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# **Reforming Pensions** in Zambia

An Analysis of Existing Schemes and Options for Reform

Monika Queisser Clive Bailey John Woodall

The design of new pension systems in African countries requires choices between defined benefit and defined contribution schemes, between funding or pay-asyou-go schemes, and between public and private management. But those choices are less important than the basic challenge of improving macroeconomic stability, regulatory capabilities, and the ability to extend coverage to more citizens.

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### **Summary findings**

All of Zambia's pension schemes are deficient in design, financing, and administration. Zambia must restructure its social protection system to complement its new economic strategy. That restructuring must address such basic problems as:

- The macroeconomic fluctuations and unstable financial sector that make effective pension fund management impossible.
- High inflation rates (which erode the real value of reserves) and politically motivated low-yield investments and loans.
- Income ceilings that are not adjusted regularly for inflation.
- Overgenerous pension benefits for the public sector, intended to compensate for social hardship resulting from economic adjustment.
  - · Inadequate management of pension fund operations.

In the short and medium term the objectives of pension reform should be to settle outstanding pension claims, revise early retirement provisions and investment policies, and improve capabilities for administering statutory pension funds.

In the long term the objectives should be to convert the ZNPF into a modest basic pension scheme for private sector employees, and subsequently integrate civil servants and public sector employees into that scheme; establish regulatory provisions for the development and supervision of private pension funds; and establish an administrative mechanism (for example, a permanent committee) to review social protection policy and supervise and coordinate its application by all agencies.

This paper — a product of the Financial Sector Development Department — is part of a larger effort in the department to study pension systems and contractual savings. Copies of the paper are available free from the World Bank, 1818 H Street NW, Washington, DC 20433. Please contact Hedia Arbi, room G8-149, telephone 202-473-4663, fax 202-522-3190, Internet address harbi@worldbank.org. January 1997. (29 pages)

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# Financial Sector Development Department The World Bank

# **REFORMING PENSIONS IN ZAMBIA**

# **An Analysis of Existing Schemes and Options for Reform**

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#### **Introduction and Summary of Findings**

Social security schemes in Zambia are designed to provide protection against loss of income due to retirement, disability or survivorship to urban workers and their dependents. There are several social programs and an insignificant social assistance scheme which provide nutritional support and other benefits to the poor based on means-testing. Comprehensive social protection, however, is not available to the vast majority of the population.

Retirement benefits are provided by statutory pension funds which mandatorily cover all formal sector workers and by voluntary occupational pension funds set up by individual employers. The statutory funds officially cover around 477,000 employees, corresponding to more than 90 percent of the formal sector labor force but only about 13 percent of the total labor force. The total assets of all statutory funds currently correspond to about 1.6 percent of GDP, down from well over 10 percent in the 1980s.

The largest fund is the Zambia National Provident Fund (ZNPF), a compulsory savings scheme for private sector employees. The ZNPF collects contributions from employers and employees, keeps individual member accounts and provides lump-sum benefits upon retirement. An estimated 40 percent of all private sector employees are additionally enrolled in private pension plans.

Civil servants and employees of local authorities are covered by separate pension funds, the Civil Service Pension Fund (CSPF) and the Local Authorities Superannuation Fund (LASF). Both schemes were designed as funded systems and provide defined retirement benefits based on the last annual salary and the years of service.

All pension schemes in Zambia suffer from a series of significant weaknesses reflecting deficiencies in their design, in their financing and in their administration. These deficiencies have not only been exposed but aggravated by the economic crisis and the radical measures necessary to face its structural causes. Zambia needs to restructure its social protection system to correspond to, and complement, its new economic strategy. The main problems which need to be addressed are summarized as follows:

- \* Macroeconomic fluctuations and the instability of the financial sector have negatively affected pension fund management. Revenue from contributions has been declining due to unemployment and insolvency in the private sector as well as retrenchments and budgetary constraints in the public sector.
- \* The real value of their reserves has been eroded through high inflation rates and the channeling of resources into politically motivated low-yield investment and loans under the previous government. The real rate of return was highly negative during the 1980s, as low as -25 percent for members' balances and somewhat less negative on fund assets.
- \* The income ceilings applied in the calculation of ZNPF contributions have not been adjusted regularly for inflation. Because of high inflation rates, the ceiling fell to the equivalent of US\$20 in 1995. This resulted in very low, practically flat-rate contributions of only K.1,500 or US\$2 per month to members' accounts. Given the disastrous financial performance, however, the failure to adjust the contribution ceiling was a blessing in disguise.

- \* Pension benefits were used to compensate for the social hardship caused by public sector adjustment measures. The funds were obliged to award generous early retirement benefits without being given the necessary financial resources.
- \* The defined-benefit schemes for public sector employees are running high actuarial deficits and have accumulated substantial arrears in benefit payments. During the waiting period until a pensioner is paid, benefits are not adjusted for inflation. Almost all pensioners choose to take the maximum amount as a lump-sum. The residual pension is also not adjusted for inflation and, in many cases, the remaining pension levels are so low that the checks are worth less than the postage required to mail them to the recipients.
- \* All statutory pension funds are experiencing severe operational problems. The collection of contributions is inefficient and the registers of members and employers have not been kept correctly. Most funds do not have accurate information on the actual salaries earned by their members. The technical capacity of social security staff is not sufficient to deal with the administrative problems.

Private pension plans operate both as defined benefit and defined contribution schemes; private plans do not exempt employers from contributing to the ZNPF. The majority of private pension funds are managed by the Zambia State Insurance Corporation (ZSIC); the state-owned Zambia Consolidated Copper Mining company (ZCCM) manages its own pension fund for its employees. Some of the private pension funds have achieved acceptable rates of return, particularly in recent years through investment in treasury bills and high quality real estate, but the pension plans managed by state-owned ZSIC have essentially suffered from the same political interference and thus low or negative real rates of return as the statutory pension schemes.

The main problems identified in the area of private pension funds are a lack of legislation, regulation and supervision of occupational pension plans, a lack of secure and profitable investment opportunities which explains why the portfolios of all private pension funds consist only of Treasury Bills and real estate, and a lack of qualified management personnel. As in the case of the statutory funds, monthly pensions are usually not indexed systematically but adjusted for inflation in a random fashion. Because of the diversity of plans and lack of regulation, problems arise in the portability of pension rights.

There are three basic challenges for the establishment and functioning of pension schemes which are particularly critical in the context of African countries. Design issues such as choices between defined-benefit and defined-contribution schemes, funding versus pay-as-you-go principles and public versus private management are subordinated to the basic challenges of macroeconomic stability, regulatory capacity and ability of coverage extension. These challenges should be taken into account in setting the objectives and design of a reform strategy.

The objectives of pension reform in Zambia should be in the short to medium term

- \* the settlement of outstanding pension claims
- \* the revision of early retirement provisions
- \* the revision of reserve investment policies
- \* the improvement of the administration and management of the statutory pension funds

and in the long term

- \* the conversion of the ZNPF into a modest basic pension scheme for private sector employees with subsequent integration of civil servants and public sector employees into the same scheme
- \* the restructuring of pension schemes for public sector employees and the revision of benefit formulae to provide the basis for introduction of a core benefit equivalent to that offered by the new basic pension scheme
- \* the establishment of regulatory provisions for the development and supervision of private pension funds including both occupational pension schemes and personal pension plans
- \* the establishment of an administrative mechanism, for example a high level permanent committee to regularly review social protection policy and supervise and coordinate its application by all institutions responsible

#### ANALYSIS OF THE SOCIAL SECURITY SCHEMES

Social security schemes in Zambia are limited to the provision of protection against loss of income due to retirement, disability or survivorship and cover only formal sector workers and their dependents. Benefits for short-term contingencies such as temporary incapacity or maternity are the direct responsibility of employers under the Employment Act, supplemented by collective agreements, which often also include provision for medical treatment. There is no statutory provision for either family allowances or for unemployment benefits. But the Employment Act requires employers to pay gratuities, which depend on earnings and length of service, to workers on retirement or on redundancy.

Other social security provisions are administered by parastatal organizations each with an independent financial system administered by a Board responsible to a particular Minister. The Ministry of Labor and Social Security is responsible for the supervision of the Zambia National Provident Fund (ZNPF), the Workmen's Compensation Fund (WCF), and the Pneumoconiosis Compensation Board (PCB). The Cabinet Office is responsible for the supervision of the Civil Service Pensions Fund (CSPF) and the Ministry of Local Government for the Local Authorities Superannuation Fund (LASF). There is no overriding authority responsible for the coordination of these various schemes.

TABLE 1: COVERAGE UNDER PENSION SCHEMES (INCLUDING ZNPF) (Estimated for 1994)

Scheme	Membership	Number
Statutory Schemes ZNPF	Private sector Parastatals	355,000
CSPF	Civil servants Armed forces Teachers	100,000
LASF	Local Govt. employees	22,000
Total		477,000
Non-statutory occupational schemes		
ZSIC and Private Insurance companies	Private sector Parastatals	180,000
Mukuba pension fund	ZCCM	18,000
Total		198,000

These statutory funds, which are all mandatory, officially cover about 477,000 employees, corresponding to more than 90 percent of the formal sector labor force but only about 13 percent of the total labor force. The ZNPF is the largest scheme; it covers all private sector employees, non-pensionable civil servants and most parastatal employees. Most parastatal employees are also members of an occupational pension scheme which, although separate for each organization, is based on a standard formula, and administered in most cases by Zambia State Insurance Corporation (ZSIC). Some private employers also have occupational pension schemes administered by ZSIC. There is a separate occupational pension scheme for employees of the Zambia Consolidated Copper Mines Limited (ZCCM) - the Mukuba Pension Scheme (MPS). It is estimated that about 40 percent of all private sector employees are additionally enrolled in private pension plans.

#### **Zambia National Provident Fund**

The Zambia National Provident Fund (ZNPF) was established in October 1966 as a compulsory retirement savings scheme. It operates as a defined contribution scheme which means that the Fund has no predefined obligations with respect to the level of old age, retirement and survivors' benefits. Contributions are accumulated with interest in members' individual accounts. Members are entitled to withdraw the balance of their accounts when they reach 55 years of age, retire at or after age 50, become physically or mentally disabled, or emigrate from Zambia; in case of the member's death, the lump-sum is paid to the designated survivors. Administrative and management expenses of the fund are supposed to be paid out of investment income.

The scheme includes special provisions for domestic workers in urban areas. This requires a flat rate monthly contribution based on a ceiling of K.1000. Further, the ZNPF provides flat-rate funeral and maternity grants to members who have contributed for at least two years. These grants are paid out of the Fund's Reserve Account which is financed from fines charged to employers and contributions not attributable to individual accounts. The ZNPF also offers a Home Ownership Withdrawal Scheme which allows members to withdraw, on one occasion, up to 60 contributions.

Membership of the Fund grew steadily from 5,440 in 1966/67 to about 570,000 in 1992/93. This figure, however, includes members' accounts which have been inactive over an extended period without further contributions or benefit claims. The total number of active contributors is currently estimated to be around 350,000 which corresponds to about 70 percent of formal sector employees. About 14,500 private sector and parastatal employers are registered with the Fund. Evasion and non-compliance by employers, often with the collusion of employees is a serious problem. Although there seem to be no national records to identify compliance levels, enquiries suggest that only about 60 percent of employers are current with their payments and at least 30 percent are more than 7 months in arrears. Although prosecutions are conducted, fines are low.

The importance of ZNPF assets as a share of GDP has been declining dramatically: total assets fell from 9 percent of GDP in 1980 to 5.8 percent in 1987 and further to about 1 percent of GDP in 1995. This was due both to negative returns on investment of the ZNPF's assets and the decline in the real value of contributions.

<sup>&</sup>lt;sup>1</sup>For members who started contributing before April 1, 1973 the respective ages are 50 and 45 years.

The ZNPF has not been able to provide adequate retirement benefits to its members. In part, this is due to weaknesses in the provident fund system which has no insurance element protecting members from the consequences of invalidity, unemployment or (except to a very limited extent) death. Further, for most people a lump-sum benefit represents an unsound basis for long term income security. But these inherent weaknesses have been compounded by deficiencies in the management of the Fund.

Firstly, the contribution ceiling has not been regularly adjusted to take account of inflation. Until 1995, employers and employees were required to each contribute 5 percent of gross monthly earnings up to an income ceiling of K.15,000 resulting in a maximum monthly contribution of only K.1,500 (approx. US\$ 2 at end-1994). The level of average earnings, however, increased by 700 percent between 1992 and 1994 alone. Due to the failure to revise the ceiling regularly, the scheme has been effectively operating on a flat-rate basis with very low real contribution receipts and consequently low members' balances. The volume of contributions fell by about 90 percent in real terms between 1981 and 1995. In 1995, the ceiling was increased substantially to K 150,000 (approx. US\$ 180); at the same time, due to strong resistance from both employers and employees the contribution rate was lowered from previously 10 to 7 percent of wages.

**TABLE 2: ZNPF Indicators** 

	1982/83	1985/86	1987/88	1990/91
Real rate of return on assets	- 5.8	- 5.9	- 39	- 32
Real interest to members	- 14.0	- 32	- 32	- 47
Real contributions	88	60	39	21
(1981/82=100)				

Source: ZNPF Actuarial Review 1992

Secondly, from the introduction of the Fund in 1966 until 1992/93, a nominal interest rate of only 4.5 to 5.5 percent was credited to the statutory contributions in members' accounts. But over the same period, annual inflation increased from 33 to 200 percent and commercial deposit interest rates rose from 15 to 84 percent. In 1993/94, the 5,000 fund retirees received on average a lump-sum of only K 10,000 (US\$14 at the end of 1994). The credibility of the scheme has suffered considerably from such low benefit levels.

Concern about the low balances in members' ZNPF accounts led to a decision to increase the interest rate for members' accounts to 50 percent for 1992/93 and then 100 percent for 1993/94. This increase was made possible mostly through a revaluation of real estate owned by the ZNPF and through yields obtained from investment in Treasury Bills. But investment income is insufficient to meet current administrative and benefit expenditure. In the following two years, interest to members' accounts was reduced again to 50 and 35 percent, respectively. There was an excess of expenditure over income in each of the last four years but this result is not surprising considering the negative real return on assets linked with the fact that personnel and other management expenditure has been rising with inflation.

<sup>&</sup>lt;sup>2</sup> For a discussion of the role of provident funds for old age security see Dixon 1989, Gruat 1990

**TABLE 3: ZNPF INDICATORS** 

(Ratios %)

	1981	1985	1990	1995
Administration Expenses/Contributions	22	35	72	102
Administration Expenses/Income from Investment	42	54	223	66
Interest to Members/Income from Investment	64	59	41	77

Source: ZNPF Annual Reports, various years

Until recently, the investment of the Fund was made according to fixed guidelines assigning 50 percent of the reserves to the Government, 35 percent to parastatals and 15 percent to the private sector. Funds were channeled into long term loans to the Government and to parastatals at low fixed interest rates. Funds were also invested in shares of loss-making parastatal companies. In 1995, almost 50 percent of assets were invested in real estate, 27 percent in government securities, 16 percent were held in fixed deposits, and 6 percent in equity. A high proportion of the residential property owned by the ZNPF is occupied by staff and thus only earning residual income, there are difficulties in the collection of rents, especially from Government departments, and rents on properties outside of the urban areas are very low. Moreover, maintenance costs for buildings have risen at a much faster pace than rents.

The administrative expenses of the ZNPF have been increasing strongly. Measured as a share of investment income, they reached a peak of 254 percent in 1992. As a share of total revenue from contributions, administrative expenditure peaked in 1995 at 102 percent.<sup>3</sup> In spite of recent personnel reductions, the ZNPF is still considerably overstaffed with currently more than 1,300 employees. Under the new management increased efforts have been made to reduce administrative costs and scale down expenses for non-essential activities. But steps to speed up the process through a substantial retrenchment program would impose a severe financial burden on the Fund, particularly since its staff pension fund is also believed to be considerably underfunded.

<sup>&</sup>lt;sup>3</sup> The experience of the provident funds in Singapore and Malaysia shows that this system can be managed successfully with higher returns on investment and low administrative expenditure. SeeVittas 1993, Queisser 1991, Valdes-Prieto 1994

#### Civil Service (Local Conditions) Pension Fund

The Civil Service Pension Fund (CSPF) was established in 1968 as a funded defined benefit scheme to provide retirement pensions to permanently employed civil servants. Contributions are payable by employers and employees each at the rate of 7.25 percent of the pensionable monthly salary. In law, there are separate schemes for teachers and members of the armed forces but it has been decided that these schemes should be integrated with that for civil servants. The practice is for the CSPF to determine and pay pension entitlement. Currently, the fund has about 120,000 members. There are about 30,000 pensioners; thus, the system dependency ratio would be around 25 percent, although precise data is not available.

Since 1993, the operation and finances of the Fund have been effectively separated from Government. A new secretary was appointed and a new Board established under the chairmanship of the Permanent Secretary of the Cabinet Office and composed of representatives from the Ministry of Finance, the Ministry of Labor and Social Security, the National Union of Teachers, the Civil Service Union of Zambia, the Bank of Zambia, and the Pensioners' Association. The CSPF has a staff of about 50 officers, the majority of whom are seconded from the Government. The administrative expenses of the CSPF are not met by the Fund but covered by the Government. Since no auditing was conducted recently, accurate information on administrative expenditure is currently not available.

As there had been no effective separation of the Fund's accounts from those of Government, investment of the notional reserves was determined by Government. It is estimated that the Government "borrowed" K.360 million from the Fund between 1974 and 1989 (equivalent to US\$ 186 million in real terms). The nominal interest rates for loans to the Government ranged between 7.5 percent in 1974 and 38 percent in 1989. These loans begin to mature in the year 2010. The Government has in principle acknowledged its obligations to the Fund but has not specified any conditions of repayment. The Government has also been defaulting on its mandatory employers' contributions to the Fund; no employers' contributions have been made since 1991.

Total assets of the CSPF were approximately K 6.5 billion in 1994, corresponding to about 0.4 percent of GDP. This figure, however, does not adequately reflect the financial situation of the Fund, since most of these funds accrued during that year due to high yields from investment in Treasury Bills. More than 60 percent of the reserves were invested in Treasury Bills, the remaining 40 percent was divided in approximately equal parts between Government bonds and real estate including about K.1.5 billion in prime properties in Lusaka. The Fund is exempt from paying taxes and investment income is received without deduction of tax.

The principal legislation covers a range of situations relating to termination of service which entitle members to benefit payments. The original intention was that the CSPF should be only directly responsible for financing pensions for: (i)retirement at 55 years subject to 10 years of pensionable employment, (ii) early retirement on grounds of ill health, and (iii) dependent survivors including death benefits. But there is also a provision for early retirement at the choice of the officer either on a marriage, for a female officer, at any time within 5 years of pension age, or after 20 years service. Furthermore, there is a provision for retirement of an officer required on abolition of the post, or in the interests of economy or efficiency, or in the public interest.

The CSPF pays only benefits for retirement at and after age 55 out of its own resources; all cases of early retirement will be paid only if the Government has made the necessary funds available. According to CSPF estimates, approximately 80 percent of all pensioners retire early or under special regimes.

In a defined benefit system such as the CSPF, there is an integral relationship between pension age, the benefit formulae and the financial system. If pensions are awarded at an earlier age the benefit level should be reduced. Thus, if such a reduction is not imposed it is reasonable that the Fund should not be responsible for the financial consequences. But it does not seem reasonable that scarce public resources should be used to provide retirement benefits on this basis at the expense of the majority of the population which cannot benefit from this scheme. The Government has recognized that the civil service is over-staffed and needs to be reduced but the extent of this is dependent on a comprehensive analysis of functions within each Ministry which has not yet been completed. In the meantime, the favorable early retirement and retrenchment provisions are used to reduce staff levels. Apart from the adverse implications for the financing of the pension system, self-selection for early retirement tends to result in a loss of the most able and qualified staff.

In addition, other generous provisions have been introduced. First, the pension formula was modified; it is now based on the last annual salary multiplied by years of service and divided by 660 (55 years in months) instead of 720. Second, a provision was introduced which allowed for two-thirds of the pension entitlement to be commuted to a lump-sum (an increase from one-third). Third, a very generous commutation factor was adopted; at age 55, male retirees receive K 23.14 and female retirees receive K 25.8 for each Kwacha of converted annual pension. Since the Government is not providing enough resources for the lump-sum payments, there is a large number of outstanding claims.

#### **Local Authorities Superannuation Fund**

The Local Authorities Superannuation Fund (LASF) is a mandatory pension scheme which covers the employees of the 61 local authorities as well as the workers of the Zambia Electricity Supply Corporation (ZESCO), the National Housing Authority and the personnel employed by the LASF itself. As part of the decentralization policy, the local authorities are supposed to eventually become self-financing. At present, however, at least part of their resources is provided through a grant from the Ministry of Local Government and Housing (MLGH).

The fund was established in 1954, initially covering only expatriate officers. In 1963, the membership was extended to all employees of local authorities between ages 18 and 50. The LASF has approximately 27,000 contributing members and 5,000 pensioners, i.e. the system dependency ratio is currently around 19 percent. Initially the contribution rate was 14 percent of pensionable salary equally divided between the employer and the workers. If it was subsequently increased to a total of 33 percent in 1989 with employees paying 10 percent and employers contributing 23 percent.

The LASF is managed by a Board which has eleven members nominated by their respective institutions or organizations and appointed by the Minister (MLGH). The Fund is administered under a General Manager appointed by the Board. Its records are manually maintained and any computerized data processing has to be contracted to a bureau. Administrative expenditure was 12.4 percent of contributions received in 1992; this figure, however, does not necessarily indicate a high level of administrative inefficiency, since revenue from contributions has declined due to noncompliance. In 1993, the number of staff was reduced by more than two thirds to 40 employees. During the first quarter of 1994, administration expenditure was 2.6 percent of total revenue (including the Government grant for additional expenses) and 5.3 percent excluding the grant.

The fund operates predominantly as a defined benefit scheme which provides old age, retirement and disability pensions. As in the case of the CSPF, benefit formulae and eligibility requirements have been improved significantly regardless of equity or financial implications. The retirement age was reduced from 60 to 55 years, local authorities were given discretionary power to retire employees at age 50 with a minimum of 10 years of service, and the commutation factor applied for the conversion of the pension to a lump-sum was increased to match the higher factor applied in the CSPF. In 1990, the pension formula was changed from being based on the average salary during the last five years to using only the last annual salary. And in 1991, the Government made retirement mandatory for employees of local authorities who had completed 22 years of service. Up to two thirds of the monthly pension may be commuted to a lump-sum payable immediately upon retirement. The same high commutation factors are applied as in the CSPF. There is no indexation mechanism for the adjustment of the remaining monthly pension payments to inflation.

The LASF is facing a three pronged problem resulting from non-compliance, low investment income and increasing expenditure. During recent years, the LASF has had increasing difficulty in collecting contributions. In 1994, compliance to contribution payments by the local authorities was only 29 percent. The high evasion can also be interpreted as reaction to the dramatic decline of benefit levels through inflation, the lack of the scheme's credibility and the high degree of political interference in the management of the scheme.

Although the Fund theoretically operates as a funded pension scheme, the income from investment of reserves is very low due to erosion of reserves through inflation and prescribed investment in non-performing assets. In mid 1994, the accumulated fund of the LASF stood at K3.3 billion, or about 0.2 percent of GDP, of which K1.8 billion were assets (90 percent fixed assets) and K1.5 billion revaluation reserves. The Fund's reserves are invested in bank deposits (20 percent), fixed interest securities (25 percent), loans (10 percent), real estate (35 percent) and equities (10 percent). Loans are given to associated local authorities and parastatals as well as to members for purchase or construction of housing. The approval of the Minister is required for investment of funds in equities and deposits or shares of the National Building Society or banks.

The obligation to retire after 22 years service has led to a significant increase in pension expenditure. This provision alone has generated liabilities of about K6.3 billion between 1992 and 1994 but only K.1.07 billion were provided by Government. There are said to be over 1000 claims outstanding with the majority of benefit payments delayed by more than a year. During the waiting period benefits are not adjusted for inflation.

The last actuarial analysis of the LASF was conducted in December 1993. The actuaries encountered serious data deficiencies, particularly with respect to dates of birth and accumulated contributions. Further, no reliable data on volume and contingencies of pension payments was available at the valuation date. Thus, the analysis had to be based on several assumptions with respect to the composition of members' age groups, income and contributions as well as pension payments.

The analysis was conducted considering three different scenarios (retirement of all members at valuation date, accrual of benefits until current members retire under the various regimes of the LASF, and full projection of benefits considering future contributions at current levels). The actuaries concluded that the LASF is substantially underfunded even considering only a minimum funding level.

#### **Private Pension Funds**

An estimated 40 percent of all formal sector employees are enrolled in private occupational pension schemes. Private pension plans operate both as defined benefit and defined contribution schemes; most of these occupational schemes are contributory. The introduction of private pension plans does not exempt employers from contributing to the ZNPF. The majority of private pension funds (about 75 percent) are managed by the Zambia State Insurance Corporation (ZSIC). The largest occupational pension scheme is the Mukuba Pension Fund which is owned and managed by the state-owned Zambia Consolidated Copper Mining company (ZCCM). 6 companies operate their own pension schemes.

The private plans managed by ZSIC (which until 1991 was the only insurance company in Zambia), were subject to prescribed investment under the previous government. Their performance was therefore not much better than the performance of the statutory pension funds. Starting in 1993, the performance of private pension funds has improved considerably due to investment in Treasury Bills which account for the bulk of investment. Funds are further invested in real estate which seems to be yielding higher returns than the properties owned by the statutory funds. Private pension funds are trying to concentrate on high-quality residential properties which are rented with foreign-exchange based leases. Other private insurance companies have also started to provide pension plans to companies; these plans are mostly on a defined benefit final salary basis.

The ZSIC offers three types of pension schemes to employers:(i)a defined-benefit final salary scheme, (ii) a money-purchase annuity scheme and (iii) a group annuity scheme. Its experience of the latter has been unsatisfactory as a result of unfavorable investment policies, inflation and an inability to change the annuity factors. Most of these schemes are being converted into fully funded defined benefit schemes. Pension age is usually 55 years and for early retirement there is an actuarial benefit reduction. Schemes are usually not indexed for inflation. Contribution rates vary but typically are 12.5 per cent from the employer and 6.25 percent from the employee. The ZSIC has experienced difficulty in collecting contributions from some employers. There has also been dissatisfaction both with the low levels of pensions in real terms and with the lack of opportunity for the employer to influence investment decisions.

Figures provided by ZSIC indicate that they currently manage schemes covering some 28,000 active employees and about 3000 pensioners. The private and parastatal pension schemes generally provide substantial benefits on the death of a member, both by way of lump sums and widow(er)s' pensions. Insurance cover is usually taken out, on a group life basis, but premiums are extremely high in view of the current prevalence of HIV/AIDS. It appears not untypical for the annual premiums for such cover to cost the equivalent of 10 percent of the pensionable salary roll, in addition to the provision made for "normal" pension benefits.

The Mukuba Pension Fund was established in 1982 and was originally obligatory for all permanent employees of ZCCM but since 1985 it has been voluntary; at that time the membership fell very sharply, but has since recovered and now amounts to more than 20,000 members. The scheme is administered by the Mukuba Pensions Trustees Ltd. (MPTL). Board members are appointed both by ZCCM and the Mineworkers Union. In March 1994 the Fund had assets of K.7 billion of which K.2 billion was invested in Treasury Bills and Government bonds. Most of the fund is invested in property of high quality and yielding high rentals and the MP has performed well compared to all other pension funds. Current contribution rates are 10.7 percent of basic monthly pay for the employer and 5 percent for the employee. Retirement age is 55 for both men and women.

#### **Conclusions**

All pension schemes in Zambia suffer from a series of significant weaknesses reflecting deficiencies in their design, in their financing and in their administration. These deficiencies have not only been exposed but aggravated by the economic crisis and the radical measures necessary to face its structural causes. Zambia needs to restructure its social protection system to correspond and complement its new economic strategy. The main problems which need to be addressed are summarized as follows

None of the schemes has been able to provide adequate retirement benefits to its members. In the case of the ZNPF, benefits were reduced to practically non-significant levels. This is the result of a combination of factors: low contributions due to the failure to adjust the ceiling, high inflation rates, low-yielding investments guided mostly by political considerations, and an interest rate policy which gave members negative real rates of return over an extended period of time. In addition, the operating costs of the ZNPF have been growing to the point where they exceed revenue from contributions.

The defined-benefit schemes for public sector employees offer very generous benefits which have proven impossible to finance. The benefit formulae have repeatedly been modified to provide increasingly attractive retirement options regardless of the financial consequences. Both schemes are running high actuarial deficits and have accumulated substantial arrears in benefit payments. During the waiting period until a pensioner is paid, benefits are not adjusted for inflation. Almost all pensioners choose to take the maximum amount as a lump-sum. The residual pension is also not adjusted for inflation and, in many cases, the remaining pension levels are so low that the checks are worth less than the postage required to mail them to the recipients. In addition, the schemes have been used to reduce public sector employment through very attractive early retirement options. Early retirement is placing a huge burden on the pension schemes and the government has been unable to provide the required funds, let alone pay its employer's share of contributions on a regular basis.

The retirement rules for public sector employees raise severe distributional concerns. Those pensioners who do get paid, receive very generous benefits compared to the standards of living of the general population. The government is using scarce budgetary resources to finance benefits for a small group while expenditure levels in the social sectors have dropped to critically low levels. Since government revenue is collected predominantly through indirect taxes, the poor are paying disproportionately for benefits they do not receive.

The current structure of the pension system presents an obstacle to labor mobility between the public and the private sector. Entitlements to benefits are portable neither between the two public sector schemes nor between the ZNPF and the public sector schemes. Thus, the incentive for public sector employees to remain in the public sector is very high and mobility between sectors is discouraged.

All statutory pension schemes are experiencing serious problems in the area of management and administration. The backlog in up-dating the individual ZNPF balances is as long as 5 years in some cases. The introduction of partial computerization has caused further complications since the manually kept records have to be reconciled with the computerized files. Evasion and non-compliance are high in all institutions. According to estimates, only 70 percent of all employers contribute to the ZNPF, the CSPF has not received any employers' contributions since 1991, and the LASF has been able to collect less than one third of due contributions in 1994.

The major privately managed pension schemes - those of ZCCM, the international banks and of the oil companies - appear to be soundly run, and to be trusted by their members, as evidenced by the steady increase in employees of ZCCM opting to join the Mukuba scheme in recent years. Nevertheless, the administrative expenses of these schemes appear to be relatively high by international standards. Most well-established, but smaller employers make pension arrangements through the management services offered by insurance companies. The overt charges made by the insurance companies for the management of pension schemes are quoted in the range of 5 to 6 percent of contribution receipts. Such an expense ratio appears to compare very favorably with the costs of, for example, the Mukuba self-administered scheme which amounted to 27 percent of contributions in 1992. However, excess costs may be disguised in the form of a poor return to the pension scheme on its money invested through the insurance company. Conversely, an apparently high administrative cost may be compensated for by superior investment returns.

The main problems affecting the management of occupational pension schemes in general are a lack of legislation, regulation and supervision of occupational pension schemes, a lack of secure and profitable investment opportunities which explains why the portfolios of all private pension funds consist only of Treasury Bills and real estate, and a lack of qualified management personnel.

#### OPTIONS AND RECOMMENDATIONS FOR REFORM

#### **National Social Protection Policy**

Zambia has a strong tradition of mutual support based on family and community ties. Although this has been disrupted by the consequences of the economic crisis, inter- and intra-family transfers are still relatively important in alleviating hardship and maintaining living standards. Any public social protection system should seek to complement and strengthen these family and community ties rather than replace them. A recent World Bank Poverty Assessment<sup>4</sup> has concluded that 69 percent of all Zambians live in households with expenditures per adult below a poverty line based on nutritional and other basic needs, and 55 percent do not have sufficient income to meet their basic nutritional needs. While poverty is both more prevalent and more severe in rural areas there has been a dramatic increase in urban poverty - only 4 percent in 1975 but now approximately 50 percent. Similarly there has been a decline in social indicators with a downturn since 1985 in primary school enrollment rates, increased infant and child mortality, and increased levels of malnourishment among children.

The state has a basic obligation to adopt policies aimed at alleviating poverty and improving living standards. Given the narrow tax base and high levels of evasion tax revenues are insufficient to meet social protection needs. Inevitably, these scarce resources must be targeted at the poorest and, in general, at meeting basic needs for health, education, housing, sanitation, clean water, and for improving services and infrastructure which will provide opportunities for income generating activities.

But there is also need for social protection of workers who are temporarily or permanently deprived of their earnings through sickness, injury or retirement. Here, income related benefits are required. There are two possible sources for social protection in this respect - either employers as part of the conditions of service or some form of social security scheme. Zambia has already established the basis for a social security system with the ZNPF and the pension schemes for public sector employees. Many employers have established supplementary pension schemes or entered into collective agreements with their workers and many individuals have taken some initiative to protect themselves. Thus in Zambia there is the basis of a private tier of social protection directed at the specific needs of individuals or occupational groups financed by employers and individuals.

The need for policy cohesion and coordination between the various players - both public and private - implies a corresponding need for a high-level broad based body, answerable perhaps to the President or to the Minister responsible for Planning and Development. It would be undesirable to create a new bureaucratic infrastructure in the form of an umbrella authority since this might entail significant administrative expenditure. But a standing committee made up of senior representatives of each of the institutions, the social partners and private sector schemes chaired by an appointee of the President might be capable of providing the necessary level of coordination and supervision without constituting another layer of bureaucracy.

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<sup>4</sup> World Bank 1994a

#### **Developing a Strategy**

The Government of Zambia established several commissions during the last 10 years to study the problems of social security and, in particular, of pension provision. It was decided that, given the weaknesses of the provident fund as a form of social protection, its failure to invest profitably members' balances in the past and its loss of credibility among the population, a pension scheme for private sector and parastatal employees should be established.<sup>5</sup> It is recommended, however, that this scheme should provide only basic protection for old age, disability and survivorship and be supplemented by occupational private pension arrangements. There are a number of strategic issues to be faced which will determine the long-term development of a pension system in Zambia: these are discussed in the following paragraphs.

#### The basic challenges

There are three basic challenges for the establishment and functioning of pension schemes which are particularly critical in the context of African countries. Design issues such as choices between defined-benefit and defined-contribution schemes, funding versus pay-as-you-go principles and public versus private management are subordinated to the basic challenges of macroeconomic stability, regulatory capacity and ability of coverage extension.

Macroeconomic stability is a crucial condition for the functioning of any pension scheme or social security system. Under the circumstances of strong macroeconomic fluctuations and high or volatile inflation rates, it is extremely difficult to maintain the financial stability of a pension system. The financial markets in countries which are macroeconomically unstable and at a low level of development typically do not offer adequate investment instruments to protect against such fluctuations. Pension reserves and real benefit levels - whether benefits are paid out as pensions, lump-sums or annuities - are eroded quickly. Without macroeconomic stability, pension systems can neither offer old age income security nor contribute to the mobilization of long-term savings.

The second challenge refers to the regulatory capacity of the government and its supervisory agencies. If the financial sector is not properly regulated and supervised, a pension scheme cannot perform adequately. This condition is independent of the type of scheme chosen; even a pay-as-you-go scheme with a minimal amount of reserves must, for example, rely on the banking and payments systems. The importance of regulation and supervision increases with the degree of funding of a system as well as with the degree of private sector participation in a compulsory pension scheme. Although voluntary pension plans should be in principle regulated just as carefully as mandatory plans, the responsibility of the supervisory agencies becomes even greater when participation in a pension scheme is mandatory.

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<sup>&</sup>lt;sup>5</sup> Most provident funds in the English-speaking Carribean have been transformed to pension schemes since the 1970s; in Africa, the most recent example of provident fund conversion has been Ghana. The experience of Ghana has been studied by many other African countries and has encouraged governments to pursue the same avenue. For a discussion of provident fund conversion in Africa see Gruat 1990

The third challenge to pension schemes, but also to social security schemes more generally, consists in the extension of coverage. Some countries are considering the extension of formal social security benefits to the informal sector. This extension, however, is feasible neither from a financial nor from an administrative point of view. Although the poor in the informal sector are probably more affected by social insecurity than the majority of formal sector workers, their protection will require informal approaches to social security. Therefore, all pension policy considerations should take into account the extent to which a system effectively can reach the groups it seeks to protect.

#### What type of scheme should be adopted?

There are two main types of scheme<sup>6</sup> from which to choose:

- (i) under a defined contribution scheme, the contributions paid by or on behalf of the worker are maintained in an individual account as under the provident fund system. The income from the investment accumulates with the contributions to form a lump-sum which at retirement is converted to an annuity. The contribution rate is usually fixed but because the final balance and the annuity depends on financial markets there is some uncertainty as to the final level of the pension benefit.<sup>7</sup>
- (ii) under the defined benefit system, a promise is made that the member will receive a pension of a prescribed amount on retirement either as a flat rate benefit or proportional to earnings. The benefit is known in advance but there is some uncertainty as to the cost in contributions of ensuring that this promise is kept.<sup>8</sup>

In Zambia, a defined contribution system cannot by itself be expected to produce an adequate pension for those with low life-time earnings or for those who have broken periods of employment. If a minimum benefit level is to be achieved, the system would have to be complemented by a government backed minimum pension guarantee. The investment performance of the ZNPF raises doubts whether a fully funded public scheme could be administered in the best interests of its members. The volatility of the financial markets has had a negative effect on annuities and those insurance companies which have been operating pension schemes for employers have tended to move away from defined-contribution 'money-purchase' schemes in favor of defined benefit ones.

A pay-as-you-go financed defined contribution scheme would avoid these problems but it would require fairly sophisticated management techniques and be subject to a considerable amount of government intervention in the setting of the notional interest rate and the annuity factor. Given the

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<sup>&</sup>lt;sup>6</sup> For a complete overview of contractual savings institutions, see Vittas and Skully, 1991.

Most of these schemes are fully funded but recently some countries have introduced pay-as-you-go defined contribution schemes. Under this approach, notional accounts are kept for each member by creating a direct link between contributions and benefits and crediting notional interest - determined by the government and usually linked to the growth of covered wages - to the accounts. At retirement, workers use their individual account to "buy" an annuity from the pension system which depends on life expectancy at retirement.

<sup>&</sup>lt;sup>8</sup> World Bank 1994

As demonstrated by Chile and other Latin American countries, these risks can be greatly reduced through the introduction of a competitive privately managed defined contribution scheme. Due to the underdevelopment of the financial sector and the lack of regulatory and supervisory capacities in Zambia, however, the Chilean model is not considered applicable in Zambia.

experience of the Zambian workers and employers with government intervention in the ZNPF, this option is not recommended.

It is therefore recommended that the basic social security pension scheme should be based on defined benefit principles and be financed exclusively from contributions without government subsidies. It should offer only modest benefits in order to leave room for supplementary pension arrangements which could be either of the defined contribution or the defined benefit type.

The provident fund system is generally seen as having failed in Zambia although its failure is largely attributable to adverse economic circumstances, political interventions, and inappropriate management. This perception is strong because the members bear the risk and thus suffer the consequences of inflation and low investment returns. But the system does meet the demand for lump-sum benefits and could also in the future form part of a supplementary defined contribution scheme in which contributors could choose to save with an approved savings plan. It would, however, place a burden on the administration to operate two systems simultaneously and good administrative performance is a key requirement for the proposed pension scheme. Further, the provident fund has suffered such a loss of confidence among its members that it would be difficult to restore credibility, and there is a danger that investment performance would continue to be inadequate. But some members' balances will probably remain after the reform and should continue to be granted interest. Thus payments will be made under the provident fund for years to come while members are developing entitlement under the national pension scheme.

Should this social security pension scheme be mandatory for all private sector and parastatal employers and their workers (as under the ZNPF) or should those who have occupational pension schemes above a certain standard be allowed to contract-out?

The strength of a social security scheme is its basis in solidarity between all sections of the work force and through the economies of scale provided by its universality. It is thereby able to take maximum advantage of the concept of pooling risks and sharing costs on which it is founded. Allowing certain employers to contract out would dilute this pooling. Furthermore, a national scheme guarantees full portability of pension rights which are otherwise difficult to achieve in a developing country. An alternative approach would be to allow for partial contracting-out, i.e. above a prescribed level. This would ensure solidarity and uniformity below that level and a choice above between increased coverage under the public scheme and supplementary coverage under private arrangements. However, this would require a range of additional administrative responsibilities to ensure that every formal sector worker has at least minimum mandatory coverage at all times regardless of the employer. This would represent a considerable burden in terms of supervision, enforcement and administration of the scheme.

A mandatory scheme for all workers further enables the integration of public sector employees into the same scheme. Civil servants, teachers, members of the armed forces and employees of local authorities are currently exempt from the ZNPF and instead covered by their own schemes.

These schemes provide very generous benefits at a level which would clearly be beyond the scope of a national scheme. They do not provide for any transfer or preservation of pension rights and they thus inhibit labor mobility between the public and private sector. Therefore, there is a strong case for the national pension scheme to also cover civil servants and other public sector employees. But this could not be done without making special provision for some features of the present schemes which should be retained as occupational benefits, similar to those arrangements made by private employers for their workers. Also, acquired rights would have to be respected.

Some doubts can be raised whether the administration of the proposed national pension scheme could cope with the immediate integration of public sector employees as insured persons. One option would be to segregate a core element of these special schemes equivalent to that provided under the national scheme which would be administered by the special scheme (for example the CSPF) in accordance with the rules of the national scheme. Total entitlement under the special scheme could be provided according to whatever conditions were considered appropriate and financially viable. Even this arrangement would probably have to be phased in over a longer period of time.

#### The Type of the Social Security Pension Scheme

Having addressed the strategic choices for the role to be played by a national pension scheme, there are several possible design options for a basic defined-benefit scheme. The choices may be influenced by factors such as the extent of desired redistribution between members or the implications for administration. The basic choices lie between:

a. a flat-rate scheme where benefits are paid at a standard rate subject to the satisfaction of a minimum qualifying period such as 15 years but contributions paid by employers and employees are earnings-related.

This system is easy to administer in that only records of employment are required for insured persons since entitlement does not depend on contributions. But the system has a strong element of redistribution from the higher paid to the lower paid which may not be acceptable. Since entitlement would not increase after the satisfaction of the minimum qualifying period there would be no incentive to contribute after that point which could lead to increased evasion. A modified version of this type of scheme could provide for graduated increases in the flat rate benefit for each additional year of pensionable employment.

b. a limited earnings-related scheme where both benefits and contributions are determined by salary bands (for example those earning between K.50000 and K.80000 pay contributions as a percentage of say K.60,000) and this amount is also used as the base earnings for a benefit formula.

This reduces the degree of redistribution inherent in type (a) but requires a higher level of record keeping and is regressive because higher income earners contribute proportionately less than lower income groups.

c. a fully earnings-related scheme where both benefits and contributions are a percentage of earnings with benefit entitlement also dependent on a minimum qualifying period and a prescribed formula or accrual rate.

This is more equitable than type (a) but it implies the need for more sophisticated records. Type (b) or (c) would require provision for a minimum benefit if the government wishes to protect those with low earnings. Provision could also be made for a benefit ceiling to limit entitlement and for a corresponding or higher contribution ceiling. The imposition of a contribution ceiling has the effect of limiting the scope of the scheme and thus increasing the need and the demand for supplementary schemes.

#### Replacement rates

The replacement rates are usually determined by a benefit formula based on length of pensionable employment and average earnings. Other important factors are benefit or contribution ceilings, the adjustment of pensions in payment and the calculation of average pensionable earnings. Many schemes in developing countries use earnings during the years immediately prior to retirement but this approach has proven to cause serious problems. On the one hand, there may be abuse through collusion with employers; on the other hand, earnings levels particularly from physical occupations may fall at the end of the working life. This has led to the use of longer periods (such as the best 5 years of the 10 years prior to retirement) or even average life time earnings.

Life-time earnings should be used for the purpose of determining entitlement to benefit. The scheme should incorporate a revaluation mechanism for automatic adjustment by linkage with a price or wage index. But the linkage with prices, could, in periods of high inflation such as those experienced in Zambia, result in pensioners receiving larger percentage increases than workers. In a national scheme with wide coverage, most persons in formal sector employment can be expected to be covered for a substantial period of their working life and a minimum period of 15 years is common as qualifying period. On balance, it is recommended that Zambia should adopt a fully earnings related scheme with a minimum pension level set at about 20 percent of average earnings.

There are various options for the determination of the pension formula. The most basic solution, which would also be the easiest to administer, is a linear accrual rate of 1 percent of average insurable earnings per year of service. Another possibility would be to award a higher accrual rate during the qualifying period of 15 years in order to ensure that a greater number of workers qualify for a meaningful pension; additional periods of insurable employment beyond the minimum period could attract an accrual rate of 1 percent per year. This option would redistribute income in favor of workers with broken careers of employment. But it would be more expensive and would thus require a higher contribution rate than a linear accrual rate. Regardless of the accrual rate chosen, the maximum benefit level would be determined by a ceiling on insurable earnings (and contribution liability). This level could be set at perhaps twice average earnings. If policy makers wish to leave a system which redistributes more towards low income workers, the ceiling for benefit calculation could be set at a lower level than that for contribution calculation.

The contribution rate for the basic pension scheme would depend on the desired replacement rate and on the type of financial system adopted. Initially, the contribution rate for a pay-as-you-go financed scheme could be very low since pension rights would be acquired only very gradually. Contribution rates, however, would vary according to the individual parameters of the scheme, such as a linear accrual rate, an upper limit on the accrual, the pensionable age, credits for disability and survivors' pensions, and whether initial credits are given for previous ZNPF membership.

#### Pensionable age

The determination of pensionable age is a major issue which is dependent on a consideration of the following factors: (i) the age generally accepted in the country as retirement age having regard to employment practice and life expectancy; (ii) the estimated cost of pension liability (payment of pensions from age 55 instead of 60 could increase the overall cost of the scheme by 50 per cent); and (iii) the employment situation (the need to match manpower resources with jobs).

Life expectancy at birth is only 47 years in Zambia and under pressure from the high incidence of AIDS. Although there is no reliable data, there is evidence that life expectancy at retirement is considerably higher. At present, age 55 seems to be the generally accepted age of retirement in Zambia. If the pension scheme was intended to be basic, employers and workers would wish to develop supplementary schemes. These schemes could make provision for early retirement. Taking into account the cost factors there is a case for adopting age 60 as the retirement age. It is possible, however, to provide the option of early retirement but the rate of pension payable would have to be reduced, by an actuarially determined amount, to reflect the longer period of expected entitlement.

#### Invalidity

The principal qualifying requirement for invalidity is a permanent loss of earnings capacity and a minimum period of insurable employment (membership under the scheme). Usually a person is regarded as an invalid if, on medical examination by an independent medical board, he or she is found to have less than one third of the earnings capacity of a person of similar age and experience. Some schemes recognize a lower degree of invalidity and provide reduced rates of benefit accordingly. Invalidity pensions are effectively early retirement pensions and help to address the needs of persons who towards the end of their working life become incapable of further employment. The impartial and accurate determination and assessment of invalidity does, however, provide difficulty in many developing countries, and this is a benefit which is open to abuse.

The qualifying period for invalidity is usually shorter than that for an old age pension to take account of the fact that this contingency can occur at any time. Periods of 3 to 5 years are commonly specified but there is usually a specific requirement that the claimant has a recent period of insurability. In most countries, invalidity pensions are payable until normal pensionable age when they are replaced by an old age pension; for this purpose, periods in receipt of invalidity pension are regarded as equivalent to months of contributory membership.

#### Survivors

Surviving dependents are usually only eligible for pensions, if the deceased person was either a pensioner at death or had completed a minimum qualifying period (usually the same period as is used for invalidity pension). Under a social insurance scheme, the objective of survivors benefits is to provide a continuing income to those members of the deceased's immediate family who were most dependent on him or her at the time of death. The approach is necessarily different from that of a provident fund where the balance in the deceased member's account is paid to his or her nominee. But, rather than determine entitlement by an individual investigation of family circumstances in every case, it is the practice for the legislation to prescribe the circumstances and the relatives where dependency is most likely to occur. It is a difficult task both to design the rules which best suit the social situation in the country and then to administer them in the face of inevitable anomalies, misunderstandings and abuse.

A widow and children under school leaving age are usually recognized as the primary dependents but with some modification. Thus, pensions may only be payable to young widows for a relatively short period unless they have young children to look after or are incapable of work. Otherwise pensions are payable to a widow until her death unless she remarries earlier. The social circumstances need to be taken into account and it is common both for the scheme to recognize more than one widow and for the definition of 'widow' to include common law or custom marriages or long-standing periods of co-habitation. Similarly, flexibility is often extended to the definition of children so that it includes illegitimate and adopted children and even children, not issue of the deceased, who were ordinarily wholly or mainly maintained financially by him such as younger brothers and sisters. Entitlement continues for the children until the end of full time education unless the child is an invalid (i.e. permanently incapable of work).

#### Funeral Grants

It would be reasonable to pay a grant to cover the cost of the funeral of a deceased insured person or his or her spouse subject to a qualifying condition of at least 12 months contributions in the last 36 months. The amount would be payable to the person who bears the cost of the funeral expenses.

#### Transitional Provisions

When a new pension system is introduced with major changes, it is usual to make transitional provisions for persons near retirement age who are otherwise unable to satisfy the minimum qualifying conditions. The conversion of the Provident Fund Scheme to a Social Security Pension Scheme implies a change from a defined-contribution scheme to a defined-benefit scheme. Usually, previous contributions are converted into credits under the new scheme, in accordance with an actuarial formula.

However, the effect of hyperinflation has badly eroded ZNPF balances which would have little value in any reasonable conversion formula. It is necessary to avoid overloading current and future contributors with the burden of past deficiencies of the provident fund. Furthermore, the issue is complicated by the large volume of unposted records and difficulties in determining members' true balances.

#### **Financial Systems**

In a developing country, such as Zambia, expenditure of a new pension scheme will initially be low but will increase as more pensions are awarded, as life expectancy increases, and as the average level of pension increases to take account of changing earnings levels. Under a pay-as-you-go system this liability would be met by annually assessing the anticipated expenditure and setting the contribution rate accordingly. Contribution rates would be low at the start but require steep increases later. By fully funding future pension liabilities, the need for subsequent increases in the contribution rate could, in principle be avoided. It would, however, require a high initial rate which may be unacceptable to a new scheme in a developing economy.

An intermediate solution is partial funding of the system. One example of this is the 'scaled premium' method: the contribution rate is fixed at a certain percentage to balance revenues and expenditure over an estimated 'period of equilibrium', for example ten or 15 years. When current resources (contribution income plus interest from investments) are no longer sufficient to cover costs, the contribution rate is increased to a level sufficient for another equilibrium period. The financing of pension liability involves decisions based on a range of projections which are often the product of uncertain assumptions and questionable data. Therefore, regular actuarial analyses are required to review progress and determine the need for adjustments.

Several countries have experienced serious problems with this system because: (i) there has been a failure to understand that under a partial funding system it is inevitable that the contribution rate will increase resulting in political opposition to an increase or the mechanism for effecting the increase has been too cumbersome; (ii) under a long period of equilibrium, large reserves accumulate in the early years and there is a risk of politically motivated low yielding investments and excessive expenditure on administration; (iii)the economic environment changed dramatically and inflation devastated the real value of the pension reserves.

In determining the period of equilibrium it is important to consider investment opportunities available as well as the targeted level of the contribution rate. There are several strong arguments for a shorter period of equilibrium and consequently a lower contribution rate: the limited scope for investment opportunities in Zambia, the need to contain administrative costs, and the difficult economic situation which severely restricts the contribution capacity of employers and employees. A low contribution rate will also increase the scope for financing supplementary pension provision. But it would need to be understood by the social partners that a lower initial contribution rate will have to be compensated for in the future as pension expenditure increases.

#### **Administrative Issues**

The credibility and effectiveness of the new pension scheme will heavily depend on the institution charged with its administration. The design of the scheme will be irrelevant if it does not work. The funds received from contributions and interest on the investment of reserves are held in trust pending claims by the beneficiaries. The management of the national pension scheme and of its funds should be entrusted to a new autonomous tripartite Board of Trustees. The membership of the Board should be based on equal representation of workers, employers, and government. The appointments should be made by the Minister of Labor and Social Security but from nominations made by the respective bodies. The Chairman

should not be restricted as at present to a defined Government official but should be appointed either by the President, in consultation with the Minister and the social partners, or should be chosen by the Trustees from within their number. The Chairman should have a prescribed term of office; his or her functions, powers and responsibilities should be defined in the legislation. Investment policy should be primarily the responsibility of the Board but it would be advisable to provide for, perhaps even as a statutory requirement, specialist advice from investment experts in consultation with the actuarial advisors of the scheme. Guidelines should be set out in the legislation for investment policy including restrictions on the scale and placement of the various sections of the portfolio.

Administrative expenditure has consistently been too high under the ZNPF. The aim should be to establish, for a public scheme, an administrative infrastructure which operates according to sound business practice. There are two ways of achieving this: either through supervisory mechanisms and legislative controls of the responsible public institution or by contracting with a private organization to act as fund managers in return for an annual fee. If the first alternative is chosen, it must be emphasized that there is a need for improvement with regard to both the institutional arrangements and administrative procedures. The administrative expenditure should be controlled either by prescribing limits in the legislation, or the Board setting on an annual basis prior to the completion of the budget the overall limit for administrative expenditure expressed as a percentage of income. The option of contracting a private firm for functions such as collection of contributions or investment management should be seriously considered since the experience of contracting a private firm for tax collection in Zambia has been very encouraging.

#### **Public Sector Pension Schemes**

The proposal to establish a uniform core of social protection applicable to all private and public sector workers should be seen as a long-term objective. The first step is to establish the national pension scheme for the private sector. Consideration could, however, be given to making new entrant public servants subject to the rules of an integrated scheme with a core provision and entitlement to supplementary benefits. It would also be possible to integrate (with phasing as necessary) the LASF scheme with the new national pension scheme.

In the short-term there are three priority areas for the public sector schemes:

- \* the benefit provisions are too generous and need to be reviewed: a distinction should be made between provisions consistent with retirement for public servants and other measures which represent favorable conditions of service and which, in particular, have developed as a reaction to the need to stimulate early retirement and thereby reduce staffing levels
- \* the financing of pension liability: this is closely associated with the above and it is essential that the different bases of liability are distinguished and that financial provision is made accordingly; either from the pension fund or directly from the Government
- \* administration; both the CSPF and the LASF are struggling with the volume of claims, inadequate records and lack of computerization facilities

An actuarial valuation of the CSPF is long overdue, but until this is completed it is not possible to provide an accurate estimate of present and projected pension liability. When this has been done and

decisions have been taken on the revision of the benefit structure, it will be necessary to review the financing of the scheme and to determine the appropriate contribution rate. But Government should honor the obligation to pay the employer's contribution into the pension fund. Pensions liability has undoubtedly been substantially underfunded because of the failure to pay the employer's contribution. Arrears due in respect of past liability should be paid but the revision of the financial system should provide an opportunity for this to be phased.

#### Occupational and Other Private Pension Arrangements

Many private schemes have been established in response to the weaknesses in the statutory schemes but these private arrangements have also generally failed to provide effective social protection. If the new national pension scheme should only partially meet the need for pension provision, this implies a significant continuing role for supplementary private provision. But this role should be within the scope of statutory supervision to protect the interests of workers and to ensure that there is adequate provision for the portability of pensions, for pensions adjustment and for the investment and management of funds. At present, pension schemes only need to satisfy limited conditions to gain entitlement to tax exemption. There is a need for comprehensive regulations relating to the approval and operation of private pension schemes and also for the appointment of a Registrar of Pensions to act both in a supervisory and a developmental role. This should be linked with proposals to develop similar regulatory provisions for the supervision and development of the insurance industry.

#### Sequencing of the Reforms: A Proposed Implementation Plan

The scale of the reforms envisaged will demand a gradual approach. Some aspects will clearly require further study and analysis and this will apply, in particular, to specialized areas such as computerization, organization and management aspects and especially to actuarial analyses.

In the short-term, there is a need to focus on the most pressing problems and at the same time lay the foundation for restructuring of the system. This will necessitate the following:

#### general

 formulate and publish a national social protection policy which sets out division of responsibility for the provision and financing of social protection and also strategy for future development

#### for the public sector schemes

- the settlement of outstanding pension claims
- revision of the early retirement and commutation provisions
- separation of liabilities relating to special public sector early retirement and retrenchment policies

- an actuarial valuation of the Civil Service Pension Fund
- strengthening of the operational capacity of both Civil Service Pension Fund and Local Authorities Superannuation Fund

#### for the ZNPF

- revision of investment policy to ensure higher yields, to restrict state intervention and to provide for expert guidance
- an increase in the contribution ceiling to about K.100,000 but only with the understanding that this represents the first step in a restructuring of the scheme
- special efforts to update records, reduce claims processing times and improve compliance
- take steps to reduce administrative expenditure

The above reforms should provide the foundation for a second phase aimed at a more fundamental restructuring of the system. The second phase involves legislation to establish a new national pension scheme but also to strengthen the institutional basis for other schemes to ensure that such schemes and their Boards are sufficiently independent and accountable and not subject to external influence as to their management and their financing.

#### This legislation should be enacted to:

- convert the ZNPF into a modest social insurance pension scheme with a new name and a fully autonomous status with stronger tripartite representation
- revise provisions in the labor legislation relating to employers' obligations to provide retirement benefits in order to avoid a double burden on companies
- restructure public sector schemes to remove (or at least restrict) special early retirement and
  commutation provisions and to provide the basis for phased introduction of a core social
  security component equivalent to the benefits provided by the new national pension scheme
  with revised supplementary provision to reflect the special occupational characteristics
  applicable to public servants
- establish regulatory provisions for the development and supervision of private pension funds including both occupational pension schemes and personal pensions or savings plans

 establish a new administrative mechanism (for example a high level permanent committee) to regularly review social protection policy and to both supervise and coordinate its application by all institutions responsible.

The implementation of these legislative changes will take time. It will be essential particularly in the case of the national pension scheme to allow for sufficient time (at least 12-18 months) for the process of education and for the preparation of the administrative systems and associated staff training.

As a long-term objective, the following structure for the social security system could be foreseen:

- a basic but earnings-related national pension scheme applicable to all employees in the public and private sector on a defined benefit basis with a ceiling and a minimum pension level; financed according to the scaled premium system; administered initially by two separate institutions - one for the private sector, parastatals and local authority employees and the other for civil servants but with the possibility of an integrated administration at a later stage. Newly appointed civil servants and employees of local authorities, however, could be insured in the new pension scheme.
- supplementary provision through occupational pension schemes and personal pension plans
  operating under supervision by a Registrar of Pensions initially on a voluntary basis but with
  the future possibility of mandatory provision when the sector has been fully developed and
  the regulatory structure is effective.

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