

military careers are in the best interest of the individual.⁷ In this section I offer evidence concerning the effect of military career lengths on post-retirement-opportunity lifetime incomes.

In an investigation of the effects of economic incentives on the career lengths of officers of the naval service, I utilized a simple mathematical model which considered post-retirement-opportunity income from each of the four potential sources previously noted.⁸ The data used are incomes from active duty military employment, military retirement, second career employment and second career retirement. Second career income information was obtained from some 5,300 responses to a questionnaire mailed to Navy and Marine Corps officers who retired during the years 1955-64 in the pay grades O-5 through O-8.⁹ Through use of various discount rates, the model collapses post-retirement-opportunity lifetime income streams from each of the four potential sources into a single-valued estimate of the present worth of post-retirement-opportunity income.

The optimum retirement length of service was determined by comparing the values resulting from the various possible combinations of military and civilian career lengths. The combination which yielded the largest estimated value was considered the optimum military career length for income maximization purposes.

The results appeared to indicate lack of a significant positive financial incentive for officers to remain on active duty for a maximum length military career. For each individual, the solution depends, of course, on the relative opportunities offered by military and second careers. However, in terms of groups and averages, second career opportunities tended to be substantially better for those who hold advanced degrees than for those who did not. As a result, for advanced degree holders, early retirement appears to show a strong financial advantage over extended military service.

For those who did not hold advanced degrees, the solution generated by the model was less clear-cut and the indicated economic advantages of early retirement were relatively small. However, inclusion in the analysis of factors outside the purview of the model (nonemployment and unemployment rates) strengthens the case for early retirement.

In large measure, the optimum retirement time for those who did not hold advanced degrees appeared to be dependent upon their atti-

⁷ See Fechter and Mahoney, *op. cit.*, for military personnel continuation rates by years of service.

⁸ A detailed description of methods is contained in: Allen J. Lenz, "Military Retirement and Income Maximization: An Examination of the Economic Incentives to Extended Military Service," unpublished Ph. D. dissertation, Graduate School of Business, Stanford University, 1967.

⁹ The military services differ somewhat in the titles used to identify a particular level in the organizational hierarchy. For purposes of clarity and brevity, ranks are subsequently identified by using the Department of Defense pay grade which is identical for all of the individual military services. Pay grades and applicable rank title equivalents for the group in which this paper is interested are:

Pay grade	Navy rank title	Army, Air Force, and Marine Corps rank title
O-5	Commander	Lieutenant colonel.
O-6	Captain	Colonel.
O-7	Rear admiral (lower half)	Brigadier general.
O-8	Rear admiral (upper half)	Major general.