## Canada Pension Plan

on that account, a slower but still considerable rate of price increase, $1 \frac{1}{2}$ per cent a year, is assumed.

Again I point out that these assumptions of the chief actuary in no way should be taken as an indication of any government expectation. The chief actuary chose them because he is seeking to guard against the danger of underestimating the possible cost of the plan.

Between these high cost and low cost estimates, the actuarial report, which I will be tabling, develops projections which are described as "intermediate cost"; that is to say, they represent costs with an intermediate rate of population growth and with price increases equivalent to $1 \frac{3}{4}$ per cent a year. Each of these projections is developed on two different assumptions about earnings, a rate of increase of 3 per cent a year or a rate of increase of 4 per cent a year. The first, 3 per cent, applied to the high cost estimates with a 2 per cent rate of price increase, would imply that productivity rises by only 1 per cent a year. This is the highest cost estimate of all. This is what will happen only if there should unfortunately be a dramatic reduction in the rate of technological progress.

Such progress has led in the past to long term productivity increases at an average rate of 2 per cent to $2 \frac{1}{2}$ per cent a year. A $2 \frac{1}{2}$ per cent increase is the rate implied on the lowest cost projections, where a rapid rate of population growth is combined with earnings increases of 4 per cent a year and price increases of $1 \frac{1}{2}$ per cent a year. A moderate rate of productivity increase is provided for in the projection which combines the intermediate population assumptions with a 4 per cent rate of increase in earnings, which is equivalent, given the assumed $1 \frac{3}{4}$ per cent price increase, to a $2 \frac{1}{4}$ per cent rate for productivity.

These various estimates cover a wide range of possibilities. Consequently, they have very different implications for the costs of the plan on a very long term basis. But for 20 years at least the stories they tell are not too divergent. On anything from the lowest cost to the highest cost assumptions, the proposed contribution rate will result in building up an investment fund which is substantial but not, in relation to our economy, unduly large. The actuary's estimates apply to the fund which the plan will generate in Canada, excluding Quebec. These estimates, at the end of 20 years, range between $\$ 6.7$ billion and $\$ 8.4$ billion.
[Miss LaMarsh.]

I should point out that these figures are based on the chief actuary's assumption that the rate of interest will remain at about the current level, roughly 5 per cent, for ten years but will thereafter be 4 per cent. About this I would enter the same reservation as I have made about others of the actuarial assumptions. The actuary's estimates must not be taken to imply a government view that interest rates are going to decline. From many points of view, of course, a decline in interest rates would be welcome. But if the developing nations of the world are to achieve the progress that is probably essential not only to them but to the security and prosperity of all of us, this may well remain a capital hungry world for many years to come. I understand that for this and other reasons many economists would say that interest rates are no more likely to go down than they are to go up.

If the actuarial projections were made on the basis of unchanged interest rates, that is, 5 per cent throughout, the estimates of the investment fund at the end of 20 years would be higher. On the various assumptions about population and earnings, they would range between $\$ 7.4$ billion and $\$ 9.3$ billion.

It is, however, common to all the actuarial estimates that by 1985 income of the plan from contributions, at the 3.6 per cent rate, will no longer equal the full cost of the pensions being paid. On some of the projections, the interest on investments will for a time more than fill the gap, so that the fund will continue to increase for part at least of the plan's third decade. The highest of the chief actuary's range of estimates for the fund in 1990 is at $\$ 8.6$ billion, slightly higher than for 1985. On the least favourable estimate, on the other hand, the fund would decline to $\$ 5$ billion by 1990. These again are the figures with the assumption of a 4 per cent interest rate. If the interest rate remained at 5 per cent on the average, the highest figure would become $\$ 10.1$ billion and the lowest $\$ 6.3$ billion.

All the actuary's estimates indicate, however, that some time after the plan is 20 years old there will be a need to reassess its finances. By that time, experience of the plan will have made possible considerably more precise estimates of its costs. The range of population and economic projections is too wide for it to be realistic to try to anticipate now what should be decided more than a generation hence. The timing of any change will, of course, depend in part on the views

