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Securing Employer-Based Pensions

An International Perspective

Edited by Zvi Bodie, Olivia S. Mitchell, and John A. Turner

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In many countries around the world, a debate is occurring over the structure of retirement income systems. Following the downfall of communism, countries in central and eastern Europe are considering private pensions to complement their state-run social security systems. In these countries and elsewhere, the state social security retirement income systems face severe financial problems caused by benefits that are overly generous and entitlement rules that allow eligibility at too young an age. In response to the heavy burden on government, private pension systems are seen as reducing the government spending needed to support an increasingly elderly society.

Establishing private pension systems in countries where they have not existed has proven to be difficult. Major institutional changes needed to establish private pension systems may be dependent on other financial institutions' being developed first.

This chapter provides analysis and a new perspective on issues surrounding the development of private pension systems. Recognizing that there are major differences between countries, the chapter considers within a general framework the initial steps toward establishing private pension systems. The development of a private pension system also needs to consider the particular situation of individual countries. This chapter draws its examples from central and eastern Europe, but much of the analysis is applicable for other countries.

Private pension systems, once established, tend to evolve as an experienced group of professionals develops to manage them, and as changing economic and demographic conditions warrant. Features of a new private pension system that are appropriate at the beginning stages may need to be changed later as conditions change.
In considering the development of private pension systems, two primary questions arise. First, what are the necessary preconditions before a private pension system can be established? Alternatively, what is the necessary sequence in which legal, economic, and institutional developments need to occur? Second, what form should new private pension systems take?

Because of the close connection between social security and pension systems, social security retirement income reform must be addressed at the same time as private pension reform. Such reform may involve raising the minimum retirement age, eliminating special categories of beneficiaries, reducing real benefit levels, changing the benefit formula to tie benefits more closely to earnings, or alternatively moving to a flat benefit where all beneficiaries receive the same amount. The complex issues of social security reform are not considered here.

Preconditions for Establishing Private Pension Systems

The private pension systems of North America, western Europe, and Japan are supported by complex legal, financial, and service provider systems. These support systems involve sophisticated institutional arrangements and highly trained specialists. These support systems appear to be prerequisites for the pension systems they support.

Factors necessary for establishing private pensions can be identified by studying the historical development of private pensions in other countries. Historical experience concerning the pension systems in other countries provides insights on ways to deal with problems arising due to the limitations of existing economic and institutional conditions.

Economic Preconditions

Capital Markets

The countries of central and eastern Europe, like many countries without private pension systems, do not have well-developed capital markets. At best, they have fledgling stock markets with few securities traded, and few regulatory safeguards found in Western countries’ capital markets. Because of government subsidies of businesses and the financial instability in the economies, it is difficult for capital markets to determine accurate, stable values for financial assets and for firms.

For small countries with a limited industrial base, optimally diversified pension portfolios would have a relatively small percentage invested domestically. This pattern of pension investment is seen in another small country, the Republic of Ireland, which in the mid-1990s had a popula-
tion of 3.5 million and which had pension plans with larger amounts
invested in foreign equities than in domestic equities. However, the coun-
tries of central and eastern Europe do not have sufficient foreign cur-
currency to invest in foreign securities. Investment of pension funds abroad
under new private pension laws in Hungary (1993) and the Czech Re-
public (1994) is exceedingly difficult. It is virtually impossible under the
Hungarian foreign exchange regulations, while very difficult in practice
under current Czech exchange restrictions (Batty, Stumpa, and Kovari
1994).

Alternative portfolio diversification options that limit domestic ex-
posure could include investment in multinational subsidiaries, interna-
tional joint venture firms, and export-oriented enterprises. The lack of
domestic financial instruments and assets in which to invest and the
inability to invest in foreign markets create problems for the develop-
ment of funded pension systems.

The historical experience of Chile, Japan, and Germany, however, sug-
gests that having a developed financial market is not necessarily a precon-
dition for developing a private pension system. Chile in 1981 established
a fully funded mandatory defined contribution system to replace its pub-
lic defined benefit social security system. At that time, Chile had few
financial assets in which its pensions plans could invest and it did not
permit international investments. During the early years, private pension
funds were invested almost entirely in government bonds, and subse-
quent demand for financial securities by Chilean pension funds encour-
aged development of a successful stock market.8

In both Japan and Germany after World War II, the banking sector and
financial markets were destroyed. Nonetheless, private pensions were
developed using the book reserve method of financing (Ahrend, Chap-
ter 3, this volume, and Watanabe, Chapter 4, this volume). With this
method, funds that might have been invested outside the firm are instead
retained within the firm. A liability for the promised future pension
benefits is then reported on the financial accounts of the firm.

Investing the pension fund entirely in the sponsoring firm entails high
risk, especially in an uncertain economic environment. In Germany, this
liability must be insured. Without insurance, workers may bear consider-
able risk because of the uncertainty surrounding the financial future of
many enterprises.

Pension funds in countries developing new pension systems could in-
vest in government bonds, as in Chile, or finance their pensions through
book reserve financing, as in Japan and Germany. They could also invest
in former state enterprises now being privatized. In Chile in the mid-
1980s, stock in state enterprises was offered for sale on the Santiago Stock
Exchange. Initially, only the large pension funds were permitted to buy it.
Chilean economists felt that only the large pension funds had sufficient financial expertise to evaluate the stocks and determine a realistic price.

Privatization—the transfer of state property to private ownership—presents unique opportunities for the development of private pensions. Significant progress has been made almost everywhere in central and eastern Europe in privatizing small firms, although privatizing larger enterprises has proceeded more slowly (Slay 1993).

Besides directly purchasing stock, pension funds could invest in newly privatized enterprises through mutual funds or investment funds. Such investment funds would be able to assist people in investing privatization vouchers that they had received (either distributed freely or purchased). Instead of themselves selecting a firm or firms in which to invest, people could exchange their vouchers against the shares of these specialized financial institutions, which would invest the public’s vouchers for them. Such a system provides investment diversification, as funds would invest in dozens of companies. In effect, the government creates shares in enterprises that it wishes to privatize, selling or giving those shares to individuals or mutual funds. In this way, pension funds could also buy or be granted mutual fund shares.

Privatization through the distribution of free vouchers has occurred in the former Czechoslovakia, and continued in the Czech Republic and Slovakia. In the Czech Republic and Slovakia, the shares of privatized firms are held by large Investment Privatization Funds. Individuals own shares in these funds through their vouchers (International Monetary Fund 1994). Such funds have been proposed in Poland. One of the most extensive programs so far is in Russia, where the government has encouraged capitalism by giving away most state property, issuing 144 million vouchers free to citizens.

Pension funds can play an important role in privatizing an economy, as they did in Chile, because of their financial expertise and because their funds create a demand for a financial market (James and Vittas, Chapter 5, this volume). Thus, rather than arguing that capital markets must precede the development of private pension funds, this approach suggests that pension funds will create a demand for capital markets. Conversely, the prevalence of book reserve financing by German pension funds, which can be used in the absence of well-developed capital markets, may explain the relatively small stock market in that country.

Inflation

In many central and eastern European countries, inflation during the early years of the economic transition was high and variable. In some
countries, this problem has declined considerably. For example, Poland’s annual inflation rate was 251 percent in 1989, 586 percent in 1990, 70 percent in 1991, 43 percent in 1992, 35 percent in 1993, and estimated to be 27 percent in 1994 (International Monetary Fund 1994). High and unpredictable inflation rates create uncertainty for both firms and savers. This environment penalizes savers when interest rates do not reflect an inflation premium (as in those administratively set).

If inflation is not to destroy a funded pension system, such a system must invest in assets that preserve their value in an inflationary market. Generally, equities preserve their value in an inflationary environment, provided the tax system does not cause the relative tax burden on equities to increase with inflation.

Alternatively, as was done in Chile, the government could offer inflation-indexed bonds. That was facilitated by the Chilean government’s inflation-indexing the tax system and other aspects of the economy. Although inflation-indexed bonds have desirable features, few governments offer them. Further, in the United Kingdom where they have been offered, few pension plans have used them, presumably because the liabilities for active workers are generally effectively indexed by wages rather than prices.

Interest Rates

As well as determining the value of assets, capital markets determine the present value of liabilities for benefit payments due in the future. In countries where interest rates are not determined by the market but are administratively set, problems can arise. The combination of administered interest rates and decontrolled prices with widely fluctuating inflation rates can lead to wide fluctuations in real interest rates (Korczyk 1993). During 1990, for example, the real interest rate on low risk lending in Poland ranged from +75 percent during the low inflation early part of the year to about -300 percent during the high—inflation latter part of the year (OECD 1992). In such a situation, it is difficult to determine stable economic values for assets and liabilities because market-based valuations vary considerably.

Real Income

Real income in the central and eastern European countries declined during the early part of the transition phase from communism to a market economy. During a period of declining real income, workers are unlikely to save for future consumption. Rather, in an attempt to main-
tain their former level of consumption, they will dissave. Thus, a period of declining real income is not a good time to start a mandatory funded pension system, but a voluntary system could be launched.

**Institutional Preconditions**

As well as economic preconditions for the development of private pensions, several institutional preconditions may need to be established.

**Social Security**

In many central and eastern European countries, social security reform is urgently needed because of the high costs of the existing systems. The seriousness of that problem suggests to some analysts that social security reform should be the top priority in the retirement income area; thereafter, private pension reform would be considered. However, reductions in real social security benefits and postponement of age of eligibility will be more easily achieved if a private pension alternative is available to workers (Fox 1994).

**The Legal System**

Many of the countries of central and eastern Europe do not have legal systems that clearly protect individual property rights and that establish legal rights in bankruptcy. It has been argued that laws governing prudence, self-dealing, and other aspects of fiduciary behavior, and concerning settlement of property disputes and bankruptcies are necessary prerequisites to developing of a funded private pension system (Korczyk 1993). These protections need to be established to reduce financial risks, and until they are, uncertainty about prospective changes in the legal system add to the uncertainties facing individuals and firms.

**Regulation**

Because of the money that accumulates in pension plans, these funds may be the target of theft and fraud. To prevent financial malfeasance from jeopardizing the retirement income of many people and shaking public confidence in a newly established private pension system, financial safeguards must be established at an early stage.

Pension fund regulators in Western countries rely on other regulators, such as those governing investment markets and financial institutions. In most central and eastern European countries, the regulation of banks, stocks and bonds, and insurance markets is in its early stages.
The Chilean experience, however, demonstrates that pension reform can be started without having a sound regulatory structure in place (Diamond and Valdés-Prieto 1994). Modern bank regulation was not fully operational in that nation until 1982, a year after the pension reform had been implemented. Reforms to the securities and corporation laws were passed in 1981. Later during the 1980s and 1990s, financial reform occurred several times, in part in response to the growth of pension funds.

Trained Personnel

The sophisticated private pension systems found in the United States, Japan, and other developed countries depend on the services of actuaries, accountants and auditors, financial management experts, attorneys, and computer specialists. Decentralized fund management requires more trained personnel than centralized fund management. While decentralized fund management may be more efficient than centralized management in developed countries (Davis, Chapter 8, this volume), that only applies in economies with an ample supply of trained personnel. Countries developing a new pension system can economize on skilled personnel by initially limiting the number of alternatives for fund management. Foreign expertise can also substitute for the lack of domestic expertise while domestic expertise is being developed. The Hungarian-American Enterprise Fund provides an example, where Western experts initially were used to evaluate the projects the fund invested in.

Policy Options

In considering policy options, any proposal for a private pension system should:

- Reduce the fiscal burden on the government,
- Protect the security of retirement benefits,
- Maintain regulatory simplicity, and
- Be politically acceptable.

Any proposal that is not politically sustainable is ultimately self-defeating. While this chapter does not directly analyze the political acceptability of proposals, all the proposals it considers are policies that have been implemented in other countries, and thus have met the test of political acceptability at least in the context of one country.

This section draws on the experience of a number of countries in considering specific proposals for dealing with problems that arise in
developing private pension systems. It concludes with a timetable suggesting an ordering of policy developments.

**Financing the Transition**

The transition from a retirement income system with only a pay-as-you-go social security system to a system where social security has a reduced role and there is a funded private pension system is generally difficult because of the paying twice problem. The “paying twice” problem is the situation facing the transitional working generation that must set aside savings to fund its own future benefits, while at the same time paying for the existing social security system, which is financed on a pay-as-you-go basis.

The double payment burden of the transition can be eased. First, if the new system is phased in gradually, the burden is spread over a longer time period and thus over more tax-paying cohorts.

Second, an abrupt transition from a pay-as-you-go social security system to a funded private pension system could be financed, as was done in Chile, by the issuance of government bonds. Workers having past service credits in the old social security system were issued these bonds to compensate them for their past service credits. The bonds are interest-bearing but no payments can be made until the worker reaches retirement. The bonds are financed out of general revenues. By postponing the payments, the Chilean government has been able to spread out the cash payments required to finance the transition to its funded pension system (Diamond and Valdés-Prieto 1994).

Third, in Chile the transition was also financed by a surplus in the government’s general revenues. The Chilean government, in anticipation of costs of transition from a pay-as-you-go to a funded retirement income system, purposively accumulated a government surplus in its general revenues. For most countries, this is not a feasible option. An alternative to that approach is to build up a surplus in the social security trust funds. While these approaches are available to some countries, neither are available to the countries of central and eastern Europe because of the financial strains on their government budgets and social security funds.

Fourth, revenues from government-owned assets or proceeds from their sale can be used to finance the government’s past-service pension obligations (Jenkins 1992). Argentina in 1994 helped finance the transition to a partially privatized system by the sale of government-owned enterprises.

Normally the establishment of funded pension plans that provide meaningful benefits takes decades because of the large sums that must be accumulated to pay benefits over a worker’s retirement years. The assets
of socialized enterprises, however, can be used to make up for the lack of initial assets in the pension funds (Holzmann 1993; Hanke 1991).

Fifth, in addition to government policies to ease the transition, supporting changes may occur in the private sector. To the extent that generations are connected by intergenerational transfers, the shift in assets between generations that occurs during the transition to a partially privatized system can be offset by private intergenerational transfers. The transition generation can adjust by making fewer private intergenerational transfers, and other generations can increase their transfers to the transition generation. To the extent that generations are linked by private intergenerational transfers, such adjustments may naturally occur.

Financial Incentives

In a market economy, the primary force driving economic development is financial incentive. In all countries with well-developed private pension systems, a major factor in the development of those systems has been tax incentives.

Personal income tax systems are envisaged in all countries of central and eastern Europe. They have already been implemented in Hungary (1988) and Poland (1992), and by the Czech Republic (1993) and Slovakia (1993). Tax incentives for pensions are generally provided through the tax exemption of contributions and investment returns of the pension funds. The taxation of pension plans generally takes the form of taxation of benefits (Dilnot, Chapter 6, this volume). The 1993 Hungarian private pension law takes this form. In an interesting variation to this approach, the Czech Republic provides matching funds to encourage pension growth.

Postponing taxation of pensions until benefits are received reduces the short-run cash flow for the government. In the transition economies, which are facing governmental cash flow problems, deferral of tax payments may pose a problem for the governments.

Alternatively stated, the deferral until retirement of taxes on pensions implies a loan by the public sector to the private sector, thereby enlarging the fiscal deficit. The loan is equivalent to the taxes that would have otherwise been paid but that are, in effect, given back to the worker in exchange for their repayment at retirement. At the same time, private individuals need to save more in order to meet their future income tax payments on their pension benefits while maintaining their after-tax pension benefits. Therefore, if private sector workers anticipate future tax payments, private pension saving and other saving should in effect compensate for part of the public dissaving (Holzmann 1993). However, the populations in central and eastern Europe, because of the expectation of
rising incomes, wish to consume more now than their current income permits but are prevented from doing so because of the difficulty of borrowing against expected future income. In light of this liquidity constraint, it seems unlikely that the private sector will compensate for potential public dissaving. Thus, the phasing in of private pensions supported by tax incentives may initially decrease rather than increase national savings. In the early phases of the transition, the introduction of tax incentives for pensions may be too expensive for government budgets. However, the effect of not introducing tax incentives is that the private pension system will be an unimportant source of retirement income.

Social Security

The generosity of social security benefits limits the development of private pension plans. This occurs particularly if benefits are generous for individuals at higher income levels (Davis, Chapter 8, this volume). Therefore, a first step toward developing private pensions is to limit social security benefits at higher income levels. This could be done by not providing cost of living adjustments in retirement for social security benefits above a certain level, as was done in Hungary. It could also be done, as in Ireland, by providing a flat social security benefit to all workers.

A Decentralized Competitive System for Pension Asset Management

In a decentrally managed competitive system for pension asset management, workers and firms pick their own management company from a number of management companies. They can transfer their accounts from one management company to another. Decentralized management systems are less vulnerable to pressure to invest pension funds for political reasons than are government-run centrally managed systems (James and Vittas, Chapter 5, this volume).

The governments of central and eastern Europe currently do not have personnel with the requisite training for regulating pension funds and financial markets. For this reason, the transition economy countries should probably have their newly established pension funds managed by large financial management firms controlling the assets of numerous individual pension fund accounts, as is done in Chile. With this structure for managing pension funds, regulatory authorities only have a few large entities to oversee.

This is the thinking of the Czech government, which is stressing a small number of large funds that can easily be supervised. That approach is quite different from the Hungarian approach, where there is a desire
to establish a significant number of Voluntary Mutual Benefit Funds (VMBFs) for the employees of individual companies. But even in the Hungarian approach, employer-specific plans are not the sole method available. Funds can be established on a regional, occupational, or trade basis (Batty, Stumpa, and Kovari et al. 1994).

**Chilean Pension Portfolio Regulations**

Two approaches can be used to regulate private pension investments. The first approach, used by the United States and the United Kingdom, is the "prudent man rule." This approach places few specific restrictions on allowable investments. Instead, pension plan managers are required to diversify their asset holdings and in all other respects to invest plan assets consistently with what would be done by a prudent person acting in such circumstances. Failure to perform carries civil and possibly criminal penalties.

The second approach places specific maximum and possibly minimum restrictions on the percentage of a pension portfolio that may be invested in certain types of assets. This approach is used by Chile, Japan, and many other countries. The second approach gives plans less flexibility in deciding their investments. It is, however, a simpler approach for regulators to monitor and for that reason may be preferable.

Hungarian pension law follows this second approach. It lays down strict provisions as to the proportions that can be invested in four classes of assets rated by risk factor (Batty, Stumpa, and Kovari et al. 1994). Czech restrictions, by contrast, do not limit types of investments but focus on the permissible investments in a particular company or particular share issue.

**British-Style Voluntary Personal Pension Plans**

An early step toward developing pension institutions and capital markets is to allow voluntary tax-deductible personal pension plans. To limit the tax revenue lost, a restriction should be placed on tax-deductible contributions, such as 15 percent of earnings up to a fixed ceiling amount, with a flat minimum amount that exceeded 15 percent of earnings for low earners. These pensions are simple to administer and do not impede labor mobility.

An alternative would be to allow such pensions in conjunction with partial contracting out, as is done in the United Kingdom (Daykin, Chapter 2, this volume). For example, workers could reduce their social security tax payments by a small amount if they contributed to a personal pension. Administratively, this could be handled by the employee's re-
questing that at the end of the tax year that amount be transferred to his or her personal pension account.

A Voluntary or a Compulsory System

An option for developing a private pension system involves establishing a universal mandatory savings system as a second tier in the retirement income system. This savings plan would supplement or replace a traditional defined benefit social security system (Fox 1994). The savings plan would be similar to that found in Chile. France, Switzerland, Australia, and Sweden also have compulsory national private funded pension systems. At least 20 countries have compulsory provident funds, or forced savings funds (James and Vittas, Chapter 5, this volume). The two private systems currently operating in the central and east European region—Czech and Hungarian—are both voluntary. A voluntary system is politically appealing to some people because it provides freedom of choice.

A mandatory funded pension system or a mandatory provident fund system would accumulate a large amount of funds. That would strain the financial and regulatory systems of those countries. At the same time, the potential for dynamic interaction between rapidly accumulating pension funds and the financial sector should not be overlooked.

Contracting Out by Employers Meeting Japanese Criteria

Both Japan and the United Kingdom allow employers to contract out of the social security system. In these countries, employers and employees can reduce their social security tax payments, and in exchange, the employer provides a private pension plan that meets certain requirements. While all employers and all employees in the United Kingdom are permitted to contract out, in Japan only large employers or groups of employers may do so, provided that they meet profitability and other requirements. The Japanese approach to contracting out could be adopted. For example, employers of 5,000 or more employees would be eligible if they had growing or stable workforces for the previous three years and had earned a profit for the previous three years. These employers could then reduce their social security payroll tax payments. Such a system would only be available to economically stable firms, but it would allow a small reduction in the total size of the social security system.

German Vesting Rules

Defined benefit plans are generally not portable, meaning that workers who change jobs receive lower benefits than do workers who stay with one
employer. Lack of portability may create a barrier to efficient labor market adjustment. During the economic transition, many workers need to change jobs as the economies restructure. During the transition period the accumulated value of pension benefits, and the associated barrier to mobility caused by their loss, would be small.

The development of employer-based defined benefit pensions creates longterm employer liabilities. These liabilities could make it more difficult to restructure enterprises during the transition (Fox 1994). In addition, enterprises will become bankrupt or cease to exist during the transition, which implies that pension promises may not be kept. This phenomenon can prompt calls for pension insurance with its attendant dangers (Pesando, Chapter 9, this volume).

If mandatory vesting were set at 10 years, for the first few years of participation pension plans would have little effect on labor mobility because the date of vesting would be sufficiently far off. In Germany, mandatory vesting occurs at 10 years of participation in a pension plan for workers age 35 and older and 12 years for younger workers. Adoption of this vesting rule would limit the disruption from impeded job mobility or due to firm bankruptcy during the transition phase.

**British Funding Rules**

In the United Kingdom, full funding is only required in contracted-out plans for the guaranteed minimum benefit. In a sense, book reserve funding may be used for benefit amounts above that level. The funding and capital market requirements of new pension plans could be eased initially by requiring only that funding cover a minimum level of benefits provided by defined benefit private pension plans. Workers would be informed of the funding level of their plan and would understand that, for unfunded benefits above the minimum level, they faced greater risks.

**Defined Benefit and Defined Contribution Plans**

Defined benefit and defined contribution plans have desirable features for different types of workers and firms. The choice between them need not be made by the government but can be left to individuals and firms. While defined benefit plans are more complex to administer and regulate, those problems are not insurmountable. Many of the complications of defined benefit plans are related to their providing annuities. A simplified form of defined benefit plan could be initially offered, for example one that only paid benefits for a fixed number of years.

Defined contribution plans, however, have qualities that commend their use (Holzmann 1991). They do not require a great number of
financial professionals nor comprehensive government regulations. Sophisticated financial markets would also be unnecessary, since defined contribution plans could incorporate the distribution of privatized assets through vouchers. Important to the transformation process as well is the fact that defined contribution plans would not create impediments to enterprise restructuring because the defined contribution plans would be unrelated to firm liabilities. They would also not create an obstacle to labor mobility since they would be portable. Hungarian Voluntary Mutual Benefit Funds are expected to be predominantly defined contribution plans. The Czech law does not yet allow for defined benefit plans.

The Chilean Model

The success of pension reform in Chile, combined perhaps with cultural affinity, has caused that approach to appeal to other Latin American countries. That approach has also been recommended by some pension consultants for central and eastern Europe. In Chile, all new entrants to the labor force, except the self-employed, must establish an individual account pension plan to which they contribute a minimum of 10 percent of their earnings, up to a maximum level of earnings that is roughly five times the average salary of all covered workers. The self-employed can participate voluntarily. Participants in the old social security system have the option of continuing in that system or joining the new system. This mandatory funded defined contribution pension system replaces the traditional defined benefit social security system in Chile. An additional contribution pays for administrative expenses, disability insurance, and pre-retirement survivors benefits. Employees wishing to contribute more to their accounts may do so. The funds must be invested with investment management companies that have been established solely for the purpose of managing the individual account pension plans. These companies are regulated by the national government.

Most social security systems redistribute income toward low income workers. The Chilean pension system also has that feature in that it guarantees a minimum pension that is funded through general revenues. To the extent that the individual’s account is insufficient to provide the minimum, the difference is made up from general revenues.

In traditional defined benefit pension systems, the financial market risk is borne primarily by the employer. In the Chilean pension system, the financial risk is borne primarily by the worker. However, if the pension fund earns a rate of return substantially below that earned on average by all funds, the management company must bear some of the risk. Larger employers are presumably better able to bear pension fund risk.
because they can pool the risks that many workers with different retirement dates would face individually.

The Chilean pension system provides less diversification than mixed pension systems that also contain defined benefit plans and social security pay-as-you-go plans. It also provides less freedom of choice than do other pension systems.

**Pension Benefit Insurance**

Most countries have not established pension benefit insurance programs. Most countries with such programs have experienced serious problems. In addition, countries with pension benefit insurance programs have adopted regulations whose primary purpose is to protect the insurance programs. Some of these regulations have restricted the investment options of pension plans in ways that otherwise would not need to have been restricted (Davis, Chapter 8, this volume). There are alternative regulatory frameworks that can be established to protect pension benefits. For example, the funding level of pension plans can be regulated to maintain minimum funding levels. In addition, workers should be informed on a regular basis as to the funding level of their pension plan.

**Begin Slowly and Have Realistic Expectations**

Because the countries starting new pension systems are inexperienced in managing private pension systems, they may make mistakes in the early stages. For that reason, new pension systems should be developed initially on a modest scale. They should be simple to understand, to administer, and to regulate.

Private pension systems for central and eastern Europe have been criticized because they will cover only part of the labor force. This could increase income inequality. Voluntary private pension systems in practice nearly always cover less than half of the labor force (Daily and Turner 1992). Private pension systems are generally designed to provide retirement income to middle and upper income workers. This fact should be realized so that unrealistic expectations as to coverage levels are not raised.

**An Approach Toward Implementation**

Table 1 outlines a proposal for the steps to take in developing a private pension system. The essence of this proposal is training for government and private sector pension professionals and incentives to private sector individuals and firms for establishing pensions. The proposal divides the development of a private pension system into three phases.
TABLE 1  Timetable for Establishing an Employer-Provided Private Pension System

\begin{itemize}
  \item \textbf{Phase I}
  \begin{itemize}
    \item Limit inflation through macroeconomic policy, deregulate interest rates
    \item Train pension personnel—development of human capital
    \item Draft and discuss pension reform proposals and alternatives
    \item Establish a personal income tax system
    \item Gradually increase social security retirement age and eliminate special categories of social securities benefits
  \end{itemize}

  \item \textbf{Phase II}
  \begin{itemize}
    \item Establish voluntary individual pension accounts that receive preferential tax treatment
    \item Establish several pension management firms
    \item Grant tax exemption for pension contributions and investment earnings
    \item Reduce the real level of social security benefits for middle and upper income workers
    \item Establish the regulatory framework for pension management firms
  \end{itemize}

  \item \textbf{Phase III}
  \begin{itemize}
    \item Draft pension law with preferential tax treatment or subsidy for pensions
  \end{itemize}
\end{itemize}

In the first phase, some preconditions are established. We assume that a transitional economic reform plan is being implemented. This would include macroeconomic policies to address inflationary pressures and to promote factor and product markets, new social safety net institutions, removal of foreign exchange restrictions, and institutional and legal measures to establish property rights and allow for the privatization of state assets. With this body of generally accepted policy prescriptions implemented, movement to study private pension alternatives, train pension personnel, and reform the social security system should quickly follow.

In the second phase, a simplified voluntary individual pension system is established. The monetary and financial sector reforms introduced during the first phase allow functioning banks and insurance companies to develop. Incentives built into the tax code for corporations and individuals are intended to stimulate economic agents to establish private pensions in an increasingly flexible labor market.

In the third phase, a framework for an employer-provided pension system is established. We have suggested features such a system might include.

\section*{Conclusion}

Using the experience of other countries with private pension systems as a guide, as well as Hungary and the Czech Republic, small steps could be
taken immediately in central and eastern Europe and elsewhere to start the development of private pension systems. Taking these steps will have a number of immediate benefits. First, they will make social security reform easier. Second, they will aid in privatization of state enterprises. Third, they will aid in the development of financial markets. Fourth, they will develop an understanding and appreciation of market institutions among the citizenry. Fifth, they will be a positive step toward greater financial security in retirement.

This chapter is the responsibility of the authors and does not represent the position of any institution with which they are associated. The work on this chapter was undertaken while Turner was a Senior Fulbright Scholar at the Institut de Recherches Economiques et Sociales in France.

Notes

1 Tying benefits to earnings would make social security into a mandatory savings program with no redistributive aspect. Providing a flat benefit would change social security into a purely redistributive program with high earners contributing more but receiving the same amount as low earners.

2 Diamond and Valdés-Prieto (1994) provide a good description of the Chilean pension system.

3 The Chilean pension system is described in Hanke (1991), Myers (1992), and Santamaria (1992).

4 See Pesando (Chapter 9, this volume), Weaver (Chapter 9, this volume), and Turner (1993) concerning the United States.

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