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PENSION PERSPECTIVES

Social Security Reform: A Cross-country Review
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Contents

Social Security Reform: A Cross-country Review 1
Estelle James

China's Pension System and Constraints on Reform 29
Mukul Asher and *David Newman*

Systemic Pension Reforms in Latin America 43
Robert Palacios

Pensions, Consumer Financial Literacy and
Public Education: Lessons from the United Kingdom 65

Edward Whitehouse

Provident Fund and Pension System in India 90
Manish Sabharwal and Madhu D

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SOCIAL SECURITY REFORM:
A Cross-country Review

Estelle James*

Over the past two decades, many countries have been adopting multi-pillar old age security systems that include a substantial role for a privately managed fully funded (FF) defined contribution (DC) pillar, accompanied by a publicly managed tax financed defined benefit (DB) pillar to redistribute to low earners. Many other countries are currently contemplating such a switch. This contrasts with traditional systems which rely on a single public pay-as-you-go (PAYG) DB pillar. In a PAYG DB plan, the benefits are defined in advance, usually based on years of contributions and average earnings during some part of the lifetime, and are financed through payroll taxes; tax rates change through time to cover the benefits promised to today's pensioners. In a DC plan, the contributions are defined in advance, accumulated and invested, but the benefit is uncertain. When workers retire they get an annuity that depends on their lifetime contributions plus their investment earnings. This paper surveys the recent multi-pillar reforms in an attempt to explain why countries chose this system, how they selected the particular forms for their first and second pillars, what old problems this system solved and what new problems were created.

Part I contrasts three structural reform models that are now being implemented – the Latin American individual account model in which workers decide how their retirement savings will be invested; the OECD employer-sponsored model in which employers and/or union representatives control the investment strategy for an entire enterprise or occupation; and the Swedish model in which workers have large notional accounts which are simply bookkeeping entries, supplemented by small funded accounts with real savings and investments in them. The menu of choices for covering transition costs, and the political economy factors behind these choices, are discussed in Part II. Part III examines empirical evidence on the positive efficiency and growth impact of these reforms and Part IV discusses new problems that have emerged. The Conclusion summarises these recent policy developments and the implications they hold for countries that have not yet reformed.

The experience of Latin America and OECD countries shows that pension reform is possible even in democracies. The reforms that countries have chosen

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have important commonalities (DC, funding and private management), but they take somewhat different forms as a result of different initial conditions and political economies. Three key design issues are: (i) what is the relative size of the public and private pillars?; (ii) what is the form of the public pillar (e.g. earnings-related, flat benefit or minimum pension guarantee)?; and (iii) who should choose the investment managers in the funded pillar?

The answers to these questions in reforming countries exhibit a striking path dependency. Empirical evidence suggests that the size of the implicit pension debt and the credibility of the old system determine the public/private mix and the form of the public pillar in the new system (see Table 1). Also, the prior development of voluntary occupational plans determines whether the private pillar will be run on a group or an individual basis.

Table 1: Implicit Pension Debt (IPD) and Pension Reform

Country	Age-IPD as % of GDP	Spending-IPD as % of GDP	% PVT	Type of new public pillar
Peru*	37	37	HI	—
Bolivia	45	65	HI	F
El Salvador	47	34	HI	MPG
Mexico	48	43	HI	MPG
Colombia	51	44	HI	MPG
Chile	79	112	HI	MPG
Kazakhstan	88	102	HI	MPG
United Kingdom*	118	118	MED	F
Argentina	125	100	MED	F
Poland	142	241	MED	ER
Australia	145	96	MED	F(MT)
Netherlands	174	198	MED	F
Latvia	175	179	LO	ER
Switzerland	195	215	MED	F(ER)
Denmark	198	170	MED	F
Italy*	203	203	LO	ER
Hungary*	213	213	LO	ER
Uruguay*	214	214	LO	ER
Sweden	226	197	LO	ER

Sources and definitions:

- *IPD is present value of accrued rights of pensioners and workers, under old system.*
- *See James and Brooks 2001 for discussion of sources. * Indicates actual IPD is used, calculated by the following sources: Hungary, Uruguay and Peru from Kane and Palacios 1996, United Kingdom and Italy from Van Den Noord and 1993. Other countries: Spending-based IPD and Age-based IPD simulated by James and Brooks 2001 based on current public expenditure (World Bank 1994). Age-based IPD simulated by authors based on 1990 population over age 60 (World Bank 1994).*
- *%PVT is based on share of benefits expected to come from private pilltar: HI = >80%; MED = 49-60%; LO=40% or less. See James and Brooks 2001.*
- *Types of public pillars; MPG = minimum pension guarantee, financed out of general revenues; F = flat (often supplemented with means-tested benefits), financed out of general revenues or payroll tax; MT = eligibility determined by means and asset test; ER = earnings-related, financed out of payroll tax; F(ER) = ER with flat structure (max close to min). Peru has not yet implemented a first pillar. In Bolivia flat benefit is financed by privatisation revenues until these assets are exhausted; shape of first pillar thereafter is unknown.*

I. HOW HAVE COUNTRIES REFORMED? [1]

Why Reform Now?

To varying degrees, the reforming countries were trying to escape from problems that the old systems had created or were on the verge of creating, such as:

- high payroll taxes, slated to go still higher in the future;
- weak linkage between benefits and contributions which led to evasion and escape to the informal sector;
- early retirement, which reduced the labor supply and increased the scheme's financial difficulties;
- benefits which were much lower than expected – the DB was not risk-free;
- declining long term saving;
- inequitable intra-generational transfers;
- unintended inter-generational transfers; and
- a large implicit public pension debt, which threatened to increase the government's fiscal burden and make the old systems unsustainable.

These problems were not very noticeable when populations were young, retirees few and pension plans immature, but they became increasingly visible as populations aged and schemes matured.

Cross-sectional analysis shows that public spending on formal pension plans increases exponentially as populations age. It now exceeds 10% of GNP in some industrialised countries and will do so in many more countries as the demographic transition proceeds. As the largest civilian program in the government's budget, it, and its associated problems, become very hard to ignore. Moreover, it has increasingly been recognised that the way this money is generated and spent can affect the entire economy, by influencing factor supplies, productivity and the size of the GNP pie (see World Bank 1994 for details).

This realisation was taking place at the same time when a shift in economic thinking was leading countries to rely, to a greater extent than before, on market mechanisms rather than centralised planning. The early success of a market-based mandatory pension system in Chile, which pioneered this solution in 1980, provided a real world role model in the pension area. These ideas were spread by intellectuals, international organisations and interested parties, such as the Chilean AFPs (private pension funds); and we can observe how the diffusion of implemented reforms followed the diffusion of reform ideas. Multi-pillar reforms, which had been implemented in only 3 countries in the 1980s, spread to 14

others by 1998, with several additional countries likely to adopt them in the near future. Not surprising, these ideas diffused along geographic, linguistic and cultural lines – half of the reformers were in Latin America, most of the others in Europe.

Multi-pillar pension systems start with the premise that growing old is a predictable life experience that most of us will have with a high probability, so a large part of old age security can be provided by retirement saving – people shifting consumption from their younger productive years to their older years when their earning power gets reduced. Relying to some extent on saving is designed to reduce the disincentive problems associated with tax and transfer systems and to share the risk of unforeseen developments between the individual and the state. Retirement saving is made mandatory in the new systems, to avoid myopia and moral hazard problems. The savings are privately invested to ensure that economic, not political, objectives determine allocation.

However, the reforming countries all recognised that personal saving cannot do the entire job, that pooling risks and insuring or redistributing across individuals is also necessary – because some people, due to factors beyond their control, will live longer than average and run out of resources, or earn very low lifetime incomes which are insufficient to support them both for their working and non-working lives. This is the rationale for the 'first pillar', which has a redistributive function and is tax-financed. Thus, the reforms seek to separate the mandatory redistributive and saving components of old age security programs into two separate pillars or financing arrangements, leaving redistribution (Pillar I) as a public tax-financed responsibility, while shifting much of the saving function (Pillar II) to a privately managed fully funded arrangement. Pillar III, the voluntary pillar, is typically used by only a minority of people. All 3 pillars together co-insure against the many risks and uncertainties that are inevitable given the long-run nature of old age program – security is provided through diversification.

The Latin American (Individual Account) vs. the OECD (Occupational Plan) Models

Historical and political background: In Latin America, the old PAYG DB systems had lost their credibility. Politicians had promised generous benefits, which were cheap in the early years of PAYG systems, but as the systems matured these benefits became unaffordable. Members complained about the inequitable divergence between contributions and benefits – some workers managed to collect benefits without contributing for much of their lives, while others contributed diligently only to find at the end that their benefits were much lower than expected. In Argentina, where evasion and early retirement were widespread, the government actually withheld benefits from pensioners because

of a shortage of funds, despite a court decision that mandated these payments. In Mexico, Venezuela, and many other Latin American countries, inflation devalued the pensionable wage base and the real value of benefits, so that most people ended up getting only the minimum pension. In countries where pension reserves had temporarily accumulated, mismanagement resulted in low rates of return and a dissipation of these funds. Moreover, it was feared that things would get worse, and people had no confidence that the government could do better. These conditions led to a radical overhaul of the social security systems in Latin America, with a major role given to the private sector.

The Latin American model was pioneered by Chile in 1980 and, bolstered by its initial success, was closely followed by Argentina, Peru, Colombia, Mexico, Uruguay, Bolivia and El Salvador in the 1990s. More recently, the Latin American model jumped across the ocean and variants have been adopted in Hungary, Poland and Kazakhstan. In Poland, a recognition that risk is inherent in public as well as private schemes and hence the best course is diversification, was one of the major rationales for the multi-pillar approach.

All the new systems had a large DC pillar, consisting of peoples' retirement savings. Making this pillar DC, thereby linking benefits with contributions, was designed to reduce evasion, discourage early retirement, and keep the system financially sustainable even if workers continued to evade and retire early. In a DC system, the worker's accumulated contributions and investment earnings are turned into an annuity or other form of periodic distribution, on actuarially fair terms, upon retirement. If a worker has evaded or retires early, this means lower annual benefits; the worker himself bears the cost, instead of imposing this cost on others, as in a DB system. Moreover, as longevity increases, annual benefits automatically decline; this reduces the financial burden on the pension system and is likely to induce many workers to postpone their retirement. These are the basic reasons why reforming countries decided to include a DC component in their new systems.

Pre-funding was designed to avoid the proclivity of politicians to promise overly generous benefits and pass the costs on to future generations. It was also hoped that funding would increase domestic savings and thereby reduce reliance on foreign capital flows. Private management of these funds was intended to avoid the political manipulation that, in the past, had dissipated pension reserves. It was also intended to help develop financial markets.

In contrast, in the (non-transition) OECD countries that reformed, the reforms stemmed more from fears about future developments than from

contemporary bankruptcy. These countries had rather modest implicit pension debts, but could see that their populations would age and the fiscal burden would grow rapidly over the next three decades. They feared the huge increase in tax rates that would be necessary to maintain the promised benefits. Alternatively, if benefits were substantially reduced, this might leave parts of their older populations with inadequate incomes. Switzerland was one of the first to foresee the forthcoming deficit in its PAYG system and began planning its reform in the 1970s. In the UK, in the 1980s, Margaret Thatcher wanted to prevent the build-up of a huge implicit debt that would be the consequence of the expanded earnings-related public system that had been introduced by the previous (Labor) government. Australia, in the 1990s, was concerned about its low and declining rate of national savings and the disincentives to saving that were built into its existing means and asset-tested system. None of these countries wanted to scuttle the public safety net they already had; they mainly wanted to prevent the fiscal burden from increasing in the future. Pre-funding was seen as a way to accomplish that.

Many of these OECD countries had long histories of employer-sponsored and/or collectively-bargained pension plans that already covered about half of the population. It was natural for them to build upon these plans and extend them to the rest of the population by making employer-sponsored plans mandatory (or, in the UK, an optional alternative to the state scheme). They wanted these plans to be primarily DC for the reasons given above. Additionally, a DC design helped ensure that the employer-based schemes would be vested and portable. While in Switzerland, Australia and the UK the multi-pillar model was achieved by legislation, in Denmark and the Netherlands a similar model was achieved through collective bargaining with government encouragement but without mandates.

Choice of investment manager: individual choice versus group choice: In the Latin American model, each worker chooses the investment manager for his or her own individual DC retirement account. Private companies that want to serve this function set themselves up, subject to regulations imposed by the government. Although nominally given choice, these regulations have led pension funds to act in very similar ways, so workers, in fact, have very little choice over portfolios and risk-return combinations.

By comparison, the OECD model built on the widespread existing employer-sponsored pension plans and made them the foundation for the second pillar. In this model, the employer or a combination of employer and union trustees choose the investment manager for each company or occupational group as a whole.

This enables them to benefit from economies of scale and financial expertise, and possibly to minimise marketing costs (although this has yet to be proved). However, in DC plans, it introduces the principal-agent problem – where employer or union representatives choose the investment manager, but workers bear the risk, the choice may not be in the worker's best interest and may not maximise net returns. This is illustrated by the low returns earned in Swiss plans until recently and by the Maxwell scandal in the UK. Moreover, a single group investment strategy may not satisfy the diverse risk-return preferences of heterogeneous workers. Workers may ultimately demand more individual choice in OECD countries; they have already been given this choice in the UK and Australia. But scandals surrounding the mis-selling of personal pension plans, as well as the tendency of low-income workers to choose low-return options, illustrate the potential abuse of choice and the need for increased consumer education and regulation if choice expands. For example, in the UK, salesmen convinced workers to switch out of employer-sponsored DB plans to DC plans that were less advantageous, especially for older workers. Regulations requiring full and accurate information might prevent this, but such regulations are difficult to implement even after they are on the books. Additionally, workers need to be educated about risk-return trade-offs, how accumulations in DC plans can be converted into annuities, and what the wage-replacement rates are likely to be for different contribution rates and rates of return. Few workers currently have this level of financial literacy, but they may acquire it if their retirement savings grow.

Size and type of the public pillar and the transition deficit: Most of the OECD countries cited above had a modest public pillar – often with flat benefits, financed out of general revenues and redistributive –when they started their new system. They could simply retain their public pillar and start their private pillar as an earnings-related tier, financed out of payroll contributions, on top of that. The existence of the private pillar enabled them to downsize the public pillar and make it partially means-tested. They had no trouble financing the transition because accrued rights were small and/or contributions to the second pillar were an add-on, rather than a diversion from the first pillar.

For example, Australia had a means-and-asset-tested first pillar, financed out of general revenues, to which it simply added a mandatory occupational funded pillar financed out of payroll contributions. In the UK, the state earnings-related pension had just been started a few years earlier with an opt-put provision for employers who already offered a pension plan, when Thatcher decided to abort it by encouraging workers to opt out directly as well; the accumulated rights were still very small. Most workers in the UK contracted out, directly or through their employers, and are now eligible only for the basic (flat) benefit

from the public scheme. In Switzerland, employer-run plans became mandatory, on top of a compressed earnings-related public pillar which remained.

How did these countries sell the idea of the additional contribution, which would be politically unpopular in most countries? To begin with, the large employers already offered employer-sponsored plans, so they were indifferent to the mandate. As for the smaller employers, the add-on was typically phased in gradually, with the understanding that it would be in lieu of wage increases. In Australia, this trade-off was made credible by the existence of national wage awards and close ties between the Labor government and the trade unions. The unions, in turn, may have seen this as a way of getting compensation increases despite fears of inflation. In the UK, contracting out of the state scheme was made optional, but the terms were extremely favorable, especially for younger workers; thus, a tax subsidy was involved. Both in Switzerland and Australia, low wage workers were exempt from the second pillar mandate, mitigating opposition from groups with the highest discount rate and administrative costs.

In contrast, the Latin American and Eastern European countries had bloated earnings-related benefits and high payroll taxes in their public pillars to start with. Thus, their new second pillars had to be 'carved out' – contributions had to be diverted and the first pillars had to be redesigned. In many cases (Chile, Mexico, Colombia, El Salvador, Peru), the new public pillar was given a very subsidiary safety net role – providing a minimum pension guarantee to low income workers whose personal accumulations in the second pillar fell below a specified amount. It was financed out of general revenues, while almost all payroll contributions flowed to the private pillar. In Uruguay, Hungary and Poland, the carve-out was smaller and a larger role was retained for the new public pillar, which continued to be earnings-related and accounted for more than half of the total payroll contribution. How do we account for this difference across countries?

When a worker switched to the new system, he was given credit for his past service under the old system, while a part of his future contributions was diverted to his funded individual account. These countries had to find money to continue paying the benefits that had been promised to current pensioners and older workers under the old system – a problem that has become known as 'financing the transition'. As we shall see, one way to reduce the cash deficit in the short run is to keep some of the debt implicit: some payroll taxes continue to flow into the new public pillar in return for PAYG benefits later on. The larger the implicit pension debt (IPD) – the present value of the pension promises that are owed to current pensioners and workers because of their participation in the old system – the greater the likelihood that this method will be used. Most

countries that ended up with a large, hence earnings-related, public pillar had a high IPD in the old system – because of generous benefits, older populations and full coverage – which made it more difficult for them to finance the transition to a predominantly funded system (see Table 1).[2]

The Swedish Model: Notional DC Plans

History: In Sweden, the unions had long relied on generous public rather than collectively bargained pension plans. It would have been difficult for Sweden to start a large second pillar without substantially reducing its public pillar, which the unions and the Social Democratic Party were not prepared to do. Very importantly, most parties and analysts feared the difficulties in financing the transition to a funded system, given the huge implicit obligations of the old system. Yet, everyone wanted a sustainable system that linked benefits to contributions to avoid the inequities and disincentives that had crept into the old DB scheme. The political compromise, currently being implemented, was a notional (PAYG) DC plan in the first pillar, buttressed by a redistributive tax-financed '0' pillar and a small second pillar that is funded and privately managed.

A notional defined contribution (NDC) plan is one in which the worker has an individual account that is credited with his contributions plus interest. However, the accumulation is notional rather than actual, since the money paid in by workers is immediately paid out to pensioners rather than being invested; i.e. the system remains PAYG. Upon retirement, the notional accumulation is converted into a real annuity, supposedly on actuarially fair terms. Thus, the NDC plan is essentially a reform of the PAYG public pillar.

The NDC has since been adopted by Italy and Latvia (without a mandatory second pillar). Poland plans to have a new system with a first pillar that is NDC and a second pillar that is funded, with investment managers chosen by the individual workers. The NDC is also under consideration in Brazil, which has a huge implicit pension debt and is separated by history and language from the rest of Latin America. Outside of Europe and Latin America, China has a notional defined contribution system, de facto. While, in principle, China wants to start a second pillar made up of funded individual accounts, many municipalities have been unable thus far to finance the transition, so the individual accounts remain largely notional.

Labor market and equity effects: The NDC system was designed to capture the labor market and equity advantages described above of linking benefits closely to contributions in a DC plan. It was attractive to blue collar unions whose members have relatively flat age-earnings profiles that are disadvantaged in DB

systems (In DB plans where the benefit depends on final year salary, workers with steep age-earnings profiles get a higher rate of return since their last salary and therefore their pension is high relative to their lifetime wages and contributions. This was one factor that helped to discredit the DB system in the eyes of blue collar workers who did not get this last-minute boost). Also important in Sweden was the fact that DC plans automatically adjust benefits downward and lead workers to adjust their retirement age upward as life expectancy increases. This helps to make the system sustainable and avoids the difficult political decision to raise the retirement age that is periodically necessary in defined benefit plans.

However, the NDC is not redistributive, so Sweden had to grapple with the issue of how to protect low earners. For this purpose, they added a guaranteed minimum pension as a "0 pillar." Workers whose own-pension would be below this floor (including the majority of women), get a subsidised pension that raises it to the minimum level. Workers whose earnings are well above the minimum are taxed to finance this subsidy. Thus, both for very low and very high earners, the actual linkage between contribution and benefits, which supposedly produces the beneficial labor market effects in the NDC, is weakened by the desire for greater equality.

Absence of funding and financial market effects: While the NDC captures some of the labor market advantages of DC plans, it does not capture the benefits of funding, since there are practically no funds. Intergenerational transfers remain, saving is not augmented and financial markets do not develop. As the dependency rate increases, either the contribution rate would have to increase or the benefits would have to decrease, to keep the system solvent in the absence of pre-funding. In either case, the incentives for evasion and escape to the informal sector would be strong.

Sweden plans to construct a 'brake' that will automatically reduce the notional interest rate and hence benefits, if system sustainability is threatened. It also plans to build a buffer fund to smooth necessary changes in contribution and benefit rates; in this sense, the NDC will be partially funded. But the buffer fund will be a publicly managed overlay, which raises problems concerning political manipulation of and low returns to publicly managed funds.

Choosing the notional interest rate and conversion rate to annuities: A key factor in NDC plans is: how are the notional interest rate and the conversion rate of notional capital into annuities determined? In Sweden, the notional interest rate is set equal to the growth in the per capita wage. This means that it will be much less than the market rate of return and even less than the rate of wage growth for most workers. A low notional interest rate saves the system money

and makes it more sustainable, but it yields a low replacement rate and generates labor market distortions that the DC is designed to eliminate. For example, if the growth in per capita wages is 1.5%, age-earnings growth 0.5%, the market rate of return on a mixed portfolio 4.5%, and the contribution rate 10% of wages, then a notional interest rate pegged to per capita wage growth would yield a replacement rate of 21 per cent, while a market investment would yield 51 per cent for workers who contribute for 40 years. Under these circumstances, workers may try to evade their contributions to the NDC by working informally, or exert pressure for a shift to funded accounts with a higher return.

The conversion factor into annuities supposedly depends on expected longevity upon retirement. However, because the process is notional, it too is subject to political manipulation. For example, the government can decide to grant notional credit for non-contributing years (a common problem in old PAYG DB systems) and it can fail to adjust the conversion factor when life expectancy increases, both of which would interfere with the labor market efficiency effects of the new system. We have yet to see how the Swedish NDC will develop in the absence of market discipline. This illustrates the point that, in designing social security systems, much depends on the credibility of the government and its ability to precommit itself to a course of action that may turn out to be politically unpopular later on.

The notional defined contribution system has turned out to be attractive to countries that have very large implicit pension debts, especially those that are unwilling to incur an explicit fiscal deficit to finance the transition. In this context, it may be a politically convenient way to reduce benefits in inflated programs and to eliminate some labor market distortions. But until a funded second pillar develops, it is basically a reform of the public pillar rather than an introduction of a multi-pillar system.

II. FINANCING THE TRANSITION

If countries with a large PAYG pension debt shift to a multi-pillar system that includes a funded component, some of the contribution usually is shifted to the individual accounts. This creates a financing gap between the remaining PAYG revenues and the expenditures needed to cover the implicit pension debt (IPD); some other revenue source must be found to cover this gap. Countries following the Latin American model have faced this transition cost problem, while those following the OECD model have not (because they had modest public pillars and did not divert contributions) nor have the NDC countries (because they remain largely PAYG).

How did the Latin American countries finance the transition? Three types of basic methods have been used: reducing the value of the implicit pension debt (IPD) and the financing gap, finding special revenue sources to pay it off, and, finally, resorting to the general borrowing and taxation powers of the treasury. The choice among these methods depends on the government's resources and the groups it needs to placate to win political support for the reform. Since one major approach is to reduce the size of the financing gap by keeping part of the system PAYG (i.e. making only a partial transition), we would expect that the larger the IPD the larger the relative size of the public pillar that will remain in the reformed system, and this turns out to be the case (see Table 1).

Reducing the Value of the IPD and the Financing Gap

Before making the transition, all Latin American countries (except Colombia) reformed the old system by measures such as downsizing benefits, raising retirement age and levying penalties for early retirement, tightening eligibility for disability benefits, and changing the indexation method from wage to price indexation, thereby making the outstanding obligations smaller. It cuts the benefits that must be paid to those who stay in the old system, and also cuts the compensation owed to those who switch to the new system. Significantly, the benefits of older workers and current pensioners are, in practice, never cut (except gradually through a change in the indexation formula) possibly to avoid the strong opposition from these groups that would otherwise stop the reform.

All reforming countries have kept some workers and their contributions in the old system. This was accomplished by excluding some workers, such as those in the military or those over age 50, from the new system (as in Chile, Peru and Poland), or by giving all workers a choice but making the new funded pillar attractive mainly to young workers (as in Argentina and Hungary). In Uruguay, the new funded pillar is made compulsory for rich young workers and voluntary for others. Since those remaining in the PAYG system continue to contribute to it, this reduces the financing gap. The serious danger is that, in order to solve a short run cash-flow problem, these countries have increased their long term implicit debt by keeping participants in a financially unsound PAYG system. As such, this solution may turn out to be non-sustainable.

If workers are given a choice to switch or stay, the switching terms can be used to reduce the financing gap. The government chooses the minimum terms that will convince the desired proportion of workers to switch (i.e. it need not satisfy all workers), thereby saving considerable money in its transition costs (as in Hungary). Giving workers a choice also reduces opposition from those with a strong preference for a PAYG system. Generally, the younger workers switch

and the older workers stay. Whether deliberately or inadvertently, practically every reforming country has underestimated the number of workers who will switch and, therefore, the initial fiscal costs of the transition.

Some countries have retained a large public payroll-tax-financed pillar in the new system, so some of the revenue inflow continues even for workers who have switched and part of the debt remains implicit, paid off through the continuation of a PAYG benefit. This strategy is particularly useful in countries, such as Argentina, Uruguay, and Hungary, that have a large pension debt, making it hard to finance a transition to a largely funded system. In Argentina, the public pillar consists of a flat benefit, and in Hungary, an earnings-related benefit, both of them financed by a continuing payroll tax. In addition, workers can choose between a funded and a PAYG option for the second pillar in Argentina. The inflow of funds to the first pillar and the PAYG second pillar helps to pay current pensions. But if the public pillar or PAYG second pillar offer benefits that are too generous (actuarially unsound), the reform will not be sustainable in the long run – a danger that Argentina and Uruguay face. The long run prognosis is worse in Colombia which keeps its old PAYG system operating side-by-side with the new multi-pillar system.

Reforming countries issued recognition bonds (as in Chile) or promised a compensatory pension (as in Argentina) to each worker who switched to the new system, to acknowledge the value of the pension that he has earned thus far. This postpones the day when cash will be needed, since the recognition bond cannot be cashed until the worker retires and the compensatory pension is gradually paid off over the entire retirement period of the worker. Besides extending the pay-off period, the issuance of the recognition bond provides another opportunity to reduce the debt. Since it is a legally binding piece of paper, it gives the worker greater certainty that the pension debt will eventually be repaid, and in return for reducing uncertainty, the government can downsize the face value of or the interest rate on the bond (as in Peru).

Finding Alternative Revenue Sources

Chile built a pre-existing primary surplus in the general treasury, and used it to pay off part of the pension debt, but most other countries are burdened with fiscal deficits rather than surpluses.

A pre-existing surplus in the social security system could be used in a similar way. While the Latin systems generally did not have a surplus, Sweden has a buffer fund which will help finance the transition to a small funded pillar.

Peru and Poland are using the proceeds from the privatisation of public enterprises to pay off part of the pension debt – a cancellation of long term assets against long term liabilities. And Bolivia is also using privatisation assets for pension reform.

Argentina and Latvia planned to reduce evasion and increase coverage, thereby increasing system revenues; however, the reduced evasion has not yet materialised. This illustrates the important point that if the over-all payroll tax continues to be high, pension reform alone is not likely to reduce evasion and generate new revenues.

Using General Borrowing and Taxation

General treasury debt can always (in principle) be used to cover the remaining cash gap. Because of the fungibility of money we do not know to what extent resources for pension reform have come from debt versus other general revenue sources, but government borrowing has usually increased in the early years of the reform. In countries with a large implicit pension debt, use of temporary explicit debt finance is almost inevitable so that a heavy double burden of taxation is not imposed on the transition generation of workers who would consequently oppose the reform.

Some of this debt may be sold to the pension funds in the new second pillar; government debt and bank deposits have been the largest initial investments of the new pension funds. Uruguay, Bolivia and indirectly Mexico require that most of the funds be invested in government securities and bonds and all Latin American countries limit international diversification of pension fund investments, which virtually ensures large investments in government bonds.

Is this explicit debt finance problematic? Two pieces of evidence suggest that, so far, the financial market response has been positive. First, the IMF recently adopted the position that debt finance earmarked for a pension transition should be allowed beyond the permissible ceiling for other debt, because it is a swap of implicit for explicit debt in the short run and is intended to reduce the over-all debt, hence to improve fiscal solvency, in the long run. Second, Hungary's credit rating from Moody's improved after it adopted its pension reform, even though this required an increase in the explicit debt, for much the same reasons.

But eventually this debt must be paid off through taxation or cuts in government expenditure, or the object of increasing national saving will not be achieved (additional private saving will be offset by additional public dissaving if the implicit debt is simply changed to an on-going explicit debt). The redemption

of the debt through tax revenues and expenditure cuts has occurred in Chile, but it remains to be seen what will happen in the other Latin American countries.

Some of these measures also mitigate political opposition to reform. Bureaucrats and unions that helped to run the old system often do not want to phase it out. Maintaining a large PAYG pillar in the new system not only reduces transition costs, it also serves to palliate opponents of pension reform. Borrowing to finance the transition reduces the costs to, and therefore the opposition of the middle-aged workers. Since young and future workers will benefit most from the reform, it is appropriate and politically expedient that they should also pay part of the cost. But a consequence of both measures is that the benefits of a full reform are not received and, as a result, sustainability of the new system may be undermined. This conflict between pragmatism and principle, short run and long run, has been faced in almost all the reforming countries.

III. EFFICIENCY AND GROWTH EFFECTS OF REFORM: HOW LARGE ARE THEY?

The chief argument that countries have used for adopting the multi-pillar system is that it will enhance the financial sustainability and equity of the old age system, will have a positive impact on the over-all economy, and will thereby provide better protection for the old in the long run. To what extent have these predictions been borne out? Unfortunately, most systems have not been in place long enough to allow evaluation of their sustainability and equity. In general, some beneficial labor market effects are seen to come from the shift from defined benefit to defined contribution system. A beneficial impact on saving comes from the shift from PAYG to funding and a positive financial market impact comes from private management of these funds. However, these estimations should all be taken with a grain of salt, as experience and data are very limited and are heavily dependent on assumptions made in specifying the counter-factual.

Reduced Labor Market Distortions: Early Retirement and Informal Sector

In many Latin American countries, the informal sector and small firms in the quasi-informal sector absorb more than half of the labor force (ILO 1996), evading taxes and regulations in the formal sector. Although many other forces are, of course, at work, a shift to a DC system might reduce these incentives for informality, because it closely links benefits to contributions, especially if the contribution rate is relatively low and the rate of return on contributions is high.

In Chile, where the payroll tax for pensions is only 13 percent and investment returns exceeded 12% real during the first 16 years, compliance and labor market

formality have been encouraged. A careful study found that evasion had dropped to only 5% of potential contributors (Chamorro 1992, Schmidt-Hebbell 1997). Between 1980 and 1990, a period when the average share of informal employment in Latin America increased, this share dropped from 36% to 31% in Chile. Edwards (1997) shows that, given reasonable assumptions about the elasticity of labor demand in the two sectors, the pension reform was responsible for a decline of 2.2%-3.6% in unemployment and a 5-8% increase in wages (In contrast, in Argentina, where the over-all payroll tax is high, evasion and labor market informality do not appear to have changed).

Increased Long-term National Saving

When a country with an existing PAYG system replaces it with a multi-pillar system, national saving increases if benefits are cut or contributions are increased. A contribution rate increase that goes into the worker's own DC retirement account may be more politically acceptable than increasing saving through a tax increase that goes into the general treasury or social security bureaucracy. This seemed to be the judgment of the OECD countries that reformed, in part with the aim of increasing national saving and thereby economic growth.

Of course, this increased saving might not materialise. Mandatory saving may not increase total private saving if individuals find ways to offset such saving against other voluntary saving or accumulated assets. In that case, capital may accumulate and returns increase in the mandatory pillar, but they may commensurably decrease in the voluntary pillar. With perfect capital markets, private saving will not increase at all, since people will simply borrow against their mandatory pension saving. A number of simulations have been run projecting the impact on saving of a shift to a fully funded scheme. Not surprisingly, the results turn out to be highly dependent on the assumptions, especially the assumptions about the crowd-out of voluntary by mandatory saving and the method of financing the transition.

In planning its mandatory occupation scheme, Australia assumed 50% crowd-out and higher for workers who were already covered by voluntary occupational plans. This implied that, in the long run, when the contribution rate was projected to reach 12%, net national saving would increase by 1.5% of GDP, or 70% of the current net national saving rate (2.2% of GDP). Australia, of course, had the advantage that the government did not have to borrow to pay off a pension debt, since the second pillar was an add-on rather than a diversion of previous contributions.

The only country that has had a mandatory saving plan long enough for actual saving effects to be estimated is Chile. Data from Chile are problematic

and the savings ratio is erratic, complicating this analysis and making the results highly sensitive to the starting date for comparisons. According to Corsetti and Schmidt-Hebbel (1997), private sector saving as a percentage of GDP increased from almost zero in 1979-81 to 17% in 1990-92, while private consumption decreased commensurably. Their regressions attribute half of the decline in the private consumption ratio to the growth of Chile's funded pension plans and correlated developments such as capital market deepening. Time series regression analyses by Haindl Rondonelli (1996) indicate that pension reform accounts for 6.6 of the 9.9 percentage point increase in the national saving rate in Chile (from 16.7% of GDP 1976-80 to 26% 1990-94).

Agosin, Crespi and Letelier (1996) are more skeptical, because they find that the main source of increased private saving was private corporations, whose saving gradually jumped from 6% of GDP in 1978-85 to 23% in 1994. Voluntary saving of households was negative (about 4% of GDP) throughout this entire period, indicating consumer dissaving or borrowing. However, forced saving through the new pension system gradually grew to almost 4% of GDP, and this was not offset by greater voluntary dissaving. This 4% magnitude is roughly consistent with the findings of Bosworth and Marfan (1994), that the pension reform increased saving 3% of GDP. The risk remains that the growth of consumer credit, possibly fueled by the pension reform, could increase consumer dissaving and offset some of these gains in the future (Holzmann 1996).

While these analyses focus on enhanced private saving, other studies emphasise the impact of pension reform on public saving and dissaving. While on the one hand, pension reform may decrease public dissaving as governments no longer need to borrow to cover escalating pension costs, on the other hand, it may increase public dissaving if the build-up of pension reserves relaxes fiscal discipline and makes it easier for governments to run large deficits or if the transition is fully financed by borrowing. Estimating the impact on public saving requires modeling government behavior – how governments will behave after pension reform and how they might have behaved in the absence of reform.

Chile had to finance a pension transition, in part through deficit finance, which decreased national saving (Agosin et al 1996). Observing that the pension-related deficits of the government were larger than the inflows to the new pension funds until 1989, Holzmann concludes that during the 1980s the new pension system had a negative effect on national saving. However, he appears to overlook the fact that redeemed recognition bonds became part of private pension saving and were not immediately consumed. Correcting this point alone generated a positive savings effect as early as 1985. Also, the Chilean government financed

the transition in part out of a large budgetary surplus that it accumulated in preparation for the pension reform and in part out of further cuts in government spending, both of which added to public saving. Moreover, the deficit induced by the transition was in the short run while the increased private saving may persist in the long run. As a result of all these factors, it appears that the total national saving in Chile is higher than it was pre-reform and probably higher than it would have been without the reform.

Thus, preliminary evidence indicates that pension reform can have beneficial effects on long term national saving and capital formation – increasing it by 10 to 30% of the ex ante gross rate and even more of the ex ante net rate – especially if it is accompanied by a broader set of policies designed to constrain consumer and government borrowing. Moreover, the savings are committed for the long term and funneled through financial institutions that can help produce an efficient allocation of capital.

Financial Market Development

One reason for favoring private management of pension funds is that this will develop a set of financial institutions – investment managers, insurance companies, and banks – that are essential for economic development. This is especially important for middle-income countries that require financial market development for economic growth.

Even in Australia, it is expected that the financial market will grow as a result of the mandatory second pillar. Insurance companies are expanding, developing a new line of products, including annuity products, to meet the anticipated demand stemming from pension funds. One of the main effects of the reform may be to shift the allocation of private saving away from home ownership, which is now the predominant form because of investment, and toward other more productive forms that flow through the financial markets. In Switzerland also, growth of the life insurance industry, investment companies and mutual funds, have been spurred by mandatory funded pension plans. And corporate governance has been gradually changing, as institutional investors have been demanding disclosure and better performance.

But the strongest evidence for this expected growth effect comes from Chile. During the five years preceding the adoption of its new system, Chile prepared the groundwork by organising a primary market for treasury bonds, reforming its laws governing mutual funds, corporations and securities, privatising banks, authorising a price-indexed mortgage bond market and liberalising the provision of insurance and reinsurance (Valdes-Prieto 1997). After the new system was introduced, this process continued – financial markets became more liquid,

as the number of traded shares on the stock market and their turnover increased; demand was created for the equities of newly privatised state enterprises; information disclosure and credit-rating institutions developed; the variety of financial instruments including indexed annuities, mortgage and corporate bonds grew; and asset pricing improved. Many of the new pension funds were joint ventures with international companies bringing in foreign financial expertise. Econometric analysis suggests that financial market efficiency induced by the reformed pension system (and other factors with which this was closely correlated) increased total factor productivity by 1% per year, or half of the increase in total factor productivity, in Chile (Holzmann 1996).

Summary

Given the high correlation between pension reform and other reforms that were simultaneous in many reforming countries, the controversy surrounding the determinants of private saving and labor supply (e.g. what is the rate of crowd-out and which variables are endogenous?), the even greater uncertainty about the determinants of public saving (e.g. what is the counter-factual?), and the difficulties in modeling feed-back effects, all these econometric and simulation results are highly sensitive to model specification and the topic clearly requires additional evidence and research. Nevertheless, a small but growing body of empirical evidence indicates that pension reform has produced positive efficiency and growth effects, particularly through increased national saving and financial market development.

IV. NEW PROBLEMS AND ISSUES

While many efficiency gains seem to have been achieved, the new systems have also created new problems that remain to be solved. The major problems that have surfaced so far concern high administrative costs, financial market distortions, and inefficient or inequitable interactions between the public and private pillars. Another problem on the horizon – the ability and cost-effectiveness of private markets to annuitise the DC savings – has not yet emerged in practice because few workers have retired.

Administrative Costs

Preliminary evidence indicates that workers are ill-informed, do not make decisions based on investment returns, and pension funds incur high sales commissions and other marketing costs to attract them. In Chile and most other Latin American countries, fees are front-loaded, meaning that workers pay a one-time fee on new contributions rather than an annual fee based on assets. Specifically, this one-time fee is about 2 percent of wages, or 15-25 percent of

new contributions, in virtually all cases, and about one-third of this is for marketing, particularly sales commissions.

These numbers appear very high. To understand their impact on net returns, it is necessary to convert these one-time charges on contributions into their equivalents in terms of annual charges on assets, a conversion which depends on how large the stock of assets is relative to the contribution flow. Simulations show that if the current fee schedule is maintained, the average Chilean worker who contributes for 40 years will pay the equivalent of less than 1 percent of assets per year. This is slightly less than mutual funds' charge for voluntary retirement savings accounts in the US; it is not excessive from the lifetime point of view, in comparison to a competitive market retail price for individuals. Moreover, it is not excessive in comparison to a less expensive system that produces much lower gross and net returns.

However, this fee structure is a problem in the early years of a new system – when all accounts are small, fees as a proportion of assets are large. It is particularly a problem for workers who will be in the system for only 20-30 years, such as workers who were relatively old upon the date of reform. It is a problem for transient workers who move in and out of the labor force, such as women, especially if their contributions are concentrated in their later years. The higher lifetime fee as a percentage of assets and hence the lower net return received by these groups is a matter of concern on equity grounds in a mandatory system. Besides the equity consideration is the practical consideration that high costs may lead these groups to evade. Moreover, it would be desirable to find ways to increase administrative efficiency for all workers, since this would increase their rates of return and replacement rates.

Some analysts believe that administrative costs would be lower under a group plan and hence favor choice of such a plan by the employer or union, as in the OECD countries. Such group plans may be better positioned to benefit from economies of scale in decision-making, greater financial expertise, and lower marketing costs. Indeed, money management costs for institutions are much less than those facing individuals in the retail market. However, as discussed above, because employers or union representatives make the investment decision while workers bear the risk, such plans can also open the door to financial abuse and principal-agent problems: employers might choose investment managers or strategies that benefit them even if this implies lower returns for their workers.

Still a third alternative exists for handling the administrative cost problem – instead of open entry, the government might auction off operating rights to a

limited number of investment companies, from among whom the workers then choose. The contract could specify the maximum risk, offer a reward for high returns as well as a penalty for low returns; and choose the winners, in part, according to who charges the lowest administrative fees. An auction process was recently used in Bolivia, which, as a result, expects to have much lower administrative costs than Chile. Or, instead of letting the fee be determined in an auction for a pre-specified number of winners, an alternative is to set a low fee ceiling and open entry to all qualified pension fund managers willing to abide by that limit.

However, there is need to insulate the auction and investment process from political manipulation, corruption and collusion, and to incorporate incentives for good performance, when entry and price are limited. Unless this is done, these mechanisms may feature lower marketing expenditures, but may also feature lower investment returns.

Financial Market Distortions

Multi-pillar systems have been given credit for stimulating the growth of financial markets in middle income countries where this is considered to be an important input into economic growth. However, as these systems have been implemented, we also observe ways in which they have distorted the operations of financial markets.

This problem stems from the fact that policymakers want workers to make investment decisions and bear the corresponding risk, but they also want to limit this risk to avoid a disaster. Relatedly, the government must offer guarantees in order to overcome political opposition to reform, and it must also impose investment contraints to avoid the resulting moral hazard problem. The contradiction between financial market development and detailed regulation can potentially lead to malfunctioning markets, particularly if the pension funds are relatively large players in the market.

For example, in Chile and several other Latin American countries, pension funds (AFPs) are heavily penalised if they deviate more than 2 percentage points from the group mean. This leads to herding behavior, as each AFP tries to look very much like the others. Rather than having a choice of different points on the risk-return frontier, stemming from differing asset allocations – as would be the case in a well-functioning financial market – workers have the much less meaningful choice from among the companies that provide the same asset allocation and risk-return mix. Also, workers are required to invest in one AFP instead of diversifying among several and thereby reducing their risk; of course,

given the lack of meaningful portfolio differences among the AFP, the gains from diversification would be small in any event.

In Mexico all workers are required to enter the new system, but those currently in the labor force are given the right to return to the old pay-as-you-go system upon retirement, if this allows them to fare better. This insurance scheme was included to acknowledge the 'acquired rights' of workers and, therefore, avoid a legal challenge to the reform efforts. However, it creates an obvious moral hazard problem – workers have an incentive to gamble with their pension funds, accepting too much risk, since they are substantially protected from loss. The Mexican authorities have avoided the moral hazard problem by greatly limiting the AFORES' choice of investment strategies: at least 65% of all assets must be invested in government bonds (currently the AFORES are 99% in bonds) and international investments are proscribed. Since workers have no real choice of portfolios, moral hazard is avoided; but the flow of funds through the AFORES to the financial market and the private sector is also avoided.

Bolivia initially intended to invest most of its revenues from privatisation (targeted for pension reform) abroad, to protect it from excess government borrowing and other country-specific risks. However, in order to overcome union opposition to these reforms, the government had to take on the responsibility for paying off the implicit debt of the complementary pensions that unions had negotiated in the past. To cover these and other expenditures, the final arrangements decreed that initially almost all of the revenue flow from privatised assets would be invested domestically, in government bonds. In Uruguay, to help cover transition costs, AFPs are required to put at least 80 percent of their assets into special issue government bonds. While the risk-reducing benefits of international diversification and diversification into private sector securities is one of the rationales for pension reform, in fact, most Latin American countries require or strongly encourage almost exclusive domestic investments, with a heavy concentration in government bonds. Even in Switzerland, regulations tightly constrain investments and require a 4 percent nominal guaranteed rate of return in the second pillars, thereby leading to a very conservative investment strategy, which until recently consisted largely of bonds.

These distortions should not be exaggerated, because the guarantees and limits on competition and portfolio diversification are likely to fall through time, as the schemes mature. Chile started with rigid restrictions but has gradually opened up the system to greater diversification, including international investment. Mexico is now considering allowing each AFORES to offer more than one type of portfolio, together with worker diversification among different portfolios. Along

similar lines, pension funds might be allowed to differentiate their asset allocation strategies applying different risk limits depending on the type of portfolio chosen. This would allow workers to choose their preferred point on the risk-return frontier and help the financial markets to operate better, but it would also require substantial worker education.

The Public Pillar – Its Distributional Impact and Interaction with the Private Pillars

Because traditional pension systems are typically both inefficient and inequitable, they offer an opportunity to improve both. However, we do not know whether, or the extent to which, multi-pillar systems have actually succeeded in achieving a better distributional outcome. Closer examination suggests that the devil is in the details and some of the results may be surprising. Also to be noted are the complex interactions between the first and second pillars, arising from the need to deal with the efficiency-equity trade-off.

Different countries use different mechanisms to limit expenditures in their public pillar, and the distributional impact depends closely on the rationing mechanism chosen. For example, Chile's public pillar is very modest – workers are eligible for a minimum pension guarantee of about 27 percent of the average wage after 20 years of contributions, meaning that the government tops up the benefits of these workers to the guaranteed point if their own accumulation in the second pillar does not suffice. Very few workers will qualify for this top-up, since anyone with more than 30 years of contribution is likely to get a higher pension on his own. The main beneficiaries, therefore, will be low earners who worked only for 20 years, disproportionately females, who have limited labor market attachment. This arrangement has the negative effect that it may encourage evasion or labor force withdrawal for low earners after 20 years of contributions, because further retirement saving may commensurably reduce their public subsidy. However, it has little impact on work incentives for middle and high earners.

In contrast, in Argentina, a flat benefit of about 28 percent of the average wage is paid to all workers who have at least 30 years of contributions (plus an additional 1 percent for every year above 30 up to 45). This sounds more generous and less distortionary. However, Argentina severely limits the eligible set of recipients to workers who spent most of their adult lives in the formal labor sector; low earners and women with transient labor force participation are only eligible for a reduced flat benefit that begins at age 70. The UK pays a flat benefit that is only 16 percent of the average wage, but it does not set a required number of contributory years. As a result, its gainers are exactly those who are excluded from the Argentinian public pillar. But they are not big gainers because

the flat benefit is below the poverty level and must be supplemented with other means-tested benefits. Switzerland's public pillar is earnings-related and hence appears less redistributive than that in Argentina or the UK, but the payroll tax which finances it is levied on all earnings (that is, there is no ceiling on taxable earnings as there is in Argentina or the UK), which works in the opposite direction.

There are examples of the sometimes unhealthy interaction between the first and the second pillar. Australia has a means and asset tested public benefit which is received, in whole or part, by the majority of the population. This proportion will probably decline as a consequence of mandatory superannuation, but, in the absence of mandatory annuitisation, people may spend their retirement savings quickly in order to qualify for the public pension. In Sweden, the existence of the guarantee pension, that is gradually phased out and is financed by a tax on earners, creates a work disincentive for low-income groups. In Chile, the minimum pension guarantee has a similar effect. These distortionary effects on saving and work are avoided by a completely flat pension, but at the expense of higher costs or greatly restrictive conditions, as in Argentina. These examples illustrate the difficulty in designing a public pillar that is affordable, accessible, and that does not impede the efficiencies that are supposed to be achieved by the private pillar, the three criteria that are, to some extent, mutually incompatible.

The set-up of the second pillar also has distributional consequences. If flat fees per account are permitted, it will reduce net returns for low earners more than for high earners. Flat fees were charged by the Chilean AFPs initially, but the unfavorable publicity they encountered was one factor leading them to drop this practice; they are now used by some AFORES in Mexico. If low income workers tend to choose more risk-averse or less-informed investment strategies than high income workers, this will lead them to have lower replacement rates in the future. Multi-pillar (as well as traditional) arrangements also affect men and women differently, because of their differing labor market experiences.

IV. CONCLUSION

As their populations have aged, governments have become increasingly aware of the need to choose a reliable and cost-effective method of old-age support. As economic growth has slowed and markets have become globalised, countries have become increasingly aware of the importance of raising productivity through improved labor market incentives and capital accumulation. As concerns about income disparities and poverty have grown, it has become increasingly crucial to target additional protection to low wage-earners who have grown old. A multi-pillar system that includes a mandatory publicly managed tax-financed pillar for redistribution and a mandatory privately managed funded defined

contribution pillar for retirement savings has seemed to many countries most likely to accomplish these objectives.

Thus, several Latin American, OECD and transition countries have already adopted multi-pillar systems, and they are under serious consideration in many more. In Latin America and the transition economies, the old system had been discredited before they made this switch. In most of the OECD countries, tradition was not discarded but rather it was built upon and modified. Nevertheless, both sets of countries ended up with basically similar multi-pillar structures. Going beyond the 'why' and 'how' is the 'so what'? Have the reforms been sustainable and equitable and have they made any difference in the welfare of the old or young? Both groups can benefit only if the size of the pie increases. On sustainability and equity we don't yet know, because few people have yet retired under the new system. On growth, preliminary evidence from Chile, the only country that has had this system long enough for empirical studies to be conducted, supports the existence of a positive effect, stemming from increased labor market efficiency, mobilisation of long term saving and financial market development. This suggests that the reward may be worth the effort of a carefully planned reform that takes into account its impact on the broader economy. At the same time, the new solutions have also created new problems – high administrative costs, restrictions on financial market flexibility and potential perverse interactions between the public and private pillars – that need to be addressed.

One of the striking points that emerges from this survey of reforming countries is the great variation in designs, within the multi-pillar rubric. Although all of them have adopted some combination of public and private, funded and PAYG, DC and DB, the relative size of each pillar, the method of redistribution in the first pillar and the choice of investment manager in the second pillar all differ strongly across countries – a manifestation of the path dependency of social security reform. Today's institutions set the power structure and financial constraints that determine what is feasible tomorrow. Countries that reform in the future can learn from the experience of those that did it before, but they are also likely to try their own experiments.

Notes

1. For further details on the Latin American and OECD reforms, see papers in *Annals of Public and Cooperative Economics*, Vol. 69, No. 4, 1998, *New Ideas About Old Age Security*, World Bank, 2001 and numerous World Bank working papers.
2. The implicit pension debt (IPD) is the present value of the pension promises that are owed to current pensioners and to workers according to their years of participation in the old system. The IPD is inherent in PAYG systems, where workers expect to

get a specified pension in return for their contributions, but assets are not accumulated to cover this; instead, the obligation is covered by implicit IOUs of the government. The IPD exceeds the conventional explicit debt (backed by government bonds) in many countries and exceeds 200% of GNP in some cases (Table 1). It is especially large in countries with high coverage, generous benefits and older populations. Although this debt is not always legally binding, it tends to be socially and politically binding; governments cannot easily renege on these obligations. Reform often converts (part of) the IPD into explicit debt, which creates a barrier to reform in countries that do not want to make their debt transparent. Most developing countries have small IPDs because of their low coverage rates, and are therefore in the enviable position of being able to change their systems to partial funding before the debt becomes unmanageable. The concept of the IPD is less applicable in those countries where old age benefits are universal rather than employment-related and are financed out of general revenues rather than from earmarked payroll tax, since in these countries workers do not have a special claim based on past service and contributions. In these countries, typically, the second pillar is financed by a new payroll contribution while the financing of the first pillar continues as before.

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CHINA'S PENSION SYSTEM AND CONSTRAINTS ON REFORM

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INTRODUCTION

China is a transition economy country trying to introduce market mechanisms while at the same time having to deal with a variety of other problems, such as social security reform, a rapidly ageing population, and enterprise reform resulting in high unemployment and the ever-present prospect of social unrest. Social security reform has been viewed as central to the overall economic reform effort since the existing, but largely insolvent, enterprise based pension system frustrates the country's efforts to rationalise state-owned enterprises (SOEs). While China has adopted the World Bank's "three pillar model" of social pool, individual accounts, and supplementary pensions, the challenge for China is to implement a national centralised scheme to replace the existing decentralised enterprise system while dealing with other economic and enterprise reform issues which act as constraints on the authorities. This paper reviews China's current political and economic environment, presents a framework for conceptualising pension reform efforts, and then examines the Chinese social security system and the difficulties China faces in implementing the "three pillar model".

CHINA'S POLITICAL ECONOMY

Since Deng Xiaoping announced his open door policy in 1978, China's economic progress has been nothing less than spectacular. In constant 1995 U.S. dollars, real per capita income in China increased from $168 in 1980 to $727 in 2000 (OECD 2002). "In 1978 it was estimated that nearly 60% of the population was living on less than US$1 a day while in 1995 this had been reduced to just 22% of the population" (Armstrong 1999). Thus, government policy over this period lifted several hundred million Chinese out of poverty.[1]

While we recognise the successes, there is the need to be balanced when appraising China's economic progress. First, while the averages suggest impressive growth, there have been significant differences in regional and rural-urban growth

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rates in China and many parts of the country remain woefully poor. Urban-rural income differences are very high and 70% of China's working population is still employed in agriculture. Several Chinese cities, Shanghai, Beijing, Tianjin, and Guangdong, rate very high on the United Nation's Development Program's Human Development Index, comparable to Hong Kong and Singapore, while rural provinces such as Tibet, Qinghai, and Gansu compare to Djibouti and the Sudan (Du and Phillips 2002). Oxford Analytical reports that China's gini coefficient increased from .33 in 1980 to .45 in 2001 and that the bottom 60 percent of the population has a smaller share of total income in 2001 than it had 20 years ago, while the top quintile increased its share of total income by 15% since 1980 (*Asia Pacific Daily Brief*, June 25, 2002).

Second, China retains many vestiges of its centrally planned pre-reform economy. One remnant is the inefficient and bloated state-owned enterprises (SOEs), which, while declining, still account for 28% of output, 44% of urban employment, and 70% of government revenue (*The Economist*, September 28, 2000). The state-owned enterprises are terribly inefficient, overstaffed and burdened with obligations for social benefits, deeply in debt, and tainted by corruption (Dixon and Newman 1998: 55). The SOEs and state banks are, however, fundamental since they are currently playing a central role in the social safety net with the banks ensuring funds are available to SOEs to continue to operate, thus avoiding extensive and painful unemployment. Typical state-owned firms may have 2 official retirees for each official worker, although it has become common to keep employees on the payroll despite having no work to do.

The banks are for the moment awash with money as depositors and savers more generally have few investment alternatives. The availability of funds in government-controlled banks has allowed the government to direct lending to SOEs despite their failure to pay existing obligations or their general lack of creditworthiness. The availability of credit has, in turn, allowed the SOEs to continue to employ workers and produce goods for which there is a limited or no market. There is need, therefore, to develop alternative investment instruments, other than bank deposits and a highly speculative stock market, so that individuals can rely on individual privately managed pension accounts and ultimately earn higher returns.

Third, China is rapidly ageing and, unlike the developed countries, it is ageing while still relatively poor. It is not only the absolute number of elderly but the pace of population change which is important. The proportion of people in China over the age of 60 will double from 10% to 20% in just 27 years (1999-2026) (Clark 2002). By 2030, 16 percent of China's then 1.5 billion population

will be over 65 (Pitsillis, 2002), and “by 2050, the ratio of workers to pensioners will decline to about 3 to 1 from 10 to 1 in 1995”(www.worldbank.org/html/extdr/extme/ampr_007.htm). Among the fast ageing countries, China is also the poorest. China will also experience individual ageing as reflected in higher life expectancies. “The number of the oldest old people, aged 80 and above, is currently estimated to be about 12 million but will reach 27 million by 2025 and 90 million by 2050.” (Du and Phillips 2002). This along with a shift from communicable to non-communicable conditions (such as heart attacks, depression, strokes, cancer and medicalisation of social and psychological problems), and the rapid introduction of more expensive medical technology is also likely to significantly increase China’s national health care expenditures. Finally, because of rapid development, the elderly cohort is likely to have a higher percentage of the poor than other cohorts.

Against this backdrop of economic change, China has embarked on a unique transition attempting to recentralise control over the social security system[2]. China previously centralised the social welfare system after the Communist revolution in the late 1940s and adopted a decentralised enterprise system during the Cultural Revolution in the 1960s. The current reform efforts are viewed as critical, since the national pension fund deficit doubled between 1999 and 2000 and now totals more than 30 billion yuan,[3] and provincial and city schemes are facing insolvency.[4] While one may take some solace in the fact that the rulers in Beijing appear to understand the links between the social security system and enterprise reform, corruption, unemployment and civil unrest, it is these linkages that make reform so difficult.

With total government obligations, non-performing loans and accumulated pension and social welfare obligations, estimated to be more than US$1.1trillion, roughly one year’s gross domestic product for the country, China faces a daunting task getting its financial house in order. The challenge is to simultaneously design a social insurance system and fund it while weaning SOEs from their dependence on “easy money” from the banks, shifting redundant employees from the SOEs into other entities and into a credible social safety scheme while avoiding social unrest, evolving the financial markets to be mature enough to offer reasonable rates of return on retirement investments and reducing reliance and expectations on any new or existing state system

Finally, these reforms need to be accomplished in a political environment. On the political front, Hu Jintao has succeeded Jiang Zemin as General Secretary of the Communist Party, but his position is not totally secure, as he was not Jiang’s choice to succeed him. Behind the scene, factional politics is likely to

dominate political decision-making in the near future making any reform initiatives, regardless of the substantive area, difficult.

AN AGENDA FOR REFORM

There are five core functions which any social security organisation must perform (Ross 2000). These are: reliable collection of contributions, taxes and other receipts, including any loan payments; payment of benefits for each of the schemes in a timely and correct way; securing financial management and productive investment of provident and pension fund assets; maintaining an effective communication network, including development of accurate data and record-keeping mechanisms to support collection, payment and financial activities; and production of financial statements and reports that are tied to providing effective and reliable governance, fiduciary responsibility, transparency, and accountability.

At the macro systemic level, a well designed social security system should be broad-based, actuarially sound and sustainable, provide reasonable levels of post-retirement income (as determined by a considered evaluation of alternatives and trade-offs within the society) coupled with a *safety-net* for the elderly poor. Clearly, all of this has to be done within the context of macroeconomic requirements and constraints, including economic efficiency, incentives to work and to save, fiscal flexibility and international competitiveness. Effective reform needs to be directed toward better organisational efforts and the broader system design issues.

CHINA'S PENSION SYSTEM

China's pension *system* consists of at least three distinct arrangements. Each arrangement is in a degree of flux, with regional and local variations and gaps between design and implementation, as the central government tries to unify the system taking into account regional differences. It is estimated that about 200 million workers out of a total of 700 million workers in 1998 (28.6 percent of workers) were nominally covered by a pension (Wu, et al. 2000). The coverage among the urban workers is about 50 percent (Table 1).

Like many developing or traditional societies, China relies on the family to provide old age support for the vast majority of its population. Article 10 of the Law of the People's Republic of China on Protection of the Rights and Interests of the Elderly which became effective in 1996 stipulated that "older persons shall be provided for mainly by their families who should care for and look after them" and Article 11 elaborates on the nature of these duties (Du and

Phillips 2002). This segment of the population, generally employed either in agricultural production or the informal sector, is outside of any formal system. A 1994 national survey showed that nation-wide 57% of the elderly primarily relied on children or spouse for economic support, 25% on work and 15.6% on a pension (Du and Phillips 2002). Table 1 presents the differences in financial support among the elderly across cities, towns and rural areas which highlight the urban-rural differences in China (Du and Phillips 2002). With longer life expectancies, lower birth rates and urbanisation, the burden on children is increasing and raises concerns about the adequacy of traditional care. In China, the adoption of the one child policy, at the limit, suggests a high dependency ratio for traditional care of two married working children taking care of four retired parents – a very heavy burden.

Table 1: Source of Financial Support Among Elderly by Place of Residence

	Total	City	Town	Country
Children or spouse	57.1	34.9	53.1	64.2
Work	25.0	14.3	14.0	29.2
Pension	15.6	48.5	29.8	4.4

Source: Du and Phillips 2002.

Pensions for rural farmers were introduced in China only in 1991.[5] This scheme involved voluntary personal contributions supplemented by a collective subsidy with individuals contributing for ten years to be eligible. The minimum and maximum monthly contributions were US$ .24- US$2.40 per month. Of the five hundred million rural workers, only 61 million were covered under the rural pension scheme with each having an average balance of US$311. In China, many of the rural poor are too poor to be expected to contribute to their retirement savings. Moreover, any accumulated balances are likely to be used to offset personal and natural calamities over life, rather than being particularly earmarked for old age. The *Economist* reported that farmers were reluctant to participate in the scheme because returns were low and they risked corrupt officials pinching their money (November 2, 2002). The government stopped promoting the scheme in the late 1990s. In late 2002, a group of Qinghua University researchers proposed a replacement scheme which was portable – for rural workers moving to the cities – and involved individual accounts privately managed. We are mindful of the high costs of managing small individual private accounts and believe that it is unlikely that this scheme will meet the needs of the current middle-aged and older rural populations who are likely to remain dependent on government-funded benefits. The 10th five year social security plan (2001) essentially ignores the issue of the rural as well as the migrant workers.

The second arrangement is the pension and social security system that emerged from the turmoil of the Cultural Revolution to address the needs of

workers in state-owned enterprises and urban workers.[6] Prior to the Cultural Revolution, workers were covered under the Labor Insurance Fund (Zhu 2002). Under the enterprise based social security system which emerged following the Cultural Revolution, a worker was provided with lifetime protection covering income, housing, health insurance and pension. The retirement age was 60 for men and 55 for women with the exception of women engaged in physical labour (age 50 after 15 years of service) and 60 for women engaged in agriculture (Ding 2002). These distinctions were carried over to the design of pension schemes with further differences based on the nature of firm ownership resulting in a very complicated system. There were additional differences depending on whether the pensioners retired before the 1997 reforms (called "old men"); were working in 1997 but not retired (called "transitional or middle men"); or worked following the 1997 reforms (called "new men").

In recent years, many listed state-owned companies, encouraged by their Ministries, divided themselves into two entities at the time of listing. One entity, essentially a shell, generally retained the marginal assets and the pension obligation to retirees. The valuable assets were transferred to a new entity. The shell company, in turn, received shares in the new and more valuable entity, but often these were not liquid. Receipt of these pensions is dependent on the future viability of the listed entities. The design of the scheme recognised that pensions were not portable and benefits were tied to the employer. Moreover, the scheme made it difficult to restructure SOEs, because unnecessary workers were retained since the social safety net was tied to employment. Most state-owned businesses have not listed and retain the obligation to pay current and future pensions. Some companies have as many retirees as workers and such high dependency ratios, in turn, raise the issue of financial sustainability.

In 1997, the government adopted the 'three-pillar' World Bank model involving a social pool, individual accounts, and supplementary pensions (Wu, et al. 2000).[7] The three pillar model seeks to unify the state enterprises and the private sector. This system is designed to try to solve several problems, including portability and a high dependency ratio within the government system (Zhao and Xu 2002). Individuals participate in a national pension scheme involving employer and employee contributions. Most of the money paid into the individual pension accounts does not go into independently managed investment funds, but is used to meet existing commitments. While these are called 'individual accounts' – this term refers more to portability than to balances – it is purely notional with administered rates of return. The government-set rate of return is lower than that offered on government bonds (*The Economist*, June 13, 2002).[8] The low return acts as an implicit tax on pension wealth (Takayama, 2002). Zhao and Xu (2002)

highlight that these efforts to develop a unified system address the high dependency ratios found in the state-owned enterprises by incorporating young private sector new hires into the scheme. But unless the key design features noted below by Sun and Maxwell (2001) leading to deficits in the current pension system are addressed, inclusion of new private sector hires may generate even larger deficits in the future.

With some regional variation, contributions under the first pillar into the social pool, are supposed to be funded by a 20% of payroll payment by the employer.[9] Employees are supposed to contribute 8% of the salary to their individual accounts. Collectively, these two pillars with a contribution rate of 28% of payroll are supposed to give a wage replacement rate of 56% (www.britishembassy.org.cn/english/about_china/business/sr_pen.shtml). Although this new system is technically in place, in practice, the system does not exist. Loss-making and technically bankrupt SOEs are unable to contribute to the pillar 1 pool because they do not have the funds to make these contributions. The authorities have raided the individual pillar 2 accounts to top-up the pillar 1 social pool. In addition, the central authorities have had to make on and off-budget supplementary top-ups. The shortfall, US$4.3 billion in 2000 (*South China Morning Post* June 25, 2001) and estimated to be cumulatively as large as US$231 billion over the next 25 years, is being made up by the Ministry of Finance and is viewed by them as manageable.[10] In 2000, state subsidies were 17 percent of the aggregate pension benefits (Takayama, 2002).

Sun and Maxwell (2001) identify four reasons for these deficits: (i) the growth in the number of retirees (including those who retired early), (ii) a decline in the number of SOE employees contributing to the system, (iii) a decline in the tax collection rate with reported collection rates of just 80% in 1997 (although actual rates may, in fact, be lower), and (iv) widespread underreporting of taxable wages. Sun and Maxwell also report that private sector employers are not registering to participate in retirement schemes.

Benefits to retirees with fifteen years of service consist of two parts. The first part is 20 percent of the average regional wage paid in the preceding year. The second part is a monthly amount equal to 1/120th of the individuals' notional account balance. Since part of the benefit has been tied to current lagged wages, there is some protection against inflation. However, from an actuarial perspective, the scheme initially does not appear to be sustainable, since the obligation to pay is for life while the individual's contributions self-extinguish in something more than ten years, depending on the rate of return credited to the notional account balance, leaving an unfunded liability.[11] Part of the shortfall is made up from a

pool consisting of employer contributions to workers who died prior to collecting ten years of benefits. Employee contributions are inheritable if the retiree dies before collecting ten years of benefits.

To fund the government's obligations under the social pool, the plan, until very recently, was to accelerate the *privatisation* and listing of viable state-owned enterprises and earmark 10% of the proceeds from these initial public offerings to fund national pension obligations.[12] In addition, Beijing planned to sell off the shares it owned in companies that had already listed (*Asian Wall Street Journal*, January 30, 2001). This scheme, it was estimated, could provide between US$40 and US$100 billion. The share sale was envisioned to free SOEs from pension obligations, introduce the discipline of the market in the state-owned enterprises by weaning them away from the state bank loans,[13] and help in the reform of the financial sector by expanding investment options.

On June 24, 2002, the government announced that it was backing away from the share sale scheme, as the proposal and the threat of a large increase in the number of shares available, had depressed local share prices by 30 percent. The backtracking on this reform effort highlights China's difficulties. Stock markets are still relatively new and the government still views one of its roles as buttressing share prices. The authorities also are fearful of alienating middle class investors who must be courted, both politically and economically, over the long run to purchase future share offerings in state-owned enterprises.[14] The uncertainty of government policy spooked investors who had come to expect that one only made money in the stock market. When the government announced the change in policy, both the Shanghai and Shenzhen stock exchange indices jumped more than 9% in one day.

Press reports the following day read: "Economists [had] regarded the construction of a social welfare network, led by the creation of a funded pensions system, as perhaps the most crucial of China's reform tasks" and "Without it, state companies are restrained by fears of social instability from making the mass redundancies they need to" (*The Financial* Times, June 25, 2002, p17). The belief was that the need for political stability surrounding a leadership change later in the year, and which has now occurred, required a change in policy. By the end of 2002, the Government was preparing to expand foreign equity investments in the country by opening up foreign investment in the 'Class A' domestic share market to foreigners.

Under the third pillar, China recognises the need to introduce what are called in China, *supplementary pensions*, involving voluntary tax-advantaged

retirement savings accounts. Some work has been undertaken on the legal and regulatory structures, which would be appropriate for supplementary pensions, but as of late 2002 the authorities have taken no firm decisions.[15] As part of the effort to respond to the regional variations and the need to experiment at the regional level, the Asian Development Bank in 2002 awarded two technical assistance contracts to international consultants to assist Liaoning Province develop an information system to administer individual accounts, collect contributions and manage payments.

The state enterprise pension system covered about 18 percent of the labour force in 1999 (Table 2) and about 41.3 percent of the urban labour force (Zhao and Xu 2002). While close to one-third of the 113 million people working in state enterprises at the peak of employment in 1995 have been retrenched (*The Economist*, June 13, 2002), estimates are that a further 40 million state enterprise employees may lose their jobs following China's accession to the World Trade Organisation. In addition, the government has embarked on an effort to reform the civil service and has announced plans to cut the public sector by 50 percent, although the extent of real cuts is uncertain. We might view these coverage rates as potentially a high water mark for years to come since the public enterprise and civil service sectors (with high rates of coverage) are likely to shrink over the next several years (with more cuts likely from public enterprises than the civil service) and these very same *covered employees*, if they are fortunate to find employment, are likely to find it in non-covered sectors of the economy. Table 2 also suggests that the system is not sustainable as there are very high replacement rates relative to contributions. Current retirees may face a reduction in current benefits and it is likely that the future retirees will have to contribute more and receive less.

Table 2: China's Pension System Compared to Selected Regions in the World

Region	Participation as share of labour force (%)	Contributions as ratio to wages (%)		Average income replacement ratio (%)	Average pension as percent of GDP per capita	Pension spending as percent of GDP
		Pensions	All social insurance			
China (1999)	18[a]	25[b]	30[c]	77[b]	99[b]	3
OECD	90	19	34	38	54	10
Range	79-98	6-35	14-57	25-49	23-98	5-15
Asia & Pacific	26	14	17	NA	NA	1
Range	3-73	3-40	4-46	NA	NA	0-3

Source: OECD 2002 (Table 8).

Notes:

a. The regular urban pension system and that for civil servants.

b. The regular urban pension system. N.B. employee contribution rates increased every year 1997-2001.

c. Approximate national average.

Thus, China's social security reform, which is still underway and uncertain, is designed in part to relieve state enterprises from pension responsibility as commercial considerations predominate. This objective, however, is being balanced against the concerns of the policymakers regarding social unrest.

CONCLUSION

Our discussion is meant to suggest that there is a realisation among policymakers in China of the central importance of pensions in the broader economic reform effort and the need to improve the performance of the social security system.[16] While some may say that China is "muddling through", muddling through is what can be expected given the enormity of the problem and the interconnectedness of social security reform to state enterprise reform, reforming the banking sector, economic growth, employment, and social peace. In addition, social security reform in any country needs to deal with the reliance of current retirees, the expectations of near-term retirees, and the current and future needs of younger workers. As such, incremental change is far easier than radical reform. In assessing pension reforms (or any other reform) in China, it is essential to avoid the euphoria and hype created by media analysts and large sections of the business, academic, and diplomatic community. It is imperative that stress on fundamentals, abundant caution, realities on the ground, and results guide the assessment of pension and other policy reforms in China.

As we have quoted in this paper, "the creation of a funded pensions system is perhaps the most crucial of China's reform tasks". China is ageing fast, it is urbanising rapidly, its economic institutions are in a flux and, as a consequence, the traditional social safety net provided by the state, the enterprise and the family is being swept aside. With a massive unfunded future pension liability, China must maintain very high growth rates and to avoid social unrest, which will undermine high growth, it must be able to absorb millions of new workers a year.

Again, the economic challenges cannot be addressed in isolation. To develop a viable second and third pillar, China needs pension regulations and a legal structure that will allow individuals to save with confidence knowing that the funds will be managed as promised and will be returned when due. So many more institutions are required to develop an effective third pillar, such as legal standards, mature equity markets, appropriate financial products, a population of investors reasonably educated about financial and retirement matters, and effective regulation. In the case of China, these tasks are so daunting that it would not be unreasonable to delay implementation of this pillar until the prerequisite institutions are in place. As Rodrik (2000) has argued, while there is consensus that institutions

matter, there is ample room for being humble concerning the practical knowledge required to develop appropriate institutions from the existing ones.

Finally, while we recognise that social security reform is inherently a political process and, as such, each country will undertake those activities which are consistent with its domestic political economy, the reform efforts need to strive for greater professionalism and results need to be benchmarked against best international practice. This task is particularly difficult in the Chinese context because, unlike other transition economies, China's reform efforts are targeted at recentralising its social security system and removing the basic functions from state-owned enterprises. Thus, there is a critical need for the state to develop a professional capability to fine-tune the development of national policy, to ensure correct implementation of policy and to assess successes and failures. The primary challenges are in the area of micro-economic reform and building of market-enabling institutions.

Notes

1. We recognise that there are considerable concerns regarding the accuracy of Chinese economic statistics with even Premier Zhu Rongji calling for improvement. While more accurate statistics are likely to show greater unemployment and lower aggregate growth, the numbers are still likely to be impressive. However, most analysts believe that China needs very impressive numbers to absorb new entrants into the workforce and displaced workers. See www.stratfor.biz/Story.neo?storyId=207299 (viewed October 30, 2002).
2. For a good review of the theoretical issues surrounding social insurance, see Gent (2001).
3. As of July 1, 2002, the exchange rate was 8.27 Yuan to one U.S. dollar.
4. It is not uncommon for local governments to manage retirement pools. The State Council decreed in 1991 that retirement pools be managed at the provincial level. This issue highlights the difficulties the central government has in reforming a disaggregated pension system. Zhoa and Xu (2002) report that by 2001 only five provinces were complying with the decree. They further note that a by-product of the reform decree was that local governments no longer had an incentive to enforce pension collections since they no longer benefited by having access to the funds. Takayama (2002) has also emphasised the above incentive problem. As he stresses, the 2001 10th five year social security plan does not satisfactorily tackle this issue.
5. Under the Communist system, a "portion of the income generated by communes and collective enterprises in farming communities were set aside as public reserve funds, public welfare funds and management expenses to be retained and allocated by the communes and collectives themselves. The system of 'five guarantees households' (households guaranteed food, clothing, medical care, housing and funeral expenses)

in farming villages provided the rural household with social security" (*Taipei Times* April 10, 2002).

6. Civil servants and the military are covered under a different scheme. Currently civil servants are covered by a non-contributory scheme providing 80-90% of their last drawn salary. In addition, they are provided with health insurance. Government salaries have gone up in recent years and there is some expectation that retirement benefits will be adjusted downward. The 2001 Social Security Plan envisages a shift to contributory scheme for civil servants (8 percent by employees and 20 percent by government). But the Plan does not specify the transition path, or whether this would apply to both old and new civil servants. The fiscal implications of explicit 20 percent contribution costs also do not appear to have been recognised (Takayama, 2002).
7. It would be a mistake to assume that the central government in China is a monolithic entity with an ability to effectively permeate society with policies designed in Beijing. As Zhu (2002) reports, China does not have a national social security law and policy has been made by State Council decisions on a "piecemeal" and "ad hoc" basis with provincial governments left to formulate detailed rules in accordance with local circumstances.
8. In Liaoning, a northeastern, highly urban, Chinese province, an experiment in individual, fully funded, accounts were started in 2001. The contribution rate is 8 percent. Unfortunately, by year end, contributions were delinquent and the central government was compelled to kick in US$120 million. State-owned enterprises reported that they simply did not have the funds to make contributions.
9. Sun and Maxwell (2001) report this rate as 24% and Du and Phillips report it as 25%, presumably referring to different provinces, as rates vary by provinces. In any event, the rate is very high but often reduced by underreporting and avoidance; and by definition of wages which cover only about half of total wages, if bonuses and related payments are included.
10. The picture with respect to current and soon to be retired workers may require more *management* than the Ministry of Finance believes. Protests by laid off state-factory employees and retirees have been growing as state enterprises fall increasingly behind on the payment of both unemployment and retirement benefits. In some cases, retirees have not received pension benefits for over three years. Demonstrations have even reached the capital, Beijing, where retirees from the Beijing Automobile Works factory blocked traffic this year protesting non-payment of pensions.
11. Wang, Xu, Wang and Zhai (2001) conducted a sophisticated fifty year simulation of the current system and also concluded that the current system is not sustainable. Other simulations such as (Zhao and Xu 2002) may be overly optimistic about real rates of return on investments in individual accounts and should perhaps be used with caution when making policy.
12. The word privatisation is a misnomer since as of 1998; the government retained a majority stake in all of the companies listed on the Hong Kong stock exchange (Dixon and Newman 1998). Other firms which are not viable are privatised by

selling shares, generally at a discount, to managers, employees, or a combination of the two, when outside investors cannot be found or when it is politically difficult to sell an entity to outsiders. The track record of these privatisations is not very good (*Washington Post*, December 4, 2002).

13. The situation has been described as a vicious circle (OECD 2002) in which the banks are forced to lend money to state owned enterprises. The state-owned enterprises are inefficient but are pressed to retain workers in order to avoid social unrest thus avoiding the very reform that would potentially make them more efficient. The government retains its equity control of the SOEs to ensure that they do not lay off workers and the SOEs are rewarded with new loans regardless of their financial situation. Moreover, by removing commercial considerations from a variety of decisions, reform of corporate and banking governance is deferred to a later date. While reform efforts are underway (FRBSF 2002), we are sceptical of their likely success in the short to medium term.
14. Almost every listed Chinese company traces its roots as a state-owned enterprise.
15. China's financial problems have been characterised as "colossal" (*The* Economist June 13, 2002) and the financial services infrastructure, regulatory framework, and products necessary to support the third pillar of tax advantaged personal savings is lacking. First, the banks require recapitalisation and a change in investment underwriting to commercial standards. Second, the insurance industry is relatively immature beyond life and casualty insurance products. Third, domestic investment alternatives are limited to deposits, government bonds, a property market with boom/bust cycles, and an equities market based on shares in government-dominated companies.
16. While we have focused on the provision of pensions, the social safety net requirements are much broader as the economy changes from centrally planned to more market-oriented and includes unemployment, health care protection, and disaster relief programmes. Zhu (2002) summarises recent developments in China that relate to unemployment insurance and healthcare provision.

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SYSTEMIC PENSION REFORMS IN LATIN AMERICA

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INTRODUCTION

Over the last few decades, a dozen Latin American countries have elected to replace all or part of their publicly-managed pension systems with privately-managed savings plans.[1] It is a diverse set of countries demographically and economically, as shown in Table 1. Countries like Argentina, Chile and Uruguay are well into their demographic transitions, have high incomes and are urbanized. In contrast, Bolivia, the Dominican Republic, El Salvador and Nicaragua have some of the youngest age structures in the world, low income and large rural populations. The size of the formal sector in these countries ranges from one fifth to two thirds of the labor force.

Table 1: Economic and Demographic Conditions in Twelve Latin American Reformers

Country	Income per capita PPP adjusted	Coverage Rates**	Urban Population (% of Total)	Population 60+ (% of Total)	Population 20-59 over pop. 60+
Argentina	12323	53.0	88.1	13.3	3.8
Bolivia	2362	11.7	61.8	6.1	7.2
Chile	8790	54.8	85.5	10.2	5.2
Colombia	5878	35.0	74.4	8.0	6.2
Costa Rica	8848	47.0	58.5	7.5	6.6
Dominican Republic	5589	30.9	64.7	6.7	7.5
Ecuador	3139	43.0	62.4	6.7	7.4
El Salvador	4424	26.2	59.0	6.4	7.3
Mexico	8374	30.0	74.2	6.5	7.6
Nicaragua*	2137	14.3	55.8	4.6	9.4
Peru	4635	40.0	72.4	7.0	7.0
Uruguay	8989	82.0	91.6	17.0	3.0

* *PPP-adjusted income per capita in US dollars for 1998. 1999 for other countries.*
** *contributors/labor force.*

While initial conditions vary widely, each of the countries had experienced an erosion in the credibility of their public, defined benefit pension schemes in the decades leading up to the reforms. Disillusionment with these programs coincided with scheme maturation in most cases, but also with the stagnation of

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The views expressed in this article do not necessarily reflect those of the World Bank.

the formal sector wages and employment upon which the finances of this type of pension system depend.

Maturation refers to the moment in the life-cycle of an unfunded pension scheme when those retiring have participated throughout their working lives and have earned the right to receive full benefits. In the absence of coverage expansion, the ratio of pensioners to contributors converges on demographic ratios, putting pressure on pay-as-you-go finances. The internal or system dependency ratio will be increased further by disability and survivors' pensions as well as early retirement provisions.

As this process unfolded, it became clear that the combination of contribution rates and benefit promises was often untenable. Most of the countries had exacerbated the problem by using early surpluses to finance government deficits and other programs such as health and housing, thus depleting reserves much earlier than originally envisioned.

These factors were due to the management and design of the public pension schemes themselves. However, hopes of prolonging the pay-as-you-go financing arrangement were dealt a serious blow by broader trends in the economy. In particular, the decade that followed the Latin American debt crisis of the early 1980s was one of fiscal adjustment and economic retrenchment. Combined with the high cost of participating in the formal labor market, the recession led to stagnation and even decline in the coverage rates of these systems.

Policymakers faced three alternatives: they could cut benefits, raise payroll taxes or find other sources of revenue or borrowing to pay their pension bills. In some countries, other taxes were, in fact, earmarked to pay for pensions while payroll taxes were raised in others. But when finding new resources became difficult in the face of other demands, pension levels were reduced. The escape valve was typically found in the ad hoc indexation provisions which allowed real pension levels to fall, sometimes dramatically. In extreme cases, an earnings related pension scheme on paper was transformed into a flat pension in practice as all pensions were compressed towards the minimum pension.

Adjustments, some more transparent than others, on the revenue and benefit side of the existing public schemes were common throughout the region. By 2002, twelve countries had passed legislation that went beyond these marginal changes. Why these particular countries engaged in systemic rather than parametric reforms is a question outside the scope of this paper. The answer undoubtedly lies in differences of political economy and will be the subject of research in the

future.[2] It is also worth noting that several other countries have seriously considered systemic reform including Venezuela where a law was passed in 1998 but was subsequently suspended by the new government. Whatever the explanation for the systemic reform choice, the fact that this option was on the table is due to the fact that Chile passed legislation in 1981 that provided a model for the rest of the region to follow.

Chile had been the first country to introduce a national social insurance scheme in 1924. Fifty years later, with costs spiraling and reserves depleted, a government dominated by technocrats began debating possible alternatives. The result was a decision to phase out the defined benefit scheme and introduce in its place a system that relied on private management of defined contribution plans. Workers already participating in the old system were given the choice to stay, but were provided incentives to switch. Most younger workers moved to the new system and new entrants to the labor market were required to do so.

The fact that this new model had been introduced under the authoritarian government of Augusto Pinochet was cited by critics of the scheme as evidence that it was inconsistent with a democratic environment. However, the next two waves of systemic reform in the region took place in more or less democratic regimes. The model eventually influenced reforms beyond Latin America, in particular, Eastern Europe.

The second wave of systemic pension reforms in Latin America took place in the early 1990s with legislation passed in Peru (1992), Colombia (1993) and Argentina (1994). Of the three, the Peruvian law was most similar to the one in Chile. In Argentina, the role of the public sector was more extensive in the reformed system, with a residual pay-as-you-go scheme continuing to supplement the funded scheme. An important difference between the Chilean reform and the reforms in these three countries was that the pay-as-you-go schemes were allowed to continue in parallel and indefinitely. In both Argentina and Peru, a new labor market entrant could elect for the public scheme, while in Colombia, even those choosing the privately-managed scheme were allowed to return to the public scheme every three years.

The third wave of reform began in the mid-1990s and continued through 2002. Uruguay and Costa Rica, and later Ecuador, followed the example of Argentina and retained a significant defined benefit scheme managed by government by carving out a new, privately-managed and funded component. Meanwhile, Bolivia, the Dominican Republic, El Salvador, Mexico and Nicaragua opted to gradually phase out their public schemes.[3] In each case, however, the transition path differed, with Bolivia and Mexico shifting all contributors to the

funded scheme immediately and the rest of the countries allowing workers above a certain age to choose between the old and the new systems.

With the exception of Colombia and Mexico, the special schemes for central government workers were also phased out and younger civil servants joined the new system.[4] In the case of Mexico, legislation was being drafted at the time of writing that would bring federal workers into the new system.

The new systems in these 12 countries share several key features, including:

- Individual retirement savings accounts financed by mandatory payroll deductions
- Specialized, sole-purpose private firms responsible for managing investments
- Portfolio limits that restrict possible investment choices
- Restrictions on withdrawals after retirement
- Annuity provision through private insurance companies

In addition, most of the new systems restricted the type (not the level) of fees that the private providers could charge participants, specified disability and survivors' benefits that must be purchased from private insurers, and provided some kind of minimum pension guarantees or residual defined benefit pension.

Despite their similarities, important differences can be noted in terms of key public policy objectives, such as target benefit levels as well as design details, such as the kind of investments allowed. The next section documents some of the variations in design and reviews the early experience of a subset of these systems where some history has been registered. The final section concludes and discusses remaining challenges.

THE NEW PENSION SYSTEMS: DESIGN AND EARLY EXPERIENCE

The key design features of the reformed pension systems can be usefully grouped into those affecting the *accumulation* and *payout* phases.

The Accumulation Phase

In the accumulation phase, all of the systems rely on a defined contribution scheme to provide a pension after retirement. The government mandates that a certain percentage of a worker's wage must be deposited into a savings account. The funds are invested and the accumulation at the point of retirement is used to generate a stream of income during old age.[5]

The key policy choices regarding the accumulation phase of a defined contribution scheme include: (i) the coverage and level of total contributions; (ii) mandated insurance coverage and commissions that reduce the net amount to be invested; (iii) the structure of the market for providers; and (iv) the investment rules. In addition, each country must determine the extent of the mandate or, in other words, who will be covered by the new system.

Coverage

Throughout the region, countries have mandated participation in the funded system differently. Table 2 below compares the rules in nine Latin American countries that have privatized part or all of their pension systems. Six countries, including the Dominican Republic, have phased out the old public scheme while three – Argentina, Colombia and Peru – allow workers to continue in the old pay-as-you-go scheme. Mexico forces all private sector workers to join the new scheme, but guarantees contributors in the old system at the time of the reform a benefit that is not lower than what would have been received in the public scheme.

Table 2: Rules for Participation in Nine Latin American Countries

Country	Who must switch to the new funded scheme?	Is separate civil service scheme phased out?	Are the self-employed covered?	How are past contributions credited?
Argentina	No one, it is optional	Yes	Yes	Supplementary public pension
Bolivia	All workers	Yes	No	Recognition bonds
Chile	New labor market entrants only	Yes	No	Recognition bonds
Colombia	No one	No	No	Recognition bonds
Dominican Republic	All private sector workers age >45 and new public employees	Yes	Yes, with subsidy	Recognition bonds
El Salvador	All workers ages 36 to 55	Yes	No	Recognition bonds
Mexico	All workers (but with guarantee)	No	No	Guaranteed PAYG benefit
Peru	No one	Yes	No	Recognition bonds
Uruguay	All workers <age 40	Yes	Yes, if under age 40	Supplementary public pension

Source: Adapted from Devesa-Carpio and Vidal Melia (2001).

In all countries, workers that switch from the old to the new scheme are compensated for the years that they contributed to the former. Like most countries,

the Dominican reform utilizes the concept of a ‘recognition bond’ to deal with this liability. First introduced in the context of the Chilean reform, this special instrument is designed to shift the accrued pension benefit from the old to the new system by calculating the present value of what has been earned to date and issuing a special bond that will eventually be added to the value of the worker’s individual account.

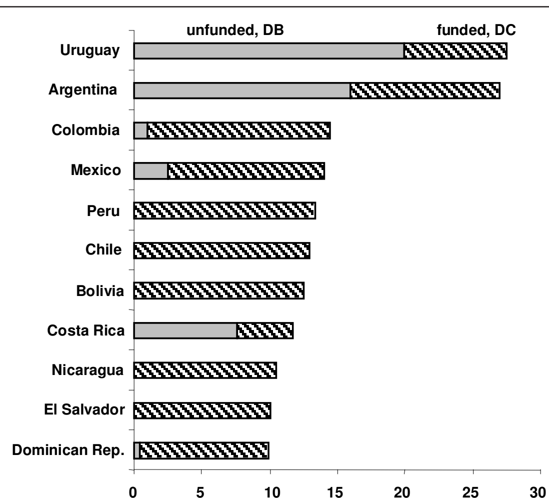
Civil servants (federal level) are covered by the reformed system in all countries except Mexico, where legislation is under preparation to bring in federal government employees. Only three countries, including the Dominican Republic, have mandated participation by the self-employed. Aside from the Dominican Republic, no country provides a direct subsidy to the self-employed contributors. However, Colombia and Mexico do subsidize low-income workers financed through a solidarity tax on higher income members of the scheme and a matching state contribution, respectively.

Contribution Rates

A key policy choice is the mandated contribution rate for the pension system. In some countries, this has two components, corresponding to separate public and private schemes. (The dark shaded portion of the bar for each country is the contribution that goes to the private, funded scheme, while the lighter portion is the contribution to the residual public, pay-as-you-go scheme). Figure 1 compares contribution rates in the twelve countries in Latin America that have introduced systemic pension reforms.[6]

The figure shows that there is significant variation in both the overall contribution rate and the proportion that is directed to the private, funded component. Bolivia, Colombia, Chile, the Dominican Republic, El Salvador, Mexico, and

Figure 1: Contribution Rates for Public and Private Pension Schemes in Eleven Countries that have Implemented Systemic Reforms



Source: *Adapted from Palacios and Pallares (1999). Contribution rates in Argentina have varied in recent years. Solidarity tax in Colombia and Dominican Republic included as DB. As noted in the text, Argentina, Colombia and Peru allow workers to join the old PAYG-DB scheme. However, fewer than ten percent of workers are thought to be taking this option.*

Nicaragua apply a relatively low contribution rate of between 10 and 14 percent that is used exclusively to finance the individual account balance. At the other end of the spectrum is Uruguay where contribution rates reach 27.5 percent and a relatively small proportion goes into the individual accounts. Argentina and Costa Rica also maintain a large contribution to the public, defined benefit part of the system. Not surprisingly, the high contribution rate countries also tend to have higher target benefit levels.

Charge Structure and Limits

The contribution rates shown in Figure 1 refer to the percentage of the gross wage that is used to finance the pension system. What ultimately matters in terms of accumulating a balance to be converted into a stream of retirement income, however, is the share of the total wage that goes directly into the individual account to be invested. This ratio varies across countries depending on the cost of mandated insurance, other charges, and the commissions charged by the private (and sometimes public) firms offering the service.

With the exception of Mexico, all of the Latin American reforms have privatized the provision of disability and survivors insurance. The company administering the pension fund is generally required to purchase a policy that provides an annuity (specified by law) in the case of death or disability. In the event that one of these contingencies arises, the insurer is required to provide the difference between what is in the individual's account and what is required to purchase the annuity. The premium charged comes out of the total contribution to the system. With the exception of the Dominican Republic, where a premium for this insurance has been set in the law, the price of this insurance is determined in the market.

The second important charge is for commissions to the private firms that administer the system. Most countries that operate this type of system have restricted only the structure of charges, in an effort to make these more transparent to workers.[7] Most countries have restricted fees to charges on contribution flows rather than on balances. Only El Salvador and the Dominican Republic have opted for caps on commissions.[8] In El Salvador, the total charge for commissions, including insurance, was limited to three percent of wages by law. In the Dominican Republic, the charge for commissions and insurances is set at 0.5 percentage points and one percentage point out of the total contribution of 10 percent.

In the case of Bolivia, private providers were granted a five-year concession and selected through an international bidding process. One of the criteria was the

level of charges. While the charges in the Bolivian system are the lowest in the region, a number of caveats must be added. First, there may be a trade-off between lower charges and competition when a concession is granted. Second, the two consortia which were granted the concession were also contracted to manage a new fund created through the sale of state shares in major enterprises. This fund was equivalent to almost two billion US dollars and management fees derived from this activity allowed the companies to charge less than they would have charged otherwise to the participants in the funded scheme.

Table 3 shows the level of charges in seven countries. These figures cannot be compared easily. For example, the charges for disability and death insurance pay for different benefit levels as specified in each country. Also, the caveats already mentioned for Bolivia should be kept in mind. Also, charges can and do vary over time. Nevertheless, the table provides an indication of the magnitude of the effect of charges on the ultimate amount of savings that will accumulate in the individual account for a given contribution rate.

Table 3: Comparison of Charges in Seven Latin American Private Pension Schemes

Country	Total fees as % of wages	Disability and death	Commissions as % of wages	Net contribution as % of wages
	a	b	c=a-b	d
Argentina	2.26	0.41	1.85	8.74 (2.74)
Bolivia	2.21	1.71	0.50	10.00
Chile	2.43	0.67	1.76	10.00
El Salvador	2.98	1.40	1.58	11.02
México	4.37	2.50	1.87	6.10
Peru	3.55	1.27	2.28	8.00
Uruguay	2.75	0.81	1.94	12.25

Fees include 0.4% for solidarity fund, 0.1% for supervision, and 0.5% commissions. Data for June 2002. For Argentina, figure assumes return to 11% contribution.
Source: AIOS (2002).

The limits placed on fees in the Dominican Republic and El Salvador were undoubtedly an attempt to answer critics concerned with the possibility that high commissions would reduce pensions. However, this charge structure and, in particular, the limits on insurance premia and commissions has several implications. First, if the limits are too low, it might discourage private providers from entering the market at all. Second, it may result in artificially high market concentration to the extent that there are economies of scale that prevent smaller firms from participating.

Market Structure for Providers

Latin American pension systems have been based on personal plans whereby individuals choose from among specialized providers, in contrast to some systems where employers make these arrangements or other groups, such as unions set up closed funds. Another common key feature of the pension fund market in

Latin America is that the participating institutions are dedicated exclusively to the sole purpose of managing these funds, limiting economies of scope that might otherwise exist. Finally, the industry is subject to licensing criteria that may imply barriers to entry.

There appear to be significant economies of scale in the industry and combined with the characteristics mentioned above, this has led to concentration in the market, as shown in Table 4 below. Not surprisingly, the number of providers tends to be larger when the absolute size of the market is also large. The number of affiliates per fund manager ranges from more than two million in Mexico to as low as 100,000 in Costa Rica. The latter figure is, however, likely to rise as consolidation takes place.

Table 4: Market for Pension Fund Managers in Nine Latin American Countries

Country	Affiliates	Average monthly wage in US$	Number of pension fund managers	Affiliates per pension fund manager	Pension fund assets as % of GDP
México	28,044,152	487	12	2,337,013	3.6
Argentina	8,977,362	230	12	748,114	11.1
Chile	6,480,819	456	7	925,831	55.2
Peru	2,877,081	531	4	719,270	5.6
Costa Rica	1,044,568	250	9	116,063	0.4
El Salvador	956,583	312	3	318,861	4.7
Bolivia	702,808	276	2	351,404	14.2
Uruguay	606,118	463	4	151,530	5.1

Source: AIOS (2002).

The market concentration that characterizes the new pension systems where the top three providers typically control more than half of the market, has been a source of concern. Aside from the potential for inhibiting competition and providing incentives for collusion, important issues arise as the accumulated assets grow over time and these institutions become the single largest investors in the economy. In Chile, where pension fund assets already represent about half of GDP, questions of corporate governance are a major issue.[9]

Regulation of Investments

In contrast to defined benefit schemes in the Anglo-Saxon world that operate under prudent person rules that allow wide discretion to pension fund managers, all of the Latin American systems impose portfolio limits. These are justified on several grounds including state guarantees that would otherwise lead to moral hazard, the need for transparency, and frequent valuation which dictates investment in securities traded on regulated markets.

There is also an underlying public policy objective embodied in portfolio limits, however. All mandated pension schemes operate with a range of target benefit levels, implicit or explicit. These are often expressed as replacement rates whereby the annuity generated by the scheme is compared to the earnings from which the individual financed his consumption while still working. In a defined contribution scheme, where the annuity depends on the balance accumulated which, in turn, depends on the investment return (along with the contribution rate, the number of contributions made and the age of retirement), portfolio limits restrict the range of possible outcomes.[10]

Most Latin American countries have imposed a set of portfolio restrictions that effectively gives all members the same asset allocation. This kind of system may be appropriate when (a) the system has just started to operate and consumers have little information; (b) regulators are new and inexperienced; and (c) when restrictions on foreign investments combined with thin domestic capital markets effectively limit the range of options that could be considered. On the other hand, it ignores individual preferences and reduces competition that would result from increased product differentiation in the industry.

The Chilean system operated under a single portfolio rule during its first two decades. The evolution of the portfolios in Chile can be seen in Table 5. However, since the second half of 2002, it has introduced limited portfolio options from which participants can choose in order to match their preferences in terms of risk and return. They are offered five portfolio choices that range from relatively high to very low volatility. Individuals approaching retirement age (within 10 years) are not permitted to choose the most aggressive portfolio. Workers that do not actively select a fund are assigned a portfolio choice according to their age (i.e., younger workers are placed in a fund with a larger share of equity instruments).

The table also illustrates another common pattern in the new systems – the early concentration of investments in government securities. In fact, in Chile, investment in shares was prohibited until 1985. Similar restrictions have been imposed in other systems during early stage and, as a result, two thirds of the funds outside Chile were invested in government bonds in mid-2002.[11] While in the Chilean case there were specific reasons related to the conditions of the financial sector that led to this undiversified portfolio in the early years of the scheme, there is some concern that governments may use limits to channel funds towards the financing of their own deficits.

Table 5: Evolution of Chilean pension fund portfolio, 1981-2000

Year	Central Bank Debt	Treasury Debt	Total Govt. Debt	Time Deposits	Mortgage Bonds	Total Bank Debt	Corporate Debt	Stocks	Closed-end Investment Funds	Foreign Investment	Pension Funds (MM US$)
	(1)	(2)	(3)=(1+2)	(4)	(5)	(6)=(4+5)	(7)	(8)	(9)	(10)	(11)
1981	27.4	0.7	28.1	61.9	9.4	71.3	0.6	0.0	0.0	0.0	300
1982	4.3	21.7	26.0	26.6	46.8	73.4	0.6	0.0	0.0	0.0	606
1983	14.1	30.4	44.5	2.7	50.6	53.3	2.2	0.0	0.0	0.0	1,136
1984	16.6	25.6	42.2	12.9	43.1	56.0	1.8	0.0	0.0	0.0	1,244
1985	20.4	22.2	42.6	20.9	35.4	56.3	1.1	0.0	0.0	0.0	1,533
1986	26.0	20.1	46.1	23.3	25.5	48.8	0.8	3.8	0.0	0.0	2,117
1987	29.8	11.7	41.5	28.5	21.3	49.8	2.6	6.2	0.0	0.0	2,708
1988	30.0	5.4	35.4	29.5	20.6	50.1	6.4	8.1	0.0	0.0	3,584
1989	38.1	3.5	41.6	21.5	17.7	39.2	9.1	10.1	0.0	0.0	4,470
1990	42.5	1.6	44.1	17.5	16.1	33.6	11.1	11.3	0.0	0.0	6,658
1991	37.4	0.9	38.3	13.3	13.4	26.7	11.1	23.8	0.0	0.0	10,064
1992	40.1	1.7	41.8	11.1	14.2	25.3	9.6	24.0	0.2	0.0	12,395
1993	38.3	0.5	38.8	7.6	13.1	20.7	7.3	31.8	0.3	0.6	15,942
1994	39.4	0.2	39.6	6.3	13.7	20.0	6.3	32.2	0.3	0.9	22,296
1995	37.5	1.9	39.4	6.6	15.8	22.4	5.2	30.1	2.5	0.2	25,143
1996	38.8	3.3	42.1	5.8	17.9	23.7	4.7	26.0	3.0	0.5	27,198
1997	36.4	3.2	39.6	12.4	17.0	29.4	3.3	23.4	3.1	1.1	30,525
1998	37.5	3.4	40.9	15.1	16.6	31.7	3.8	14.9	2.9	5.6	30,805
1999	31.0	3.6	34.6	18.1	15.1	33.2	3.8	12.4	2.6	13.4	35,936
2000	33.6	2.2	35.8	20.8	14.4	35.2	4.0	11.7	2.4	10.9	37,752

Source: *Iglesias (2001).*

The limits of domestic capital markets in many countries, along with the objective of reducing country-specific risk, makes the option of international diversification an important policy issue. While Chile achieved good rates of return without foreign investment, this was done in the context of major reforms in the financial sector and privatization that combined to increase the supply of high quality domestic securities. Despite these advantages, limits on the share invested abroad gradually rose and today are equivalent to thirty percent of the total value of a particular fund.[12]

There are many advantages of investment abroad. First, it allows workers to diversify away from country-specific risk and generate better pensions for a given level of risk tolerance. Second, it mitigates problems arising from shortage of domestic instruments into which pension funds can be channeled without compromising principles of liquidity and accurate valuation. Third, it reduces potential conflicts of interest that arise in a concentrated market where a few private pension funds own a large proportion of securities of local firms. Finally, it might reduce political risk observed in other countries where governments find it convenient to finance their deficits using the captive pension fund market.

On the other hand, there is increasing evidence of a positive synergy between gradually accumulating pension funds as long-term investors and the deepening

of domestic capital markets.[13] This has led some experts to suggest the use of foreign exchange derivatives as an alternative mechanism for diversification without requiring that savings go abroad.[14] However, while this may achieve some of the diversification objectives, it does not provide the other benefits mentioned above. As of mid-2002, the share of investments in foreign securities ranged from 1.4 per cent in Bolivia to 15.3 percent in Chile, with several countries having no investment abroad whatsoever.

Investment Returns

In a defined contribution (DC) scheme, the contribution rate, the contribution density and the net investment return – the return after taking into account charges – will determine the balance that is accumulated at the point of retirement. Table 6 shows the rate of return history for six of the new pension systems (for the others, too little time has passed or the system has not yet started operating as in the case of Dominican Republic, Ecuador and Nicaragua).

Returns have ranged from six to eleven percent in real terms in the seven countries shown in the table for periods of four to 21 years. While these rates of return are relatively high, they largely reflect yields on domestic government bonds, especially in the more recent reforms. In Argentina, the risk associated with those bonds became evident in 2001-02, although the ultimate outcome of the negotiations currently taking place is not yet known.[15] There is little correlation between returns and volatility with relatively high returns and low risk in Uruguay and lower returns with higher risk in Peru.

Table 6: Rates of Return on Pension Fund Investments in Six Latin American Countries

Country	Number of years of returns	Annualized cumulative rate of return	Standard deviation of annual returns
Argentina	7	8.3%	11.7%
Bolivia	5	–	–
Chile	21	10.4%	8.9%
México	4	8.9%	3.7%
Peru	8	5.9%	8.4%
Uruguay	5	11.3%	5.2%

Source: AIOS (2002).

Payout Phase

Upon retirement, the balance accumulated in the DC account will be withdrawn to finance consumption during old age. Aside from the prerequisites for retirement age and disability eligibility, the main design issues at this stage are the modalities of this withdrawal and the guarantees (minimum pensions) that are triggered when the benefits fall below a certain level.

Modalities of Withdrawal

All of the countries restrict withdrawals from the individual account balances that have been accumulated by retirement. This policy is designed to ensure that a stream of income is provided through the scheme throughout old age. There are generally two kinds of withdrawals allowed – scheduled withdrawals and annuities – although two countries, Costa Rica and Uruguay, allow only annuities.

Programmed or scheduled withdrawal (SW) does not provide longevity insurance, since the balance can fall to zero before the retired person dies. It also fails to provide a floor with regards to poverty, although minimum guarantees and residual public pension schemes often serve this purpose. It is, however, intended to prevent the worker from spending his balance in the first years of retirement by setting a schedule of payments based on life expectancy. The SW also allows the individual to leave a bequest since it remains his or her property.

Box 1: Chile's Scheduled Withdrawal Option

Each programmed retirement annuity is calculated according to the following formula:

$$P_t = \frac{F_t}{\left(\sum_{x=t}^{110} \frac{q_x}{(1 + i_{ti})^{(x-t)}} \right)}$$

where, F_t is the individual account balance in year t.

q_x is the probability that the individual will live to year x, given that he or she has lived until year t. Normally, q_x=0, when x>110.

The discount rate used in the calculation is obtained as follows:

$$i_{ti} = 0,80x\, tirv_{t-1} + 0,20x \sum_{j=1}^{10} r_{i,t-j}$$

where, i_{ti} is the discount rate of AFP i in year t

$tirv_t$ is the average implicit rate applied to life annuities in year t.

r_i is the average profitability of AFP i pension funds.

If the pension calculated according to the programmed retirement formula falls below the minimum pension for the age of the affiliate, he or she may request that the AFP readjust the pension up to the minimum. When the account balance reaches zero, the worker may request the minimum pension guaranteed by the government, as long as he or she has paid into the system for at least 20 years and does not have income from other sources greater than the minimum pension. If these requirements are not met, the account balance runs out and the affiliate is left without a pension from the system. From the above, it can be inferred that in the programmed retirement plan, the employees take on the investment risk and the risk of living long enough to exhaust their individual account balance.

Source: *Rofman and Palacios (2000).*

In each country, this form of benefit is handled by the pension fund administrator (AFP). The benefit is recalculated annually based on the investment return achieved and the new age-specific mortality rates. A key feature of this instrument is that it allows the worker to participate in investment returns. But it also exposes the worker to investment risk and results in a more volatile and unpredictable stream of payments. The formula applied is strictly regulated and uses a moving average interest rate in the calculation that has the effect of smoothing the payment stream. Box 1 above describes how this works in Chile.

Annuity options are offered in all of the countries. The allowable products vary with regard to the possibility of deferral, amount of temporary withdrawal, survivor benefits, guarantees, denomination, indexation rules and participation in investment returns.

All of the countries allow an immediate life annuity. In Chile and Peru, retiring workers may choose to defer their annuity for sometime (usually one or two years). During this period, retirees receive a temporary benefit, in the form of a scheduled withdrawal, which may amount to as much as twice the expected annuity. This arrangement has created some problems. First, some beneficiaries enter the contract without fully understanding that their benefits will be reduced by as much as 50% in a year or two or that the higher benefit in the first years implies a reduction for the remaining lifetime. Second, because the deferred annuity is contracted at the time of retirement (and the capital is transferred at that time), some problems may arise when returns in the pension fund are not those that were expected. If returns are high, benefits will be increased (increasing the gap between the temporary benefit and the annuity), but if returns are lower than expected, the individual accounts may run out of money before the deferment period is completed.

In Chile, a life annuity plus a guaranteed period of payment after death is also available whereby, upon the death of the affiliate, the life insurance company continues to pay the spouse for a fixed period. One version of this product has come to be known as the ‘thinking of her’ life annuity. It pays the same amount until both spouses die. Finally, there is a life annuity with a guarantee period of payments to survivors which pays until the total pension paid is equal to the original premium. In a departure from the Chilean model, Argentina’s law limits the choice of annuities to one type, a joint-and-survivor annuity.

In Peru, the law indicates that either of the two types of annuities can be obtained – a ‘Personal Annuity’ or a ‘Family Annuity’. The first option is open to single workers with no potential survivors. This type of annuity can be offered

only by the AFPs. This provision has been criticized, mostly because it makes it possible for the AFPs to assume insurance type risks, thereby changing their role as managers of third-party funds. In practice, the existence of this alternative is only notional since the Supervisor has not issued the necessary detailed regulations, and the industry does not yet appear to be interested in this market.

The second option is the 'Family Annuity'. In this case, the beneficiary purchases an annuity from an insurance company that includes the potential payments to survivors. Family annuities can be offered with a number of options. First, they can be offered in Soles (with an indexation rule) or in US Dollars. In addition, beneficiaries can purchase a combination of a time-limited scheduled withdrawal and a deferred annuity, where the benefit to be obtained from the scheduled withdrawal can be anywhere between the annuity and twice that amount. Finally, as in Chile, it is possible to ask for a 'guaranteed' period.

Because of the combination of different options (currency, time of delay, amount to be paid during the temporary withdrawal, amount and period guaranteed), the number of possible products is quite large. As of March 1999, the Supervision of Pension Funds had approved 121 possible products, and they were considering requests for authorization of other combinations that would take the total number of alternatives to more than 500. Box 2 describes the products currently available in Peru.

Argentina and Bolivia allow annuitants to participate in investment returns. The Argentine variable annuity promises some negotiated share of returns above the minimum 4% nominal return. There are no regulations on how and when the excess return should be transferred to annuitants. In practice, insurance companies have taken different approaches. In some cases, reserves have been increased, resulting in a higher expected flow of benefits in the future. In others, a lump-sum payment has been made at the end of the year based on the excess returns. At least one company offers to maintain the excess in a separate reserve, to be inherited by survivors once the beneficiary dies. The method of calculating excess returns is also not clear. Besides, assets backing annuity reserves are not separated from other assets of the insurance companies and valuation regulations are weak.

Most of the systems require automatic price indexation of benefits. In Chile, for example, annuity contracts are made in 'Unidades de Fomento' or UF, an accounting unit that is adjusted with inflation. In Uruguay, indexation is to wages, while in Argentina there was no indexation during the currency-board period that ended after the crisis in 2001. There, all contracts are set in nominal terms. Also, annuity contracts can be negotiated in US dollars in several countries, including Argentina and Peru.

Box 2: Annuity Products Offered in Peru

Amount Guaranteed: Amount a survivor spouse would receive if retiree dies:

42% (as prescribed in the law)
70%
100%

Period of Guarantee: Years after retirement when the amount guaranteed will be paid:

No guarantee
5 years
7 years
10 years
15 years
No limit

Deferment: Years of deferment of annuity (a scheduled withdrawal is paid meanwhile)

No deferment
1 year
2 years
3 years

Ratio of annuity benefit to benefit received while deferring:

50%
75%
100%

Currency:

Soles (indexed by inflation in Lima)
US Dollars

(The combination of these different options generates up to 432 possibilities, although there are only 121 currently authorised.)

Source: Palacios and Rofman (2000).

The experience with the new annuity industry is very short since even in the earliest reforms, the number of people retiring from the funded system is still relatively small.[16] The indicators of that industry (Table 7) show that only Chile has a significant market with around 25,000 annuitants at the end of the 1990s. About half of those retiring under the new scheme choose scheduled withdrawals. The annuity markets face several challenges, including the lack of availability of assets to match inflation indexed liabilities and inadequate mortality tables.

Table 7: Indicators of Annuity Industry in Four Latin American Countries

	Argentina	Colombia	Chile	Peru
Number of providers	21	9	28	5
Top 5 market share	91%	84%	44%	100%
Total premium $(mn)	156	134	1100	?
Total premium/GDP	0.1%	0.2%	1.5%	?
Annuitants	8200	1888	25151	600+

mn = million
Source: Palacios and Rofman (2000).

Another important part of the new insurance business created by the new systems is the mandatory insurance for survivors and disability. With the exception of Mexico and Costa Rica, the disability benefits in the new system are provided through contracts between the pension funds on behalf of their members and

private insurance companies. Survivor benefits for contributing workers are also generally provided through insurance contracts. These contracts insure the difference between the annuitized value of the accumulated balance of the worker that becomes disabled or dies and the benefit level prescribed by the government. With the exception of the new scheme in the Dominican Republic, the price of this insurance is determined in the market.[17]

There is significant variation in the benefit levels specified for survivors in different countries. For example, upon death of the affiliate, the spouse would receive 70% in Argentina, 60% in Chile, 100% in Colombia and 35% in Peru and the Dominican Republic.[18] The conditions also depend on the underlying defined benefit schemes in countries such as Costa Rica and Uruguay.

Disability benefits and eligibility determination also vary across countries. Table 8 shows the eligibility conditions and benefit formulas for seven of the systems. The Mexican disability benefit is the lowest, while most total disability benefits are set at about two thirds of wages prior to the event. There are also differences regarding the eligibility conditions which depend on having made a certain number of contributions during the last few years.

Table 8: Mandated Disability Benefit Levels and Eligibility Conditions

	Argentina	Bolivia	Chile	Dominican Republic	Mexico	Peru	Uruguay
Benefit in terms of average income	Regular: 70% Reduced: 50%	70%	Employees: total: 70%, partial:50% Self-employed: total: 50%, partial: 35%	60% Partial: 30%	35%	Total: 70% Partial: 50%	Total: 65% Partial: 65%
Reference period used to calculate average income	5 years	last salary	10 years (adjusted for inflation)	Last three years (adjusted for inflation)	500 weeks	3 years (adjusted for inflation)	10 years
Required contribution history	30 months of last 3 years; reduced with 18 months	60 months and one in the last year or 18 months in last 3 years	Employees: one contribution in the last year and 6 months in the previous year[1]	N.A.	250 weeks	3 months in a row in the last 4, or 4 in the last 6	2 years, including 6 months immediately previous to disability

1. One month required for self-employed.
Source: Gruschka and Demarco (2001) and Palacios (2003).

Guarantees

Most of the new systems offer two types of guarantees.[19] The first relates to returns over periods of one to three years, while the other is specified as a

minimum pension. The first type of guarantee requires that each pension fund manager establishes a reserve that is used to finance a guarantee of a relative rate of return. When one fund underperforms the rest of the market by a significant degree, variously defined, this fund is used to make up the difference. Should the reserve be exhausted, the pension fund would be liquidated and the government would step in to make up the difference.[20] This relative return guarantee has two important effects. First, it limits the dispersion of outcomes between members of the system. Second, it creates incentives for 'herding' or a convergence of investment choices across pension fund managers.

The second type of guarantee is a minimum pension to be provided should the accumulation in the individual account be insufficient to purchase a predefined pension. Eligibility conditions and benefit levels vary across countries. As an example, the Chilean minimum pension guarantee has been set at roughly one quarter of the average wage over the last few decades and only workers with a history of twenty years of contributions are eligible. In the Dominican Republic, eligibility is based on thirty years of contribution, while the current minimum pension is more than forty percent of the average formal sector wage. Peru has not implemented such a guarantee, while the minimum is rendered unnecessary by the residual public, defined benefit schemes in Argentina, Costa Rica and Uruguay. Finally, the minimum pension guarantee in Chile is financed from the central government budget, while earmarked 'solidarity contributions' are levied in Colombia and the Dominican Republic.

Supervision

Pension fund supervisors play a vital role in the new pension systems in Latin America. Through 2002, no pension fund manager had gone bankrupt and there had been no important instances of fraud or theft of funds. Table 9 shows that staff size normalized by the number of affiliates varies widely ranging from only 12 in Colombia, where supervision is not separate, to more than 70 in Peru.

Table 9: Comparison of budget and staff of Latin American pension supervisors

Country	Employees (number)	Budget ($m)	Employees/ fund members (per million)	Employees/ funds (number)
Argentina	183	12.5	31	10
Bolivia	21	1.9	64	11
Chile	134	7.0	23	10
Colombia*	30	–	12	3
Costa Rica[1]	66	3.8	63	7
Dominican Republic[1]	75	5.0	n.a.	8
Mexico	214	26.3	19	13
Peru	85	5.1	74	14
Uruguay*	21	—	46	4

** Pension supervisor is not a specialized entity.*
Source: Demarco and Rofman (1999).
1. *Figures refer to January, 2003. All other data are from 1998.*

Across the sample, there are between three and 14 staff per fund. With the exception of Colombia, Uruguay and now, Ecuador, the supervisors are specialized.

CONCLUSIONS AND CHALLENGES FOR THE FUTURE

Systemic pension reforms in Latin America are part of a larger global shift in public policy being observed today. Its main characteristics include an emphasis on accumulation of assets to cover part of future pension obligations, an increased role for private management of pension funds and more active participation by individuals in the process. The results of this historical change will only be fully understood several decades from now and will undoubtedly reflect further modifications to these new instruments of social policy.

Reform is also spreading to other regions, such as Eastern Europe where eight countries have introduced individual accounts components, typically with large residual public schemes. Some of the richer OECD countries, such as Australia, Denmark, Switzerland, Sweden and the United Kingdom have made funded schemes an important part of the overall mandatory pension system, while others like Italy, are hopeful that voluntary private provision can be encouraged to supplement reduced public pensions. In 2000, Hong Kong became the first country in East Asia to mandate individual retirement savings plans managed by private institutions with the introduction of the mandatory provident fund legislation. This coincides with recent changes to Singapore's central provident fund that allow an increasing amount of the fund to be invested privately by asset managers chosen by members of the system.

The new systems in Latin America and elsewhere face many challenges.[21] First, there are clearly details in the design of many of the systems that must be adapted to changing circumstances over time. The gradual liberalization of investment rules in Chile over the last two decades provides one example of the adjustments that might be expected in other countries, as their systems mature. In some cases, however, technical corrections to some of the parameters of the system are needed. For example, allowing members to retain the option to move back to the pay-as-you-go scheme reduces incentives to monitor the performance of pension fund managers and leaves open a large potential fiscal liability. While many of these issues are the result of political negotiations, new empirical research over time should help inform the debate and facilitate the changes that are needed.

Other challenges include promoting consumer sensitivity to prices and controlling costs, creating the conditions and rules required for efficient annuity

provision, expanding the coverage of the system in the context of large incentives to remain in the informal sector, and matching the supply of investment opportunities with the new demand for long-term assets. But perhaps the most important challenge is to minimize political risk. While ex-post changes in the pension 'deal' for workers are less likely in the new systems, there is no doubt that large accumulations of assets are a particularly tempting target for governments with short-term horizons. One of the strengths of the new model is that through the creation of property rights and direct incentives for individuals, the risk of government manipulation of the funds for purposes other than pension provision will be reduced relative to the experience of the past.[22] Nevertheless, the risk will continue to be significant, particularly in countries where the rule of law is weak and expropriation cannot be ruled out.

Notes

1. All twelve reform laws are available on the World Bank website at www.worldbank.org/pensions, but only in Spanish.
2. See Muller (2002) for example.
3. In Mexico, the disability component of the pension system continues to be managed by the public, social insurance institution.
4. Uruguay did not have a separate scheme for its central government employees prior to the reform.
5. In contrast, a defined benefit scheme specifies the level of the benefit that will be provided, usually in the form of a benefit formula that expresses the pension as a percentage of the worker's wage.
6. Note that the contribution rate in the Dominican Republic increases gradually over a five year period until reaching 10 percent.
7. Mexico allows for a variety of charge structures in contrast to most of the systems in the region.
8. Kazakstan has also imposed caps on commissions in its newly privatized system.
9. See Iglesias (2000).
10. Although this is the result of restricting asset allocation choices for individuals, these limits are not derived from an explicit range of target outcomes; for example, a price indexed annuity whose initial value lies between 40 and 80 percent for a worker that contributed his entire career and retired at 65.
11. AIOS (2002). Peru is the exception with less than 15 percent in government bonds due to the limited supply of government debt.
12. In the new 'multifondo' arrangement, five portfolio options are allowed ranging from a high degree of variable rate investments like equities in fund A to only highly rated, fixed income in fund E. The share in each of these funds invested

abroad can be higher as long as the total combined assets of funds A-E do not sum to more than 30 percent foreign securities. See SAFP (2002).

13. See Walker and Lefort (2001) for empirical evidence for Latin America.
14. Feldstein (2002) suggests this option and points out that domestic investments that increase corporate revenues at home lead to the externality of higher tax revenues for the government.
15. While the funds will experience a large loss in terms of US dollars, the *peso* return in real terms is still likely to be positive.
16. This is largely due to the age structure of the population that voluntarily switched to the funded scheme. See Palacios and Whitehouse (1998).
17. The system in the Dominican Republic sets the price of the survivor and disability insurance at one percent point of wages.
18. In Chile and Colombia there are differences if the surviving spouse is male or female, with a strong bias in favor of women. In all cases, there are also benefits for young children.
19. Some countries also provide limited guarantees for annuitants in the case of the default of an insurance company. This guarantee has not been triggered to date.
20. Regulations in each country define the process by which fund members and their accumulated balances would be transferred to other companies. To date, this has not occurred and all pension funds have been able to meet the guarantee requirements.
21. Palacios in ILO (forthcoming).
22. Iglesias and Palacios (2000).

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PENSIONS, CONSUMER FINANCIAL LITERACY AND PUBLIC EDUCATION:

Lessons from the United Kingdom

Edward Whitehouse*

Consumers in most countries are generally not well informed about pensions. Knowledge of both the general facts about the structure of the pension system and the specific data on their own pension entitlements is lacking. Many people consequently have unrealistic expectations of their retirement incomes. But apathy and indifference to pension planning (and personal finances in general) form a large barrier to improving people's knowledge of the pension system and how it affects them. Indeed, many people form unrealistic expectations or have no idea at all of their prospective retirement income. Lack of understanding of the pension system as a whole can mean that voters are unaware of the pressures that pension systems face from the maturing of benefit entitlements and the ageing of the population, limiting the potential for sensible national debate. These problems are probably general, affecting pension systems of all types.

Pension systems involving privately managed retirement savings accounts place a greater responsibility on individuals for planning their retirement income than those with a monopoly, state scheme offering comprehensive social insurance. At the very least, people must choose which of a range of competing funds should manage their pension assets. In many countries, they have a choice over whether to join the defined-contribution pension scheme or to remain in a public, defined-benefit scheme. There is also considerable choice over how much to contribute to retirement accounts in some countries. Even when systems have a mandatory contribution, members may choose to make extra voluntary contributions. While portfolio choice is typically limited (except in the United Kingdom and the United States), other countries are moving to allow members more choice over how their pension fund is invested. Finally, defined-contribution pensions, because of the compound-interest effect, reward early pension planning to a greater degree than defined-benefit schemes.

This paper examines the experience of the United Kingdom and draws some general lessons for other countries. It is structured as follows. Section I

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looks at the consumers' knowledge of the pension system. This is followed by section II on the challenges for public-education policies in the United Kingdom. Sections III and IV look at policies toward general information about the pension system, and information on individual pension entitlements. Section V looks at the style of public-information campaigns, while section VI concludes.

I. LACK OF KNOWLEDGE OF THE PENSION SYSTEM

The Office of Fair Trading (1997) conducted a survey of 3,800 consumers' knowledge of the pension system and their attitude to their own pension provision. Tables 1 and 2 show people's answers to seven main questions. There are some worrying examples of ignorance. For example, less than a third of people can estimate the value of the basic pension for a single person within a range of ±7 per cent (and ±10 per cent for a married couple's entitlement). Another recent survey found that 55 per cent of people admitted to having no idea of the value of the basic state pension.[1]

Table 1: Consumer's Knowledge of the Pension System

Question	Correct	Incorrect
Weekly value of basic pension, single person (£61)	32% (£55-64)	29% above £64 27% below £55 (13 % do not know)
Weekly value of basic pension, married couple (£98)	28% (£90-104)	19% above £104 37% below £90 (16% do not know)
Entitlement to basic pension	20% (based on contribution record)	77% (based solely on age)
How is the basic pension indexed?	48% (prices/cost of living)	25% government whim 12% average earnings 4% European Union rules (7% do not know)
What does the acronym 'SERPS' stands for?	21% (state earnings-related pension scheme or close)	5% mentioned pensions 8% mentioned other word 8% all incorrect (57% do not know)
Are personal pensions defined-contribution?	83% of employees with personal plans	9% said based mainly on earnings and tenure 3% hybrid

Source : Office of Fair Trading (1997)
Note : Row totals may not sum to 100 due to rounding

Less than half of people knew that the basic pension is price-indexed. A quarter thought that uprating was discretionary, and 12 per cent that the pension increased in line with average earnings. (The pension was earnings-indexed

between 1975 and 1981; before that, uprating was discretionary, but the increases tended to approximate average earnings.)

Over three-quarters of people incorrectly said that the only entitlement condition for receipt of the basic pension is age. Only a fifth correctly said that it depended on the individual's contribution record. This inaccuracy is probably not very significant. The vast majority of people will receive the full pension based either on their contribution record or because of credits received for periods of unemployment or home responsibilities (e.g. caring for children or the elderly).

Turning to second-tier pensions, only 21 per cent of people were close to knowing what the acronym SERPS stands for. Indeed, only 34 per cent could guess one or more of the words. Knowledge of private pensions was mixed. More than four-fifths of employees with a personal pension knew that it would provide a defined-contribution pension, while nine per cent thought that personal pensions are defined-benefit. On occupational pensions, the proportion that told the Office of Fair Trading survey that their plan was defined-benefit was significantly below the proportion found in surveys of pension funds (Table 2).[2] Interestingly, an earlier study for the Department of Social Security found a higher proportion saying that their pension benefits would be related to earnings. These studies point to very different conclusions on people's knowledge of their pension benefits.[3] It is difficult to reconcile these different findings.

Table 2: Benefit Formula in Occupational Plans: Survey and Administrative Data

Per cent of employees with occupational scheme	Defined benefit	Defined contribution/ other	Do not know
Consumers' views			
Office of fair trading survey	63	30	6
Department of social security survey	85	12	4
Administrative data	95	5	–

Source: Office of Fair Trading (1997), Hawkes and Garman (1995), Whitehouse (1998).

Table 3 summarises peoples' views about their pension coverage. The first column divides people into those who think they have a personal plan, an occupational pension, or no private coverage. Column two divides people by whether they thought they were contracted into SERPS, contracted out or did not know their status. The third column gives survey data, while the last column provides administrative data for comparison.[4] The percentages add up to more than 100 because some people have both an occupational and a personal scheme.

The most interesting divergence is on the issue of contracting out. For occupational schemes, the overall proportion that said that they had a plan is

Table 3: Pension Status: Survey and Administrative Data

Private pension	Contracting out	Survey	Administrative data
Personal pension	in	8	9
	out	18	25
	do not know	4	
Occupational pension	in	16	3
	out	22	39
	do not know	7	
None	in	7	33
	out	9	0
	do not know	13	
Do not know		2	

Source: Office of Fair Trading (1997), Whitehouse (1998). See also Department of Social Security (1998b).

close to the administrative data. Nevertheless, only a third or so of people with an occupational plan said that they were contracted out. A further one in six did not know, while administrative figures show that over 90 per cent of occupational scheme members have in fact left the SERPS scheme. Similarly, many people without a private pension said that they were contracted out and nearly half did not know, while contracting out is impossible without either a personal or an occupational plan that meets certain rules.

There are significant differences between public- and private-sector occupational-scheme members' knowledge of contracting out, according to a Department of Social Security survey.[5] All public schemes are contracted out, but around three in ten members thought their scheme replaced SERPS and a quarter did not know whether they were contracted out or not. In the private sector, three out of five people said that they were contracted out. This is closer to the administrative figure (85 per cent) than public sector workers' views, but still substantially lower. Again, a quarter of workers in the private sector did not know whether they were contracted out.

Awareness of the SERPS scheme among those without a private pension is low, according to Hawkes and Garman (1995). For example, 42 per cent of full-time employees who either said that their private pension was contracted in or that they had no private pension reported that they were definitely not building up a SERPS entitlement and a quarter did not know. But the vast majority will be earning a SERPS pension.[6] Furthermore, 17 per cent of people who said that their scheme was contracted out claimed definitely that they were still earning SERPS.

Less than half of employers believe their employees understand their occupational pension, according to a study by Towers Perrin (1999). Far more employees claim they do understand their pension, but as Tammy Mattson of the employee benefits consultancy says, they 'do not understand as much as they

think'. For example, two-thirds think the cost of fringe benefits, including holidays and pensions, are worth only 20 per cent of the pay or less, while the true figure exceeds 30 per cent on average. '73 per cent [of employees] may understand that they have a pension plan in place', says Ms Mattson, 'but if you ask them if it will be adequate, they clearly do not understand what their income will be or…what will happen when they move jobs'.[7]

Qualitative research for the Department of Social Security also shows widespread ignorance.[8] For example, few people knew that contributions attracted tax relief and many were confused about the structure of pension payouts (lump-sums or annuities). The terminology, particularly acronyms, such as 'SERPS' and 'AVC', were seen as bewildering. The principle of contracting out was fairly well known, but people often admitted to researchers that they did not understand the implications. For example, some assumed that contracting out meant that they would not receive the basic state pension.

II. PUBLIC-INFORMATION CHALLENGES IN THE UNITED KINGDOM

Lack of knowledge of the pension system and general problems of consumer financial literacy are only one of the challenges faced by the pensions policy-makers in the United Kingdom.

A second important issue is the increasing role of voluntary provision for retirement. The value of the basic pension has been indexed to prices since 1981.[9] Its value relative to average earnings has already fallen from over a fifth to around 15 per cent today. By 2025, it is likely to be worth only around 7½ per cent of average earnings. The second-tier public scheme, SERPS, was cut by the 1988 and 1995 reforms. After a full career on average earnings, a worker retiring in 2025 can expect a pension from this scheme worth another 7½ per cent of average earnings. Thus, the total mandatory pension is very small. To avoid a large drop in living standards on retirement, people have to make additional provision themselves.

Quantitative and qualitative attitudinal research carried out for the Department of Social Security shows that people are generally aware of their personal responsibility in retirement-income planning. One study concludes: most people under 40 'typically assume the basic pension will disappear, be limited to people in poverty or too small to be of much use'.

Around a third of people of working age (including the self-employed and non-workers) have an occupational pension. These schemes must meet minimum

standards set by the government, which cover both the level of benefits and portability between schemes. However, people will typically have gaps in their contribution record: they do not spend a full career in an occupational plan. Secondly, moving jobs still reduces pension benefits: occupational plans are not fully portable. Finally, people often retire early. For these reasons, only a tiny minority will achieve the target benefit for occupational schemes of two-thirds of final earnings.

A further fifth of people of working age have a personal pension. However, people often stop contributing to their plan early and have gaps in their contribution records. Among employees with a personal pension, only a third contribute more than the mandatory minimum.

Few people, then, are making adequate provision for their retirement despite the fact that they tell surveys that they are aware of their personal responsibility in this regard. There are many potential explanations. First, lack of confidence in the system, a trust that has been undermined by the following factors which have affected all parts of the system:

- personal-pension mis-selling;
- the Maxwell fraud: a theft from an occupational pension plan;
- government mis-information about survivors' benefits in SERPS; and
- the difficulty in finding impartial, accurate advice.

A second problem is instability in the pension system, which makes it difficult to plan for the long term. There were major reforms to the pension system in 1978, 1981, 1988 and 1995. The present government has introduced stakeholder pensions, transformed SERPS into the state second pension, and proposed revisions to the minimum funding requirement for occupational plans and a new pensioner credit.[10] Financial regulation was overhauled in 1986 and again in 1997, with the introduction of a unified regulator, the Financial Services Authority. Finally, the pension system is extremely complex, with over a dozen different kinds of pensions.

III. PUBLIC EDUCATION POLICIES: INFORMATION OF THE PENSION SYSTEM

The government has implemented or proposed a number of initiatives to tackle the public-information problem and improve awareness of pension issues. These involve a range of actors: regulators, employers, unions, financial services companies, schools and the public employment service. Some private sector companies and groups are already running a number of programmes, many of which are aimed at general financial literacy.

Where possible, the paper attempts to assess the impact of these schemes. There are a number of important factors to be taken into account in an evaluation:

- *Coverage*: the number of people reached.
- *Characteristics*: the type of people covered. It is generally easier to reach groups that are already financially sophisticated. A premium should, therefore, be placed on programmes of remedial value (reaching the less financially literate) and those that reach young people (whom it is difficult to get interested in pensions).
- *Attitudes*: surveys of consumers' opinions about the information that they received.
- *Behavioural studies*: investigation of how programmes affect consumers' financial decisions.

Working down the list of bullet points, the data and analytical requirements become more onerous. Unfortunately, there have been no detailed behavioural studies in the United Kingdom (in contrast with the extensive literature in the United States).[11]

The Pensions Education Working Group

The Department of Social Security, now known as the Department for Work and Pensions, established a pensions education working group in July 1997 to 'raise awareness of pensions and improve the level of financial education so that people understand the importance of saving for retirement and make the right choice about which pension product is best for them.'

The group's report, issued in 1998, argues that provision of information alone is not enough to ensure that people make appropriate pension decisions: 'understanding and knowledge are scarce while at the same time there can be information overload'.

The group proposed a comprehensive publicity programme to improve understanding of pension issues and to encourage early consideration of retirement income. The programme demands involvement of government, employers, financial services companies and interest groups. The group stressed the role of the government, both as an information provider and in standardising the information provided by financial companies, etc. They proposed that pension contracts should be written in 'plain' English, and the Plain English Campaign (1999a,b) has responded with two guides to the jargon of the pensions industry.

The report argued for an approach that targets particular groups (e.g., women, the self-employed). An interesting suggestion is to enhance the effectiveness of publicity by linking information to other important life-cycle events, such as leaving full-time education, changing jobs, marrying, divorcing, having children, etc. Researchers in the United States have similarly stressed the role of major birthdays (e.g. 30th, 40th) as a savings-information opportunity. Linkage with these events would both increase the targeting of information and catch people at points when they are more receptive to new information and, perhaps, more susceptible to changing their financial behaviour.

Telephone Help-lines

The Trade Union Congress (TUC) operated a pensions telephone help-line in 1997 aimed at women. Demand for the service was huge, with 4,000 calls answered and 140,000 unable to get through. The pilot was extended from one week to two. Detailed study revealed widespread ignorance about the pension system, but a strong desire for advice and information.

The pensions education working group proposed a pilot of a general help-line, aimed at both men and women. The government took up this suggestion and the 'Pension-power-for-you' help-line ran for six weeks in July and August 1999. This pilot programme was evaluated in a series of research reports for the government (Bunt, Adams and Vivian, 1999, 2000a,b).

The help-line received some 24,000 calls in the six-week period. More than half of callers were aged between 50 and 64 and less than four per cent were under age 30. Yet, both these groups account for 21 per cent of the total adult population. Most callers – over 40 per cent – said they had 'little' or 'patchy' knowledge of pension. However, compared with responses to other surveys, this might, if anything, reflect a slightly better knowledge of the pension system.

The second stage interviewed callers six weeks later. The majority of people seemed satisfied and found the service useful. Most had either followed up the referral to another organisation or read material that they had been sent. Many, for example, had investigated private pension plans or requested a state pension forecast.

At the third stage, researchers contacted callers again between four and six months later. Overall, around 60 per cent of respondents claimed that they had taken or would take action. For example, around a quarter joined or were investigating joining a private pension plan, while four per cent had investigated or implemented increases in their contributions to an existing private plan.

The evaluations thus rate the scheme as a reasonable success.[12] However, the authors suggest that targeted promotion was required to reach younger people[13], manual workers and ethnic minorities. Furthermore, many callers had unreasonably high expectations of the service (that they would receive individual advice, for example) and these expectations need to be managed.

A Role for the Financial Regulator

The new unified regulator, the Financial Services Authority (FSA) has a statutory responsibility to promote public understanding of money matters. Clause 4 of the Financial Services and Markets Bill 1998 says the role includes, 'promoting awareness of the benefits and risks associated with different kinds of investment or other financial dealings, and the provision of appropriate information and advice.' Clause 87 charges the FSA to 'issue guidance…with respect to any…matter about which it appears to the authority to be desirable to give information or advice.'

This legislation provides for a very broad scope for the FSA. Following consultation, the authority issued a paper setting out its consumer-education strategy.[14] There are three main planks to the strategy:

- *Consumer education in financial literacy*: 'Specific education programmes to enhance knowledge and skills, thereby empowering consumers to shop around and make informed decisions which meet their needs and personal preferences'. An important first step is research on consumers' current financial literacy, with plans for regular updates.
- *Consumer advice*: 'Giving guidance to consumers…while not being prescriptive or recommending specific products or services'.
- *Consumer information*: 'The provision of facts and basic information'. Initially, this will involve explanatory materials explaining the basic characteristics of different financial products. Standardisation and simplification of the information on pension products is also proposed.

The authority is upbeat about the possible results, arguing that 'consumer education should help empower consumers and enable them to use their "buying power" more effectively.' It even suggests that it could 'over time, reduce the need for detailed intervention.' The government has also argued that 'better awareness is good for competition.'[15] The FSA proposed an initial consumer education budget of £1.5 million for 1999-2000, with a range of £2 million to £5 million in the medium term.

A central part of the consumer education strategy is the provision of comparative information about different financial services providers, known colloquially as 'league tables'.[16] The chancellor of the exchequer (finance minister) announced this proposal in his 1999 budget speech. 'The FSA will now publish league tables of costs and charges in savings, insurance and pension products, to guarantee a better deal for the consumer and avoid the mis-selling of the past,' he said.

The FSA has, so far, implemented its consumer-education remit impeccably. It has produced a vast range of leaflets and brochures, which are generally clear and well presented. It has also established a help-line for consumers. Moreover, it has in place a thorough programme of research on consumer-education needs and use of different types of information.[17]

Nevertheless, there remain concerns about potential conflicts between a supervisory agency's regulatory role and the consumer education remit.[18] First, it can be difficult to draw the line between a non-prescriptive, guiding role and advice that is more specific. There is a risk that this might result in the FSA deciding how much it thinks consumers should save, what financial products best meet their needs, and providing information that ensures this outcome. People who buy unsuitable products might blame the FSA, with the risk that this might undermine confidence in its regulatory activities. At the least, this centrally provided information could result in a sclerotic market for financial services. The FSA's approval of the existing products and providers might act as a barrier to competition with the education programme exerting too strong an influence on the types of products offered.

Secondly, there are potential conflicts between the FSA's many different activities. 'The FSA will not just be a new regulator, but a new kind of regulator. Its new role will cover improving market confidence; protecting savers and investors through increased financial literacy…as well as by regulating those involved in financial services; and reducing financial crime', said Patricia Hewitt (when economic secretary to the Treasury). She was very optimistic about resolving the trade-offs the authority will face: 'It will offer regulation that works with the grain of consumer needs and industry innovation and development: a winning formula for both.'

Thirdly, there are already many private sector providers of comparative information about financial services companies. The regulator's efforts could, therefore, be wasteful duplication or they might drive out private providers due to the superior cachet of the FSA's imprimatur. More dangerously, this could be perceived as some kind of guarantee.

These arguments are not intended either as a criticism of the FSA's consumer education programme or to deny the role of a neutral, public sector organisation in providing financial advice. There is, however, a strong case for institutional separation of financial supervision from financial-literacy campaigns.

Minimum Standards for Financial Products

In addition to providing 'league tables' of financial products through the FSA, the government has employed schemes for minimum standards over various features of financial services.[19] This is commonly known as 'Kite-marking' (The 'Kite-mark' has long been the symbol of the British Standards Institute). Minimum standards essentially operate as a supplement to a regulatory approach.

Some of the providers of the new individual savings accounts (ISAs) will be granted a 'Cat-mark' if they meet conditions on cost, access and terms. The new stakeholder pensions, described elsewhere, will be similar to group personal pensions, but will have to meet conditions beyond the regulatory minimum on administrative charges and the provision of information to consumers.

Kite-marking is a useful addition to the government's armoury for intervention in financial services. Some features in the pension (and other retail financial) markets may be desirable, but not sufficiently so to warrant regulation. Kite-marking can promote simple and fair contracts appropriate for the mass market without outlawing products suitable for more sophisticated consumers.

Surveys of consumers suggest that Cat-marks for ISAs will be limited in their usefulness. Almost half said that they would consider a well-known institution for their ISA even if it did not meet the Cat standard, while only a third said that they would consider a Cat-marked plan from an unfamiliar source. A director of NOP Financial, who conducted the study said: 'the relative lack of interest in the government's own 'quality standard' indicates that the Cat is not as important a factor in influencing potential customers as the perceived quality and reassurance of a known provider'.[20] The Institute of Economic Affairs, a right-wing think-tank, has recently used similar arguments to suggest that reputation and competition can be an effective substitute for detailed financial regulations.[21]

The government seems keen to press ahead in this area and has recently issued a consultative document on minimum standards for a range of retail financial services (HM Treasury, 2001). In occupational pensions, the government withdrew earlier proposals for voluntary minimum standards (see section on information in the workplace below).

Information for People Taking up New Jobs

The public employment service (known as Job Centres)[22] will be equipped to provide information on pension issues to people moving into employment and direct them to sources of detailed advice. As noted by the pensions education working group, this might be a time when people are susceptible both to new information and to changing their financial arrangements. Most people, however, do not find new jobs through Job Centres, although they do tend to be lower-income workers who are less likely to have private pension arrangements.

Information in the Workplace

Another set of policies aims to improve pension information in the workplace. The introduction of stakeholder pensions is a major plank of this policy. Employers who do not offer an occupational plan will be required to identify a stakeholder pension (in consultation with employees or their representatives) and facilitate access to it. This will involve both providing information and 'allowing the nominated scheme a reasonable degree of access to the workforce to promote the scheme.'[23] The employer will also have to deduct contributions from earnings and transfer them, within a reasonable, specified period, directly to the nominated stakeholder plan. Workplace access is designed to reduce marketing and administrative costs compared with personal pensions and, most importantly, to ensure that a broader range of people come into contact with pension information.

A second initiative was the attempt to develop a 'quality in pensions' scheme (as set out in Department of Social Security, 1999a). This would Kite-mark occupational schemes that met a minimum set of standards, concerning the scheme's governance structure, the scope of employee access, communications with members and benefit levels. However, this scheme was widely criticised by the National Association of Pension Funds, the Employers' Organisation, the Confederation of British Industry, and others.[24] After consultation, the government shelved the proposal and opted instead for best-practice guidelines only, with the medium-term aim of moving to an accreditation scheme should the pensions industry support it in the future.[25] A working group, including representatives of employers, trade unions, regulators and the pension industry, was established in July 1999 to draw up the guidelines.

Financial Education for Adults

A number of private sector organisations offer financial education.[26] The Pre-Retirement Association provides a range of publications, 'pensions-for-beginners' seminars and courses to train other information providers. However,

as its name suggests, older workers, particularly those facing redundancy, are the focus of the association's work.

The Money Management Council has a broader remit. It is involved in developing qualifications for schools (see below), provides tutors for financial-planning courses and operates a 'quality mark' scheme to assess and reward clear financial information. Both these are non-profit organisations.

The Trades Union Congress produces a range of explanatory leaflets, but member trustees of occupational pension schemes and industrial relations negotiators are the organisation's principal targets.

Financial Education in Schools

A personal financial education group, including educationalists (and observers from the Qualifications and Curriculum Authority (QCA), regulators (the FSA), government, consumer and industry representatives, has investigated ways of developing basic financial literacy in schools. Research has shown huge gaps even in older children's knowledge: around half, for example, are unaware that there will be deductions from their earnings for income tax and social security contributions when they start work. School teaching of personal finance has broad support among adults: 87 per cent responded favourably to the idea in a recent NOP survey. In addition, the Department of Social Security commissioned qualitative research on teachers' attitudes to introducing school children to the idea of pension planning. The study, carried out by Education and Youth, a specialist communications company that has worked for various financial services organisations, had mixed results. School pupils, however, seem very keen. Managing money came top of a list of subjects secondary school pupils would like to see covered in more detail in school, mentioned by 48 per cent of respondents to a survey by Mori for the QCA. Only one in ten thought this was currently well covered in their lessons.[27]

The personal finance education group, an industry consortium established in 1996, has developed a 'learning framework for personal finance'. The group piloted this scheme in schools during 1998. Good practice guidelines in the design of industry-sponsored materials and a directory of teaching resources have also been issued. Building on this work, the FSA is now negotiating with the QCA to include financial education in the national curriculum. The major barrier is that the curriculum is already crowded, and personal finance teaching needs to dovetail with 'personal and social education', covering a wide range of issues. A second problem is the current lack of an accredited qualification in money management.[28] The City and Guilds of London Institute, which examines

a range of vocational qualifications, offers a 'profile of achievement' scheme. Nevertheless, this is simply a record of money management skills learned. The Money Management Council, a charity aimed at improving financial literacy, is presently developing units in personal finance that would count towards a GNVQ (the main vocational qualification).

Many financial services companies and associations already provide materials for schools.[29] The largest programme is *Face 2 Face with Finance*, operated by NatWest, one of the four major banks. The scheme, co-ordinated by the NatWest Financial Literacy Centre at Leicester University, targets secondary school students (age 11-18). More than 130,000 pupils have participated, involving over half of all secondary schools in the country. The programme includes resource packs, classroom simulation exercises and videos.

Regional co-ordinators and local staff volunteers go into schools to address students directly The bank is strongly committed to this initiative: its erstwhile chief executive, Derek Wanless, has said: 'Business must help to prepare our children for a changing world…By doing this we are investing in all our futures.'

The National Foundation for Educational Research evaluates the programme and materials to maintain high standards. Around 2,000 students were surveyed before they participated in the programme and immediately afterwards. The study followed up some groups one and two years later. They found significant increases in conceptual and computational skills in money management. The students were, on the whole, positive about the experience: most felt they had learned at least a bit about finance. NatWest's Derek Wanless has paid: 'This evaluation has shown that *Face 2 Face with Finance* does make a measurable difference. We are proud of that finding.'

Most other banks have similar, albeit less ambitious, offerings than *Face 2 Face with Finance*. These initiatives, and those of other financial services companies, are very useful, but they do raise concerns. The borderline between education, information and marketing can be blurred. Companies' objectives in offering these resources might include marketing their products, recruiting staff in local labour markets and developing staff's skills, in addition to more charitable motives, as part of 'community action programmes'. Nat West's motives for the *Face-2-Face-with-Finance* programme, examined in a study by the Corporate Citizenship Unit at Warwick, are very broad.

Many of these resources cover a large range of topics, including budgeting, careers advice, student finance. Saving, let alone pension provision, is often

covered only tangentially although NatWest's programme includes a module – 'It's Your Life' – which covers long-term financial planning and the importance of savings and pensions.

IV. PUBLIC EDUCATION POLICIES: INFORMATION ON INDIVIDUAL PENSION ENTITLEMENTS

Regular pension statements are an essential pre-requisite for giving people the information and the confidence to make retirement-income decisions. The Department of Social Security currently provides around 600,000 state-pension forecasts a year. Individuals must request the forecast using a relatively simple five-page form, called BR19. The forecast consists of a summary table and five further pages of explanation. These cover the basis of the forecast, the basic pension, automatic credits, home-responsibilities protection, voluntary contributions, additional pension (the official name for SERPS), graduated retirement benefit (SERPS' predecessor) and the effect of living abroad. However, neither the table nor the accompanying explanation is at all clear. The Department of Social Security appears to agree: it has promised to revise forecasts of individuals' state pension rights to make them easier to understand. (I have not been able to ascertain whether revisions have been made.)

The government's aim in the future is to move towards automatic provision of forecasts, rather than providing them on request, as now. As shown above, few people have any idea of the value of the basic state pension let alone their entitlement to SERPS, etc.

Defined-contribution plans – both personal and occupational – will in the future be required to provide projections of members' funds at retirement and the value of the annuity that these are likely to buy. Providing annual information on contributions, charges and pension value will also be part of the minimum standards for stakeholder pensions.

The medium-term aim is to move to a single, comprehensive statement of accrued and forecast pension rights. This statement might be provided through employers, the 'pay-as-you-earn' income-tax system, or through other pension providers (such as financial services companies). Table 4 shows the government's illustrative example of a combined pension statement.

The Pension Provision Group (1999) has argued that there are 'considerable technical problems to be overcome' and that 'it will be some time before this laudable aim can be achieved.'

Table 4: Illustrative Summary of a Combined Pension Forecast

Name :	**A Smith**
Age :	**58**
The contributions you have made so far have built up the following pension entitlements:	
State pension	
Your basic pension	£55.00
Your state second pension	£12.50
Occupational/personal/stakeholder pension	£62.30
Total current pension earned so far	**£129.80 a week**
If you stay in your current job your pensionat age 65 is forecast to be:	
State pension	
Your basic pension	£64.70
Your state second pension	£12.50
Occupational/personal/stakeholder pension	£85.70
Forecast pension	**£162.90 a week**
If you increased your pension contributions by 5 per cent of your earnings from 1 January your forecast pension would increase to:	**£170.20 a week**

Source: Department of Social Security (1998a)

In response, the Department of Social Security established a pension forecast advisory group, which reported in the summer of 2000. The group's terms of reference were:

- To consider how the proposals for introducing combined pension forecasts, being brought forward by government, might best be implemented to achieve wide and effective adoption.
- To advise on how the programme could be implemented with the minimum additional burden for employers and pension providers.
- To advise on what supporting information and facilities need to be provided to ensure that individuals make the best use of the new information.

The government's target was that 15 million combined forecasts a year should be issued from 2005 onwards.

The pension forecast advisory group pointed to a number of technical and legal hurdles, including the readiness of computer systems to provide information about state pensions and the human rights implications of giving data from contribution records to employers. The government has announced one pilot with an employer (Department of Social Security, 2000), but has remained silent on the progress since, although, in conjunction with the actuaries' professional organisations, there has been a detailed study of the technical issues in forecasting defined contribution pension values.[30] The projected value depends on a number

of assumptions. How are funds invested? What will investment returns and annuity rates be? When will the individual retire?

There remain, however, fundamental problems with the forecasts for defined-benefit plans. The statement aims to set out pension rights already earned and estimate what future rights might be. Predicting future pension accruals is necessarily speculative, but even the value of accrued pension rights depends on a range of uncertain variables.[31] In defined-benefit occupational schemes, current workers do not know what their final salary will be. Changing earnings levels affect the value of pension rights already accrued in the scheme as well as future rights. Moreover, people do not know how long they will remain in the scheme and most change jobs regularly.

The relevance of this for pension statements is evident from Table 4: 'If you stay in your current job until age 65 your pension is forecast to be…'. This is a highly unrealistic assumption, both because only a few people will remain in their current scheme to retirement and because most will retire before age 65. The median retirement age is under 55 for people without an occupational pension and just below 60 for people who are in an employer plan.[32]

Table 4 is currently very simple, but this simplicity is unlikely to survive its translation into a real benefit statement. First, most people have a portfolio of different pensions. They may have different plans from different jobs. Or, they may have a personal and an occupational pension at the same time. Or their private pension may be 'contracted in', and so they may build up both SERPS (in the future, state second pension) and personal or occupational pension. The pensions from previous employment continue to grow, as the earnings measure in defined-benefit schemes is uprated in line with prices and the investments in a defined-contribution plan continue to earn returns. Secondly, the current statement, to explain basic state pension and SERPS, requires five pages of explanations. How long will an explanation be of the two state plans plus defined-contribution, defined-benefit occupational, personal and stakeholder schemes? Yet, without this comprehensive coverage, the statement can only be misleading.

The statement is denominated in current prices. The Pension Provision Group, for one, has argued that 'governments need to spell out unambiguously the likely future value of state pensions in relation to future living standards'. The group recommends that the statement should be in 'earnings terms', with future nominal values deflated in line with an earnings index rather than a price index. This would reflect the purchasing power of the pension relative to general future standards of living. However, this option has been rejected by the follow-up study groups.

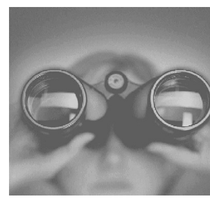
In conclusion, the development of a combined pension forecast is a vital pre-requisite for improving individuals' retirement-income planning. Nevertheless, the obstacles are huge.

V. INFORMING CONSUMERS: PUBLIC AND PRIVATE SECTOR APPROACHES

A theme throughout this paper has been the difficulty in persuading young people to think about pensions and retirement, issues which Vass (1998b) described as not 'aspirational'. Yet, the growing importance of voluntary contributions as compulsory pension provision declines in value means that people do have to prepare if they are to avoid a very basic retirement. In addition, the move towards defined-contribution provision puts a premium on early retirement savings.

Lunt and Disney (1998) explain people's reluctance to think about their retirement despite these changes in terms of 'ageism': the prejudice of the young against the old. They analysed, inter alia, a television advertisement from the Prudential, the largest personal-pension provider, which directly confronts this perception. Peter Davis, the company's chief executive, walks down a rainy urban street with an umbrella, saying that, if you were 25-years-old, he would look like a boring, middle-aged businessman. Then the challenge: 'You'd be wrong: I'm your guardian angel'. However, people's prejudices are confronted in a highly aspirational way: the advertisement then offers 25-year-olds a range of attractive lifestyles for when they become 55. The images and options include a couple on a large, sun-drenched yacht, running a small cheese shop in a quaint rural village, writing a novel, etc. Lunt and Disney argue that the advertisement's aim is to shorten the gap between the two ages, 25 and 55. The message: a relatively small effort now can open a huge range of future choices; investment is a means to a desirable end. Other advertisements adopt similarly aspirational approaches to retirement planning.

Figure 1: The Long View of Retirement



Private sector marketing probably has an easier goal than public information. A major objective is competition between providers: persuading people to take a Prudential pension rather than a plan from another provider. Perhaps only a limited goal is to encourage people who have not previously thought about pensions to plan for retirement. The latter, a more difficult objective, is central to public information. Still, it is worth contrasting the private sector approach with the public sector. For example, the Financial Services Authority seems to take exactly the opposite approach to the Prudential's advertisements. Its pension leaflet has someone looking, presumably towards her retirement, through a pair

of binoculars. The image appears to suggest that retirement is far away, while the Prudential promotes the idea that it is just around the corner.

The Department of Social Security (now the Department for Work and Pensions) has recently overhauled its public information efforts. The previous campaign was more carrot than stick. It exhorted consumers:

'Don't leave your pension to chance…It's up to you! The basic state retirement pension is a secure foundation but it was never meant to support the lifestyle most people want today…*Everyone needs to decide for themselves whether the basic retirement pension and any second pension…will be enough to meet their needs when they retire'* (original emphases).

The repeated message is that retirement will be uncomfortable and insecure without planning, and that it is individual's own responsibility. Again, many of the images (shown bowling, hiking, etc.) seem calculated to confirm rather than challenge youthful prejudices about older people.[33]

The new campaign is based on television advertisements featuring 'animatronic' sheep dogs. The dogs are shown at work, discussing how pension planning can deliver a retirement 'with my own kennel in the sun'. These, playing on the British love of animals, are endearing and attention-catching. But it is too early to judge the success of the campaign.

VI. CONCLUSIONS

Consumer financial knowledge and public education are important issues for pensions policy-makers that have often received less attention than they deserve. When it comes to pension reform, public information has a vital role to play at all stages:

- making the case for change;
- explaining the features of the reform; and
- helping people make informed choices, which includes both familiarising consumers with the general structure of the pension system and providing individual information.

This paper has described a number of initiatives to inform the public about pensions, which has sadly been neglected in the past. The Department for Work and Pensions and the Financial Services Authority, the new regulator, have issued a range of leaflets giving impartial, generic advice. Stakeholder pensions will improve access to information in the workplace. And the government will try to

clarify forecasts of state pensions and will move to a combined pension statement, including private plans.

These initiatives offer valuable experience for other countries developing public information campaigns. But the principal message is that public education and pension system design need to be closely integrated. Many problems in the United Kingdom stem from the complexity of the system.

Ongoing work at the World Bank is examining public information policies in a broader range of countries: in the OECD, Latin America and Central and Eastern Europe.[34] We expect this work to yield useful lessons for policy-makers.

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Notes

1. An NOP survey of nearly 1,000 adults for the Nationwide Building Society (Pensions World, 1998).
2. This comparison will, of course, understate the true level of error. Starr-McCluer and Sundén (1999) found the numbers in the United States that said that their pension plans are defined-benefit or defined-contribution matched the aggregate figures, but 20 per cent of people were incorrect.
3. Field and Farrant's (1993) work for the Pension Law Review committee found similar levels of ignorance about the rules of occupational schemes.
4. These results are similar to the analysis of private-pension coverage in Barrientos (1998). Also, Hawkes and Garman (1995) report that 25 per cent of employees said they had a personal pension, 47 per cent claimed they were in an occupational scheme, while 34 per cent said they had no private provision.
5. Hawkes and Garman (1995).
6. Only employees earning below the national-insurance lower earnings limit do not earn Serps. But that the low level of this limit (around a fifth of average pay at the time of the survey) means this condition affects part-time workers almost exclusively.
7. Pensions World (1999).
8. Hedges (1998). The study is based on 16 discussions held with a total of 97 people in the Autumn of 1997.

9. Although this year the government will provide an above-inflation increase and in future has promised that increases will be a nominal minimum of £100 a year. The relative living standards of the poorest pensioners are and have been protected by above-inflation increases in the minimum income guarantee and its predecessor, income support.
10. On which, see Agulnik (1999), Disney, Emmerson and Tanner (1999) and Clark (2001).
11. See the extensive references to American studies in Whitehouse (2000) and Whitehouse and Queisser (2001).
12. There is, of course, a general problem with attitudinal surveys of this sort: people tend to overstate the effect on their behaviour. It is interesting to note that over 60 per cent of callers thought that they would have taken action anyway, but that the call had encouraged them to move more quickly.
13. Other research shows that young people in particular are unwilling to think about pensions because they associate them with unwelcome eventualities, such as old age and death. See, *inter alia*, Finch and Keegan (1991).
14. FSA (1999*a*). The response to the responses to the consultation paper is FSA (2000*g*).
15. House of Commons Treasury Committee (1999).
16. FSA (1999*b*). These proposals are based on the research of Bacon and Woodrow (1999), a firm of actuarial consultants.
17. Among the fruits of which are FSA (2000*a*,*b*,*d*,*e*,*f*).
18. These arguments are set out in detail in Whitehouse (2000). Nye (1999) argues (from the opposite perspective) that consumer-information programmes should not be used to substitute for regulation.
19. The government has recently proposed to extend this beyond ISAs to basic bank accounts, mortgages, etc. HM Treasury (2001). Johnson (2000) and Farnish (1999) discuss the issues and the arguments on minimum standards.
20. NOP Research Group (1998).
21. Simpson (1996) and Benston (1998). See Davies (1999) and Llewellyn (1999) for a counter-argument and a defence of financial regulation.
22. The public employment service has recently been merged with the benefits agency into a new service called ‘Job Centre Plus’.
23. Department of Social Security (1998). See also Department of Social Security (1999*c*) on this issue.
24. See Financial Times (1999). Axia Economics (1999) provides a detailed critique. Surveys of pension professionals showed widespread opposition: see Mackintosh (1999) and Trueman (1999).
25. Department of Social Security (1999*b*) and Timmins (1999).

26. Vass (1998) provides a comprehensive survey.
27. Questionnaires completed by 3,500 pupils aged 11-16 in 142 schools. FSA (1999*a*).
28. Schagen and Lines (1996).
29. These are summarised in Vass (1998).
30. Department of Social Security and Faculty and Institute of Actuaries (2000) and Faculty and Institute of Actuaries (2000).
31. See Disney and Whitehouse (1994, 1996).
32. Disney, Meghir and Whitehouse (1994) and Meghir and Whitehouse (1997). Retirement is defined retrospectively in the event-history data as the time at which a person leaves their last job before age 65.
33. Participants in the government's consumer research on drafts of the leaflets felt that many of the characters were too old, and the final version does have 15 pictures of younger people as well as the pictures shown. Nevertheless, consumers found the characters varied, representative, that they were 'quite amusing and provided a friendly approach and feel'. The research, carried out by Michael Herbert Associations for the Central Office of Information research department, involved nine focus groups with people aged 18-55 in four English regions (Hankins, 1999).
34. See Chlon (2000) on Poland and Whitehouse and Queisser (2001) on Australia, Switzerland, the United Kingdom and the United States.

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PROVIDENT FUND AND PENSION SYSTEM IN INDIA

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INTRODUCTION

One eighth of the world's elderly population lives in India. A vast majority of this population is not covered by a formal pension system. They rely on their earnings and transfers mostly from children.

According to the 1991 Census, India has an estimated 314 million workers. Of this, 47 million (15.2%) are regular salaried employees, over 166 million (53%) are self-employed and 97 million (31%) are casual/contract workers. However, only 34 million workers comprising 11.3 million civil servants (employees of central/state governments and departments, including postal, defence and railways) and 23.18 million workers of organised workforce are covered by systemic pension plans. Thus, only 11% of the total estimated working population is covered by some formal pension provision.

The governments both at the central and state levels are spending increasingly large amounts on meeting the pension payments of the civil servants who constitute just 3% of the working population and a negligible percentage of the total population. The pension liabilities of the central government alone are growing at an average compound annual growth rate of 25% since 1990 and constitute 1.3% of the country's GDP. The liabilities on account of the already superannuated and working civil servants are estimated to be Rs 6,50,000 crore. These liabilities are unfunded and are met on a pay-as-you-go (PAYG) basis.

Pension scheme applicable to the 23.18 million workers covered by the mandated Employees Provident Fund (EPF) scheme is also unfunded. According to the World Bank estimates, the liability under this scheme is approximately 1.3% of the GDP and is expected to increase.

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The findings, interpretations, and conclusions contained in this paper are entirely those of the authors. They do not necessarily represent the views of India Life Hewitt, or its Board of Directors.

Hence, there is an urgent need for the governments, both at the central and state levels, to first address the problem of mounting financial exposure on account of pension payable to the civil servants, and to restructure the mandatory EPF schemes in order to make them self-sustaining, before attempting to address the issue of wider coverage.

This paper attempts to present the status of various occupational pension plans available in India, the issues involved and the suggestions for reform. It is divided into three sections. The first section discusses the pension benefits available to civil servants and non-government organised sector employees; the second section deals with issues related to investments faced by the retiral trusts in the organised sector; and the third section discusses some of the major industry-related issues.

CIVIL SERVICE PENSION

Retirement Benefits of Civil Servants

Civil servants, both of the central and the state governments, enjoy a basket of post-retirement benefits which includes (i) a lump-sum *gratuity* linked to the length of service and final salary, (ii) *provident fund* to which civil servants contribute 6% of the basic pay, the accumulated corpus with interest being paid out as lump-sum at the time of retirement, and (iii) *pension* which is dependent upon length of service, and average salary for the last 10 months of service. A civil servant at the time of retirement can commute up to 40% of the pension and the commuted portion is restored if he survives 15 years past retirement. Dependent family of a deceased civil servant is also eligible for family pension.

Each component of the basket has issues associated with it. For example, gratuity is a typical defined benefit lump-sum that is unfunded and paid on PAYG basis. Contributions by the employees to the provident fund, generally known as General Provident Fund (GPF), are retained in the government's cash balance and are used to finance government deficit. Technically, therefore, it is only a notional defined contribution scheme with no asset segregation. The payment at the time of retirement for both gratuity and GPF is from government's general revenue receipts.

The issues related to pension are more serious, since it is a life-long commitment to the employee and the cost of this commitment is increasing by geometric proportions every year. Some of the features of the pension scheme, such as restoration of commuted pension after 15 years and linking pension to inflation as well as future wage increases, compound the cost of pensions.

The Fifth Pay Commission's recommendations, which resulted in large-scale liberalisation of pension benefits, had a major impact on this liability. The Commission's recommendation on raising the ceiling of pension from Rs 4,500 per month to Rs 15,000 per month, 100% neutralisation against inflation, increasing commutation to 40% of the pension, raising gratuity ceiling from Rs 2,50,000 to Rs 3,50,000, including dearness allowance for calculation of gratuity, wage parity, etc. have had serious impact on the pension liabilities. As a result, the expenditure on pensions by the central government for the fiscal 2001-02 is more than three times that of 1995-96.

Year-wise figures of central government's expenditure on pensions for the period 1990-91 to 2001-02 are given in Table 1:

Table 1: Central Government's Expenditure on Pensions
(1990-91 to 2001-02)

Amount in Rs billions

Year	Civil	Telecom	Railways	Defence	Posts	Total
1990-91	4.80	0.85	8.86	16.70	1.50	32.72
1991-92	5.83	1.03	10.40	18.40	1.82	37.48
1992-93	7.01	1.17	12.51	23.13	2.04	45.85
1993-94	8.18	1.42	14.88	25.31	2.27	52.06
1994-95	9.34	1.56	16.86	27.04	2.53	57.34
1995-96	11.03	1.99	21.17	31.97	3.12	69.28
1996-97	14.25	2.52	25.09	36.83	3.84	82.53
1997-98	19.48	4.13	35.09	49.47	5.58	113.76
1998-99	28.03	4.52	41.44	72.70	6.77	153.46
1999-00	32.86	4.37	40.18	110.24	6.82	194.46
2000-01	40.21	5.75	51.67	105.39	8.15	211.17
2001-02	43.20	6.85	58.00	107.70	8.35	224.10

Source: Working Group on Pensionary Liability, Department of Expenditure, Ministry of Finance, Government of India, June 2001.

The financial situation of the state governments in this regard is equally precarious. The civil servants serving the state governments are also eligible for benefits similar to those extended to the central government employees. The impact that these liabilities have on the state finances can be gauged from the following observation of the Planning Commission in their approach paper for the Tenth Five-year Plan (2002-2007).

> "The deterioration in the state finances in recent years is, largely, an outcome of the fact that in the face of a limited resource-base the states had to cope with a significant growth in their committed expenditure. These include, wages and salaries, pensions and interest payments, which account for a major proportion of the non-plan expenditure and together absorb a sizable part of the revenue receipts. The pension liabilities of fourteen major states have increased by 200 times from

Rs 100 crore in 1975-76 to Rs 20,000 crore in 1998-99. It has, thus, increased from just 2% of revenue receipts in 1980-81 to about 12% in 1999-2000 and is likely to touch 20% by the end of the Tenth Plan" (para 2.8 page 16).

Table 2 indicates the rising expenditure of the state governments towards pensions and the percentage share of revenues required to meet this cost.

Table 2: Expenditure of the State Governments towards Pensions
(1995-96 to 2001-02)

Year	Pension expenditure (Rs billion)	Pension expenditure as share of states' total revenue (%)
1995-96	78.13	5.39
1996-97	98.27	5.82
1997-98	115.99	6.21
1998-99	161.66	7.35
1999-00	226.79	8.69
2000-01	244.33	8.12
2001-02	267.91	8.05

Reform Attempts

The Union Finance Minister in his budget speech for the year 2001-02 envisaged a new pension scheme based on defined contribution for new recruits entering government service after October 2001. The Finance Minister stated:

> "The central government pension liability has reached unsustainable proportions; as a percentage of GDP, it has risen from about 0.5% in 1993-94 to 1% in 2000-2001. As such it is envisaged that those who enter central government services after October 1, 2001 would receive pension through new pension programme based on defined contributions. In order to review the existing pension system and to provide a road map for the next steps to be taken by the government, I propose to constitute a High Level Expert Group, which would give its recommendations within 3 months."

The central government constituted an expert group under the chairmanship of Mr. B K Bhattacharya, former Chief Secretary, Government of Karnataka. The expert group submitted its report in February 2002, but its recommendations are yet to be formally accepted by the government. It is, however, understood that the group has recommended a hybrid scheme. It has proposed that all new entrants to government service shall have to contribute towards their pension, and this amount, together with the government's contribution shall be placed in a special fund. However, the pension itself will not be directly related to the amount contributed, but will continue to be a defined-benefit scheme linked to length of service and final salary.

Based on whatever information is available, following are the concerns on the recommendations of the expert group:

- The system recommended is neither defined benefit (DB) nor defined contribution (DC) but a mix of the both and hence the sustainability of the same is considered to be doubtful.

- It is doubtful whether the contribution proposed would be sufficient to cover the defined benefits at the time of retirement.
- The expert group assumes that so long as the difference in the rate of return on investment by the fund and the rate of growth of salaries equal 2% or more, the contributions proposed would meet the requirements of the benefit. This is a very risky assumption.
- The proposed scheme will not be able to reduce the pensionary liability of the central government in the short run and is essentially a long-term solution to the growing pension liability. This means that net saving would start accruing nearly forty years hence.

Suggested Reform Agenda

The reform agenda should be far more broad-based than what is being proposed by the Bhattacharya Committee. It would be ideal to formulate a three-phase strategy as follows:

The 'easy' phase of reform should switch to defined contribution for new employees and direct all future contributions to the GPF into a segregated fund, or discontinue GPF altogether. This should be mandatory for all new employees though it may arguably reduce the attractiveness of government employment.

Instead of a hybrid plan proposed by the Bhattacharya Committee, all new employees should be eligible only for a Defined Contribution Pension. As in the case of EPF, the civil servants could also be asked to contribute 12% of the basic pay, matched by the government's contribution as employer. Whatever amount such contributions accumulate (including returns on investments) should be used to purchase an annuity at the time of retirement. It is also possible to build a voluntary tier over and above this defined contribution (DC) plan. GPF should be part of the proposed DC plan. It would be ideal not to allow access to the GPF accumulation prior to retirement unlike what is being allowed under the Employees' Product Fund scheme.

Accumulations should be pooled into a separate fund to be managed by the trustees representing the government and employees. The government should evolve norms to invest the corpus through a professional fund manager with guidelines ensuring reasonable return and safety. Even the administration of the scheme should be handed over to a professional Pension Administrator who would be able to bring in latest information technology to service the employees. It is possible to evolve such a plan eventually into an individual retirement account a la 401 (k) plans in the US.

The ‘difficult’ phase of reform would include changing the formula for indexation, rationalising pension design (commutation, parity, retirement age), and addressing the problems associated with funding. Indexation in its present form is actuarially unsustainable: its base should be frozen, or even abolished. Commutation is not a service condition but an unscientific plan rule which should be modified to abolish pension restoration or get rid of commutation altogether.

It is clear that the frills attached to pension, such as indexation to inflation, wage parity, restoration of commuted pension, cause heavy financial burden. Most of these frills were not originally planned and were added for political or other reasons over the years. Any effort at reforming civil service pension scheme needs to address these frills to begin with. The difficult decisions would be to remove wage parity, commutation or at least restoration of commuted pension and place a cap on indexation to inflation.

The next issue that needs to be addressed is funding. It could start with GPF. The GPF contributions that are being deducted from the employees’ salary should be set aside into a corpus fund that again should be managed by trustees representing civil servants and the government with professional fund management and administration support.

With regard to unfunded pension, the government should actuarially estimate the liability and put the yearly pension contribution into a separate fund. Actuarially it is possible to determine a particular year’s pension cost and to start with the government should set aside that amount into a separate fund every year from now on. Gradually, governments could think about funding the past service liabilities over and above a particular year’s liability.

The ‘very difficult’ phase of reform would involve a reduction in benefits or shifting existing employees from defined benefit to defined contribution plan. This shift involves a delicate recalibration of a moral contract (the legal liability is only the vested, accrued benefit), but may finally be the only option. Ultimately, government would be forced to bring down the benefits, such as introducing a cut in the amount of gratuity payable, a reduction in the percentage of the last salary for calculating the amount of pension or adopting a career average of salary rather than the last 10 months average salary for determining the amount of pension payable.

The government could give an option to the current employees to shift to the defined contribution scheme designed for the new recruits. For such optees,

government would have to actuarially calculate the equitable interest for the period from the date of joining till the date of option and treat that as an opening balance in the defined contribution plan. It is quite likely that the younger among the current employees may also opt for the DC plan if the DC plan set up for the new employees performs satisfactorily. Mounting financial burden might ultimately force the government to shift all of them a defined contribution plan.

PENSION FOR NON-GOVERNMENT EMPLOYEES

Occupational pension for non-government employees consists of the provident fund and gratuity, which are mandatory, and superannuation plans which are offered by the employers voluntarily. A diagrammatical representation of the current framework is given in Annexure I.

Provident Funds

Provident Fund is a mandatory retirement benefit required to be provided by all employers with more than twenty employees under the Employees Provident Funds and Miscellaneous Provision Act, 1952 (PF Act). The Employees Provident Fund Organisation (EPFO) headed by the Central Provident Fund Commissioner administers and regulates all employee benefits. This organisation is part of the Union Labour Ministry. A politically nominated Board of Trustees makes policy decisions.

Employees covered by the Provident Fund Act enjoy benefits under the following three schemes:

Employees Provident Fund (EPF) scheme is a defined contribution plan paying lump-sum at the time of retirement. The employer and employee divide a contribution of 24% of the employee's wages equally. The corpus of this scheme earns an administered rate of return every year (for 2000-2001 it was 9.5%). There are multiple scenarios (marriage, mortgage, medical, etc.) which allow for early access to the accumulation.

Employees Pension Scheme (EPS) is a defined benefit scheme to which part of employer's contribution to EPF is diverted and central government offers a subsidy of 1.16% of the covered wage bill. This accumulation is used to pay various pension benefits on retirement or early termination.

Employees Deposit Linked Insurance Scheme (EDLI) is aimed at providing social security; in the event of death of an employee, his dependents are paid an insurance linked to the PF accumulation available to his credit. The employer pays all fees, charges, etc. for the administration of this entire plan (over and

above the contribution). The accumulated fund is currently not debited with any administration or management costs. Besides, employers are also required to submit information on member movement (joined, resigned), total contributions, etc. on a monthly and yearly basis.

The various options available to employers in providing PF benefits are listed in Annexure II.

Exempt Provident Fund Trusts

Acknowledging that some employers did not want to hand over the management and administration of their employee benefits to EPFO, the PF Act provided for employers the option to set up their own exempt PF Trusts after going through a formal and somewhat cumbersome (originally meant to be rigorous) process of approval.

The PF Act allowed for three kinds of exemptions:

(i) *Individual employee exemption* – An employee could apply to the Regional Provident Fund Commissioner stating that the employer provides benefit better or equal to EPFO and hence the private PF scheme should not be forced to pay into the EPFO and be allowed to pay into the employer's PF trust.

(ii) *Exemption for a class of employees* – The employer may set up a PF Trust that has restrictive membership to a category of employees e.g. managers, workers, staff, etc. All other un-exempt categories are required to comply by remitting monthly contributions to the EPFO.

(iii) *Exemption for the employer as a whole* – The employer sets up a trust that covers the entire employee population, including the employees of contractors.

In 1952, when the scheme was set up, most employees were covered under some kind of Exempt Trust. Over time, aggressive growth by the EPFO and a go-slow with regard to exemptions by the EPFO has radically altered the relative balance. In fact, the number of exempted employers and employees has stagnated over the last 15 years. The relative balance of exempt and un-exempt institutions is given in Table 3.

Why Employers Prefer Exempt PF Trusts?

With provident funds being part of cost-to-company and employees wanting more information, control and access, employers prefer managing exempt trusts.

Table 3: Exempt and Un-exempt Establishments
(Coverage)

	Employers covered				Employees covered			
	No. in '000s		% of total		No. in millions		% of total	
	1986	2001	1986	2001	1986	2001	1986	2001
Exempt	2.79	2.62	1.77	0.77	4.02	4.28	30.45	15.89
Un-exempt	155.07	337.39	98.23	99.23	9.18	22.66	69.55	84.11
Total	157.86	340.01	100.00	100.00	13.20	26.94	100.00	100.00

(Rate of Change)

Year	Exempted employers		Exempted employees	
	No. in '000s	Change(%)	No. in millions	Change(%)
1986	2.79		4.02	
1996	2.93	0.14	4.58	0.56
1999	3.12	0.19	4.11	-0.47
2000	2.59	- 0.53	4.36	0.25
2001	2.62	0.03	4.28	-0.08

Source: Prof. Mukul Asher's research and EPFO Annual Reports.

The corporate landscape is a lot more volatile, with restructuring, merger, and acquisitions now becoming more common than before. With the highly mobile labour market and employees seeking easy portability of their benefits, a monitored exempt trust would seem to work best.

The employers of exempted establishments feel that there is a huge direct cost saving (this does not include the indirect cost of follow-ups with Regional Provident Fund Commissioner) to them relative to un-exempt compliance. Further, the service levels of the EPFO, though improving, have a number of interface points and cumbersome procedures (refer Table 4).

Table 4: Exempt and Un-exempt Trusts

Administrative costs

	Un-Exempt	Exempt	Savings
Administration/Inspection Charges (% of basic + DA)	1.10%	0.18%	0.92%

Level of service

	Un-exempt	Exempt Trust
Administration of the fund	EPFO	In-house, hence more control over funds
Service levels – processing of applications	Unpredictable. No fixed timelines	Better and more reliable service. Immediate action on receiving application

The government mandates the investment returns, while exempt funds have the flexibility to give higher returns due to better cash flow and fund management. The onus of paying the minimum guaranteed return in an exempt trust shifts from the EPFO to the employer. This may not be a real threat now as interest

rates credited by EPFO slide in relation to market rates. The subsidy, if any, is now limited to a time lag in adjustment to market rates.

Comparison of Un-Exempt and Exempt PF Trusts

The average contribution by the employees of Exempt Trusts has always been almost three times higher than that of the un-exempt employees (Table 5):

This huge difference in contributions per member reflects self-selection by employers; those that form exempt trusts pay wages which are above the national average, and are willing to undertake the administrative responsibility and investment risk to provide a higher level of service to their employees.

Table 5: Annual Average Contribution

(Rs thousands)

Annual contribution per member	1986	1991	1996	2001
All establishments	1.36	2.57	3.06	4.08
Exempt establishments	2.55	4.81	6.67	10.16
Un-exempt establishments	0.84	1.70	1.96	2.90

Source: Prof. Mukul Asher's research and EPFO Annual Reports.

Contributions to exempt PF Trusts constitute a large proportion of total contributions (Table 6).

Table 6: Percentage Share of Contribution

	2001		2000		1999	
Category	PF contribution Rs. billion	Percentage to total	PF contribution Rs. billion	Percentage to total	PF contribution Rs. billion	Percentage to total
Un-exempt	63.99	59.65	57.78	59.68	49.54	63.55
Exempt	43.29	40.35	39.04	40.32	28.41	36.45
Total	107.28	100.00	96.82	100.00	77.95	100.00

Source: Annual Report of Union Labour Ministry, 2000-2001.

Need for Reform

Ending Dual Role of EFPO

Companies with over twenty employees have to pay 24% of salary (contributed in equal share by the employer and the employee) to the Employees Provident Fund Organisation (EPFO). The monopolistic status of the EPFO does not subject charges or service to competition. Further, employers pay an additional 4.4% of contributions as asset management and administration fees with service levels that need to be improved.

Nobody disputes the complexities of creating competition in a mandatory contribution pension plan, but that cannot be an argument against it. The first

phase of reform, therefore, needs to separate the regulatory and administrative roles of the EPFO, and subject the administrative part (which is nothing but an asset management and IT services operation) to open competition. The immediate implication will be that the employers will be free to choose the administrative and/or investment service provider, and the current convoluted and bizarre exemption process can be scrapped.

Portability

The Provident Fund Commissioner currently prohibits the free transfer of accumulations between exempt trusts and excluded trusts (set up by employers for employees not covered by the PF Act and participants with base salary above Rs 6500/-). This prohibition completely defeats the intent of portability, and it would appear that the EPFO is merely trying to stifle the growth of schemes outside its purview. This restriction needs to be withdrawn immediately.

Portability from one employment to another within EPFO is administratively complex and time-consuming, forcing the members to withdraw at every change of employment. This is one of the primary reasons for small PF accumulations at retirement.

Tax Issues

The Income Tax Act needs to address two issues urgently. Firstly, the taxing of investment returns beyond the rate credited by the EPFO. This removes all incentives for prudent fund management. Very few exempt trusts currently pass on the benefit of higher corpus returns to members since any credit higher than what is given by the PF commissioner attracts tax and mandates complicated tax deduction at source (TDS) procedures. This creates a large reserve account in some well-managed funds. The distribution of this reserve at some point in the future will create unfair cross-subsidies for the current members at the time of distribution. Employees who leave early lose their share of the created reserves.

Secondly, parity between exempt trusts and EPFO needs to be introduced with respect to taxing the withdrawal of PF accumulations. All exempt trusts currently deduct tax at source for lump-sum withdrawals before five years of service. The EPFO does not follow this practice. It is important to level the playing field by removing this anomaly. This would also discourage withdrawals at every change of job.

Early Access to Accumulation

Liberal early withdrawal options from the provident fund account have led to the average terminal accumulation value being only around Rs 25,000.

A number of leakages (retirement, medical care, housing, family obligation, education of children, financing of insurance polices, etc.) need to be plugged, but this may not be possible given the high rates of contribution.

Any plugging of leakages should be accompanied by a reduction in the rates of contribution from 24% to somewhere in the range of 17 or 18 percent. In addition, ensuring portability and tax on early withdrawals would definitely help in increasing the accumulation at retirement.

Table 7 shows the categories of withdrawals:

Table 7: Provident Fund : Pre-Retirement Withdrawals, 1999-2000

Category	Number (thousands)	Percent of total	Amount (Rs million)	Percent of total
Total withdrawals	394.0	100.0	7819.5	100.0
Life insurance policies	14.3	3.6	112.3	1.4
Housing	62.8	15.9	3344.6	42.8
Closure of establishment	56.7	14.4	804.1	10.3
Health care	68.7	17.4	1006.5	12.9
Marriage and education	171.5	43.5	2251.8	28.8
Others	20.0	5.1	300.3	3.8

Source: Prof. Mukul Asher's research and EPFO Annual Report, 1999-2000 (Tables 6 and 23).

With the exempt trusts providing better and more accessible service than the EPFO, members of these trusts have faster and easier access to the corpus. The state of Maharashtra is an interesting example of the difference in un-exempt and exempt withdrawals (Table 8):

Table 8: Advances Sanctioned and Amount Disbursed in 2000-01

Category	By Exempt Trusts		By the PF Commissioner	
	Cases (nos)	Amount (Rs millions)	Cases (nos)	Amount (Rs millions)
Financing LIC policy	1320	7.63	271	16.46
Housing advance	24323	1698.75	19700	1295.60
During temporary closure	0	0	10756	297.96
Illness	11561	210.13	5307	131.41
Marriage	11665	400.01	16349	402.44
90% withdrawal	219	65.85	0	0.00
Others	6098	293.21	753	93.22
Total	55186	2675.57	53136	2237.09

Source: Annual Report 2000-01 of Regional Provident Fund Commissioner, Maharashtra.

Employees Pension Scheme 1995

Going against the current expert opinion, the government provided for defined benefits, which are to be met by defined contributions payable into the

scheme. This is impossible in actuarial parlance; when the benefits are defined, the contribution into the scheme is decided by periodical actuarial estimation. And even if the contributions are based on actuarial estimation to start with, the assumptions are certain to change periodically and eventually the scheme would become unviable.

Benefits

Superannuation pension is payable to those having a minimum of 20 years of service, after they have attained the age of 58 years. The formula for calculating the pension is:

$$\text{Pension} = \frac{\text{Average salary for last 12 months of service X Pensionable service}}{70}$$

Average salary will however be capped at Rs 6,500/-.

There are other variations, such as Retirement Pension (for those who leave service before attaining 58 years but after serving 20 years), short service pension (for those who have rendered more than 10 years service but not 20 years).

There are also provisions for taking care of an employee's service during the period he was governed by FPS 71.

There are options to commute the pension and pension with return of capital. Other benefits offered under the scheme are: disability pension, widow pension, children pension and orphan pension with minimum of sums assured irrespective of the amount contributed by the member.

If a member has served for less than 10 years, he can avail the benefit of withdrawal, i.e. such an employee will be paid back his contributions multiplied by a factor depending upon the number of years of contribution.

In 1971, Family Pension Scheme (FPS 71) permitted a maximum of Rs 58 to be diverted from the employer's contribution to provide pension to the family of a deceased workman. FPS 1971 was replaced by the Employees Pension Scheme (EPS) 1995.

Issues

Actuarial soundness: Actuarial estimation of liabilities of any pension scheme depends entirely upon the basic data. Although the EPS is supposed to

be based on actuarial valuation, the data used for the purpose is suspect considering the quality of data available with the various regional and sub-regional offices of the EPFO.

EPFO continuously professes that EPS is actuarially sound. However, it is not transparent as to the actuarial assumptions, and the quality of data used. Till last year, the actuary who had devised the scheme also carried out the actuarial valuations. This year, according to the EPFO, the valuation was carried out by another actuary.

Any defined benefit pension scheme such as EPS 1995, depends on the successful pooling of contributions of all the members. Returning contributions to early exits rarely allows this to happen. It is a proven experience of EPFO that the members take their balance away every time they change job. This effectively impairs pooling and shall certainly affect the long-term viability of the scheme.

Post implementation, the government further tinkered with the scheme. For example, the original scheme had stipulated a reduction in the pension benefits by 6% for every year of service less than the minimum of 20 years. This clause has now been deleted. The same is the case with the clause that permitted members to draw pension after attaining the age of 50 but before 58. While the earlier clause provided for a reduction of 6% for every year's shortfall, it has now been brought down to 3%. Although this may appear to be a small reduction, it could have a major impact on the long-term viability of the scheme.

Providing commutation value equivalent to 100 times the original pension, after reducing only 10% of pension payable, is also actuarially unsound.

Cross-subsidy: It is inherent in any defined benefit pension scheme. However, in EPS it is highly skewed. For instance, the widow of an employee drawing Rs 1000/- at the time of his death would receive a pension of Rs 544 per month; whereas the widow of a member drawing Rs 4200 per month and beyond would only get Rs 1481 per month. Moreover, widow pension is not linked to the period of contribution and amount of contribution. This only indicates that there is not much linkage between contributions and ultimate benefits promised.

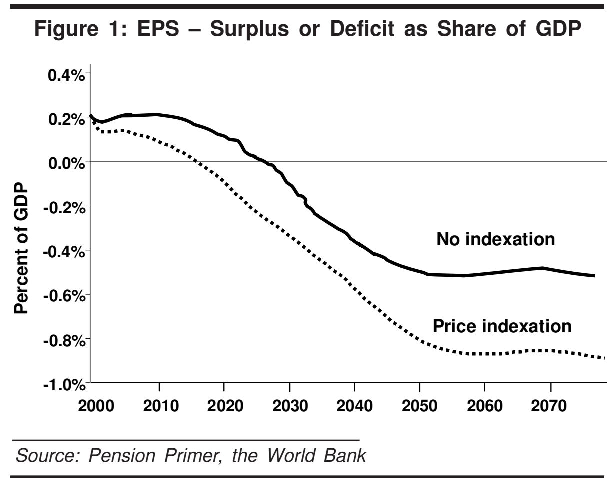
Cross-subsidy in an employer-contributed scheme or a social security scheme sponsored by tax receipts of a government is accepted internationally (though being questioned, of late). However, EPS is a mandated second pillar pension plan based on employee contribution. Cross-subsidising in such a situation amounts to penalising one employee to pay another.

The World Bank and the Asian Development Bank have studied the scheme in detail. The World Bank estimates that if the benefits are not indexed to inflation, the EPS would go into deficit by around 2030. However, with inflation-indexing, deficits may begin to surface around 2015, progressive deficits could become as high as 1% of GDP (Figure 1).

Suggested Reform

Not many people with a provident fund account know that 8.33% of their salary is sent to a badly designed Employees Pension Scheme (EPS) that does not come back as a lump-sum. The scheme was introduced without any debate. Employers opposed it. Employees do not like it. The Supreme Court has heard several arguments, but the Employees Provident Fund Organisation (EPFO) has refused to back down.

Figure 1: EPS – Surplus or Deficit as Share of GDP



Source: Pension Primer, the World Bank

The EPS carries an inherent design flaw of having defined benefits along with defined contributions. Other shortcomings of the scheme are: a defined benefit plan with individual balances; early withdrawals that destroy pooling effects; opening balances that may not cover past service liability; and a committed central government subsidy. Most importantly, the EPS is actuarially unsound and probably unsustainable; an asset shortfall will require a government bail-out sometime in the next ten years. It is nothing short of a contingent liability on the government's finances. It is, therefore, suggested that the EPS should be scrapped.

Superannuation and Gratuity Funds

Gratuity is a benefit mandated under the Payment of Gratuity Act, 1972 (The Gratuity Act) and the employer is under a statutory obligation to pay gratuity to his employees under the stipulated conditions. The Gratuity Act mandates employers to pay a gratuity at the rate of last drawn wages x 15/26 x number of years of service. The employee is eligible for the benefit only after serving for a minimum period of five years except in the case of death or permanent incapacity. Employers are free to offer better terms of gratuity. However, the benefit is largely unregulated except for the provisions in the

Income Tax Act, 1961, if the employer had set up a Gratuity Fund approved by the Income Tax authorities.

The Gratuity Act is currently enforced by the Labor Commissioners of the respective state governments. As per Section 4A of the Gratuity Act, each state can notify the clauses for exemption from an insurance policy in their own way. This leads to differential regulations.

Gratuity is a retirement benefit and needs to be administered differently than other labour legislations like the Factories Act, Payment of Wages Act, etc.

Superannuation is a voluntary occupational pension scheme adopted by employers. There is no regulatory body for these plans other than the Income Tax Department.

The employers who wanted to fund and institutionalise either the gratuity or superannuation scheme had two options. One was to approach the Life Insurance Corporation of India (LIC), the state life insurance monopoly until the other day, for a group insurance product; and the second was to administer a trust with trustees representing both the employees and the employer. While employer-run pension schemes can accumulate and invest funds, they are required to purchase annuities on behalf of the retiring employees from LIC.

As of March 1998, the total accumulated fund for these group pension plans was about Rs 65 billion, of which the LIC managed Rs 49.7 billion on behalf of 4719 schemes*.

Earlier, the superannuation plans were generally defined benefit plans assuring benefits based on length of service and linked to final salary at the time of retirement. However, corporate India has woken up to the dangers of a defined benefit plan, and there has been a distinct trend towards defined contribution plans.

Mandate Asset Segregation/Funding

The Gratuity Act while mandating gratuity as a benefit and defining eligibility norms, quantum of benefit, etc., is silent on how the employer should fund the liability. The Act leaves the aspects of funding to the discretion of the employer. However, from a corporate governance perspective, the accounting standards prescribed by the Institute of Chartered Accountants of India require

* *IMF Working Paper WP/01/125/ - 'Pension Reforms in India' by Robert Gillingham and Daniel Kanda.*

the employer to value the liability actuarially and provide for the same in the books.

The Gratuity Act provides for compulsory insurance for the liability under the Act (Section 4A) and also for exemption from compulsory insurance if the employer has set up a gratuity fund approved by the Income Tax authorities. However, the provision has not been made effective, as state governments have not notified this provision.

There is no incentive for employers to fund gratuity liability, either through an insurance policy or by setting up a gratuity fund approved by the Income Tax authorities. As such, in the event of unexpected closure of a business, employer would not be able to meet the gratuity liability, leaving the employees in the lurch.

The obvious advantage of mandatory funding of gratuity liability is that the liability is always funded and the employee is assured of receipt of gratuity at the time of termination of employment. It should be clearly laid down that the employer should either obtain an insurance policy or set up a gratuity fund with the due approval of Income Tax authorities. Actuarial valuation of gratuity liability should be made compulsory for all the employers in the Gratuity Act itself. Further, it should also be made mandatory that the contribution/premium is paid annually within a specified time limit. Such contribution/premium should be made an eligible business expenditure in the year of contribution.

Review Tax Deductibility Cap on DB Contribution

The Income Tax rules cap the business deduction on contribution to superannuation fund at 15% (27% including the PF contribution of 12%) of the basic salary. Likewise, there is a ceiling of 8.33% of the basic salary in respect of gratuity funds. While defined contribution superannuation could be restricted to 15% of the gross basic salary, the contributions for the defined-benefit superannuation schemes should be allowed subject to an actuarial valuation. However, contributions for defined benefits, which are based on actuarial valuation, should be fully allowed as deductions. The current cap on the contributions to the defined-benefit superannuation fund could lead to asset liability mismatch if the employer decides to restrict the contributions to the prescribed ceiling. In respect of the initial contribution, it is allowed as a deduction over a period of five years.

The trusts would be fully funded, if the employers contribute on the basis of the actuarial valuation. Hence, the cap on the business deduction from the

contributions should be removed if these are based on actuarial valuation. To avoid excessive contributions, there could be a cap on the defined benefit; for example, the gratuity benefit could be limited to the benefit defined under the Gratuity Act.

Lay Down Framework for Actuarial Services

Actuaries who provide valuation services to defined benefit plans (superannuation, gratuity, leave encashment) are not governed by any regulations apart from those laid down by the Actuarial Society of India. The individual actuary and the trustees jointly decide the actuarial assumptions for various valuations. Aggressive actuarial assumptions have led to under-funding in many such plans. One reason for the situation is non-availability of compiled data on assumptions such as industry-wide salary escalations, turnover rates, etc.

The Actuarial Society of India or any other governing body of the actuarial profession should evolve standards for actuarial assumptions that leave enough discretion for the actuary to meet specific realities of different situations (trusts, employers, industries, etc.).

Create Regulatory Framework

As it is, superannuation and gratuity plans do not operate under a comprehensive regulatory framework or a regulator. The only touch point is the Income Tax Act. However, Income Tax authorities have a limited objective; they often demand reports from an information perspective only. It is important to integrate the regulatory framework for the superannuation and gratuity funds with that of the occupational pensions.

INVESTMENTS

The Union Finance Ministry currently mandates the investment pattern for retiral trusts with three possible objectives: (i) safety; (ii) captive demand for government paper; and (iii) ability to influence interest rates. The evolution of the pattern of investment has, however, been slow. The major shift has been from direct investments in the government to investments in government enterprises.

Mandated Investment Pattern

The pattern of investments has been continually liberalised since the 1970s, but progress has been slow. Table 9 indicates changes over time.

The trustees take the investment decision for the PF Trusts. They retain discretion on choice of securities and duration of assets within the prescribed asset allocation model. Regulation does not stipulate the sources of assets. Trustees

Table 9: Changes in the Provident Fund Investment Pattern (1975-2000)

In %

Investment Categories	Pre 1975	1975-85	1985-92	1993-94	1994-95	1995-96	1996-97	1997-98	1998	Now
Special Deposit Scheme (SDS)	-	30	Not more than 85	70	55	30	20	-	-	-
G.O.I./Mutual funds@	100	70	Not Less than 15	15	15	25	25	25	25	25
S.D.L/ State guaranteed securities/Mutual funds						15	15	15	15	15
P.S.U./ DFI Bonds/ Certificates of deposit	-	-	-	15	30	30	40	40	40	40
Any of the above	-	-	-	-	-	-	-	20	20	20
Private sector	-	-	-	-	-	-	-	-	10*	10*
Total	100	100	100	100	100	100	100	100	100	100

**10% represents 20%-10% = 10% and not 10% of 20% = 2%, this is as per clarification issued by RPFC, Maharashtra and Goa.*

@ Mutual funds refer to dedicated gilt funds, introduced in April 1999.

Source: Website Investmartindia.com

themselves decide on the choice of secondary/primary markets. Typically, provident funds have been seen to buy bonds from primary sources. Provident fund regulation does not permit active management of portfolio by Exempt PF Trusts. Sale of securities has to be effected after approval from the PF Commissioner.

Case Study of an Exempt Provident Fund

The following example details the experience of a PF Exempt Trust that has been in existence since the early 1950s. The trust has a corpus of Rs 460 million and its investment performance is shown in Table 10.

The portfolio composition over the last four years is shown in the chart below. The fund is saddled with the Special Deposit Scheme (SDS), which is gradually reducing in proportion to the total corpus.

Table 10: Investment Performance of a PF Exempt Trust

	1999	2000	2001	2002
Return	12.69%	12.68%	11.48%	10.70%

The chart shows that:

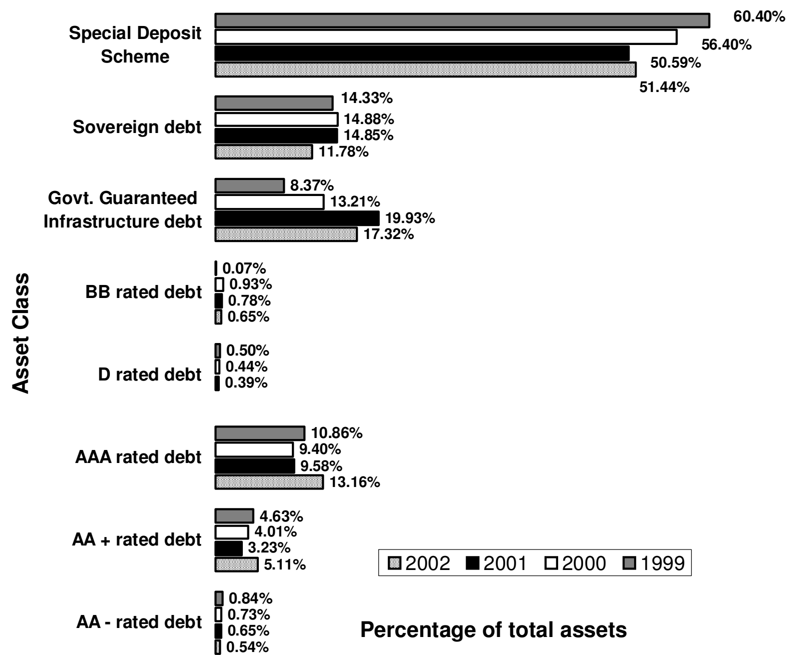
– Returns on assets have fallen by 200 basis points (mainly on account of falling yields of assets).

– This has been on account of falling yields of assets.

– Composition of portfolio has changed to reflect credit quality concerns.

– Exposure to government guaranteed debt has declined.
– Exposure to AAA assets has increased.
– Sovereign debt exposure – known to be zero-risk – has declined.

Figure 2: Portfolio Composition – 1999 -2002



Investment Issues of Pension Trusts

The current asset allocation model no longer meets the objective of providing the trustees avenues to invest in safe assets whilst ensuring a reasonable rate of return.

Creditworthiness of Mandated Assets

Cases of defaults and delays in debt servicing are on the increase among Government Paper. The deterioration in the financial health of the state governments has further accentuated the credit quality problems. Due to the absence of marking assets to market, the investment of Provident Fund Trusts in default-grade assets remains largely hidden.

Multiple Regulators

The PF Commissioner (Ministry of Labour) mandates the rate of interest payable by provident funds to employees, while the Ministry of Finance sets the

rates on the special deposit scheme. A disconnect between the two has led to uncertainty in interest liability, resulting in sub-optimal investment decisions. Wide differences exist in the asset allocation models of the Ministry of Finance and Ministry of Labour, e.g., gilt mutual funds form part of the Ministry of Finance's pattern of investment but this is not the case with the Ministry of Labour.

Financial Reforms have Outpaced Pension Reforms

Changes in financial sector have not been accompanied by changes in the asset allocation for provident funds. Interest rates on savings instruments like the small savings are linked to market rates. Yet, the administered provident fund rates remain on the higher side and are not determined by the underlying rates on assets or performance of mandated investment portfolio. Since investment risk is borne by the company there is an inherent inability to establish and implement risk management practices. In addition, the inability to sell assets without approval from the EPFO does not encourage the trustees to introduce procedures for better and more efficient management of credit and interest-rate risk. Hence the trustees, being typically executives of the employer, tend to be 'yield chasers', disregarding the risks involved.

The current regulation does not permit trusts to pay custodian and portfolio advisory fees. These have to be picked up by the company. Trustees, therefore, tend to refrain from using the services of such professional advisors.

Operational Problems

The marketable lots of government securities and PSU/corporate bonds are in the value range of Rs 50 million and above. In order, therefore, to be able to buy them at good prices, the retiral trusts should have investible surpluses of Rs 50 million every time they access the markets, which is very rare. Retail lots of such securities which are ordinarily not available in the market are, therefore, priced 0.05% to 0.5% higher. In the process, the trusts end up paying more for such good securities. SEBI has recently come out with a regulation by which any issue of securities to more than 49 persons would be treated as public issue with attendant disclosure and regulatory requirements. In order to avoid such hassles, issuers of AAA – rated securities avoid issuing such securities to more than 49 persons. This further restricts access to such bonds for pension trusts and they are left with bonds of riskier and lower rated government companies, such as the state electricity boards and irrigation projects. Pension funds are forced to buy securities from smaller broking firms who pose settlement risk.

Declining Yields

Lower interest rates on sovereign bonds and AAA-rated bonds have substantially eroded the earnings of the retiral trusts. This has resulted in exempt provident funds finding it difficult to meet the mandated rate of return which has remained at 9.5% for the year 2002-03 also, whereas the returns on good quality securities hovered around 7% (Figure 3).

What Needs to Be Done

Asset Administration

Trusts should be permitted to pay asset management/custodian fees. Complexities in investing have necessitated the use of the services of fund managers, investment advisors and custodians. The current rule of employer picking up the tab is a major disincentive to the trustees to avail of the services of professionals.

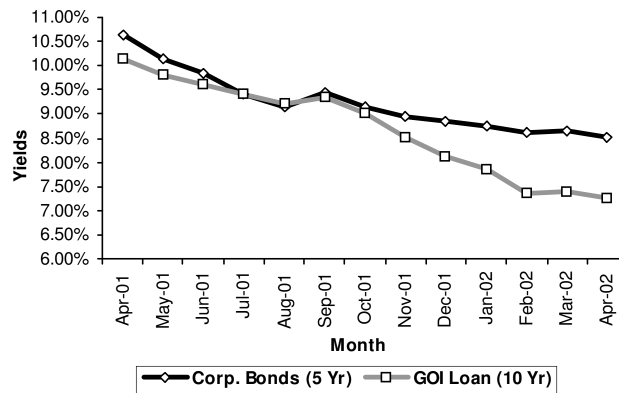


Figure 3: Falling Bond Yields

Trusts should be mandated to evolve and implement risk management practices, such as asset holding practices making it mandatory for dematerialisation of securities, holding government securities in the Securities General Ledger (SGL), etc. It should be made mandatory for trusts to follow counter party risk management practices, such as minimum net worth for counter parties like brokers. Other practices could be credit exposure norms limiting exposure to sectors and institutions and marking all the assets to market periodically.

Asset Allocation

It is important that employer choice is given precedence over employee choice in investment decisions rather than jumping to the individual retirement account structure wherein employee decides where his retirement contributions are invested.

The move to employee-driven investments will have to be preceded by greater investor understanding of the nature of investments and the risks associated with them. Retail investors have quite often turned yield-chasers and burnt their fingers as they have no understanding of the risk / return trade-off.

We hold the conservative view that while equity markets in India may be ready for pension money, the latter is not ready for equity markets. Financial sophistication is still evolving, and there is no vibrant market for corporate control. Even when equities are eventually allowed, indexed investments should precede active direct equity investments.

It is important to sequence changes in asset allocation, and we feel that incremental reform will be more effective than radical reform.

Reforms in asset allocation could start with amending the mandated pattern by enabling trusts to invest in corporate debt mutual funds, liquid mutual funds, index-based mutual funds (with limited equity exposure) and bank deposits. In the meanwhile, trusts should also be allowed to actively manage their assets and utilise the services of professional fund managers.

This could be followed by a second phase where limited employee choice could be introduced by allowing employees either to go with the trustees' decision or invest as per their choice within the asset allocation model.

In the third phase, equity exposure may be introduced – mandated returns may be removed and complete choice may be given to the employee with regard to investment.

Asset Management

In the asset management area, it is important to link provident fund interest rates to market rates, permit sale of securities without permission from the Provident Fund Commissioner to facilitate asset-liability matching, liquidity management and credit risks management. Active management of the funds will also help increase returns – an effective hedge in a declining interest rate regime.

The retiral trusts should also be allowed to securitise/impart liquidity to Special Deposit Scheme. Most pension funds today have invested in this scheme and it is a drag on the earnings of the trust on account of its illiquidity. Liquidity can be imparted to the scheme by its phased conversion into dated government securities and permission to transfer/trade on special deposits among trusts at pre-determined prices.

INDUSTRY ISSUES

Integrated Regulatory Bodies

An Integrated Pension Regulator (IRDA, SEBI, or restructured EPFO) needs to be identified as the first step. This would put an end to the dual and conflicting role of EPFO both as administrator and regulator.

The Integrated Regulator would be solely responsible for all legislation and supervision of players in the industry (investment managers, insurers, and administrators). The superannuation trust set up by employer, though voluntarily, will get regulated and the employee would receive the same benefits at the time of retirement as were assured by the employer at the time of commencement of employment. Also, the provisions of the Income Tax Act could be aligned with the requirements of the Pension Regulator rather than bringing all the state-wise regulations in line.

Fiduciary Responsibility of Plan Trustees

Plan trustees currently have no liability for plan performance or actions. The highest leverage in any reform programme would be creation of fiduciary and criminal liability for plan trustees as individuals. The current lack of a framework has created, at times, an unholy alliance between trustees and financial intermediaries which leads to decisions that are not always taken in the interests of plan participants. This role needs to be clarified and the downside needs to be amplified.

It is suggested that systems are introduced to switch over from the current over-regulated but under-supervised status to a fiduciary framework for trustees that will hold them accountable. It would be ideal to make it mandatory for a nominee of the Pension Regulator (preferably a neutral independent professional from a panel of Chartered Accountants or Company Secretaries) to be present in the annual meetings of the trustees. The nominee shall report the yearly status to the Pension Regulator and recommend corrective action, if any.

Creation of Licensed Pension Administrators

Exempt trusts and other pension trusts are currently managed both by trustees nominated by the employer as well as those who represent the employees. More often than not the officers heading the finance and personnel departments are called upon to administer the trusts. The day-to-day administration is further delegated to the finance department of the employer and does not get the attention it deserves except probably for investment of the corpus and settlements/loan disbursal. A number of employers are now opting for outsourcing arrangements to take care of administrative activities.

Outsourcing is still not recognised by the EPFO, but a formalisation of the pension administration / outsourcing industry into a regulated and monitored industry would have many upsides. Such an integrated regulatory body could license institutions that would be authorised to offer pension administration service.

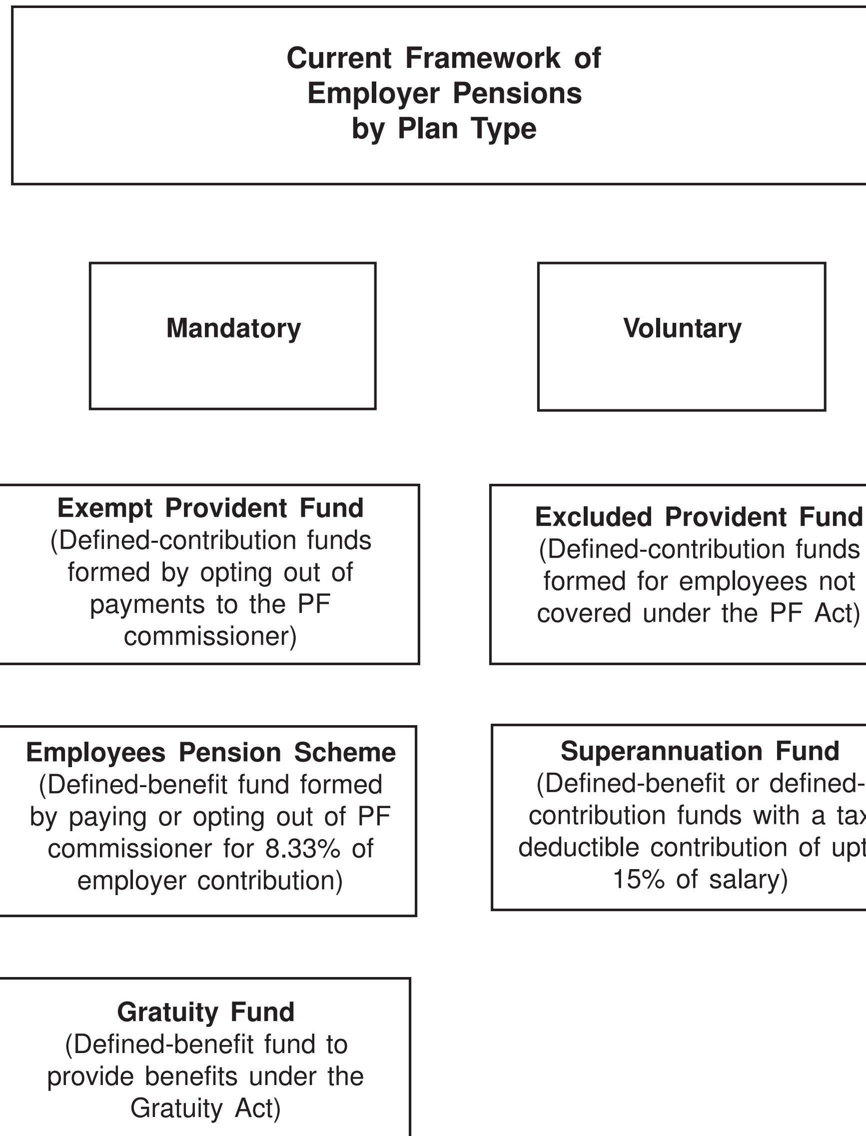
The service operation of EPFO could be the first licensee. LPAs would catalyse an industry structure for unbundled and transparent pricing

Creation of Licensed Pension Investment Managers

All occupational pensions (exempt or excluded PF trusts, superannuation or gratuity funds) have to invest in a highly regulated investment pattern. Given the traditional lack of volatility and flexibility, most trusts are managed by a low-level decision-maker. The inability of the fund to pay asset management fees has resulted in a situation where employers do not seek professional asset management advice but rely on brokers.

It is necessary to formally recognise the role of Investment Managers in Pension Funds in two distinct categories: portfolio management, and mutualised solution. The basic criteria for managers who undertake segregated funds with separate custody should be the portfolio management licence from SEBI, and for managers who want to offer a mutualised solution, an asset management licence from the same regulatory authority.

Annexure I



Annexure II

Options for Employers in Providing PF Benefits

Criterion	**Within the PF Act**		**Outside the PF Act**
	Un-exempt	**Exempt**	**Excluded**
Eligibility	All employers with more than 20 employees All employees covered under the PF Act	All employers with explicit exemption from EPFO All employees covered under the PF Act	Voluntary for employers Only employees with more than Rs 6,500 (basic salary) and no previous EPFO balance
Salary used for calculation	Basic + dearness allowance	Basic + dearness allowance	As per trust rules
Contributions	EPF employer - 3.67% EPF employee - 12.00% EPS employer - 8.33% EDLI employer - 0.50% EPS govt. - 1.16% Total - 25.66%	EPF employer - 3.67% EPF employee - 12.00% EPS employer - 8.33% EDLI employer - 0.50% EPS govt. - 1.16% Total - 25.66%	PF employer - 12.00% PF employee - 12.00% (Trust rules could provide for a lesser rate) Total - 24.00%
Contribution payable to	EPFO	PF contributions to the Trust and the rest to EPFO	Entire contribution payable to the Trust
Other charges	PF Admin. - 1.10% EDLI Admin. - 0.05%	PF Inspn. - 0.18% EDLI Admin. - 0.05%	No charges payable
Administration	EPFO	Trustees representing employer and employee	Trustees representing employer and employee
Benefits	EPF; EDLI; EPS	EPF; EDLI; EPS	Provident fund
Regulator	EPFO	EPFO & Income Tax Commissioner	Income Tax Commissioner
Coverage	On crossing twenty employees	On approval by the EPFO	At the option of employer
Investment returns	Rate fixed by EPFO	At least equal to rate fixed by EPFO	Rate to be decided by the trustees; determined by the return on corpus
Asset allocation	As per Labor Ministry notification	As per Labor Ministry notification	As per Finance Ministry notification
Taxability	EEE* (*No tax at any stage)	EET* (*Taxable only if withdrawn before 5 years of membership)	EET* (*Taxable only if withdrawn before 5 years of membership)
Portability	Technically portability is possible both in and out. Administratively very difficult.	Technically portability is possible both in and out. Administratively EPFO to trust is difficult otherwise it is convenient	Portability from EPFO/exempt trust prohibited. Portability to EPFO/exempt trust is possible

Notes:

EPFO = Employees' Provident Fund Organisation
EPS = Employees' Pension Scheme
EDLI = Employees' Deposit Linked Insurance
EET/EEE= Letter 'E' represents exemption from tax and letter 'T' denotes tax.
The first letter represents the status at contribution stage, the second at investment income stage and the last at the stage of receiving pension benefits.