Executive summary

The present actuarial review of the Pension and Other Benefits Schemes (POBS) of the Republic of Zimbabwe reflects the financial situation of the POBS as of 31 December 1998. Since the financial viability of the POBS mainly depends on economic and population developments, a scenario regarding the macro-economic and labour market development and the development of mortality and fertility were set up for the purpose of this valuation.

Assumptions

The demographic assumptions take into account the distortion of mortality rates under the presently high level of the HIV / AIDS pandemic in Zimbabwe. The assumption on population growth is based on a life expectancy at birth of 39.1 years for males and 39.2 years for females in 1998. They are lower than the officially adopted ones for the year 1997. This reflects the dramatic impact of the HIV / AIDS pandemic. For the same reason it is also assumed that life expectancy at birth will further decline until about 2010, and only increase thereafter. Fertility is assumed to stay constant at its present level until the year 2005 and decline thereafter until about three quarters of its present level in the year 2030. From then until the end of the projection period it is expected to stay constant.

The projection of economic growth is based on real GDP growth of about 0.5 per cent for the years 1999 and 2000 and long-term annual GDP growth of 2.5 per cent until the end of the projection period. This is a fairly optimistic assumption and needs well balanced measures by the government. The number of insured persons / contributors is expected to rise from 1.4 million in the year 1998 to about 2.9 million in the year 2050; this is an average rate of increase of 1.5 per cent per year. Insurable wages are expected to increase on average by 0.9 per cent p.a. in real terms over the whole period. At the beginning of the projection period until the year 2010 their increase will on average be 1.1 per cent annually since the contribution ceiling is assumed to be increased substantially.

Inflation is assumed to stay high until the year 2003, but decline to a long-term rate of 3 per cent annually as of the year 2010 until the end of the projection period.

Projection results

The valuation shows, that the POBS will be able to meet all its liabilities for the next 30 years, even if there is no increase of the present contribution rate of 6 per cent of insurable earnings and if pensions in payment as well as other fixed amount benefits are adjusted in line with inflation for the years 2001 and 2002 and thereafter in line with wage increase. However, the evaluation also assumes that the current monthly contribution ceiling for insurable earnings of ZIM$4,000 will be increased drastically to ZIM$7,000 as of the year 2001 and further to ZIM$12,000 in the year 2002, up to ZIM$40,000 in the year 2008.

The projections further reveal, that under the present benefit and contribution conditions, the POBS will incur annual cash flow deficits by the year 2028 and the reserve will be depleted after the year 2039, if the assumptions of the chosen scenario materialize.

This development is not unexpected. The POBS has been operating for approximately only 5 years. Hence it is far from having reached a mature state. Only very few generations of insured persons have reached pensionable age and their number of credited contributions are also limited due to the short time the scheme has been operating. In addition the high incidence of HIV / AIDS leads to fewer persons reaching the age of 60/65 and claiming their full old age pension. Instead of this a high number of funeral benefits and widows pensions will be claimed. However, funeral benefits are paid as lump-sums and the amount of survivors benefits are significantly less than the amount
of old age pensions. In addition the widows of the insured who died due to AIDS tend to be also infected by the virus, hence will get their pensions for a short time only.

On the other hand it can be assumed that employees dying due to AIDS will be replaced by persons who are now not covered by the scheme. Hence the impact of the AIDS pandemic on the income side of the scheme will be fairly small as long as the scheme does not reach a nearly full population coverage.

In future the number of old-age pensions will increase significantly, at a much higher rate than the number of insured persons, from whom contributions are collected. In addition, future pensioners will receive higher pensions than present pensioners, because they will have accrued more contribution credits since the inception of the scheme. It is also expected that the impact of HIV/AIDS will be reduced after the year 2020, therefore pensions will be paid for a longer time.

On the macro economic level, expenditure of the PODS presently represents a low share GDP of only 0.3 per cent. Until the end of the projection period it is expected to grow to 2.4 per cent of GDP. This ratio of benefit spending is still at the lower end of observed levels in more developed countries.

The level of the funding ratio of the pension scheme is about 6.7 times annual expenditure in 1998, or 24 times annual benefit outgo. According to the projection results, this funding ratio will increase slightly up to 8.6 around the year 2011, but steadily decline thereafter. After the year 2027 the PODS will incur annual cash flow deficits, hence it will have to start liquidating the reserves. The reserve will be depleted around the year 2040. Then the scheme will have to borrow money to pay benefits due. At the end of the projection period the cash flow deficit will be about -1.8 per cent of GDP.

**Recommendations**

According to section 26 of the Act the actuary is requested to make recommendations in regard to the establishment and maintenance of reserves that would ensure the payment of future benefits of the scheme. However, in the current situation of high inflation with a negative real rate of return on the reserves such explicit recommendation should be avoided, and reserves kept as low as possible. The issue should be reviewed in the context of the next actuarial valuation.

In order to safeguard the purchasing value of pensions it is favourable to adjust pensions in payment according to an established formula. However, in times of high and possibly volatile inflation such a mechanism should not be implemented, since it may lead to rather unforeseen results. It is therefore recommended to adjust pensions in payment on an ad hoc basis for the time being; the projections take into account an adjustment of 50 per cent in the year 2001 and another 50 per cent in the year 2002. This mainly reflects the observed and expected inflation rates for the years 1999 and 2000, respectively. Thereafter when inflation is assumed to be reasonably low and steady again, indexation of pensions in payment follows the assumed wage increase on an annual basis.

It is therefore recommended that pensions in payment as well as the amount of grants, of minimum pensions, and other fixed financial amounts be adjusted as of 1 January 2001 by 50 per cent, as of 1 January 2002 by another 50 per cent.

It is further recommended to increase the contribution ceiling of insurable earnings to ZIM$ 7,000 per month as of 1 January 2001, and further to ZIM$ 12,000 per month as of 1 January 2002. Thereafter it should further increase but a concrete figure would have to depend on the observed wage development in the year 2000 and 2001. The projections are based on an increase of the ceiling up to ZIM$ 40,000 as of 2008. After this time a development in line with wage increase is used. This will insure that the income of the scheme in the long run develops in line with the
expenditure side. This will lead to a catchment rate of 75 per cent as of the year 2008 and thereafter. At present the catchment rate is as low as 46 per cent. The above valuation also indicates that contribution rates will have to be adjusted possibly during the period 2020 to 2025. The actual numerical value of those future contribution rates after the year 2020 can only be decided in the light of future actuarial reviews, but insured persons as well as employers should be aware that the contribution rate in the pension scheme will have to be increased in the long run.

The POBS has to start the implementation of a more sophisticated and comprehensive data base on past contribution payments, credits and other important data concerning all insured, as well as on the necessary particulars of pensioners. Computer retrievable information should be kept in different files for different groups of insured persons and be up-dated at least every six months. In particular, more and detailed information on the group of inactive insured persons has to be established, in order to be able to assess possible claims of this group and their impact on the financial stability of the pension scheme.

The POBS should also strive to record contribution income broken down by contributions due in the year, contributions actually collected from this amount, and contributions collected from arrears of previous years. This will enable the POBS to get clear information on its contribution collection rate. Until now it can only be assumed that the collection rate of the POBS is rather low. Under the presently high rates of inflation, employers tend to partly withhold their contribution payments for some time, since the real value of the payment decreases with inflation. It is therefore generally recommended that the POBS introduce measures to improve the probably low collection rate.

Prescribed assets count for 15 per cent of the portfolio. These assets are usually government bonds with below-market interest rates. Hence government and/or quasi-government institutions are borrowing funds from the POBS at preferential rates. On the other hand the value of the prescribed assets is eroded by high inflation. It is therefore advisable to reduce the share of prescribed assets in total investment to a level well below 15 per cent.

Under the assumption that inflation will not slow down but stay at high levels for the next one or two years it would be advisable to prefer short-term investments. This may yield lower returns, but it also allows to adjust more quickly to changing/increased interest rates.