Order Paper Questions

points above the implicitly assumed rate of inflation. Real economic salary increases of 2.5 per cent were assumed. However, when these increases are combined with assumed promotional salary increases, it is impossible to calculate a single meaningful average figure, since the average compound rate depends on the range of ages being considered as indicated by the following examples:

Average Compound Annual Real Salary Increases Assumed in 1977 PSSA Actuarial Report

Age Range	Male	Female
50-65	2.75	2.80
40-65	2.89	3.16
30-65	3.29	3.72
45-60	2.87	3.07
35-60	3.09	3.57
25-60	3.92	4.27

The promotional salary scales used for purposes of the PSSA are based on the pattern of PSSA contributors; they are not as high as those used for CPP contributors at the young ages but higher at the older ages. The two scales are simply not comparable. For example, the earnings pattern of CPP contributors reflects the abnormally high "promotional" increases obtained by employees who move from one employer to another precisely for the purpose of increasing their earnings; on the other hand, they reflect the earnings of older employees whose earnings may substantially decrease but some of whom may have retired on pension from one job while continuing full or part-time work with another employer to augment their income. The substantial decreases in average earnings exhibited by the relatively older CPP contributors would not be representative of PSSA contributors nor of members of many other employer pension plans.

The assumption that the general level of salaries of PSSA contributors would increase at 2½ per cent net of inflation (actually 2.427 per cent) was based on the statistical data for Canadian wages and salaries which showed a rate of 2.35 per cent for the 50 years ending in 1978 and 2.29 per cent for the ten years ending in 1978. While the rate has been declining it appeared desirable to retain a margin of conservatism in the assumption, particularly since the assumed rate of real interest of 3.5 per cent (actually 3.398 per cent, which was chosen as representative of implicit assumed real interest rates used in the private sector and of the returns expected of balanced portfolios, might be subject to the criticism of tending to understate costs.

If the assumed real interest rate and real general salary increase rate used for purposes of the 1977 CPP Actuarial Report were substituted for those used for purposes of the 1977 PSSA Report, all the results relating to basic PSSA benefits would remain unchanged. However, the normal actuarial cost (current service contribution rate) for total benefits (including Supplementary Retirement Benefits), would have increased from 15.9 to 16.8 per cent and total estimated combined actuarial liabilities would have increased by about \$580 million.

It might be added that the economic assumptions used for the 1977 PSSA Actuarial Report were the same as those used for the three CPP Actuarial Reports immediately preceding the Report as at December 31, 1977 (No. 6). For purposes of the CPP Actuarial Report No. 6 the assumed real rate of increase in earnings levels was decreased from 21/2 per cent to 2 per cent and the assumed real interest rate was reduced from 3½ per cent to 3 per cent. The decrease in the assumed rate of increase in real earnings meant that the estimated CPP contribution rates (i.e. pay-as-you-go costs) would be determined on a slightly more conservative basis. For a "funded" plan such as the PSSA, such a reduction in the assumed real rate of increase in earnings levels would have had the opposite effect. The concomitant change in the assumed real interest rate for the CPP Report was of relatively little importance but would be significant in the determination of costs for a "funded" plan such as the PSSA.

3. Approximate increase in real salaries received by PSSA contributors as a result of salary revisions in the last ten calendar years.

	Per cent	
1972	1.0	
1973	0.3	
1974	2.0	
1975	3.3	
1976	3.6	
1977	-1.5	
1978	-1.8	
1979	-0.2	
1980	0.5	
1981	-0.3	

Note: Salary increase information is maintained on a calendar rather than a fiscal year basis.

Information regarding salary increases due to promotions each year is not available. Promotional salary increase assumptions used in the actuarial reports are determined by making comparisons of salary movements for various age groups between valuations.

- 4. As outlined in the response to Parts 1 and 2, the premise of the question is not correct.
- 5. The 1977 PSSA deficit estimated at \$61.5 million is the result of all the assumptions entering into the actuarial calculations. As noted in the reply to Parts 1 and 2 above, the salary increases assumed for purposes of the CPP would not be appropriate for use in connection with PSSA estimates, because of the different promotional patterns.
- 6. (a) The actuarial report on the Public Service Superannuation Account as at December 31, 1977, was tabled on October 29, 1980. Since it was estimated that as at that time the Public Service Superannuation Account was in a surplus position, principally as a result of the fact that until the tabling of the report the actuarial liability adjustments on account of general economic salary increases were being determined with reference to the totality of increases in excess of 5½ per cent,