

TABLE 4.—COMPARISON OF MONEY INCOMES (OTHER THAN INCOME FROM MILITARY RETIREMENT PENSION) OF MILITARY RETIREES AND COMPARABLE OTHER CIVILIANS, 1965

Level of school completed and age	Money incomes in 1965 of—	
	Retirees	Civilians
Less than 8 yr.:		
35 to 44 yr.	\$5,227	\$4,542
45 to 54 yr.	4,925	4,622
55 to 64 yr.	3,939	4,012
65 yr. or more.	1,869	1,854
9 to 11 yr.:		
35 to 44 yr.	6,449	6,118
45 to 54 yr.	5,890	6,111
55 to 64 yr.	4,624	5,532
65 yr. or more.	2,287	2,426
12 yr.:		
35 to 44 yr.	6,533	7,040
45 to 54 yr.	6,492	6,957
55 to 64 yr.	4,714	6,626
65 yr. or more.	2,762	2,882
13 to 15 yr.:		
35 to 44 yr.	7,603	8,145
45 to 54 yr.	7,409	8,724
55 to 64 yr.	5,612	6,804
65 yr. or more.	4,322	3,041
16 yr.:		
35 to 44 yr.	7,836	10,029
45 to 54 yr.	8,723	11,557
55 to 64 yr.	7,515	8,949
65 yr. or more.	6,577	4,157
17 yr. or more:		
35 to 44 yr.	9,615	11,048
45 to 54 yr.	11,088	12,326
55 to 64 yr.	10,720	10,844
65 yr. or more.	8,552	7,346

Source: App. B and U.S. Bureau of the Census, Current Population Reports, series P-60, Consumer Income, No. 51, table 22, p. 35.

The striking conformity of the labor force behavior of different groups of military retirees to the theoretical model suggested the possibility of deriving estimates of the income and substitution parameters of labor force participation from the retirement survey data. This would enable us to specify more precisely the effects of military retirement income on the labor force behavior of military retirees.

It is possible to separate the income effect from the substitution effect by observing the independent effects of changes in wage and non-wage components on labor force behavior. The nonwage component identifies the pure income effect and the wage component captures the income and the substitution effects jointly. Given an estimate of the income effect based on the nonwage component of income, the pure substitution effect may be derived as a residual from estimates of the joint effects picked up by the wage component.¹⁸

¹⁸ The technique for isolating these effects is developed in detail in J. Mincer, *op. cit.*, especially on pp. 69-75. Estimates of income and substitution parameters have been derived in several studies. See, Bowen and Finegan, *op. cit.*; "Educational Attainment and Labor Force Participation," *American Economic Review*, LVI (May 1966), No. 2, pp. 567-582; G. G. Cain, *Married Women in the Labor Force* (Chicago, Ill.: University of Chicago Press, 1966), p. 159; "Unemployment and the Labor-Force Participation of Secondary Workers," *Industrial and Labor Relations Review*, XX (January 1967), No. 2, pp. 275-297. A review of the recent literature on labor force participation may be found in J. Mincer, "Labor Force Participation and Unemployment: A Review of Recent Literature," in R. A. Gordon and M. S. Gordon, editors, *Prosperity and Unemployment* (Berkeley, Calif.: University of California Press, 1966), pp. 73-112. A more rigorous analysis of the income and substitution parameters is contained in M. Koster, "Income and Substitution Parameters in a Family Labor Supply Model," unpublished Ph. D. dissertation, University of Chicago, 1966.