

**ECONOMIC COMMISSION FOR LATIN AMERICA AND THE CARIBBEAN
SERIE FINANCIAMIENTO DEL DESARROLLO**

45

**PENSION REFORM IN CENTRAL AND EASTERN EUROPE:
NECESSITY, APPROACHES AND OPEN QUESTIONS**

Robert Holzmann



UNITED NATIONS

**JOINT ECLAC/UNDP REGIONAL PROJECT
FINANCIAL POLICIES FOR DEVELOPMENT**

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CONTENTS

	<i>Page</i>
ABSTRACT	5
1. Introduction	7
2. Necessity of reforming the public pension scheme	8
3. Reform discussion and reform plan	12
4. The central reform issues: the structure of the unfunded tier, financing of transition towards the funded tier, and financial sector requirements	20
5. Concluding remarks	26
Notes	28
BIBLIOGRAPHY	31
TABLES AND FIGURES	
Figure 1: Pension expenditure in reform countries of Central and Eastern Europe, 1980-1995	9
Table 1a: Social security contribution rates in Central and Eastern Europe in 1993-1994	9
Table 1b: Social security contribution rates in former Soviet Union countries in 1993-1994	9

ABSTRACT

All reform countries in Central and Eastern Europe require a rapid and drastic restructuring of their public pension schemes for macro- and microeconomic reasons. From the time of central planning they inherited a comprehensive unfunded pension system, and pension expenditure in per cent of GDP increased rapidly during the initial years of transition, reaching 10% and above in many countries. While initial but not effectuated reform considerations were geared towards a streamlining of the unfunded scheme, reducing the many distortions and making it financially sound, very recently various transition economies initiated reform plans, partly laws, for a partial move from unfunded to funded retirement income provisions.

The paper reviews the need for reform, surveys the reform discussion, and presents a summary of current reform plans in individual countries before addressing three central but open questions of the reform approach: how to structure the first and unfunded tier?, how to finance the transition toward the second and funded tier?, and what are the minimum financial sector requirements before funded provisions can be initiated? The success or failure of the current pension reform efforts in Central Europe have an important bearing on the reform developments in total Europe —East and West. A failure in one transition economy due to bad system design, unprojected fiscal deficit developments, or insufficient financial market preparations could discredit funded pensions in the region; a successful move towards a unfunded-funded multi-tier pension scheme in Eastern Europe could positively impact the reform discussion in the European Union.

1. Introduction

As in other industrialized countries, pension reform is high on the agenda in all Central and Eastern European countries on their way from plan to fully fledged market economies.¹ From the period of central planning those countries inherited an extensive social system, providing social protection from cradle-to-grave. The system had to be even extended quickly during the initial stage of transition to cover new risks, officially not known before (unemployment) or ignored (poverty), but becoming striking with the decline in economic activity and structural change in the economy (Holzmann 1992). In consequence, social expenditure increased at a time of output decline and falling budgetary resources.

Much of that burden was also borne by the pension system, caring for the elderly at a time of subsidy reduction and very high inflation, or the for the elderly dismissed workers at a time of exploding unemployment rates. In an unfunded social insurance scheme this means higher contribution rates or higher budgetary transfers, or, as in the case of those countries, both. In view of reduced budgetary revenues and the need for macroeconomic stability, the need for a comprehensive pension reform became part and parcel of the economic reform programme in these economies from the very beginning. However, despite extensive technical assistance support by international institutions and Western national social insurance agencies, in none of these countries a far reaching plan for reforming the unfunded pension scheme was adopted by Parliament; the political resistance was too overwhelming. Perhaps for this reason all reform countries are currently contemplating following the example of countries in Latin America and moving towards a multi-tier scheme with a reformed unfunded and a new funded pillar. In a few countries, preliminary and initiating laws in this direction have already past Parliament, yet many questions remain.

The reform environment in Central and Eastern Europe shares many similarities with Latin America countries, but exhibits also notable differences. The similarities comprise, inter alia, the social insurance type benefits of the unreformed scheme, with some, but not strong links between past contributions and initial pension level; the high expenditure level and unsound financial position of the current scheme; the low credibility of reform attempts of the unfunded scheme, and hence the reform attempt of moving towards funded provisions; the high expectations about the economic benefits of such a reform approach, such as higher national saving, capital formation and growth; and the question if all the necessary requirements of such an reform approach are met.² The most notable differences comprise, inter alia, the many additional problems and reform demands when moving from central planning to market structures, including institution building (see Gros and Steinherr, 1995); no old, but a new coverage problem (since in the past all employed were covered by the scheme, but with market initiation the share of the uncovered is rising, accentuating the revenue-expenditure gap); less problems with unification of different social insurance institutions (mostly unified during communist times); and a population ageing which is already pronounced.

The structure of the paper is as follows: Section 2 highlights the necessity of reforming the current pension scheme for macro and microeconomic reasons. Section 3 surveys the current reform plans in those countries, highlighting common features and individual approaches. Section 4 addresses the three central questions of the current

reform plans: How to structure the first and unfunded tier, how to finance the transition toward the second and funded tier, and what are the minimum financial sector requirements before funded provisions can be initiated? Tentative conclusions are drawn at the end of the paper.

2. Necessity of Reforming the Public Pension Scheme³

In all Central and Eastern European reform economies, the public pension systems are in severe financial difficulties. This situation is little linked to past and current demographic developments, but is essentially the result of past policy decisions reflecting central plan logic and the ignoring of incentive structures, which is exacerbated by the transition to market structures. As a consequence, the expenditure level is mostly high, requiring extremely elevated contribution rates, in addition to budgetary transfers. More moderate expenditure levels in a few countries reflect transitory capping measures in view of budgetary restrictions, and thus constitute a repressed disequilibrium. This section presents central macro and microeconomic reasons, why a rapid and comprehensive reform of the pension scheme is required if the overall reform programme should not be jeopardized.

i) Obstacle for economic stability and growth

The operation of public pension schemes in Central and Eastern Europe –their expenditure share in GDP, financing requirements and benefit structure– constitute a major obstacle for stability and long-term growth in their economies.⁴

Like in most Western industrialized countries, the share of pension expenditure in GDP has also been increasing in the former centrally planned economies in recent decades, albeit with moderate pace. With the initiation of economic and political reform, starting between 1989-1991, however, the rise in the expenditure share has substantially accelerated, reaching, on average, well above 10% of GDP in 1995 in the most advanced reform countries (see figure 1). Such a level is in the range of the average expenditure share of the much richer member countries of the European Union which amounts to some 12% in 1994. The high and often rising proportion of economic resources which is transferred from the active to the retired population has important implications for stability and growth prospects of these countries.

The former centrally-planned economies were characterized by a very high level of budgetary intermediation of economic resources, reaching more than 50% of GDP. With the reform process, a reduction is taking place, but the pressure on cutting budgetary expenditure proves as difficult to implement as raising revenue, making the control of the overall fiscal deficit a main issue of macroeconomic stability. Social expenditure are, in principle, financed by social security contributions, reaching high levels in the reform countries, of which some 50% to 70% are devoted to financing pension expenditure (see table 1).⁵ Despite those high rates, an important and often rising portion of pension expenditure has to be financed through state budget resources, thus widening the general government fiscal deficit. Yet, in the reform countries, the possibility of non-monetary financing of a major share of the fiscal deficit is still very much restricted in view of only rudimentary financial markets. Consequently, a high pension expenditure level threatens macroeconomic stability unless other public expenditure are curtailed or revenue increased.⁶

Figure 1
PENSION EXPENDITURE IN REFORM COUNTRIES OF
CENTRAL AND EASTERN EUROPE, 1980-1995

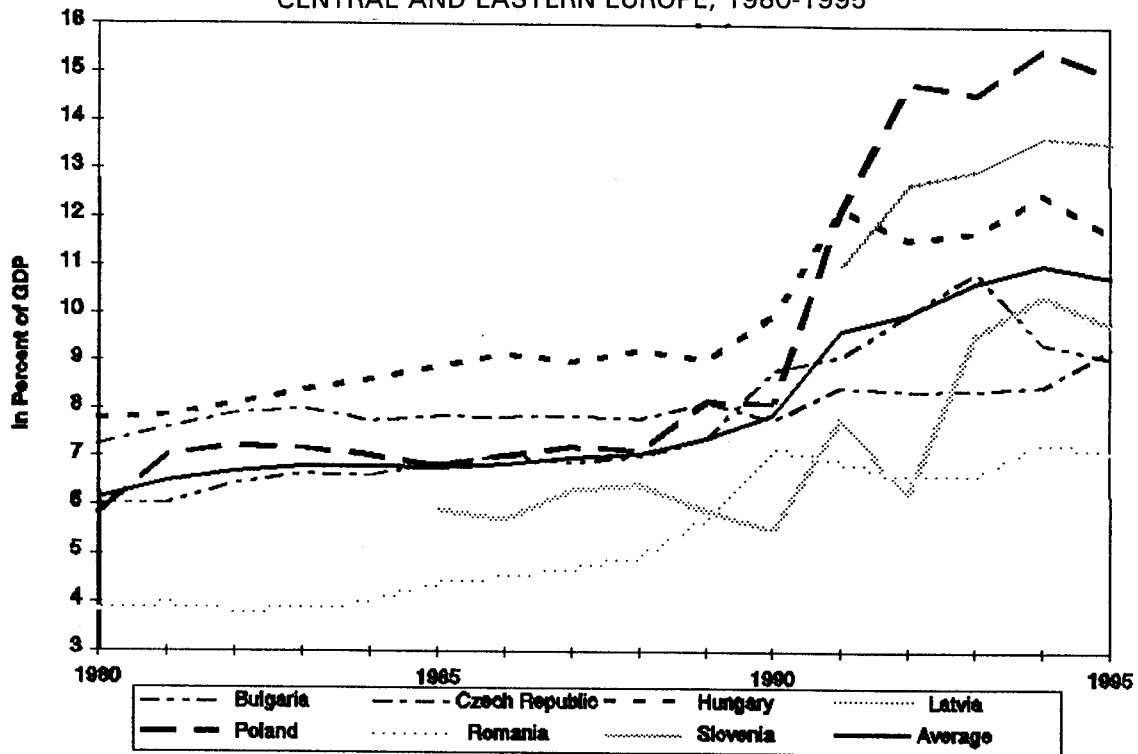


Table 1a
SOCIAL SECURITY CONTRIBUTION RATES IN CENTRAL
AND EASTERN EUROPE IN 1993-1994^a

Albania	Bulgaria	Czech Republic	Hungary	Poland	Romania	Slovakia	Slovenia
42.5**	46-52*	48.5	62.3'	52*	35**	50.0'	44.7'

Table 1b
SOCIAL SECURITY CONTRIBUTION RATES IN FORMER SOVIET UNION
COUNTRIES IN 1993-1994

Belarus	Estonia	Latvia	Lithuania	Moldavia	Russian Federation	Ukraine
6.7-42.8*	33	38**	31**	28*	40	41*

^a These contributions typically finance pension, sickness and maternity, unemployment, family and health benefits, unless otherwise stated.

* Excludes health benefits which are financed by state budget.

** Excludes family benefits which are financed by state budget.

Source: Topinska (1996).

Using the latter options is likely to jeopardize the growth prospects. High and sustainable economic growth in these economies requires, as elsewhere, efficient allocation of resources, technical progress, and also the accumulation of productive resources, i.e., investment. The new relative price structure in the reform countries, however, renders the inherited capital stock largely obsolete, if measured in efficiency units, thus enhancing the need for elevated capital accumulation if Western income levels are to be approached rapidly. High levels of social security contributions are likely to reduce household savings (as elderly are likely to exhibit a higher consumption propensity), with negative impacts on the financing of investments of the emerging private sector. Pressure on the general government expenditure level risks to crowd out educational and infrastructure investment, as already experienced in these countries. Thus, pension reform as part and parcel of an overall fiscal reform to reduce government expenditure and revenue levels appears crucial for achieving high long-term economic growth.⁷

ii) *Impediment for achieving the social function*

Paradoxically, despite of the already high level of expenditure on public pensions, they cannot fulfil the central functions of a retirement scheme: poverty alleviation and income replacement.

As a result of an extremely high number of retirees, the benefit levels are very low, providing mostly an income support around the poverty level. The exact share of elderly living in poverty is still an open issue in view of questionable official poverty lines, important regional price differences, the large, but varying share of elderly living with their children, important home production of food and ongoing (official and unofficial) labor market participation of elderly. However, there is general consensus that the share of elderly poor has increased during the reform process, only the extent is open for discussion.⁸ Yet, financial constraints and the already high expenditure level prevent an untargeted increase in the minimum benefit level. More targeted provisions through social assistance programmes are under implementation, but progress, so far, is mostly slow due to political, technical and administrative problems resulting from the re-creation of local governments.

Budgetary constraints have also limited the scope for indexation, while annual inflation rates were in the high two or three-digit range until recently. Since benefit indexation has mostly been performed in a graduated manner, raising lower benefits by a higher amount, the benefit distribution is very much compressed, providing the majority of retirees in essentially all countries with minimum benefits only. Consequently, public pension benefits provide only a very low replacement of earnings, even if compared with the compressed wage distribution of current workers. Since in the past, the acquisition of other assets to support retirement consumption has been limited (mainly housing, saving deposits, and cash), and the latter two were exposed to an important inflation tax, retirees essentially have to rely on low public benefits, further labor market participation, home production, and intra-family transfers.

Unless the pension scheme is reformed and economic growth takes place, it will not be able to fulfil its main objectives. High and sustainable economic growth, however, may be conditioned on a prior reform of the current scheme.

iii) *Main reasons for expenditure surge and deficiencies*

The reform requirements of the public pension scheme, centered around high and surging expenditure levels and microeconomic deficiencies, are a heritage of the past central planning and of the current transformation process.

Under central planning, the pension scheme was part and parcel of the overall distribution concept, displaying the following central characteristics:

1) The regulations paid little attention to incentives, and deviations from envisaged individual behavior could, in principle, easily be controlled via all-encompassing socialized enterprises. The regulations served to implement planning objectives, with differentiation by sectors and branches, and low standard retirement ages (mostly 55 for women, 60 for men), further reduced for priority sectors.

2) The female labor force participation was extremely high, being at and above the highest level experienced in Western industrialized countries (Sweden), and resulting in almost universal coverage.

3) The government provided essential goods and services free of charge or heavily subsidized, financed by cash flows from socialized enterprises, giving the cash labor income almost a residual character and resulting in a low labor income share.

4) Important social services, goods and social transfer provisions were directly covered by the socialized enterprises, giving those enterprises social welfare-type functions.

As a result of the transformation process, comprising, *inter alia*, price and trade liberalization, subsidy reduction and privatization, and implying adjustment inflation, a decline in output, structural changes, and the emergence of (open) unemployment, main characteristics of the inherited scheme – which is invariably of the social insurance type – became striking.

1) Government's loosening grip on enterprises (and individuals) induces them to exploit the existing deficiencies of the regulations and lacking administrative structures, resulting in rising benefit take-up and lower contribution payments (from socialized enterprises and the emerging class of private farmers and self-employed), including rising arrears to the social security funds.

2) The stark reduction in budgetary (consumer and producer) subsidies – in the past amounting up to 15% of GDP (Holzmann 1991) – required adjustments in the nominal benefit level, and the higher pension expenditure thus reflect the shift from indirect (lower price level) to direct income support.

3) This development is fostered by the privatization of enterprises and the imposition of a hard budget constraint on socialized enterprises, reducing their social policy functions and shifting corresponding expenditure to the budget.

4) Expenditure implications are exacerbated by various policy actions as a result of emerging unemployment and government restructuring. In various countries early retirement windows are introduced to cope with rising labor market disequilibria, and disability pensions are rising, too. Lacking an elaborate social assistance scheme and means testing procedures, governments are pressed to provide less targeted minimum pension benefits.

5) Last but not least, the substantial decline in real GDP in the initial years of transition added to the rising pension burden.⁹ In view of the already low benefit level and the political need for social safety provisions for the elderly, real benefits could not be downward-adjusted by the same degree as it happened with real wages.

iv) *Prospect for the future*

The strong impact of the initial output contraction raises, of course, the question to what extent the existing financial problems of the public pension schemes are largely temporary and will be reversed once high and sustainable growth sets in. Output decline has largely bottomed-out, and a few countries already experienced impressive economic growth rates in 1994 and 1995 (see IMF, 1996). Various considerations and scenario projections, however, oppose such a view, suggesting a further and important increase of the cost-covering contribution rate of an unreformed pension scheme, inter alia:

1) The basic imbalance results from the high retiree/contributor ratio as a consequence of low retirement ages. Currently, some 50% of the population are active, paying for some 25% of the population being retired. Future higher wages may reduce incentives for early retirement, but as experienced in Western industrialized countries, the impact is likely to be small.

2) The aging of the population will also hit the countries in transition. Currently, in comparison with Western Europe, their age structure is, in general, younger as a result of past higher fertility rates and lower life expectancy. Yet, fertility is falling in these countries, too, and likely to approach Western levels; life expectancy is going to rise in parallel to the introduction of Western production technology and healthier life styles. In addition, the likely migration of younger age groups to the much richer West will further deteriorate the population structure.

3) The share of wages in GDP under central planning was low (some 30% to 40% compared to 45% to 55% in OECD countries) due to the residual character of wages in the income distribution process, and the lower development level. With the transition towards market structures, the contribution base in per cent of GDP plummeted further due to the shift to self-employment, under-reporting of wages by the emerging small-to-medium size private enterprises, and falling labor force participation. In an earnings-related scheme this reduces the expenditure level but temporarily also widens the gap between revenue and expenditure. Eventually, however, the wage share will approach Western levels, resulting in a steady state expenditure level (pension expenditure as a per cent of GDP) which may be some 20% to 40% above the current level.

3. Reform Discussion and Reform Plans

From the very beginning of market orientation, the reform countries were made aware by the Washington-based International Monetary Fund (IMF) and World Bank (WB) of the unsustainability of the inherited pension scheme for financial and social reasons, and reform options have been proposed. The Geneva-based International Labor Organization (ILO), the Paris-based Organization for Economic Cooperation and Development (OECD) and the Brussels-based European Commission (EC), also recognized a reform need, but recommended a more cautious reform approach and much less drastic reductions of the expenditure level. Yet, while at the beginning both IMF and WB suggested a conventional restructuring of the existing unfunded schemes, more recently proposals for partial funding of future retirement income have been put forward, and independent reform plans in this direction elaborated by the transition economies. This section will in a first part shortly survey the development of the reform discussion, and in a second part outline the reform direction and plans.

3.1 *Development of the reform discussion*

The initial reaction by IMF and WB to the unsustainability of the existing pension schemes was rather conservative.¹⁰ The proposals in programme mission and technical assistance reports amounted essentially to a financial redressing of the unfunded schemes and an elimination of the main distortions with the conventional instruments, inter alia: increase in the (low) retirement age, lengthening of the assessment period from the past few years to the last 20 years (or even life-time earnings) in order to provide for a better contribution/benefit link, reduction in the annual accrual factor to reduce the too-high replacement rate, higher deaccrual factors for early retirement, price instead of wage indexation, elimination of group privileges, more equal split of the contribution between employers and employees, and consistent tax treatment of contributions and benefits.

Those reform proposals, if implemented, would have put the unfunded pension system on sound financial footing for the short and medium term. However, in none of the countries did such a reform take place. Some minor adjustments or discretionary changes were often made to avoid a too-high-a-deficit of the social security fund. Some countries (such as Hungary) voted an increase of the retirement age in Parliament, but its implementation was suspended afterwards. Various other countries (such as Latvia, Lithuania and Poland) enhanced even the generosity towards the elderly at the beginning of economic reform and democratization. As a consequence, the expenditure share in GDP continued to rise; an even stronger increase was often prevented by discretionary measures (such as suspension or flat-rate indexation of benefits). The reason for the lacking progress in pension reform was, of course, political. All of these countries represent new democracies with often fragile parliamentary support of government and lacking mechanisms of consensus-finding between social groups. Given the starting conditions of these countries, in which any traditional reform necessarily means a cutback of "acquired rights" for important segments of the population, neither a consensus nor a majority solution could be achieved.

This lacking progress in traditional pension reform, adjusting an unfunded scheme only, may be one major reason why proposals and plans for a more drastic reform approach, moving towards a funded scheme took hold. Moving to a private and funded, contribution-related schemes may prove more credible since the future benefit is considered to be dependent on the individual contribution effort and not on political distributional considerations (Holzmann, 1994a), promising also higher benefits for a lower contribution effort. Such a thinking was certainly fostered by the World Bank Report of 1994, the positive assessment of the Chilean experience (and ensuing reforms in Latin America), and the positive externalities expected from such a reform approach on saving and capital formation, financial market developments, and labor market performance. As a result an unfunded-system-cut-cum-funded-provision-reform is under discussion in many transition economies, and under elaboration or even implementation in some reform countries.

3.2 *Reform plans: Common characteristics and individual country proposals*

The reform plans in the transition economies share major characteristics, but differ in design, preparation and implementation. This sub-section highlights first common characteristics before surveying shortly the plans of Latvia, Hungary, Poland, Croatia, Czech Republic and Slovenia.

i) *Common characteristics*

Synchronism between market and pension reform: The progress in the reform discussion seems to be strongly correlated with progress in market orientation and macroeconomic stabilization. The reform discussion seems to be most advanced in countries where price stabilization is largely achieved (annual inflation rate in the one or low two-digit range), the exchange rate is largely stable, the output decline reversed for two to three years, and market orientation (liberalization, privatization and institution building) advanced. This progress is correlated with the proximity to Western countries, and hence concerns the Baltics, Poland, Czech Republic, Hungary, Croatia and Slovenia. The stage of the pension reform discussion apparently reflects both the priorities in economic reform (stabilization first) and the possibilities for funded provisions (such as banking and financial market reforms).

Unfunded-system-cut-cum-funded-provision-reform: No transition economy envisages a Chilean-type reform, moving totally from an unfunded to fully funded provisions. The envisaged *partial* unfunded/funded shift (UFS) seems to be motivated by the scope of the implicit social security debt (always well above 200% of GDP, compared to some 100% in Chile at the beginning of the reform) and hence fiscal considerations as well as risk-sharing considerations. None of the reform plans, except one proposal for Poland, envisages shifting more than 50% of mandated retirement income towards funded provisions, but all proposals include major cuts in the unfunded benefits (through higher) retirement age, a switch to price indexation and strengthening of eligibility criteria) in parallel with the change in the financing. All reforms propose a gradual move towards funded provisions, covering all new entrants to the labor force, and only part of the existing labor force on a voluntary or mandatory basis.

Funded benefit type and administration: The funded provisions are invariably defined contribution plans, with funding and administration undertaken by privately managed and publicly supervised financial institution. Against the background of the Chilean experience (which is closely observed in Eastern Europe), administrative costs are always a major concern leading to proposals of a "clearing house" in charge of premium collection, record keeping and benefit disbursement.

Many loose ends: All proposals, even parliamentary decisions and laws still leave many issues undecided. This concerns in particular transitory issues such as the recognition of past contributions, the question of voluntary/mandatory participation, and the financing of the transitory deficit (operational deficit and compensation of acquired rights). On the latter, all countries share the optimism that assets put forward for privatization could help to finance the transition on large scale.

ii) *Individual country proposals*

The move towards a multi-tier structure, with unfunded and funded provisions is already casted in law in Latvia and Hungary. Official proposals in this directions currently exist in Poland, Croatia and Slovenia. The Czech Republic has implemented voluntary funded provisions since 1994; Romania had fragments of funded provisions since 1972, which, however, fell pray of the high inflation during transition. In recent years, various transition countries, including Russia, started to enact laws to regulate voluntary personal and occupational pension schemes (EBRD, 1996).

Latvia

The earliest, government-induced concept for an UFS was prepared for Latvia and reflects the strong views and campaign of a former minister of social affairs. The current plan differs from the initial concept (see Holzmann 1994b) in some aspects: The first and unfunded tier is now a "notional defined contribution plan" and in effect since January 1996 (see Fox and others, 1996). The second, mandatory and funded tier, and the allocation towards this tier is still open but should start operation in 1998. In the meantime the preparation and implementation of the (voluntary) third tier should serve as a ground to gain experience with financial markets and their operation.

The "notional defined contribution plan" mimics a contribution-based pension that would be offered in the private sector; it takes up an old suggestion by Buchanan (1968). Contributions are ear-marked to an individual "saving" account which earns a rate of return equal to the growth of the contribution wage base. At retirement, the pension paid is equal to the accumulated personal capital (contributions plus "notional interests" earned) divided by the expected post-retirement life span for all those of that person's age; benefits are price indexed. The pension benefit cannot fall below the social pension. The minimum retirement age is 60 (men), 55 (women), with a required minimum contribution period of 10 years. Any non-contributory period (such as unemployment, sickness, maternity, military service) requires an immediate transfers from the appropriate budgetary institution, with the simulated contribution wage set at minimum wage.

This first tier approach (also voted for implementation in Sweden) has various advantages, most importantly: i) it provides the closest contribution/benefit link possible in an unfunded scheme, thus minimizing labor market distortions; ii) it does not require the setting of a standard retirement age, and increments/decrements for later/earlier retirement are implicitly set at "notional actuarial level";¹¹ iii) the system adjusts automatically to increases in (conditional) life expectancy since the benefit level for given retirement age is downward-adjusted accordingly; iv) the system is expected to provide major short-term savings. The reform-indifferent replacement rate (44% for average wage) is pitched at a retirement age of 60, well above the current effective average retirement age for men, even more for women, implying important surpluses if the current retirement pattern were to continue but also if retirement is postponed. The cash surplus is accumulated (to safeguard the system against adverse economic and demographic shocks);¹² and should allow a scheduled reduction of the contribution rate from 38% in 1996 to 33% in 2001, and make room for contributions to the funded tier; v) superimposing an actual defined contribution plan on a notional defined one should prove easier since moral hazard problems are avoided and the individual decision restricted to expected rate of return differences.

The compulsory portion of the pension system (first and second tier) has been designed with a long-term contribution rate of 20% of wages. The pension concept calls for the investment of some fraction of these contributions in the private sector through the creation of individual accounts (personal saving plans), managed by private sector financial institutions. According to the current legislation, operation of this tier for those born in 1949 and later should start in January 1998. The regulatory framework for the operation of the second tier, including the preparation of a framework law, and the creation of a supervisory agency empowered to enforce its provision should be completed by that time. However, many decisions about major features of the second tier have not yet been taken, most importantly: i) voluntary versus mandatory participation. Such a decision has not only a great bearing on the individual, but also on the government since it determines the financial position of the reserve fund and government budget; ii) What

contribution share should be allocated to the funded tier? Two constraints limit the contribution rule option: The target contribution rate of 20% for both tiers, and balances (and reserves) of the first tier. Tentative calculations suggest that by 2005 the cash balance should allow for a contribution rate to the funded tier of 8%; iii) What are the appropriate regulations to minimize administrative costs?; iv) What guarantee system should be implemented to safeguard contributions and a (minimum) rate of return in the second tier?; iv) What kind of pensions should be paid by the second tier? There are two main options: private sector annuities bought at retirement, and transferring the accumulated personal capital to the first-tier fund, with a pension paid by the latter on the sum of notional and actual personal savings accumulated. The second option would circumvent insurance-market related problems and keep administrative costs low, but would enhance the political problems of too large reserve funds in the first tier and the problems for the rate of return such an approach often implies.

*Hungary*¹³

After many years of discussion, the Hungarian Government has recently approved a proposal of pension reform, jointly drafted by the Ministry of Finance and the Ministry of Welfare, which consists in the transformation of the publicly managed unfunded system into a three pillar system (unfunded, mandatory fully funded, and voluntary fully funded scheme). The new pension law should be submitted to Parliament in September 1996. Final voting of the law is scheduled for December, and the new three pillar pension system is expected to become effective on 1 January 1998, after one year of preparatory work (only).

The reformed unfunded and new first tier would share a number of characteristics, such as higher standard retirement age for full pension (increased to age 62 by 2001 for men, and by 2009 for women, compared to currently 55 for women, and 60 for men), a reformed disability scheme, changed indexation rules (from wage indexation to mixed price/wage indexation or mere price indexation), tighter eligibility criteria, broadened tax bases, and lower contribution rate. The proposal states that the target average replacement rate in the new system would be 60%, of which two thirds generated by the first, unfunded pillar, and one third by the second, funded pillar. These replacement rates are expected to be achieved with long-term contribution rates of 18% (paid by the employer) and 10% (paid by the employee), respectively (compared to an overall contribution rate of around 35% under the current system, paid largely by the employer only); for the transition period, the scenario calculations indicate the intention to keep the current contribution level. The proposal envisages that the switch to the new system should be mandatory for people under age 40. People above this age would have the option to stay in the reformed unfunded, or switch to the new multi-tier scheme. For payments upon retirement under the second tier, the proposal envisages three options: lifetime annuity, phased withdrawal, and a lump-sum subject to restrictions. The government would guarantee a minimum income (25% of the average net wage) if the sum of benefits in the first and second pillar is below. However, the proposal does not state whether this minimum is targeted to retirees, or just part of the Government's regular social assistance programme.

The current proposal is often unspecific and leaves various questions unanswered, inter alia: i) The treatment of disability and survivors benefits under the new scheme. Should they be provided and financed through both tiers, or the first tier only with accumulated funds of the second tier? ii) Is the mandatory switch for all aged 40 and

younger optimal, or should not the incentive scheme be structured such as to achieved the envisaged switching age voluntarily? iii) How will the compensation for the switchers be calculated, indexed and disbursed? iv) the tax treatment of both tiers. Currently pension benefits are untaxed. Staying with this option would create distortions between the unfunded and funded tier since the first tier will be financed by tax-exempt employer's contribution, while the second will be financed from non-tax exempt employee's contributions which tends to provide higher implicit returns for the unfunded pillar. And perhaps most importantly v) the scope and the financing of the transitional deficit (operational deficit plus compensation for accrued rights of switchers).

Poland

In 1995 and 1996, two alternative proposals for a reform of the pension scheme have been published by government bodies: one by the Ministry of Labor and Social Affairs in May 1995 (see ISSA 1996, pp. 54-55), and one by the Ministry of Finance in spring 1996 (see, Deutsche Bank Research 1996). The alternative views in both proposals, and the importance for government operation to come forward with a unique and consistent reform plan, gave rise to the assignment of a plenipotentiary for social security reform in summer 1996, with an office of high-level staff. This office is assigned to produce a reform plan, including required legislation within a year. To this end, the task-force is, in principle, free from any current proposal, but a partial move from unfunded to funded provisions is part of the reform objective. The scope and speed for such a shift is only limited by fiscal considerations, and hence will be endogenously determined.

The 1995 reform programme by the Ministry of Labor and Social Affairs proposes a three tier retirement income scheme, consisting of a universal pension, a social insurance pension, and a voluntary, supplementary funded pension for people with higher income.

The universal pension is payable to all citizens aged 65 and above who contributed to the scheme for up to 40 years, and would amount to 30% of the average wage. Yet expenditure would be funded from general government revenue!

The social security pension would be financed from contributions only, with the contribution base (and derived benefits) limited through a ceiling of 250% of the average wage. Eligibility requires a contribution period of 15 years.

The supplementary pension would be available to some 2.3% of the economically active population earning more than 250% of the average wage.

The reform programme includes no proposals for an increase in the retirement age (or tightening of eligibility conditions), but suggests various changes in organization, inter alia dividing the existing social security fund (ZUS) into six separate funds (including an own old age and survivor's insurance fund), and a broadening of the competence of ZUS (including enforced control functions).

A recent proposal by the Polish Ministry of Finance envisages a pension reform which resembles the Hungarian plan: Reform of the unfunded scheme (including an increase in the retirement age for women from 60 to 65, tightened eligibility criteria for disability benefits, and a switch from wage to price indexation) in parallel with the introduction of an funded second tier (Deutsche Bank Research 1996). The remaining unfunded tier would continue to carry for the non-switchers, but would provide for all others only a low minimum benefit of 20% of the average age. For all new entrants to the labor market, and those who decide voluntarily to change to the new two-tier scheme

the funded, personal, and privately managed provisions would provide the main part of retirement income. The personal accounts would be managed by private and specialized financial intermediaries under tight government supervision in a competitive environment, with individuals able to choose freely among providers. For voluntary switchers accrued pension rights would be compensated by recognition bonds to be disbursed at retirement. For the financing of the reformed scheme a contribution rate of 45% of gross wage would be levied, with 40% financed by employees and 60% by the employer. The employee's contribution under the two-tier scheme (18%) would flow to the funded scheme, the employer's contribution (27%) to the unfunded scheme to finance the basic tier and existing obligations under the old reformed scheme. During the transition, budgetary transfers would still be required, but the deficit of the pension scheme in per cent of the state budget would fall from some 15% in 1996 to zero by 2008/9 under medium scenario assumptions (real GDP growth 3% p.a., productivity increase 2% p.a.). This proposal constitutes the most radical reform in central and eastern Europe, but by the same token is still very general, leaving open many questions of concept, implementation and transition.

Croatia

The Croatian draft law for pension reform has also some resemblance with the Hungarian law. The initial draft proposal, elaborated after the break-up of Yugoslavia was geared towards a mere reform of the unfunded scheme, modeled after the recent German reform, with two main changes: an increase in the retirement age for women from 55 to 60 and for men from 60 to 65, and a lengthening of the assessment period from last 10 years to all earnings since 1970. In view of the limited short and long term saving of the initial reform concept, the new proposal envisages a three-tier system, with a reduced unfunded scheme, a mandatory funded scheme, and a voluntary funded scheme. Under current planning, only those under 45 would be put under the new two-pillar structure; those above that cut-off age would stay with current but reformed scheme. Roughly 15% out of the 25% contribution rate would be allocated to finance the unfunded component, the remaining 10% would be allocated to mandatory funded individual retirement accounts. Individuals would be encouraged to supplement their retirement income through additional voluntary savings operating under the same tax exemptions as the second pillar. No decision has yet been taken with regard to the specific benefit design of the first tier (traditional defined benefit scheme or "notional individual accounts"), the redistributive component of the basic tier (such as social minimum, and treatment of farmers), the target replacement rate of the first and second tier, and the disbursement options under the second tier.

The central questions still under investigation concern, of course, transition issues, most importantly: i) The treatment of those remaining fully with the unfunded tier. With an envisaged common first pillar, the non-switchers need some top-up to bring them in line with the switchers. ii) Further measures to control expenditure (such as a further increase in retirement age for women to a common standard retirement age of 65, further increase in early and standard retirement ages above 60 and 65 respectively, actuarial decrements for early retirement, price instead of wage indexation for benefits in progress). iii) The financing of the transition. The budgetary situation, and the wish to continue to adhere to strict macroeconomic stability leaves little or no space in household or the government budget to finance the transition deficit. For this reason various thoughts (and hopes) are given to use privatization assets to bridge this constraint over

the next ten years or so. According to those plans, in the initial period the mandatory pillar would be funded with privatization assets, rather than new saving. Such an approach raises, of course, many questions with regard to the scope of such a debt/equity swap, appropriate pricing, liquidity, and corporate governance.

Slovenia

The available information indicates that the pension reform discussion in Slovenia is still in an early stage as regards the details of a partial UFS (Heller and others, 1995). Yet, the Slovenian authorities seem to be determined to follow the example of other transition economies and to move towards a mandatory two-tier (unfunded/funded) pension scheme.

Czech Republic

The reform approach is currently geared towards a revised public scheme, consisting of a flat-rate and an earnings-related part, providing moderate income replacement for the low and middle-income groups, and a supplementary pension scheme (SPS) on a voluntary basis. To ease the financial pressure on the unfunded scheme, the reform includes a scheduled increase in the retirement age between 1996 and 2007 from 60 to 62 for men and from 53-57 to 57-61 for women, and an extension of the assessment period from 5 of the last 10 years of earnings to average over 30 years (ISSA, 1996).

The in March 1994 already implemented SPS exhibits the following salient features: i) Predominance of a defined contribution plan; defined benefit plans are restricted to disability pensions and long-service pensions (a gift to miners); ii) any citizen can join any pension fund; iii) stipulation of minimum vesting period and (partial) portability of acquired pension rights; iv) no tax preferences for employers' contributions; employees' contribution are tax-exempt while returns on investment and benefits are taxed. The government provides a graduated subsidy to the individual pension fund's contributor which favors low wage earners.

Romania

This country introduced already in 1977 a supplementary pension scheme, which is notionally on a funded basis. The scheme is of a defined benefit type, with a replacement rate of 7% (for a contribution period of between 5 and 10 years) rising step-wise to a replacement rate of 16% (for a contribution period of 25 years and more). The mandatory contribution rate was originally set at 2%, and has been 3% since 1986 (when the voluntary contribution of 2% was discontinued), and is paid by the employees only. According to the original concept, the initial high surplus of contribution revenue over benefit expenditure should allow the build-up of financial reserves, thus keeping the steady-state contribution rate below the pay-as-you-go level since additional revenue is derived from interests earned. The concept and implementation, however, became threatened from various sides, inter alia: i) the nominal rate of return of 3% stipulated by law may have been sufficient under past economic conditions and the illusion of zero inflation. In view of the very high inflation since 1990, this fixed rate implied a huge inflation tax on the insured, amounting to some 2% of the reserves in 1990 and to over

60% in 1991 (equivalent to 2.3% of GDP) and to almost the same magnitude in 1992; ii) the use of those reserves to provide "credits" to ailing social pension programmes (to the agriculture insurance scheme since 1990) has been seen in other parts of the world, leading ultimately to a depletion of the funds and putting an initially funded scheme back on a pay-as-you-go basis.

4. The central reform issues: The structure of the unfunded tier, financing of transition towards the funded tier, and financial sector requirements

The experience with funded pensions throughout the world and the special background in the reform countries suggest that a careful design of the final scheme and the transition path are required if the potential advantages of a (partial) UFS are to be realized. In principle, there is a long list of stumbling blocks on the road. In the following, the discussion is restricted to the two central limiting factors: i) How to structure the unfunded first tier?, ii) how to finance the transition?, and iii) the minimum level of financial market required at the outset of reform.

4.1 *Structure of the first tier*

As noted above, all reform countries in Central and Eastern Europe envisage only to make part of the implicit social security debt explicit. Such a partial UFS has both advantages and risk, and, in addition, raises the questions how the unfunded tier should be structured.

The main (potential) advantages of a partial UFS are three-fold: 1) It proportionately reduces the potential scope of the implicit debt made explicit and can thus lead to a manageable fiscal task. While the repayment of, say, 200% of GDP in debt appears difficult, or even impossible, the repayment of half of this amount is in the range of the Chilean pension reform. 2) Basing retirement income on both an unfunded and a funded scheme allows for risk diversification and may be welfare enhancing. It can be argued that the internal rate of return of an unfunded scheme —the natural growth rate— is a stochastic variable which exposes each pension cohort to an income risk. The same can be claimed for the internal rate of return of a funded scheme —the interest rate. Thus, if the covariance of both returns is lower than 1, a mixed financing mechanism reduces the overall income risk and provides positive welfare effects. 3) Public and earnings-related pension schemes traditionally have a distributional and an annuity component, and it is the mingling of both and the lack of a clear contribution/benefit link which is held responsible for the various distortions inflicted by public and unfunded schemes (see e.g., Schmidt-Hebbel, 1993). Separating both components into an unfunded distribution-oriented tier, and a truly earnings-related funded tier is claimed to reduce the distortions importantly (World Bank, 1994).

However, there are also (potential) risks of a partial shift only which are the following: 1) Keeping an unfunded and, perhaps, earnings-related tier does not contain the political pressure for benefit extension, observed in both developed and developing countries. Hence it is a priori unclear how to avoid the pitfalls of the past, and to keep the unfunded tier financially sound. 2) Unfunded and funded tiers have different rates of return. Temporary lower rates of the funded tier may exert a political pressure for higher benefits under the unfunded tier in order to compensate for; conversely, also higher rates

in the funded tier may introduce a pressure for higher unfunded benefits from those parts of the population which are little covered by the second tier.¹⁴ Hence, there is a danger of a ratched effect in which the higher return of the two tiers puts the pressure on the unfunded scheme since it is the only tier in which adjustments to stochastic realisations of income can take place. 3) The unfunded tier is much more exposed to the aging of population, and the problem of long-term financing this implies.

Given the technical nature of the advantages, but the political nature of the risks the first prevail in the reform discussion raising the issue how the first tier should be structured. There are three main options: i) Curtailing the inherited unfunded and earnings-related scheme; ii) changing to a basic flat-rate benefit; and iii) changing to a notionally defined contribution plan.

i) *Curtailing the current scheme*: This option appears to be the most obvious one since it is likely to minimize transition costs: The current scheme is known, the administrative procedures and institutions established, and financial effects more easily assessed. Beside the anyhow necessary reform steps such as increasing the retirement age, lengthening of the assessment period, changing of the indexation formula, and tightening of the eligibility criteria, the transition then requires "only" to reduce of the initial pension through, say, a lower annual accrual factor in line with the targeted unfunded/funded replacement rates for standard pensions. That option for the first tier can be implemented concurrently with the UFS, providing compensatory pensions for the non-switchers (and also of differentiated amount for the switchers, if the device of recognition bonds is not adopted), or is phased-in in a differentiated manner for cohorts concurrent with the increase in benefits from the funded tier.

The main drawback of that option is mainly political. Downscaling the current scheme is likely to meet more political resistance, also since the individual benefit position before and after reform can be more easily compared, and the various inconsistencies, distortions and special group treatments of the inherited scheme are more difficult to evict. As a result, such an option is likely to lead to a modest UFS only, and the long-term financial soundness of the scheme is less likely to be secured.

ii) *Changing to basic benefits*: The option of changing to basic, essential flat-rate benefits is consistent with a large UFS, providing a minimum income guarantee only, as well as a more modest shift, providing a large share of retirement income largely independent of past contribution/tax effort. The basic benefit can be means-tested, of demogrant type, or related to life-time contributions on a pro-rata basis. The choice is determined by distributive and allocative considerations (such as more hazard effects).

Moving towards basic benefits of moderate amount would constitute little break in outcome from the current scheme, since in most reform countries the actual benefits are little differentiated due to recent financing problems and often flat-rate indexation. Moving in short-term towards low basic benefits appears not feasible in view of their already low level, while higher basic benefits are excluded in the short-term for fiscal reasons. Altogether, and independent of the long-term benefit level, such a reform approach would signal little short-term changes, reducing, perhaps, the political support from the medium income level up-wards, and the approach may also make adjustments in the (actual and standard) retirement age more difficult since such a move is not rewarded individually.

iii) *Changing to a notional defined contribution plan*. This microeconomically ingenious approach, recently introduced in Latvia and discussed above, has also important political advantages: it signals a major change, without radically changing the actual benefit structure in the short term; it harvests most of the expenditure saving through individual adjustments in labour supply, but not government-imposed changes in the pension parameters; and, perhaps most importantly, it is more credible than the other

reform options of the unfunded scheme since it limits the future political trickering in the benefit structure.

The main problem of this approach is the reserve accumulation it requires against temporary employment and wage shocks, and most importantly, against the aging of population. Since the system is an unfunded one, but promises a rate of return based on past average wage growth, expected changes in beneficiary/contributor ratios but also likely shocks in the real economy, require corresponding financial reserves if future transfers from the state budget should be prevented. While the calculation of a long-term expenditure-covering contribution rate is technically relatively easy, the actual accumulation of reserves and the receipt of a market-based rate of return may be constrained by political pressure for an alternative use of these funds.¹⁵ Furthermore, since the change runs parallel with the move towards a funded scheme, which requires additional financial resources, a transparent calculation and clean separation between the built-up of reserves and the additional financial resources resulting from the transition is required. Otherwise, both accounts get blurred (and aggregated), underestimating in the short and medium term the costs of transition and thus passing the bill on to future generations.

4.2 *Financing the transition*

As it is well known, an unfunded pension scheme constitutes a commitment toward current retirees and workers, and thus is equivalent to a (hidden) public debt. Shifting to a funded scheme makes this implicit debt explicit, which has eventually to be repaid. The shift between implicit and explicit public debt, and the fiscal flows involved, have little macroeconomic effects in a world of certainty where the golden rule of economic growth holds. In a world of high uncertainty, and large differences between real interest and economic growth rates, however, rising budgetary deficits and debt levels may substantially impede macroeconomic stability and economic growth. For this reason the pension reform approach of the transition economies is directed towards a stable explicit financial debt. This section shortly highlights the reasons to keep the deficit and debt level under control before discussing the two main options envisaged to do so: contribution based transition financing, and the use of privatization assets.

i) On the economic non-neutrality of making the implicit debt explicit

An UFS keeps the overall debt level of explicit and implicit financial debt of government constant if the golden rule holds, i.e., the interest rate equals the natural growth rate (productivity plus population growth). In this case both implicit and explicit debt grow at the same rate if no debt service takes place. Any fiscal deficit emerging from the UFS is inconsequential since a debt-financing of the deficit leaves the total debt-to-GDP ratio unchanged. While the golden rule is a welfare-optimal prescription for the long-term steady state (since consumption welfare is optimized when the saving rate is exogenously given), it does not hold for the catch-up situation of transition economies. There, the interest rate (i.e., the marginal productivity of capital minus depreciation) has to be higher than the economic growth rate to generate capital accumulation; in turn, for a given technology, this capital accumulation generates a higher (transitory) economic growth rate, producing an economic convergence towards the GDP levels of the most advanced economies (Barro and Sala-i-Martin 1995).

In such a catch-up situation of the interest rate (r) exceeding the economic growth rate (g) a true transition deficit (TTD) emerges from an UFS, which amounts to the difference of interest and growth rate times the social security debt made explicit. Since a capitalization of this deficit would make the financial debt ratio to grow without bounds it has to be financed through higher taxes (or lower expenditure). The scope of TTD may be large. Making SSD of some 50% to 100% of GDP explicit (less than half of the overall SSD of a reformed unfunded scheme in Eastern Europe), each percentage point of ($r-g$)-difference creates a TTD of 0.5% to 1.0% of GDP. A lower bound for $r-g$ is 3 percentage points but can reach as high as 8 percentage points, leading to a potential long-run TTD of 1.5% to 8% of GDP.

High interest rates in transition economies do not only reflect high marginal productivity of capital, but also a high risk premium on public financial debt. Most transition economies have inherited a large public debt, much of it is often external.¹⁶ The external debt during the period of central planning was contracted by government agencies (specialized banks or central bank), thus becoming effectively a government obligation. Considering default against foreign creditors less likely (since the reactions by the international financial markets are considered more ferocious), a higher domestic financial debt may trigger a higher risk premium (unless the financial market is suppressed). Different default probabilities on implicit and explicit government debt will also have a bearing on risk premia when an UFS is undertaken. If partial default on the implicit debt is more likely (as it happens with a pension reform curtailing eligibility and benefit level), a shift towards explicit debt may increase the risk premium on the explicit financial debt while leaving the overall debt level constant (Holzmann 1996b). Higher interest rates on public debt increase the costs of financing an UFS, but in portfolio considerations may also rise the price of other financial instruments and hence the capital costs for the economy, with negative implications for capital accumulation and economic growth.

Such an effect could be compensated by an increase in the saving volume created by an UFS. Indeed, many economist argue that such a saving effect would take place, citing the Chilean experience. However, closer inspection of the Chilean evidence indicates that the saving effect of the reform is not clear, and that the direct effect on private sector saving was perhaps negative (Holzmann 1996a). The strong rise in domestic saving was generated by strong public saving, more than compensating the direct fiscal costs of the reform, and, perhaps, an inverse causality through which higher economic growth as a result of improved financial markets (together with other macro- and microeconomic reforms) induced higher private saving.

In any case, the fear of adverse financial market reactions and of a loss of credibility of the launched macrostability-cum-microreform-approach leads the economies in Central and Eastern Europe to reject a debt financed UFS. Such a view is fostered by the cautious attitude of Fiscal Affairs Department of the IMF. In consequence, the transition economies plan a financing of the total transition deficit (operational deficit plus compensation of accrued rights) by non-debt instruments. The two main approaches currently envisaged are: contribution-based financing, and a debt/equity swap.

ii) *On contribution-based financing of the transition*

As evidenced in the reform plans presented above most countries envisage a contribution based financing of much of the transition costs (Latvia, Poland, Hungary, and perhaps also Croatia and Slovenia). To this end, expenditure on the unfunded scheme are

curtailed, but the contribution rate is not reduced by an equivalent amount, if at all, creating a surplus which is then used to finance the transition. Such an approach has advantages and drawbacks, which have to be evaluated against the alternatives. The alternatives are lower other public expenditure or higher other revenues. Lower other expenditure tend to have distributive, allocative or growth consequences (e.g., if useful infrastructure investments are curtailed), unless the expenditure savings result from the reform of inefficient expenditure programmes; higher other taxes introduce inevitable distortions since lump-sum taxation is not feasible. Hence, an evaluation of taxation alternatives has to compare the amount of excess burden introduced. An easing of additional dead weight loss of taxation would occur if the UFS were conducive to a higher economic growth rate (e.g., through the development of financial markets, such as in Chile, see Holzmann 1996a). However, since the enhanced economic resources flows to the private sector, at given tax rates, only a share of higher income (roughly one third) would flow into the budget. Hence, even a high growth effect of 2% p.a. produces only 0.67% of GDP of additional budgetary resources to be used for financing the transition.

After recent tax reforms in the transition economies which imitated the Western European tax design, the major tax revenues are generated by corporate and personal income tax, VAT, and specific consumer taxes (essentially on mineral oil products, alcohol and tobacco). Tax rates, however, are already rather high, reflecting the large scope of informal economy and the still rather poor state of tax administration. Consequently, a further increase in the tax rate, but also a broadening of the tax base is likely to produce a major excess burden.

On the other hand social security contributions, including the share attributed for pensions, in the transition economies are extremely elevated (see table 1). Curtailing the present value of pension benefits by the reform of the unfunded scheme while conserving the contribution rate makes the latter even more akin to a pure labor tax. This applies for both switchers and non-switchers under the reform. Consequently, such a financing approach may not produce during the transition the often claimed positive effects on the labor market.

iii) On the financing of the transition through debt/equity swap

All reform economies expect from privatization assets a major contribution to the financing of the UFS. Under that approach the public debt implied in the social security scheme could be exchanged (swapped) for public assets to be privatized. Compared to a free distribution of assets to the population via vouchers, the net-asset position of government would remain unchanged, whereas under the first approach, the net-asset position would deteriorate and would have to be compensated via future increased taxes. This idea, while fascinating, raises many questions, most importantly with regard to the scope for such a social security debt-government equity swap, to liquidity and pricing, and to corporate governance. No reliable estimates for both sides of the swap are available, but some very tentative calculations may be provided.

As regards the scope of such a debt/equity swap, macroeconomic questimations suggest a modest level (Holzmann 1994a). The estimated ratio of transferable government assets to the overall social security debt has a wide wedge, ranging from some 3% to 70%. Tentative empirical data on Hungary, Poland, Croatia and Slovenia suggest that a reasonable ratio is rather to be found in the lower range, around some 5% to 10%.

Since privatization assets will not produce sufficient liquidity for some time, one approach particularly discussed in Croatia is to allocate to switchers government assets in exchange for their premia to the funded tier, while using the cash receipts to finance the reformed unfunded scheme. This raises, of course, many questions about the appropriate pricing of these shares, risk management and administration. For example, the asset holding of the financial institution would be concentrated on equities for some time, whereas in most pension funds in OECD countries (except the United Kingdom) equities amount to less than half of the total portfolio (see Davis, 1995). Furthermore, those financial institutions holding major shares in individual companies would have to exert corporate governance for the benefit of the contributors, for which they may not be equipped or inclined. The latter problem exists also in OECD countries, but is likely to be compounded in the reform countries.

4.3 *Financial sector: The minimum requirement*

The introduction of funded pensions in economies with no or only rudimentary financial markets resembles the hen-egg problem: As a prerequisite to introduce funded pensions, some kind of financial market must already exist to which the introduction of funded pensions should contribute. This raises the issue of the minimum financial sector to exist before even the simplest form of funded pension schemes can be introduced. In absence of this, such minimum conditions have to be created. Since a detailed analysis of the issue is beyond the scope of this paper, this section attempts to outline what the minimum requirements of the financial sector could be. The most recent Transition Report by EBRD (1996) has stressed the importance of contractual saving for Eastern Europe, but has failed to be specific on this account.

A key objective of pension-fund type institutions is to achieve a high real rate of return on assets at an acceptable risk, while matching the time structure of assets and liabilities. This requires technical capacities and also institutional possibilities of risk assessment and risk diversification (besides the usual institutional framework to safeguard the individual against unsound operations of the fund managers). Two polar solutions may be suggested for countries with an underdeveloped financial sector:

A highly centralized solution, with only one national pension fund, a strong government involvement to prevent shortcomings and to compensate for lacking markets, and major financial and technical assistance from international institutions (such as the World Bank) have been proposed to assist the introduction of funded pensions in low-income transition economies (Johnson 1993).

The alternative is a decentralized approach in which privately owned and managed pension fund institutions operate in an increasingly privatized and market-oriented environment. My conjecture is that this type of approach is more fertile for a fast development of financial markets and for the support of growth. On the other hand, the starting conditions for both the conventional regulatory framework of pension funds (such as supervision, auditing, etc.) and the initial financial market conditions are likely to be higher. What the conditions are is very much open to discussion, and in the following a preliminary attempt to identify these conditions is made:

i) A proper legal environment, including regulations on (central, commercial and retail) banking, bankruptcy procedures, and accounting. This is often claimed to be the most important prerequisite for a sound and stable financial system (e.g., Szekely 1993). As regards banking legislation, the process is advancing fast. As regards the other elements of legislation, progress is much slower and also much more diverse in and

among the reform countries. Yet, the existence of a legal framework alone is likely to be insufficient and may require some testing and experience before a reasonable risk assessment and diversification can take place.

ii) A solution of the bad debt problem of the banking system, the elimination of inter-enterprise arrears, and in some countries also an adequate solution of the concessional mortgage problem. Without those solutions, the economy may remain in a "bad equilibrium", and the pension fund assets endangered.

iii) A stable macroeconomic framework allowing for low, or at least not accelerating inflation, a monetary policy and financial sector regulation providing non-negative real interest rates on financial assets, and a fiscal policy setting the fiscal stance independently of available pension fund money. While a rising number of reform countries can fulfil the first two conditions (see IMF, 1996), the latter may be more difficult to achieve. Essentially all reform countries are struggling with budgetary problems and it appears that a higher deficit is mostly only prevented by the limited access to private sector financing (and the explicit restrictions to monetary financing under IMF-supported programmes).

iv) A more competitive financial sector. Financial markets are still largely segmented, over-concentrated and the government is the predominant owner of the commercial banks. Albeit government may have to become more strongly involved in the development of the financial sector during the transition, privatization of a major share of the financial sector and the opening to foreign financial institutions may be required up-front in order to reduce the incentives to abuse market power and to avoid the higher costs of financial intermediation (which are either an excess burden or a rent, both equivalent to a tax on pension fund money).

v) Financial assets diversification. Besides banking deposits, the pension funds should have access to treasury bills and bonds; and perhaps to enterprise bonds, too, to allow for a minimum liquidity management and risk diversification. The need for having access to foreign financial assets as a minimum condition is debatable. Undoubtedly, this would enhance the risk diversification and ease risk assessment, and exert pressure on government to conduct a credible economic policy. On the other hand, this would require capital account convertibility, which would lengthen the list of prerequisites.

None of the reform countries in Central and Eastern Europe currently fulfils all these conditions, although the Czech Republic, Hungary and Poland, and perhaps Slovenia, too, have made important progress and the minimum conditions may soon be met. In other reform economies, in particular in the CIS, progress is much slower (see EBRD 1993, 1994, 1995, and 1996). Hence, if a UFS were to take place, this would require either a speeding-up of the financial sector reform under a decentralized approach, or the implementation of a centralized solution with other likely problems.

5. Concluding remarks

The pension reform discussion in Eastern Europe has changed dramatically over the last one or two years. While with initiation of economic reform around 1990 only a streamlining of the unfunded pension scheme was envisaged (but never fully implemented), nowadays many transition economies are contemplating, a few even preparing a more drastic reform moving towards a mandatory multi-tier scheme, consisting of a reformed unfunded and an a newly created funded tier.

Judging from recent reform developments in Latin America, the succesful going ahead of a few countries creates a reform dynamic which makes it difficult for other

countries (and their politicians) to escape, forcing them to rethink their non-reform approach. On the other hand such a dynamic may create a mere band-waggon effect, inciting countries (and their politicians) to go for a reform approach for which the necessary requirements are not met.

As of mid-1996, the reform plans are still rather vague, even for the most advanced countries. Latvia has implemented a reformed first tier as of 1 January 1996, but the funded second tier is still out. In Hungary the basic decision for a two-tier scheme was recently taken by government, but on the many important details political decisions are still required. In the other reform countries most of the conceptual and design questions still need to be settled, most importantly i) the coverage and benefit type of the unfunded first tier, ii) the financing of the transition, and iii) the measures to insure the minimum financial market conditions for the operating of the second and funded tier.

The success or failure of the current pension reform efforts in Central Europe have an important bearing on the reform developments in total Europe — East and West. Two scenarios can be envisaged: A failure in one transition economy to move to a funded scheme due to bad system design, unprojected fiscal deficit developments, or insufficient financial market preparations could negatively impact the reform discussion throughout the region, discrediting funded pensions and reducing the political consensus for reshaping the existing unfunded ones. On the other hand, a successful move towards a unfunded-funded multi-tier pension scheme in Eastern Europe could positively impact the reform discussion in the European Union. Such a move is currently not envisaged in the major member countries, such as Germany, France or Italy, but has been under discussion in academic and policy circles for some time. Demonstrating the feasibility of an UFS in the East could trigger a similar reform effort in the West.

Notes

¹ The notion of Central and Eastern European reform countries loosely refers to all former centrally planned economies in Europe, but most of the presentation will be focused on the Central European reform countries of Poland, Czech Republic, Slovakia, Hungary, Croatia and Slovenia. Here, both economic reform and the preparation of pension reform is the most advanced. Some references will also be made to the Baltic countries (Estonia, Latvia and Lithuania); after their independence from the former Soviet Union they have made important progress in market orientation, and Latvia is engaged in a path-breaking pension reform. Few references are made to the Balkan countries (Romania, Bulgaria, Albania, and the other successor states of the former Yugoslavia); their economic and pension reform discussion is little progressed. Not addressed in this paper is the situation in the other follow states of the former Soviet Union.

² In his opening speech, Mr. Héctor Assael, Director of Internacional Trade, Transport and Finance Division at ECLAC, outlined five necessary, general requirements for a succesful move from unfunded to funded provisions which all have to be met concurrently: i) macroeconomic equilibrium before and after the reform; ii) increase in the saving/investment volume of the economy; iii) financial liberalization, including a rise in the real interest rate; iv) existence of a satisfying insurance industry; and v) existence of a supervision for the private pension funds, providing, inter alia, transparency and competition.

³ This section draws partly on Holzmann (1994a), with appropriate up-dates in data and development.

⁴ The pension schemes considered provide benefits for old-age, disability and survivors. Work injury benefits under central planning were provided under the disability program, and continue to be so in most of the countries.

⁵ The overall social security contribution rate covers sickness payment, health, pension, unemployment and a few family benefits. The contributions are essentially paid by the employer only, with only a few percentage points in charge of the employee.

⁶ For the broader fiscal issues of countries in transition, see Tanzi (1992, 1993).

⁷ For arguments in the same direction, see Sachs (1996), Sachs and Warner (1996).

⁸ The incidence of poverty for the total population has increase dramatically during the initial years of transition:

INCIDENCE OF POVERTY IN EASTERN EUROPE

	Poverty ^a		Extreme Poverty ^b	
	1989	1992	1989	1992
Bulgaria	13.8	57.0	2.0	26.2
Czech Republic	4.2	25.3	0.2	1.3
Hungary	14.5	19.4	0.7	2.5
Romania	33.9	51.5	8.6	19.1
Russian Federation	15.8	61.3	2.5	23.2
Slovakia	5.8	34.1	0.1	3.9

^a Percentage of population in households with income below the poverty line defined as a percentage of 1989 real wage (ranging from 35% to 45%, depending on the country).

^b Percentage of population in households with income below 60% of the poverty line defined above.

Source: UNICEF (1994).

⁹ Since the beginning of reform around 1990 real GDP declined by at least 20% in all reform countries, reaching some 50% in the Russian Federation and Ukraine. This trend was reversed in the most advanced reform economies between 1992/1994. Nevertheless, even Poland, with its high growth rates of up to 7% p.a. since 1992 reaches its 1989 income level only in 1995. For a comprehensive analysis of the output decline, see Holzmann and others, 1995.

¹⁰ See, for example, Kopits et al. (1990), Gandhi et al. (1990), Chand et al. (1990), Barr (1994), and the various IMF Staff/RED reports and WB Country Economic Memoranda of the early 1990s.

¹¹ Since the implicit rate of discount is the rate of growth of the contribution wage base, which is below the market interest rate, a bias towards earlier retirement will remain.

¹² To safeguard the solvency of the unfunded scheme requires long-term projections and the set-up of a reserve fund, with all the well-known problems of asset management (and adequate returns) by public pension funds.

¹³ Based on internal World Bank Document: Hungary - Public Sector Adjustment Loan, Preparatory Mission Back-to-Office Report - Annex on Pension Reform, Washington, D.C., 11 June 1996 (mimeo).

¹⁴ According to anecdotal evidence such a pressure occurred in Chile in 1989 when the benefit increase in the remaining unfunded scheme was motivated by the higher benefits in the funded scheme.

¹⁵ Since the benefits are indexed to prices but not wages, a notional interest rate equal to the change in the contribution base, provides some additional cash-flow and thus reserve building which rises with the rate of real wage growth.

¹⁶ Internationally comparable statistics of general government debt are sparse. The data on the development on gross debt of general government for Hungary may provide some indication.

GROSS DEBT OF GENERAL GOVERNMENT IN HUNGARY, 1990-1995 (IN PERCENT OF GDP)

	1990	1991	1992	1993	1994	1995
Domestic Debt General Government	66.1	70.4	74.7	84.3	82.3	81.4
Foreign Debt Central Government ^a	1.8	4.8	4.6	5.7	5.4	5.8
Total	67.9	75.2	79.2	90.0	87.6	87.2

^a Excludes government guaranteed foreign debt for public sector enterprises and financial institutions.

Source: IMF (1996): Hungary - Recent Economic Developments, Washington, D.C.

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