

Pension Reform for Beginners: The Hungarian Case

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PENSION REFORM IS NOW ON TOP OF the economic agenda practically everywhere. Traditional arrangements, where those currently working finance those who are retired, are encountering difficulties—both in the industrialised and the transforming economies. For whatever reason, people decided some years ago to have fewer children. This has led to an ever-increasing burden on those now working. In turn, this economic burden has been transmitted to the political mechanisms. Reformers seek to relieve the burden by calling for increased self-provision; those resisting reform argue acquired rights. The result is high political drama in France and Italy, and dignified grumbling in Sweden.

All of this is related to the increasing unwillingness by nearly everyone to accept government spending financed by debt and the money press. These are the sources heavily relied upon to finance failing public pension schemes. Hungary, having become the first transforming economy to undertake a thorough reform of its social-security system, represents an example of both the problems and potential solutions.

The World of Pension Plans

Pensions are replacement income for those too old to work. “Funded” pension plans have a pool of assets large enough to meet their future liabilities. “Pay-as-you-go” (or PAYGO) plans have little or no assets, and rely on future payments into the plan to finance benefit pay-outs. There are two kinds of pension benefits. Defined-Benefit (DB) plans promise a monthly income calculated on the basis of previous earnings and years of service.

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In order to run a DB scheme, the plan need not be funded, but there must be a solvent guarantor. By contrast, Defined-Contribution (DC) plans simply accumulate a savings account which will buy whatever annuity is available on the market at the time of retirement. DC plans require assets and safeguards, but no guarantor of a promised level of benefits, because there is no such promise.

There are successful and unsuccessful pension plans. The major success criteria are, first, solvency and, second, a rate of return to the typical contributor which is competitive with returns available elsewhere. To help along with the latter, favoured tax treatment is sometimes provided by government. Success or failure is ultimately measured by the ability of the system to provide pensions, and the perception by the participants that they are getting their money's worth. Though all participants in pension plans are unlikely to be financial wizards, there will be an intuitive understanding of the individual's benefits and costs. *You can't fool all of the people all of the time...*

Private pensions, be they DB or DC, are legally required to have dedicated assets to cover their liabilities. A major scandal of recent vintage in the United Kingdom, where assets were simply stolen, has alerted pension regulators more generally to the need for more serious security arrangements. One major exception from the specific funding requirements is the practice in Germany, where the funds for the company pension plan remain within the sponsoring firm. There is a government-backed guarantee for solvency of these plans.

Government-sponsored plans in most major industrial countries are based on PAYGO arrangements. This means that everyone's pension is paid by some other

people down the road. The theory of successful PAYGO plans presumes that the working population as a proportion of the total will grow (or at least not decline!). The theory also presumes that labour productivity in the economy will also grow. If these conditions do not hold, the solvency of the plan will be threatened.

Such public pensions also provide the institutional potential to include elements of income redistribution. These typically run not only from rich to poor but also from later generations of contributors to the initial generations of recipients and from men with short life-expectancies at retirement to women with long ones. It is always seductive politically to deliver something apparently for nothing. How much redistribution there is in a plan—and in which direction—is a political decision constrained by the availability of resources.

Hungary, the first to undertake a thorough-going reform of its social-security system, illustrates the problems and potential solutions.

Since public pensions represent actual and potential government outlays, they must compete with all other government expenditures. As a politically astute way of restraining overall pension expenditures, governments often earmark a payroll tax to cover the ongoing expenditures of the PAYGO system. In years of a sur-

plus, benefit increases are granted, while in the inevitable years of a short-fall, an instant “crisis” is created. Attempts to increase the yield on this payroll tax by raising the rate or by broadening the tax base will, in chronic cases, lead to no increase or to an actual decrease in the revenue collected. The required supplement from general funds gives the government both the need and the excuse to reduce benefits.

Pension benefits may be reduced in three ways:

- 1) the formula used in determining the initial pension may be made less generous;
- 2) the retirement age may be raised; or
- 3) benefits may not be adjusted to reflect inflation.

The first two of these measures affect future pensioners who may not be fully aware of the impact on them at the time of enactment. The third measure affects the population of present pensioners immediately; for this reason, it is less popular with governments.

Pension Reform

Heaven for pension-plan designers is to start with a country with no pension system in place. Unfortunately, such opportunities are rare. One interesting pioneering design, initiated in Asia, evolved from the retirement system of the British Colonial Civil Service. This is the Central Provident Fund of Singapore (CPF). The CPF requires the setting aside of 40% of each individual's current wage in a personal account. These compulsory savings pay for retirement, the ownership of flats, and health-care expenses. The existence of CPF is credited with the provision of Singapore's modern housing stock, as well as all the other good things that flow from having the world's highest saving rate. The funds within the CPF are centrally administered by the government.

The Chilean pension system, widely imitated in Latin America, requires 10% of an individual's wages to go into a dedicated private account. The funds are managed by competing private investment firms. Both the Singaporean and the Chilean schemes have been obtaining high real rates of return and are generally viewed as providing satisfaction to the participants.

Reform is really the design of a new system, while maintaining the liabilities of the old system. The twin goals of reform are usually to reduce budgetary cost to the government along with the burden of taxes to citizens, as well as to increase benefits to retirees. These goals of course are constrained by the need to pay current and future pensioners, and to meet the benefit promises accruing to those contributing to the pre-reform scheme.

Looking at the recent experience of public pension schemes around the world, it seems clear that pension reform in the late 1990s involves two aspects. First is the redesign of the public pillar (PAYGO) by reducing benefits. Many PAYGO schemes also carry the costs of late-in-life unemployment (reclassified

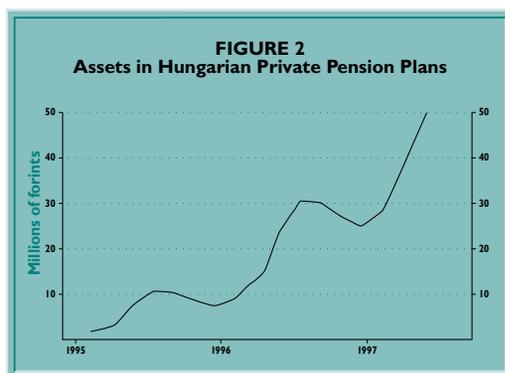
the latter are the incidence of smoking, alcoholism, generally bad diet, and a high level of stress. The retired population is overwhelmingly female, ageing, and in need of ever-increasing medical expenses. The labour force is 4.5 million, of whom about 16% are officially unemployed. There are 2.9 million pensioners, including those on early retirement and disability benefits. Hungary has had a funded social-security system since 1928. There was also a complete body of legislation governing the operation of funded, private, employer-sponsored pension plans. Many of the assets in these plans were lost during World War II and in the hyperinflation of 1945-46. The remaining assets were sequestered with the onset of communism. A Soviet-style social-security system was in place by the late 1940s, as part of the newly introduced planned economy (see box).

Following the fall of communism, it was clear to all that pension reform was needed. Pensions were very low; the payroll tax was very high. The initial step was a resolution passed by Parliament in October 1991 pointing to the desirability of a four-pillar system consisting of a base amount payable to all aged citizens, plus a service and earnings related public pillar, complemented by voluntary employer/employee pension plans, as well as individual saving schemes.

It was quickly recognised that the resource requirements of making the base amount payable to all made the resolution a wish list, rather than a programme.

Following two years of intense preparatory work, the Hungarian Parliament passed legislation in 1993 enabling the establishment of private pension plans. A period of rapid growth in terms of both membership and assets followed. By the end of 1997, membership is expected to be at 847,000, assets at 51 billion forints or US\$ 275 million (see Figures 1 and 2).

After the relatively non-controversial private pension funds came into being, it was time to address the larger issues of Social Security. The underlying problems are revealed by the fact that the dependency ratio—the ratio of old and young population to the working-age population—is high and will continue to



as early retirement) and of disability pensions. In the latter cases, cost reduction can only be obtained by tightening eligibility conditions.

The second aspect of reform is the redirection of funds from the PAYGO system to privately owned and managed contribution accounts which are fully funded. These are attractive because they confer a sense of ownership on the pension saver and, if competently managed, promise much better returns to the typical participant than can be obtained by putting the same funds into the PAYGO arrangement.

For this second aspect of pension reform, a study of the Hungarian case is enlightening.

The Case of Hungary

Hungary's population is 10 million and is slowly declining. The birth rate is low, and the death rate of middle-aged men is spectacularly high. The causes of

rise for the foreseeable future. Current estimates predict that the dependency ratio will be 79% in 2001 and will increase to 87% by 2020. It is in this context that the reform of the PAYGO pension system becomes inevitable, but remains difficult.

The particular generation undertaking the change to a funded system will have to bear the ongoing costs of PAYGO, as well as the burden of the investment required to establish the new system. The older view of this problem was that the obstacles are insurmount-

able. Luckily, a new way of looking at this problem has evolved. It is recognised that the burden of PAYGO is given and will have to be paid regardless of what happens. In this way, the future obligations of PAYGO may be viewed as an *implicit* form of the national debt. When the current portion of this implicit debt is paid, and thus the current budget deficit is increased, the *explicit* national debt rises accordingly. In this sense, with pension reform the total debt remains the same, but more of it has now become formally written down.

The incremental current budgetary deficit caused by the reform becomes an accounting identity without much economic significance.

One problem with this sanguine approach to the conversion of implicit to explicit debt is made clear in the age of Maastricht. The current thinking is that budget deficits and debts are bad—but of course the emphasis in public debate is only on the explicit part of the debt. For this reason, it makes sense for government to keep the rate of conversion from implicit to explicit debt at a low per-

On the Soviet-Type Economy and its Pension System

An immense amount of nonsense has been written about Soviet-type economies. (An excellent description of how this system actually worked may be found in Janos Kornai, *The Socialist System: The Political Economy of Communism*, Oxford University Press, 1992.) The Soviet version of the planned economy was based on compulsion. All capital assets were sequestered, and legislation was passed requiring every able-bodied citizen to find state-approved employment. Compliance was mixed. Enthusiastic co-operation cannot be legislated and the natural human tendencies to trade, truck and barter kept resurfacing. This was one economic reason for the eventual downfall of communism.

In a macroeconomic sense, the system worked by centralising all significant cash-flows in the hands of the government, and maximising or optimising nothing in particular. (A socialist “reform” literature grew up, keeping economists busy developing the idea of “optimisation”, as a way to improve things.) The key to the planning process was an allocation of the available cash flow between the government and consumers. There was also a need to supply goods to match the cash flow (adjusted for changes in the stock of savings). The planners never managed to get the saleable and desired mixture of goods right, so as to match both resource constraints and consumer demand. Everyday life was characterised by shortages and unsold surpluses. This inevitably translated to consumer dissatisfaction, as did, above all, the aggregate level of resources available for consumption. The resulting mess was managed by imports financed through Western borrowing in the “soft” dictatorships such as Hungary and Poland, and by police repression in the “hard” dictatorships like Czechoslovakia and Romania. (Following the fall of communism, the former were left with large external

debts, while the latter were not.) The narrowing constraints on acceptable levels of consumer deprivation, repression and foreign borrowing accounted for another set of major reasons for the fall of communism.

Pension systems were virtually identical throughout the entire Soviet Empire. One major characteristic was the low retirement age: 55 for women, 60 for men. This had two important functions. It reduced the pervasive hidden unemployment, and provided a stream of consumer services to families by able-bodied, active grandparents.

For reasons already mentioned, the planned economy was characterised by much standing in line. The able-bodied grandparent could stand in line for bread, milk, or meat, while the parents in the same household could go to work. The implicit baby-sitting services also had considerable value to the family. All this was facilitated by a disastrous shortage of the housing stock, forcing a very large proportion of families to crowd into multi-generational households.

The pension system itself aimed for a replacement rate of about 40% of the average wage. Pensions were miserably low, but not unreasonable as an increment to the cash income of the multi-generational family unit. The implicit egalitarianism of this pension system was

broken by an unabashed tendency to provide generous bonuses over and above the base pensions to those favoured by patronage. Medals awarded for services to socialism automatically carried pension add-ons.

The pension system was characterised by minimal to non-existent record-keeping on potential claimants, hence no serious planning of the expenditure level was or could have been undertaken. As a major allocation of the government’s resources, pension systems became an unfunny parody on the idea of planning the economy.



“Sorry guys; it was just an idea.”

centage of GDP. (It is difficult to provide a rational explanation for the caution, however, since smart bond-raters know all about implicit debt!)

The specific reform arrangements in Hungary are:

- 1) The retirement age is to advance in stages, from 55 and 60 for women and men, respectively, to a unisex 62 years, by 2008.
- 2) The annual inflation indexation of ongoing pensions will follow the Swiss indexing formula (see box on next page).
- 3) The payroll tax used to finance pensions will extend its base to capture all wage-like incomes.
- 4) In the reform's initial year of 1998, 6% of wages will be diverted to individual retirement accounts for those participating in the new system. In 1999, the diversion will be 7%; and in 2000 and thereafter, it will rise to 8% of wages. These contributions will be deductible from the income and social-security tax bases. PAYGO benefits will be adjusted accordingly, with a lessened redistribution between income groups.
- 5) Participants in the new plan will include all those entering the labour force after January 1998, plus anyone wishing to switch to the new system.
- 6) There will be a floor-guarantee for individuals who have spent at least 15 years in the new system. At the same time, there is no ceiling on the new publicly provided annuity.

These measures have been fully enacted, with the exception of the Swiss indexation scheme, which is supposed to take effect after 2000. That issue has run into heavy political fire.

The expectations attached to these reforms are:

- 1) they will reduce the scope of the PAYGO programme and hence the government's deficit in the long run;
- 2) they will increase substantially the stock of domestically owned savings;
- 3) the level of pension benefits will be more closely related to the level of earnings on which they are based; and
- 4) the private DC pension will more than offset the cut in the government DB pension, thus leaving future pensioners better off.

The government thus expects to have completed a major portion of its reform

commitment, and is expected to emphasise this as a significant accomplishment when campaigning for re-election in 1998.

Some Tough Issues

The expectations of the reformers clash with the activities of the anti-reform lobby. Some anti-reformers are motivated by a distrust of the substitution of private activity for government activity. For others, there is well-established self-interest in the *status quo*, with income streams that are likely to fall with a successful reform. Neither of these positions make for promising arguments in the public arena. The rhetoric actually employed by the anti-reform lobby invokes threats to present pensioners by the diversion of funds to individual accounts. There is also the "foreign devils" argument, usually associated with causes supported by the World Bank and the International Monetary Fund. The final, but understandable, anti-reform argument involved is the assertion that the money going into private pension accounts will simply be stolen. Since much money is known to have been stolen in Hungary over the years, it is not easy to meet this particular argument by invoking the existence of state institutions designed to protect property rights.

The Hungarian PAYGO system promises identical wage- and service-determined monthly benefits to both men and women. Gender-neutral as this may appear, the benefit has a greater value to women, because they live longer to collect it. This is typical of PAYGO systems the world over. What is important to remember here is that real resources are required to pay pensions, and the gender-composition of beneficiaries matters significantly in determining the cost of a DB pension plan.

It is with DC schemes such as the new Hungarian pension saving accounts, where a finite sum of money is turned into an annuity at the time of retirement, that this female longevity problem becomes visible. With any given accumulation in a pension account, a life payout would result in lower monthly payments for women of a given age, simply because there are more months in their remaining lives. Annuity markets reflect the actuarial fact of longevity—at a given age, for a given amount of

capital, men get more per month, women less.

There have been political pressures from some women's groups directed to the use of unisex annuity tables. These tables, in principle, simply ignore the gender of the future pensioner in establishing the amount of the monthly pension. Unfortunately, that cannot be the end of the story. If every pensioner has his/her annuity determined on the female mortality experience, monthly pensions will be low and because of the predictable early mortality of men, there will be a surplus in the plan. Conversely, using male rates in determining pensions will yield higher pensions, but on account of the predictable female longevity, a deficit in the annuity scheme will inevitably arise.

Accordingly, the ratio of genders within the scheme becomes a critical variable in choosing the policy on establishing annuities, and remaining solvent. If pension funds allow the lump-sum withdrawal of pension accounts, males disadvantaged by the use of female rates will move to gender-distinct arrangements with insurance companies and the like. That would leave unisex plans overwhelmingly populated by females, and the unisex rates would accordingly be very close to female rates.

Maintaining unisex rates above the female rates under these circumstances requires additional resources. With DB schemes, it is the guarantor of the plan whose resources become committed. Where overall costs are constrained, the costs of unisex rates are paid by lower overall benefits accruing to pensioners of both genders. The Hungarian government, in putting forward its reform legislation, has stated that women's monthly pensions originating with the DC pillar shall not be disadvantaged by the fact of their gender. In the next few years, provision will have to be made for the resource requirements of this promise.

Another set of issues involve the establishment of the taxation policies for the new system. It is a stated intention of the reform programme to have—as is true in most industrialised countries—the contributions to private accounts count as a deduction from the income-tax base, and the emerging annuities as additions to taxable personal income. It is also understood that pension funds will not be taxed on their earnings.

Where rates of return to pension plans are higher than the marginal borrowing rate on the national debt, and income-tax rates are not very steeply progressive, it may turn out that the net worth of the taxing government is increased by allowing contributions to pension plans. The value of future income taxes on deferred pension arrangements may be thought of as an implicit offset to a country's national debt. Actual practice, which varies from country to country, is usually coloured by short-term treasury thinking. The tax expenditure lost from current tax collections looms larger than the potential collections on the distant horizon, no matter how big.

With socialist systems where there was traditionally no income tax, the practice

of not including pension income in the tax base has developed. Part of the reform effort in transforming economies is to persuade makers of tax policy to follow the practice announced by the Hungarian reform programme, to take full effect in 2013.

The major unknown now is the proportion of persons who will actually opt to transfer to the new system. That number can only be guessed. The government hopes that the proportion will be low enough to accommodate the resulting shortfall in the cash flow of the PAYGO system to within 1% of GDP.

In the Window

Hungary was the first transitional economy to legislate the operation of private pension funds. Hungary is again the

first transitional economy to have legislated thorough-going reform of its social-security system. Because a large number of countries will be evaluating the early Hungarian experience, the story is of much more than of local significance.

Some specific questions to be answered for the decision-makers of the other transforming economies are:

- Will the individual pension accounts produce a suitable real rate of return?
- Will the book-keeping costs of the transformation, if badly underestimated, cause some kind of crisis?
- Will the public sector evolve a system of record-keeping of a more complex system fast enough to avoid serious problems?

Though there are weighty reasons to be optimistic on all counts, the reader must by now suspect that pension reform is far more than an abstract exercise in public finance. ♦

An important anti-reform argument is the assertion that the money going into private pension accounts will simply be stolen.

Indexing Pensions for Inflation

There are two ways of indexing pensions. First, use of a *consumption base* suggests compensating for increases in the consumer price index annually, or more frequently where warranted. The logic underlying this practice is that the pensioner has established a standard of living, and that CPI indexing maintains that standard in the face of inflation.

The second approach is to index pensions to the *average industrial wage*. Here, the objective is for public pensioners to participate in national income changes. It is further assumed that average wages are a reliable index of prosperity, or lack thereof.

On closer scrutiny, both of these approaches fail their objectives. In most countries, the consumption basket used for the indexing of consumer prices is representative of the preferences of some specific group of the population. Even where a special price index is developed for the typical consumption patterns of pensioners, individual variations in consumption habits are likely to be large. In other words, inflation as measured by the CPI may be very different from that experienced by a particular pensioner household. Another problem with using the CPI is related to its much-discussed upward bias. This bias, implicit in all conventional consumer price indexes, comes from ignoring the offset available by substituting relatively cheap goods for those that have become relatively dear. This theory deals with the type of situation where the price of coffee might go up, while the price of everything else remains constant. But in situations where there is a broad

and general increase in all prices, as in the transforming economies, the overstatement of inflation caused by the failure to account for such substitutions becomes irrelevant.

The case for using average wages is even less convincing. Average wages, by definition, measure the average pay of those who happen to be employed at a particular time. Changes in observed values incorporate, on top of the wage changes of the on-going working population, the following:

- Reductions in the observed average wage due to the current retirement of relatively senior, and highly paid workers.
- Reductions in the average wage due to the hiring of relatively junior, and lower paid, workers.
- Increases in the average wage due to the lay-off of relatively junior workers during periods of poor business conditions.

It is fair to conclude that the average industrial wage is influenced by many factors, and if the intent is to make the adjustment representative of the rate of change in economic activity only, the other factors at work may very well make the total effect perverse.

One compromise, which solves none of these problems, is what is known as "Swiss Indexing". This simply involves taking half the change in the consumer price index, and combining it with half the change in the average industrial wage. By altering these proportions, a very large set of indexing possibilities emerge.