



SOCIETY OF ACTUARIES

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CANADIAN ACTUARIES WRESTLE WITH ECONOMIC TENDENCIES

by E. J. Moorhead

When actuarial groups invite economists to address them, the actuaries usually make one devastating mistake. The program chairman fails to make it clear to the visitor that we actuaries have to focus on *long-term* trends. Hence the guest speaker typically wastes the audience's time by discoursing on why the economic picture has been so discouraging since last January, and why happier times lie ahead for next fall—or, if the economist is of the cautious breed, for the following spring.

Planners of the Canadian Institute of Actuaries meeting in Toronto in mid-March successfully avoided this grievous error. They left no room for doubt that the discussion was to be confined to the outlook for 10 years, 25 years, and 50 years ahead. The consequence was the most useful analysis of economic cause and effect that this reporter has yet heard in an actuarial meeting.

Furthermore, the assembled actuaries were persuaded to try their hands, not once but twice, at economic forecasting. First was before they had heard how the guest economists see the outlook. Second was after three of those four guests had spoken. Herewith is a table showing what the actuaries came in believing ("Before"), and went away thinking ("After"), that the future holds in store for Canada.

Evidently the collective opinion of the actuaries is: (a) that Canada faces horrendous inflation for longer than even the youngest present actuaries will be practicing; (b) that growth in wages will more than keep pace with purchasing power; (c) that investment yields will provide the investor with positive returns after allowing for rising prices; and (d) that stocks will on average prove to be superior to bonds. Now all we need is to find at least one actuary with spirit adventurous enough to calculate premium rates that are consistent with his own economic beliefs.

Happily, the assembly did not spend all its time on these prognostications. Useful study was given to some of what may be called economic axioms, including these:

(i) Rates of growth in prices tend to correspond to growth rates in the money supply less growth rates in the national output of marketable goods and services.

(ii) Rates of growth in wages tend to correspond to rates of gain in national productivity plus rates of growth in prices.

(iii) The nominal rate of interest, with due allowance for the applicable risk element, equals a basic real rate of interest increased by the expected rate of price inflation.

The guest economists, all of whom performed capably as well as entertainingly, were C. Scott Clark of the Dominion Department of Finance, Arthur W. Donner of Research Securities Ltd.,

Michael Walker of Fraser Institute, and John Crispo, Faculty of Management Studies, University of Toronto.

The actuaries who planned and conducted this economic foray were Malcolm R. Reynolds and James G. Paterson. Messrs. Reynolds and Paterson and other actuaries who took part in this program gave a lesson to others to go and do likewise. □

WANTED!

Extensions of Useful Time-Series

Elsewhere in this issue is an extension to 1978 of a time-series that was published in the *Transactions* in 1970. Other authors are urged to submit extensions of their past tables that they believe will be useful to our readers and also will draw attention to the existence of those past figures.

We're Being Noticed!

(Continued from page 3)

What these six sources said about us:

(1) "Generations may have to pass before meaningful actuarial data (about health hazards of nuclear power) can be compiled"; (2) a fine essay about Orlo Nichols, actuary in S.S.A.; (3) a table from the Society's new Build & Blood Pressure Study (erroneously credited to a west coast life company!); (4) "Actuaries say (certain proposed) changes (in workmen's compensation) would reduce by \$135 million the premiums now paid (in Florida)"; (5) "Now, actuaries find that recent population growth-rates are undermining Social Security"; and (6) the following priceless item in "National Review".

"Actuarial Note: Having noted the rapidity with which heads of state are being knocked off in underdeveloped lands these days, President Mobutu Sese Seko of Zaire is taking his precautions. He has ordered from a Belgian jeweler a ten-pound gold-plated bullet-proof vest."

The contest between 1978 New Fellows and Former Board Members is ruled a dead heat. Special congratulations to Ronald Hirsch, F.S.A. 1978, who emulated Horatius At The Bridge for his side, and to Josephine Beers, The Champ among the senior group.

Puzzling thought: Why was there not one single response from any actuary employed in an insurance company?

E.J.M.

CANADIAN ACTUARIES' FORECASTS, March 1979

Mean Annual Compound Rates for Periods Shown with Standard Deviations in Parentheses.

I. Growth in Consumer Price Index

	1979-1989	1979-2004	1979-2029
"Before"	8.0% (2.5)	6.2% (2.2)	5.1% (2.3)
"After"	7.7 (1.6)	6.3 (1.6)	5.3 (1.5)

II. Growth in Average Weekly Wages

"Before"	8.6 (2.6)	7.1 (2.1)	6.1 (2.3)
"After"	8.4 (1.5)	7.6 (1.6)	6.8 (1.5)

III. Index of Bond Yields (McLeod, Young, Weir & Co., 50 Bonds)

"Before"	9.9 (2.5)	8.3 (1.9)	7.4 (2.0)
"After"	9.6 (1.8)	8.3 (1.5)	7.7 (4.0)

IV. Dividends plus Capital Gains on Stocks (Toronto Stock Exchange, 300 Stocks)

"Before"	10.3 (3.7)	9.2 (2.4)	8.6 (2.5)
"After"	10.4 (2.1)	9.8 (1.7)	9.4 (1.9)