# South Dakota State University Open PRAIRIE: Open Public Research Access Institutional Repository and Information Exchange

Department of Economics Staff Paper Series

Economics

10-15-1994

# Comparative Efficiencies: National and Military Service

John Sondey South Dakota State University

Follow this and additional works at: http://openprairie.sdstate.edu/econ\_staffpaper Part of the <u>Labor Economics Commons</u>

# **Recommended** Citation

Sondey, John, "Comparative Efficiencies: National and Military Service" (1994). *Department of Economics Staff Paper Series*. Paper 117. http://openprairie.sdstate.edu/econ\_staffpaper/117

This Article is brought to you for free and open access by the Economics at Open PRAIRIE: Open Public Research Access Institutional Repository and Information Exchange. It has been accepted for inclusion in Department of Economics Staff Paper Series by an authorized administrator of Open PRAIRIE: Open Public Research Access Institutional Repository and Information Exchange. For more information, please contact michael.biondo@sdstate.edu.

#### COMPARATIVE EFFICIENCIES: NATIONAL AND MILITARY SERVICE\*

by

John A. Sondey

#### Economics Staff Paper 94-10

#### June, 1994

#### South Dakota State University

\* Paper will be presented at the 69th Annual Meeting of the WEAI in Vancouver, BC, June 29-July 3, at the Hyatt Regency Hotel.

Papers in this series are reproduced and distributed to encourage discussion of research, extension, teaching, and economic policy issues. Although available to anyone on request, Economics Department Staff Papers are primarily intended for peers and policy makers. Papers are normally critiqued by some colleagues prior to publication in this series. However, they are not subject to formal review requirements of South Dakota State University's Agricultural Experiment Station and Cooperative Extension Service publications.

"Fifty copies of this document were printed by the Economics Department at a cost of \$1.11 per document.

# TABLE OF CONTENTS

I	Page
Abstract	iv
Introduction	1
The National Service Program	2
Flaws Inherent in National Service	3
Costs of National Service	4
Military Downsizing: an Opportunity Cost of National Service	5
The Joint Product Nature of Military Training	5
Social Capital Generation	6
Technology and Transferability	6
Veteran's Premium: Its Existence	7
Source of the Veteran's Premium	8
The Military, African-Americans, and Human Capital Acquisition	9
The "Bridging" Effect of Military Service	10
A New Military Enlistment Option	12
Funding the New Enlistment Option	13
Comparative Advantage of the New Military Servuce Option	13
Summary	15
Bibliography	17

# LIST OF TABLES

Table	1	ii

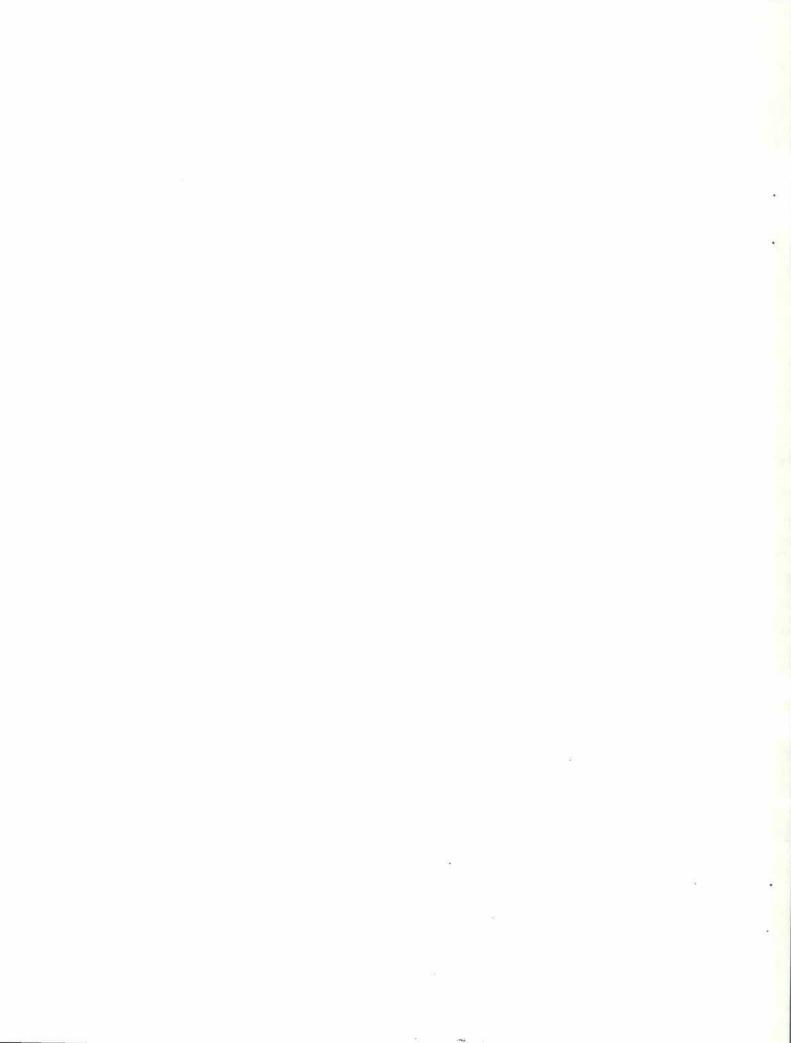
#### COMPARATIVE EFFICIENCIES: NATIONAL AND MILITARY SERVICE

**ABSTRACT:** The National Service Act of 1993 is viewed as a means of inculcating a sense of personal and social responsibility in young adults. The present emphasis on fiscal responsibility and budget reduction implies that any new expenditure program be funded by either: (a) reductions in present programs; or, (b) new taxes. As new taxes are regarded as "politically incorrect" by legislators seeking to extend their tenure, program cuts become mandatory. It is proposed that military downsizing is one means of funding national service; and that the tradeoff is suboptimal. Downsizing adversely affects minorities and the least skilled - who benefit most from military training. A new military enlistment option is suggested as a means of improving access for the least advantaged to the social mainstream and increasing the generation of human capital. The new option would be funded by reducing the maximum number of national service participants by 50%.

This paper will be presented at the 69th annual meeting of the WEAI in Vancouver BC, June 29-July 3, at the Hyatt Regency Hotel.

John A. Sondey Assistant Professor of Economics South Dakota State University Brookings SD 57007-0895 phone: SD (605) 688-4873 WA (509) 229-3509 FAX: (605) 688-6386

iii



# COMPARATIVE EFFICIENCIES: NATIONAL AND MILITARY SERVICE

#### Introduction

National service is an attempt by government to get young people involved in vital issues facing today's society. The federal government will hire people to teach the illiterate, help in police work, provide child care, and work on environmental cleanup. In return, volunteers will receive a minimum wage, educational/ training vouchers, and/or forgiveness of a portion of outstanding student loans. The mission of national service is a broad one. Its intent is to inculcate a sense of civic awareness and social responsiblity, thereby strengthening the social fabric while fostering marketable skills. As presently structured, national service contains philosophical elements of the Peace Corps, the Job Corps, and Vista.

While national service is being nurtured, the military services are being downsized. In an environment where any increase in the federal budget (increase in the deficit) must be accompanied by either a decrease in existing programs or an increase in taxes, it is not a logical contrivance to state that the two can be viewed as substitute public goods in a constrained budget. Efficiency dictates that scarce tax dollars be channeled between the programs in a manner which maximizes net social benefits.

#### The National Service Program

In the fall of 1993, the National Service and Community Trust Act was approved by Congress. The purpose of the law is, "to establish a Corporation for National Service, enhance opportunities for national service, and provide national service educational awards to persons participating in such service, and for other purposes." (Public Law 103-82, 103d Congress). Commencing in 1994 with 25,000 participants and a budget of \$400 million, the program is projected to grow to 100,000 young men and women and a budget of \$3.4 billion by 1997. Participants in the program agree to spend one or two years in community-oriented service. In return, volunteers earn the minimum wage for the period of service (approximately \$7,000 per year) and \$5,000 to \$10,000, depending on length of service, toward further education or repayment of outstanding student loans (Economist, March 6, 1993).

National (non-military) service has its earliest tangible roots in the Civilian Conservation Corps, begun in 1933 to employ thousands of young men in conservation and forestry projects. John F. Kennedy instituted the Peace Corps in the early 1960's to share American know-how with less developed nations and to allow American volunteers an understanding of the world beyond American shores. The Peace Corps was (and is) modest in scope, including, at its peak, no more than 16,000 volunteers (Bernstein and Cock, 1993).

President Clinton's national service corps represents the

largest effort at employing young volunteers in the public welfare since the Great Depression. However, during the Depression the focus was more on incomes support and public works and less on the goal of fostering the spirit of community and, ultimately, nationhood.

The most immediate antecedent of national service is embodied in the National Service and Community Act of 1990, which established pilot projects to test the viability of a national service initiative (Economist, June 13, 1992). The Corporation for National Service will provide umbrella supervision and parcel monies to similarly designed state commissions. In turn, state agencies would direct funds to community organizations providing local services - who might benefit from an influx of youthful volunteers. President Clinton views the national service plan as, "America at its best - building community, offering opportunity, and rewarding responsibility" (Economist, March 6, 1993).

#### Flaws Inherent in National Service

Advocates of national service view the program as mitigating a host of problems confronting today's youth: namely, the absense of training opportunities; the lack of community involvement; and, a shortfall in personal as well as civic responsibility. Proponents see the program as working where the market does not or cannot; growing "non-market" attributes such as cohesiveness, social awareness, and equity. Furthermore, national service addresses the problem of student loans (and their annual \$2-\$3 billion in debtor defaults) by offering national service participants redress from part of debt obligations. Undoubtedly, the program is an omnibus of good intentions.

However, the breadth of national service is also its flaw. National Service seeks to target a number of relatively diverse national ills with one program; becoming a social MIRV. More concretely, the costs of national service are not justified by its benefits. As in the Peace Corps, the attractiveness of a "hitch" in national service is skewed toward the college-educated and college intended. The forgiveness of educational debt repayment makes the option particularly attractive to college-bound youth but much less so to its non-college oriented cohort. However, even if the initiative is fully embraced by young people, only 2% or less of the 14 million college students stand to benefit from the legislation's provisions (Economist, March 6, 1993).

# Costs of National Service

The costs of national service have been understated by its supporters. First, the program's advocates have noted that national service can be accomplished without adding a level of bureacracy. It is difficult to envision a brand-new federal program, with no existing organizational infrastructure, standing without the "flying buttress" of significant new bureacratic support. Second, there will be substantial training costs

associated with each placement in a community agency. It is inconceivable that young people can simply begin work in any community service without substantial job-specific training. Using existing state and local programs as a benchmark, training costs may reach \$18,000 per hire (Economist, March 6, 1993). With simple arithmetic, the government's own estimates for 1997 amount to \$34,000 per participant. But, it is a third cost accruing to national service which provides the focus of the paper.

#### Military Downsizing: an Opportunity Cost of National Service

Deficits averaging 3% to 5% of GDP have essentially guaranteed that a new program of discernible size will be funded through reductions in existing programs, given the political hazard of raising taxes. While the demise of the USSR and the end of the cold war has allowed defense cuts, it is argued that the reductions in defense expenditures (and military readiness) will be larger in the presence, rather than the absense, of national service. More importantly, it is argued that military service accomplishes the same goals that national service sets out to achieve, more effectively, more cost efficiently, and more equitably.

#### The Joint Product Nature of Military Training

First, it is worthwhile to distinguish between the aspects of human and social capital development which accompany military training. In enhancing the recruit's physical and mental skills, military service directly rewards the acquirer by shaping a more

productive labor resource. Succinctly, military experience enhances the value of a trainee as a capital (human) asset. The return on the individual's self-investment is seen in a higher rental price for labor services and a higher life cycle income.

# Social Capital Generation

Social capital generation refers to attributes nurished by the military experience which result in social benefits of equal magnitude for all citizens, veterans and non-veterans. These service-induced characteristics include a greater sense of personal and community responsibility, adaptability, self-discipline, and a greater exposure to and tolerance of differing viewpoints. The paper proposes that the quality of social capital produced through the military experience is unique and superior to that generated in other venues: e.g., national service. Admittedly, measuring the value of social capital produced as a by-product of any endeavor is a difficult task. Yet, it does not require an undue stretch of the imagination to project that the social capital attributable to military service (self and group responsibilty, discipline) would be superior to that produced in the campus-like atmosphere of a national service program. It is perceived that human and social capital are a joint product of military training (Sondey, 1994).

#### Technology and Transferability

One measure of the applicability and value of military training in the civilian sector is the technological content of

military jobs. The technological content of the military job has increased significantly over time. For example, in 1945, white collar labor constituted 28% of the military labor force; whereas today, nearly 50% of armed forces military specialties (personnel assignment codes) are considered white collar (Binkin, 1986). Not only is military training more technologically intensive and less apt to be military-specific in nature, but the "grunt" aspects of military training (mess hall duty, grounds maintenance, janitorial) are increasingly out-sourced to civilian firms.

A counterpart of the technological infusion into military jobs has been the improved transferability of military training to the civilian sector. Magnum and Ball (1989) found a skill transferability rate of 45%-50% for military inculcated skills, a rate than previously estimated. The higher enhanced transferability is likely to be a function of the increasing overlap between job characteristics in the military and civilian sectors. It is also likely to result from the greater degree of individual choice in enlistment and career paths (Sondey, 1994). Magnum and Ball also noted that the transferability rate from military training was equal to the rate from civilian (nonemployer) training.

#### Veteran's Premium: Its Existence

Evidence of the unique human capital productivity of the military services is provided through a number of longitudinal

studies which studied veterans' earnings in civilian life. With respect to World War II and Korean veterans, the body of evidence points to a positive and significant pay premium relative to the non-veteran cohort (Little and Fredland, 1979; Martindale and Poston, 1979). Conversely, the premium for Vietnam veterans may be negative. However, it is suggested that the absense of a premium for Vietnam veterans may be attributable to an adverse civilian labor market - supersaturated by an influx of baby-boomers and female entrants (DeTray, 1982; Little and Fredland, 1979). Or, it may be that the premium takes considerable time (longer than covered by the studies) to reveal itself. In any case, the author agrees with Schwartz (1986), who regard the Vietnam era as an outlier, in terms of its effect on post-service earnings.

The "outlier" hypothesis is implicitly supported by the findings of Magnum and Ball (1989) who studied the civilian earnings of veterans in the post-draft (post-Vietnam) period. They found that an earnings premium for veterans of the all volunteer military did exist, and evidenced itself within two years of entrance into civilian employment.

#### Source of the Veteran's Premium

What is the source of the veteran's wage differential? then, DeTray (1982) and Little and Fredland (1979) attribute the premium to two factors: (1) differences in investment in education by veterans and non-veterans; and, (2) the perception, by employers,

of veteran status as a credential.

Veterans of World War II, Korea, Vietnam, and of the all volunteer era have had access to educational rights of differing dimensions. By and large, veterans have exercised these rights to invest in education and training, thereby developing more marketable skills than the non-veteran counterpart. Concurrently, employers seeking to fill vacancies view veteran status as they might weigh added civilian training, a credential which: (a) is an effective screening device in winnowing the queue of job seekers; and, (b) a characteristic which enhances the value of labor services, necessitating a higher rental price. In this perception, veteran status provides a certification to the hiring firm that the applicant is trainable and capable of a certain level of responsibility and initiative. In short, an honorable discharge certifies that the veteran has been pre-screened and found capable by the military (Little and Fredland, 1979).

So far, the paper has sought to convince the reader of the existence and value of human and social capital created by the military experience. Next, we will consider the question of those who will become worse-off as the result of military down-sizing blacks and other minorities.

The Military, African-Americans, and Human Capital Acquisition Since the advent of the all volunteer service in 1973, blacks

have volunteered in disproportionate numbers. Today, blacks make up more than 20% of the combined military services and approximately 30% of the Army. While the percentage of young, black youth enlisting has declined slightly in recent years, the overall black composition of the services has remained almost constant. This equilibrium is attributable to the fact that blacks are selecting to remain in the service for longer periods than whites.

African-Americans now constitute a higher percentage of the top three enlisted grades than in previous decades (Binkin, 1993). Economists would argue that blacks are making calculated economic decisions in choosing to enlist and remain in the military. The decision to enlist is buttressed by the potential for training and human capital acquisition - and is made in full light of opportunity costs in the civilian sector. Critics of the higher black composition of the military would condense the economist's perspective to a failure of government and the private sector to provide ample non-service training opportunities and jobs for blacks. Nonetheless, African-Americans are acting in rational self interest by choosing to serve in the armed forces.

#### The "Bridging" Effect of Military Service

Military service has been characterized as a ladder of socioeconomic mobility and a bridge which allows young minorities access to the economic mainstream. In examining the earnings of

World War II, Korea, and Vietnam veterans relative to their nonveteran cohort, Martindale and Poston (1979) find a particularly strong, positive relationship between civilian earnings and military service for African and Mexican-Americans.

Little and Fredland (1979), studied disaggregated data from the National Longitudinal Survey on the earnings of men aged 45 to 66, and concluded that military service has a significant and positive effect on civilian earnings many years after service. They compared the positive effects of service on the civilian earnings of blacks and whites. White veterans earned incomes 5% to 10% higher than their non-veteran counterpart, while Hispanic and African-American veterans earned 13% - 15% more than their nonveteran cohort. For white veterans, this service-connected increment to income was equal to the return of another year of formal education or four to seven added years of job tenure. For African-Americans, the service-caused increment is equivalent to two to three years additional formal schooling or seven added years of job tenure.

It is no surprise that a strong, direct relationship exists between years of formal education completed and the availability of rights to subsidized education under the historical menu of GI Bills. Little and Fredland (1979) found that white veterans averaged one more year of post-military training than their civilian cohort. However, minority veterans averaged two and a half additional years of formal education when compared to their non-veteran counterpart.

The weight of the literature suggests that while both blacks and whites benefit from military service, blacks benefit more than whites. It follows that blacks will suffer greater economic hardships than whites from ongoing military force reductions.

#### A New Military Enlistment Option

Despite its pro forma recognition of the need to empower and create a civic leadership base among "residents of low-income communities," the national service program is focused on the college-oriented segment of the youthful cohort. Certainly, the "forgiveness" aspect for educational loans will appeal to upwardly mobile youth, both white and of color. However, national service will bypass the majority of non-college directed youth. It is this group of "underachievers" that stands to benefit most from the proposed military program.

The new enlistment option would require a twelve month period of active service, followed by optional duty in the reserves at the discretion of recruit and military service. A program for accession into the career ranks would allow the best of the new recruits the option of a military career and open a new pipeline of skilled recruits to the career military. Training would consist of four months of basic military training and eight months of training in a military operating specialty skill. At the completion of enlistment, each recruit would be allowed a \$5,000 stipend for college or vocational civilian training. Additionally, student loans in the amount of \$10,000 (ceiling adjustable) would allow the recruit to complete an extended period of civilian education/training.

## Funding the New Enlistment Option

It is further proposed that the new military option be funded by reducing the scope of the national service program. At present, national service is budgeted at \$3.4 billion (100,000 participants) for fiscal year 1997. The paper proposes that national service be restricted to 50,000 participants and that the approximately \$1.7 billion in savings be used to (nearly completely) fund 100,000 recruits under the new, 12 month enlistment option (see table 1). After the new option's advantages have been evidenced, the program can be expanded to 200,000 in a facile manner.

# Comparative Advantage of the New Military Service Option

The new enlistment option could be easily appended to the existing military infrastructure. Training 100,000 additional youth (or even 200,000) would not put undue stress on existing military facilities. Certainly, an increase in supervisory capacity and some facility modification would be needed. However, the military chain of command, organizational structure, and system of educational and training procedures is in place and fully

operational.

Alternately, national service will require a new organizational structure and level of bureacracy. Furthermore, exactly what participants will do in national service remains a subject of conjecture. In short, the military/national service tradeoff replaces an established product with a recognized capacity for human capital development with an unknown product of an unproven potential.

Compared to national service, the new military option would be relatively cost efficient (see Table 1). Even with a 33% supplemental allocation for supervisory and facility enhancement, the cost of training 100,000 military recruits is less than national service.

Such an option would benefit the greater society in three ways. First, it would continue to extend the potential for personal development, discipline, and training to less advantaged youth. As the military down-sizes, it will become more demanding in terms of educational attainment and qualification test scores. Therefore, the burden of force reduction will be borne by minorities in particular and the least skilled in general. Second, on a tax dollar for tax dollar basis, monies spent on military training will yield a greater net return on social investment than will national service. Finally, as the Reserves have become an

integral part of the active military mission, the program will act to augment those forces (Binkin and Kaufman, 1989; Sondey, 1994).

# Summary

Implicit in the allocation for a national service program are tradeoffs in terms of reduced expenditures for ongoing programs, including the military services. Military force reductions will most adversely effect minorities by removing the ladder of social mobility. The new enlistment option would modestly increase military force size while providing opportunities for the disenfranchized not addressed in national service. Reducing the maximum projected strength (1997) of national service to 50,000 from 100,000 would fully fund the new enlistment program while displacing no one.

#### TABLE 1

#### Cost Projections for New Enlistment Option under Two Force Increment Regimes 12 Month Enlistment

force increment	cost
100,000 personnel	<pre>\$786 x 12 x 100,000 = \$943 mm (overhead @ 33%) = 311 mm education @ \$5000 x 100,000 = 500 mm Total = \$1,754 mm</pre>
200,000 personnel	Total = \$3,508 mm

a. Military basic pay is calculated using 1990 pay tables.

b. The average monthly pay of a recruit (\$786) is derived thusly. It is assumed that during a fiscal year, the force increment will be evenly divided between the enlisted ranks of E-1, E-2, and E-3. The 1990 monthly pay scales for E-1 through E-3 are \$684, \$803, and \$871, respectively. Therefore, \$786 is the average monthly pay. Admittedly, this is a crude but necessary estimate of the average monthly wage once the system is fully operational.

c. It is assumed that recruits will not be promoted beyond E-3 during the 12 month enlistment.

d. Only base pay is included in the calculations. However, if benefits such as quarters, food allowances, and medical are included in the matrix at 50% of base pay, cost benefit analysis will still weigh in favor of military service (national service estimate for 1997; 100,000 participants and a cost of \$3.4 billion).

Source: derived from <u>Statistical Abstract of the United States</u>, <u>1992</u>, published by the U.S. Bureau of the Census, Washington, DC, 1992, p. 345.

#### BIBLIOGRAPHY

America, editorial, July 3, 1993 p.3-4.

Angrist, Joshua D., "Lifetime Earnings and the Vietnam Era Draft Lottery: Evidence from Social Security Administration Records," <u>American Economic Review</u>, June 1990, pp. 313-336.

, "The Draft Lottery and Voluntary Enlistment in the Vietnam Era," Discussion Paper 1505, Harvard Institute of Economic Research, Harvard University, August 1990.

- Berger, Mark C. and Barry T. Hirsch, "The Civilian Earnings Earnings Experience of Vietnam-Era Veterans," <u>Journal of</u> <u>Human Resources</u>, vol. 18, no. 4, pp. 455-478.
- Bernstein, Allison and Jacklyn Cock, "The Appropriate Models of National Service," <u>The Chronicle of Higher Education</u>, May 19, 1993, p.A44.
- Binkin, Martin, <u>Who Will Fight the Next War</u>, Washington, DC, Brookings Institution, 1993.
- Bryant, Richard R., V.A Samaranayake, and Allen Wilhite, "The Effect of Military Service on the Subsequent Civilian Wage of the Post-Vietnam Veteran, <u>Quarterly Review of Economics</u> <u>and Finance</u>, Spring 1993, pp. 15-31.
- Cohany, Sharon, "The Vietnam-era Cohort: Employment and Earnings," Monthly Labor Review, June 1992, pp. 3-15.
- <u>Congressional Digest</u>, "National and Community Service," October 1993, pp.225-234.
- <u>Congressional Digest</u>, "Should the House Approve H.R. 2010, the National Service Trust Act," October 1993, pp. 237-257.
- Congress of The United States, Public Law 103-82, September 21, 1993.
- DeTray, Dennis, "Veteran Status as a Screening Device," <u>American</u> <u>Economic Review</u>, March 1982, pp. 133-142.
- Jamison, Charles N., "The Cannon Fodder Myth," <u>Forbes</u>, July 19, 1993, p.82.
- Little, Roger, and J. Eric Fredland, "Veteran Status, Earnings and Race: Some Long Term Results," <u>Armed Forces and Society</u>, Winter 1979. pp. 244-260.

- Mangum, Stephen L. and David E. Ball, "The Transferability of Military-Provided Occupational Training in the Post-Draft Era," <u>Industrial and Labor Relations Review</u>, January 1989, pp. 230-245.
- Martindale, Melanie and Dudley L. Poston, Jr., "Variations in Veteran/NonVeteran Earnings among World War II, Korea and Vietnam War Cohorts," <u>Armed Forces and Society</u>, vol. 5, no. 2, pp. 219-242.
- Phillips, Robert L, Paul J. Adrisani, and Curtis L. Gilroy, "The Economic Returns to Military Service: Race-Ethnic Differences," <u>Social Science Quarterly</u>, June 1992, pp. 340-359.
- Schwartz, Saul, "The Relative Earnings of Vietnam and Korea-Era Veterans," <u>Industrial and Labor Relations Review</u>, July 1986, pp. 564-572.
- Sondey, John A., "Enhanced Human Capital Stock and the Military Experience: a Modest Policy Proposal," Economics Staff Paper no 94-1, South Dakota State University, Brookings SD, January 1994.
- US Bureau of the Census, <u>Statistical Abstract of the United States</u>, <u>1992</u>, (112th edition), Washington DC, 1992.