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MILITARY RETIREMENT AND INCOME MAXIMIZATION:  
AN EXAMINATION OF THE ECONOMIC INCENTIVES  
TO EXTENDED MILITARY SERVICE

ALLEN J. LENZ

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This paper summarizes the methodology and results of a more detailed study of some of the economic aspects of military retirement. Additional detail appears in "Military Retirement and Income Maximization: An Examination of the Economic Incentives to Extended Military Service", Allen J. Lenz, unpublished PhD Dissertation, Stanford Graduate School of Business, Stanford University, 1967.

EARLY RETIREMENT AND INCOME MAXIMIZATION:  
Some Effects of the Economic Incentives in the Military  
Retirement System

By CDR Allen J. Lenz, SC, USN\*

The U. S. military retirement system is designed to serve an established need of the military organization: it functions to permit withdrawal of career personnel from the military establishment at relatively young ages in order to prevent the organization from being dominated by men too old for the rigors of military life and to insure that maintenance of "youth and vitality" will provide a combat effective organization.

The removal of superannuated personnel is a commonplace objective of retirement systems. However, the military system is virtually unique with respect to the early age at which the withdrawal of career members is mandatory or encouraged.

The military retirement system does fulfill its objective of maintaining "youth and vitality" in the military personnel structure. But, in achieving its goals the system establishes a pattern of economic incentives and resultant individual behavior responses which may imperfectly serve the best interests of the military organization. The objective of the research described in this paper was to determine if the existing combination of retirement annuities and civilian economic opportunities tends to motivate premature retirement of military personnel.

\* The author is an active duty naval officer. However, the views and conclusions expressed in this paper do not necessarily represent the position of the Department of Defense, the Department of the Navy, or any agency or staff thereof.

Part I briefly describes the military retirement system. The unique "income maximization" problem thrust upon members of the military profession by the necessity of a second career is examined in Part II. Part III summarizes the results of a study of the effects of the length of a military career on lifetime incomes. Conclusions are summarized in the final portion of the paper.

#### I. Military Retirement and Second Careers

Every career military officer and enlisted man faces ultimate involuntary retirement from military service. In itself, mandatory retirement is not an unusual practice. Most organizations specify some age at which the employee is involuntarily removed. However, few, if any, remove their members at such early ages and in accordance with such a specific, well-defined plan as does the military.

For the vast majority of its "employees" the military organization requires retirement at a relatively young age.<sup>1/</sup> The basis for this requirement is an emphasis on the maintenance of a young and vigorous military force capable of performing vital defense and combat missions. As a result of prior experiences wherein promotion stagnation and superannuation of personnel lead to military forces with less than the desired efficiency and capabilities, the need for such an emphasis is well established and generally recognized.<sup>2/</sup> This is not to say that youth and vigor is a panacea for the military organization or that the

<sup>1/</sup> For details on the provisions of military retirement, see "Federal Staff Retirement Systems", Appendix to the Report to the President by the Cabinet Committee on Federal Staff Retirement Systems, April 6, 1967, U.S. Government Printing Office, p. 127.

<sup>2/</sup> See Ibid, p. 365.

organization is optimally structured. In the present day world many military skills closely parallel those of the civilian economy. Not all of these skills require the same degree of physical vigor. New concepts, more complex weapons systems, the continuing cold war and the world-wide deployment of military forces may carry need for a recurring change in the mix of requirements for physical endurance, technical skill, and practical experience which would provide the "ideal" military personnel structure. There can be no assurance that the present system of personnel utilization is optimum.

Nevertheless, given the present assumptions concerning manpower requirements and resultant methods of personnel management, termination of all but a tiny minority of military careers at an age much lower than the normal civilian employment retirement age fills a need of the organization--not a need of the individual. The termination may be desirable from the standpoint of the organization, but it imposes problems on the individual terminated. His financial needs normally greatly exceed the income from his military retirement annuity. And, even though middle-aged commencement of a new profession may be difficult or even somewhat traumatic, withdrawal from the labor market is usually neither physically necessary, financially practical, nor emotionally desirable for the typical military retiree. As a result, the great majority of career military personnel seek civilian employment in a "second career" after retiring from the military.<sup>3/</sup>

<sup>3/</sup> For military retiree employment participation rates, see "The Economics of Military Retirement", Mahoney and Fechter, in "Old Age Income Assurance: Issues and Alternatives." Joint Economic Committee, 90th Congress, 1st Session.

Military retirees generally earn less in their second careers than is earned by other civilians of similar age and education. One may argue that, in part, the differential results from availability of the military annuity and thus a reduced civilian earnings aspiration level for the military retiree. This probably causes some of the differential, but there is good evidence that this is not the major cause.<sup>4/</sup> Rather, the higher incomes accruing to the civilians appear to be primarily a natural result of seniority and experience advantages.

If this is the case, then a late, middle-aged transfer from military to civilian employment carries an economic penalty, and one can say that pursuing a military career involves an "opportunity cost" that follows the individual into subsequent civilian employment. Thus, despite governmental provision of a military retirement annuity which is a significant percentage of active duty income<sup>5/</sup>, from the viewpoint of the individual, middle-aged military retirement is neither an unmitigated economic nor social benefit. A portion of the military retirement annuity, in effect, serves to compensate the retiree for the economic disadvantages typically encountered in a middle-aged transfer from a military to a civilian occupation. The military retirement annuity is thus an unusual

<sup>4/</sup> See "A Study of the Military Retired Pay System and Certain Related Subjects", A Report to the Committee on Armed Services of the U.S. Senate by the Study Committee of University of Michigan, 1961, p.38, and Part III of this paper.

<sup>5/</sup> Monthly military nondisability retirement pay is determined by multiplying  $2\frac{1}{2}$  percent times the number of years service times the monthly base pay for the individual's retirement grade and longevity pay step. The minimum payment is 50% of base pay (for 20 years service) and the maximum is 75% of base pay (for 30 or more years of service). Nondisability annuities are not paid for less than 20 years of service. Basic pay is, on average for those eligible for retirement, only about 70 percent of tax equivalent gross cash income.

form of income maintenance program, compensating recipients in part for the "opportunity cost" of pursuing a military career which does not offer a working lifetime of employment. However, the problems and economic penalties of a transition to civilian employment vary with respect to the individual's retirement age, education, military occupation, etc. Further, there is no assurance that the annuities provided for each of the possible military career lengths are equally advantageous. The effect is to create a unique income maximization problem for those eligible for military retirement.

## II. Military Retirement and Income Maximization

Since the military cannot provide a lifetime career for most of its personnel, it seems logical to assume that each individual achieving eligibility for military retirement will attempt to determine the optimum time, within the range of choices available, to make the transition from military to civilian employment. Selecting the most favorable point at which to terminate a military career and begin civilian employment will inevitably involve consideration of a variety of factors, both economic and non-economic. The interest of this paper is in the economic elements of the decision process.

For a military careerist who is eligible to retire from military active duty service, it is contended that the logical and typical approach in deciding "when to retire" would be one of selecting the military career length which maximizes expected future total lifetime income; i.e., maximizing the expected income for that portion of the individual's lifetime subsequent to his earliest opportunity to retire from the military organization (after completion of twenty years of active service). We define

this period as the "post retirement-opportunity period" and identify the income received during this period as the "post retirement-opportunity lifetime income".

After achieving eligibility for military retirement, a military careerist can receive various combinations of four types of income:

Military Active Duty Pay  
Military Retired Pay  
Civilian Second Career Pay  
Civilian Second Career Retired Pay

A careerist who could retire from military service but does not do so continues to receive military active duty pay, but foregoes military retired pay and the opportunity to earn a civilian second career income. Conversely, a careerist who retires foregoes military active duty pay in exchange for military retired pay and the opportunity to earn a civilian second career income.

As the length of an active duty military career is extended beyond the minimum required for military retirement, the tenure of receipt of military retired pay and the potential period during which second career income may be received are obviously shortened. The individual's economic maximization problem thus becomes one of selecting the optimum "mix" of military and second career lengths.

Some of the considerations which may affect the determination of an optimum include:

1. Military retirement pay increases as the length of a military career increases.

2. Continued military service may bring an increase in active duty compensation as a result of promotion and/or reaching longevity pay increase points. Either type of active duty pay increase also serves to increase subsequent retirement pay.

3. It is generally assumed that job opportunities and incomes in second careers decline as military retirement age advances.

4. Second careers also offer potential pension benefits. However, the value of these benefits will decline as the starting age advances and the potential years of civilian second career employment decrease.

5. In large measure, the individual's capabilities, skills, and education determine his civilian employment opportunities. Thus, those with low civilian employment potential will find delayed military retirement more financially rewarding (or less of a financial sacrifice) than will those with a higher employment potential.

### III. The Impact of Military Career Lengths on Income Maximization

The very small number of enlisted personnel who serve beyond the minimum military career length and the growing numbers of officers who retire soon after completion of twenty years service offer strong evidence that military personnel are, in the main, convinced that short military careers are in the best interest of the individual.<sup>6/</sup>

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.<sup>7/</sup> The data used are incomes from active duty military employment, military retirement, second career employment and second career retirement. Second career

<sup>6/</sup> See Fechter and Mahoney, op. cit. for military personnel continuation rates by years of service.

<sup>7/</sup> A detailed description of methods is contained in: Allen J. Lenz, "Military Retirement & Income Maximization: An Examination of the Economic Incentives to Extended Military Service", Unpublished PhD dissertation, Graduate School of Business, Stanford University, 1967.

income information was obtained from some 5300 responses to a questionnaire mailed to navy and marine corps officers who retired during the years 1955-1964 in the pay grades O-5 through O-8.<sup>8/</sup> 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

<sup>8/</sup> 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:

<u>Pay Grade</u>	<u>Navy Rank Title</u>	<u>Army, Air Force and Marine Corps Rank Title</u>
O-5	Commander	Lt Colonel
O-6	Captain	Colonel
O-7	Rear Admiral (lower half)	Brigadier General
O-8	Rear Admiral. (upper half)	Major General

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 (non-employment 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 attitude toward "risk". For example, a Navy captain or marine corps colonel (O-6) who completed 23 years of service could look forward to a guarantee of seven additional years of military employment at an income level which is, at worst, not likely to decline sharply. Conversely, the vagaries of business conditions might make it difficult to secure civilian employment or, if he is employed, might cause him to lose his job. Thus, a transfer to civilian employment during this period could represent, in a real sense, a loss of "security".

However, continued military service until retirement is mandatory increases "risk" in the sense that it increases the odds that, when termination of military employment does finally occur, the retiree will be unable to find civilian second career employment that is both financially rewarding and personally satisfying. Thus, it is difficult to say which course of action, early or later termination of a military career, is the more risky. To a large extent, the solution is dependent on the economic aspiration level of the individual. If his income

aspiration levels are relatively low, extended military service provides a high degree of assurance of attaining his goal. If his income aspirations are low enough such that the combination of military active duty income and subsequent military retired pay satisfies his desires; i.e., he does not desire a second career, extended military service provides him complete assurance of attaining his goal. Conversely, if he aspires to higher income levels, early retirement offers the greatest opportunity for realizing his ambitions.

In addition to the results yielded by the model, analysis of questionnaire and other income data led to the following conclusions:

1. Except for a "one time surge" occurring during the first one or two years immediately after entering the civilian work force, military retirees maintain, but do not tend to improve, the relative income standing they establish at the time of their military retirement; i.e., though their incomes may grow over time, the growth experienced generally parallels that of the nation's wage level.<sup>9/</sup>

2. The military retirement age (and hence the age at which the individual enters civilian employment) is a crucial variable in determining the absolute and relative level of income which will be realized from second career employment. As age advances, second career incomes decline. (See table 1).<sup>10/</sup>

3. There was a strong positive correlation between education and annual income (See table 1). However, the relative advantage of an advanced degree declined sharply as the retirement age advanced.<sup>11/</sup>

<sup>9/</sup> This result corresponded with published findings from census data for similar age groups in the overall U.S. population. See H.P. Miller, "Lifetime Income and Economic Growth", American Economic Review, September, 1965, p. 834.

<sup>10/</sup> It should be noted that the annual incomes displayed in table 1 relate only to those individuals who held full-time employment or were self-employed. Lower averages would, of course, result if unemployed and part-time workers were included. However, for the purposes of the analysis undertaken, it was considered that a more valid comparison of the effects of age and other factors would be obtained by focusing on those working full time.

<sup>11/</sup> The relatively poor table 1 income showing of those who obtained master's degrees after retirement stems from the fact that most of this group entered the education field, a relatively low income profession.

4. O-6 retirees almost invariably achieved higher income levels than O-5 retirees in comparable retirement age and education level groups. Thus, if promotion to higher rank is a measure of "success" in military life and annual income is a measure of success in civilian life, one can conclude that the qualities which result in success in the military environment similarly tend to produce success in civilian second careers.

5. The income level achieved in second careers, as well as the labor force participation rate, appears to be very much a function of the opportunities open to the individual and not solely a function of need. Were second career incomes solely a function of need, we would expect O-6 retirees, with their larger retirement annuities, to have lower second career incomes than O-5 retirees. Table 1 illustrates that the reverse is true, when retirement age and education level are held constant. Similarly, tables 2 and 3 indicate that labor force participation is strongly affected by the opportunities available, with participation and opportunities increasing with the education level.

For officers holding advanced degrees there appears to be a strong positive economic incentive to leave the military organization soon after achieving retirement eligibility.<sup>12/</sup> If such an incentive actually exists and if career-military officers are responsive to economic incentives, we would expect the more highly educated officers tending to retire at earlier ages than their less-educated fellows who do not have comparable second career opportunities.

The empirical evidence available substantiates the theory. Table 4 compares the retirement ages and education levels for O-5 and O-6 officers in the population surveyed. The relationships are very much those which we might expect from the economic data in table 1. Those who earned master's degrees while still on active duty tended to exit from their military careers at earlier ages than their less educated age and grade cohorts. (At some ages those who obtained master's degrees after their military retirement terminated their military service earlier than those

<sup>12/</sup> Lenz, op. cit., Chapter IV.

who had earned their master's degrees before retiring, but the former group is small in number and statistics concerning it therefore more subject to the influences of random variations.)

Most of the O-5 retirees in table 1 are individuals who failed of selection to O-6. For them, retirement would be mandatory upon completion of 26 years of service. Most retire before completing that length of service, but when the group is analyzed by education level, there are some perceptible differences in the rates of exit. Table 4 indicates that graduate trained officers in grade O-5 do not tarry on active duty once they fail of promotion to the next grade. Some 73.3 percent of this group had retired by age 45, while only 58.0 percent of the B.S. degree holders and 32.3 percent of the non-degree personnel had retired by the same age. It is also interesting to note that 38.8 percent of the graduate trained retirees in grade O-6 had turned to civilian life by age 47. By retiring at this early age, the majority must have foregone the opportunity to be considered for promotion to the next grade (O-7, rear admiral/brigadier general).

Thus, the data of Tables 1 thru 4 tend to indicate that:

1. There is a positive economic incentive for the more highly educated officers to leave military service soon after becoming eligible for retirement.

2. Officers holding advanced degrees are apparently aware of, and responsive to, this incentive.

3. If education level is a valid measure of the "quality" of a military professional, the officer corps can expect a tendency to lose, via voluntary retirements, a larger portion of the higher quality personnel (advanced degree holders) than it will lose of the lower quality personnel (those not holding advanced degrees).

From the viewpoint of the organization, the undesirable aspects of a retirement system which encourages early retirement of its better quality personnel are obvious. But, is education level a reasonable proxy for the "quality" of a professional military officer? Few, including the writer, would assert that attained level of education was an unfailing measure of quality in any profession, be it military or civilian. However, the majority of those navy officers who hold advanced degrees at the time of their military retirement probably have received their graduate educations under navy auspices and at navy expense. The receipt of such training is based on a selection process which utilizes standards similar to those used for determining who will be promoted. Presumably, the result is selection for graduate training of the individuals with the greatest career potential; i.e., those the naval organization, using its own standards, views as being of superior quality. If one accepts this rationale, it is difficult to escape the conclusion that the naval service is suffering a quality loss through early retirements.

There is little reason to expect that analysis of army and air force officer retirement patterns would yield basically different results. In general, we would expect that retirements would correlate closely with civilian opportunities--the greater the civilian opportunities, the higher the rate of early, voluntary military retirement. To the extent that the rewards of civilian employment correlate with education, the military can expect to lose its higher educated people at a more rapid rate through early voluntary retirement. Similarly, to the extent that civilian opportunities stem from specific skill training, it should be expected that those members with skills easily marketable in the civilian economy

will tend to voluntarily retire earlier than those members possessing skills not in high demand in the civilian economy.

#### Summary and Conclusions

The military retirement system functions to encourage and permit withdrawal of career personnel from the military forces at relatively young ages, in order that the military organization may maintain a desired degree of "youth and vigor". Most military retirees enter the civilian labor force after completing their military careers. During the second career years, the retirement annuity is not an old age pension. Rather, at least in part, it serves to compensate military retirees for reduced civilian employment income levels which stem from a late entry into civilian employment.

The existing retirement system and the 20 year retirement option have maintained "youth and vigor" in the military forces and assisted in attaining a more rapid and regular promotion flow. However, there are some indications that short (20 year) military careers may be more economically rewarding than longer careers, providing a positive economic incentive to early retirement for certain categories of personnel, including the more highly educated officers.

TABLE 1

AVERAGE 1966 ANNUAL INCOMES OF SURVEY RESPONDENT POPULATION  
BY RANK, EDUCATION LEVEL AND RETIREMENT AGE

(FULL-TIME AND SELF-EMPLOYED ONLY)

1966 Average Annual Income by Retirement Age

Grade	Education*	Ret.	Ret.	Ret.	Ret.	Ret.	Ret.	Ret.	All Ret. Ages		
		Age Less Than 44	Age 44-45	Age 46-47	Age 48-49	Age 50-51	Age 52-53	Age 54-55		Age 55 Over	
O-5	LTBS	11110	10910	9600	8690	8830	8890	10940	8390	9810	
	BS	12310	10630	10880	10260	10060	10230	**	**	11130	
	MBR	15720	14350	13630	11880	12080	11250	11250	**	14520	
	MAR	10000	8640	8750	**	**	**	**	**	**	9130
	PhD	**	**	**	**	**	**	**	**	**	15050
O-6	LTBS	**	14170	16530	11250	12190	9550	10140	12920	12280	
	BS	14730	13390	12030	11220	11220	10280	11280	12190	11440	
	MBR	20270	17640	15670	14260	12330	12490	11350	13040	14660	
	MAR	**	**	11670	9350	7380	8630	8570	**	**	9070
	PhD	**	**	**	**	**	**	**	**	**	14110
O-7	All	**	**	**	**	**	**	**	**	12920	
O-8	All	**	**	**	**	**	**	**	**	13630	

Source: Lenz, op. cit., p. 83

\* Education:

LTBS = Less than a Bachelor's degree  
 BS = Bachelor's degree or some work toward a Master's degree  
 MBR = Master's degree awarded before military retirement  
 MAR = Master's degree awarded after military retirement  
 PhD = PhD degree

\*\* Number of observations too few to provide meaningful data.

TABLE 2

PERCENT OF SURVEY RESPONDENTS WHO HELD CIVILIAN EMPLOYMENT FOR 3 OR MORE MONTHS AND WERE CURRENTLY EMPLOYED FULL TIME BY GRADE, EDUCATION LEVEL AND RETIREMENT AGE

Grade	Education*	PERCENT HOLDING FULL TIME EMPLOYMENT										All Ret. Ages
		Ret. Age LT44	Ret. Age 44-45	Ret. Age 46-47	Ret. Age 48-49	Ret. Age 50-51	Ret. Age 52-53	Ret. Age 54-55	Ret. Age Over 55			
0-5	LTBS	93.4	90.7	86.5	84.0	79.0	70.4	75.1	50.0	85.3		
	BS	96.9	95.0	94.0	89.0	91.1	96.2	90.9	64.3	93.9		
	MER	98.8	98.2	100.0	100.0	100.0	**	**	**	97.4		
	MAR	100.0	92.0	100.0	90.0	100.0	**	**	**	96.8		
0-6	LTBS	100.0	100.0	70.6	94.1	80.0	84.4	66.7	65.0	81.5		
	BS	88.9	95.2	94.2	86.4	80.3	79.4	74.6	75.0	83.5		
	MER	98.4	96.5	95.5	90.7	88.7	78.7	79.3	90.0	89.4		
	MAR	**	**	92.3	83.3	97.1	83.6	87.5	**	87.6		

Source: Lenz, op. cit., p. 174

\* Education:

- LTBS = Less than a Bachelor's degree
- BS = Bachelor's degree or some work toward a Master's degree
- MER = Master's degree awarded before military retirement
- MAR = Master's degree awarded after military retirement

\*\* Number of observations too few to allow meaningful percentage expressions.

TABLE 3

PERCENT OF SURVEY RESPONDENTS NOT EMPLOYED  
SINCE RETIREMENT BY RANK,  
EDUCATION LEVEL AND RETIREMENT AGE

Grade	Education*	PERCENT NOT EMPLOYED SINCE RETIREMENT									
		Ret. Age LT44	Ret. Age 44-45	Ret. Age 46-47	Ret. Age 48-49	Ret. Age 50-51	Ret. Age 52-53	Ret. Age 54-55	Ret. Age Over 55	All Ret. Ages	
0-5	LTBS	3.6	4.5	6.5	13.3	11.0	13.6	20.0	56.4	10.3	
	BS	2.6	1.5	1.7	5.7	10.4	12.9	7.7	26.3	4.1	
	MER	2.2	0.0	2.3	4.0	**	**	**	**	2.3	
	MAR	5.9	16.0	5.3	9.1	0.0	**	**	**	4.1	
0-6	LTBS	14.3	0.0	5.3	30.8	16.0	19.5	11.8	42.5	21.0	
	BS	1.8	4.6	3.5	6.2	10.2	16.5	19.9	25.5	11.7	
	MER	0.0	1.2	1.1	0.0	7.5	8.9	14.7	9.1	4.7	
	MAR	0.0	0.0	7.1	0.0	0.0	5.9	0.0	**	2.4	

Source: Lenz, op. cit., p. 172

\* Education:

- LTBS = Less than a Bachelor's degree
- BS = Bachelor's degree or some work toward a Master's degree
- MER = Master's degree awarded before military retirement
- MAR = Master's degree awarded after military retirement

\*\* Number of observations too few to allow meaningful percentage expressions.

TABLE 4

RETIREMENT AGES AND RETIREMENT EDUCATION LEVELS  
OF SURVEY OFFICERS RETIRING FOR NON-DISABILITY  
REASONS DURING YEARS 1955-64

CUMULATIVE PERCENT OF  
ALL RETIREMENTS ACCOMPLISHED BY INDICATED AGE

Grade	Education*	Age	Age	Age	Age	Age	Age	Age	Age
		43	45	47	49	51	53	55	Over 55
O-5	LTBS	18.9	32.3	49.5	72.8	89.2	95.0	96.7	100.0
	BS	30.9	58.0	73.8	85.2	91.6	95.7	97.4	100.0
	MBR	45.1	73.3	84.4	90.7	95.2	96.7	98.5	100.0
	MAR	34.7	60.2	79.6	90.8	97.9	98.9	99.9	100.0
O-6	LTBS	3.6	13.8	23.5	36.8	49.6	70.5	79.2	100.0
	BS	4.1	10.5	21.1	37.9	55.4	84.3	86.3	100.0
	MBR	6.9	22.3	38.8	52.5	69.3	91.7	98.0	100.0
	MAR	3.7	9.2	17.7	36.0	56.7	87.8	98.6	100.0

Source: Lenz, op. cit., p. 150

\* Education:

- LTBS = Less than a Bachelor's degree
- BS = Bachelor's degree or some work toward a Master's degree
- MBR = Master's degree awarded before military retirement
- MAR = Master's degree awarded after military retirement

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13. ABSTRACT

U The military retirement system functions to encourage and permit withdrawal of career personnel from the military forces at relatively young ages, in order that the military organization may maintain a desired degree of "youth and vigor". Most military retirees enter the civilian labor force after completing their military careers. During the second career years, the retirement annuity is not an old age pension. Rather, at least in part, it serves to compensate military retirees for reduced civilian employment income levels which stem from a late entry into civilian employment.

U The research which this paper describes investigated the economic incentive structure resulting from the existing military retirement system and civilian second career opportunities. It concludes that there are some indications that short (20 year) military careers may be more economically rewarding than longer careers, providing a positive economic incentive to early retirement for certain categories of personnel, including the more highly educated officers.

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