

Research Department  
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## Military Disgrace?

Political writer Norman C. Miller recently used that caption, without the question mark, in a *Wall Street Journal* article describing the status of the volunteer army. Miller claims that the military is beset by "dangerous manpower shortages and deficiencies," and official Washington apparently agrees with him. Under new legislation, 4 million young men will begin crowding the nation's post offices next week to register for a potential draft—suggesting a failure of the volunteer-army concept which had been initiated with so much fanfare in 1973. Although allocating 22 percent of its \$138.6-billion budget this year for active-duty personnel, the Administration apparently believes that it lacks the strength to carry out the nation's military objectives throughout the world.

The manpower statistics are not very reassuring. The size of the active-duty force has declined steadily, and now stands at 2.0 million, compared with 2.3 million at the creation of the all-volunteer force. Most major units today are considerably below their authorized strength. More importantly, the armed services have experienced qualitative as well as quantitative shortfalls in manpower resources. About 62 percent of male Army recruits have not completed high school, and one-fourth of that group read at the sixth-grade level or below. The quality problem is aggravated by the difficulty of retaining qualified people. About 30 percent of males enlisting do not even complete their first term of enlistment. Retention rates for third termers—people with roughly 11 years' service—now average less than 70 percent. Most of those who leave possess critically needed skills, such as submarine technicians, electronics technicians, air-traffic controllers, and computer programmers.

### Broken commitment

The evidence thus appears to support the argument that the volunteer-army concept

has failed. But those who make that argument ignore a key conclusion of the President's Commission on the All-Volunteer Force (the Gates Commission), which a decade ago set forth the basic economic requirement of a volunteer army: "The viability of an all-volunteer force ultimately depends on the willingness of Congress, the President, the Department of Defense, and the services to maintain competitive levels of military pay." To meet that commitment, Congress restructured military-pay schedules prior to the adoption of an all-volunteer force in 1973. But today, military pay schedules are not competitive.

In 1972, the average pay of military personnel equalled 98 percent of the average pay in all industries. Today, military pay amounts to only 85 percent of all-industry pay, reflecting a 14-percent decline (in real terms) in military pay since 1972 (see chart). That ratio is considerably lower today than it was in 1939, when the nation had a small 400,000-man volunteer force, and also in 1945, when the nation fielded a large conscript army of 11.4 million people. (The gap has widened even more between civilian government pay and military pay.) In contrast, retirement-pay schedules are relatively generous by civilian standards, providing for (indexed) half-pay after 20 years.

Former Defense Secretary Melvin Laird, in a recent report to Congress, noted that the average compensation for an enlisted person (including pay and allowances) amounted last year to \$9,900—14 percent below the minimum amount necessary to maintain a "lower" standard of living for a family of four. The basic pay for all personnel in grades E-1 to E-4—that is, roughly one-third of the entire enlisted force—falls at or below the minimum-wage. Differentials are even more pronounced in certain high-skill areas. Mid-career, non-commissioned officers earn about \$12,000 a year as computer pro-

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grammers or electronics technicians, but as civilians they could earn twice that much.

Laird cites the case of an E-4 plane handler on the nuclear carrier Nimitz, deployed on the Indian Ocean, who normally works 16 hours a day or about 100 hours per week. In the course of his duties, he handles F-14 aircraft (which cost \$25 million per plane) and he helps operate a \$2-billion ship—yet he makes less per hour than a cashier at McDonald's, lives below the poverty level, is eligible for food stamps, and probably has not seen his family for six months or more.

#### **Costs: volunteers vs. draftees**

To meet the standard set by the Gates Commission will take a considerable amount of money—roughly \$11½ billion a year, in Laird's view. For example, \$5 billion would be needed to restore military pay to its 1972 real-income level—considerably more than 1980's 12-percent scheduled raise. Another \$2 billion would be needed to provide annual special-skill pay to those enlisted and officer ratings where severe shortages now exist. However, there would be compensating benefits. For example, about \$2 billion per year is now needed to recruit, train, separate, and pay benefits to individuals who do not complete their first term—in addition to the costs that the government incurs in unemployment compensation for such military dropouts.

Faced with the cost increases needed to restore the viability of a volunteer army, many congressmen may be tempted to reimpose conscription as a cheaper alternative—although even that course would not solve the drain of experienced personnel. But strong differences of opinion exist regarding the draft itself. William H. Meckling, Dean of the University of Rochester's Graduate School of Management and former Executive Director of the Gates Commission, argues that a conscript force costs society substantially more than a volunteer force. In his view, if the military takes a volunteer, it draws from that part of the supply curve of people for whom being in the military is an attractive

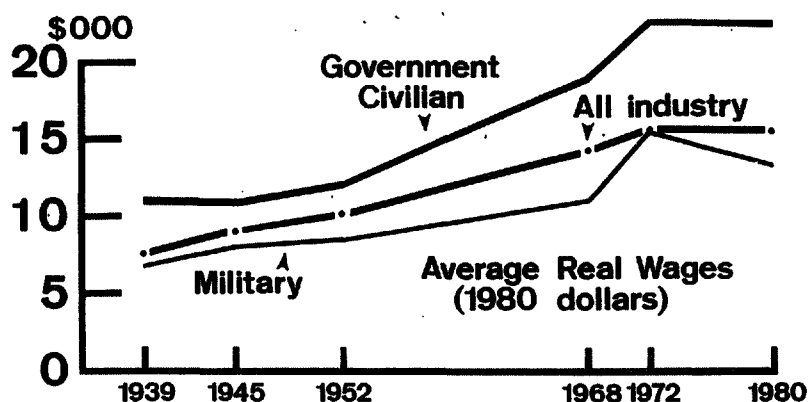
occupation. That costs society very little. In contrast, conscription takes people from all along the supply curve. In a recent *Fortune* interview, Meckling argues that society incurs heavy costs when physicists are put to work swabbing down the decks of ships.

Moreover, says Meckling, "When you have a conscript force, instead of taxing the general public to get the right kind of people to volunteer, you are levying a high tax on the very small subset of the population that you draft." According to the Gates Commission's statistics, draftees and draft-induced volunteers incur an effective tax rate of more than 50 percent, mostly in the form of foregone earnings, compared to the 10-percent tax rate paid by individuals who are not drafted.

#### **Filling the gap: demographics**

Supporters of a volunteer army may be correct in their belief that more funds will help fill the ranks of the armed forces, but that task will be complicated by adverse demographic factors throughout the 1980s. In the mid-1970s, maintaining a volunteer force of 2.1 million active-duty personnel meant that roughly one-third of all qualified and available (non-college) men volunteered for active military service before age 23. This ratio would have to rise during the present decade, however, because of a 19-percent decline in the population of males in the 17-22 age category between 1979 and 1989. Specifically, male accession requirements would shift from a ratio of 1/2.9 in 1975-80 to a ratio of only 1/2.3 in the 1985-90 period.

The one-third ratio could be restored, however, by reducing demands on the pool of qualified and available males, and also by increasing the supply of possible candidates. For example, demands on that key manpower pool could be reduced by 84,000 through several measures—such as increasing the ratio of women military personnel to 15 percent of total strength, reducing the attrition of first-termers by 20 percent, or utilizing more civilians in military positions. At the same time, the manpower



supply could be increased by perhaps 32,000, by attracting 5 percent of third-and fourth-year college students into the armed services, or by relaxing weight standards by about 10 percent.

### Filling the gap: management

More basically, the success of a volunteer army depends upon the military establishment's ability to adjust its management techniques to a new environment. For a lengthy period — 1940 to 1972 — the system of conscription encouraged the military to develop and maintain patterns of manpower utilization that are no longer cost effective. But the cost of manpower has risen substantially relative to the cost of capital equipment over the past decade, so that military managers are now being forced to find ways of substituting equipment for manpower, especially in support activities. Additionally, they are being forced to improve resource allocation by changing the experience-mix of the military force. Because of first-term pay increases and recruiting costs, the cost of first-term personnel has increased dramatically relative to the cost of career personnel. Thus, shifting from the current mix of 60 percent first-termers and 40 percent careerists to (say) a 55-45 percent mix could yield substantial cost savings — even though it would require some reallocation of funds to career personnel.

Funds for boosting active-duty pay also could be obtained through changes in the military-retirement system. Retirement costs represent the largest and fastest-growing component of manpower spending, having increased from \$1/2 billion in the mid-1950s to more than \$10 billion in 1979, and perhaps to \$18 billion by 1983. (At that point, retirement costs would equal roughly 60 percent of the cost of the active-duty force.) The actuarial cost of the current system adds between 40 and 55 percent to the regular military compensation of those who retire, whereas the contribution for standard private-retirement programs is between 5 and 20 percent of salaries and wages. In any event, retirement costs will continue to be a heavy drain on the

defense budget, so long as service personnel continue to retire after only 20 years at half-pay, with that amount indexed to increases in active-duty pay.

Reliance on a volunteer army also could lead to substantial changes in military planning. In a Congressional debate last year, Senator Gary Hart argued for a change in the ratio of combat-power to manpower, to parallel the ratios maintained by foreign armies. The total Army division "slice" — the number of personnel required to man and support each division — is now over 40,000 men. But if the Army could achieve a division slice of 25,000 men — roughly the average for our NATO allies — we could field our current 19-division equivalent with 475,000 men, thus generating a saving of about 300,000.

### Bearing the burden

In the growing debate over the nation's military strength, no one has disputed the facts about the declining relative share of the military in the national economy. Between 1970 and 1979, the defense portion of GNP dropped from 8.4 percent to 5.1 percent, and the military portion of the labor force dropped from 3.7 to 2.1 percent. Perhaps for that reason, a broad consensus has developed favoring the Administration's call for a 25-percent spending increase (in real terms) for the military over the next half-decade.

The major argument, as we have seen, has centered around the question of who will bear the burden of the nation's growing military-personnel requirements — a relatively small number of young workers, or the general taxpayer. In this controversy, the Gates Commission's economic arguments for an all-volunteer force have yet to be disproved. Indeed, we have witnessed in the past half-decade a textbook illustration of the workings of economic incentives and disincentives — with a sharp rise in military pay bringing about a satisfactory labor-supply situation in the mid-1970s, and a sharp decline in real wages creating an unsatisfactory situation today.

William Burke

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### BANKING DATA—TWELFTH FEDERAL RESERVE DISTRICT (Dollar amounts in millions)

Selected Assets and Liabilities Large Commercial Banks	Amount Outstanding 7/2/80	Change from 6/25/80	Change from year ago	
			Dollar	Percent
Loans (gross, adjusted) and investments*	136,826	619	7,723	6.0
Loans (gross, adjusted) — total#	115,378	642	8,883	8.3
Commercial and industrial	33,629	387	2,219	7.1
Real estate	46,511	19	7,961	20.7
Loans to individuals	23,679	20	1,253	5.6
Securities loans	953	8	805	45.8
U.S. Treasury securities*	6,256	48	1,397	18.3
Other securities*	15,192	25	237	1.6
Demand deposits — total#	44,781	3,735	2,021	4.3
Demand deposits — adjusted	30,965	705	1,191	3.7
Savings deposits — total	28,208	647	2,239	7.4
Time deposits — total#	62,567	697	11,439	22.4
Individuals, part. & corp.	54,038	429	11,638	27.4
(Large negotiable CD's)	22,583	86	4,391	24.1
<b>Weekly Averages of Daily Figures</b>	<b>Week ended 7/2/80</b>	<b>Week ended 6/25/80</b>	<b>Comparable year-ago period</b>	
<b>Member Bank Reserve Position</b>				
Excess Reserves (+)/Deficiency (—)	— 35	— 55		56
Borrowings	11	1		221
Net free reserves (+)/Net borrowed(—)	— 46	— 56		— 165

\* Excludes trading account securities.

# Includes items not shown separately.

Editorial comments may be addressed to the editor (William Burke) or to the author . . . . Free copies of this and other Federal Reserve publications can be obtained by calling or writing the Public Information Section, Federal Reserve Bank of San Francisco, P.O. Box 7702, San Francisco 94120. Phone (415) 544-2184.