Report No.

Pensions in Crisis: Europe and Central Asia Regional Policy Note

November 12, 2009

Human Development Sector Unit
EUROPE AND CENTRAL ASIA

Document of the World Bank

ABBREVIATIONS AND ACRONYMS

CEE	Central and Eastern Europe
CPI	Consumer Price Index
ECA	Europe and Central Asia
GDP	Gross Domestic Product
IMF	International Monetary Fund
NDC	Notional Defined Contribution
OECD	Organization for Economic Cooperation and Development
PAYG	Pay As You Go
PFMCs	Pension Fund Management Companies
PROST	Pension Reform Options Simulation Toolkit
UCITS	Undertakings for Collective Investment in Transferable Securities

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ACKNOWLEDGMENTS

This policy note was prepared by a Bank team led by Anita Schwarz, that included Ufuk Guven, Richard Hinz, Robert Holzmann, Heinz Rudolph, and Asta Zviniene, and builds on forthcoming separate notes and papers that substantiate the calculations and proposed options. It incorporates policy discussions and feedback on related presentations at a regional workshop on Pensions in Crisis held in Brussels on May 7, 2009 involving participants from 23 countries and officials from the OECD, EBRD, European Commission, and IMF. The authors would also like to thank Zoran Anusic, Sergiy Biletsky, Tatyana Bogomolova, Richard Florescu, Indermit Gill, Kathy Lindert, Tamar Manuelyan-Atinc, Fernando Montes-Negret, Kaspar Richter, Rafael Rofman, Sophie Sirtaine, Andras Horvai, and Penny Williams, for their comments on earlier drafts.

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EXECUTIVE SUMMARY AND INTRODUCTION

The financial crisis has significantly impacted pension systems in the Europe and Central Asia region (ECA)[1] tempting governments to make policy changes in response to the increased pension deficits they are facing. The crisis exacerbates the existing financial imbalance in the public pension systems by reducing contribution revenues sharply while leaving expenditures constant or even higher. The crisis also resulted in a sharp drop in financial asset values which affects pensions provided by funded pillars. Consequently, no pension system, however structured, has been immune to the crisis.

Despite the severity of the financial crisis, it pales in comparison to the demographic crisis which the region will face. Therefore, countries are urged not to make long-term policy changes to address short-run fiscal concerns. Any short-run responses should be consistent with strategies to address the long-run challenges to the pension system. The long-run focus should include (i) protecting the purchasing power of pensioners and fiscal sustainability of the system, both during the crisis and beyond, by shifting to inflation indexation of pensions, (ii) encouraging individuals to work more and longer by raising retirement ages, equalizing retirement ages between men and women, and curbing early retirement, and (iii) enhancing public awareness of the increasingly limited capacity of publicly provided pensions as populations age.

In addition, those countries which complement their public pensions with funded pensions should focus on (i) providing better insurance for second pillar pensions through life cycle portfolios or guarantees, (ii) accelerating regulatory reforms to enhance the rates of return, and (iii) building a market for inflation-indexed bonds which will allow insurance companies to offer inflation-indexed annuities.

The financial crisis has quickly turned into an economic crisis with major implications for all public programs, including pension systems. The ECA region has been hit hard and early by the crises, leading to a temporary reversal of the strong growth and increased employment experienced by most of the region over the last decade. During this decade, most countries reformed their pension systems, some making parametric changes, with others undertaking major systemic reforms. The rapid deterioration in output, employment, asset values, fiscal balance, and access to domestic and foreign financing has led to a rapidly worsening situation for the entire pension systems in the region and to early policy reactions by authorities in response to the crisis. While the impact of the crisis varies substantially from economy to economy, some generic lessons can be drawn

[1] The World Bank ECA region includes Albania, Armenia, Azerbaijan, Belarus, Bosnia-Herzegovina, Bulgaria, Croatia, Czech Republic, Estonia, Georgia, Hungary, Kazakhstan, Kyrgyz Republic, Kosovo, Latvia, Lithuania, Macedonia, Moldova, Montenegro, Poland, Romania, Russian Federation, Serbia, Slovakia, Slovenia, Turkey, Tajikistan, Turkmenistan, Ukraine, and Uzbekistan.

from the experience with the recognition that the analysis and recommendations will not apply fully to each and every economy, and that there is no blueprint for reforms given the diversity of contexts, institutions and pension systems in the region. The analysis makes it clear that however severe the impact of the financial crisis, this pales with respect to the coming demographic crisis and that countries need to make sure that whatever actions they take now do not impose bigger financial burdens when they will be even more constrained than they are today.

SECTION 1: IMPACT OF THE FINANCIAL CRISIS ON PENSION SYSTEMS

A. NO PENSION SYSTEM IS IMMUNE FROM CRISIS

Pension systems in the ECA region come in all shapes and sizes, and one of the key lessons from the crisis is that no pension system is immune from the global financial and economic crisis. Most countries in the region have three pillars in their pension system, a zero pillar, typically a first pillar, but sometimes a second and a third pillar. Eleven of the thirty countries have all four pillars. The pillars and the variations are described in Box 1.

Box 1: Pension Systems Come in All Shapes and Sizes

Figure 1: Types of PAYG pension system in ECA

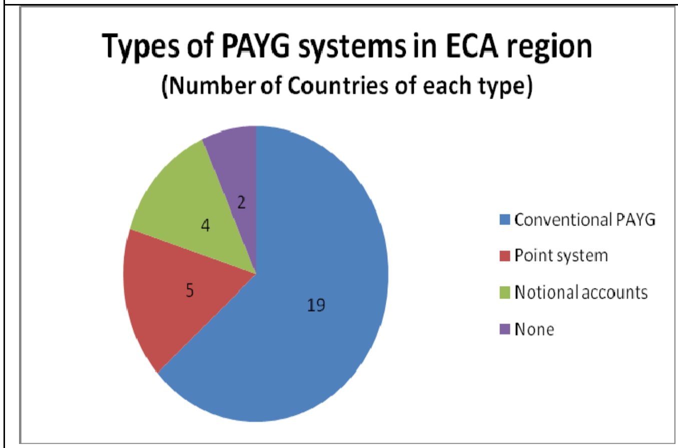
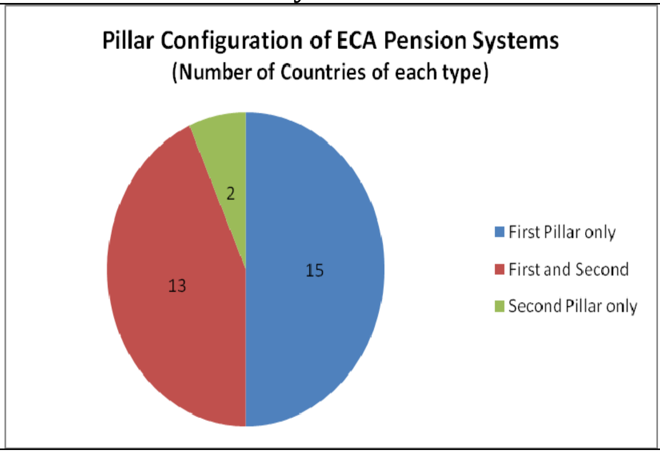


Figure 2: Pillar Configuration of ECA Pension Systems



Most countries in this region have a "**first pillar" or "unfunded pension system**," where contributions paid by current workers finance pensions for current retirees, and pensions for today's workers will be paid by contributions from future workers. This system is typically called a Pay As You Go (PAYG) system. The majority of ECA countries, 28 out of 30, provide retirees with some percentage of their former salaries, however defined, per year of contribution. In some cases such as in Lithuania this benefit is in addition to a flat benefit provided to contributors. In others, such as Bosnia-Herzegovina, the entire contributory benefit is based on the individual's wage history. In still others, like Georgia, the system has such little revenue that benefits are mostly the same for all contributors, with little differentiation based on past salaries. A few, including Croatia, Montenegro, Romania, Serbia, and the Slovak Republic, have adopted a variant of the PAYG called a "**point system**" where individuals are awarded points per year of contribution, with the number of points awarded each year depending on the ratio of the individual's wage to the average wage. These points are then converted to monetary amounts at retirement with the pension again depending partially or completely on the individual's wage history. Yet another group of countries, the Kyrgyz Republic, Latvia, Poland, and the Russian Federation adopted another variant of PAYG systems called **"notional accounts"** in which each contribution made by individual workers is tracked in an individual account together with hypothetical interest credited to the contributions. Upon retirement, the balance in this hypothetical or notional account is converted into a pension. Only two countries in the region do not have a contribution-based publicly managed PAYG system, Kazakhstan and Kosovo, but in both cases, flat pensions are provided to all elderly from the budget. These arrangements are summarized in Figure 1.

In addition, 13 of the 30 countries have adopted **second pillars or funded systems,** Bulgaria, Croatia, Estonia, FYR Macedonia, Hungary, Kazakhstan, Kosovo, Latvia, Lithuania, Poland, Romania, the Russian Federation, and Slovak Republic. These differ from the first pillar in that worker's contributions are kept in individual savings accounts and actually invested in a variety of financial assets, rather than being used to finance current pensions. The contributions plus interest earned on each account is used to provide a pension for that particular individual when the individual reaches retirement age. In most of the ECA countries, these second pillar contributions are carved out of the overall pension contribution so that less revenue now goes to the PAYG system to finance the already existing pensioners. Given that most of these countries are running deficits even with their full pension contributions, carving out a portion results in even bigger deficits for the first pillar, to be financed by general revenue. The range of pillar configurations are shown in Figure 2 with 2 countries with only funded pillars, 13 with first and second pillars, and 15 with only first pillars. In addition to first and second pillars, the two countries without first pillars, Kazakhstan and Kosovo, have general revenue-financed flat benefits to all elderly, typically known as **zero pillars.** Zero pillars refer to noncontributory benefits which in most of the countries are provided to some portion of the elderly, usually on a means-tested basis.

Finally, almost all countries have **third pillars,** mechanisms for individuals to save additional money toward a better pension on a voluntary basis. The third pillars vary extensively in terms of level of regulation and supervision.

The financial crisis affects each component of a pension system differently, and while magnitude and timing may be different, each component is adversely affected. *Zero pillars* are financed by general revenues, and as output fell and the overall tax base shrank, financing for zero pillars shrank. *First pillars* are financed by worker and employer contributions, and as unemployment rose and wages fell, the revenue available to finance first pillars fell. *Second and third pillars* are financed by employer and employee contributions and by interest earnings on these contributions. The drop in the valuation of financial assets added to the negative impact of unemployment and shrinking wages to reduce potential payouts from these pillars.

B. IMPACT OF GLOBAL CRISIS ON FIRST PILLAR SYSTEMS

Since first pillar pension systems are financed by contributions paid by employers and workers as a percentage of wages, revenues are tied to formal sector employment and wages. As both have fallen due to the crisis, pension system revenues have taken a sizable hit.

On the expenditure side, the number of beneficiaries typically increase during a crisis, as people look to early retirement and disability as a means to cope with unemployment. Benefit levels typically stay the same or rise slightly as countries are reluctant to reduce pension levels even when wage levels are falling. A sizable loss in revenue coupled with a smaller increase in expenditures opens up a gap in the pension financing or extends the already existing gap in most of these countries.

To get a sense of the magnitude of the potential gap, the Bank team constructed a hypothetical country that looks like a "typical" ECA country with the "average" characteristics of the region, with respect to demographics and pension system. These characteristics were then fed into the Bank's Pension Reform Options Simulation Toolkit

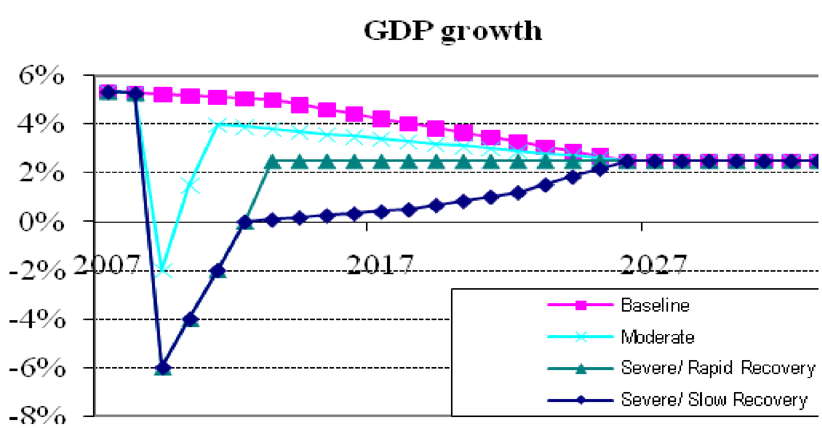
(PROST) model to determine the potential impact of the financial crisis on the pension system. Table 1 summarizes the pension system characteristics.[2]

Table 1: Pension System Characteristics in 2009

	Pure PAYG	Multipillar System
Contribution Rate	28%	21% to PAYG; 7% to funded
Contribution Revenue, as % of GDP	6.0%	
PAYG Expenditures, as % of GDP	7.2%	
Average pension as % of average wage	47%	
Indexation rule	wage	

Figure 3 shows the different macroeconomic scenarios considered. In the absence of reform real GDP growth would have fallen from the pre-crisis levels of 5.2% to just over 2.5% in the next 20 years. A moderate crisis scenario would show a 2% decline in 2009, followed by growth of 2% and 4% in 2010 and 2011, respectively, converging to 2.5% within a decade. A severe shock followed by rapid recovery would show a 6% decline in 2009, followed by a return to the long run path within 4 years, while a slower recovery would result a return to the long run path over 10 years.

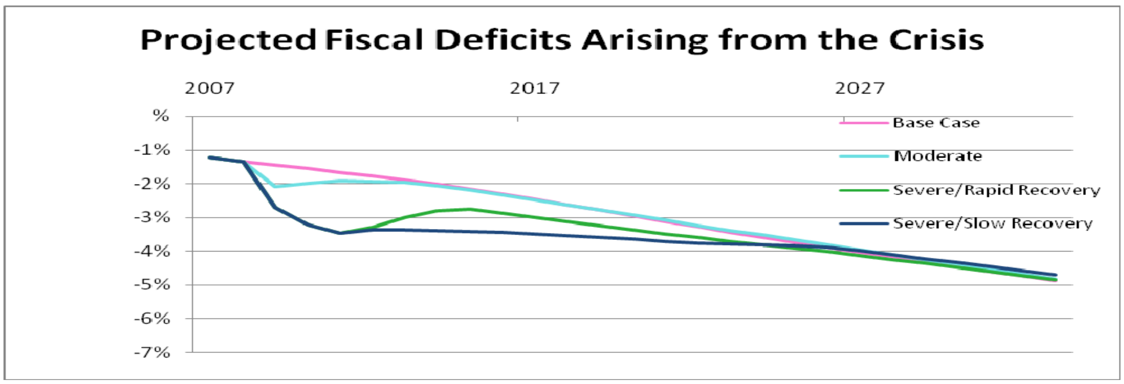
Figure 3: Macroeconomic Scenarios Modeled



[2] Richard Hinz, Asta Zviniene, Sergiy Biletsy, and Tatyana Bogomolova, "The Impact of the Financial Crisis on Public Pension Systems: Stress Testing Models of Mandatory Pension Systems in Middle Income and Developing Countries," Social Protection Discussion Paper, World Bank, September 2009.

Experience from previous crises suggests that the reduction in the wage bill and contribution revenues is roughly twice the magnitude of the reduction in GDP. Given that forecasts for 2009 range from a mild reduction of 2% of GDP to much higher shocks of negative 6% growth, the modeling suggests that this hypothetical country will experience a decline in revenue ranging from 4% to 12%, which would translate into revenue declines of 0.1% to 0.8% of GDP in the cases outlined above. If pension expenditures stay roughly constant in the face of falling GDP, expenditures as a share of GDP will rise between 0.5% and 1%, opening up an additional deficit of 0.6% to 1.8% of GDP in the pension system. The impact of the crisis is shown in Figure 4 below. In the mildest case, the pension system will return to its pre-crisis position as early as 2013, while in the more severe case, it may take 20 years.

Figure 4: Projected Pension System Deficits Arising from the Crisis



C. IMPACT ON COUNTRIES WITH SECOND PILLAR PENSION SYSTEMS

For funded pension systems (second and third pillars), the crisis potentially impacts benefits due to decreasing asset values for the financial instruments in which the pension funds are invested. The decline in asset values has a direct impact on those just reaching retirement age. If the government chooses to provide some public compensation to affected individuals, the overall fiscal budget may be affected. Fortunately, in the ECA region, very few individuals are currently retiring with benefits in the funded system because the schemes are relatively new and often exempted older workers. The oldest of the ECA second pillars are Hungary and Kazakhstan which began in 1998, soon followed by Poland in 1999. In Hungary only new entrants had to join the second pillar while it was voluntary for all current workers. Those older than 52 who did join the second pillar were encouraged to switch back, resulting in few current retirees. Similarly, in Poland workers older than 50 at the time of the reform were not allowed to join the second pillar and it was voluntary for workers between the ages of 30 and 50. Again, as a result, few are retiring from the second pillar. In the case of Kazakhstan, all workers joined the second pillar, but current retirees receive benefits from the old first pillar based on the number of years they contributed to it, and only receive benefits from the second pillar for the relatively small percentage of their working career during which they contributed to the second pillar. The other ten countries[3] adopted the second pillar even more recently and had similar restrictions on who could join and provided first pillar benefits to current retirees based on their years of contribution to the previous pension system, also resulting in few current retirees. Nevertheless, the drop in asset prices will be reflected in the future pensions of workers now contributing to the second and third pillars.

Even prior to the financial crisis, rates of return earned by second pillars in the region have been modest relative to income growth, as shown in Table 2 for a limited number of countries for which comparable data were available. Since there is always volatility in asset prices, it is incorrect to judge investments expected to take place over an earnings lifetime on the basis of the rate of return over a short period of time, but in this case only a short period of time is available. And during the initial years of the pension funds, income growth and wage growth have been extraordinarily high as these countries recover from the collapses of the 1990's. Nevertheless, the underperformance signals issues regarding industry structure, regulation, and financial market development that have yet to be addressed. The drastic fall in asset values arising from the crisis accentuates the already low replacement rates being generated by these second pillar funds, but at the same time creates the opportunity to undertake reforms that will improve performance of the pension funds both in the short and long term.

Table 2: Rate of Return of Pension Funds since Inception till end 2007
(in real terms and as differential over GDP growth)

	Year of Inception	Real Rate of Return	RoR over GDP growth
Bulgaria	2002	3.2	0.5
Estonia	2002	4.9	0.6
Hungary	1998	2.6	0.6
Latvia	2001	-3.5	-0.3
Lithuania	2004	5.7	0.7
Poland	1999	8.9	2.2
Slovakia	2005	0.9	0.1

Sources: World Bank staff using data from national sources

[3] Countries adopting a second pillar include Bulgaria, Croatia, Estonia, FYR Macedonia, Hungary, Kazakhstan, Kosovo, Latvia, Lithuania, Poland, Romania, the Russian Federation, and the Slovak Republic.

SECTION 2. INITIAL POLICY RESPONSES BY COUNTRIES TO THE GLOBAL CRISIS

Hit with an abrupt shock to the fiscal position of the public pension scheme, countries started considering and implementing policy changes across the key pillars, as shown in Table 3. The immediate concern was improving the fiscal balance, by generating additional resources for the public pension system or by cutting expenditures. However, policymakers need to be aware that measures that generate short-term gains may involve additional costs in the long run.

A few countries, such as Romania and Russia, reversed recently introduced cuts in contribution rates. The rate cuts had been intended to reduce labor costs and to foster formal labor market participation, but were reversed in light of the crisis and need for revenue.

Some of the second pillar countries, including Estonia, Latvia, Lithuania, and Romania reduced contribution rates in the second pillar, while increasing them in the first pillar. In the case of Romania, they delayed a scheduled rise in second pillar contribution rates. Temporarily of course this raises revenue and alleviates some of the current shortfall, but workers will now see reduced balances in their second pillar accounts at retirement and consequently lower pensions. Since they made higher contributions to the public system, they will expect the public system to finance higher first pillar pensions to compensate for the reduced second pillar pensions. The fiscal impact of this long-run, short-run trade-off depends on the particulars of each pension system, the extent of the contribution change, and the duration of the change, but is unlikely to be favorable for either the Government or the individuals.

Other countries are allowing, or considering allowing, individuals who chose a combination of first and second pillars to switch back to a first pillar only option. Countries in this group include Hungary and the Slovak Republic. Like reducing contribution rates to the second pillar, this measure generates additional revenue

Table 3: Policy Actions in ECA Countries – Legislated and Considered in Response to the Global Economic and Financial Crisis

(a) Policy Action	(b) Legislated	(c) Considered
Change in **Overall Contribution Rate**	-**Romania:** From 27.5% in 2008 to 31.3%. - **Russia:** From 20% to 26%, and moving contributions from basic pension to NDC pension. -**Macedonia*:** Gradual reduction of pension contribution rate starting from January 2009 (2008 - 21.5% , 2009 - 19%, 2010 - 16.5% and 2011 - 15%) and payment of contributions based on gross wage (including bonuses etc) instead of net. - **Montenegro*:** From 21% in 2008 to 20% in 2010	**Bulgaria*:** From 23% to 21% in 2010 and then gradually to 18% by 2013 **Lithuania:** To be increased by 2% starting in January 2010.
Adjustment to **Second Pillar Contribution Rate**	-**Romania:** Contribution rates to the 2nd pillar frozen at 2% (instead of legislated increase to 2.5%) -**Lithuania:** Contribution rates to the 2nd pillar reduced from 5.5% to 2% in 2009 and 2010, to go to 6% for 2012-2014. -**Estonia:** Diverting full 2nd pillar contributions to 1st pillar in 2009 and 2010; moving back to 2% contribution from mandatory rate in 2011 and 4% in 2012, with the possibility of higher 2nd pillar contributions of 6% in 2014-17 to compensate for the current reductions. -**Latvia:** Contribution rates to the 2nd pillar reduced from 8% to 2% in May 2009; increasing to 4% in January 2010 and to 6% in January 2011and remaining at this level (2nd pillar contribution rate was to rise to 10% in 2010 prior to the amendment)	.
Allowing Opting	- **Slovak Republic:** First option (Jan –June 2008) and second	

(a) Policy Action	(b) Legislated	(c) Considered
in/out of Second Pillar	option (Nov 2008 – June 2009) to switch in/out of the second pillar. -**Hungary:** Those who were older than 52 on December 31, 2008 will be allowed to switch back to the first pillar only until December 31, 2009.	
Making Second Pillar **Voluntary to New Entrants**	-**Slovak Republic:** Second pillar participation for new participants voluntary as of January 2008.	
Changing Indexation/ **Minimum &Basic Pension/Benefit Cuts**	**-Serbia** : Suspension of indexation for 2009 and 2010 with return to legally mandated inflation indexation beyond 2010 per Government agreement with the IMF --**Hungary:** Abolishment of 13th pension; indexation to be between Swiss or pure inflation indexation depending on the GDP growth as follows (i) GDP growth < 3%, 100% inflation; (ii) GDP growth between 3-4%, 20% wages, 80% inflation; (iii) GDP growth between 4-5%, 40% wages, 60% inflation ; and (iv) GDP growth >5%, Swiss indexation. - **Croatia:** Suspension of indexation in 2010 **- Latvia:** First pillar benefits cut (non-working beneficiaries 10%; working beneficiaries 70%) - **Macedonia**: Pension indexation at 20%-50% gross wage –CPI indexation from July 2009 to December 2009; will go back to 50%-50% gross wage-CPI indexation starting January 2010.	**-Latvia:** Elimination of wage indexing of contributory pensions. -**Estonia:** Changing indexation if negative growth or first pillar deficit more than 1% of GDP -**Romania:** Moving from wage to inflation indexation. **Ukraine:** Suspension of indexation in 2010. - **Moldova:** Suspension of indexation in 2010 **-Lithuania:** Benefit cuts (regular pensions based on progressive scale between 3.3% -12.4% -on average by 5%; state pensions-non-contributory pension supplements for police, military, victims of repression, special recognition pensions-between5% -20%; pensions for non-working beneficiaries in addition be reduced based on their wage income from 2.5% to 50%) starting in December 2009.
Increase in **Retirement Age**	**-Hungary:** Increase in retirement age from 62 to 65 by 2012.	-**Ukraine:** Increase in retirement age to 62 for both men and women -**Romania:** Equalizing retirement age of women with men at 65.

(a) Policy Action	(b) Legislated	(c) Considered
		-Croatia: Increase in retirement age for women to 65 **-Poland: I**ncrease in retirement age for men and women to 67 by 2030.
Measures to Address **Early Retirement**	**-Poland:** Elimination of numerous early retirement schemes (previously available to some 1 million people) . **-Hungary:** Increase in penalties for early retirement and introduction of bonuses for delayed retirement. **-Latvia:** Reduction of early retirement pensions from 80% of normal retirement pension, to 50% of normal retirement pension. Early retirement will no longer be an option from January 1, 2012	**-Ukraine:** Gradual elimination of special and early pension regimes **-Romania:** Elimination of special pension schemes and early retirement
Guarantees of Second Pillar Contributions	**-Kosovo:** Guaranteed nominal value of contributions for those retiring in late 2008 and 2009	

**Montenegro and Bulgaria continuation of earlier policy decisions; Macedonia to account for the increased wage subject to contributions.*

for the first pillar, but this measure is more extreme, maximizing both the extent of the change and its duration. Allowing transition cohorts, in particular those close to retirement to switch back to the first pillar yields immediate revenue gains for the first pillar and may provide more secure benefits for those about to retire when asset values are particularly low. But extending this option to younger cohorts and new entrants risks creating (i) additional uncertainties for government finances as future revenues and expenditures depend on future individual choices, (ii) additional uncertainties for the pension fund market since future market size now becomes unpredictable, (iii) political pressure to allow first pillar participants to switch back to the second pillar if asset values rise sharply, (iv) more uncertainty for individuals from the reduced diversification in their old age incomes, and (v) higher fiscal costs in the future.

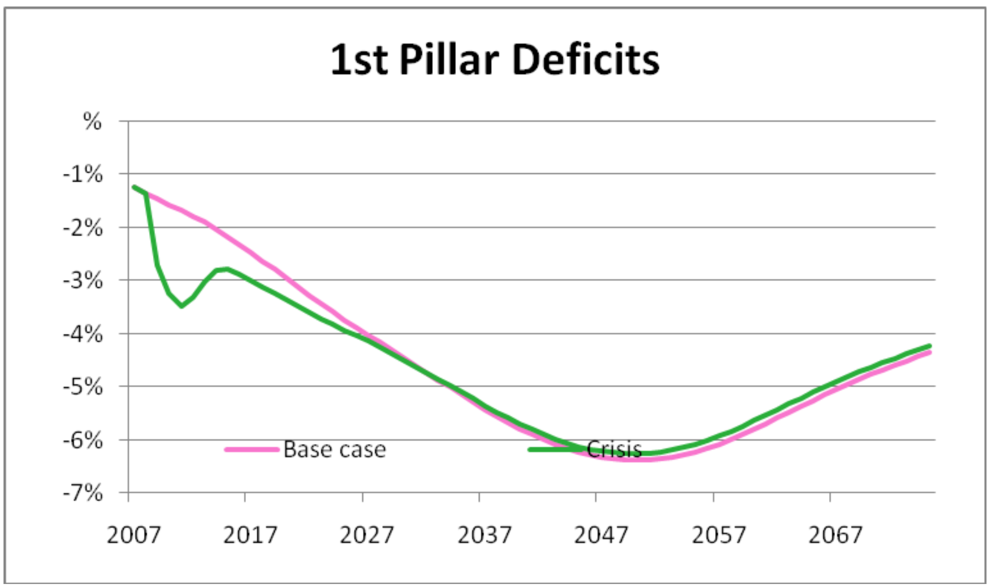
An additional group of countries has changed or is considering changing indexation. These include Serbia which has frozen pensions in nominal terms in both 2009 and 2010 in response to the declining revenue. No countries have actually reduced nominal pensions even when the legal indexation required reductions in response to falling nominal wages.

In many countries, second pillar pension funds have reacted to the drop in financial asset prices by moving out of equities and into fixed income instruments. However, this amounts to unnecessarily capitalizing the losses in the pension portfolios and in losing the opportunity for capital gains when asset prices recover. Since pension funds are long term savings, they should focus on long term performance and avoid panicked attempts to time the market.

SECTION 3. THE REAL CRISIS IS YET TO COME

Despite the pain countries have endured during the global financial and economic crisis, the impact of this crisis pales in comparison to what the countries are soon to face as the region continues to age. It is sobering to look at the impact of the most severe version of the global financial crisis next to the impact of the demographic crisis to come, as shown in Figure 5. Future pension system deficits are expected to be threefold what is currently being experienced in the worst hit countries and are expected to remain at that level for more than 20 years before slightly improving.

Figure 5: Projected Balance of the Pension System over the Next 60 Years



Policymakers need to be cautious that their response to this crisis does not exacerbate the next one.

In past crises, governments have responded to rising unemployment by loosening early retirement and disability restrictions. Increased retirement now will shift the baseline deficits even higher as potential revenues decline and expenditures rise. Raising contribution rates in some types of systems raises liabilities for the future. Transferring second pillar contributions to the first pillar also involves an increase in future liabilities for the first pillar.

A. First Pillar Reforms: Improve Fiscal Sustainability before the Big Crisis Hits

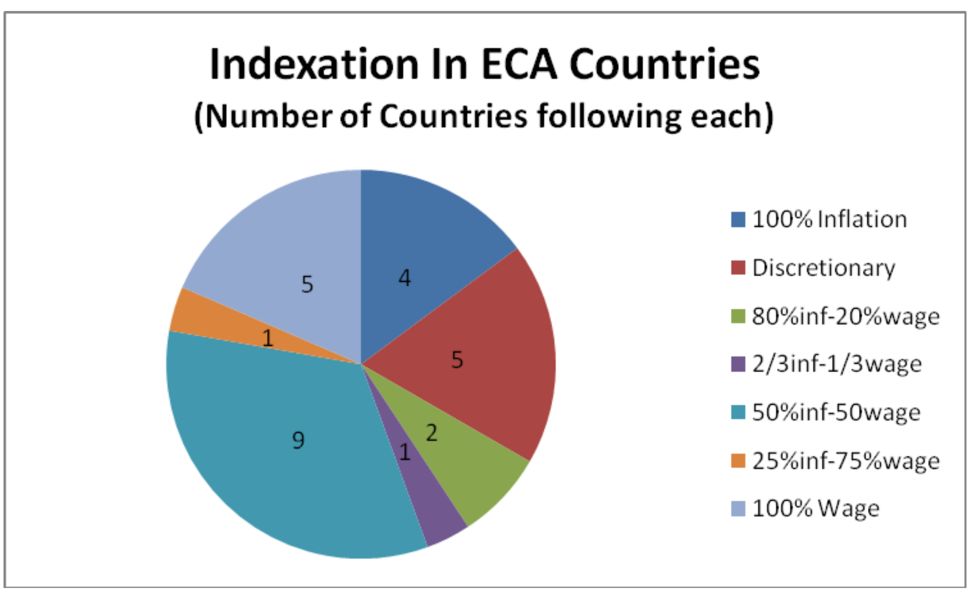
The big crisis shown above arises from the unfavorable demographics facing most of these countries, but also from some of the policies they are following. Prior to 1990, most of these countries had pension systems which were unaffordably generous, particularly in light of the aging to come. Most countries, in one way or another, have improved their pension systems. Substantial reforms took place in the late 1990's and early years of this decade, often as much as was politically feasible at the time, and policymakers took a rest, knowing in most cases that they had not reached fiscal sustainability, but recognizing that they needed to give the public time to absorb the substantial changes already made. Without these reforms in place, the demographic crisis would have looked much worse.

Crisis provides an opportunity for reform. In some cases, as the economy improved and fiscal pressures fell, generosity began to increase again. The crisis provides the opportunity to revisit these pension reforms and put policies in place that will help workers and pensioners cope with the crisis to come. What policies would be helpful?

i) Moving to inflation indexation

Most countries in the region maintain some element of wage growth in the pension increases granted to pensioners after retirement, although international best practice and practice in both EU and OECD countries has shifted toward inflation indexation. Pre-reform, most of the countries indexed pensions to wage growth. Box 2 shows the current indexation arrangements in the region. As shown in Box 2, only four of the

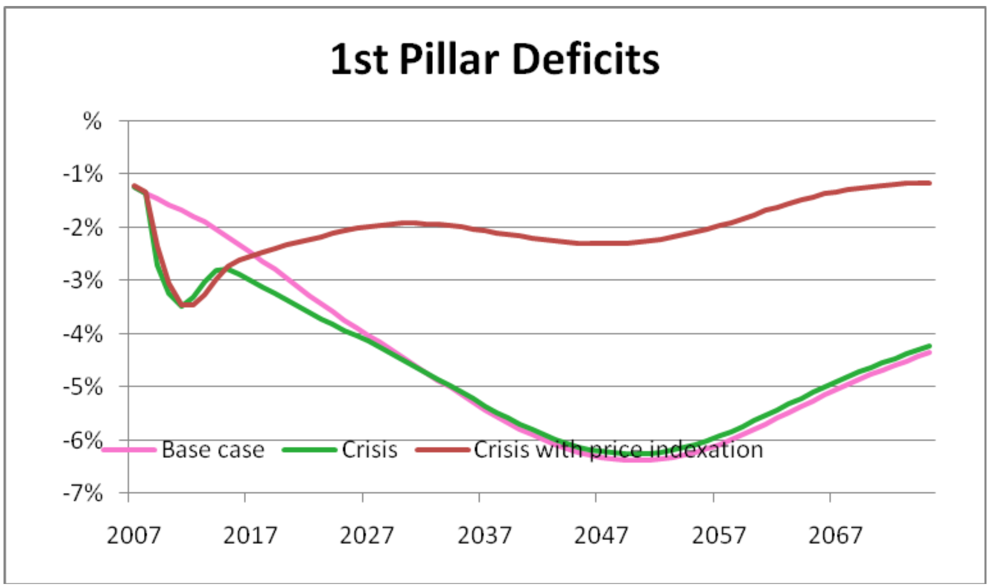
Box 2: Regional Indexation Arrangement



twenty-seven countries for which there are data follow the international best practice. The other twenty-three countries continue to include at least some element of wage growth in the indexation of pensions after retirement. Moving to inflation indexation during the crisis would better protect pensioners in the short run by maintaining their purchasing power, but at the same time, move the pension system to better fiscal sustainability for the long run, in short a rare win-win proposition.[4]

Figure 6 shows the impact of moving to inflation indexation in this hypothetical country. While there is a very small initial fiscal cost, given that full wage indexation should reduce real pensions in the short run, the benefit is better protection for vulnerable pensioners in the short run and major fiscal improvements for the long run.

Figure 6: Projected Pension Deficits with Move to Price Indexation



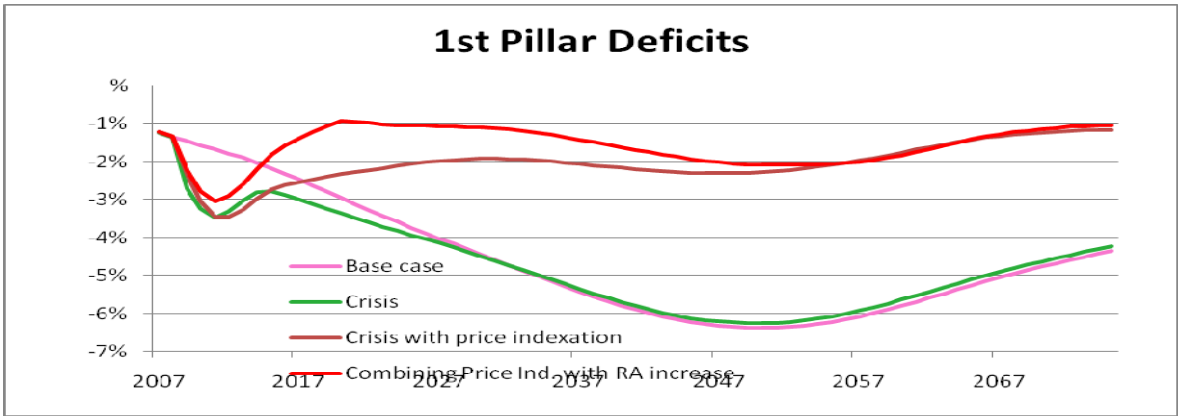
ii) **Raising retirement ages.**

While most OECD countries have already raised retirement ages for both men and women to 65 or beyond, most ECA countries continue to allow men to retire younger than 65 and continue to allow women to retire even younger than men. Average retirement ages are even younger than statutory retirement ages with half or more of new retirees retiring younger than the statutory retirement age because of early retirement privileges granted for many occupations pre-transition. While male life expectancy is significantly lower than in western Europe, especially in countries like Russia, the expected duration of benefits is longer for men and even more so for women than in western Europe. If retirement age was raised to 65 at the rate of 6 months per year,

[4] International best practice suggests that wages pre-retirement be revalued using average wage growth, while pensions after retirement are indexed to inflation.

along with the move to price indexation, the impact on the long run would be even more substantial as shown in Figure 7.

Figure 7: Projected Deficits with Both Inflation Indexation and a Retirement Age Increase



iii) **Promoting public awareness of pension issues.**

With the aging of the population (the coming demographic crisis), people will increasingly have to save additional money for their own retirement if they want more generous benefits. Financial literacy schemes and information awareness campaigns are important to build public understanding of the need for reforms and the need for individual savings to complement public pension benefits.

B. SECOND PILLAR REFORMS

The crisis also unmasked some particular vulnerabilities of the second pillar pension systems in the region: (i) vulnerability of benefits during accumulation and decumulation stages to vagaries of financial markets, (ii) regulatory limits which discourage risk-taking and result in lower returns to participants, and (iii) the need for stronger capital market development.

i) **Provide better insurance for the funded benefits**

Lifecycle pension portfolios provide different portfolio allocations for individuals in different stages of the lifecycle, with younger individuals more heavily invested in higher-risk, higher-return equities and older individuals in lower-risk, lower-return government bonds, and optimize the expected value of future pensions. Many countries in the ECA region, including Poland, Bulgaria, Croatia, Macedonia and Romania allow pension fund managers to offer only a single portfolio. Due to regulatory restrictions and competitive behavior, portfolios end up being very similar among different funds. As a consequence, individuals with different portfolio needs face a single portfolio option. This solution is sub-optimal from a lifecycle perspective, imposes risks for generations that are close to retirement age, and does not generate sufficiently high returns for younger generations.

Two other potential measures countries could consider are (i) providing a basic guarantee for the contribution of participants, such as a zero rate of return and (ii) increasing flexibility on the timing of converting fund balances into annuities to avoid forced selling of assets and conversion if the age of retirement coincides with a period of low asset values. The first measure would help raise confidence in the pension system for those individuals who have seen their asset values drop dramatically. In the second, individuals could choose the date at which they convert their balances to annuities rather than being forced to convert them on the date at which they reach retirement age. Better insurance from measures like these and the switch to life cycle portfolios will prevent the need for allowing older cohorts to switch back to the public system during times of crisis.

ii) **Accelerate regulatory and supervisory reforms that result in better rates of return**

Many of the current regulatory and supervisory practices do not provide the necessary investment options, investment regulation, performance criteria, and economic incentives to diversify the portfolio.

Less restrictive regulatory limits that encourage appropriate risk taking. Subject to proper supervision, regulation should encourage investments through low cost collective undertakings that promote international portfolio diversification. The excessive reliance on performance measures (e.g. minimum return guarantees, non negative returns), restrictions on international portfolio diversification and limitations for investing through collective undertakings (UCITS funds) may discourage pension fund managers from taking risks, which affect the rates of return they can provide participants. While the use of a minimum relative return guarantee is widely used among countries with second pillars, in some countries the parameters are too strict. In addition, some countries have added absolute return guarantees and compliance with a self defined investment strategy. The combination of these three factors is likely to bring portfolios towards conservative strategies. As a way of ensuring long-term sustainability of pension portfolios, regulation should allow for international portfolio diversification. Collective undertakings are an efficient way of diversifying portfolios at low cost. But pension fund managers will invest through these more expensive instruments only if the fees are paid by the fund.

Lifting unprofitable restrictions on administrative fees. Although high fees charged by pension fund managers are still a problem in some CEE countries, tight caps might discourage sound investments by pension funds. All ECA countries have imposed caps on fees charged by pension fund management companies (PFMCs), and in practice fees typically reflect the maximum allowed by the regulation. While in some countries fee structures have resulted in healthy profits for PFMCs, in others such as Slovakia and Romania, tight caps on fees have been an impediment for the development of the pension industry. In these cases PFMCs have not put enough emphasis in diversifying portfolios and offering attractive alternatives in retirement savings to contributors. Pension fund managers are currently discouraged from investing in assets other than low-yielding fixed income instruments because of the additional costs incurred in investing in other assets which are not covered by the restricted fees.

Flexibility in valuation methodologies during periods of illiquidity. Last, but not least, valuation methodologies should be prepared to deal with episodes of illiquidity and should avoid unfair transfers of wealth among contributors. As financial markets have turned illiquid, we see important challenges in the area of asset valuation. In order to avoid opportunistic behavior during the crisis by PFMCs, valuation rules should allow fair comparison of returns among different pension funds. Mark to model can temporarily replace the practices of mark to market, but supervisors should strengthen their efforts in insuring consistency in the use of modeling for asset valuation. Mark to market should be resumed as soon as the market recovers liquidity.

iii) Build a financial market for inflation-indexed bonds

Although pension funds may help to develop the domestic capital market, governments should also take proactive measures, including the development of an inflation indexed bond market. Development of the domestic capital market reduces the dependence on foreign financing, but also offers necessary instruments for pension funds and life insurance companies that are difficult to purchase in offshore markets, including long term inflation indexed bonds. The development of the domestic capital market requires a proactive approach from governments in the provision of financial infrastructure and in promoting the issuance of government inflation indexed bonds.

SECTION 4. CONCLUSIONS

While the financial crisis has hit pension systems in the ECA region hard, the real crisis is yet to come. Despite the pain countries have endured during the global financial and economic crisis, the impact of this crisis pales in comparison to what the countries are soon to face with the aging demographic transition. Short run recommendations include:

- Do not be hasty and make changes in long run programs to address short term needs
- Use the opportunity of the crisis to address long-run issues which will help when the demographic crisis hits

Long run recommendations include:

First Pillar

- Move to inflation indexation of pensions after retirement
- Increase the retirement age and equalize the retirement ages of men and women
- Reduce early retirement
- Promote public awareness that public pensions will necessarily be less generous than in the past

Second Pillar

- Provide better insurance against vagaries of the financial market during accumulation and decumulation phases
- Accelerate regulatory and supervisory reforms that will allow pension funds to earn better rates of return for participants
- Pro-actively engage in capital market development, particularly by offering inflation-indexed bonds

SELECTED REFERENCES

Chawla, Mukesh, Gordon Betcherman and Arup Banerji et. al. 2007. *From Red to Gray: The "Third Transition" of Aging Populations in Eastern Europe and the Former Soviet Union.* Washington, DC: The World Bank.

European Commission and Economic Policy Committee. 2009. *The 2009 Ageing Report: economic and budgetary projections for the EU-27 Member States (2008-2060).* Brussels: European Commission. Mimeo. Forth-coming in European Economy No 1/2009.

Gray, Cheryl, Tracey Lane, and Aristomene Varoudakis, editors. 2007. *Fiscal Policy and Economic Growth: Lessons for Eastern Europe and Central Asia.* Washington, DC: The World Bank.

Holzmann, Robert. 2009, ed. *Aging Population, Pension Funds, and Financial Markets: Regional Perspectives and Global Challenges for Central, Eastern and Southern Europe*. Washington, DC: The World Bank.

Holzmann, Robert and Ufuk Guven. 2009. *Adequacy of Retirement Income after Pension Reforms in Central, Eastern and Southern Europe: Eight Country Studies.* Washington, DC: The World Bank.

Lindert, Kathy and Anita Schwarz. "Social Protection Responses to the Global Economic Crisis in ECA." *Europe and Central Asia Knowledge Brief.* Vol. 1: March 2009.

OECD. 2007. Pensions at a Glance. Paris: OECD Publishing, 2007.

OECD. 2009. *PRIVATE PENSIONS AND DRAFT POLICY RESPONSES TO THE CRISIS*. Paris: OECD. April.

Whitehouse, Edward. 2007. Pension Panorama. Washington, DC: OECD and World Bank.

World Bank. 2008. The Financial Crisis and Mandatory Pension Systems in Developing Countries - Short- and medium-term responses for retirement income systems. Washington, DC: The World Bank. December.