence eliminates (i.e. reform in Kazakhstan) or reduces scale of the implicit gap, but shifts value of future costs into current expenditure. In essence implicit gap transforms into an explicit gap.

“Starting from an unsustainable PAYGO scheme, a pension reform will usually aim at curbing the growth in total government liabilities over time. Thus a pension privatization can involve a trade-off between reducing total public (implicit plus financial) debt in the long run, but increasing the riskiness of the composition of liabilities in the short and medium term as financial debt replaces IDP (implicit pension debt), at least during the transition period of the reform.” (Cuevas, Gonzales, Lombardo, Marmolejo, 2008)[4]

Hence, introduction of a funded component as part of the reform creates a fiscal hole in the PAYGO system. This fiscal hole (a set of transition costs) has to be financed from the available sources. In general there are five ways in which these transition costs can be covered:

a) Additional income from sources such as privatization can be realized
b) Taxes can be raised for the current generation, either directly on payroll by adding on’ the individual account contributions without reducing contributions to the PAYGO component, or by increasing other unrelated taxes
c) Current expenditures on pensions or on other expenditure programs can be reduced
d) Debt can be issued, to be paid back in the future either by tax increased or expenditure cuts
e) Efficiency gains of some kind can be sought, for instance through reductions in payroll tax rates that remove labor-market distortions, or growth in output (GDP growth)

Each method has its pluses and minuses. Tax increases or expenditure cuts can most directly lead to positive future gains from pension reform but are likely to be politically unpopular. Issuing debt can postpone the costs of pension reform, but will also postpone many of its benefits. Issuing debt can also create unintended problems – explicit debt generally carries a much higher interest rate than the implicit rate of debt carried by PAYGO promises (market interest rates vs. the rate of growth of the wage fund). Merely swapping implicit debt for explicit debt therefore often worsens the fiscal stance of government by increasing interest rates it must pay on its debt. Efficiency gains always are desirable

4 *Source: CUEVAS, A.; GONZALEZ, M.; LOMBARDO, D.; LOPEZ-MARMOLEJO, A. (2008). Pension Privatization and Country Risk, IMF Working Paper, 08/195 (Washington: International Monetary Fund), pp. 4.*

since they give benefit without being at the expense of anyone – however, these can be hard to achieve.

Sizes of these explicit gaps and forms of their financing occurred in different size in different countries. However, main factors related to this variability were mostly similar:

(i) undertaken reform path or scope of reform (single fully funded pillar vs. multi-pillar), **(ii)** robustness and accuracy of actuarial models used as basis for scope of the reform, **(iii)** willingness to follow-through by subsequent governments (i.e. 13th pension, early retirement, selective non-standard high pensions, policies that promote evasion from paying taxes and social contributions), and **(iv)** reliability of assumed financing sources. Political and economic approaches toward financing of the explicit gap are closely intertwined with sustainability of the overall reform – improper mixture coupled with political choices can lead to introduction of new uncertainties and materialization of risks which can destabilize one or more elements (or even stakeholders) essential to proper functioning of the reformed pension system.

Private pension administrators as new stakeholders

Process of implementing a fully funded pension pillar (single or multi-pillar) breaks down stakeholders into three main categories: (i) citizens – those impacted by pension system reform (parameters of PAYGO) and future savers, (ii) government – guarantor and "privatizer" of public finance, and (iii) private pension administrators – new profit oriented stakeholders. It is imperative to realize that investing into creation of pension administrator has to make business sense. This is a private-ownership element that has been embedded into public framework and opportunity cost of required capital has to be lower or at least equal to that attained elsewhere within financial service industry. Failure to understand this fact by other stakeholder (mainly governments) can seriously hamper long-term sustainability of such reform.

Private pension administrators and risk vs. uncertainty

Impact of political and economic choices on pension administrators and hence sustainability of pension reform can be described through concept of "risk and uncertainty".

"It is important to distinguish risk and uncertainty. With risk, the probability distribution of potential outcomes is known or estimable, with uncertainty it is not. The distinction is critical, among other reasons, because actuarial insurance can generally cope with risk but not with uncertainty. Pension schemes face both uncertainty and risk – the future is an uncertain business, and no pension scheme can give certainty". (Barr, 2000)[5]

Being one of the key elements for a successful reform, pension administrators too face risks and uncertainties. Risks are quantified and projected into business cases and determine final required rate of return on the business. Uncertainties do not find their way into quantitative parts of business cases. Incorrectly priced business cases can force a pension administrator out of the market; however, irresponsible or short-sighted policy choices

5 *BARR, N. (2000). Reforming Pensions: Myths, Truths, and Policy Choices, IMF Working Paper, 00/139 (Washington: International Monetary Fund), p. 5.*

by a government can convert too many uncertainties into risk and force all private players out.

Case study of Slovakia: Some uncertainties "materialized" into risks

Recent amendments to second pillar legislation in Slovakia and already publicly stated future intentions of Slovak government in this respect offer a relevant example of how some uncertainties can be transformed into risks. These can subsequently pose a serious threat for business sustainability of private pension administrators. Initial second-pillar (fully funded pillar) pension legislation was passed by Slovak parliament in the beginning of 2004. Legislation clearly defined attributes of the system as well as rules for private pension administrators. These legislative rules and attributes were used by future pension administrators to calculate long term business feasibility. However, following 2006 election victory by leftist social democrats, financing of government's "pro-social" programs became a top priority. Assets accumulated by private pension administrators turned out to be too tempting as they were missing in the budget of Social Insurance Company and had to be financed from other sources (financing of explicit gap). Since then, the government proposed and executed several amendments to Slovak pension legislation, which substantially altered till-then generally accepted rules and attributes, and jeopardized existence of private administrators on the market. Table 3 below illustrates major proposed and realized changes, together with their status.

In addition to these changes, government also amended legislation on fund performance with a guarantee element. In practice this requires a pension administrator to subsidize negative fund performance from own assets and potential impact is multifold:

a) Amount of assets held by pension funds is so high, that even small negative performance would cause a significant damage to business feasibility of the pension administrator

b) In order to avoid this new risk, pension administrators invest into very similar conservative financial instruments. Hence (i) potential gain for savers is limited (even in growth funds), and (ii) composition of funds and their performance is very similar, hence savers have very little choice

c) In fact, depending on market conditions, asset appreciation in pension funds will most likely drop below rate at which PAYGO is indexed (Slovakia uses Swill indexation of a basket of inflation and average wage growth)

As consumer understanding of pension system in general is quite low, these implications can form yet another basis for the government to question validity of a fully funded pillar in Slovakia.

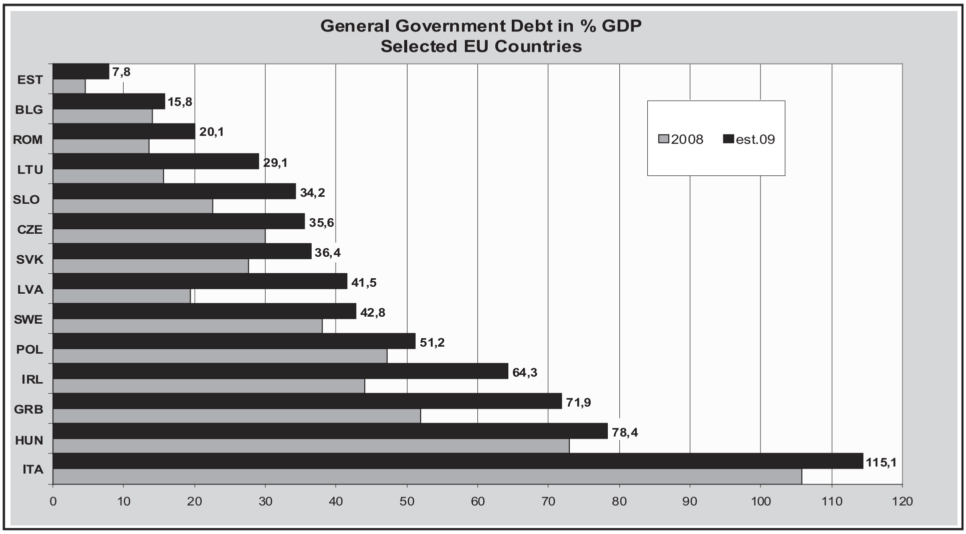
Scenario of reversal from multi-pillar to Defined Contribution is very rare (Argentina is a recent example), and has not been studied by academia in much depth. Although full reversal could be the most radical outcome of current challenges to pension systems in transition countries (and post-transition), case study of Slovakia certainly provides an example of how it could materialize into reality.

Academic community has to shed more light into topic of reversal to help governments and other institutions better understand full implications of their policy choice.

Table 3: Changing parameters of Slovakia 2nd pillar

	Description	Status
Management fee	This fee is deducted from AuM on the monthly basis. It has been lowered from 0,065 %-0,025 %. A new fee "success fee" has been introduced, but it is linked only to positive asset appreciation and in case of negative result, pension administrator has to inject own funds into the fund	Already part of Slovak legislation effective as of July 1, 2009
Contribution rate	Percentage of gross monthly salary sent to a private pension administrator. to this date this was 9 % of gross salary, but is was expected to be decreased	To this date, the contribution rate has not been changed. However, government officials hinted at it lowering following next parliamentary elections in 2010
Initial fee	This is a 1 % fee deducted from each saver`s monthly contribution. For pension administrators on Slovak market, this is the most important fee in the initial post-reform years before AuM build up	As with the contribution rate, government has hinted at lowering of this fee – depending on scale of decrease, this could have very serious consequences for 2nd pillar pension administrators
Change from mandatory to voluntary	Under original legislation (2004), second pillar was voluntary for people who were employed at the onset of the reform and mandatory for all new entrants on the job market. Latest legislative changes made 2nd pillar voluntary for all	This is already part of legislation since 2008
Opening of pillar for exit by existing savers	2nd pillar has been "opened" for voluntary exit by existing savers twice in the years 2008-2009	Altogether roughly 170,000 people left the 2nd pillar (roughly 11 % of total savers)

Graph 4: General Government Debt in selected EU countries, 2008 and est. 2009



Source: Eurostat

Challenges ahead: External environment is getting worse

Challenges described in the paragraphs above will likely intensify with time, as the external environment will most likely become significantly tougher. We are already observing how already chronic public finance tensions further deepen due to current financial and economic crisis.

Stability and Growth Pact punishes countries that have converted part of their implicit pension debt into explicit fiscal burden – by including this into overall budget deficit. In other words: the transition costs of the partial shift to funded pensions are not accepted as an investment in favor of long-term sustainability of public finance. This can effectively discourage some countries from implementing a systemic pension reform.

Lastly we observe a clear ideological shift from neo-liberal approach toward a more significant role of states in economy – socialistic tendencies in all public policies across the developed world. Such an environment will also be an obstacle for paradigmatic reform approach in the pension area.

Conclusion – End to „age of naivety“

Since early 90´s paradigmatic pension reforms were accomplished in more than 20 middle-developed countries across LA and CEE. Private financial sector took an active role in most of these cases as a provider of technical know-how, supplying products and services, making significant investments into the financial services infrastructure, marketing and education of the public. Today, 10 to 15 years on (at least in CEE), pension providers and investors are experiencing significant frustration with newly materialized politically driven uncertainties and risks. In very real terms, these threaten sustainability of pension providers and pension reforms as a whole. Case study of Slovakia clearly illustrates how newly materialized risks damage long term business feasibility of private pension administrators. It is becoming more and more evident that many of the emerging transition economies were not sufficiently prepared for such a kind of radical pension reform. This especially applies to level of institutional development and quality of state administration and political culture. If pension reforms of the World Bank model are to be successfully implemented in the future, lessons must be learned from current developments. One of the key lessons is solid long-term anchoring of reform principles (legislative and technical) into political and economic framework. It is clearly insufficient to introduce a private element (private pension administrators) into public framework through mere legislative means. Instead future reforms need to be built on at least two pillars – legislative and contractual. Contractual pillar should be structured like classical Public Private Partnership project and serve as an insurance against foreseeable political uncertainties. Authors invite the academic community to build on arguments presented in this article and expand research in the area of long-term pension reform sustainability.

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