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# POLICY RESEARCH WORKING PAPER

# Old-Age Security in Transitional Economies

Louise Fox

Pension reform has proved even more contentious an issue than privatization during the former communist countries' transition to a market-based economy.

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# Summary findings

The formerly communist countries in Eastern Europe and Central Asia (EECA) are undertaking their second great social experiment of the century: the transition from authoritarian central planning to a market economy. One of the many problems they face during the transition is what to do with their pension systems.

Their problems are more complex than countries elsewhere at the same income level for three reasons. First, the systems are mature, with high and sharply rising dependency ratios. Second, pension coverage is more extensive than in most other middle-income countries, because of overindustrialization and the collectivization of agriculture. Third, pension reform is being undertaken at the same time as other fundamental economic changes. The timing, sequence, and political economy of pension reform are complex.

Fox reviews the main feature of existing EECA pension systems, identifies the major reform issues and reform options, discusses obstacles to reform, and proposes a sequence for reform. She focuses primarily on the richer, older European countries of the EECA, where pension systems have matured.

Paradoxically, pensions are low in those countries, yet expenditures as a proportion of GDP are high. The main reason for this is the very low age of retirement, which means a short contribution period and a high dependency ratio. EECA governments must bring spending promises in line with a more realistic revenue ceiling.

What makes reform so difficult is that too many people have already retired. Especially during the transition, when there are few opportunities to acquire wealth and some intergenerational redistribution is needed the retirees need a safety net, whether or not they deserve one on the basis of age alone. Fox's recommendations are designed to make the system more equitable and efficient for this group.

Four years after the fall of the Berlin Wall, pension reform has been elusive in EECA despite the severity of the problem. Fox identifies several reasons for this. First the extent of the pension system crisis was not foreseen in the early days of the transition (except perhaps in Hungary). Indeed, some countries expanded entitlement to help induce the labor market to adjust. As the depth of the problem became clear, EECA countries have tried to formulate reform programs, but only Albania has passed legislation substantially reducing entitlements.

Another reason reform has proved difficult in EECA countries is that governments have tried to reduce the scope of the public pillar without providing an alternative to assure old-age security. Failure to begin developing other pillars (based on savings and insurance principles) to meet the active generation's needs for old-age security may have doomed reform efforts from the start.

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# **OLD AGE SECURITY IN TRANSITION ECONOMIES**

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#### Introduction

Formerly communist countries in Eastern Europe and Central Asia (EECA) are undertaking their second great social experiment in this century. Following the failure of the first experiment (authoritarian central planning), these countries have begun a rapid transition to a market economy. In many countries the pace of change is staggering -- at least as revolutionary as the introduction of the command economy itself. Not only are new economic institutions such as private financial intermediaries and unemployment offices being created overnight, but the collapse of the Warsaw Pact and the authoritarian regimes required the creation of new political institutions as well. As with the introduction of the command economy, the dismantling and transformation of the state on this scale is uncharted territory.

The first years of the transition have not been easy. The late 1980s had been periods of declining growth for all EECA countries, as the inefficiencies of central planning, the limits to growth led by cheap energy, and (especially in the Soviet Union) the burden of high military expenditures took its toll. However, the dramatic fall in GDP most countries have experienced since beginning the transition was unexpected. As a result of the collapse of trading relationships internally and externally, the dislocation caused by the distribution of state assets such as land and housing to private owners, the cost of re-tooling economies highly dependent on cheap energy, the toll taken by civil wars and disruptions in the region, and the general chaos caused by the pace of change, GDP has fallen 20 to 40 percention. EECA countries since 1989. Chronic inflation has also emerged as price controls have been removed. While prospects for the restoration of growth are good in some of the early reformers, (e.g. Poland and Hungary), most EECA countries face bleak prospects over the medium term, without hope of restoring pre-transition income levels until the beginning of the next century.

A major issue facing EECA countries is what to do with their pension systems during the transition and beyond. As in other developing countries, declining growth has resulted in a fiscal crisis, squeezing all government expenditures including transfers. While the EECA pension problem appears similar to the ones described for countries at the income level of EECA in Latin America, the Middle East or North Africa, the problems are actually more difficult for three reasons. First, as a result of steadily declining fertility and mortality since World War II (at least in the European countries of EECA), the systems are mature, with high and sharply rising system dependency ratios. Eastern European countries have the demographic ratios of their Western European counterparts (as well as the aspirations), but not the economic development. Second, coverage is much more extensive than in most other middle income countries (owing to the over-industrialization and the collectivization of agriculture), and thus reform affects the current and future income stream of many more households. Third, pension system reforms reed to be undertaken while many other changes are going on in the economy, and while income distribution is changing dramatically. As a result, the design of pension reform, including timing and sequencing is quite complicated. And the political economy of reform is even more challenging.

<sup>&</sup>lt;sup>1</sup> Throughout this chapter, the acronym EECA will be used to refer to all the formerly communist or socialist countries of Europe and Central Asia, including the former Soviet Union (FSU), the former members of the Warsaw Pact, Albania and the former Yugoslavia.

This paper discusses pension system reform in the transitioning economies of the EECA. It is divided into two parts. In the first part, the main features of the current system are reviewed, and the major reform issues highlighted. In the second part, reform options, tailored to the needs of the transition economies, are presented. Part II concludes with a discussion of reform obstacles, and a proposed reform sequencing. The focus is primarily on the European countries of EECA, as the difficulties are most intense in these countries, where systems have matured. The experience of the richer and older European countries in transition offers important lessons for the younger and poorer Asian countries, however.

# Part I: The Existing System

### Old-Age Security in the Command Economy

Public pension systems in EECA countries began at about the same time as in the OECD countries -- during the first decades of the 20th century. Prior to World War II, most were modest systems, intended to be a funded system of comprehensive "worker's insurance", based on the German model. Most formal sector workers were covered, but the self- employed, small businesses, and those working in agriculture were in general not covered.

These modest systems changed dramatically after World War II, as central planning was introduced across Central and Eastern Europe. Coverage expanded rapidly, as these systems became the third leg of the cradle-to-grave minimum income and living standard security which socialism promised citizenry who played according to the rules of the game. The first leg was support for families with children: universal family benefits, child care, education, health services, etc. The second leg covered working life, and promised a job (according to the individual's skill level), with a modest and basically un-differentiated wage, for the active period (18 or school leaving age to 55 for women, 60 for men), coupled with full short-term benefits (sickness and maternity leave, worker's compensation, etc.). The third leg was a pension, with almost complete salary replacement. Together, the three legs assured income security to households.

The introduction of the command economy changed household behavior dramatically over the post-war period. Guaranteed jobs and child benefits, combined with the prevailing political view that both sexes had an obligation to work and the economic difficulty of living on one salary, sent millions of women into the labor force, such that today, EECA countries have the highest female labor force participation rates in the world (World Bank, 1993). Indeed, in Russia, women outnumber men in the workforce. At the same time, labor force participation declined among workers over 55 (Mitchell, 1992). Given the high returns to unpaid work under central planning (e.g. standing in food rationing queues, getting permits, etc.), and a rationing system which tended to award consumer durables and housing based on age or time in queue, the older population could live reasonably well on a pension income, small accumulated assets and housing entitlements. In rural areas, the elderly usually had access to agricultural land for a subsistence garden plot as well. This command economy

<sup>&</sup>lt;sup>1</sup> Merning, worked directly for the state in state enterprises, or in state-sponsored cooperatives; about 95 % of the population in most countries.

<sup>&</sup>lt;sup>2</sup> In countries with a large rural population, a larger earnings differential was observed in the 1980s. However, this differential never came close to that commonly observed in non-EECA countries with similar income levels. See Atkinson and Mickelwright, (1993) for this analysis.

rationing system (as well a constant housing shortage) also encouraged multigenerational households and intra-household transfers of time and money as both were needed under central planning if an acequate living standard was to be acquired. Partly as a result of these press ares, as well as controls on movement which inhibited labor mobility, and cultural traditions, multi-generational income pooling arrangements persisted in Eastern Europe much longer than in Western Europe, complementing and reinforcing the three legs of the official system. (Porket, 1980). Imbedded in the extensive tax and transfer system were major disincentives to efficient resource allocation, but this was of little concern under central planning.

As in all other countries, the introduction of PAYG funding permitted the granting of generous benefits. Early retirement was encouraged and liberal disability provisions were provided, to make way for new workers. Replacement rates were high in Central Europe. For example, in 1970, the average old-age pension awarded was 73 percent of the net wage in Poland (Porket, 1980). However, in the Soviet Union and the Balkans, rates tended to be lower — in the same year, the average pension in payment in Romania was 40 percent of net wages (the average newly awarded pension was somewhat higher). There were few opportunities for financial savings and low take home-incomes, social insurance was the only vehicle for consumption smoothing. As a result, the active as well as retired depended on the guarantees of the government (Porket, 1980).

Not surprisingly, the combination of demographic trends and behavioral responses to the incentives expanded pension dependency ratios and expenditures. By the second half of the 1980s, systems which had been in surplus, transferring resources to the general budget, began experiencing revenue shortfalls (e.g. Hungary, Bulgaria, Romania). (See graphs.) Despite these high expenditures, macroeconomically the system still appeared affordable in the context of the centrally planned model. Compared to the massive redistribution of resources through subsidies, transfer pricing, and the like which characterized the centrally planned economy, transfers for pensions were not a large share of the budget -- less than 20 percent in most countries.

# Characteristics of EECA Systems Today

During the establishment of communism in EECA, social institutions were harmonized across countries. They still exhibit a striking number of common characteristics, described below.

Only one pillar. EECA countries have one, publicly managed, redistributive system (with a limited earnings link, see below), with no other pillars. This contrasts with the situation in most middle income countries, which tend to have complementary private pension programs for the middle and upper classes, and a more developed financial sector offering better savings opportunities for all, permitting much greater risk diversification for the active population. Other pillars did not emerge in EECA countries because under central planning, all long term financing needs were handled by the state -- there was no demand for

longer term financial intermediation. In the richer countries, urban households did generate some personal savings, primarily owing to the shortage of consumer goods to buy. Most of these savings were held in state banks earning low rates of interest, (and have been inflated away as prices were liberalized)<sup>3</sup>.

Near-universal coverage As a result of the collectivization of agriculture, the formalization of the service sector and the organization of the remaining parts of the agricultural sector into cooperatives, near-universal coverage was obtained. The privatization of the agricultural, commercial and service sectors is now eroding this feature, as a non-contributing private sector is emerging<sup>4</sup>.

Old-age insurance unified with short-term insurance and other programs. Outside of the FSU and the Czech and Slovak Republics, the risk of loss of income in both the short and long term is covered in a unified insurance scheme with one contribution rate and pooled funds. Typically, these schemes cover loss of income due to injury, sickness (occupational or otherwise), maternity and infant child care responsibilities, as well as disability and oldage. Many also include non-insurance benefits such as family allowances or social welfare payments in the system as well. In Hungary, before the 1991 reform, the same fund also covered health expenditures. In the FSU until 1990, all social insurance benefits were included in the normal state budget (Liu, 1992). Pensions and child allowances are still lumped together in several FSU countries.

PAYG funding. Most non-FSU systems registered surpluses into the 1980s. These surpluses were not held in the funds, but were turned over to the central government. While many funds in the FSU are running surpluses today, few outside the FSU do. The notable exception is Romania. In Romania and in those countries where the funds run surpluses, the reserves are held in accounts earning negative rates of interest. As a result, the reserves are disappearing. In 1991, the loss in value of the reserves was estimated at two percent of GDP, a hefty inflation tax. In Romania and the FSU, these surpluses are an important source of deficit financing for the central government.

Low retirement ages and special regimes. Normal retirement with full pension in most countries in 1989 was 60 for men and 55 for women. In most countries, special regimes for selected occupations or industries (such as heavy industry or mining) offer retirement with full pension as early as 45 for women and 55 for men. For example, in Poland in 1990, 40 percent of all old age pensioners were below the standard retirement age (Maret and Schwartz, 1993). This results in an average effective retirement age in EECA of

<sup>&</sup>lt;sup>3</sup> In 1987, a voluntary, funded pillar was started in the Russian state insurance company. Romania also experimented with a voluntary funded pillar, but fiscal exigencies soon turned the "supplementary" program into a mandatory, PAYG one.

<sup>&</sup>lt;sup>4</sup> In Romania, the agriculture sector was exempt from all taxation for three years following the land reform. As a result, a large non-contributing sector has developed.

about 57 for men, 53 for women. Given an average life expectancy at age 60 of 16 years for men and 19 years for women, these retirement ages leave an average post-retirement life of over 25 years! Since 1989, several countries have raised the retirement age or reduced the privileges for selected occupations. The fiscal cost of these low retirement ages will continue into the next century, however.

High and growing dependency ratios. As a result of the post-war demographic trends as well as the low retirement ages, system dependency ratios are high in the European countries. The ratio of pensioners to contributors anges from .33 in Kyrgyzstan (a demographically younger country) to .87 in Bulgaria (Table 1). Note that these rates are 30 to 50 percent higher than the old-age dependency ratio primarily because of the early retirement age. By comparison, in the OECD, system dependency is only 8 percent higher than demographic dependency. In most of the Central European systems, the combination of reduced numbers of contributors (caused by unemployment and evasion by the private sector) and demographic trends are expected to push this ratio to one by the end of the decade (barring major reforms).

High expenditure levels and contribution rates. Total social security system outlays as a share of GDP are high and have been rising over the last decade. (Graph 1). Pension expenditures are normally two-thirds to three-fourths of total social security system outlays. By 1992, many EECA countries were spending as much in percent of GDP as the OECD welfare states, where per capita incomes are at least five times higher. In OECD countries, labor's share in GDP is high, and therefore this level of expenditures has thus far been affordable, albeit requiring high payroll taxes. But in EECA countries, the share of labor income in GDP is more typical of middle income developing countries, (e.g. about one-half to one third that of OECD countries), so contribution rates had to be raised to exorbitant levels to support these benefits — a'most 50 percent of payroll for short and long term benefits. These rates are typically levied on the payroll (not on the individual, except in Hungary and the former Yugoslavia) and paid entirely by the firm, obscuring the cost of these systems to the active generations.

High statutory replacement rates, few provisions for indexation. Statutory replacement rates tended to be about 80 percent of net wages, with actual replacement rates averaging slightly less. Pensions were based on the last three to five years' earnings, unadjusted for inflation. Usually pension payments were also not indexed, but subject to ad hoc adjustments. During the period of administered prices, the average pension tended to be close to the statutory replacement rate and the lack of indexation was not a problem because inflation was negligible. Those receiving full pensions (most pensioners) had a dependable income replacement stream. As prices have been freed during the transition, inflation has eroded the real value of pensions and compressed the distribution so that in many countries, the median pension is the minimum pension. For example, in Russia, 50 percent of pensioners now receive the minimum pension, in Kyrgyzstan over 70 percent. In Romania,

<sup>&</sup>lt;sup>5</sup> These life expectancy data are for Hungary, and were calculated for the author by the Statistical Institute.

the ratio of the average pension to the average net wage was about 65 percent throughout the 1980s. It fell to about 40 percent during the initial period of price liberalization. Indexation provisions recently introduced have maintained this ratio. Exceptions are Polano and Slovenia, who have maintained or raised the average relative to the average wage since 1989.

Actuarially unfair benefit provisions, perverse redistributions. Prior to 1989, many countries also varied the tax rate by sector, creating priverse redistributions as those eligible for early retirement usually paid equal or lower contributions, despite receiving a pension at retirement with a much greater present discount divalue. These workers tended to be the highest paid as well. Benefit accrual provisions are usually constant or reduced over time, providing little or no increase in benefits for working past the normal retirement age. Some countries imports a tax on employees who continue working while collecting a pension, discouraging employees from working in the formal sector past retirement age. (In the FSU, workers were encouraged to continue employment, as upon reaching full retirement age they could both work and receive their pension, with a re-adjustment taking place once real retirement took place). Credit was also given for non-active periods (e.g. service in the military, maternity leave, university studies). Recently Bulgaria and Romanic have introduced higher contribution rates for those eligible for early retirement in an attempt to reduce the anti-actuarial bias of the system, while the Baltics have removed this provision entirely. Several countries have increased pensions for working past retirement age.

Liberal disability certification. Certification for disability is quite lax. It is usually done by a local doctor, and in some countries it was common to pay the doctor a "tip" for providing this certification. In Bulgaria, 12 percent of pensions paid are for disability, in Hungary 30 percent of pensioners receive disability pensions, and in Poland is a whopping 36 percent of pensions are for disability.

Taxation of benefits. Cash transfers of all kinds have been exempt from income tax system, which to date has been primarily a wage tax system.

# Impact of the Transition

The transition has been hard on pensioners. As a result of the sharp fall in GDP, living standards of all groups are declining. The decline in GDP, combined with a crisis in tax administration is causing government revenues to evaporate, including those earmarked for the pension system. As a result, average pension benefits have fallen in real terms in Romania, Bulgaria, Poland, Hungary and the former Yugoslavia since 1989. Meanwhile, the returns to non-market time have also plummeted as market pricing has eliminated queues. Thus the opportunities for the retired to supplement their resources with non-market work are declining. Although all available data suggest that pensioners are no worse off than other groups (indeed some are better off), survey research shows this group less likely to support reform programs, and less optimistic about their future (Rose and Haerpfer, 1993).

### Box 1: Are the Aging Poor in ECA?

Preventing the emergence of old-age poverty through a combination of forced savings and redistribution to the lifetime poor was one of the main motives for creating public pension schemes. However, as PAYG schemes mature and the fiscal cost mounts, questions are increasingly raised as to how much of the active generation's income should be transferred on an entitlement basis to the old, given the needs of the younger poor, including public spending priorities such as transfers to the working poor or improved public education systems. The answer to this question depends in part on how poor the inactive generation is, relative to the active, and what other resources the older generations have at their disposal to alleviate poverty.

It is difficult to get a good picture of poverty in EECA countries, as this was not a focus of public policy prior to the transition. Although most countries do conduct household income and expenditure surveys, coverage in these surveys is incomplete and biased towards those working in state enterprises. A few private surveys have been conducted since the transition with more complete coverage, providing a complement to the official data.

All analyses of household incomes and expenditures in EECA countries during the transition show an increase in poverty (Sipos, 1992). This is not surprising, given the enormous decline in GDP which has occurred. In all cases, most of the poor are not pensioners. Although pensions have fallen in real terms, pensioners appear to have fared much better during the first years of the transition than other households, especially young household with children. In Hungary, pension-aged people are much less likely to be in poor households than active-aged or children (van de Walle, Ravallion, and Gautam, 1993). In Poland between 1989 and 1991, poverty rates went up in all social groups except pensioners (Milanovic, 1993). In Russia, a survey conducted in the fall of 1992 showed that the pension-aged population is under-represented in poor households, while children under 15 were over-represented. 22 percent of the pension-age population live in poverty, compared to a poverty rate of 37 percent for the whole population. 19 percent of poor households were headed by a pensioner according to this survey; the rest were headed by an active-age person. (World Bank, 1993).

If pensions are so low (below subsistence in many countries), why aren't pensioners poor? Several factors account for this paradox. The main reason is many pensioners continue to work. In Belarus, 20 percent of pensioners continue to work in the same job. In urban Russia, 32 percent of the population over 60 has a full-time job, and 5 percent have two jobs! (Boeva and Shironin, 1992). Similar ratios hold in Hungary and Bulgaria (Sziracski and Windell 1992). Many pensioners have garden plots or access to agricultural land. In 1986, considering both formal and informal activity, Petkov and Minev (1989) found that only 20 percent of Bulgarian pensioners "ceased work entirely."

The second factor is that most pensioners do not live alone, so intra-household transfers are also important in keeping pensioners out of poverty. 60 percent of those over 60 in urban Russia live in households where at least one member has a full-time job, and half live in households which have access to land on which they grow food. In Bulgaria, roughly half of pensioners live with their children. Studies in Hungary and Russia found that pensions are an important source of household income for households across the income spectrum. This is because pensions, being earnings-related, rise with household income. Although recent inflation has eroded significantly the real value of savings, nonetheless, 30 percent of the elderly in urban Russia reported living off of savings during 1992. Finally, private inter-household transfers probably play a key role, although we have no data on this yet.

(Continued)

It is also important to recognize that in EECA countries today, monetary income is still a poor indicator of well-being. In recent household surveys in EECA countries, Rose and Haerpfer (1993) found the correlation between monetary income and total income to be quite low. When households were asked whether they were saving, dissaving, or "ge'ting by" - consuming their income only -- the largest share were "getting by". However, there was no relationship between the amount of monetary income the household earned each month and whether households were "getting by".

In addition to the income measured by household surveys, most pensioners are also better off than the average population because they are more likely to have access to cheap housing. (This is a windfall not considered as income in most poverty studies; van de Walle, Ravallion, and Gautam (1993), for Hungary is the exception). In Hungary, Georgia, Lithuania, and Bulgaria, the majority of housing stock is privately owned, bought by the current owners at highly preferential prices. In other countries, housing stock is publicly owned, and rents are kept artificially low. While some of the housing is up for sale, rent control regulations and prohibitions against eviction protect the aging. Meanwhile, younger people without older relatives in the same location are stuck paying for higher-priced private rental housing.

While many pensioners may be better off than the average citizen, anecdotal evidence suggests that there are pockets of very vulnerable older people. In major cities in Russia, the NGO CARE found that found that a substantial proportion of those over 60 reported losing five kilos or more over the last six months. In Romania, a survey by HelpAge identified some pensioners (primarily in rural areas) living alone with little money for food or fuel. In all surveys, pensioners reported a high degree of psychological stress, given their fixed incomes and uncertain inflation. Access to health care was also a problem for most of the old-aged population, as medicine at controlled prices was rarely available, and doctors required "tips" in order for a patient to be treated.

In sum, over the next few years, while public resources are expected to be very tight and needs of all populations great, poverty alleviation objectives could be served by cutting back pensions and spending more resources on the working poor. Pensions should be reduced at the high end of the income spectrum, and for those still able to work (e.g. men and women below 65 without a disability). A flat pension or means-tested pension would clearly be more equitable, combined with special programs for the aging, (such as meals on wheels for those with mobility problems, or the creation of senior support networks). As means-tested assistance programs are created, they should also be available to this group.

Pensioners may indeed have less reason to be optimistic. While the long run prospects for economic growth are good, in the short run, they are uncertain at best, providing few opportunities for pensioners to improve their position. Privatized assets currently being distributed are not liquid enough to improve living standards of many pensioners today. As the economy changes, the pattern of household income pooling and income security needs are also changing. Younger cohorts may no longer wish to share housing or income with their older relatives. They, for the first time, are able to accumulate assets and savings to meet part of these needs, and most wish to do so. As a result, a major conflict exists between the entitlement of the generations who have retired or are about to retire with little old-age security and the living standards of the active generations.

#### Reform Issues

To be successful, the reform of the system should address the following major problems: (a) lack of income security for the aging; (b) perverse redistributions; (c) high cost; and (d) incentives for inefficient resource allocation. At the same time, reforms should increase system transparency and consumer satisfaction.

Security for the aging. Pension systems in EECA do not any more provide consumption smoothing and old-age income security, two of their key goals. Rather than replacing lifetime earnings in a dependable fashion for contributors, public pension benefits are quite uncertain, as inflation has ravaged pension entitlement in most countries, reducing them to the minimum, or in case of Estonia, a flat rate. The poverty reduction objective appears to be the only system objective now met, as pensioners are still better off on average than other groups despite receiving pensions below the estimated subsistence rate in some countries. However, pockets of poverty are being to emerge where pensioners lack complementary sources of support. (See Box 1).

Equity. EECA pension systems are also inequitable, both within and among generations. Redistributions occur in pension systems when pensioners receive more in benefits than they would have under an actuarially fair annuity plan given their contributions. Using this yardstick, even the near-subsistence level benefits many pensioners now receive involve major redistributions. This is primarily the result of the low retirement age. Low contribution rates in the 1970s and early 1980s also account for this result.

Inequitable redistributions within cohorts occurs as well through the special early retirement programs. These programs are quite regressive, as usually the highest paid workers were eligible for them. In Bulgaria in 1990, the ratio of the present value of the pension at retirement to the present value of contributions for an early retiree in the highest labor category (i.e. one that retires 10 years earlier) was 3 times that of a normal retiree (using a modest rate of interest and discount rate). <sup>6</sup> Early retirement ages for women combined with pension base credit for maternity leave also results in significant redistributions given women's longer life span.

Affordability. Public pension expenditure consumes much more of available resources in EECA countries than in other countries at the same income level. For example, pension expenditures are about 11 percent of GDP in Hungary and Poland, 14 percent in Ukraine and Slovakia, and 10 percent in Bulgaria, Estonia, Georgia and Uzbekistan, compared with 8

<sup>&</sup>lt;sup>6</sup> If early pensions were actually deferred compensation, then the above argument analysis does not really apply. However, the PAYG, payroll tax funding was then not appropriate; enterprises employing these workers should be required to contribute more as their workers retire. Given the current financing methods, these benefits are inequitable.

percent for Portugal, 3 percent for Argentina, and 5 percent for Israel. Countries with younger demographic structure but similar income level spend even less. Expenditures as a share of GDP are expected to continue rising for the foreseeable future, as a result of a continued aging of the population. This raises a serious affordability issue. Faster transition to the market economy will only worsen this problem.

Under central planning, transfers of up to 10 percent of GDP for pensions appeared affordable. Government revenues and expenditures were typically about 50 percent of GDP, and these were extracted directly from state-owned enterprises by state-owned banks, so tax administration was relatively simple. This efficient and effective tax administration has changed as market forces have been introduced. Banks are not willing to collect taxes, so administration system has to be built up from scratch. As a result, tax revenues are shrinking rapidly.

Many EECA countries consider the current fiscal crisis temporary, caused primarily by the need to improve administration. However, EECA countries should not expect to return to previous revenue levels in a mixed system or market economy, as it is neither desirable nor feasible for the government to collect such a large share of GDP in taxes. It is not desirable because taxes distort economic incentives, stimulating unproductive rent-seeking activities and lowering the rate of economic growth. Higher tax rates distort more, causing more evasion, requiring more resources devoted to administration and therefore collecting less net revenue. It is not feasible because there are practical limits to tax administration in a market economy, where economic activity is decentralized. Most countries with a GDP per capita of about US\$2000 are only able to collect 23-25 percent of GDP in taxes, below the average in OECD countries. This is because tax administration systems are typically weak, and wage income (on which it is easier to collect taxes than rents or profits) is a smaller share of GDP than in OECD countries.

EECA governments need to adjust their expenditure promises to meet a more realistic revenue ceiling. Assuming that EECA governments face an overall tax ceiling of 25 percent of GDP, collecting one-third to one-half of this potential revenue in payroll taxes and spending it on pension benefits appears unwise. On the expenditure side, all EECA countries face urgent needs for government spending. Hospitals need rehabilitation, school need an overhaul and teachers need training, the communications infrastructure is inadequate for participation in the international economy, the unemployed need to be retrained, crime needs to be prevented, etc. At the same time, the high payroll taxes have already encouraged evasion and avoidance, resulting in a shrinking tax base. For example, in Poland in 1992, an estimated 10 percent of the non-agricultural labor force evaded payroll taxes. Arrears among those who did pay are also climbing. Raising payroll taxes to finance increasing pension expenditures is not likely to resolve the affordability problem, but will instead reduce employment in the formal sector and accelerate the development of the underground economy, exacerbating revenue collection problems for the whole tax system.

<sup>&</sup>lt;sup>7</sup> The EECA numbers are from Table 2 and are mostly 1992; the data on other countries are from the World Bank Old-Age Security Project database and are 1989.

Micro-economic efficiency. EECA countries are also becoming increasingly concerned about the micro-economic effects of the current system. High payroll tax rates have placed a significant wedge between the take-home wage and labor costs, distorting demand for labor. Administered wages and a binding minimum wage prevent the firm from fully shifting these costs to the worker. This wedge is particularly undesirable now, as the obsolete technology and inefficient enterprises common in EECA countries have placed them in a situation of labor surplus and low productivity. Increases in contribution rates have aggravated the worsening of labor relations during the transition, as workers are receiving low and falling real wages, and therefore demanding increases from employers facing high and rising real labor costs. This has greatly complicated the political economy of stabilization

The early retirement age for full pension and the lack of incentives for continued formal or official work, provides a major disincentive for labor supply to the formal sector, and a major incentive for older workers to retire and enter into unofficial or informal activities. Attempts to increase employment of younger workers in public enterprises during the transition by lowering retirement in Romania and Bulgaria have been a costly mistake, as already overstaffed enterprises did not take on new, inexperienced workers in place of the older, more experienced ones. Instead, overall employment fell, and the pension burden increased. (See Box 2).

#### Box 2: Should early retirement with full pension be used to resolve unemployment problems in ECA?

One of the most daunting issues in EECA countries is the adjustment in the labor market. Central planning encouraged not only an inefficient structure of production, but also at the plant level, inefficient use of factors of production, including excess labor. The introduction of scarcity prices (especially for energy and raw materials) and more economic openness has made much of the industrial sector activity in EECA unsustainable. Plant closings and other restructuring activities are expected to leave 20-40 percent of the labor force unemployed for some period of time in the medium term.

If these countries follow macroeconomic and sectoral policies which encourage a flexible labor market and stimulate demand for labor, long run employment opportunities for most of the active population are good. Most have a high level of educational attainment, and the sectors which are expected to expand are the more labor intensive (e.g. the service sector). The short to medium run is another question, however. Concern is high in countries unused to labor market mobility and unemployment over the social costs of the mass layoffs required. The specter of able-bodied men and women walking the street without any work or source of income was quite frightening.

To respond to these concerns, countries have adopted three tactics. Virtually all have now introduced some form of unemployment compensation, which pays a benefit for specified period of time (6-12 months, depending on the country). These benefits are financed by payroll taxes. Most countries have also started programs for the unemployed, including counseling, job placement, and retraining. Some countries have also introduced early retirement schemes, allowing the unemployed to take a full pension up to five years earlier. This provision has encouraged firms to lay-off older workers, as they are perceived

(continued)

by both employers and unions to have a secure social safety net. As a result, pension roles have swelled. In Bulgaria during the period that this provision was in force the number of new pensioners added per annum was three times the average for the previous five years.

The arguments for the early retirement were both economic and social. Socially, pensioning workers was considered more humane than simply providing unemployment benefits. Economically, it was argued that many of the workers were unproductive, and therefore their wages were indirectly a drain on the budget (in the form of increased subsidies or lower profits). As pensions are lower than wages, aren't pensions cheaper?

Both of these arguments have proven to be mistaken. From a fiscal point of view, unemployment benefits are much cheaper than pensions. Consider two cases. In case P, the firm lays off a worker at age 50 who is eligible for retirement at 55. The worker takes the pension, supplements the income with a small amount of informal sector income, and lives a comfortable life. Both the pension and the informal sector income are not taxed. The cost to the budget is five extra years of pension payments plus the loss of tax revenue (payroll and other wage taxes) from the worker for those five years. In case U, a worker age 30 is laid off. The worker receives unemployment benefits, perhaps takes some retraining, perhaps works for some time in the informal sector, and eventually enters the formal sector after two years. The cost to the budget is 6-12 months of unemployment benefits, plus the loss of tax revenue for two years. This is significantly lower than the costs under case P. Indeed, even if the worker never returns to the formal sector, the cost of case U is only one-tenth to one-fifth that of case P. Plus, total production will be higher under case U.

It could be argued that it was worth paying the fiscal cost for social reasons. However, there is little evidence that the pensioner is happier than younger worker who has found a new career. Interviews in east Germany in 1992 show that many workers in their 50s who were given early retirement are bitter and depressed. They feel worthless, "used-up". Few are motivated to retrain, as they wonder who will want them after their training. And indeed, retraining has not been very successful in other countries when given to older workers. Meanwhile, the younger workers are much more flexible and willing to invest in a new skill or a new sector. They are optimistic about their future.

For these reasons, using pension policy to encourage firms to lay-off older workers is not recommended.

The early retirement provisions for workers in special occupations are inefficient for another reason — they represent a socialization of the costs of poor occupational health and safety. Employers have no incentive to improve workplace safety.

Transparency. The operation of pension systems is not transparent. Contributions are paid almost entirely by employers, obscuring the costs of the system to employees, who bear much of the burden of the tax through lower wages (or unemployment and lower economic growth). The intermingling of pension contributions and expenditures with other benefits further obscures the costs of the various programs to the taxpayers. During the years in which the system was in surplus, funds were transferred to the central budget, further breaking the benefit-contribution link. The numerous special regimes weaken this link even more.

Consumer satisfaction. The erosion of entitlements by inflation and the uncertainty surrounding future benefits has created enormous dissatisfaction with the public scheme. In Uzbekistan, dissatisfied pensioners have even created their own political party. Many members of the active population are also voting with their feet, and legally or illegally opting out of public pension programs. In addition, as wages increase and the structure of wages decompresses, a large pent-up demand for pure earnings-related, private or quasiprivate schemes is emerging (i.e. other pillars). This poses two problems. First, his dissatisfaction with the public scheme, especially among younger cohorts for whom the rate of return to contributions is negative, has caused tax evasion and avoidance, reducing revenues. Second, if history is any guide, private and/or occupational plans will emerge to meet this demand. Hungary has recently enacted legislation authorizing private pensions. supported by tax incentives. Autonomous, complementary schemes have also been proposed by politicians in Romania, Poland and the Czech republic. Already in Russia and Bulgaria. private financial institutions are beginning to offer pension schemes.<sup>8</sup> As there is no effective regulatory framework in most countries for private schemes, the possibilities for consumer fraud are high.

In sum, EECA pension systems simultaneously offer benefits which are quite low yet unaffordable. This is because too much of money is spent on transfers to people who would normally work in other middle income countries (i.e. those 45-65). As a result, these unaffordable systems are actually providing benefits which are barely adequate or even in some countries inadequate to meet the income security needs of the real target population - those 65 and above. As the role of the government in the economies declines and the private sector grows, these EECA income transfer systems, including pensions systems will only become more unaffordable. This excess government consumption will crowd out the major investments needed to put these countries on a sustainable growth path, compromising economic growth.

Major reforms in entitlements are needed to ensure that public pension systems can perform their redistributive role of preventing elderly poverty in an affordable manner into the next century. At the same time, instruments which would permit the active generations to take responsibility for part of their own income security needs should be provided. This must be accomplished in manner conducive to the development of an efficient market economy, with adequate risk diversification for all age groups—a multi-pillar system. This implies an enhanced role for private and funded schemes, which should also assist in mobilizing savings needed for the restructuring.

<sup>&</sup>lt;sup>8</sup> In Russia, at least 12 private funds are already operating and over 50 are in the process of being set up.

# Part II: Options for the Future

EECA countries will have to adopt a comprehensive reform of their pension systems eventually, as the squeeze of declining revenues and increasing claims will only get worse over time. A successful reform is likely to involve adding at least one more pillar. Below, some approaches to developing the multi-pillar system are outlined.9

EECA pension systems today face a conflict between the objectives of savings and insurance (old age security for the middle and upper classes) and redistribution (old-age security for the lifetime poor). This conflict is inherent in an earnings-related PAYG system, which tries to address two problems with one instrument. Public pension systems were created to reduce elderly poverty both by: (a) increasing savings for old age and (b) reducing elderly poverty through cash transfers to those who cannot save enough (the lifetime poor). PAYG systems face conflicts between these objectives because of realizing the savings objective requires an investment, while realizing the redistribution objective requires a transfer program. Countries have tried to resolve this conflict by partially funding the public system (e.g. U. S. and Japan, where the surplus is invested in government bonds). Others have encouraged or even mandated funded, privately-managed pensions systems as the main old-age savings instrument for middle and upper income workers.

We recommend an alternative approach for transition economies. Rather than attempt to partially fund the public system, we recommend scaling back the public system and developing a universal mandatory savings system for the second pillar. Under such a system, the PAYG public pillar would carry primary responsibility for providing redistributive transfers. The second pillar would be a funded, mandatory, privately-managed, savings system, similar to that found today in Chile, and under development in Mexico and Argentina. As it would be mandatory, coverage would be higher than in OECD-type occupational schemes. Together, these two pillars should provide income replacement for the average worker equal to about 40 percent of gross wages (more for lower income workers, less for higher income workers, who will have other assets).

Implementing a two-pillar system in EFCA countries implies first and foremost reducing entitlements in the public scheme, and consequently the share of income the active age cohorts pay in contributions. If not, there will be no room for the growth of other pillars, as employees will have no money left to save. This is a particularly difficult problem in EECA countries, as most are faced with a very sizeable population of 50 years and older. The old-age security needs of this group are significantly different than those of the active generation.

Providing for the older age cohorts. The generations already retired or about to retire had fewer opportunities to save, as most income was earned during the period of central

<sup>&</sup>lt;sup>9</sup> The conceptual basis for the approach described here is found in James, (1992) and is elaborated in the World Bank's forthcoming Old-Age Security Report.

planning, when salaries were low and pensions were supposedly guaranteed. In addition, during the last years of their working life (e.g. 1985-1995) economic growth was very low or highly negative, so incomes were falling. In any case, those households in this group which did have some liquid savings before the transition lost it in the ensuing inflation. Some additional wealth may come to this generation through privatization (e.g. the distribution to the population of assets held by the state). The extent to which the wealth of this group increases will vary from country to country, and even within cohorts, the distribution of wealth and opportunities is unlikely to be equal. Thus, members of this generation are potentially quite vulnerable to the income fluctuations of the market economy.

Intra-family private transfers will undoubtedly be important in sustaining this group. Many will also continue to work beyond the currently very low pension age -- either in the formal or informal economy -- and this should be encouraged as part of the reform. However, for the majority, the primary source of income is likely to be the public system, financed by PAYG transfers from the active population. This implies the continuation, in the short run, of a substantial intergenerational transfer. How much should the active generation pay to the inactive, knowing that the dependency ratio is increasing and they must save for their own retirement? How should this transfer be financed (i.e. how can the double savings burden be managed)?

As with OECD countries during the depression (when the savings of a generation was similarly wiped out and the slow economy did not provide much chance for replacement), an explicit intergenerational transfer appears warranted, both on economic and social grounds. Long term development prospects are good for all EECA countries, which should bring not only income growth but substantial increases in labor productivity. Thus, the disposable income prospects for those just entering the labor force are quite good. The younger half of the active generation should be able to both pay the burden of partially supporting older generations and save, in an additional pillar, for part of their own retirement income. And if the growth forecasts are too optimistic, the burden of paying off part of existing promises will have to spread across more than one generation, through lower pensions to these generations and/or debt financing. Whatever the speed of transition, the key is to set in motion now, as part of the reform, an explicit policy of multi-pillarism, and a gradual reduction in entitlements from the public system.

# Overview of Proposed Reforms

An outline of reform options for EECA countries within the framework presented above is shown in Box 3. The timing of the reforms, as well as some of the features of each pillar, will vary from county to country. However, all countries need to reform the public pillar to reduce entitlements. Regardless of income, demographic structure, or level of development, the most important step for all countries is to raise the effective retirement age. We also recommend that all countries also simplify benefit structures in the public pillar to eliminate earnings-related features and accentuate redistributive features. Two options for doing so are presented, the contribution model and the social assistance model.

#### Box 3: Outline of Recommended New System

#### Pillar 1 - The Public Pillar

Variant A: The Contribution Model

Eligibility: All who contributed at least 20 years over minimum

pensionable age (at least 65)

Benefit: Fixed amount per pensioner (flat), or related positively to years

of contribution (restricted flat)

Financing: Payroll tax

Average replacement rate: Initially 30-35 percent of average wage, falling to 20 percent

over time as other pillars phase-in

Variant B: The Social Assistance Model

Eligibility: All over retirement age (universal flat) or all poor over

retirement age (means-tested flat)

Benefit: Fixed amount per pensioner
Financing: General revenues or payroll tax

Replacement rate:

Universal flat
 Means tested flat
 30-35 percent of average wage
 30-35 percent of average wage

• Replacement rate falls to 20 percent over time as other pillars phase-in

Pillar 2 - The Mandatory Savings Pillar

Financing: Minimum required contribution from all employed to privately

managed fund; could be supplemented by transfers of shares in

state enterprises (allocated to contributors)

Benefit: Contributions of active plus returns on invested contributions

(defined contribution), paid out in set number of installments or

as annuity

Expected average Initially, minimal for payroll contributions only,

replacement rate: higher if shares of state enterprises used to start fund; rising to

20-30 percent

Pillar 3 - The Occupational Pillar

Not recommended in transitional economies

Complementary Systems

Higher income, rapidly developing financial systems, heavy dependence on wage income: means-tested social assistance system, community programs for elderly, informal support systems.

Lower income, less developed, more rural: informal support systems.

Higher and middle income countries with emerging capital markets should also develop the second pillar as soon as possible. This could be developed using the conventional payroll tax method, which would gradually build up balances in each contributor's account. It may also be possible for EECA countries to use assets of the state slated for privatization to jump-start the second pillar, building up the savings of the active age cohorts more rapidly. In all cases, entitlements in the first pillar (and the payroll taxes to finance them) should be gradually reduced as balances build up in the second pillar. The pace of this reduction will depend on how quickly the second pillar can be started up (and whether any state assets are used to jump start it).

In some countries, voluntary and quasi-voluntary (e.g occupation-based) schemes are developing. Governments should move very quickly to regulate these. Defined contribution schemes are recommended. If optional earnings-related defined-benefit schemes are even allowed, funding requirements should be set very high to prevent fraud and abuse. The volatility of asset values (and exchange rates) in transition economies will make such systems extremely difficult to regulate in the short and medium term.

Lower income countries should initially concentrate their efforts on reforming the public pillar to an affordable level. Reducing payroll taxes should be an important outcome of the reforms, as these countries are quintessentially labor-surplus economies. Having the development of the private pillar as a medium term objective will be useful in guiding the reform in the public pillar. The average replacement rate will probably remain at about 35 percent of the average wage for a longer time in these countries.

In all countries, cash benefits need to complemented by the development of community social services for the elderly, to break their isolation, assist them in handling the transition, aid them in living an independent life as long as possible, and help alert local assistance agencies to those who are falling through the cracks of the safety net.

A detailed discussion of the application of this reform framework is provided below. The experience of the last three years in transition economies has shown that identifying the most promising reform options is not enough. In the last section of part II, a critique of previous reform efforts is provided, and recommendations with respect to sequencing and implementation capacity issues. Obviously, the design of the reform program should also take into consideration sequencing pension reform with other reforms (such as privatization and tax reform), and the weak implementation capacity in many countries.

#### Public Pillar Reforms

Retirement age. The most important element in EECA reform programs is equalizing and raising retirement ages. While it is difficult to state now the appropriate retirement age for the next 50 years, given current life expectancies at retirement, 65 is clearly the minimum. As life expectancy is still increasing, by the time the new retirement age is fully phased in 65 may even be too low. All special regimes should also be eliminated. As this

will involve raising retirement age by as much as 15 years for a number of workers, a phased movement will be required. The special regimes are the most expensive, so retirement ages for these should be raised as soon as possible (e.g. by 1-2 years per annum). Normal retirement could move on a slower path, e.g. one year per annum for women and 6 months for men<sup>10</sup>.

# Benefit and Financing Reform Options

Although benefits are notionally earnings related, the failure to either re-value earnings in calculating the contribution base or to index pensions once they have been provided has created a very flat system in EECA countries. This provides an excellent reform opportunity, as EECA countries only need to accept the flat benefit structure which has evolved as the basis of the reformed public system, meeting the demand for an earnings related system by adding new pillars. Alternatively, EECA countries could try to reestablish a public, earnings-related, defined benefit system with PAYG funding. We do not recommend this latter option. However, we also recognize that introducing a flat benefit may be politically difficult, especially as the private pillar is not ready to be introduced. Below, two benefit and financing reform options are considered: the contributions model and the social assistance model.

#### The Contributions Model

This model preserves the notion of a contributions-based system, but flattens out the benefit structure. It is thus a less radical alternative given where EECA countries are now. Benefits could be equal to all pensioners (flat) or related to years of contribution (modified flat). In both cases, the question of pension level arises.

Flat pensions. Average pensions relative to the average wage in EECA countries currently range from 33 percent in Estonia to 74 percent in Poland. As even countries with levels under 40 percent are suffering financing crises, (and these crises are likely to worsen until retirement age reforms take hold), even this level appears unaffordable. At the same time, as there are no other pillars, setting the benefit level as low as 20 percent of the average wage may not provide enough income support. Thus, depending on resource availability, the flat benefit should be set at about 30-35 percent of the average wage for current recipients. As the second pillar is introduced, the size of the benefit relative to the average wage could be gradually lowered to 20 percent (indexing the benefit to p ices during a time of real wage growth would accomplish this).

Raising the retirement age by one or more years per annum is the same as raising the retirement age all at once as far as the under-age pensioner looking for a <u>full</u> pension is concerned. However, for the pensioner looking for a partial pension, the difference matters. Politically, the difference may matter as well.

<sup>&</sup>lt;sup>11</sup> Countries with an effective, means-tested social assistance system could more easily cut back contribution-related pension benefits to 20 percent of average wage.

Modified flat pensions. For EECA countries, most of which already offer a reduced pension after a minimum number of years of contribution, implementation of this option would be least radical. It would involve establishing a minimum pension after a number of years of contribution (e.g. 15 percent of the average wage after 20 years of contribution). Equal increases could be provided for each additional year. The increase could be doubled for each year after the normal retirement age (e.g. from .75 percent to 1.5 percent), thus providing an incentive to work longer during the transition to higher retirement ages.

Introduction of a flat pension has a tremendous equity advantage, as the current inequality among pensioners (caused by the effects of unanticipated inflation) would be removed. The main disadvantages of a flat pension system for EECA countries are:

- Less incentive to contribute. Obviously, a flat system offers little marginal incentive for participation once the minimum contribution requirement has been met. However, given the weak linkage between benefits and contributions inherent in a PAYG, it is not obvious that this incentive in an earnings-related system actually improves compliance. Certainly in EECA countries, the shrinking tax base provides strong evidence that those who can avoid, do.
- No incentive to continue working to achieve a higher pension once minimum age is reached. This point is more important, as measures to raise the retirement age will have to be phased in. Thus, at least until the end of the decade, some will be eligible for the costly early retirement. A benefit system which rewards longer working provides a disincentive to collect the pension. The modified flat rate might correct this disadvantage (although probably not enough). Some EECA systems require pensioners to quit working entirely to collect the pension, or reduce the pension of those who continued to work. These options may become problematic as the informal sector grows. Pensioners will take their pensions and continue to work in the informal sector, causing a drop in revenues with no concordant decline in expenditures. The best option is probably to allow pensioners to take their pension without penalty at the legal retirement age, "clawing back" some of the expenditure through the tax system. Pension payments and post-pension earnings should be treated as any other earnings, subject to all taxes.

The modified flat does not have the above disadvantages. However, it is more complicated administratively as better records have to be kept and pensions have to be calculated. It also runs a higher risk of expenditures getting out of control, as EECA countries have a tendency to set minimums higher than is affordable given the size of the average benefit. For example, if the desired average pension in the public pillar by 2005 is 20 percent (in order to leave room for the funded pillar), the minimum would have to be less than 10 percent of the average wage -- very small by current EECA standards.

Financing reform. One of the goals of benefit reform should be a reduction in payroll taxes to reduce the labor market disincentive effects, as well as the avoidance and evasion problems. Shifting social assist\_nce programs (such as social pensions or child allowances) to the central government budget, financed by general revenues, would also permit a lowering of tax rates. With any payroll tax, at least half of the payment responsibility should be shifted to the employees (a deduction form the paycheck). This reform can be done in a manner which is neutral with respect to take-home pay (although it will require some adjustment of income or wage tax schedules as well). Having the employee actually see such a large deduction will be an important step in improving transparency and creating a constituency for change.

Even if all the recommended measures are taken, evasion will continue to be a problem. In order to increase collections from the self-employed, small business (less than five employees), and agriculture, a special rate with a presumptive minimum tax could be assessed. This tax should be low enough to encourage compliance (25 percent of the minimum wage, for example). Integrating payroll tax collection with other tax administration systems will also help.

#### The Social Assistance Model

Adoption of this model represents an explicit recognition that the public pillar's function is redistributive, and therefore represents a more radical reform for EECA countries. It basically involves unifying existing social insurance and assistance programs for the aging into one program entitlement, with general revenue financing. Pensions would either be given to all who reach pensionable age, regardless of income, wealth or contribution record (the universal flat pension) or to those who have reached retirement age and whose income is below a given level (the means-tested flat pension).

A universal flat pension has all the equity benefits of a contribution-related flat pension, but is administratively even simpler. This is an important advantage as most countries do not yet have central contribution record keeping systems, so establishing pension entitlement is becoming a complicated task in a contributions-based system. Its universal coverage also helps to ensure that the poverty reduction objectives would be met, as there would be one system paying a benefit to all old people. Under a contributions-related system, the elderly poor who have not contributed would be sent to a different system (e.g. a social assistance system). The broad coverage would also encourage political support.

In terms of the poverty alleviation objective, a means-tested flat pension might be cheaper (i.e a special social assistance system for the aging). However, caution is suggested with respect to this approach at this time in most countries, as the distribution of overall cash income is still quite flat, and the administrative capacity very weak. Thus, means-testing could involve significant administrative expense, for limited savings. This is especially true when considering the impact of a progressive tax system on a universal system. Much of the wastage of a universal system could be "clawed back" through the tax system. A means-

tested system could also have a higher political cost than the flat rate, as a public pension is still considered an obligation of the state to all employees who worked for years 2º low wages, not a social welfare program.

Financing reforms. Adoption of the social assistance model would allow a major shift in the tax structure, reducing payroll taxes while increasing other, broader-based and less distorting taxes such as the personal income tax (PIT) and the VAT. This should be more progressive, and lead to higher employment (especially in the formal sector). This change will have to phased, as part of the major fiscal reforms now underway in EECA countries. As the VAT and the PIT are only now being established, the payroll tax may have to be lowered gradually as the others take hold.

#### Other Public Pillar Reforms

Indexation rules. Clear rules for adjusting benefits to price changes should be enacted, eliminating the ad hoc measures now in force. Given the stabilization difficulties of most EECA countries, guaranteed full price (or wage) indexation may not be the best choice for the next few years, even for the lowest benefits. This is because pension benefits are already a very large share of government expenditure. Promising full indexation during a time of stabilization and its associated expenditure cuts could result in other programs with a very high social benefit (such as immunization programs for children) to be cut back too far. An alternative could be a monthly indexation of 80 percent of price changes, plus an annual review (to allow further corrections if affordable). Once the macro-economy stabilizes, a less discretionary system could be put in place.

Reserves. Most systems in the FSU, and the Romanian system, currently keep reserves, supposedly for the purpose of financing future obligations as the active population declines. The desirability of this policy is questionable, especially now. These countries are currently in severe recession. Economic growth is expected to do much more to improve affordability than will holding reserves. At the same time, the presence of large reserve holdings may inhibit reform, and cause a false complacency regarding future liabilities.

This false complacency stems directly from the management of these reserves by the independent pension funds. Although these reserves are nominally separate from general revenues, they are essentially financing current government consumption. This occurs in two ways. The first is direct, as negative real interest rates on reserves held in the banking system impose an inflation tax which lowers their real value.<sup>12</sup> The second is indirect, as the presence of reserves in banks offsets the borrowing of other government entities thus lowering the entire public sector borrowing requirement as well as subsidizing the price of this borrowing. Use of reserves in this manner also lowers the transparency of the fiscal system and the pension fund, and adds to labor costs.

<sup>12</sup> This is actually a subsidy from taxpayers to borrowers.

Recognizing that the reserves are being eroded, some pension fund managers have proposed or even drafted legislation which would allow them to invest their reserves in real estate or shares of firms to be privatized (e.g. Hungary, Bulgaria, Russia, FYR Macedonia). This is a major mistake. Evidence from other countries shows that pension reserves invested by the public sector rarely yields a high rate of return -- on the contrary.<sup>13</sup> Even more worrisome is the potential of the fund managers to slow down restructuring by preventing enterprises in which they hold shares from liquidating assets or firing excess employees. This could either happen in response to political pressure from unions, or because the fund managers themselves fear the temporary loss of revenue associated with a mass layoff.

For the immediate future, we recommend that the practice of holding more than about one months' reserves in the public system cease, and payroll taxes be lowered. In order to balance the budget, other taxes could be increased in a revenue neutral manner. In countries under extreme fiscal distress, where the only tax base remaining is the state sector payroll, in the short run, a portion of existing payroll taxes could simply be transferred to the central government directly, supplementing other taxes. This would at least improve transparency, as well as keeping the excess cash out of the hands of pension fund managers. It is expected that in most affected countries, a personal income tax will be introduced shortly, so shifting the tax structure out of payroll taxes into those which fiance the central government budget would improve the progressivity of the whole tax structure.

Administration. Reforming eligibility requirements such that eligibility would depend on contribution, not on work history as is currently the case in most countries, will require investment in a contributions record base. This new record system should be automated, to facilitate tax administration. Hungary, the Czech and Slovak Republics, and Romania have all begun to develop such a data base, which should facilitate reform.

Taxation of benefits. Most EECA countries do not now have a PIT, but rely on taxation of wages and profits at source. Social insurance benefits and other government transfers are exempt from these taxes, leading to significant distortions in labor supply. As PITs are introduced, pensions should be included in earnings, subject to this tax. This will also help to improve progressivity.

Reform of disability programs. The generous disability programs should be curtailed as soon as possible. As retirement ages are increased for old-age pensions, the incentive to qualify for disability pensions will increase. Tightening up of criteria, monitoring of certification, and benefit reform should all be part of the reform program in order to prevent a new form of expenditure growth.

<sup>13</sup> For a review of the Latin American experience, see Mesa-Lago, (1991)

# Funded Systems: Should EECA Follow Chile or Germany?

Development of a policy framework and legislation to support a second pillar of private, funded programs has not taken place to date in any EECA country. The main reason appears to be reform-overload, as policy makers have been overwhelmed by the number and scope of policy issues the transition has thrown up. Equally important is the need in all countries for financial system reform. Although a private financial sector is growing, the vast majority of financial assets and liabilities are still held in publicly-owned banks. Most of these banks are in need of restructuring, and are suffering from solvency problems owing to a deteriorating portfolio of loans to public enterprises (Caprio and Levine, 1994). Few mutual funds or other forms of institutional investment currently exist. This leads to questions of the sequencing of reforms, and whether an explicit strategy of capital market deepening is wise or feasible in the short-to medium term in EECA. Questions have also been raised regarding the feasibility of developing such a system in the short to medium run, given the shortage of financial skills in EECA countries (especially in regulatory agencies) (World Bank, 1992).

Offsetting these concerns regarding timing and sequencing of reforms is the large demand for long term savings vehicles and earnings-related retirement insurance. Governments are unlikely to be successful in scaling back the obligations of the public system without offering alternatives for additional old-age security, especially for middle income workers. Experience in OECD and middle income countries suggests that if governments are not pro-active in organizing the second pillar, a hodge-podge of occupational and employment-based systems will arise. This would be particularly problematic in EECA countries, (if not downright detrimental to the transition) for the following reasons.

- Impediment to enterprise restructuring. The development of an employer-based system, by creating a new set of long term liabilities for the firm, could seriously impede enterprise restructuring, and jeopardize fiscal balance if the Treasury were required to bail out failing state enterprise pension schemes.
- Reduction in labor mobility. Failure to insure full portability from day one (rare in occupational plans) would also jeopardize labor market mobility (especially from the public to the private sector). Efficient labor market adjustment is critical to an effective transition.
- Inadequate and inequitable coverage. Fragmented coverage tends to exclude people in low paid jobs, small businesses and agriculture, benefitting primarily the higher income groups. Excluded groups can be expected to put more pressure on the public pillar, as this will be their only source of income. They will also be disadvantaged relative to included groups as they will not have access to the high rates of return with diversified risk that institutional investment provides. This could contribute to increasing income inequality.

For these reasons, we recommend that government move quickly to develop a fully-funded, privately managed, mandatory savings pillar, following the model which has been in place in Chile for 12 years, and is now being adopted in Mexico and Argentina. Note that unlike Chile, retention of the public, PAYG system is recommended, in lieu of a the guaranteed minimum pension provided in Chile. Below, we review the key design features for EECA countries.

Preconditions. As funded pension plans must have some investment vehicles, a minimal set of financial sector, macroeconomic, and overall structural reforms is desirable before the second pillar can begin to operate in the domestic market. Most of these preconditions already exist in other middle income countries; their absence at the beginning of the transition process in EECA has been one of the defining features of this set of countries (Caprio and Levine, 1994). These reforms include:

- a legislative framework providing clear and enforceable private property rights;
- introduction of modern accounting and auditing standards (to facilitate oversight);
- a set of prudential regulations for financial institutions and markets;
- initiation of training in modern financial skills;
- adoption of significant price and trade liberalization policies so that relative price signals not too far from world prices are guiding resource allocation (if not, pension funds will make a bad investments, complicating the restructuring process);
- progress toward macroeconomic stability, such that high and variable inflation is not a threat:
- tradeable financial market instruments; and
- initial steps toward development of tax administration capability.

Some countries have achieved or nearly achieved these preconditions, including Hungary, Poland and the Czech Republic. These countries should be able to begin the second pillar as soon as the regulation is in place. In other countries, several of these preconditions do not exist, but are likely to be met over the next 3-5 years. These countries can begin system planning and design, and could consider initiating a system now with extremely limited investment options (e.g. only international and domestic government bonds, or equity investments linked to foreign direct investment). Investment rules could be relaxed as the transition proceeds. In almost all countries, some planning can and should take place during the earliest stages of the reform, even if implementation is not envisaged for a number of years. Note that full financial sector restructuring is not necessary. Chile suffered a financial crisis and began bank restructuring two years after the creation of the

mandatory private pension system. Indeed, it is believed that the new pension companies were an important pressure group insisting on tight prudential regulation in the aftermath of the financial crisis of 1982 (Diamond and Valdes-Prieto, 1993).

Scope of program. We recommend that EECA countries begin the second pillar modestly. As in other countries where a well-developed public scheme already exists, in most cases it is neither feasible nor desirable to immediately require large additional allocations from take-home pay for a funded-pension scheme. In EECA, three strong reasons for starting small are:

- a. even if public systems have been reformed and payroll taxes are lowered, these rates are still very high. Adding a mandatory contribution to a funded system too these high levels risks increased evasion throughout the revenue system, even though the strong contribution-benefit link lowers the distortionary effect of this tax;
- b. appropriate investment opportunities in the initial years may be low; and
- c. lacking experience, the pension funds and the regulatory authorities are bound to make mist kes at first. Better that these mistakes be small than large.

In this situation, an initial contribution rate of 3-5 percent of payroll would be enough to start the program. In the average EECA country, wages in the covered sector are about 20-30 percent of GDP. A five percent contribution rate would produce assets equal to about 1-1.5 percent of GDP in the first year, a savings easily intermediated by the new system. As real wages rise and expenditures in the public system are reduced, the contribution rate for the second pillar could be raised to around 10 percent.

Using privatizable assets. With such low contribution rates, the funded pillar will not offer much income security to those due to retire over the next ten years. One way to accelerate the development of the funded pillar and provide a more diverse old-age security system faster would be to transfer some of the assets owned by the state, slated for privatization, to the second pillar accounts of the active generation in the form of shares of stock in these firms. This approach would also have the advantage of "paying off" some of the accumulated debt, thus easing the way for a major reduction in public sector entitlements. (See Box 4)

#### Box 4: Can public assets to be privatized be used to start funded pension schemes?

For countries seeking to make the transition from a PAYG scheme to a funded one, the main obstacle is usually how to fund the existing pension obligations. While the size of outstanding debt is difficult to evaluate, in EECA countries with a mature scheme its present value given existing entitlements has been estimated at about 1.5 to 2 times GDP (Holzmann, 1993). Only Chile (under a dictatorship) has been able to extract the resources from the private sector to pay off the total obligation to existing pensioners while at the same time mandating the contributions needed to fund the new scheme.

In EECA countries, however, assets valued at around 2.5 times GDP are already in public hands. Why not transfer these assets to pension funds to pay off existing obligations, thus creating the basis for a new, funded system? Although quite tantalizing, this idea thus far has proved infeasible for the following reasons.

How many assets are there really available? At least twenty percent of these assets are public infrastructure, which will not be privatized. Another thirty to forty percent is housing and agricultural land, which has, in most countries outside the FSU already been given away. Political pressures resulted in housing and agricultural land being transferred either to the former owners for free under restitution schemes, or to the existing tenants at grant prices (historical prices or through loans with negative real interest rates or both). There are no signs that treasuries will receive more resources from the privatization of these assets in the FSU. Another twenty percent (roughly) is commercial real estate, which in most countries was already in the hands of the municipalities, so is not available to the federal government. This leaves the state enterprise sector, roughly twenty to thirty percent of the existing assets, available for this purpose, or about one-half to three-fourths of GDP. This is not enough to pay the whole debt (although it could fund part of the debt, such as the debt to existing workers).

What are these assets really worth today and who will buy them? EECA countries hoping to raise revenue from the sale of privatizable assets have been sorely disappointed. First of all, overstaffed, poorly managed, under capitalized, indebted state enterprises are not easy to sell under any circumstances. Most countries have not wished to transfer large chunks of the state enterprise sector into foreign hands. However, the domestic private sector has little cash with which to buy these assets, and a weak domestic banking sector is in no position to provide the necessary liquidity. This liquidity constraint implies that were the state to sell the assets over a reasonable period to domestic investors (e.g. 3-5 years), it would amount to a give-away to those few who have cash or access to credit. As most of these are the beneficiaries of the former system, this has also proved politically unsustainable. As a result, most countries have concluded that the political consequences of selling these assets would outweigh the revenue benefits, and have chosen to simply give the assets away on a per capita basis in the form of equities (vouchers), or encourage employee buyouts/takeovers, or both.

Why not put the vouchers into pension funds for those over the age of 18? If all of the vouchers went into pension funds, these funds would have an initial portfolio of 100 percent equities, a ratio considered much too high for a private pension fund in most OECD countries (the average in these countries is closer to one-third). Moreover, the average quality of these equities is much lower and volatility much higher than would be found in most OECD private pension funds. As the equities are not likely to pay a high dividend nor be very liquid for the first ten years, transfers would still be needed from the state to pay existing pensions and those which come due in the medium term.

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Would enterprise performance improve sufficiently if the equities were placed in pension funds? A second reason why voucher schemes have proved popular has been the need to quickly improve industrial governance, in order to insure that the necessary restructuring takes place. EECA governments have proved unable to change from socialist owners, with redistribution objectives, to pseudo-capitalist owners, with profit making objectives in such a short time. Thus EECA countries leading the transition have felt that the only way to enforce the "hard budget constraint" on enterprises is to get real, private owners, actively managing the portfolio, and working with companies to restructure or liquidate. Based on the experience in OECD countries, EECA countries have been skeptical that pension funds under state sponsorship, or with a state guarantee could provide the firm hand necessary to enforce the needed changes in a short time period. Clearly, very independent funds would be needed if the proper corporate governance is to be exercised. The higher the share of these state-enterprise equities in the portfolio of these funds, the smaller the number of funds, and the less independent the funds are, the greater the danger that they will perpetuate the status quo rather than take the risks necessary to push the restructuring forward.

Who will manage and who will regulate these funds? One of the major problems facing EECA countries as they seek to create a market economy is the shortage of people with financial skills. Although the workforce is highly educated compared with other countries at this income level, this education has been highly skewed toward science, math, and engineering, as the emphasis in education during the centrally-planned period was on supplying human capital for the industrial sector. Banks were not independent, but basically arms of the treasury. As a result, financial skills are in short supply, and most are being bought up by the growing private sector. In order to do their job, pension fund regulators normally rely on another set of regulators who rate the investments of pension fund managers -- bank regulators, bond market regulators, stock market regulators, real estate market regulators, etc. This first tier of regulation is only now being created in most EECA countries, which complicates the task of regulating secondary investors such as pension funds. If funds are built up slowly, the regulatory capability might be able to catch up. But if funds with assets of 50 percent of GDP (i.e. larger as a share of GDP than total private pension funds in the U.S., Canada or Sweden, and just under the U.K.) grow up overnight, the regulatory challenge will be immense.

While it does not appear feasible to convert the total unfunded public pension obligation into fully funded ones with the proceeds from the sale of state enterprises, a more modest approach may be possible. For example, the active generation could be required to contribute a portion of their vouchers to accounts in privately-managed pension funds (e.g. a mandatory savings scheme). Alteratively, a payroll contribution-based fund could gradually buy up some of the vouchers, helping to improve this market. In this way, pension fund managers could become "active investors" in a few companies. Pension fund managers seeking to retain a passive role could also invest in voucher mutual funds. This would allow the pension funds to play a role in the privatization process without being the main owner of the industrial sector in the short run.

Under the right circumstances, this approach appears to have some merit. It is important that the amount transferred be small, so as not to overwhelm the other, less volatile investments of the fund (e.g. bonds). If not, an unmanageable risk could be introduced, causing the whole system to fail. A major difficulty will be the allocation of shares in enterprises among the funds if there are a number of funds organized.<sup>14</sup> It would be unfair

This problem is well known in EECA, as it bedevils any privatization scheme which bundles assets into groups for distribution in the form of shares or vouchers.

be unfair to the future pensioners if one fund received assets which turned out to be worth much more than another. Yet asset valuation is very difficult in EECA countries today. Finally, if this route is chosen, it will be especially important to insure that fund managers have full autonomy to manage their investments and clear incentive to do so. This implies that they cannot come under pressure from governments or unions not to restructure or liquidate the enterprises — they need to have full independence from the state in the management of their assets. Strategic or otherwise sensitive sectors or firms therefore should not be privatized in this manner.

Coverage: voluntary or mandatory? The standard arguments for mandatory insurance coverage (myopia, better risk pooling) should apply in most EECA countries. <sup>15</sup> Especially important is the fact that EECA countries cannot afford the tax expenditures which usually accompany voluntary systems to insure broad participation. An optional voluntary contribution to a mandatory second pilar program would be a desirable feature, however, as these schemes will probably be the only long-term financial savings vehicle available for some time. Participants could even be invited to make voluntary contributions to pension funds in the form of tradeable privatized assets (vouchers or shares). This voluntary contribution should not be tax favored given current revenue shortfalls (except possibly with respect to deferred payment of taxes on interest income).

Benefit structure. Several options for benefits receipt were reviewed in Chapter 5, including a lump sum, in phased withdrawals, or required purchase of an annuity. Each country will want to make its own choice. A key element will be how quickly the private insurance market develops. In most countries, the insurance industry is underdeveloped. This implies that in the initial years, insurance companies might charge high risk premiums or have high overhead costs. As a result, phased withdrawals appear more promising than the required purchase of an annuity.

Investment allocation. Regulations specifying allowable investments may be the most difficult aspect of the policy framework. In EECA countries, the risk associated with classes of assets is particularly difficult to measure. The policy framework should not be too rigid, allowing for regular review and modification as the capital market develops (e.g. investment allocation rules should not be written into legislation, but set by executive decree). For safety and liquidity, and as a hedge against domestic inflation, a portion (e.g. 30-40 percent) should be invested in indexed government bonds. A second hedge against domestic inflation would be provided by requiring at least 15 percent of capital invested in foreign bonds. Foreign investment will be controversial given strong demand for foreign exchange and stiff exchange controls on capital transactions in most transition economies. However, this may be the most important feature in establishing fund credibility and risk diversification, and so it should be pursued vigorously. The rest of the capital may be invested in equity in private companies, real estate, shares of public holding companies, private bonds as these emerge, etc. Regulations covering these investments should specify

<sup>15</sup> See James, 1992 for a discussion of these arguments.

the receiving firm's reporting requirements, auditing practices, and other such regulations to insure transparency.

Expertise. One of the major obstacles to the formation of institutional investors in EECA is shortage of expertise. The best way for EECA countries to gain this expertise quickly is to encourage foreign-domestic partnerships at the beginning. As nationals gain the necessary expertise, foreign partners can be bought out.

Organization and regulatory structure. Centralized state management is clearly not consistent with the transition path most EECA countries are following, and is not likely to be credible given the experience with the public system (which in most countries started out funded and became PAYG as reserves built up and were used by government for current expenditures). On the other hand, EECA countries will want to avoid the high overhead costs of a highly decentralized, individual system. Smaller countries may find that economies of scale in administration do not permit more than one or two funds, however, and so may be forced into a more centralized route. These funds could simply be branches of larger investment companies from OECD countries. Development of a number of private funds or the creation of a set of funds with regional monopolies may be appropriate in larger countries. Larger pension funds are particular desirable given the role these funds need to play in improving corporate governance as "active investors" (or investors in other funds run by active investors).

EECA countries are in the process of developing new regulatory agencies for financial intermediaries. Given the shortage of financial skills and the high demand for these skills in the private sector, staffing these new agencies has been a problem. The human capital constraint has been much stronger when supervisory roles are given to departments already staffed by bureaucrats from the days of central planning (e.g. departments of the Ministry of Finance, for example). Not only are these staff difficult to train, but the existing government bureaucrats are not usually as performance-oriented as would be needed. Creation of a new, independent agency to regulate pension funds, staffed by non-civil servants on more flexible contracts deserves serious consideration.

### Effects of Reform Program

The primary motivation for pension reform in EECA countries is the fiscal crisis. Will the set of reforms to the public pillar recommended resolve the fiscal problems? Developing the economic scenarios to answer this question is extremely complex, as it requires a number of assumptions about economic growth, the evolution of wages and labor productivity, and behavioral responses. However, based on several quantitative analyses, the following results emerge.

• Raising retirement ages can be expected to generate significant expenditure savings over the next 10-15 years. Simulations for the FSU show that raising the normal retirement age by six months a year for 10 years is projected to yield an expenditure

savings of about 30 percent by 2003 (assuming the average pension remains the same). (Cavalcanti, 1993). In Poland, cutting back early retirement by 50 percent could save roughly 3 percent of GDP annually by 2010 (Rashid, 1993). In Romania, equalizing normal retirement ages for men and women to 65 and for most early retirees to 60 by the year 2000 reduces the projected system dependency ratio by 25 percent at the millenrium (Romanian government projections).

Lowering average benefits also generates expenditure savings, but not as dramatic in the medium term. In Poland, simulations lowering regular benefits by 20 percent generated only half the savings of the eligibility-delaying reforms by the year 2003 (Rashid,1993). This is because the system is maturing. Without reform, the postwar baby boom generation will begin to reach retirement age during the next ten years.

Thus, of all the reforms of the public system mentioned above, the highest priority should be given to raising retirement ages. This is clearly a question of political feasibility as in Bulgaria, a 1986 survey found that over 50 percent of all pensioners rated themselves as able to work (Petkov and Miney, 1989).

The recommended reforms in the public sector are less feasible without the development of additional pillars. This is one of the most important reasons for moving ahead in this area. The second pillar will have other benefits as well which are not fiscal, but political or psychological. As Johnson, (1993) points out, creation of this pillar would be the strongest possible signal the government could send that individuals are now responsible for their own well-being. It would also create a constituency in favor of macroeconomic stability and financial sector reform. To the extent that in the absence of a second pillar the profits from privatization and enterprise restructuring are more likely to go to wealthier investors — who are better able to diversify their portfolio, handle risk, and take a long term perspective — creating institutional investors with broad participation among the active generation may increase the political acceptability of the privatization and restructuring process. Pension fund assets could also help to stimulate foreign direct investment (FDI), as they could complement FDI in new ventures. The presence of domestic pension fund assets in an FDI deal would help to reassure foreign investors with respect to the political climate.

#### Sequencing and Obstacles to Reform

Most EECA countries recognize that their public pension systems are in need of a major reform. Indeed, reform of long-term benefit entitlements has been a condition of Bank adjustment loans in most countries. Since 1989, some reform has taken place. (See Box 5). For example, Hungary has attempted to improve transparency by separating benefits into separate funds (e.g. long term benefits, short-term benefits, health care expenditures). The FSU created an independent pension and family allowance fund, fully financed by earmarked contributions, just prior to the break-up. Since the break-up, Estonia has introduced flat pensions. Bulgaria has reduced the scope of early retirement for future pensioners, and both

Bulgaria and Romania have increased the tax rate for employees who receive early retirement (although not the level which would be required for actuarial fairness). Albania has introduced a far-reaching reform, including the introduction of employee contributions and a modified flat benefit structure. Many countries have now introduced indexation provisions at least for the minimum pension.

Box 5: Transition Economies - Public Pension Reforms since 1989

#### Eastern Europe

Poland

Social Insurance Act of 1991 introduced new benefit formula which abolished differences in benefit levels according to occupation, gradually increased the number of working years used to calculate earnings base and lowered the maximum pension. Quarterly indexation of pensions to average wage was also introduced.

Romania

1992 reforms introduced higher contribution rates for those employed in occupations subject to early retirement programs, and increased benefits from the funded scheme. The multiple pension schemes are gradually unifying.

Bulgaria

In 1991, contributions were increased for employees in eligible for early retirement. Pension Reform Act of 1992 raised minimum retirement age for early retirees, reduced number of workers eligible for these benefits, and added incentives for those above retirement age to keep working.

Hungary

1992 reforms included: introduction of ceiling on contributions, increase in minimum contribution years necessary, minor changes in benefit formulae, indexation of pensions, and creation of independent social insurance fund, with separation of contributions according to use. The provision in the 1992 legislation which would have gradually raised the standard retirement age for women to that of men was suspended.

Albania

1992 reform created an independent social insurance agency with an independent financing and budget; the pension fund was separated in 1993. Also in 1993, major reform legislation was passed and implemented, including: a gradual increase in the minimum contribution period for a full pension; ceiling on pension and contributions; employee contributions, and a flat contribution for the self-employed. Benefits were also restructured, and are now based on years of contribution. Annual indexation of pensions was also introduced.

(continued)

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Former Soviet Union					
Ukraine	Independent fund (with earmarked funding and separate budget) established in 1991. Contribution rate raised in 1st quarter 1992 but then lowered back.				
Russia	Independent fund established March 1991. Maximum pension lowered but then raised to previous level in October 1992. Optional annuity scheme created in 1987.				
Kyrghyzstan	Independent pension fund created in 1991, based on Soviet model. A retirement test was eliminated in 1991.				
Belarus	Independent pension fund created in 1991, based on Soviet model.				
Estonia Georgia	Independent pension law passed in April 1991. Flat pension paid since February 1992. Independent fund created in 1990, on Soviet model, with addition of earnings test.				
Kazakhstan	Independent pension fund created 1991.				
Latvia	Independent pension fund established in 1991.				
Lithuania	The pre-1990 Soviet scheme was still in operation in 1992 although social pensions were introduced.				
Uzbekistan	Still operating on the basis of the existing Soviet Pensions Law from 1990.				

However, system-wide reform, addressing comprehensively the issues listed above, has been elusive thus far, despite widespread agreement among policy makers that the current programs are neither adequate nor appropriate. Why have efforts at comprehensive reform stalled?

The weaknesses of the system are poorly understood by most of the voters. PAYG system are inherently non-transparent, which is why reform is so difficult. Until a crisis occurs, most pensioners imagine that their contributions have been placed somewhere safe, that their entitlement is actuarially fair, and therefore that they are entitled to their benefits. After years of central planning, most of the active and retired populations are used to thinking of income as an obligation of the state and are unaware of the issues identified above.

More importantly, there is not yet a constituency for reform. The active population has not focussed on the cost to them of this system, as the contributions are paid by the firm. Even among policy makers, the depth of the problems are poorly understood. The extent to which EECA systems are at variance with both Western European system and the systems of countries at their income level is not well known. Yet the differences are stark, as we have seen above. And, even in the high income welfare states, public PAYG systems are facing pension financing crises.

Personal economic uncertainty is extremely high. Structure and rigidity were two of the key features of centrally planned economies. Jobs, stable prices, access to services (albeit mediocre ones), and a pension were all guaranteed. Household income distribution was relatively flat -- all but the party elite were equally poor, and even the elite were not ostentatiously rich. (Atkinson and Micklewright, 1993). The transition is changing all of this. Inflation, unemployment and inequality have all arrived. The rules of the economic game change every day as activities are decontrolled or decentralized. Privatization and restitution are redistributing assets, but few markets exist so that their value can be ascertained or monitored. Opportunities to gain or lose money quickly abound, creating a climate of fear and suspicion. Changing the rules of the game with respect to pensions is not welcome, so long as people mistakenly believe that the old rules can be maintained.

Fiscal systems are collapsing. Changing to a market economy has implied major changes in the tax system, shifting from an emphasis on taxing functional income at the enterprise to taxing personal income and consumption. Few EECA countries are managing this fiscal transition well. In the face of shrinking tax revenues form other sources, countries are depending on payroll tax collections, no matter what the efficiency and equity issues are. This is especially true in countries where the system is running a surplus. There is no interest on the part of finance ministries in a reform of the financing side until collections from other taxes improve.

Short-run perspective. Politicians are famous for having a short-run time horizon, with a resistance to tackling difficult issues which only have a short run political cost but a long run payoff. For this reason, comprehensive social insurance reform is difficult in all countries. This problem is even worse in EECA countries. Three years of intense economic decline has political and economic leaders desperate to restart growth. High inflation (caused in part by the shock of lifting price controls) and a highly uncertain future have added to the incentives to postpone reform in this area, despite the urgency of the issue.

Political cost. Adding to the innate reluctance of politicians to address this issue is the political cost of admitting to the population that the promises of past governments can not be met. Even if many voters suspect this, they rarely reward the messenger.

Little experience in market economy and the management of change. Political institutions are young, and in many countries quite volatile. Parliaments are still finding their way, and setting the rules of the game. Most technocrats have little experience in the market economy, and therefore have trouble anticipating events or developing implementation plans for reforms which are much less controversial. Civil servants and centralized bureaucracies are inexperienced in introducing and managing change, and do not have the skills (or, sometimes, the interest) in implementing the legislation already adopted. Governments are unused to their responsibilities to communicate with the population in a democracy. As a result, change in EECA countries has come much slower than originally anticipated. The transition time is now being measured in decades rather than the months or years discussed during the euphoria of 1990.

Failure to consider the system as a whole. Most reform efforts have concentrated on the public system, without considering the long term need for a multi-pillar system, and the role of the public pillar within this system. Thus, financial system development is being considered in one part of the government (usually the central bank) while reform of the social insurance system is being considered in another (usually a ministry of labor and social insurance, although independent social insurance agencies are becoming more common). The government agencies are not predisposed to consider a reduced role for themselves, as they are used to a model where the public redistributive pillar provides all. The financial authorities are overwhelmed by the short-term problems of developing a sound banking system. Neither agency is to talking to the other (nor were they in the habit of doing so in the past).

What kind of reform program could overcome these obstacles? As in other countries, a well-designed, coordinated, patient approach shows the highest likelihood of success. The process must begin with a public education and consensus building effort, so that the parameters of the problem are better understood. The unfairness of the current system must be documented, and the costs made more transparent to the active population through reform of the taxation system. The proposed reform should be comprehensive and credible, clearly meeting the redistribution, savings, and insurance needs of all age groups. Government agencies and departments must begin to work together on this issue. One possible phasing for higher income countries might be:

- Year 1: enact contribution reform to set the stage for further reform; prepare technical analysis of reform options including actuarial analysis of the public pillar and financial analysis of funded options; explain analysis and need for reforms to the population; begin creating macroeconomic and financial pre-conditions for second pillar.
- Year 2: complete and enact legislation providing for a phased reform of public sector program, including raising retirement age, eliminating special categories, flattening out benefits; introduce administrative reforms, establish timetable for reform of public pillar financing options consistent with overall fiscal reform (e.g. probably at the time of introduction of PIT).
- Year 3: complete and introduce legislation to create the second pillar including schedule to assign some payroll taxes from the public PAYG pillar to the funded pillar.

Slower-reforming countries will probably wish to delay introduction of the second pillar. Reform of the financing system in the public pillar may also be delayed if the tax reform has not yet started.

One approach to sweeten the reduction in benefits from the public system might be to give the active generation a choice of:

- (a) joining the new system reduced contributions to the public system combined with reduced benefits, with the difference between the old and new contributions assigned to the mandatory savings system; or
- (b) staying with the old system same level of contribution to the public system, higher flat or modified flat benefit than group (a).

Option (b) might be perceived as a less risky option for older workers with fewer years of contribution left.

#### Conclusion

EECA pension systems present a paradox. Pensions are low, yet expenditures are high, given the level of GDP. Part of the explanation for this paradox is the demographic structure, which is usually seen only in richer counties. But the main explanation is the very low age of retirement, which results in a low contribution period and a high system dependency ratio. It is this paradox of low pensions and high expenditure which makes reform so difficult in EECA, as in these countries, too many people have already retired. Especially during the transition, these generations need a safety net, regardless of whether they deserve one on the basis of age alone. They have few opportunities to acquire wealth today. Some intergenerational redistribution is necessary. The recommendations are designed to improve the equity and efficiency of the public pension system as a safety net for this group, in an affordable manner.

While a number of the initial difficulties of the transition in EECA countries were foreseen as the Berlin Wall fell, the extent of the crisis in pension systems was not. This is especially true in the countries themselves (Hungary being a notable exception). Indeed, some countries expanded entitlements as a way of inducing labor market adjustment. As the depth of the problem became clear, EECA countries have attempted to formulate reform programs. Albania, one of the poorest in EECA, is the only country to have passed through their legislature a major reduction in entitlements, however. The pension issue has proved to be one of the most contentious of all in EECA, even more contentious than privatization.

We conclude that one of the reasons why reform has failed in EECA countries is because governments have tried to reduce the scope of the public pillar without providing an alternative to assure old-age security. Failure to begin development of other pillars which would meet the active generation's needs for old-age income security based on savings and insurance principles may have doomed reform efforts from the start.

### Bibliography

Atkinson, Anthony, and John Mickelwright, Economic Transformation in Eastern Europe and the Distribution of Income, Cambridge: Cambridge University Press, 1992.

Boeva Irina and Viacheslav Shironin. Russians between State and Market: The Generations Compared, Studies in Public Policy #205, Glasgow: University of Strathclyde; 1992.

Cavalcanti, Carlos, Bridging the Poverty Gap in the Former Soviet Union, Unpublished draft, World Bank, July 1993.

Caprio, Gerard Jr. and Ross Levine, "Reforming Finance in Transitional Socialist Economies: Avoiding the Path from Shell Money to Shell Games", World Bank Research Review (forthcoming, 1994).

Diamond, Peter and Salvador Valdes-Prieto, <u>Social Security Reforms</u>; Unpublished draft, June 1993.

James, Estelle, <u>Income Security for Old Age: Conceptual Background and Major Issues</u>, Washington, D.C.: World Bank Policy Research Working Paper #977, September 1992.

Johnson, Paul. A., Rationale and Design for a funded pension system for the low-income transition economies of the CIS, London: Centre for Economic Performance Working paper #415. London School of Economics; June 1993.

Liu, Lillian, "Income Security in Transition for the Aged and Children in the Soviet Union and the Russian Federation," Social Security Bulletin, Vol. 56.1, Spring 1993.

Maret, Xavier and Gerd Schwartz, <u>Poland: The Social Safety Net During the Transition</u>, Washington DC: International Monetary Fund, Fiscal Affairs Working Paper, 1993.

Mesa-Lago, Carmelo, Portfolio Performance of Selected Social Security Institutes in Latin America, Washington DC: World Bank Discussion Papers #139, 1991.

Mitchell, Olivia, Retirement Systems in the OECD: Institutional Features, Economic Effects and Lessons for Economies in Transition, 1992 Draft.

Milanovic, Branko. Social Costs of Transition to Capitalism: Poland 1990-91, Policy Research Working Paper #1165, Washington DC: World Bank, 1993.

Petkov, Krastyu and Doukhomir Minev, "Work and Income of the Bulgarian Pensioner", International Social Security Review, 1989, pp. 70-86.

Porket, J.L., <u>Inequalities in Eastern Europe</u>: The Case of Old Age Pensioners, Papers in East European Economics No. 64, St. Anthony's College, Oxford, 1980.

Rashid, Mansoora, Financing the Polish Social Security System: A Simulation Model and Results from Two Experiments, Unpublished draft (restricted distribution) March 1993.

Rose, Richard, and Christian Haerpfer, <u>Adapting to Transformation in Eastern Europe: New Democracies Barometer-II</u>, Studies in Public Policy #212. Glasgow: University of Strathclyde, 1993.

Sipos, Sandor, <u>Poverty Measurement in Central and Eastern Europe before the Transition to the Market Economy</u>, Florence, Italy.: International Child Development Centre Economic Policy Series # 29. UNICEF, July 1992.

Sziraczki, Ggorgy, and James Windell, "Impact of employment restructuring on disadvantaged groups in Hungary and Bulgaria", <u>International Labor Review</u>, Vol. 131 (1992), pp. 471-496.

Van de Walle, Dominique, Martin Ravallion and Gautam Madhur. The Incidence of Cash Benefits in Hungary, Washington D.C.: World Bank Unpublished draft, July 1993.

World Bank, <u>Poland: Income Support and the Social Safety Net: Policies for the Transition</u>, Washington DC: World Bank, 1992.

World Bank, Russia: Social Protection during Transition and Beyond, Washington, D.C.: World Bank, (forthcoming 1994).

World Bank, World Development Report. 1993: Investing in Health, Oxford: Oxford University Press, 1993.

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(percent or number)					
	(1) System Dependency <u>Ratio**</u>	(2) Old Age Dependency <u>Ratio*</u>	(3) Percentage Difference (1)-(2)/(1)	(4) Standard Retirement Age, Males	(5) Standard Retirement Age, Females
Eastern Europe					
Hungary	59	36	38	60	55
Poland	49	28	43	65	60
Romania	62	30	52	60	55
Czechoslovakia	••••	32	****	60	55
Bulgaria	87	37	57	60	55
Albania	37	17	54	60	55
Slovenia	54	29	46	60	55
Former Soviet Union					
Estonia	52	32	38	60	55
Latvia	51	33	35	60	55
Lithuania	53	30	44	60	55
Russia	46	31	33	60	55
Kyrgyzstan	34	20	41	60	55
Ukraine	50	35	30	60	55
Kazakstan	40	19	53	60	55
Azerbaijan		18	••••	60	55
Uzbekistan	34	15	56	60	55
Georgia	45	30	33	60	55
Belarus	49	34	31	60	55

Notes:

Source: World Bank Staff Estimates

<sup>\*</sup> Ratio of persons aged 60 + to 20-59 in 1990 from World Bank Population Data.

<sup>\*\*</sup> Ratio of pensioners to contributors.

1

Table 2: Financial Characteristics of Public Pension Schemes in Transition Economies, 1992

(percent)

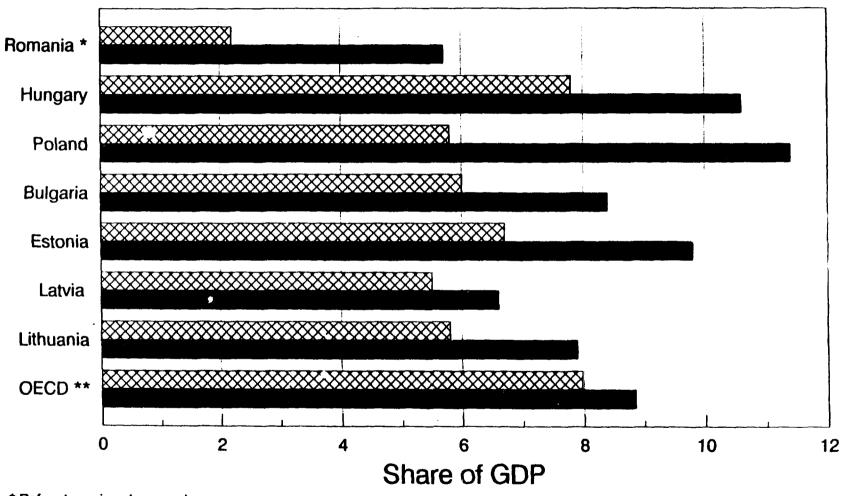
	Pension Expenditure/ GDP	Pension Expenditure/ GOVEXP.	Pension % of Avg. Wage*	Earnings <u>Test</u>	Automatic Inflation <u>Indexation</u>	Pension Contribution <u>Rate</u>	Unified System Contribution <u>Rate</u>
Eastern Europe							
Hungary	10.6**	18.6**	<b>49</b> .	Y	Υ	35	53
Poland	11.4	24.8	74	Y	Y	30	43
Romania	6.7	16.8	43	Y	Υ	16.5-25.9	31-41
Czechoslovakia	9.5**	16.8	49	N	N	30	50
Bulgaria	8.4	21.5	34	Υ	N	26.7-38	35-50
Albania	6.3	29.2	55	N	N	25	26
Slovenia	1.3	26.0	85	••••	Y	30	41
Former Soviet Union							
Estonia	9.8	••••	33	N	N	20	20
Latvia	6.6	****	52	N	Y	23	38
Lithuania	7.9		41	••••	N	••••	31
Russia	4.9	••••	34	N	Υ	32	40
Kyrgyzstan	6.7	••••	34	N	N	34	39
Ukraine	13.9	••••	39	••••	N	31	37
Kazakstan	4.7	10.3	39	••••	N	22	41
Azerbaijan	5.8**	18.3**	•••••	N	N	14	40
Uzbekistan	10.3	••••	43	N	N	33	40
Georgia	9.8**	31**	70	Y	N	••••	41
Belarus	7.3	14.8	42	N	Υ		42

<sup>\*</sup> Annual Average

Source: World Bank Staff Estimates

<sup>\*\* 1991.</sup> 

## Graph 1 Growth in the Pension Share of GDP in Selected Transition Socialist Economies

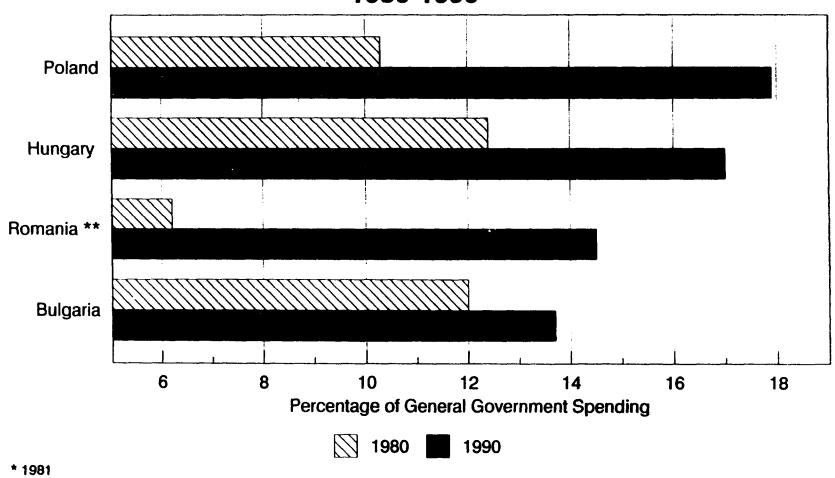


<sup>\*</sup> Refers to main scheme only.

Source: World Bank estimates and OECD.

<sup>\*\*</sup> Average of 21 OECD countries from 1980 to 1988 for 12 countries and 1990 for 9 countries.

# Graph 2 Pension Spending Share of Government Expenditure in Selected East European Countries 1980-1990



<sup>\*\*</sup> Main Scheme only.

Source: World Bank estimates.

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