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Pension Reform in Eastern Europe and Central Asia—

A Multi-Pillar Approach

by Michael Cohen

wwwwwwwwwastern hile the United States and Western European nations are debating the challenges facing national pay-asyou-go pension schemes, former socialist countries in Eastern Europe and Central Asia have got on with the job and introduced reforms that harness the ability of the financial market place to provide superior rates of return in the long run.

The impetus for the reform included the familiar demographic challenges of steadily climbing old-age dependency ratios, common to developed and developing countries alike. However, in the countries of the former Soviet Union and other socialist countries a more immediate cause was apparent-a collapse in output and in the workforce, as well as a legacy of over-generous and unsustainable social programs. In the best cases, employment fell by 10 percent in Poland and the Czech Republic and in the worst cases (excluding countries of the ex-Yugoslavia) by 30 percent in Hungary and Bulgaria. With relatively low retirement ages (typically 60 for men and 55 for women) and weak unemployment and disability income systems, many of these displaced workers were eligible for benefits in the pension system. This drove up pension system dependency ratios by 50 percent to 100 percent in most of these countries.

Obvious responses to these changes are to reduce the generosity of the pay-as-you-go system and increase contributions. The first response is being employed throughout the region, by increasing retirement ages, decreasing accrual rates, tightening eligibility rules for disability and survivor benefits and limiting indexation. The second response is not so easily achieved, as contribution rates are already so high as to encourage evasion and growth of the informal economy and further increases in contributions would simply exacerbate this. Combined employer and employee rates of 25 to 30 percent are typical, with rates of over 35 percent in Albania, Bulgaria and Poland.

But simply reforming the mandatory payas-you-go system, the first pillar, is not enough. While this might rescue the systems in the short-run, demographic changes will again plunge the systems into crisis, requiring either declining replacement rates, other benefit reductions or an increase in already high contribution rates. The answer is to introduce a funded second pillar, generally by way of individual capitalized accounts. To see why this is, we need to examine the pay as you go system from an investment perspective.

A pay as you go pension system could be looked upon simply as a government program transferring resources from workers to those unable to work because of old-age, disability or death of a working spouse, generally financed by ear-marked payroll taxes. Alternatively, it could be looked at as a savings scheme whereby workers create an entitlement to future income by paying contributions. In this latter schema, we can legitimately ask what is the rate of interest on these savings. In a sustainable pay-as-you-go system the answer is quite simply the growth in wages plus a component representing the increase in the labour force. Even in transition economies after they have begun to recover, it is difficult to foresee a level of real wage growth in excess of about 2 percent per year. Also, "growth" in the labour force is likely to follow the same pattern as in developed countries. Due to low family size (1.5 children per couple is typical, although in some Central Asian countries it is a little higher) this component is negativeabout minus 0.5 percent. Therefore the real rate of return in a pay-as-you-go system is generally around 1.5 percent per year, whereas in the long run a diversified portfolio can be expected to yield a real return of 3 to 4 percent.

Another advantage of a multi-pillar approach is diversification of risks. Clearly a pay-as-you-go system is vulnerable to demographic changes, labour participation rates and other economic phenomena. The financial market is not immune to risks either, but they tend to be different, although there is some correlation among economic risks. A system based on both pay-as-you-go and funded accounts should be less prone to demographic and economic risks. Also, employees like capitalized accounts and where choice was allowed an unexpectedly large number of employees switched (current turmoil in the stock market must be testing their mettle!). While social security contributions are generally seen as a tax, contributions to capitalized accounts, even if they are mandatory, are often seen as savings. This is expected to have a positive impact on labour markets, reducing evasion and assisting in a shift from the informal to the formal sector. A further advantage is the availability of funds for investment in the economy and the development of capital markets, which are often weak in these countries.

Generally, these countries have also introduced a voluntary "third" pillar, consisting of employer-sponsored plans and individual savings, often with some degree of incentive. Most of these third pillars are still in a rudimentary stage.

Of course the transition to a multi-pillar system is not without its costs. The principal issue is the transitional cost imposed on the "sandwich" generation, which has to continue to fund pay-as-you-go benefits for previous generations and begin to build up investments for themselves. This is achieved through various mechanisms, from the savings resulting from compressing current overly generous benefits, to modest contribution increases and budgetary sources, such as privatization receipts and government borrowing.

Other issues that need to be addressed include the questions of international investment and investment in government bonds. While unfettered global investment maximizes the prospective rate of return, developing countries need to weigh that against the need for development capital. Out-flow of capital can also cause balance of payments problems. Similarly, enforced investment in government bonds is sometimes a necessary evil to assist in the transition.

As these experiments mature developed countries will have much to learn from transitional economies. Don't be surprised to see the odd Kazakh or Estonian wondering around the Social Security Administration in a few years time—they will not be on a study tour, they will be participating in some reverse technology transfer! \Box

Selected bibliography

Pension Reform in Central and Eastern Europe: An Update on the Restructuring of National Pension Schemes in Selected Countries, Elaine Fultz, Markus Ruck, International Labour Office, Budapest, 2000 – most of the factual data comes from this paper.

The Evolution of Pension Systems in Eastern Europe and Central Asia: Opportunities, Constraints, Dilemmas and Emerging Practices, David Lindeman, Michal Rutkowski, Oleksiy Sluchynskyy, The World Bank, Washington, 2000.

Pension Reform and the Fiscal Stance, G. A. Mackenzie, Philip Gerson, Alfredo Cuervas and Peter S. Heller, International Monetary Fund, 2001.

The World Bank Approach to Pension Reform, Robert Holzmann, World Bank, 1999.

Reforming Pensions: Myths, Truths, and Policy Choices, Nicholas Barr, International Monetary Fund, 2000.

Social Security—Adequacy, Equity, and Progressiveness: A Review of Criteria Based on Experience in Canada and the United States, Robert Brown and Jeffery, North American Actuarial Journal, 2000—the discussion on this article is particularly interesting.



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ISC Minutes

Meeting Minutes of the International Section Council Conference Call • July 24, 2002 • 8:00 am EST •

1. Roll Call

Lisa Kuklinski-Ramirez, Rejean Besner, Michael Enright, Mike Gabon, Shumei Kuo, Randy Makin, Marc Slutzky, Hans Wagner, Hubert Mueller and Lois Chinnock, Martha Sikaras and Michael Kaster of the SOA

2. April Meeting Minutes Approved.

3. Treasurer's Report

The second quarter books are closed and the financials will be available during the first week in August. Fund balance at the end of June was approximately \$74,000. The council has received requests to fund activities that will use some of the surplus and should investigate other ways to spend this surplus effectively.

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