Pension Reform in the Czech Republic: Gradualist Czechs

The Czech pension system, which distributes more than a half of the total social security hand-outs in the Czech Republic and about 9% of its GDP, is going through a turbulent and extremely important phase of its development. While the underlying trends are as worrying as elsewhere in the developed or transition countries, the short-term accounts look balanced and a thorough reform does not seem imminent. The system has so far managed to maintain its balance through tightening eligibility rules, postponing the retirement and keeping contribution rates quite high. In this article we argue that the long-term regards are indeed more important and that the pension reform could foster further development of the Czech Republic in various aspects. This belief is based on the empirical evidence from the early reformers, mainly Chile. While its impact on the aggregate saving rate is still debated, the pension reform has undoubtedly positive impacts on the long-term growth rates and on the capital markets. The role of a properly functioning capital market cannot be under-emphasised in all the reforming countries. The pension reform would foster much faster development of the capital markets and would bring many long-term financial instruments so far missing on these markets.[1] The reform would also spur lagging privatisation process.

Governments in the transition countries often stress that the private agents are not ready to embrace the full scale pension reform, as they are used to the old, state dominated systems. Officials maintain that depending exclusively on the voluntary private savings would bring pension, and indeed the whole economies, to a collapse. The main arguments are shortsighted people who do not save enough for their old age and rely on the state help. Inadequate financial instruments the propensity of the financial institutions in transition countries to fail and information gaps are also often cited as an obstacle for private savings to play a dominant role. If we add the classical market failure arguments - adverse selection, moral hazard - the case for private old

[1] It is often argued that the pension reform requires a well functioning capital market to be in place beforehand. It has been repeatedly argued that the development of capital markets and a pension reform are complements and enforce each other. See, for example, Rapaczynski (1996) "The Roles of the State and the Market in Establishing Property Rights", Journal of Economic Perspectives, Volume 10, Spring 1996, or Vittas, Michelitsch (1995) "Pension Funds in Central Europe and Russia", World Bank Policy Research Working Paper No. 1459.

age insurance seems almost lost. Nevertheless, these arguments fail to address the scale of problems faced by the state pension systems in all transition countries, as well as in the developed countries.

High cost of the current social security system has already translated into a main obstacle to a more dynamic economic growth, which would bring the transition countries among the developed countries. The main aspects of the current social security dilemma can be described as follows. First, the transition countries begin to feel the pinch of the increasing shares of pensioners as their populations' age.[2] Second, the relatively generous pension benefits promised by the state hamper development of the private pension funds and insurance companies. Third, the labour markets, namely mobility of labour, are inversely affected by the rigid rules that create considerable distortions in incentives and allocation of labour. It is illustrated by an increasing gap between the official retirement age and the actual retirement age in most of the EU countries. Fourth, the social security systems are seriously affected by a widespread manipulation and evasion. This causes higher benefits paid and lower contributions collected by the state and thus exacerbates the social security balance. Last, but not least, social security systems in the transition countries are perilously under funded. The reason is that they operate on the Pay-As-You-Go (PAYG) basis, which is ill suited to cope with the ageing of populations.

As a result, the countries in question are slowed in their development. The sheer scale of the welfare state provisions, which have been left from the previous regimes, is alarming, given the economic situation. Pensions consume about 10% of GDP in Hungary and Czech Republic and even 14% of GDP in Poland and contribution rates are as high as 30% of wages in Hungary and Poland. These shares are even higher than in a number of the OECD countries and bear no comparison to shares in the newly industrialised countries of East Asia. The scale of the welfare state negatively influences saving rates[3], discourages labour mobility and hampers development of capital markets. As a result the growth potential of these countries is

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[2] This does not hold for Russia, where the expected lifetime has been actually decreasing for last years. Though this development does relieve the Russian pension system of some acute problems, it is not to be envied.

[3] See Feldstein (1996) "The Missing Piece in Policy Analysis: Social Security Reform", Richard T.Ely Lecture, American Economic Revue, May 1996.

seriously reduced. While the various measures aimed at trimming the costs are highly desirable and help to maintain the overall balance, a need for a thorough reform is mounting.

Such a reform has to proceed in several dimensions at parallels. First, a profound downsizing of the public systems is urgent. It encompasses both the postponing the retirement age and the tightening of the eligibility rules for early retirement. Transition countries are known for their lax benefit administration which demonstrates in the much higher share of actual receivers of pensions than is the demographic old age dependency ratio.[4] The systems have to lower the target replacement rates to roughly 30-35% of average wages and to decrease the contribution rates appropriately. The process already under way in the Czech Republic, i.e. increasing importance of the flat part of the pensions is to become even more vital. This share, currently as low as 25% of pensions needs to be increased, so pensions could better play its main role - redistribution. The insurance aspect of pension, currently reflected in the notion "the higher salary, the higher the pension" should be abolished and left to private markets, where people can seek appropriate insurance contracts.

Second, the importance of the private pension schemes needs to be increased. The Czech Republic and Hungary have already enacted legislation allowing the creation of private pension funds that accumulate voluntary savings, encouraged by the governments. The Polish and Hungarian governments are discussing proposals to introduce a mandatory saving pillar to their pension systems. In the Czech case, the discussion of a radical reform is only beginning. The state run system is not too much in deficit and the prospect for two or three following years is equally rosy. Nevertheless, the Czech pension system will soon face the same problems, as do pension systems all over the industrialised world.

The Czech PAYG System

The current Czech pension system suffers from the same flaws as all pension systems in Europe. First of all, it is ill defined to cope with the ageing of the population. As the share of pensioners increases, the cost of pensions soars. Had the

[4] This gap makes about 15% in the Czech Republic and Russia and even over 20% in Poland and Hungary, see Vittas, Michelitsch (1995).

current system of pensions been maintained, pension spending is to double from 10% to 20% of GDP. Contributions per worker are projected to rise by about 30%. As we show later, the contribution rate (payroll tax) would have to rise from the already high level of 26% to at least 36% during the next two decades. The accelerating cost argument is the one most often cited, however, there are others no less important.

Second, the PAYG system tries to combine all three functions of a pension system (smoothing of the lifetime consumption, redistribution and insurance). While this combination might save some administrative cost and be politically easier to introduce, it fails to satisfactorily meet any of its proposed goals. Moreover, the very maxim of the PAYG system providing adequate wage replacement to high-income workers, causes its towering financial burden at some point.

Third, mature PAYG systems unavoidably require higher level of contribution rates, which are seen by many workers as another tax and therefore lead to a decrease in the labour supply, tax evasion and all the possible manipulation, including the reallocation of labour to the informal sector.

Fourth, the principles of the current PAYG systems encourage early retirement and thus decrease already low participation rates among people over 50 years old. Last, but not least, the dominance of PAYG systems hinders the development of the private financial sector and decreases national savings, which undermines the economic growth of an economy in the long term.

All the arguments summed above illustrate difficulties which governments preserving a PAYG system will face in the near future. Needless to say, many of governments, the Czech government included, are well aware of this and are trying to avoid the worst or most pressing effects of the ageing. So far, they have concentrated on easing strains of pension systems by altering the entitlements or changing the retirement age.

Modifications of PAYG

A number of modifications have been proposed to abate the PAYG problems over the world. The Swedish government has currently adopted an approach linking the normal retirement age to longer life expectations. The appeal of such an approach consists mainly in avoiding the necessity to cut benefits nominally by linking the retirement age to some exogenous number, in this case the period spent in retirement.

The draft has not been voted into power yet, so we have to wait for an assessment of this attempt.

Second, a number of American economists, namely Diamond and Gramlich[5], suggested investing part of the trust funds in equities. These suggestions are driven mainly by the high performance of the equity market in the U.S. It remains irresolute whether such an investment strategy would be prudent in emerging markets, where financial markets are much less developed and much more volatile than in the U.S. Moreover, a majority of pension schemes over the world have severe problems paying the promised benefits without generating debt, thus there is no amount left which could be invested.

Other reform proposals coined in several transition countries contain at least a partial privatisation of social security. Firms could be mandated with the responsibility to invest a part of wages into investment funds on behalf of their workers. This is the Australian or Swiss approach to pension reform, which might foster the creation of a highly corporatist economic structure. Given the already close connections among banks, investment funds and firms in some of the transition countries, it remains doubtful that further strengthening of these ties would be beneficial. Alternatively, workers themselves can be given the choice among competing pension funds. This could be done through a partially defined contribution scheme which, nevertheless, would fail to make any significant impact on the pension arithmetic, unless the partiality would converge to a fully defined contribution scheme. This is indeed the very reform adopted by Chile in 1981 and then followed in other countries.

PAYG pension systems can be altered to accommodate the changing demographic environment as well. The most discussed modification of the basic PAYG system would be to set contributions on a long-term equilibrium level, which would take into account future demographic changes. As this "long-term" level appears to be above the current contribution level in all countries, it is a politically ungrateful task, requiring formidable foresight from a government.

The situation in the Czech Republic in this respect is rather bleak. We have estimated the PAYG contribution rates needed to keep the system in balance

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[5] See Journal of Economic Perspectives, Summer 1996.

annually, as well as a "smoothed" PAYG rate, which would balance the system over a longer period of time.

Table 1 gives an overview of the simulations. First, if we keep the current level of contributions (26% of the wage bill), the PAYG shows a surplus for next few years and then it exhibits a deficit. The table shows that assuming 3% real return on investment (and 3% real interest rate to be paid later on loan), the trust fund would accumulate a deficit of more than 40% of GDP in 2020. The deficit would be equal to the GDP around the year 2035 and more than 180% of GDP in 2060. The sheer size of these numbers suggests that the current situation is not sustainable.

If the government decided to adjust contribution rates of the PAYG every year, the Czech Republic would experience a sharp increase in rates around the year 2010 and in 2020 the rate would reach more than 36%; i.e. one third higher than the current level. As we assume no change in the demographic trends afterwards, the contribution rate is then constant.

We have estimated that the "smoothed" contribution rate; i.e., the rate under which revenues are sufficient to pay for the level of pension outlays until 2060. This rate would be equal to the level of 35.4%. Under this "smoothed" regime, the Trust Fund would accumulate reserves equalling 35% of GDP in 2015, then deficits would begin to gradually deplete the Trust and as of 2060 the Trust would vanish. It remains to be seen whether such vast sums of assets would be prudently invested and what would be their impact on the capital market and returns to capital. The strong political commitment remains crucial for the smoothing of the contribution rates, as it requires an extremely long foresight and discipline on the side of politicians.

Table 1: Estimates of "smoothed" contribution rates and associated trust funds for the Czech Republic

	Current Contribution Rate (26%)		"Smoothed" Contribution Rate (35.4%)		Contribution Rate Necessary for Annually Balanced PAYG
	Trust Fund (bil CZK)	Trust Fund (% GDP)	Trust Fund (bil CZK)	Trust Fund (% GDP)	
1997	6.5	0.5	36.9	3.1	26.9%
2000	-6.6	-0.5	168.2	12.1	26.9%
2005	-54.0	-3.1	455.6	25.8	27.7%
2010	-224.0	-9.9	777.5	34.5	30.7%
2015	-677.0	-23.5	1033.6	35.9	34.6%
2020	-1545.3	-42.0	1173.3	31.9	36.4%
2030	-4790.5	-80.0	1321.5	23.0	36.4%
2040	-11297.8	-115.8	1303.3	12.7	36.4%
2050	-23886.5	-150.3	953.4	6.0	36.4%
2060	-47687.4	-184.3	-100.2	-0.6	36.4%

Source: Author's calculations

The PAYG system in the Czech Republic would have to be transformed thoroughly, if it is to avoid the harmful effects of high pension contributions on the labour supply and public finances. The reform within the limitations of the PAYG system can generally take two directions: either the government decreases the pension replacement ratio (Average Pension - Average Wage ratio), or it postpones the retirement age further. Figure 1 presents the results of different simulated reform scenarios. We estimated the aggregate contribution rate under four reforms of the PAYG system and under the radical reform comprising of PAYG abolishment and switching to a funded system.[6]

The worst "no reform" scenario - retirement age as of 2007; i.e., 62 for men and 57-61 for women and the replacement ratio of 45%, embroils a relentless rise in

[6] Details see Jelinek, Schneider (forthcoming).

the pension contributions to the long-term level of 36.4% of wages. If the retirement age is increased to 67 years for both men and women, then the long-term contribution rate reaches more than 30% in 2015 and then gradually decreases to 24.8%, which is roughly equivalent to the current level.

A more radical approach consists of gradual reductions in the aggregate replacement ratio to 25%. If this scenario is adopted and if the retirement age does not change, then the contribution rate decreases to 19.3%. The most radical reform would embroil both approaches: it would increase the retirement age to 67 and at the same time it would cut the replacement ratio to 25% of wages. In such a case, the contribution rate falls to roughly half of the current level, namely to 13,2%.

The discussion above, and Figure 1 as well, seems to suggest that the PAYG system in the Czech Republic is "reformable" and can be sustained, provided there is the political will to change the rules. However, given the quite equal distribution of wages and relatively generous welfare system of the Czech Republic, the cut in the replacement rate would create immense social tensions. Currently, the average wage is only about three times the living minimum. The 25% pension replacement ratio would not secure even the living minimum for pensioners and it would, therefore, bring an enormous expenditure pressure to the other welfare system's segments. Such a replacement ratio would be probably acceptable as a basic income protection, but not as a pension system worth its name. In fact, the cut of the replacement rate, especially when accompanied by the increase in the retirement age, in all but in the name, connotes a PAYG abolishment.

It thus seems that the PAYG systems currently predominant are doomed to be abandoned, at least in principle, sooner or later. The Czech Republic, nevertheless, needs a system which would enabled the retired to keep a decent living standard and which would at the same time reduce the risk of myopic behaviour of the non-saving population. The funded systems best satisfy these conditions.

Funded System

An alternative is to switch from the PAYG system to a funded (or actuarial fair) system. The funded systems are better suited to cope with the demographic shocks, which the industrialised countries are now facing. Moreover, the funded systems facilitate higher rates of savings, which in turn supports higher capital investment, higher returns to labour and consequently also higher rates of economic growth. Last, but not least, the funded systems have a distinctive advantage in that they limit government clout over the economy, facilitate individuals' responsiveness and economically rational behaviour, punish myopic and reckless behaviour and by all these means abate the moral hazard problems which are hampering the state-run PAYG systems.

Unfortunately, the Czech pension reform, as of now, has been rather moderate. First, the law that has began to increase the retirement age by 2 years for men and by 4 years for women, was enacted last year. Under this law, men will retire in 62 and women in 58-61, as of the year 2007.[7] The law thus preserves the retirement gap between men and women and does not abolish the early retirement privilege for women who have brought up children. As has been illustrated above, this relatively tiny change (though economically unsatisfactory, it has provoked a wave of protests) will not rescue the Czech pension system.

As a supplement, a voluntary third pillar has been introduced last year in the Czech Republic. The Czech government encourages savings in this scheme by a government subsidy up to the limit of 120 CZK for a 500 CZK own contribution. There are about 40 funds of different sizes and policies, nevertheless the role of pension funds is still negligible in the Czech Republic. Moreover, the increase in number of participants has already slowed down, as seen in the Figure 2. It appears that the pool of the voluntary participants has been already tapped and while we have to appreciate that currently almost one quarter of the Czech labour force is involved in a pension saving scheme, the amounts going to the funds are still paltry. The average monthly saved amount is about 3% of the average wage in the Czech Republic. Therefore, the private pension funds currently allocate only about 1% of the total country's wage bill (i.e. about USD 250 mil annually). This amount cannot in any case significantly relieve the pressure on the state PAYG system and lacks strength to influence the Czech capital market. This is especially regretful as these funds could serve as a backbone for further reform of the Czech pension system.

As it has been argued elsewhere, the pension reform could increase the long-term rates of growth and thus benefit future generations. There seems to be a broad

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[7] See Table A1 in the Appendix.

agreement that the reform can even be done in a Pareto efficient way, so that the current pensioners and older contributors would not suffer a loss in their lifetime income. To achieve these desired results the reform needs not only a careful planning but also a well functioning network of private financial institutions that would facilitate private savings and secure returns on savings which would encourage further development of the private pension schemes. As the Czech experience seems to suggest, it is extremely unlikely that such a strong network would emerge without a substantial and radical pension reform which would divert a major part of pension savings to the private pension funds.

The reform would yield several important benefits. Reformed social security systems would provide adequate and sustainable benefits to the citizens and they would avert a financial insolvency of the state systems and decrease the political risks of the state provided pensions. They would be also better equipped to deal with the ageing phenomena. The labour mobility would increase, as a consequence of a reform, as the incentives for strategic manipulation in the last years prior to retirement would vanish. The informal labour market would be diminished, as the contributions would lose the substance of a payroll tax and would be perceived rather as deferred income. The scale of the impact of the pension reform on the national saving rates is still debated. Nevertheless, it appears plausible that a reform would lead to an increased saving rate if it involves a high rate of mandatory saving for a substantial share of the labour force and a limited access to private credits.

The reform process would also undoubtedly spur the capital market development and by this avoid the fear of inadequate financial instruments. The reform can definitely be encouraged by the example of the Chilean pension funds, offering a long list of financial services and acquiring ever higher stakes in the most lucrative assets all over the Latin America where they meet no relevant domestic competition. This development stresses the importance of the private management of pension funds. If only one, centrally managed fund were created, the government would be tempted to use it as an ever willing buyer of its under-performing bonds or even as a proxy to support failing public enterprises. This could, in fact, eliminate all the advantages of private saving scheme. While it is clearly an extreme example, the negative returns achieved by the state run "provident" funds in several countries may serve as a warning. Indeed, the difference between private American funds which achieved 8% return and the publicly managed fund OASI (Old-Age and Survivor's Insurance) is instructive.

On the contrary, the Chilean funds, which have to compete for workers, have turned themselves into the dominant player in the capital market. The Chilean arrangement gives ultimate decision power to workers who seek the best performing funds. It creates other problems, as insufficient information on the workers' side, which have been reduced by strict regulation of the Chilean funds. What is probably most important is the fact that the pension reform in Chile has fostered the development of numerous financial instruments and institutions which vastly improved the functioning of the capital market.

From what has been written above follows that we argue for a reform of a publicly provided pension system to a one based on the compulsory private savings. It would better prepare the Czech Republic for the future when almost one half of its adult population will consists of pensioners. As we have argued the funded system would lead to a higher economic growth and would leave the state with a proper role to play - to secure decent, but modest income level for the poor. The reform, nevertheless, requires a very clear set of rules and a strong authority that would guarantee the prudent behaviour of pension funds. It remains to be seen whether the Czech Republic will have find courage and determination to reform its inadequate pension reform. It needs to do so, sooner rather than later.

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Table A1: The Former Czech Pension System and the New Scheme

	The Former System	The New Scheme
Formula	Average of 5 best years from the last decade = PMV	Average of 30 years (after 1986), indexed to wage growth
Retirement Age	60 for men 54-57 for women	62 for men 58-61 for women (effective from 2007)
Reductions	Up to 2500CZK: 100% 2500-6000CZK: 33% 6000-10000CZK: 10% Above 10000CZK: 0%	Up to 5000CZK: 100% 5000-10000CZK: 30% Above 10000CZK: 10% (threshold to be indexed)
Accumulation of entitlements	First 25 years: 2% annually, then 1% each year	1.5% annually
Early Retirement	At most 2 years earlier, PMV reduced by 1% for each 90 days of early retirement (only until the regular age of retirement)	As before, and: At most 3 years earlier, reduction by 6% for each 90 days (permanently)
Postponed Retirement	PMV increased by 1% for each 90 days	PMV increased by 1% for each 90 days
Fixed amount	420 CZK in 1995	1020 CZK from November 1996
Widow Pension	Fixed Amount + 60% of spouse's pension	Fixed Amount + 50% of spouse's pension
Orphans Pension	Fixed Amount + 30-50% of parent's pension	Fixed Amount + 40% of parent's pension
Parallel Pensions	100% of higher and 50% of lower pension	100% of higher and 50% of lower pension

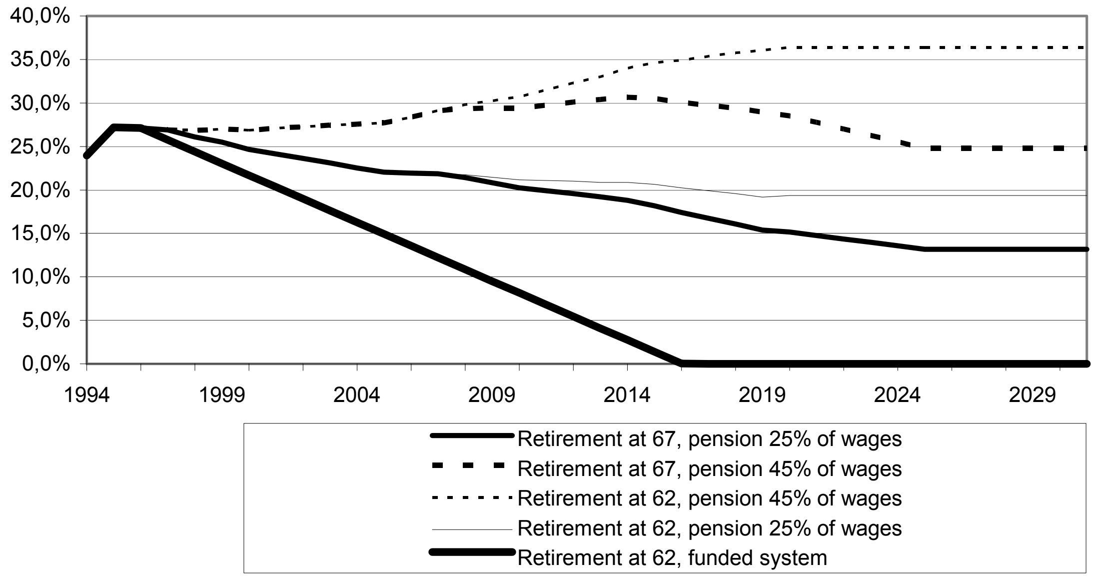

Figure 1 Payroll Tax Under Different Reform Scenarios