International Labour Review, Vol. 132, 1993, No. 2

Pension reform in developing countries

Subramaniam N. IYER *

Introduction

The purpose of this article is to survey the status of institutionalized pension schemes, with specific reference to developing countries. This spans a huge range extending from countries such as St. Kitts (population 40,000) to China (population over 1 billion); and from States such as Mozambique (per capita GNP, US$80) to the United Arab Emirates (per capita GNP, US$19,860).[1] However, all these countries share one common characteristic: a low state of social security development relative to the industrialized countries.

The provision of retirement benefits in old age is based on a long-term contract between the active population and those who are too old to work. Benefits in the case of invalidity which renders an active person incapable of working and in the event of death which deprives his or her dependants of their breadwinner are generally assimilated to old age benefit.

The concept of protecting the elderly dates back millenia, with the active members of an extended family supporting their elderly relatives, in the expectation that they in turn will be supported by the younger members of the family. A similar concept also applied to disabled relatives and to the widows and orphans of deceased family members. This informal intra-family system can break down, of course, as in the case of families where no one is economically active or where the active members do not earn enough. However, the main reason which prompted the development of more formal arrangements in this respect was the rapid growth of the urban labour force due to the progress of industrialization, and its alienation from the traditional family setting.

Large-scale institutionalized arrangements for the protection of the elderly and disabled originated in the Western industrialized countries at the beginning of the twentieth century in the form of Bismarckian social

* International Labour Office.

[1] World Bank: *World Development Report*, 1992 (Washington, DC, 1992). The quoted figures relate to 1990.

insurance,[2] progressed through the enlarged concept of Beveridgian social security[3] at the middle of the century and are finally approaching the truly universal concept of social protection.[4] Today most advanced countries have comprehensive systems which typically extend to the whole population and operate effectively and efficiently.

By contrast, with very few exceptions, institutionalized arrangements in the developing countries are of relatively recent origin, having appeared only after the Second World War, following the emergence of several independent States at the end of the colonial era. In general, these schemes exclude appreciable proportions of the population who are as much in need of protection as those covered. Moreover, there are serious shortcomings as to their operation and the schemes have failed to deliver the promised benefits even to the restricted circle of their clientèle.

This state of affairs has transpired despite the ideals enshrined in international declarations such as the Universal Declaration of Human Rights adopted by the United Nations in 1948. More particularly, from its inception, the ILO has been concerned with the development of such protection schemes in all its member States; apart from issuing such statements as the Declaration of Philadelphia in 1944,[5] it has adopted a number of Conventions and Recommendations which provide both the inspiration and a necessary framework for the development and expansion of such schemes.[6] Nevertheless, on the whole, progress in this area in the developing countries has been disappointing.

This article explores the reasons for such a situation and considers how it may be rectified. It starts with a description and a critique of the structure of the benefit systems in place; it then proceeds to review their experience so far and to analyse the constraints which have prevented a healthier development of the systems; and it concludes with an agenda for reform.

I. Structure of the benefit systems

The main scheme providing protection against the contingencies of old age, invalidity and death is invariably a *public* scheme. The provisions of

[2] The first broad system of social insurance was created by the Government of Germany under Chancellor Bismarck between 1883 and 1889. Such schemes were limited to workers in specified occupations; entitlement depended on past employment and contribution history; and they were required to be self-financing, with little support from the State.

[3] The report *Social insurance and allied services* by Sir William Beveridge (London, 1942) envisioned a greater degree of coverage and solidarity, with the State assuming considerable responsibility for financing.

[4] Generalized social support for all citizens, regardless of contribution or employment history, benefits being set according to need rather than acquired rights or entitlement.

[5] In the Declaration of Philadelphia, in 1944, the ILO restated and expanded upon a number of the fundamental principles inspiring its work.

[6] See A. Otting: "International labour standards: A framework for social security", in this issue, p. 3.

such a scheme are laid down in full detail in a statute or in subsidiary legislation. These provisions cover, in particular, the rights and obligations of all individuals and establishments affected by the scheme, including the contributions to be paid and the benefits to be derived. A public scheme is mandatory, at least for specified categories of the population. It is administered directly by the State or, alternatively, by an autonomous parastatal organization subject to government supervision through a governing board in which representatives of the individuals and establishments concerned by the scheme generally participate. The scheme's solvency is guaranteed by the government; such a guarantee is generally implicit but may sometimes be made explicit in the relevant legislation. Finally, because of the dominant role of the State in the organization and operation of the scheme, the reserve funds are mostly invested in government securities.

Two main models of public schemes prevail in developing countries: most countries have the defined-benefit social insurance model; a few countries have the defined-contribution national provident fund model. A variation on the latter is the mandatory retirement savings-annuity model, which was implemented in Chile in 1981.

The social insurance model

This is a defined-benefit model, that is, the benefit formula is specified in detail, leaving the contributions to be determined as required. Contributions are generally proportional to earnings, but which are sometimes subject to a ceiling. The benefit is usually related to the previous earnings of the beneficiary and to the period of contribution, and is payable in the form of a periodic payment (pension) throughout the contingency. People who have contributed for a short period may be assisted through an enhanced benefit formula or through specified minimum rates of pension. This applies, in particular, to those who become disabled or who die at a young age and to those who first enter the scheme already at an advanced age. The principle of indexation of pensions after their award is normally recognized in the legislation, although the exact mechanics of the adjustment may not be specified. The cost of the scheme is generally shared between employee and employer or borne by the insured person alone, in the case of the self-employed. Sometimes, a state subsidy is also provided.

In this system, contributions are not allocated to individual accounts. Title to benefit depends on payment of contributions, without there being necessarily an exact equivalence between the amount of contributions and the amount of benefits of each member. This is because implicit in this model is a pooling of risks and of resources (i.e. redistribution) within any given generation. This principle can be extended to include an element of intergenerational redistribution. This permits the choice of actuarial funding method from within a wide range of possibilities going from the pay-as-you-go (PAYG) method to the fully funded method.[7] In practice, most developing countries have adopted a partially funded method. Any funded method will necessarily lead to the accumulation of reserves which could be invested to produce income to supplement contributions.

A common variant of the partially funded system is the scaled-premium system, which leads to the accumulation of a non-decreasing reserve fund. The initial contribution rate (expressed as a percentage of insured earnings), is fixed at a level higher than the initial PAYG rate[8] and maintained at the most until the year preceding the year when the scheme's contribution income together with its investment income are first expected to fall short of its expenditure. The contribution rate is then increased and maintained until it is revised in its turn, and so on. Another variant requires the reserve fund not to fall below a specified multiple of the annual expenditure in the latest year (e.g. two or three times the annual expenditure). Social insurance schemes need to be actuarially valued at intervals of three to five years in order to recommend appropriate adjustments to contribution rates, also taking into account any significant modifications in the schemes.

The national provident fund model

This is a defined-contribution model, that is, whereas the contribution rate is specified, the benefit is left to be determined by accumulated contributions and the interest which accrues to them. Contributions are identified with each member and accumulated, with interest, in an individual account. The balance in the account is paid as a lump sum to the member or the heirs, as the case may be, on the occurrence of one of the specified contingencies (old age, invalidity or death). Sometimes there is an option to convert the balance into a life-annuity. Contributions are typically shared between the employer and the employee and usually there is no state subsidy. By its very nature, the scheme is fully funded and substantial reserve funds necessarily accumulate. Certain provident funds permit premature withdrawals or advances from the balance for specified purposes, e.g. to purchase a residential property, to educate a child, for dowry purposes, or to pay an insurance premium.

The mandatory retirement savings-annuity model is a modified version of the national provident fund model. The accumulated balance in the individual account is compulsorily converted into an indexed annuity, which

[7] Under the PAYG system, revenues are raised, as they are required, to meet expenditures. Under a funded system, revenues are raised in advance of requirements. If a scheme is fully funded, the accumulated reserve fund will be such that, together with future interest earnings, it will suffice to cover expenditure on benefits accrued to date.

[8] In a new pension scheme benefits, as a percentage of insured earnings, would generally start at a relatively low level and increase continuously until a certain stability is reached after several decades; the PAYG contribution rate will accordingly follow the same trend.

cannot fall below a specified minimum. Disability and survivors' benefits are provided through separate insurance arrangements. In the particular case of Chile, contributions are paid only by the employees, although the State guarantees minimum pensions; the scheme, although statutory, is administered by private companies which are supervised and partly underwritten by the State; the State also covers the past-service liability in respect of the initial entrants into the scheme.

Comparison of the models

From the social viewpoint, the social insurance model has definite advantages over the national provident fund model. The latter may have some economic advantages but, as will be explained below, it does not meet certain basic requirements of ILO standards. The retirement savings-annuity model attempts to correct some of the deficiencies of the national provident fund model, but in the process introduces other problems.

The social insurance model has the following advantages: it provides periodic payments which ensure protection throughout the contingency; through the pooling of risks and resources, it provides benefits more closely related to the social need of beneficiaries rather than to the individual contribution effort alone; it frees insured persons from the inflation and investment risks; and it provides a choice of actuarial funding method which can be adapted to national situations and requirements. However, it has been claimed that pooling of resources reduces transparency because contributions are not allocated to individual accounts; further, since the relation between individual benefits and contributions is not strictly proportional, there is a tendency for evading contributions or underdeclaring earnings subject to contributions. Moreover, there is an appreciable state commitment, and partially funded methods imply a greater burden on future generations which may not be tenable unless there is adequate economic and/or demographic growth. Finally, it is claimed that PAYG or near-PAYG methods may depress aggregate national savings, although this is a controversial matter.

The advantages of the national provident fund model are its greater transparency, its implied lower state commitment and its likely beneficial effect on national savings. On the other hand, it has several disadvantages: it provides lump-sum benefits which can be frittered away leading to poverty in old age; lump-sum benefits do not meet the requirement of ILO Conventions which only recognize periodic payments; the benefit is not related to the social need of the beneficiary; members have to bear the inflation and investment risk; the contribution rate needs to be relatively high from the outset to provide meaningful benefits; the reserve accumulation is likely to be considerable and could exceed the absorptive capacity of the economy; and, finally, premature withdrawal, which is often allowed, will dilute the protection against long-term contingencies.

The mandatory retirement savings-annuity model improves on the national provident fund model by providing annuities instead of lump sums, by relating benefits more closely to social needs through minimum pensions and by partially freeing members from the inflation and investment risk. However, it does not guarantee the replacement ratio (pension as a percentage of terminal earnings) and adds significantly to the state commitment. Moreover, the use of sex-specific annuity factors would lead to a lower pension for women, other things being equal.

In view of the shortcomings of the national provident fund model, several countries operating such schemes are contemplating their transformation into social insurance pension schemes (e.g. Sri Lanka, Nigeria, Tanzania). However, progress in this direction has been slow. One of the reasons may be that (as will be seen later) the avowed advantages of the social insurance model have not been fully realized in practice in the developing countries. Nevertheless, the transformation of national provident funds is an objective which should be pursued by developing countries.

The private pension model

Private pension schemes are arrangements which complement statutory public schemes by providing top-up benefits. Private schemes may be accepted as alternatives to the public scheme, that is to say, members of such schemes are allowed to "contract out" of the public scheme since they are covered for equivalent benefits. Schemes may be designed on either a defined-benefit or a defined-contribution basis; the effects are broadly similar to those of, respectively, the social insurance model and the national provident fund model, but some effects may be more intense. For example, labour mobility may be curtailed due to vesting and portability provisions,[9] requiring a long period of service before entitlement to benefit is established or restricting the maintenance of acquired benefit rights on change of employment.

It is generally considered that private schemes have to be fully funded, irrespective of whether they are on a defined-benefit or defined-contribution basis, in order to guarantee the accrued benefits in the event of premature termination of the scheme. Full funding of defined contribution schemes is a relatively straightforward matter, but full funding of defined-benefit schemes requires an actuarial estimation of future liabilities in respect of accrued benefits and hence is subject to a degree of uncertainty. The resulting reserve funds become available for investment, thus encouraging and facilitating the development of a national capital market. Defined-benefit private schemes are generally unable to guarantee indexation of pensions, unless the State

[9] Vesting: minimum qualifying contribution period for entitlement to any benefit; portability: the possibility of carrying earned benefit on moving from one scheme to another.

makes available inflation-indexed bonds to them, and thus assumes the basic risks associated with inflation.

The decision to establish private schemes is usually left to employers and/or workers. Sometimes such schemes are used as an instrument to attract and retain labour, and then form part of their terms of employment. There are similar voluntary arrangements, such as personal pension policies or annuity policies issued by insurance companies, which are suitable for self-employed persons.

With a few exceptions, however, the private pension market is relatively undeveloped in developing countries.

Civil service pension schemes

Civil servants in developing countries normally benefit from special pension arrangements as part of their conditions of service. The schemes are usually financed on a pay-as-you-go basis from the state budget, but sometimes contributions are deducted from salaries to cover part of the cost of benefits. It is a general practice to exempt civil servants from participation in the public social security scheme, although other categories of government employees may be covered under the public scheme.

II. Review of developing countries' experience of pension provision

Origins and development of public schemes

Almost all developing countries have a system in place to provide protection against the long-term contingencies, in which a public scheme is the main element. However, there are substantial variations among the public schemes in major regions of the developing world, as also among those in the countries of a given region.

Latin America was the first region to implement such schemes, some countries (e.g. Argentina, Brazil, Cuba, Uruguay) having initiated their systems by the 1920s. Such provision came on the scene in Asia and Africa only after the Second World War, following the independence of several countries. Most developing countries have based their public schemes on the social insurance model, although some (mainly those previously under British administration) adopted the national provident fund model. A few national provident funds have been transformed into social insurance pension schemes, including the one in Ghana. Chile moved in the opposite direction, transforming its social insurance pension scheme into a mandatory savings-annuity scheme. China, which had an individual enterprise-based system, is experimenting widely with pooling of risks and resources across enterprises, geographical areas and categories of workers.

Coverage

Except for certain countries in Latin America and other rare exceptions, the public schemes in developing countries generally cover only a small proportion of the population. Coverage in sub-Saharan Africa is particularly low and typically represents well under 10 per cent of the labour force. Elsewhere coverage may be higher, but it rarely exceeds 50 per cent. Moreover, there is considerable variation between countries; for example, in Latin America, the coverage is reported to vary from a low of 10.2 per cent of the economically active population in the Dominican Republic, to a high of 100 per cent in Cuba and Nicaragua.[10]

In fact, when the schemes were set up, they were mostly intended for the urban employed population, in view of the recognized priority needs of this category of workers and taking into account the ease of administering a scheme covering this sector. Self-employed persons and rural workers were generally excluded at the outset, the intention being to cover them at a later stage. In practice, however, the extension of schemes beyond the formal sector rarely materialized. Meanwhile, in many countries, the urban informal sector has been growing in numerical importance, leading to the gradual marginalization of the covered sector. This has led to the criticism that the relatively privileged members of society are protected, while the considerably larger number of underprivileged citizens are exposed to the risks of old age, invalidity and death of the breadwinner.

Retirement characteristics

The normal pensionable age under public schemes in developing countries is generally 60 or below, with sometimes a lower retirement age for women. Several schemes apply the pensionable age of 55; this compares with the age of 60 or over, and often 65, prevailing in industrialized countries. In addition, there are often generous provisions allowing for the payment of a pension based on the normal scale, without any actuarial reduction, on retirement after completing a specified insurance period (without any age condition); retirement of women who have given birth to a specified number of children; or retirement due to "premature ageing", a provision found in several African schemes. Moreover, some schemes have adopted special measures seeking to help solve the unemployment problem or to cater for retrenchment arising from structural adjustment policies.

The relatively low retirement ages in developing countries, often unjustified at present levels of expectancy of life at those ages, as well as the generous early retirement provisions are factors which increase pension costs. Further, population ageing is a factor contributing to the escalation of

[10] *Report of the Director-General*, Thirteenth Conference of American States Members of the ILO, Caracas (Geneva, 1992), p. 74.

costs in Latin America and China, although not yet in the rest of the developing world.

Replacement ratio

By replacement ratio is meant the percentage which the pension entitlement after a long career (e.g. 30 years) represents in relation to the earnings basis. The latter is generally an average of insured earnings computed over the last three to five years. The replacement ratio under public schemes is relatively modest in sub-Saharan Africa, generally in the range of 40 to 60 per cent. Elsewhere it is higher, and in exceptional cases can reach very high levels (e.g. Kuwait has 95 per cent).

When the pension amount is compared with final earnings, however, the percentage is likely to be lower – significantly so if the insured earnings entering into the computation of average earnings have not been indexed. This is a problem which has arisen in certain countries during periods of high inflation; it has not always been adequately solved. Ideally, if the pension is based on earnings over a number of years, the amount of earnings of each year should be revalued to take account of the general rise in earnings up to the terminal year. On the other hand, there may be a tendency to overstate earnings or to grant accelerated promotions towards the end of the worker's career, with obvious implications.

Indexation of pensions

A related question is that of adjusting pensions after their award, to compensate for the effect of inflation and/or to take account of rising earnings. Although the principle of indexing pensions is generally recognized in the legislation governing public schemes, the procedures are rarely specified and the usual practice has been to index on an ad hoc basis. This has led, in some countries, to a massive depreciation of pensions. Indexation should also apply to any parameters specified in terms of the national currency (e.g. ceilings on insured earnings or minimum pensions); if such parameters are not adjusted in line with the movement of average earnings, the protection provided by the scheme will become increasingly marginal over time, as has happened in numerous developing countries. Sometimes the minimum pension is regularly indexed but not pensions over the minimum; this leads to bunching of pensions at the minimum level and the degeneration of earnings-related schemes into flat-rate schemes.

Investment of reserves

Reserves of public schemes have mainly been invested in fixed-interest securities, among which government securities predominate. Any limited investment in the private sector has been in the form of bank deposits or bonds. This makes for a very conservative investment policy – one which is sometimes dictated by government, frequently as a form of captive financing for excessive public deficits. In practice, it has led to negative real yields in many countries over long periods of time.

A special situation in Latin America is the investment of public pension reserve funds in health infrastructure. Although this has brought social returns, adequate financial returns on the reserves have not materialized. The same has applied to investment in workers' housing, which is practised in some countries.

The negative real yields have a deleterious effect on the funding level of social insurance schemes and will eventually lead to contribution rates higher than those originally foreseen, if promises regarding pension have to be fulfilled. As regards national provident funds, such investment performance leads to the depreciation of members' balances in real terms.

Migrant workers

Workers moving from one country to another for work lack protection. Some countries restrict their public schemes or some benefits from such schemes to nationals only. Even where non-nationals are covered there are generally restrictions on payment of pension benefits abroad and on the portability of accrued rights. Bi- or multi-lateral agreements regulating such matters are still rare in developing countries and where they exist, their proper implementation often faces a number of administrative and political difficulties.

Actuarial valuations

Although actuarial valuations of social insurance schemes are often statutory requirements, they are not systematically carried out everywhere. In the absence of such valuations and due to the misconception of pension scheme surpluses as profits, benefit liberalizations have sometimes been implemented without commensurate increase in revenue, thereby compromising the long-term financial equilibrium of pension schemes. In certain countries this has contributed to a gradual deterioration in the level of funding and even to the degeneration of a funded system into a *de facto* pay-as-you-go system.

Administration

With few exceptions, in developing countries both social insurance schemes and national provident funds operate substantially below their full potential with regard to the collection of contributions and payment of benefits. In many countries governments have defaulted on their financial participation and even on the payment of contributions in their role as the employers of government employees covered by the schemes. There is also widespread evasion or underreporting by private sector employers of workers' earnings and hence of contributions.

The maintenance of records is often grossly inadequate. This refers in particular to individual contribution records, which are required for both social insurance schemes and national provident funds. This usually leads to undercomputation of benefits.

Furthermore, administrative charges are high in developing countries' schemes – sometimes excessively high, by comparison with social security schemes in industrialized countries. There may also be problems of misuse of funds, with consequent poor returns from investments or showing up as high administrative expenditure – though this problem is not, of course, exclusive to developing countries.

Private schemes

As already mentioned, private schemes are rare in the developing world. This is particularly so in Africa, although South Africa and Zimbabwe are notable exceptions. They have become established to a certain extent in some Latin American countries (e.g. Mexico) and in some Asian countries (e.g. India). One reason for their relatively low prevalence is the existence of a large pool of surplus labour, which reduces the need for the employer to offer such plans for attracting and retaining labour. Another reason may be the rather generous replacement levels provided, at least in theory, by numerous social insurance schemes, which reduces the perceived need for supplementation. Moreover, except for civil servants who are usually covered by special schemes, contracting-out provisions are generally absent, on the basis that the maximum possible pooling is desirable for the public social insurance schemes. This argument, however, does not apply to national provident funds, and it is not uncommon for private provident funds to be approved and their members exempted from participation in a developing country's national fund.

III. Directions for reform

Although there are exceptions, the overall experience of public social security schemes in developing countries leaves much to be desired, and even within the limited scope of their application, they have not performed to acceptable standards of social security systems. The principal deficiencies observed include the following:

– In spite of initial intentions, the schemes have made hardly any headway in extending their coverage beyond the formal sectors of the economies concerned. As indicated earlier, this means that substantial sections of the population remain without any form of protection against the long-term contingencies.

- There are major gaps in compliance: revenue from contributions is frequently much less than it should be; employers (including the government and often with the connivance of employees) do not pay the contributions they should, or understate the earnings on which contributions should be calculated.
- Investment income in real terms is frequently lower than it should be, and is sometimes negative. As indicated earlier, this can arise from the absence of properly functioning financial markets, and sometimes from implicit or explicit appropriation by the government of social security reserves.
- Administrative costs tend to represent a high proportion of revenue: both because of general management inefficiencies, or because of excessive staffing and/or salaries within the social security institutions.
- Direct transfers from public budgets, particularly where they are required to fund basic flat-rate anti-poverty pensions, have been eroded over the past decade or so by overall budgetary constraints and by a failure to give them adequate priority in total public expenditures.
- Administrative deficiencies, in particular the absence of efficient record-keeping and processing of claims, frequently means that benefits are paid late, are underpaid, or are not paid at all.
- High inflation coupled with revenue problems have meant that both initial benefit levels and their subsequent real value have been substantially devalued over time, in some countries to derisory levels.
- Periodic actuarial valuations of social insurance schemes are not systematically carried out, leading generally to a deterioration of funding levels.

It is significant that this state of affairs is largely independent of the basic structure of the systems; in other words, both social insurance schemes and national provident funds have equally failed to deliver the expected benefits to their members. Nor have private schemes developed to any significant extent to provide supplementary protection. Over the past two decades or so, many of the prerequisites for the healthy development of social security were lacking in numerous countries: full employment, steady economic growth, functioning financial markets and institutions, stable and democratic political structures and good governance and administration. In addition, extension of social security to the underprivileged sectors of the population could not take place without the necessary political commitment to social solidarity.

These considerations imply both that there is a serious need for reform and that the first priority should be to upgrade the operational efficiency of the systems in place.

Institutional and management reform

For the most part, the management and administrative issues to be addressed suggest their own diagnosis and treatment. It is not a question of broad analytical issues or radical change. What is required above all is the fixing of management targets, responsibility for them, and accountability for their achievement. From this follow many of the necessary changes: in personnel and wage policies, in training programmes, in the development of electronic data processing, in a readiness to pursue defaulting employers and employees, and to open the books, and in a willingness to defend their clients when the political requirements of government policies start to deprive contributors and beneficiaries of their entitlements. But action is needed in a number of key areas including:

- the improvement of financial management, especially concerning the investment of pension funds;
- regular actuarial monitoring of the schemes;
- better control and monitoring of administrative and personnel costs;
- the development of electronic data processing techniques, and their application to record keeping;
- greater efforts at pursuing employers and employees who are in default, and the development of legal departments capable of enforcing the collection of contributions;
- implementation of training and personnel development programmes, particularly at middle-management level;
- greater attention to relations between regional and local offices and headquarters;
- better relations with clients and the public generally, and greater transparency, both as concerns the overall operation of the social security institutions and in providing individuals with accurate and up-to-date information about their entitlements;
- the creation of policy analysis, planning and forecasting units close to higher management and capable both of providing management advice and of ensuring better coordination with public policy generally, particularly as regard relations between social security institutions and ministries of finance, economic planning, labour and social welfare.

It is clear that many public schemes have experienced difficulties because of the scale and complexity of their administrative systems as originally set up, or as expanded in an effort to meet perceived deficiencies. Hence, it is essential that schemes be designed in such a way as to strike the right balance between the needs of the beneficiaries and the capacity of the administration to deliver the corresponding services. Some of the ingredients for increased capacity are within reach, especially where they depend simply on management initiatives; more often, however, they require gradual improvements in conditions of service, training and equipment.

The debate about structure

The deficiencies of existing pension systems have also given rise to considerable debate – not to say controversy – concerning the optimum structure of pension systems in developing countries, and whether or not existing structures need to be reformed. In this area, the issues being considered by developing countries parallel a similar debate going on in the industrial advanced countries. But the context of the debate differs significantly between the two groups. Thanks in large part to the generosity, universality and general success of social security retirement pensions, the relative income position of the elderly in developed countries has improved very substantially over recent decades: to the point where there is some questioning about the level of benefits, and more particularly about the means by which they are achieved. By contrast, the debate in developing countries arises chiefly from the lack of success of public schemes, both social insurance and national provident funds, and the absence of successful private schemes; the main issue is whether a change in the structure of the schemes would result in better levels (and wider coverage) of social protection for retirees and the elderly. In both developed and developing countries, however, budgetary considerations play an important part: developed countries are concerned about the implications for current and future public outlays of existing benefit levels, past commitments, and the consequences of demographic ageing; developing countries are correspondingly concerned about the budgetary implications during periods of economic stabilization and structural adjustment.

At the origin of the debate are the basic objectives of a national system of protection against the income needs of old age, invalidity and death. These include:

- protection against poverty in old age, during disability or on death of a breadwinner for all members of the population;
- provision of an income, in replacement of the earnings lost as a result of (voluntary or involuntary) retirement;
- adjustment of this income to take account of inflation and, at least to some extent, of the general rise in living standards;
- creation of an environment for the development of additional voluntary provisions for retirement income.

Other, subsidiary objectives sometimes also exist, including the important question of whether the design of pension structures can also improve the level of aggregate national savings. But additional policy targets may require additional policy instruments if they are not to detract from the achievement of basic objectives concerning the provision of retirement income.

In broad terms, the resources needed to meet these objectives derive from three channels: direct transfers from public budgets and funded by the tax system; benefits provided by social security schemes financed by earnings-related contributions; and the income derived from savings accumulated over a working life. There are a number of options both in the way in which they are applied and in their relative weights in any composite system. Such differences can have a significant effect on outcomes and on the extent to which any combined system, considered as a whole, is capable of meeting the required objectives. The most straightforward approach is through the adoption of a tiered system which would match financing sources to the separate objectives along the following lines:

(a) a basic tier, providing flat-rate benefits at subsistence level on a universal or means-tested basis, funded on a pay-as-you-go basis from taxation;
(b) a mandatory, defined-benefit tier, financed mainly through contributions and operating on a partially funded basis;
(c) a voluntary complementary tier, based on individual or collective private initiative, and operating on a fully funded basis.

Such a three-tier structure would meet all the basic objectives of protection systems. The core component of this structure, the mandatory defined-benefit tier, would oblige all those who are able to contribute towards their protection to do so. It should guarantee an adequate level of income replacement in the form of an indexed periodic payment.

Those falling outside the mandatory defined-benefit tier for one reason or another will be provided the means of subsistence through the basic tier, financed out of general revenues. This is the tier which is practically non-existent in developing countries and to the development of which the highest priority should be accorded. Its development will no doubt be affected by the state of the economy and, in view of the limited tax-base in the countries concerned, only a means-tested approach may be possible for the time being.

The lower the level of benefits provided by the mandatory tier, the greater the scope for the complementary tier, which would in principle be available for those wishing to augment their protection. However, employees in higher positions are more likely to benefit from complementary schemes than lower paid, casual, temporary and part-time workers.

The basic and mandatory tiers would be state-administered, in view of their nature and the government financial guarantees involved. The complementary tier would be privately administered.

It will be noted that the mandatory defined-benefit tier corresponds to the social insurance model which already exists in most countries. However, it should be applied as widely as possible and should eventually cover all those with a regular income from economic activity, including civil servants. The benefit provisions should be streamlined in order to minimize distortionary effects on labour supply. Reforms could usefully include measures such as raising the retirement age, tightening early retirement options, reducing excessive replacement ratios, formalizing indexation provisions and improving the protection of migrant workers. The schemes should, however, conform at least to the standards of the ILO's Convention No. 102 concerning minimum standards of social security and, if possible, to the higher standards of Convention No. 128 concerning invalidity, old age and survivors' benefits. This implies that national provident funds – which, although they provide a limited form of protection, cannot adequately meet the basic objectives of a national protection system – should therefore be converted into social insurance pension schemes.

Alternatives and compromises

The situation of many developing countries leaves them little room for manoeuvre when contemplating a move to the stylized three-tier structure described above (or one of its many variants). What is more, they may not wish to. Their experience over the past two or three decades – with provident funds as well as with social insurance type systems – has created a deep and widely held sense of disillusionment with the capacity of national, and in particular publicly managed, pension systems to deliver acceptable levels of benefits. The acknowledged deficiencies have led to a search for alternative structures which may prove to be better implemented. Just as some countries with national provident funds are reviewing the possibilities of a move to social insurance schemes, others are contemplating moves in the opposite direction: that is, towards greater use of fully funded defined-contribution models, almost invariably also associated with a shift to private, rather than public, management and administration.

Some of the advantages and disadvantages of the two different models were discussed earlier, with the general conclusion – other things equal and on the assumption that the schemes work as they should do – that the social insurance model offers substantial social advantages over the provident fund/defined-contribution model. But in developing countries other things are not equal and things do not work as they should, so the question arises of which model is to be preferred in such a second-best situation.

From the points of view of both contributors and beneficiaries, the question centres on two kinds of risk, neither of which can reliably be assessed. Reliance on a public social insurance scheme means in essence that the participants in the scheme accept the risk that governments may not ensure that the promised defined benefits are in fact delivered (that is, that retirement income will adequately reflect earnings during the working lifetime and that its real value will be maintained). Reliance on privately managed defined contribution schemes means forgoing any inter-generational solidarity and accepting the risks that financial markets will provide an adequate rate of return, that the pension can be indexed against inflation, and that market forces will ensure efficient management of the (competing) schemes.

The trade-off between the alternative models depends not only on their intrinsic merits and demerits, but also on perceptions about which can be more efficiently and effectively implemented. Many countries with a bad experience of the performance of defined-benefit social insurance schemes are now willing to try defined-contribution, privately managed schemes. They are supported in this by the feeling that things cannot be much worse, and also by the paradigms associated with structural adjustment in other parts of the economy: the view that greater reliance on competitive market forces will result not only in greater allocative efficiency but also in more efficient management. But the evidence is confused and confusing. National provident funds in developing countries have suffered many of the same deficiencies as public social insurance schemes, with the implication that the heart of the problem is the implementation of the schemes, rather than their basic design. Moreover the evidence from the advanced countries is not easily interpreted or necessarily transferable to the context of developing countries. Market mechanisms in advanced countries are associated with efficiencies in economic production. But publicly managed social insurance schemes, which are the predominant form of pensions in advanced countries, also operate at a high level of efficiency. Advanced countries also possess well-functioning financial markets, which is not always the case in developing countries. Competition may be able to avoid some of the bureaucratic inefficiencies associated with public schemes, but it also involves extra costs, particularly in the form of expenditure on promotion and sales, and it cannot achieve the economies of scale associated with national schemes.

In these circumstances, hedging one's bets may be a pragmatic alternative: that is, within the context of a mixed defined-benefit, defined-contribution structure greater scope could be allowed to the defined-contribution component which would be privately and competitively managed. To some extent this is envisaged in the three-tier structure outlined above. But much depends on the particular parameters which determine the balance between the tiers and the way in which they operate.

A first issue concerns the magnitude of both the contributions and the benefits associated with the mandatory defined-benefit tier. PAYG funding of such a tier permits lower initial contribution rates than would be the case either for a fully – or a partially – funded social insurance scheme or for a corresponding privately managed defined-contribution scheme. Low initial contribution rates may be a prerequisite for schemes to be established in developing countries. But, of course, reliance on good compliance, adequate performance and government guarantees is correspondingly greater than in the case of privately managed defined-contribution schemes. Furthermore, the scope for a subsequent, defined-contribution tier depends on the replacement ratios offered under the mandatory tier. Replacement ratios under, say, 50 per cent probably leave substantial incentives for individuals to save by contributing to a complementary scheme.

A second issue concerns the way in which a middle tier, aimed chiefly at workers with regular employment in the formal sector of the economy, is to be integrated with the basic, flat-rate, anti-poverty tier, aimed chiefly at poor and low-income households. If the basic tier is to be financed entirely from taxation, then the middle tier can stand on its own. But inefficiencies in the tax system, coupled with a weak tax base, frequently mean that the defined-benefit tier must also be used to support the basic tier, often by including a guaranteed minimum pension within its benefit structure. This requires solidarity between social and income groups, as well as intergenerational solidarity, and may also involve the State in allocating finance to the social security institution – a complex and often fragile arrangement.

Following from these two considerations is the question of whether or not any defined-contribution component should be voluntary or mandatory, voluntary in this case being understood also to include occupational schemes resulting from collective bargaining between workers and enterprises. Short-sightedness on the part of individuals in providing for their own retirement clearly requires that some part of the structure should be mandatory (if they are not to end up as additional burdens on the state guaranteed minimum scheme). This argument is reinforced by the need for solidarity within parts of the scheme. But where should compulsion stop? If a privately managed defined-contribution component is regarded as supplementary to both the basic and the defined-benefit components, if both tiers are mandatory and function with reasonable efficiency, then there would seem little reason for additional compulsion. Individuals would benefit from a choice of savings alternatives in addition to pensions, such as housing, children's education, health care, or the capital to start a small business. On the other hand, if neither the basic nor the defined-benefit components work effectively or if they provide inadequate benefits, then confidence in public provision may justifiably be so low that a degree of compulsion to contribute to a defined-contribution scheme may be necessary and politically acceptable, largely on the grounds that it is perceived as being able to deliver benefits where the public schemes are not. Such a choice would amount to an open vote of no confidence in the public schemes. But whether the underlying perceptions about the capacity and efficiency of private management are realistic is another, and a more open, question.

The role of the State

Any development in the structure of pension schemes requires a review and an assessment of the role of the State. In all the possible variants the State assumes substantial, and unavoidable, responsibilities and accepts the consequent risks, especially in terms of the financial implications for public budgets and/or the demands which might be placed upon the tax system, but also in terms of the task of regulating and supervising a (possibly pluralistic) pensions structure. If change is involved, the State is likely to be responsible for transition costs.[11] It is also likely to assume the risks of inflation, either directly in relation to public schemes, or indirectly through the provision of inflation-proofed bonds which must be made available to private pension funds. Under all options, the State will remain the guarantor of last resort and the provider of minimum basic incomes for poor and low-income households.

The primary responsibility of the State is to ensure the competent performance of the schemes for whose delivery it is directly responsible. But in addition, the State will need to issue extensive, detailed regulations in connection with the development of complementary schemes and to supervise their application. Standards must be prescribed in regard to minimum vesting and portability requirements, so that the labour mobility of scheme members is not seriously curtailed. Provision must be made for solvency controls, in order to ensure that the schemes are adequately funded. Regulations need to be issued concerning the investment aspect of the reserve funds, listing permissible categories of investments and the respective limits; they should take into account not only security and yield considerations, but also the need for diversification, including in the private sector, in order to facilitate the development of the capital market. It is also necessary to provide for guarantees in the form of reinsurance, to protect members' rights in the event of insolvency. Finally, the State may encourage private schemes by offering tax privileges, for example by exempting the employers' and employees' contributions as well as the investment income on the reserve funds from taxation; in this case, the tax authorities will need to exercise control to ensure that overfunding of schemes does not take place.

Partly because of the pluralistic structure of retirement provisions, partly because the State is itself a principal actor in the delivery of pensions, there is a strong case for some separation of institutional functions between the government, the national social security agencies, and any private sector agencies responsible for complementary schemes. The different tiers need to be coordinated, planned and regulated to ensure that the system as a whole functions as desired and this may best be achieved by entrusting a greater degree of control to a single supervisory authority which is, to a substantial degree, constitutionally separate from the different agencies involved and which is governed by representatives of those most directly affected by the schemes – in other words, employers and insured persons as well as government representatives. Constitutionally established tripartite supervisory organs should be able to exercise arms-length control over the

[11] As is well known, a move from an unfunded, or only partially funded, system to a fully funded system requires current contributors to pay twice: once for the benefits of the exiting generation of retirees; and again in the form of saving for their own retirement.

various agencies responsible for delivering social protection, with a view to limiting deficiencies in administration and management and ensuring that the basic objectives are met. This is not to deny the ultimate sovereignty of elected governments: simply to establish that immediate authority for delivering social protection rests with an independent, and representative, institution unless specifically over-ruled.

The need for such an institution is particularly evident in the area of financial management. The financial autonomy of social security schemes should be reinforced and investment policy should be designed with the interests of the financial solvency of the scheme in mind and applied in such a way that an optimum yield on the reserve funds is realized, subject to safety considerations, within the national investment possibilities. Control and watchdog measures are needed to ensure the financial probity of private schemes. Of course, all these measures rely on public policies which actively promote financial markets and their untrammelled operation.

Conclusion

The main points to emerge from this brief review are as follows.

Firstly, the performance of pension systems (of whatever type) needs to be greatly improved in developing countries: in many cases, the level of retirement benefits available even to workers in the formal sectors of the economy is extremely low, especially in relation to income earned during work. Very large sectors of the population remain completely uncovered or receive benefits which simply cannot lift them above the poverty line. Indexation of benefits after retirement is often very limited or even non-existent.

The priority response to this situation must be an improvement in the management and administration of existing public schemes which would ensure that revenues are fully collected, benefits fully paid and coverage extended. The discussion above sets out a number of aspects where performance needs to be improved.

Debate about the choice of schemes and their structure is conditioned by the administrative and management capability of the country concerned. Reform of pension structures is seen as subsidiary to, and dependent on, improvements in efficiency. But though they are linked the two issues should not be confused; changing the structure of a pension system is not a substitute for improving its operational performance, although the various structures do present different advantages and disadvantages in terms of implementation. In any case, it seems likely that in order to meet social objectives, pension structures will have to comprise at least three tiers: a basic flat-rate minimum pension tier; a mandatory, publicly administered, defined-benefit (social insurance) tier; and a complementary, voluntary, probably privately managed, defined-contribution tier. Within this basic frame, many variations are possible, both in terms of the relative magnitudes of the different components and of their parameters. Policy options will have to be closely tailored to the particular circumstances of each country, to the need to make any proposed transformation both politically acceptable and economically affordable, and to the necessity of ensuring that any new scheme receives a full measure of public confidence. Compromises will be necessary: but not to the extent that basic objectives of performance, benefit levels, contribution rates, and social and intergenerational solidarity are placed in jeopardy.

Development of a pluralistic structure will require the State to accept a wide range of responsibilities, both for the delivery of certain parts of the pension structure and for the control, supervision and regulation of other parts. To do so may require the development of a centralized institution, separate from the public and private pension agencies and at least partly separate from direct government management. Such a body would be responsible for the planning, regulation and supervision of the overall pension structure and would require a tripartite governing body with a substantial degree of autonomy and independence.