Military Manpower and the All-Volunteer Force

Richard V. L. Cooper

A report prepared for

DEFENSE ADVANCED RESEARCH PROJECTS AGENCY
The research described in this report was sponsored by the Defense Advanced Research Projects Agency under Contract No. DAHC15-73-C-0181.

Reports of The Rand Corporation do not necessarily reflect the opinions or policies of the sponsors of Rand research.
Military Manpower and the All-Volunteer Force
Richard V. L. Cooper

A report prepared for
DEFENSE ADVANCED RESEARCH PROJECTS AGENCY

APPROVED FOR PUBLIC RELEASE; DISTRIBUTION UNLIMITED
PREFACE

This report was prepared as part of Rand’s DoD Training and Manpower Management Program, sponsored by the Cybernetics Technology Office of the Defense Advanced Research Projects Agency (ARPA). With manpower issues assuming an ever greater importance in defense planning and budgeting, the purpose of this research program is to develop broad strategies and specific solutions for dealing with present and future military manpower problems. This includes the development of new research methodologies for examining broad classes of manpower problems, as well as specific problem-oriented research. In addition to providing analysis of current and future manpower issues, it is hoped that this research program will contribute to a better general understanding of the manpower problems confronting the Department of Defense.

For the approximately 2 million young American males who come of military age each year, there is probably no single public policy decision in the past 25 years more important than the termination of the draft in 1973. The importance of this decision, however, goes far beyond the implications for those most immediately affected by the draft’s removal. Whether viewed as an instrument of economic and social policy or in terms of its effects on the maintenance of the U.S. defense effort, the draft was a key element of public policy and touched on nearly every aspect of defense management.

The advent of the All-Volunteer Force (AVF) accordingly marks the beginning of one of the largest and most important experiments of its type ever conducted. Never before in modern history has a nation with such global military responsibilities or such an emphasis on defense been without the authority to conscript young men into military service. Together with the skyrocketing manpower costs and tight defense budgets that have characterized the 1970s, the removal of the draft has served to make military manpower one of the key concerns in the Pentagon and on Capitol Hill.

Despite its importance as a public policy issue, remarkably little has been published about the AVF and its implications for defense and nondefense national objectives. This report therefore offers the first comprehensive analysis of the AVF, including the factors that led to the removal of the draft, the experience from the first few years without conscription, and the longer-run prospects for the volunteer force. Two themes underlie this analysis. The first concerns the narrower effects of the draft’s removal on the maintenance of a viable national defense, while the second concerns some of the broader social implications of the method of manpower procurement. The common thread throughout the report is the treatment of the draft and its removal as a public policy decision problem, so that the reader is provided with an analytic framework for assessing the implications of the alternative policy options.
SUMMARY

The advent of the All-Volunteer Force (AVF) in 1973 marked the beginning of a new era for the United States military and, indeed, for American society in general. Without the pressure of the draft, the Armed Forces would be forced to rely on true volunteers as their sole source of military manpower for the first time in more than three decades.¹

Although the AVF has been viewed since its inception almost entirely in terms of its ability to attract the desired numbers and types of recruits, the implications of the volunteer force are clearly much larger, touching on virtually all aspects of the defense effort. Moreover, and whether intended or not, the draft and its removal were and are an integral part of U.S. economic and social policy, with effects going far beyond the narrower confines of defense.

THE DECISION TO END THE DRAFT

Although the demise of the draft has generally been credited to the Vietnam War, the AVF was actually the result of far more fundamental concerns. The concept of the volunteer force emerged in the late 1960s as one of the very few alternatives for dealing with the growing inequities of the Selective Service draft. The number of young men reaching military age each year was increasing, while force sizes were remaining constant (or were decreasing), which meant that a smaller proportion would have to serve in the military. Since the pay for junior military personnel was substantially below that of comparably aged and educated civilian workers, those who were not forced to serve—about 80 percent of the military-age male population—benefited substantially, while the other 20 percent carried the full burden.

The issue of draft versus volunteer manpower procurement policies was debated extensively during this period, and several advisory groups were commissioned to consider the problem. The debate culminated in 1970 with the report of one of these groups, the President's Commission on an All-Volunteer Armed Force (named the Gates Commission, after its chairman, former Secretary of Defense Thomas S. Gates, Jr.). The Gates Commission argued persuasively that those forced to serve should not have to pay a large financial price in addition to the other burdens of involuntary servitude, and it recommended that first-term military pay be raised to a level commensurate with earnings of comparably aged and educated civilian workers (i.e., 18 to 21 year old male high-school graduates). The Congress concurred with this recommendation and raised first-term pay in 1971. Interestingly, this pay raise meant that the Services would be able to attract enough volunteers so that a draft would no longer be necessary. In other words, achieving an all-volunteer military would not require any extraordinary measures; it basically meant the payment of a "market wage" to new recruits.

¹ With the exception of a short 18-month hiatus following World War II, the U.S. military was not without the authority to conscript young men between 1940 and 1972.
The substantive debate having taken place two years earlier, the end of the draft came rather quietly in 1973. Because of the rapid force reductions following the disengagement from Southeast Asia, Secretary of Defense Melvin Laird announced the end of draft calls in January 1973, six months before the expiration of draft authority.

EARLY AVF EXPERIENCE

Perhaps the most important conclusion to emerge from the first four and a half years of experience without the draft (i.e., since January 1973) is that the volunteer force has worked. It has been shown that the military services can attract a socially representative mix of the desired quantity and quality of new recruits without the pressure of the draft and at a cost substantially lower than commonly assumed. Moreover, the success of the volunteer force is not due to high unemployment rates, although unemployment certainly aided the recruiting effort, but rather can be attributed to the fact that military service is apparently seen as an attractive employment option by a broad cross-section of American youth.

With the exception of modest Army and Marine Corps recruiting shortfalls during the first year of the AVF, and again during the summer of 1976, the Services have successfully met their quantitative recruiting objectives since the removal of the draft. Moreover, these recruiting shortfalls can be shown to be largely the result of shortages of recruiters in the field, unnecessarily restrictive quality standards, and unusually large enlisted accession requirements. These difficulties thus do not seem to be indicative of longer-run recruiting problems, but they do show that recruiting problems can occur if the force is not properly managed.

The key AVF issue is therefore not manpower supply; it is enlisted accession requirements. Service policies such as limiting the flow of manpower into the career force (which is due in part to Congressional limitations on the numbers of personnel in the senior pay grades) have resulted in enlisted accession requirements that are actually higher under the volunteer force than they were under the draft, relative to force sizes—just the reverse of what would be expected. The long-run success of the volunteer force therefore depends upon reducing enlisted accession requirements—and, hence, reducing personnel turnover rates. This, in turn, is the means to more cost-effective management of enlisted manpower.

The quality of new recruits, as measured by such indicators as mental aptitude and educational attainment, has actually increased since the removal of the draft, and substantially so since about 1975. The real quality issues therefore concern whether the Services’ current quality-maximizing philosophy yields standards that are too restrictive (rather than too lenient) and whether the right balance is being maintained among individual quality criteria such as mental aptitude and educational attainment. Specifically, the evidence suggests that current quality standards are too strict, that the Services should accept more Category IV high-school graduates (i.e., those who score in the 10th to 30th percentile on Service-administered mental aptitude tests), and that some of the medical standards should probably be relaxed.

The question of social representation has frequently been raised by those who are opposed to the concept of a volunteer force, as black participation in the Armed Forces has increased significantly during the past 15 years. However, this increase
is largely unrelated to the volunteer force; it is instead due mainly to the increasing numbers of blacks found eligible for military service and to the unusually high unemployment rates experienced by black males of military age (relative to whites). Although blacks continue to score lower than whites on mental aptitude screening tests, the proportion of blacks failing to qualify for military service has decreased significantly over the past 20 years. Because of this, the black proportion of the prime manpower pool—that is, military-age males of average and above-average mental aptitude—has increased from a little under 3 percent in 1960 to more than 7 percent in the mid-1970s, a more than twofold increase.

Moreover, the increasing proportion of blacks in the force does not indicate that the AVF has resulted in an Army of the poor; there are as many new recruits from middle- and high-income areas under the volunteer force as there were during the lottery draft, which was presumably the most socially representative period of peacetime conscription. Also, the regional composition and the urban/rural make-up of the volunteer force are remarkably similar to what they were under the draft. In other words, the military continues to draw a socially representative sample of American youth.

Another major issue raised by critics of the AVF is that of costs. Indeed, it is easy to see why manpower costs in general and the presumed cost of the volunteer force have become so important. Manpower costs have increased from about $25 billion in 1964 to the more than $60 billion projected for 1978. However, the attribution of these increased costs to the volunteer force is plainly incorrect. The factors leading to the considerable growth in manpower costs can in fact be traced to events that began nearly three decades ago. For example, whereas the military career has historically consisted of 30 years of service, the immediate post-World War II period saw the widespread implementation and use of the 20-year military career—a policy that would come to have a dramatic effect on defense manpower costs about 25 years later.

Similarly, the 1960s marked the implementation of comparability pay for civilian employees of the DoD, the beginning of annual pay increases for military personnel, the so-called "catch up" pay increase for career military personnel, and the "one-percent kicker" for adjusting Federal military and civilian retired pay.

In short, the only increases in manpower costs that can be even remotely related to the volunteer force are the large pay increase for first-term personnel implemented in 1971 and the increased recruiting and bonus costs for these individuals. And even the pay increase cannot properly be viewed as an AVF cost, since the Gates Commission argued vigorously that pay discrimination against junior military personnel ought to be eliminated for equity reasons alone, irrespective of the decision to end the draft.

The end result is that the volunteer force has added less than $300 million to the cost of defense manpower—about two-tenths of one percent of the defense budget. The reason why the proportion of manpower cost growth that can be attributed to the AVF is so small is that the draft provides very little leverage over total manpower costs. That is, whereas the basic effect of the draft is to reduce budget outlays for those in their first two years of service, the total cost of these personnel amounts to only about $6 billion—just a little over 10 percent of the total defense manpower outlay.

For the most part, then, the story of the volunteer force has been one of success. To be sure, there have been problems, such as the first-year recruiting shortfalls
experienced by the Army and the Marine Corps, but these have been largely problems with the way the transition was managed, not with the fundamental concept or policy. Other problems remain, such as those of reserve forces manning and first-term enlisted attrition. However, these problems probably have more to do with finding the right management and/or force structure solutions than with the implementation of the volunteer force per se.

For example, although the reserves have historically been structured as a "mirror image" of the active forces, common sense would seem to argue for alternative solutions, such as a more experienced force (where capability is maintained but not developed). These problems with the reserves should not, of course, be oversimplified. Nevertheless, the fundamental problem is that the reserve forces are showing the effects of more than 25 years of neglect. As a result, far closer attention must be paid to determining the appropriate manning configurations and personnel policies for maintaining an effective reserve force, instead of viewing the problem as a simple one of draft versus volunteer procurement policies.

MANPOWER MANAGEMENT AND UTILIZATION IN A VOLUNTEER ENVIRONMENT

Although conscription has not been used for more than four and a half years, to assume that the draft is entirely history would fail to recognize the imprint that it has left throughout the defense establishment, especially on the way the military manages and uses its personnel. Dealing effectively with this legacy will be one of the most formidable obstacles that the Department of Defense and the Congress must face during the next decade.

In a managerial sense, the elimination of the draft was a major shock. The immediate effect of ending the draft was to substantially increase the budget cost and scarcity of new recruits. The full impact, though, is clearly much larger. In a draft environment, the military could afford to be dominated by policies and traditions that ran counter to the general thrust of change in the civilian world—the draft insured an adequate supply of manpower, almost no matter what personnel policies the Services followed. In a volunteer environment, however, the Armed Forces must be responsive to the conditions of change in the civilian world.

The removal of the draft has thus altered the entire philosophy under which the military must manage its human resources. The nearly three decades of post-war conscription encouraged the military to develop and maintain patterns of manpower utilization and management that may be neither cost-effective nor equitable and, as a result, may add needless constraints and costs to the manpower system. But manpower, which was once plentiful and seemingly cheap, is now scarce and expensive. Policies adopted for reasons of convenience and equity must therefore be evaluated in terms of efficiency as well. In short, manpower is important, so cost-effective solutions to the management problem must be developed and implemented.

The possible efficiency gains that could result from new policies of manpower management and utilization—and the corresponding cost savings—have so far gone largely unrealized. These improvements will require greater understanding of the AVF, since the AVF provides the context for improved management; but more important, it is essential to address the major areas in need of reform: man-
power requirements; compensation, retirement, and tenure policy; and military training.

To illustrate, the cost of manpower has risen substantially relative to the cost of capital equipment—about 40 percent—during the past decade, yet there has been little or no change in the mix of manpower and equipment used in the defense mission. Consideration should therefore be given to finding ways of substituting equipment for manpower, especially in the support areas.

Similarly, the costs of military personnel have risen substantially relative to the cost of DoD civilian employees since the removal of the draft. The DoD has in fact responded to much of this increase, but primarily by substituting direct-hire civilian employees for military personnel. Alternatively—and this is an issue that is only beginning to receive much attention—analysis indicates that cost savings of up to $1 billion per year might be realized by contracting out for 250,000 direct-hire and indirect-hire civilian positions. Thus, the cost-effective solution may lie not in substituting direct hires for military personnel, but in substituting contract hires for direct hires.

Perhaps the most important, but least recognized, type of resource-allocation issue raised by the removal of the draft, however, concerns the experience mix of the force. Because of first-term pay increases and recruiting costs, the costs of first-term personnel have increased dramatically relative to the costs of career personnel. Yet the Services continue to rely on approximately the same mix of first-term and career personnel as they did during the pre-Vietnam draft era. The substitution of experienced personnel for first-termers would not only help to reduce enlisted accession requirements, it could result in substantial cost savings as well. Shifting from the current mix of 60 percent first-termers and 40 percent careerists to a 55/45 mix or a 50/50 mix could lead to better utilization of junior members by having them serve in jobs for which they are better suited and, as a consequence, could yield cost savings of up to $1 to $2 billion per year.

These are only three examples of the ways in which resources can be allocated within a given force structure to achieve cost savings or increases in capability. But they illustrate how manpower requirements ought to be a function of the cost of particular inputs to the defense mission.

Equally important with these questions of resource allocation are those concerning the ways the DoD manages its uniformed personnel. Individual military training, with costs amounting to more than $6 billion per year, is clearly one of the key policy problems and is recognized as such. However, attention in this area has focused almost exclusively on improving the efficiency of the training establishment in the narrow sense—that is, on designing better courses, reducing the student/staff ratio, and so forth. Equally important is the impact of today’s manpower requirements system on the magnitude of first-term enlisted training, the single largest component of the training establishment.

First-term enlisted training costs are determined largely by the numbers of personnel receiving training and by course length. Shifting to a somewhat more career-intensive force could dramatically reduce the number of personnel who receive basic and skill training and could also lead to shorter courses. Thus, what at first appears to be a training problem is in reality a requirements problem.

With respect to promotion and tenure, the personnel policies developed over the last 30 years reflect a management orientation frequently geared more toward structuring an internally coherent personnel system than toward achieving the
desired force structure in terms of requirements. They are based largely on the provision of predictable career patterns followed by early retirement.

Fundamental changes in the system should be considered, but there is a persistent tendency to focus on symptoms rather than causes. For instance, the up-or-out promotion system helps to prevent the military from encountering many of the problems associated with the Civil Service system, yet it is continually questioned. The problem with up-or-out is not the basic concept, but rather the ways in which it has come to be applied over the years. A recent survey shows that nearly 50 percent of all enlisted personnel would prefer to remain technical specialists rather than assume supervisory responsibilities, but the promotion system forces them either into supervisory positions or out of the military altogether. A personnel management system that would allow senior service members to be promoted into either technical or supervisory positions would enable the integrity of the up-or-out system to be maintained while simultaneously meeting mission requirements.

The military compensation system is likewise in need of a major overhaul. It was developed for the needs of a basically different environment, and although marginal adjustments have been made in the system to solve specific problems over the years (e.g., the introduction of bonuses and flight pay), there has been no systematic or thorough revamping of the system. The result is that the current system is a patchwork of separate legislative and regulatory changes that may be ill-equipped to deal with the needs of the post-draft environment.

The current system was originally intended to keep Federal pay (both military and civilian) competitive with wages in the civilian sector, but it has evolved to the point where far more than necessary is paid. Summing all the components of the compensation package reveals that military officers, for example, earn about 70 percent more, and enlisted personnel about 30 percent more, than comparably aged and educated civilian workers. This did not happen by design, but by accident.

Military retirement is part of the compensation system that is particularly in need of thorough review. Retirement costs are among the largest and fastest growing components of manpower spending, having increased from $477 million in 1956 to the more than $9 billion projected for 1978. The present retirement system is also based in many ways on conditions that no longer prevail, such as having a small standing military, a heavy concentration in the combat arms, and limited pay. Originally, retirement compensation was intended more as a form of deferred payment than as old-age sustenance. Now that military pay equals or exceeds civilian pay, the retirement system should be reexamined in terms of its basic purposes.

The reason for today’s enormous retirement costs can be seen in the fact that the actuarial cost of the current system adds between 40 and 55 percent to the military pay (regular military compensation) of those who retire; in contrast, the contribution for standard private retirement programs is between 5 and 20 percent of salaries and wages. Yet the Services have little incentive under current policy to economize on retirement costs, both because the costs do not appear in the Services’ own budgets and because they appear in the DoD budget when paid rather than when incurred. Equally important, the current policy of retirement vesting after 20 years of service but not before means that there is very little turnover between the 8th and 20th years, but there are large losses at the 20-year point. Consequently, the DoD has little flexibility in adjusting career personnel to meet requirements. At the same time, strong financial incentives for early retire-
ment mean that many outstanding officers and enlisted personnel are lost to the Services just as they are entering their most productive years.

CONCLUSIONS

The removal of the draft presents an opportunity to make better use of defense resources—an opportunity that was not always present under or encouraged by the draft. The importance of this point is dramatically underlined by the fact that the relatively modest changes that have been suggested here could yield long-run cost savings of from $5 to $10 billion per year.

To summarize, the AVF can be made to fail. But it can also be made to work—and perhaps much better than its draft-dependent predecessor. Whether or not the potential of the AVF is realized will depend critically on the policies that the DoD and the Congress adopt during the next ten years, for the true test will occur in the 1980s. If this potential is not realized, society may not be willing to pay the escalating costs emanating from the current approach and, as a consequence, may simply cut forces.
ACKNOWLEDGMENTS

This report would not have been possible without the considerable help of many persons. I am particularly grateful for the support of Dr. Stephen Lukasik, former Director of ARPA, and Colonel Austin Kibler, former Director of the Human Resources Research Office in ARPA.

I am also grateful to present and former Department of Defense personnel Stephen Herbits, Lt. Colonel John D. Johnston, Stephen Chapel, Louis Pales, Kenneth Schefflin, John Rosenthal, Lt. Colonel Edward Raupp, Fred Suffa, I. M. Greenberg, Commander Richard Hunter, Thomas Sicilia, and Robert Murray, among others, for their comments and help in obtaining the necessary data.

For their insightful suggestions and other help, I would like to thank, in alphabetical order, present and former Rand colleagues Douglas Campbell, David Chu, Dennis De Tray, Craig Foch, Robert Gay, Glenn Gotz, Patricia Gowen, Gus Haggstrom, Patricia Munch, Gary Nelson, Michael Polich, Donald Rice, C. Robert Roll, Jr., Bernie Rostker, Roberta Smith, Barbara Stanton, Geraldine Walter, and John White.

Deserving particular mention are Gene Fisher and Cheryl Cook of Rand and Walter Oi of the University of Rochester for reading the draft manuscript in its entirety, and for the many helpful comments and suggestions that they provided. For secretarial and production assistance, I would like to thank Janet DeLand, Barbara Felts, Vicenta Jacobs, Marilyn LaPrell, Joy Schappell, and Linda Taft.

Finally, but most important, I am deeply indebted to my wife Susan for editing several earlier drafts of this manuscript, for her clarifying suggestions, and for significantly shortening the final manuscript.
# CONTENTS

<table>
<thead>
<tr>
<th>Preface</th>
<th>iii</th>
</tr>
</thead>
<tbody>
<tr>
<td>Summary</td>
<td>v</td>
</tr>
<tr>
<td>Acknowledgments</td>
<td>xiii</td>
</tr>
<tr>
<td>Figures</td>
<td>xix</td>
</tr>
<tr>
<td>Tables</td>
<td>xxi</td>
</tr>
</tbody>
</table>

Chapter

1. **INTRODUCTION** .................................................. 1
   - The Transition ................................................. 1
   - The Nature of the Problem .................................. 2
   - Organization of the Report ................................. 3

2. **MANPOWER AND DEFENSE: DIMENSIONS OF THE PROBLEM** 5
   - Structuring the Defense Problem .......................... 5
   - Sizing the Defense Effort .................................. 10
   - The Defense Manpower System .............................. 14
   - The Cost of Defense Manpower ............................. 20
   - Manpower and Defense ...................................... 29

**PART 1: THE DRAFT AND ITS REMOVAL**

3. **THE MOVE TO END THE DRAFT** ............................... 35
   - The Draft Debate ............................................ 35
   - The Equity Issue and Demographic Trends ............... 40
   - Summary ...................................................... 44

4. **HISTORICAL AND INTERNATIONAL PERSPECTIVE OF CONSCRIPTION** 46
   - History of Conscription .................................... 46
   - Lessons from the Past ....................................... 57
   - International Perspective ................................ 59
   - The All-Volunteer Force in Perspective ................. 64

5. **THE ECONOMICS OF PEACETIME CONSCRIPTION** .......... 66
   - Economic Cost as a Policy Criterion .................... 67
   - The Economics of Labor Utilization ...................... 74
   - The Conscription Tax ...................................... 80
   - Redistribution of Income under the Conscription Tax 86
   - Economic and Budget Costs as Policy Criteria for a
     Manpower Procurement Policy ......................... 89
   - Appendix 5-A: A Model of Participation in the Military and
     Draft Avoidance under Conscription ............... 96
6. THE DECISION TO END THE DRAFT ........................................ 102
   The Gates Commission Findings ....................................... 103
   Outside Criticisms of the Gates Commission ....................... 106
   Implementing the Volunteer Force ................................. 109

PART II: THE ALL-VOLUNTEER FORCE

7. TRANSITION TO THE VOLUNTEER FORCE .......................... 113
   The Process of Transition ........................................... 113
   The Volunteer Debate .............................................. 116
   The AVF Issues ..................................................... 121

8. MANPOWER PROCUREMENT: QUANTITY AND QUALITY .......... 123
   Conceptual Framework .............................................. 123
   Enlistment Quality ................................................ 128
   Enlistment Quantity .............................................. 141
   The Reserve Forces ................................................ 148
   Summary ............................................................. 158

9. ENLISTMENT SUPPLY AND DEMAND ............................... 159
   The Supply of Enlistments ......................................... 159
   Recruiting Objectives and the Demand for Enlistments .......... 169
   Recruiting Shortfalls ............................................ 182
   Unemployment and Enlistment ..................................... 187
   The Future of the Volunteer Force ................................. 188
   Appendix 9-A: Enlistment Supply Estimation ................. 194
   Appendix 9-B: Defense Manpower Commission Estimates ...... 200

10. SOCIAL REPRESENTATION IN THE VOLUNTEER FORCE ....... 204
    Background .......................................................... 204
    Individual Characteristics ....................................... 206
    Socioeconomic Background ...................................... 221
    Conclusions ....................................................... 229
    Appendix 10-A: Socioeconomic Composition of Enlisted
                    Accessions: Supplementary Results .................... 232
    Appendix 10-B: Zip Code Data as a Unit of Analysis ........ 246

11. COST OF THE VOLUNTEER FORCE ................................. 251
    The Cost Issue .................................................... 251
    Budget Costs ...................................................... 252
    Economic Costs ................................................... 265

PART III: RESOURCE ALLOCATION AND MANPOWER
          MANAGEMENT

12. RESOURCE ALLOCATION WITHOUT THE DRAFT ................. 269
    Conceptual Framework for Defense Resource Allocation ....... 270
    Capital and Labor ................................................ 277
13. RESOURCE ALLOCATION: MANPOWER REQUIREMENTS .......... 291
    Military or Civilian? ........................................ 291
    The First-Term/Career Mix .................................. 303
    Summary ....................................................... 318
    Appendix 13-A: Resource Allocation: Supporting Data ........ 320

14. MANPOWER MANAGEMENT IN A VOLUNTEER ENVIRONMENT .......... 332
    Management Principles under the Draft ...................... 332
    Recruiting ..................................................... 338
    Military Training ............................................. 343
    Career Management ............................................ 349

15. MANPOWER MANAGEMENT: THE MILITARY COMPENSATION SYSTEM .... 356
    Theoretical Framework ....................................... 357
    The Military Compensation System .......................... 361
    Military Pay .................................................. 364
    Military Retirement ......................................... 372
    Military Compensation Policy ............................... 376

16. DEFENSE WITHOUT THE DRAFT ................................ 381
    Draft or Volunteer? ......................................... 381
    Early Experience with the Volunteer Force .................. 386
    The Legacy of the Draft ..................................... 388
    The All-Volunteer Force: Providing the Nation's Defense .... 389

BIBLIOGRAPHY ...................................................... 395
# FIGURES

2-1. Organization of the Department of Defense ........................................... 8
2-2. Defense Resources .................................................................................. 10
2-3. Defense Manpower System ..................................................................... 15
2-4. Defense Spending .................................................................................... 29

3-1. Annual Military and Civilian Wages ......................................................... 43
3-2. Military Manpower Procurement and Population Size ............................ 44

5-1. The Relationship Between Supply (Reservation Wage) and Civilian Earnings Opportunities ................................................................. 69
5-2. Measuring the Economic Cost of Military Manpower ............................... 72
5-3. Overemployment of Labor with the Draft ............................................... 76
5-4. The Conscription Tax .............................................................................. 82
5-5. Economic and Budget Cost ...................................................................... 92

6-1. Eliminating Recruiting Deficits by (1) Moving Along the Supply Curve SS, (2) Shifting the Supply Curve, and (3) Shifting the Requirements for Volunteers ................................................................. 108

7-1. Indexes of Pay for Civilians, Career Military, and Recruits ...................... 115
7-2. Non-Prior-Service Male True Volunteers and Annual Enlisted Accession Requirements ................................................................. 116

8-1. Enlistment Supply and Demand ................................................................. 124
8-2. The Enlistment Process: Calendar Year 1972 .......................................... 126
8-3. Enlisted Accessions: All and True Volunteers .......................................... 145
8-4. Selected Reserve Enlisted Accessions ....................................................... 153

9-1. Factors Affecting Enlistment Supply ....................................................... 161
9-2. Logistic Supply Curve ............................................................................. 166
9-3. Army Accession Rates and End Strengths .............................................. 172
9-4. Navy Accession Rates and End Strengths .............................................. 172
9-5. Marine Corps Accession Rates and End Strengths ................................ 173
9-6. Air Force Accession Rates and End Strengths ....................................... 173
9-7. Recruiter Shortages and Enlistment Shortfalls ....................................... 184
9-8. Quantity, Quality, and Unemployment .................................................. 188
9-9. Male 18 to 21 Year Old Population ....................................................... 190
9-10. Non-Prior-Service Male Enlistment Supply and Demand Projections .... 192
10-1. Blacks as a Percentage of Enlisted Accessions and the 18 to 21 Year Old Male Population .......................... 210
10-2. Black Accessions and Unemployment ......................................................... 218

12-1. A Hypothetical Production Function ...................................................... 271
12-2. Indexes of DoD Capital and Labor Stocks ............................................. 280
12-3. Indexes of DoD Cost of Capital and Cost of Labor ................................. 283
12-4. Indexes of DoD Capital and Labor Costs and Utilization ...................... 285

13-2. Productivity of First-Term Enlisted Personnel on the Job .............. 309

14-1. Statistical Decision Framework for Establishing Selection Criteria 341
14-2. First-Term Enlisted Training, Productivity, and Costs: Conceptual Framework ................................................................. 347

15-1. Military Labor Supply and Demand in Multiple Labor Markets... 358
15-2. Military Career Basic Pay and RMC Expressed as a Percentage of Median Wage and Salary Earnings of Comparably Aged and Educated Civilian Workers ............................................. 368
15-3. Enlisted RMC Versus Civilian Wage and Salary Earnings for White High-School Graduates and White Non-High-School Graduates: Calendar Year 1974 ........................................ 369
15-4. Officer RMC versus Civilian Wages and Salary Income for White College Graduates: Calendar Year 1974 .................... 370
15-5. Officer RMC under Slow and Rapid Promotion versus Civilian Wage and Salary Earnings for White College Graduates: Calendar Year 1974 ......................................................... 371
15-6. Total Military Officer Compensation versus Total Compensation for White College Graduates: Calendar Year 1974 .... 377
15-7. Total Military Enlisted Compensation Versus Total Compensation for White High-School Graduates and White Non-High-School Graduates: Calendar Year 1974 ........................ 378
### TABLES

2-1. Sizing the Military: Measures of Force Strengths .................................. 11
2-2. Measures of Military Manpower Strengths for Selected Years .......... 13
2-3. Distribution of Military Personnel by Service and Rank:
      31 December 1974 .................................................. 17
2-5. Military Manpower Procurement ........................................... 20
2-6. Manpower Budget Expenditures .......................................... 22
2-7. Military Retirement: Budget Outlays versus Accrued Liability ... 24
2-8. Manpower Budget Costs Not in the DoD Budget ......................... 26

4-1. Comparison of Annual Military Enlisted Earnings with Average
      Annual Earnings in Manufacturing .................................. 52
4-3. Minimum Length of Service for Conscript Forces in Western
      Europe ........................................................................ 63

5-1. Ratio of the Total Number of Personnel Required to the Number
      Assigned in Operational Billets, as a Function of Training Time
      and the Length of the Conscription Tour ................................ 79
5-2. The Conscription Tax in 1964: Narrow Definition ....................... 84
5-3. The Conscription Tax (Narrow Definition) and the Costs of
      Collection: 1964 ......................................................... 85
5-4. Estimates of the Conscription Tax: 1970 ................................... 88
5-5. Conscription Tax and the Ability to Pay: Tax as a Percentage of
      Lifetime Earnings (1970) .............................................. 90

6-1. The 1971 AVF Pay Raise: RMC ............................................. 110

8-1. Estimated Productivity of Enlisted Personnel at the End of Four
      Years of Military Service ............................................. 131
8-2. Percentage of First-Term Enlisted Men Receiving Disciplinary
      Action by Mental Category and Education: Calendar Year 1967
      Accessions as of 31 December 1969 .................................. 131
8-3. Distributions of Non-Prior-Service Male Enlisted Accessions by
      Mental Category and Education for the DoD ........................ 133
8-4. The Quality of Non-Prior-Service Male Enlisted Accessions:
      Mental Category IV and Percentage Non-High-School Graduates 134
8-5. Distribution of Non-Prior-Service Enlisted Accessions by Mental
      Category: Actual versus Objective .................................... 136
8-6. Quality of Male Non-Prior-Service Enlisted Accessions: Joint
      Distribution by Mental Category and Education ...................... 136
8-7. Estimated Productivity of Enlisted Personnel at the End of Four
      Years of Military Service, Expressed as a Percentage Relative to
      the Average Four-Year Specialist ................................... 139
<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>8-9. Percent of Enlisted Accessions Discharged for Failure to Meet</td>
<td>140</td>
</tr>
<tr>
<td>Minimum Behavior or Performance Criteria: Fiscal 1971 Enlistees</td>
<td></td>
</tr>
<tr>
<td>Separated as of 30 June 1973</td>
<td></td>
</tr>
<tr>
<td>8-10. AVF Enlistments and Objectives by Service: All Sources</td>
<td>142</td>
</tr>
<tr>
<td>8-11. DoD Enlistments and Objectives by Source</td>
<td>143</td>
</tr>
<tr>
<td>8-12. Non-Prior-Service Male Category I-III Enlistments and Objectives</td>
<td>144</td>
</tr>
<tr>
<td>8-13. Enlistments, Objectives, and Force Strengths</td>
<td>147</td>
</tr>
<tr>
<td>8-14. Average Enlisted Strengths of the Selected Reserves: Authorized</td>
<td></td>
</tr>
<tr>
<td>versus Actual</td>
<td>151</td>
</tr>
<tr>
<td>8-15. Selected Reserve Enlisted Accessions: Distribution by Education</td>
<td>155</td>
</tr>
<tr>
<td>8-16. Selected Reserve Enlisted Accessions: Distribution by Mental</td>
<td>155</td>
</tr>
<tr>
<td>Category</td>
<td></td>
</tr>
<tr>
<td>8-17. Quality: Comparison of Active and Reserve Force Accessions</td>
<td>156</td>
</tr>
<tr>
<td>9-1. Individuals' Branch of Service Preferences by Enlistment</td>
<td>163</td>
</tr>
<tr>
<td>Intention</td>
<td></td>
</tr>
<tr>
<td>9-2. Supply Elasticities Implied by Equation (9.5)</td>
<td>168</td>
</tr>
<tr>
<td>9-3. A Model of Enlistment Demand-Regression Results for Equation</td>
<td>177</td>
</tr>
<tr>
<td>(9.12)</td>
<td></td>
</tr>
<tr>
<td>9-4. First-Term/Career Mix Implications for Annual Enlisted Accession</td>
<td>179</td>
</tr>
<tr>
<td>Requirements</td>
<td></td>
</tr>
<tr>
<td>9-5. Accession Rates and Accession Rate Requirements</td>
<td>181</td>
</tr>
<tr>
<td>9-6. Service Accession Plans</td>
<td>191</td>
</tr>
<tr>
<td>9-A-3. Miscellaneous Supply Data</td>
<td>196</td>
</tr>
<tr>
<td>and Those from Equation (9.5): Fiscal 1985</td>
<td></td>
</tr>
<tr>
<td>10-1. Distribution of Enlisted Accessions and the General 18 to 21 Year</td>
<td>207</td>
</tr>
<tr>
<td>Old Male Population by Mental Category</td>
<td></td>
</tr>
<tr>
<td>10-2. Educational Attainment of Enlisted Accessions and the U.S. Male</td>
<td>208</td>
</tr>
<tr>
<td>Population</td>
<td></td>
</tr>
<tr>
<td>10-3. Educational Attainment of All Male Military Personnel and the</td>
<td>209</td>
</tr>
<tr>
<td>U.S. Male Population</td>
<td></td>
</tr>
<tr>
<td>10-4. Enlisted Accessions: Percentage Black</td>
<td>211</td>
</tr>
<tr>
<td>10-5. Mental Category Distributions for Pre-Inductees by Race:</td>
<td>211</td>
</tr>
<tr>
<td>1971-1972</td>
<td></td>
</tr>
<tr>
<td>10-6. Percentage of the Population Classified as Mental Categories I-III</td>
<td>213</td>
</tr>
<tr>
<td>10-7. Percentage of Male Population Pool that Are High-School</td>
<td>214</td>
</tr>
<tr>
<td>Graduates</td>
<td></td>
</tr>
<tr>
<td>10-8. Category I-III Manpower Pools</td>
<td>215</td>
</tr>
<tr>
<td>10-9. Category I-III Enlisted Accessions and Manpower Pools</td>
<td>216</td>
</tr>
<tr>
<td>10-10. Annual Income for Year-Round Full-Time Employed 18 to 24 Year</td>
<td>217</td>
</tr>
<tr>
<td>Old Males with Four Years or Less High-School Education by Race</td>
<td></td>
</tr>
<tr>
<td>10-11. Determinants of Racial Composition of Enlisted Accessions</td>
<td>220</td>
</tr>
<tr>
<td>10-12. Black Officer Accessions</td>
<td>221</td>
</tr>
<tr>
<td>Section</td>
<td>Title</td>
</tr>
<tr>
<td>---------</td>
<td>----------------------------------------------------------------------</td>
</tr>
<tr>
<td>10-13</td>
<td>Black Enlisted Accessions into the Guard and Reserves</td>
</tr>
<tr>
<td>10-14</td>
<td>Distribution of Enlisted Accessions by Census Division and Region</td>
</tr>
<tr>
<td>10-15</td>
<td>Distribution of Enlisted Accessions According to Urban Status of Home Residence</td>
</tr>
<tr>
<td>10-16</td>
<td>Distribution of Male Enlisted Accessions by SMSA Zip Codes Ranked According to Average Family Income</td>
</tr>
<tr>
<td>10-17</td>
<td>Distribution of Black and Nonblack Enlisted Accessions by SMSA Zip Codes Ranked According to Average Family Income</td>
</tr>
<tr>
<td>10-A-1</td>
<td>Distribution of Enlisted Accessions by SMSA Zip Codes Ranked According to Average Family Income by Mental Category and Education</td>
</tr>
<tr>
<td>10-A-2</td>
<td>Distribution of Nonblack and Black Enlisted Accessions by SMSA Zip Codes Ranked According to Average Family Income by Mental Category and Education</td>
</tr>
<tr>
<td>10-A-3</td>
<td>Distribution of Enlisted Accessions by Division and Region of the Country, by Six-Month Intervals</td>
</tr>
<tr>
<td>10-A-4</td>
<td>Distribution of Enlisted Accessions by SMSA Zip Codes Ranked According to Average Family Income, by Six-Month Intervals</td>
</tr>
<tr>
<td>10-A-5</td>
<td>Percentage of Enlisted Accessions Falling in the Upper 10 Percent and Upper 50 Percent of all SMSA Zip Codes Ranked According to Average Family Income</td>
</tr>
<tr>
<td>10-A-6</td>
<td>Distribution of Enlisted Accessions According to Region of the Country, by Service</td>
</tr>
<tr>
<td>10-A-7</td>
<td>Distribution of Enlisted Accessions by SMSA Zip Codes Ranked According to Average Family Income, by Service</td>
</tr>
<tr>
<td>10-A-8</td>
<td>Distribution of Nonblack Category III High-School Graduate Enlisted Accessions by SMSA Zip Codes Ranked According to Average Family Income, by Service</td>
</tr>
<tr>
<td>10-A-9</td>
<td>Distribution of Enlisted Accessions by SMSA Zip Codes Ranked According to Average and Median Family Income</td>
</tr>
<tr>
<td>10-A-10</td>
<td>Distribution of Enlisted Accessions by SMSA Zip Codes Ranked According to Average Years of Education Completed</td>
</tr>
<tr>
<td>10-A-11</td>
<td>Distribution of Nonblack and Black Enlisted Accessions by SMSA Zip Codes Ranked According to Percentage Whites</td>
</tr>
<tr>
<td>10-B-1</td>
<td>Recruits and the Income of their Parents: Comparisons of AFEES Individual Survey Data with Aggregate Zip Code Data</td>
</tr>
<tr>
<td>11-1</td>
<td>Budget Expenditures Associated with the AVF: Alternative Approaches</td>
</tr>
<tr>
<td>11-2</td>
<td>Chronology of Major Factors Affecting Defense Manpower Compensation</td>
</tr>
<tr>
<td>11-3</td>
<td>Defense Manpower Costs by Source</td>
</tr>
<tr>
<td>11-4</td>
<td>Cost of National Service: Men Only</td>
</tr>
<tr>
<td>11-5</td>
<td>Economic Cost of Military Personnel</td>
</tr>
<tr>
<td>13-1</td>
<td>Military and Civilian Personnel Strengths</td>
</tr>
<tr>
<td>13-2</td>
<td>Average Costs of Military and Civilian Personnel</td>
</tr>
<tr>
<td>13-3</td>
<td>Comparisons of Monthly Basic Pay for First-Termers and Careerists</td>
</tr>
</tbody>
</table>
13-4. Percentage of the Enlisted Force in the First-Term .......................... 306
13-6. Annual Enlisted Accession Requirements Under Alternative
      Mixes of First-Term and Career Personnel .......................... 314

13-A-1. DoD Labor Input ................................................. 321
13-A-2. DoD Manpower Costs ........................................... 322
13-A-5. Index of Earnings from Civilian Employment ......................... 328
      Training and Retirement Policies .................................... 330

14-1. Age Distributions of Male Military Personnel and the Male
      Civilian Work Force .................................................. 335
14-2. Fiscal 1976 Military Training by Type: Manpower and Costs ........ 344

15-2. Perceived Value of Military Pay ................................... 366
15-3. Military Retirement Costs ......................................... 373
15-4. Economic Cost of Military Retirement: The Percentage of Regular
      Military Compensation Necessary to Fund the Future Retirement
      Benefits for Those Who Serve Until Retirement ..................... 375
Chapter 1
INTRODUCTION

The advent of the All-Volunteer Force (AVF) in 1973 marked the beginning of a new era for the United States military, and indeed, for American society in general. Without the pressure of the draft, the armed services were forced to rely on true volunteers as their sole source of military manpower for the first time in more than three decades.\(^1\)

Although the AVF has been viewed since its inception almost entirely in terms of its ability to attract the desired numbers and types of recruits, the implications of the volunteer force are clearly much larger, touching on virtually all aspects of the defense effort. Moreover, and whether intended or not, the draft and its removal were and are an integral part of U.S. economic and social policy, with effects going far beyond the narrower confines of defense.

An accurate assessment of the AVF, both its implications and prospects, is therefore critically dependent on putting the AVF experience into the broader context of U.S. defense, economic, and social policy. This broad perspective, however, has been noticeably absent from most of the post-draft debate and analysis.\(^2\) The lack of any systematic overview or analysis of the evidence to date thus serves as one of the principal motivations for this report.

The purpose of this report, then, is to provide a broad assessment of defense without the draft—past, present, and future. Indeed, how policies evolve and how the military responds will clearly play a key role in shaping U.S. defense posture and social policy for the remainder of this century.

THE TRANSITION

The law authorizing the conscription of young men for military service expired on July 1, 1973, but because of rapid force reductions following the Vietnam War,

\(^1\) With the exception of a short 18-month hiatus following World War II, the U.S. military was not without the authority to conscript young men between 1940 and 1972.

\(^2\) As of the last writing in this report, there was no other comprehensive review or analysis of the experience with the AVF. There are several other studies, however, that do examine various aspects of the early AVF experience. Binkin and Johnston provide an excellent overview, but their analysis was confined to the first three months without the draft. The Defense Manpower Commission considers the AVF but is very brief in its treatment, focusing principally on recruiting prospects. King is broader in his treatment, but because of time constraints and the fact that his emphasis is on national service, he is not able to explore the AVF issues in much depth. Finally, Lee and Parker provide an interesting description and analysis of the political and legislative history of the AVF. Other studies have, of course, been conducted, but they have tended to be more narrowly focused (many of these are cited at appropriate places later in this report). See Martin Binkin and John D. Johnston. All-Volunteer Armed Forces: Progress, Problems, and Prospects, report prepared for the Committee on Armed Services, United States Senate, Ninety-Third Congress, First Session, U.S. Government Printing Office, June 1, 1973; Defense Manpower Commission, Defense Manpower: The Keystone of National Security, U.S. Government Printing Office, April 1976; William R. King, Achieving America's Goal: The All-Volunteer Armed Force or National Service?, report prepared for the Committee on Armed Services, United States Senate, Ninety-Fifth Congress, First Session, U.S. Government Printing Office, March 2, 1977; and Gus C. Lee and Geoffrey Y. Parker, Ending the Draft—The Story of the All-Volunteer Force, Human Resources Research Organization, Report FR-PO-77-1, Alexandria, Virginia, 1977.
reliance on the draft all but ended six months earlier. In January 1973, Secretary of Defense Melvin Laird announced that there would be no more draft calls, so the last regular induction occurred on December 29, 1972. Although those previously drafted continued to serve—the last serving draftee was not discharged until November 1974—the United States has for all practical purposes operated under an all-volunteer military since January 1973.

It would be a mistake, however, to limit analysis of the AVF to the short period since the draft ended. On the one hand, much of the early AVF experience is merely a manifestation of more fundamental and longer-run trends. On the other hand, the transition is far from over—the military has only begun to adjust to the myriad of changes brought about by the draft’s removal. In other words, it is important to recognize the dynamic nature of the transition when assessing the progress to date or when evaluating the future of the AVF.

For example, the transition to the volunteer force has taken place at a time when the cost of conducting the defense effort has become a likewise important concern. Manpower costs have escalated rapidly since the mid-1960s, both in absolute dollar amounts and as a share of the defense budget. As this has happened, the defense budget, which once dominated Federal expenditures, has come under more careful scrutiny by the Congress and the public every year. While making up more than half of the Federal budget during the 1950s, the defense budget today accounts for less than a quarter of all Federal expenditures, making efficient use of scarce defense resources even more important.

The advent of the AVF, rapidly escalating manpower costs, and tight defense budgets have therefore all served to make military manpower an ever-increasing concern in defense planning and budgeting. Whereas the most important issues before the Department of Defense (DoD) were once almost solely strategic and tactical in nature, they now include cost and management as well—particularly manpower costs and manpower management.

THE NATURE OF THE PROBLEM

It is important to begin by recognizing the public policy nature of the manpower procurement issue. In a narrow sense, the ability to attract the personnel required to man the nation’s Armed Forces is obviously an issue of public concern. There are, however, much broader, though less visible concerns, as well.

At the broadest level of aggregation, the method of manpower procurement affects the way the defense effort is conducted, since the availability of manpower under different procurement policies is clearly an important determinant of the way that the defense mission is carried out. Furthermore, and to the extent that the DoD and the Congress respond to budget incentives, the method of manpower procurement affects the ways the DoD allocates and manages its resources, simply because of the effect of procurement policy on manpower costs.

Manpower procurement policy also has a dramatic effect on the military manpower system—on the numbers and types of personnel procured, the cost of manpower, and the ways that military personnel are managed. For example, conscription tends to encourage reliance on very junior personnel because of their increased availability and lower cost. It also acts to insulate the military as an employer from
the mainstream of society, so that policies are frequently adopted more for reasons of convenience than cost-effectiveness.

Finally, the effects of military manpower procurement policy go beyond questions of defense. For example, when coercion is used to allocate labor resources, as it is under the draft, the method of manpower procurement becomes an instrument of the nation's economic and social policies. Conscription extracts a "tax" from those forced to serve and, contrary to most social objectives, this tax generally penalizes most severely those least able to bear the burden—namely, the poor. Conversely, universal conscription can be viewed as a tool for encouraging a "socialization" process among the nation's young citizens. Although the resulting "tax" tends to be progressive in this case, the use of universal conscription requires either very large force sizes (relative to the nation's population) or short service tours (which result in reduced force readiness). Finally, whenever coercion is used to allocate labor resources into the military, some individuals will attempt to avoid serving, a process that brings its own economic and social costs.

The policy problem therefore becomes, first, one of choosing the method of manpower procurement that best resolves the often conflicting concerns represented by defense, economic, and social policy objectives. The problem then becomes one of adapting manpower and defense policy to meet the needs and constraints imposed by the form of manpower procurement that has been adopted. Accordingly, one of the main themes of this report concerns the types of changes in manpower policy that must be made if the DoD is to provide the desired defense effort at a cost the American public is willing to bear.

ORGANIZATION OF THE REPORT

This report is not intended to provide detailed and specific solutions to each of the vast array of problems and issues raised by the method of manpower procurement in general or the removal of the draft in particular. In the words of Hitch and McKean, once-and-for-all solutions of this sort are impossible "... because good solutions change with circumstances, and circumstances change rapidly." The purpose here is, rather, to present an overview of the broad trends and policies that have emerged during the period of transition and to assess their likely effects on defense posture and the structure of the military personnel system in the years ahead.

The focus of this report is largely economic. Its principal concern being the major public policy issues posed by the draft and its removal, especially for the active duty forces. This is not to deny the importance of other issues and approaches—and where possible, these other issues and approaches have been incorporated into the analysis. The focus was adopted, rather, as a means for keeping the discussion within reasonable bounds.

After some necessary background is presented in the next chapter, the body of the report is divided into three parts. Part I, The Draft and Its Removal, focuses

---


2 The reserves are clearly a major defense issue, but a comprehensive treatment of them is beyond the scope of this study.
principally on the factors underlying the decision to end the draft. The analysis shows that the volunteer force was essentially the only viable alternative for eliminating the growing inequities of the selective service draft. Part II, *The All-Volunteer Force*, examines the early AVF experience and concludes that the volunteer force has been a success in terms of its ability to attract a socially representative mix of the desired quantity and quality of recruits at a substantially lower cost than has been commonly assumed. Part III, *Resource Allocation and Manpower Management*, examines the broader implications raised by the removal of the draft. The analysis makes it clear that major changes in manpower utilization and management are required to provide an effective defense at a cost the Amerian public is willing to pay and that the removal of the draft provides an opportunity for making such changes.
Chapter 2

MANPOWER AND DEFENSE: DIMENSIONS OF THE PROBLEM

Military manpower is an integral part of the U.S. defense effort and, as such, changes in manpower can have a substantial effect on the larger issues of defense policy. Since defense is clearly much more than manpower alone, however, we shall begin by examining how the manpower system fits into the larger context of overall defense management.

STRUCTURING THE DEFENSE PROBLEM

At the very core of the problem is the concept and measurement of "national defense." Unlike much of the private sector, or even many government activities, where there may be objective measures of output and productivity, there is no ready measure of "defense output." Instead, national defense embraces a variety of policy objectives, some broadly stated and others more narrowly defined. Though these objectives are all viewed as contributing to the "security" of the nation—whether through the defense of the borders, the deterrence of war, or the protection of allies—they are for the most part not conventionally measurable.

This lack of a clear-cut measure of defense output poses certain problems for the defense planner and for the policy analyst. It is difficult to evaluate the implications of policy alternatives when comprehensive information about the costs and benefits of the alternatives is not available.

A complete analysis of the definition, measurement, and structure of national defense is, of course, beyond the scope of this report. The intent here is merely to highlight some of the conceptual issues and, in the absence of precise definitions and measures, to suggest how the military manpower problem can be approached in the larger context of defense management.

The Policy Problem

Broadly stated, the policy problem facing defense planners is one of selecting the appropriate amount of defense at the least possible cost, or, as stated by Hitch and McKeans:

1 The term defense planner should be viewed broadly in this context; it includes not only those engaged in such specific functions as projecting next year's defense plans, but also those agencies that conduct the more general planning functions—the military services, the Office of the Secretary of Defense, other Administration officials, and the Congress.

2 There are a number of excellent studies which do address the more general issues of national defense in some detail. See, for example, Charles Hitch and Roland McKeans. The Economics of Defense in the Nuclear Age, op. cit.; and Alain C. Enthoven and K. Wayne Smith, How Much Is Enough? Shaping the Defense Program 1961-1969, Harper & Row, Publishers, New York, 1971. Others are listed in the bibliography.

3 Hitch and McKeans, op. cit., p. 3.
The problem of national security might in theory be regarded as one big economic problem. The nation has certain resources—now and prospectively in the future—which are conventionally classified by economists as various sorts of land, labor, and capital. These resources can be used to satisfy many objectives of the nation and its individual citizens—national security, a high standard of living, social security, a rapid rate of economic growth, and so on. These are, of course, competing objectives. In general, the more resources the nation devotes to national security, the less it will have for social security and vice versa. We could (as some economists have done) conceive of a "social welfare function" which we would attempt to maximize by an appropriate allocation of the nation's resources among the various activities satisfying these objectives.

Although this approach may be theoretically appealing and can provide valuable insights, it is at best impractical. Indeed, Hitch and McKeen go on to note:4

In fact, for reasons which will become familiar as we proceed but are in any event obvious, this kind of approach to the problem of national security is completely impractical and sterile. We have to break economic problems, like so many others, into manageable pieces before we can make a good beginning at finding solutions. And in fact, in the United States and all other countries, governments and departments of defense are organized to deal with appropriate parts of the grand problem at many different levels.

As a beginning let us consider economic problems at each of three rather gross levels. National security, from the point of view of an economist, may be said to depend on three things: (1) the quantity of national resources available, now and in the future; (2) the proportion of these resources allocated to national security purposes; and (3) efficiency with which the resources so allocated are used.

The basic issue, then, is not whether the broad problem of choosing the amount of defense is important—it clearly is important. Rather, the issue is that to make the problem of defense management analytically tractable, it must be disaggregated into smaller, manageable subproblems.

As a first step, the problem can be formulated as one of minimizing the cost of achieving a specified level of defense capability, or its economic dual, maximizing defense capability within a given cost constraint.5 Though this formulation may seem little different from the social welfare optimization point of view, it is analytically attractive because it enables us to sidestep the critical issue of "How much defense?" and instead focus on efficiency in achieving defense (or cost) objectives.6

These two aspects of the defense problem—output and cost—provide a conceptual basis for evaluating the effects of ending the draft. The key to making this

---

4 Ibid., pp. 34.

5 Although the amount and cost of defense will vary according to which of these two approaches is used, the so-called "first-order" or "marginal" conditions are identical under both approaches. That is, a necessary condition for the optimal allocation of resources under both approaches is that the ratio of the marginal product to the marginal cost for each input be equal to this ratio for all other inputs. For a discussion of both approaches, see, for example, David Gale, The Theory of Linear Economic Models, McGraw-Hill Book Company, New York, 1960.

6 That is, the social welfare maximization approach requires the explicit specification of a social welfare or utility function, thus necessitating specification of society's preferences with respect to the tradeoffs between the amount of defense and the cost of defense. By focusing instead on minimizing the cost of achieving a given amount of defense (or its economic dual), the analysis can be directed to the achievement of efficient resource allocation.
framework operational, though, rests in the ability to structure the problems and issues in meaningful, but manageable, pieces.

There is no unique way of formulating these specific subproblems, but the individual elements of defense, as well as the aggregate defense effort, can be viewed as an economic problem. That is, defense capability can be thought of as a function of the factors of production (or, equivalently, the inputs to the defense mission). Thus, efficient management of the defense effort—whether in whole or parts—depends on efficient use of defense resources vis-à-vis their contribution to defense capability (i.e., their productivity) and their costs.

Defense Organization and Capability

We can begin by examining, in a theoretical sense, the defense mission, keeping in mind the primary difficulty resulting from the lack of an obvious measure of military capability. Indeed, the conceptual definition of military capability will vary considerably, depending on political, military, and economic objectives. These variations give rise to such terms as offensive forces, self-defense forces, "first-strike" capability, "expeditionary" forces, etc.

To achieve its various objectives, the DoD is organized into the Office of the Secretary of Defense (OSD), the three military departments1 (Army, Navy, and Air Force), and a variety of specific defense agencies (such as the Defense Intelligence Agency and the Defense Nuclear Agency), as illustrated in Fig. 2-1. The OSD and the other defense agencies are generally concerned with broad DoD-level management and coordination for specific, but generally nonmilitary functions (in the narrow sense); the military departments, on the other hand, are responsible for specific mission requirements, as well as their own internal management.

Each military department can in turn be structured into its major programs and activities—such as strategic forces, general purpose forces, and support functions (e.g., training and medical). The Air Force, for example, consists of major "commands," including the Strategic Air Command, the Tactical Air Command, and the Military Airlift Command, in addition to such support commands as the Air Training Command. Organizationally, the Army’s ground forces are disaggregated (in descending order) into divisions (which are, in a sense, self-contained "armies"), brigades, regiments, battalions, and so forth. Each of these organizational entities produces its own "output," whether final or intermediate.2

The DoD thus has a multitude of objectives, programs, and functions—a fact that considerably complicates the definition and measurement of defense capability. The problem of measurement arises primarily, however, from the lack of a common denominator among the many outputs. Commercial firms, for instance,

---

1 Alternatively, defense can be viewed as an organizational or bureaucratic problem—that is, how can the defense effort be best organized to get the most out of a given amount of resources? While recognizing the importance of the organizational perspective, this report emphasizes the economic viewpoint.

2 Although formally a part of the Department of the Navy, the Marine Corps will be treated here as a fourth military service. There are, of course, other uniformed services: the Coast Guard, the National Oceanic and Atmospheric Administration, and the Public Health Service. Even though they may have mobilization roles during wartime, these other uniformed services have been excluded from the analysis, since they fall under the jurisdiction of other executive departments.

3 For example, an Army division can be thought of as producing "final" output, while the training command produces "intermediate" output in the form of trained personnel.
may typically produce many different products, but the dollar serves as the vehicle for determining the value of the aggregate output.

It is therefore crucially important to develop measures that give the policy planner better insights into the structure and allocation of defense resources. Though we may not have very precise measures of capability, we do have some understanding of the factors that determine overall defense capability, which include the number of men the country has under arms, the morale of its troops, the amount and quality of its weaponry and materiel, the bureaucratic structure of its defense establishment, and its military and political leadership.

In the absence of good output measures, defense strategists have been (and will be) forced to base their proxy measures of outputs on various input measures.\textsuperscript{10} Thus, it is common practice to compare the inputs to the defense mission, under the assumption that such comparisons will provide some understanding of comparative defense capabilities. Moreover, though all analysts recognize that intangibles such as troop morale are important inputs with a likewise important effect on output, proxies for defense output are generally based only on those inputs that can be readily quantified.\textsuperscript{11}

\textsuperscript{10} It is worth noting that the development of appropriate proxies for military capability has been one of the most widely researched topics in defense planning. The tools used in this process have been numerous and varied, including historical comparisons, econometric studies, and computer simulation models. The various types of simulation models that come out of this process, for example, enable the policy planner to construct proxy measures of output such as numbers of targets destroyed, rate of troop advance, and so forth. The point is that actual output is not observed except in time of war, and thus must be estimated.

\textsuperscript{11} Simulation models are, however, frequently structured so that the analyst or force planner can input some of the intangible factors through some sort of quality-adjustment parameter.
It is therefore not surprising to find such quantifiable factors as the number of army divisions, the number of ships, and the number of aircraft frequently used in defense comparisons. Among these, the number of men in uniform is perhaps used most often. The danger with using these input measures lies in using them too literally. For example, although the number of military personnel is a useful measure, a force of 2,000 men is not necessarily twice as capable as a force of 1,000, nor is it necessarily equal in capability to another force of 2,000.

Perhaps even more limiting than the general fixation on input measures as a proxy for defense output is the tendency of some analysts and planners to focus almost exclusively on only one or two measures, taken out of context. For example, Janowitz bases his contention that U.S. defense objectives will have to be substantially altered in the post-draft era largely on his assumption that the volunteer force will not be able to sustain force strengths of more than 2 million soldiers.\footnote{See Morris Janowitz, The U.S. Forces and the Zero Draft, Adelphi Paper 94, The International Institute for Strategic Studies, January 1973. Although fiscal 1978 uniformed personnel strengths are projected to be about 25 percent below the fiscal 1964 level, total personnel strengths (including military and civilian) are projected to be only 8 percent smaller, thus indicating the importance of looking beyond military personnel alone. (See Table 2-1.)}

In spite of their shortcomings, though, these quantifiable measures do provide a basis from which to begin. If the contribution of specific factors of production can be identified, then we can estimate the effects of alternative input mixes on overall defense capability—enabling us to approach the broad defense objectives outlined earlier.

**Inputs to the Defense Mission**

Economic theory provides the general analytic framework for analyzing the allocation of defense resources among specific inputs to the defense mission. To the extent that groups of specific inputs are relatively homogeneous in the conditions that determine their supply and demand, economic theory suggests that the production process can be examined in terms of these groups. Thus, the analysis of cost and productivity can be considerably simplified if suitable categories of inputs can be defined.

At the most aggregate level, defense output, or capability, is shown to be a function of the aggregate amount of resources devoted to the defense mission. Figure 2-2 shows, at a less aggregate level, that defense resources can be categorized according to three broad categories of inputs—capital, labor, and other.\footnote{"Other" in this instance includes land and such consumables as supplies, materials, etc. Thus, although these consumables might be thought of as capital, as they indeed are they are counted here as "operating expenses," since they are generally used within the reporting period. By way of contrast, "equipment" generally is usable over multiple reporting periods.} It will be shown later that the annual "costs" associated with "capital" and "labor" alone amount to more than 90 percent of the DoD annual operating budget.

This approach to structuring the problem of managing the nation's defense resources allows us to identify the appropriate responses to the removal of the draft. For example, the low wage paid to junior military personnel during the draft encouraged the military services to allocate disproportionately large amounts of their resources to manpower versus capital, to military personnel versus DoD civilians, and to junior versus senior military personnel. The removal of the draft...
has changed the allocation incentives and thus argues for a revision in traditional resource allocation patterns.

**SIZING THE DEFENSE EFFORT**

The conceptual framework detailed in Fig. 2-2 provides a useful starting point for investigating DoD resource utilization, and manpower resource utilization in particular. At the broadest level of aggregation, defense inputs can be grouped into two major categories—capital and labor—which provide the basis for the analysis. In this regard, the aggregate force strength estimates shown in Table 2-1 have several major implications, the most obvious of which is the sheer magnitude of the defense establishment. With its 3 to 4 million employees, depending on who is counted,¹⁴ and its approximately $400 billion worth of land and capital in fiscal 1976, the DoD is the single largest employer of resources in the nation.

Second, though it may be most common to focus on uniformed personnel as the measure of force strength, Table 2-1 shows the importance of other factors in terms of the gross numbers. To begin with, personnel makes up only a portion of total

¹⁴ Those directly hired by the DoD include uniformed personnel and direct-hire civilians. Additional DoD labor resources include indirect hires and contract hires. Indirect hires are those foreign nationals working in U.S. installations abroad who are formally employed by the host nation but whose costs are actually paid by the U.S. military through a reimbursement program. Not all foreign nationals are indirect hires; for example, of the 139,000 foreign nationals working for the DoD on December 31, 1974, 48,000 were direct hires and 91,000 were indirect hires.

Contract hires are those individuals who, though actually employed by civilian firms, perform contract services such as aircraft maintenance, janitorial services, and kitchen services for the military (contract hires do not include civilian workers who are engaged in the production of equipment and construction that are ultimately purchased by the DoD).
Table 2-1
Sizing the Military: Measures of Force Strengths

<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>Uniformed(^b) (Active Duty)</th>
<th>Direct-Hire(^b)</th>
<th>Indirect-Hire(^b)</th>
<th>Contract-Hire(^c)</th>
<th>Total</th>
<th>Capital Stock (billions of 1976 constant dollars)(^d)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1920</td>
<td>343</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>1930</td>
<td>256</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>1940</td>
<td>658</td>
<td>256</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>1945</td>
<td>12,123</td>
<td>2628</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>1950</td>
<td>1459</td>
<td>753</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>1953</td>
<td>3555</td>
<td>1332</td>
<td>434</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>1956</td>
<td>2806</td>
<td>1179</td>
<td>291</td>
<td>199</td>
<td>4475</td>
<td>306 100 406</td>
</tr>
<tr>
<td>1960</td>
<td>2476</td>
<td>1047</td>
<td>178</td>
<td>266</td>
<td>3967</td>
<td>283 112 395</td>
</tr>
<tr>
<td>1964</td>
<td>2687</td>
<td>1030</td>
<td>140</td>
<td>219</td>
<td>4076</td>
<td>286 118 404</td>
</tr>
<tr>
<td>1968</td>
<td>3548</td>
<td>1317</td>
<td>119</td>
<td>402</td>
<td>5386</td>
<td>309 114 423</td>
</tr>
<tr>
<td>1972</td>
<td>2323</td>
<td>1083</td>
<td>110</td>
<td>394</td>
<td>3910</td>
<td>300 111 411</td>
</tr>
<tr>
<td>1976</td>
<td>2087</td>
<td>1010</td>
<td>86</td>
<td>455</td>
<td>3638</td>
<td>268 109 377</td>
</tr>
<tr>
<td>1978(^e)</td>
<td>2090</td>
<td>994</td>
<td>87</td>
<td>536</td>
<td>3707</td>
<td>-</td>
</tr>
</tbody>
</table>

\(^a\) Dashes indicate data not available.
\(^c\) Source: Richard V.L. Cooper, Contract-Hire Personnel in the Department of Defense, The Rand Corporation, P-5864, Santa Monica, California, May 1975, column [7], Table 6.
\(^d\) Equipment includes "military equipment in use" and "supply system inventories; plant and land includes "military construction" and land (both "owned" and "used but not owned"). Source: Charles Robert Roll, Jr., Capital and Labor Shares in the Department of Defense, The Rand Corporation, forthcoming. (Roll's estimates are given in 1967 constant dollars; those reported here were converted to 1976 constant dollars by the BLS wholesale price index for "machinery and equipment.")


defense resources, as illustrated by the fact that the 3.2 million individuals working directly for the DoD (i.e., uniformed, direct-hire, and indirect-hire) in 1976 were complemented by a capital equipment stock worth more than $250 billion and another $100 billion or so of plant and land. In other words, for every full-time directly hired employee of the DoD, the military had almost $90,000 in capital equipment and $35,000 in plant and land in fiscal 1976.

Just as defense manpower represents only a portion of total defense resources, uniformed personnel make up only a portion of total defense manpower. For example, one-third of all full-time employees hired directly by the DoD are civilians, not counting the additional thousands who work indirectly for the military under the auspices of civilian contractors.\(^{15}\)

\(^{15}\) In addition to these personnel, the DoD unofficially employs an estimated 250,000 "non-appropriated fund" civilian personnel, such as employees of commissaries and Post Exchanges. Because such personnel are paid out of the funds generated in the Post Exchanges and so forth—i.e., not out of Congressionally appropriated funds—the exact numbers never enter the central management information systems, so there is no formal count. See Chap. 13.
It is extremely difficult to estimate the numbers of contract hires, as there are no formal procedures even for monitoring aggregate civilian contractor costs, much less for monitoring the numbers of contract hires. Yet, the fact that contract hires are used in a wide variety of defense activities—ranging from routine jobs such as kitchen duties to complex and key functions such as the maintenance of sophisticated aircraft and electronic systems—attests to their importance. Table 2-1 presents rough estimates of the numbers of contract hires used by the DoD since the mid-1950s and indicates that they are a key element in the defense effort. In fact, the estimates suggest that there may have been a large enough increase in their numbers to offset much of the reductions in uniformed personnel that have taken place relative to the pre-Vietnam period.

The larger point, of course, is that we cannot focus on military personnel alone, to the exclusion of the other inputs to the defense mission, if we are to understand the implications that the removal of the draft has had for the maintenance of a viable defense effort. The variety of resources shown all contribute to the defense mission and can, in many cases, be substituted for one another. Therefore, the key policy questions, as discussed in Chaps. 12 and 13, concern how cost and productivity considerations are taken into account in the allocation of total defense resources among these various input types.

Military Personnel Strengths

The gross force strength figures shown earlier are certainly not the only measures of defense resources. For example, by looking solely at gross manpower strengths, we are implicitly assuming that all members of the force are equally productive. Since this is far from the case, it is important to examine alternative measures of force strength. In particular, consider some alternative measures of labor input, such as those shown in Table 2-2.

The rationale for the development of input measures lies in the usefulness of these measures as factors of production in the defense process. Whereas measures such as total force strengths are interesting descriptors, it is equally, if not more important, to develop measures that reflect inputs usable in the generation of defense capability.

It is noteworthy that the military, unlike most civilian employers, maintains a large training establishment that includes a sizable number of students, instructors, and others. Although this represents an investment in future capability, in the form of human capital, it does not contribute to present military capability. As shown in Table 2-2, this training establishment consumes a significant share of uniformed personnel—historically, about 15 to 20 percent of all military personnel. This sug-

---

16 In fact, the DoD cannot require contractors to provide information regarding the numbers of personnel used in the performance of services provided to the DoD, except under "personal service" contracts, which make up only a small portion of all contracts.

17 See Richard V. L. Cooper, Contract-Hire Personnel in the Department of Defense. The Rand Corporation, P-5864, May 1977, for a description of the methodology used to estimate the numbers of contract hires. Although the estimates presented there are extremely approximate, they reflect the trends described in informal conversations with many defense officials and analysts—namely, that there has been a sizable increase in the numbers of such personnel since the pre-Vietnam period.

18 Recall that one of the objectives of this review of defense inputs is to determine their usefulness as proxy output measures. Thus, to the extent that inputs are not homogeneous it is necessary to reflect comparative contributions to defense capability.
Table 2-2

Measures of Military Manpower Strengths for Selected Years
(thousands)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>I. Active Duty Personnel</strong>&lt;sup&gt;a&lt;/sup&gt;</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A. Training Status</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Engaged in Training</td>
<td>2478</td>
<td>2687</td>
<td>3548</td>
<td>2323</td>
<td>2189</td>
</tr>
<tr>
<td>2. Not Engaged in Training</td>
<td>2113</td>
<td>2285</td>
<td>2881</td>
<td>1937</td>
<td>1809</td>
</tr>
<tr>
<td>B. Experience Mix</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Officers</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. Less than 4 years</td>
<td>317</td>
<td>338</td>
<td>416</td>
<td>336</td>
<td>302</td>
</tr>
<tr>
<td>b. 4 or more years</td>
<td>(90)</td>
<td>(95)</td>
<td>(165)</td>
<td>(109)</td>
<td>(84)</td>
</tr>
<tr>
<td>2. Enlisted</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. Less than 4 years</td>
<td>2149</td>
<td>2338</td>
<td>3120</td>
<td>1976</td>
<td>1849</td>
</tr>
<tr>
<td>b. 4 or more years</td>
<td>(1263)</td>
<td>(1374)</td>
<td>(2241)</td>
<td>(1198)</td>
<td>(1111)</td>
</tr>
<tr>
<td>3. Officer Candidates</td>
<td>11</td>
<td>12</td>
<td>11</td>
<td>12</td>
<td>11</td>
</tr>
<tr>
<td>II. Reserves&lt;sup&gt;b&lt;/sup&gt;</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A. On Active Duty</td>
<td>4567</td>
<td>2781</td>
<td>3126</td>
<td>3917</td>
<td>3233</td>
</tr>
<tr>
<td>220</td>
<td>230</td>
<td>350</td>
<td>206</td>
<td>168</td>
<td></td>
</tr>
<tr>
<td>B. Not on Active Duty</td>
<td>4147</td>
<td>2551</td>
<td>2865</td>
<td>3711</td>
<td>3065</td>
</tr>
<tr>
<td>1. Selected Reserve</td>
<td>997</td>
<td>953</td>
<td>922</td>
<td>925</td>
<td>925</td>
</tr>
<tr>
<td>2. Other</td>
<td>3150</td>
<td>1598</td>
<td>1923</td>
<td>2786</td>
<td>2140</td>
</tr>
</tbody>
</table>

<sup>a</sup>Includes reserve personnel on active duty. Source: Data were furnished by OASD(M&RA).

<sup>b</sup>Source: Department of Defense, Selected Manpower Statistics, op. cit.

suggests that an alternative measure of military labor input might be those personnel not engaged in training activity, as given in Table 2-2.<sup>19</sup>

From still another perspective, we might expect the relative contribution of any given individual to defense capability to be a function of his or her experience. As a result, defense capability is not a unique function of the total number of personnel, but instead is a function of individual productivities. Table 2-2 shows military personnel grouped into two broad experience categories, those in their first term of service and those beyond their first term (so-called careerists),<sup>20</sup> with the latter expected to be more productive because of their greater experience.

To illustrate the importance of the foregoing, suppose that careerists are, on the average, twice as productive as first-termers. Under this assumption, an enlisted force of 1,725,000 with only 50 percent first-termers would yield as much capability as the actual fiscal 1974 force of 1,850,000 (with its 60 percent first-termers). Thus, by relying on more experienced personnel, the DoD could reduce total force size by 125,000 while simultaneously maintaining capability. Whether or not such a force

<sup>19</sup>Furthermore, "prisoners, patients, and transients" could also be subtracted from total force strengths. The rationale for this exclusion would be to provide measures that describe the amount of labor input to the defense mission, not just the numbers of personnel employed by the DoD.

<sup>20</sup>Empirically, it is useful to categorize those with less than four years of completed military service as first-termers and those with four or more as careerists. See Chap. 13.
would be cost-effective depends on the relative costs of first-termers and careerists. Nevertheless, the basic point is that we must attempt to account for capability, not only gross force sizes.\(^{21}\)

The discussion to this point has concerned full-time employees of the DoD as represented by active duty military and full-time equivalent civilians. Reserve personnel represents another, potentially valuable resource. This raises the larger issue of the conceptual definition of defense output, since the reserves are a contingency force for mobilization.\(^{22}\) As shown in Table 2-2, the total number on the reserve rolls has varied considerably over the past 15 years, though the mainstay of the reserve forces, the selected reserves (those who train regularly), has remained roughly constant over this period.

THE DEFENSE MANPOWER SYSTEM

Analysis of the defense manpower system can be structured according to the general framework shown earlier in Fig. 2-2 for the defense establishment as a whole. Specifically, the defense manpower system can be examined according to groups of inputs, where the guideline for defining these groups is again the relative homogeneity of specific inputs with respect to the conditions that determine their supply and demand. When applied to the defense manpower system, this approach yields a structure along the lines shown in Fig. 2-3.

At the most aggregate level, manpower can be thought of in terms of its uniformed and civilian components, since these differ (perhaps considerably) in both supply and demand characteristics. Of course, each of these broad categories can be further disaggregated. For example, civilian personnel consists of persons employed by the DoD and contract hires—those employed by civilian contractors under service arrangements with the DoD (such as contracts with civilian firms for kitchen duties).

Those employed by the DoD can be further disaggregated into direct hires and indirect hires. Direct hires consist of two primary groups: general schedule (GS) employees and "other" (primarily wage board employees). General schedule employees are generally white collar professional, administrative, technical, and clerical workers paid according to the general schedule salary structure; wage board employees are blue collar workers, whose wage and specific job conditions are governed by local area wage boards.

The Military Personnel System

Figure 2-3 provides a basis for structuring the military personnel system. At the most aggregate level, military personnel can be classified into "regular" and "non-regular" status, where the latter includes reservists and others (such as inductees

---

21 The importance of this point will become clear in Chap. 13, where it is shown that annual savings of as much as $2 billion could be realized by shifting from the current 60/40 mix of first-termers and careerists to a 50/50 mix. The total number of men in uniform would be less than today's force, but the output or capability would be the same. If the focus remains almost solely on the number of men in uniform, opportunities for achieving efficiency gains may never be realized.

22 Defense capability has thus far been defined implicitly in terms of peacetime conditions. Consideration of the reserve forces explicitly raises the issue of wartime versus peacetime capability. For the most part, however, the remainder of this report will focus on peacetime capability.
during the presence of the draft). The reserves can be structured into those on active duty and those not on active duty.

Though the reserves represent a potentially important part of U.S. defense forces, the main emphasis in this report is upon active duty personnel. As shown, active duty personnel consist of regular military personnel, reservists on active duty, and others. Except for the tenure provisions, which do differ, regular and nonregular personnel can be grouped together.

Military personnel, whether regular or reserve, can be classified as either officers or enlisted members. For the most part, the officer corps has the primary management and leadership responsibility in the force; enlisted personnel tend to correspond to the blue collar work force in the civilian sector. Although these characterizations are not exact, since, for example, many in the enlisted force have "white collar" clerical jobs, they nevertheless describe the basic character of the two forces.

The military personnel system differs from its civilian counterpart in a number of respects. Perhaps the most obvious distinction is that the military maintains

---

an essentially closed personnel system, with little lateral entry. With few exceptions, entry into the military occurs only at the bottom. Thus, management and leadership are developed solely within the system—the military does not draw from outside its own ranks for its top management and leadership positions, whether officer or enlisted.

For purposes of management and compensation, the military is structured into ranks, or pay grades. The most obvious distinction is between officer and enlisted personnel. For enlisted personnel, there are nine pay grades, E-1 through E-9. The officer corps consists of two major components: warrant officers, (pay grades W-1 through W-4) and commissioned officers (pay grades O-1 through O-10). Warrant officers are primarily senior foremen or supervisors of the "blue collar" enlisted force, though the Services, especially the Army, have also used warrant officers as helicopter pilots. Commissioned officers generally occupy leadership, managerial, and professional positions.

The distribution of the force by Service and rank shown in Table 2-3 reveals several interesting comparisons. For example, the Air Force relies most heavily on officers, about 18 percent of its total military personnel, reflecting the fact that its primary mission, flying, is manned by officers. At the other end of the spectrum, the Marine Corps consists of only 9 percent officers. The Army is the only Service that relies to any degree on warrant officers, who account for about 2 percent of its total military personnel, as compared with 0.5 percent for the Navy and Marine Corps.

The closed nature of the military personnel system means that enlisted members enter as E-1s and that officers generally enter as O-1s. In addition, promotions occur sequentially and within a fairly rigid time schedule. For example, an individual must be promoted to O-2 before he or she can be promoted to O-3. Similarly, eligibility for promotion to a higher grade is determined by the length of time the individual has served in his or her present pay grade. The practical result of this system is that the military grade structure—and, hence, the management structure—is largely determined by seniority.

The military personnel management system differs in one further and important respect from the civilian sector. When an individual joins the military, he or she signs a contract which obligates him or her to a specified length of service, generally between two and six years. Thus, whereas individuals employed in the civilian sector are generally free to leave at any time, military personnel are obligated to fulfill the terms of their contract. (It is this period of commitment which makes it feasible for the military to invest so heavily in the training of its personnel.)

---

24 There are some exceptions to the rule, such as medical doctors, dentists, lawyers, and band members. Though not a major source of procurement, lateral entry is used to acquire personnel in these professions, since these individuals may be given partial or full credit for their civilian work experience.

25 Part of this is attributable to the fact that the Navy provides various support activities (e.g., medical and dental services) to the Marine Corps.

26 The Air Force at one time had a significant warrant officer program for its flying personnel.

27 Warrant officers are generally promoted from within the enlisted ranks and thus do not represent part of the standard officer career.

28 For example, under the proposed Defense Officer Personnel Management Act (DOPMA), the "phase points"—i.e., modal promotion years—are 2 years of service (YOS) to O-2, 5 YOS to O-3, 11 YOS to O-4, 17 YOS to O-5, and 23 YOS to O-6. Thus, senior management positions (O-6 and above) will be filled primarily by individuals with 23 or more years of service, though there are a certain number who will be promoted ahead of schedule.
Table 2-3
Distribution of Military Personnel by Service and Rank:
31 December 1974
(thousands)

<table>
<thead>
<tr>
<th>Rank</th>
<th>Army</th>
<th>Navy</th>
<th>USMC</th>
<th>USAF</th>
<th>DoD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Officers</td>
<td>89.8</td>
<td>62.3</td>
<td>17.0</td>
<td>108.8</td>
<td>277.9</td>
</tr>
<tr>
<td>Warrant Officers</td>
<td>13.4</td>
<td>3.6</td>
<td>1.1</td>
<td>nil</td>
<td>18.1</td>
</tr>
<tr>
<td>Enlisted</td>
<td>665.5</td>
<td>479.2</td>
<td>174.1</td>
<td>512.3</td>
<td>1831.1</td>
</tr>
<tr>
<td>Officer Candidates</td>
<td>4.0</td>
<td>4.3</td>
<td>-</td>
<td>4.2</td>
<td>12.5</td>
</tr>
<tr>
<td>Total b</td>
<td>772.8</td>
<td>549.4</td>
<td>192.2</td>
<td>625.3</td>
<td>2139.7</td>
</tr>
</tbody>
</table>

Source: Selected Manpower Statistics, op. cit.

a "Officer candidates" include cadets and midshipmen at the Service academies.

b Numbers may not add to the stated totals due to rounding.

Like the management system, the military compensation system differs substantially from those generally found in the civilian sector. This is not surprising, since the compensation system is an integral part of the basic management structure. Pay is primarily a function of pay grade and length of service and consists of several components: basic military pay, cash allowances, a tax advantage, and numerous special pays.

Basic military pay is solely a function of pay grade and length of service and is structured so that seniority is heavily rewarded. In addition, military personnel receive "free" room and board as part of their compensation package or, in lieu of these, payments in kind, i.e., cash allowances for housing and subsistence (basic allowance for quarters, BAQ, and basic allowance for subsistence, BAS, respectively). The amount of these cash allowances is a function of pay grade and number of dependents.

Because they are not treated as taxable income, cash allowances give rise to another element of the compensation package, the "tax advantage." That is, since civilian pay tends to be fully taxable, military pay is put on a comparable basis by computing what total military pay would be if it were all regarded as taxable income. The amount of this tax advantage is a function of the amount of cash allowances and the individual's marginal tax rate. Thus, those individuals who are unmarried or those with outside sources of income, such as working spouses or investment income, receive a larger tax advantage.

These three elements—basic pay, cash allowances (or their in-kind equivalent), and the tax advantage—make up what is known as "regular military compensation," or RMC. In addition, there are a number of other pays such as bonuses and monthly increments which go to individuals serving in certain occupations (flight

---

29 Comparisons between military and civilian pay are generally based on RMC, in recognition of the fact that military pay has these several components.
pay, jump pay, etc.) or which are designed to induce certain behavior (e.g., reenlistment bonuses). Another feature of the compensation and management system which distinguishes the military from most of the civilian sector is the retirement system. In the military, there is no vesting of retirement benefits prior to the completion of 20 years. Individuals separating with 20 or more years are eligible for retirement benefits which are collected immediately upon separation.

The military also differs from the civilian sector in a number of other, less tangible respects, such as the unique camaraderie that develops among the members of the military. These factors have been the subject of extensive discussion and debate by the academic and military communities, and though they are certainly important, they will not be treated here.

At the same time, the military is similar to the civilian sector in many broad respects. Consider, for example, the occupational mix of military personnel. As shown in Table 2-4, the military encompasses a wide range of jobs, from combat to supply to sophisticated electronics. Thus, although the military is often viewed in terms of the combat soldier, those in the combat arms make up only about 10 percent of all enlisted personnel. In fact, almost 20 percent of all enlisted personnel are in clerical occupations.30

Table 2-4
Distribution of the Force by Occupational Area:
Fiscal 1974a

<table>
<thead>
<tr>
<th>Officer</th>
<th>Percent</th>
<th>Enlisted</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Executives</td>
<td>1.6</td>
<td>Combat Arms</td>
<td>12.3</td>
</tr>
<tr>
<td>Tactical Operations</td>
<td>40.8</td>
<td>Electronics</td>
<td>10.4</td>
</tr>
<tr>
<td>Intelligence</td>
<td>3.2</td>
<td>Commm/Intelligence</td>
<td>6.7</td>
</tr>
<tr>
<td>Engineer/Maintenance</td>
<td>15.6</td>
<td>Other Specialists</td>
<td>1.9</td>
</tr>
<tr>
<td>Scientists/Professionals</td>
<td>6.6</td>
<td>Elec/Mechanics</td>
<td>21.6</td>
</tr>
<tr>
<td>Medical/Dental</td>
<td>9.4</td>
<td>Medical/Dental</td>
<td>4.6</td>
</tr>
<tr>
<td>Administrators</td>
<td>12.8</td>
<td>Admin/Clerks</td>
<td>18.4</td>
</tr>
<tr>
<td>Supply</td>
<td>6.1</td>
<td>Service Supply</td>
<td>11.0</td>
</tr>
<tr>
<td>Otherb</td>
<td>3.8</td>
<td>Craftsmen</td>
<td>4.6</td>
</tr>
</tbody>
</table>

30Based on "primary" occupation designators.

aBased on "primary" occupation designators.

bTraining, Miscellaneous, and Other.

Source: Data were furnished by OASD(MRA).

This view of the military occupational mix further serves to illustrate the importance of looking beyond the numbers of uniformed personnel as a measure of force strength. That is, a corollary to the fact that only 10 percent of enlisted personnel are in "combat" assignments is the fact that 90 percent are in noncombat assignments. Because it is a matter of policy regarding how many of the particular

30 For a discussion of the occupational job structure, how it has changed over time, and how it compares with its civilian counterpart, see Harold Wool, The Military Specialist Skilled Manpower for the Armed Services, Johns Hopkins Press, Baltimore, 1968.
jobs in this "other" 90 percent are to be staffed—with military, direct-hire civilian, or even contract-hire civilian personnel—uniformed personnel strengths alone are not an accurate reflection of defense capability.

It is important to understand the similarities and dissimilarities between the military and civilian personnel systems, for the military's ability to successfully compete in the volunteer environment will depend critically on how well it adjusts to the changes brought about by the termination of the draft.

**Stocks and Flows**

To this point, the discussion of defense force structure in general and the military personnel system in particular has focused on the physical inputs to the defense mission. As such, the emphasis has been upon input stocks—that is, the amount of resources employed in the production of defense capability. An equally important aspect of the military manpower problem is the flow dimension—that is, the number of new entrants required to sustain force strengths. While the flow dimension is important to all employment sectors in the economy, it assumes a special importance for the military. Because there is little or no lateral entry into the military occupational structure, the Services recruit largely unskilled or semi-skilled youth who acquire their skills while in the military through training and on-the-job experience. The practical implication of this is that the military recruits from a very limited age group. That is, most new officers are drawn from the current year's crop of male college graduates; most new enlisted members are drawn from the 17 to 21 year old male age cohort. Thus, the military's recruiting fortunes under both draft and volunteer procurement policies are very much tied to variations in age-specific population groups, which usually show much larger size variations than the population as a whole.

In a sense, then, the earlier discussion about stocks—i.e., force sizes—underestimates the overall magnitude of the manpower issue. Sizable though the total DoD employment is (some 3 to 4 million personnel out of a total labor force of about 90 million), the flow dimension is even more impressive. For example, even though the DoD civilian work force is sizable and has high annual accession requirements, it can draw from a large pool of potential applicants, as can the civilian work force in general. Military personnel, in contrast, are drawn from only a narrow age spectrum. To staff the enlisted ranks, the military services must attract approximately one out of every three or four "qualified and available" members of this age cohort. Thus, the ability to attract the requisite number and quality of personnel from this limited age group represents one of the key problems for the volunteer force.

Before 1973, the military services were able to rely on the draft to fill their ranks, not only by way of the induction process itself, but also by encouraging "draft-motivated" enlistments. In fact, inductions have accounted for only about 30

---

31 To illustrate, 95 percent of all enlisted accessions fell in the 17 to 21 year old age group during the first three years of the volunteer force. Even under the draft, about 90 percent of all enlisted accessions fell into this age cohort.

32 The term "qualified and available," which was first introduced by Binkin and Johnston, refers to those qualified for military service (i.e., excluding those not mentally or medically fit) and likely to be available for military service (e.g., excluding full-time college students, those already in the military, and so forth). See Martin Binkin and John D. Johnston, All-Volunteer Armed Forces: Progress, Problems, and Prospects, op. cit.
percent of all enlisted manpower procurement since the Korean War, as shown in Table 2.5. Voluntary enlistments accounted for the remaining 70 percent—split about evenly between “true volunteer” and “draft-motivated” enlistments. The other side of the coin is, of course, that the military services were able to attract significant numbers of true volunteers, even during the height of the draft. Thus, great though the recruiting problem may seem to be, past history has shown that large numbers of young men are willing to join the military for reasons other than the draft, reasons that are examined in some detail later in this report.

Table 2.5
Military Manpower Procurement
(thousands)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Officer</td>
<td>48</td>
<td>31</td>
<td>41</td>
<td>70</td>
<td>83</td>
<td>36</td>
<td>28</td>
</tr>
<tr>
<td>Enlisted</td>
<td>508</td>
<td>414</td>
<td>498</td>
<td>863</td>
<td>631</td>
<td>424</td>
<td>391</td>
</tr>
<tr>
<td>Inductions</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Enlistments: Total</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(True Volunteers)</td>
<td>137</td>
<td>90</td>
<td>151</td>
<td>340</td>
<td>207</td>
<td>27</td>
<td>nil</td>
</tr>
<tr>
<td>(Draft-Motivated)</td>
<td>(152)</td>
<td>(158)</td>
<td>(183)</td>
<td>(223)</td>
<td>(210)</td>
<td>(330)</td>
<td>(391)</td>
</tr>
<tr>
<td></td>
<td>(219)</td>
<td>(166)</td>
<td>(162)</td>
<td>(290)</td>
<td>(214)</td>
<td>(67)</td>
<td>(0)</td>
</tr>
</tbody>
</table>

aSource: Data furnished by OASD (MSRA).
bSource: Selected Manpower Statistics.
cTrue volunteer enlistments for FY56 through FY70 estimated based on (1) true volunteer enlistment rates per 100 17 to 20 year-old males and (2) the numbers of 17 to 20 year-old males. True volunteer enlistment rates are in turn based on the assumption that 60 percent of FY1964 were true volunteers (from the Gates Report); true volunteer rates for other years were adjusted according to changes in the ratio of military to civilian pay, assuming a pay elasticity of 1.25 (see Chapter 9). True volunteer enlistments for FY72 and FY74 provided by MARDAC.
dData for 1957 (1956 data unavailable).

THE COST OF DEFENSE MANPOWER

The focus to this point has been upon the physical inputs to the defense mission, but the costs of these inputs are equally important in overall defense planning. Indeed, it can be argued that cost, more than any other single factor, is responsible for the increased attention afforded to defense manpower in the post-draft environment. Analysis of manpower costs and their trends over time thus serves to highlight some of the crucial issues for defense policymakers.

The Measurement of Cost

Though a seemingly obvious concept, cost in fact has many different interpretations, as illustrated by the fact that Webster’s Encyclopedic Dictionary defines cost
as the "value" of the item in question, while Webster's New Collegiate Dictionary defines cost as the "amount . . . paid or charged for something." Depending on who is paying, these definitions can mean very different things. Nowhere is this more apparent than in the case of military manpower under a draft, since the government can by fiat pay less for manpower than its "value."

This gives rise to two different measures of cost, depending on who is viewed as paying. If the government is viewed as paying, the cost of defense manpower is measured by budget expenditures, since this is the amount paid out of the treasury. When the government can pay less than the value of something, as is the case for manpower during periods of conscription, the cost to the government does not necessarily reflect the cost to society. That is, when cost is viewed more broadly in terms of what society pays for something, the appropriate measure is what society gives up (i.e., pays) for the item in question. In the case of manpower, society gives up productive output from the civilian sector when it employs individuals in the military. The value of the goods and services forgone—i.e., the opportunity cost—is therefore a more appropriate measure of the cost to society. Thus, the two dictionary definitions of cost are equivalent when society is viewed as paying the cost of manpower.

Because the measurement of economic cost of manpower under the draft depends on concepts that have not yet been developed, analysis of these costs is postponed to Chap. 5, where a more thorough discussion of the economics of conscription is presented. The remaining discussion in this chapter will focus on the budget costs of manpower, which are important if for no other reason than that they measure what the taxpaying public pays to maintain a defense labor force.

**Manpower Budget Expenditures**

Analysis of budget expenditures for defense manpower can also be structured along the labor input categories developed earlier in this chapter. The results of this approach, given in Table 2-6, show that manpower costs have risen dramatically over the past 20 years, both in absolute terms and as a proportion of the defense budget. Between 1956 and 1976, for example, these costs have more than tripled, and since 1970, manpower costs have consumed more than 60 percent of the defense budget. Indeed, between 1964 and 1974, the manpower share of the defense budget increased from 52 percent to 70 percent. Even if the difficult-to-measure costs of contract-hire personnel are excluded, the increase in manpower costs is still impressive: from 49 percent of the defense budget in 1964 to 61 percent in 1974.

Although the share of the DoD budget devoted to manpower has fallen since fiscal 1974, the fiscal 1978 percentage is still substantially above the percentages experienced during the 1950s and 1960s. Moreover, the fall in the percentage of the defense budget devoted to manpower since fiscal 1974 has not been the result of falling manpower costs, though limitations on military and civilian personnel pay increases during fiscal 1975 and fiscal 1976 helped to hold down the amount of increase in manpower costs. Rather, the decrease in the manpower percentage is attributable to substantial increases in other elements of the defense budget.

In addition to the magnitude of manpower costs, the composition of these budget costs has also changed considerably over the past 20 years. While the proportions of total manpower costs associated with the military and civilian com-
Table 2-6
Manpower Budget Expenditures\(^a\)
($ billions)

<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>Military Personnel</th>
<th>Civilian</th>
<th>Personnel Support</th>
<th>Manpower Total</th>
<th>Defense Total</th>
<th>Percent Manpower</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Active Duty</td>
<td>Reserve</td>
<td>Retired</td>
<td>Family Housing</td>
<td>Direct Hire(^c)</td>
<td>Indirect Hire(^d)</td>
</tr>
<tr>
<td>1956</td>
<td>10.9</td>
<td>0.2</td>
<td>0.5</td>
<td>nil</td>
<td>5.1</td>
<td>0.2</td>
</tr>
<tr>
<td>1960</td>
<td>11.0</td>
<td>0.7</td>
<td>0.7</td>
<td>0.2</td>
<td>6.1</td>
<td>0.3</td>
</tr>
<tr>
<td>1964</td>
<td>12.3</td>
<td>0.7</td>
<td>1.2</td>
<td>0.6</td>
<td>7.3</td>
<td>0.3</td>
</tr>
<tr>
<td>1968</td>
<td>19.0</td>
<td>0.9</td>
<td>2.1</td>
<td>0.6</td>
<td>10.3</td>
<td>0.3</td>
</tr>
<tr>
<td>1970</td>
<td>22.0</td>
<td>1.1</td>
<td>2.8</td>
<td>0.6</td>
<td>11.9</td>
<td>0.4</td>
</tr>
<tr>
<td>1972</td>
<td>22.0</td>
<td>1.1</td>
<td>3.9</td>
<td>0.7</td>
<td>12.8</td>
<td>0.5</td>
</tr>
<tr>
<td>1974</td>
<td>22.2</td>
<td>1.6</td>
<td>5.1</td>
<td>0.9</td>
<td>13.4</td>
<td>0.7</td>
</tr>
<tr>
<td>1976</td>
<td>23.3</td>
<td>1.8</td>
<td>7.3</td>
<td>1.0</td>
<td>15.5</td>
<td>1.1</td>
</tr>
<tr>
<td>1978(^e)</td>
<td>25.1</td>
<td>2.0</td>
<td>9.0</td>
<td>1.5</td>
<td>17.3</td>
<td>1.3</td>
</tr>
</tbody>
</table>

\(^a\)Source: *Budget of the U.S. Government* (except as noted).

\(^b\)Prior to the establishment of the separate family housing budget account, costs are those reported under the Capehart Act and Wurth Act housing programs as applicable to military personnel and as reported in the *Budget*.

\(^c\)Source: Office of the Assistant Secretary of Defense (Manpower and Reserve Affairs).

\(^d\)Source: Office of the Assistant Secretary of the Army (Manpower and Reserve Affairs).


\(^f\)Includes costs of individual training, medical support, recruiting and examining, overseas dependent education, half of base operating support, and a miscellaneous category (all net of direct military and civilian personnel costs). Source: *Annual Defense Department Report: FY1978*.

\(^g\)Estimates based on the FY1978 budget request, as reported in the *Budget of the U.S. Government, 1978*. 

---

*Note: The table represents a portion of the data, and the full context and sources should be referenced as noted in the notes.*
ponents have remained roughly constant at 70 percent military and 30 percent civilian (excluding contract-hire and support costs), the makeup of military personnel costs has shifted substantially. For example, the direct costs associated with active duty military personnel decreased from nearly two-thirds of the total manpower costs in fiscal 1956 to less than half by fiscal 1976. Budget expenditures for military retirement, on the other hand, increased from less than $500 million in fiscal 1956 to about $9.1 billion in fiscal 1978. Stated differently, military retirement costs made up less than 3 percent of manpower costs in 1956, as compared to more than 16 percent in fiscal 1978. Thus, whereas active duty personnel costs have doubled in the past 20 years, the "peripheral" elements, including reserve personnel, retired personnel, and family housing costs, were nearly 15 times as large in fiscal 1976 as they were in fiscal 1956.

Limitations of the Budget Accounts

Budget costs refer to those expenditures—cash or in kind—that are incurred on behalf of the factors of production. In defense manpower, budget outlays measure what the government actually pays for the labor services rendered to the DoD.

Within this broad definition, two specific issues require some elaboration: the method of accounting and the structure of the budget accounts. Both issues affect not only the gross magnitudes of manpower costs but also, in some instances, the inferences that can be drawn from these cost figures.

Method of Accounting. Budgets can be structured according to cash or accrual methods of accounting. Under cash accounting procedures, costs (and receipts) are recorded in the budget accounts when payments to the factors of production actually take place; under accrual accounting procedures, costs are recorded in the budget accounts according to when the liabilities for these costs are incurred.

In the case of manpower costs, this means that cash accounting methods record manpower costs when individuals are actually paid, irrespective of when the labor services were rendered. Accrual accounting methods record these costs when the labor services are rendered, which need not coincide with the time of payment.

The DoD, like most of the Federal Government, operates mainly on a cash basis.33 Thus, the defense budget reports costs when they are paid rather than when the liabilities for them are incurred.34 For much of the defense manpower budget, the distinction between cash and accrual accounting methods is relatively unimportant, since the costs are paid in the same budget period in which the liabilities are incurred.35

The distinction becomes quite important, however, for certain manpower and manpower-related costs, most notably military retirement costs and certain veterans costs. For these items, the current manpower budget does not measure the costs

33 It is interesting to note that Public Law 84-863, with various supplementary Treasury regulations, requires all government agencies to prepare businesslike, accrual-basis financial reports. Although this law was enacted in 1956, however, it remains only partially implemented more than 20 years later.

34 Actually, the defense budget is a mixture of cash and accrual accounting methods, though it is predominantly on a cash basis. For example, the budget costs for DoD civilian employees include the 7 percent retirement contribution for participating employees. Though this 7 percent is not sufficient to fund the government's future retirement liability, it nevertheless represents at least partial accrual accounting.

35 By way of contrast, this distinction is very important for many other parts of the defense budget, particularly the Procurement budget.
of maintaining the current force, but instead reflects the costs of past manpower and personnel policies.

As noted earlier, budget costs are an important input to public policy decisions because they measure what the taxpaying public must pay. Taxpayers are likely to be relatively, if not entirely, indifferent to whether their taxes are paying for current or past policies. However, if budget costs are to be used as a tool for examining the implications of alternative policy options, it is important to distinguish between those associated with current policy and those associated with past policy.

Military retirement costs are a good example, since military retirement is such a large budget item. Because retirement pay is paid for out of the current budget, the policy planner has little or no flexibility to reduce these outlays, since they are the result of past promises and policies. As a result, there is little incentive to institute changes which, at best, could only realize cost savings in the future. Conversely, if military retirement was funded on an accrual basis, current budget "costs" would relate to the current force. If the government had to make provisions today for tomorrow's retirement benefits, there would be a much stronger incentive to develop a cost-effective retirement system.

The implications of the foregoing for retirement costs can be seen in Table 2-7, where current budget outlays are compared with estimates of what annual retire-

<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>Budget Outlays (1)</th>
<th>Annual Accrued Liability (2)</th>
<th>&quot;Unfunded&quot; Liability (3)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1956</td>
<td>0.5</td>
<td>2.4</td>
<td>1.9</td>
</tr>
<tr>
<td>1964</td>
<td>1.2</td>
<td>3.1</td>
<td>1.9</td>
</tr>
<tr>
<td>1968</td>
<td>2.1</td>
<td>3.9</td>
<td>1.8</td>
</tr>
<tr>
<td>1972</td>
<td>3.9</td>
<td>4.6</td>
<td>0.7</td>
</tr>
<tr>
<td>1974</td>
<td>5.1</td>
<td>4.7</td>
<td>-0.4</td>
</tr>
<tr>
<td>1976</td>
<td>7.3</td>
<td>5.4</td>
<td>-1.9</td>
</tr>
</tbody>
</table>

\(^{a}\)See text.

\(^{b}\)Column (3) = Column (2) less Column (1).

ment costs would have been if they were funded on an accrual basis.\(^{28}\) For example, the accrued retirement liability was almost five times larger than actual retirement budget outlays during fiscal 1956, basically due to the relatively small force sizes.

\(^ {28}\) The annual implicit contribution can be estimated as a percentage of total basic military pay, where the percentage is in turn a function of the length-of-service distribution of the force and expected future retention behavior. Based on the methodology developed previously by the author and on historical force structure profiles and actual pay rates, the total amount of basic pay and the percentage
maintained before World War II and the Korean War. At the same time, the military was accruing a substantial future liability for those in the active force at that time—hence, the difference between the $2.4 billion in accrued retirement obligations and the actual outlay of less than $500 million for fiscal 1956, which left a net "unfunded" liability of some $1.9 billion.\textsuperscript{37} As a result, budget outlays for military retirement understated considerably the magnitude of the "true" cost of military retirement during the 1950s and 1960s.

By the mid-1970s the picture had turned around, with budget outlays exceeding the accrued liability. This is because the smaller forces of the 1970s were incurring smaller retirement liabilities than did the larger forces of the 1950s and 1960s.\textsuperscript{38,39} As a consequence, the growth in current retirement outlays overstates the growth of "true" retirement costs.

**Structure of the Budget Accounts.** The second major conceptual issue concerns the extent to which the budget accounts corresponding to defense manpower accurately reflect defense manpower costs. For instance, due to the peculiarities in the budget structure, there are certain defense or manpower-related items that are not included in the defense or manpower budgets.

The underlying analytical problem is that the budget accounts are not structured according to the specific factors of production, as in the schematic shown in Fig. 2-2. Instead, the defense budget is a mixture of budget items, some organized according to resource type and some organized according to defense function. The Military Personnel account is an example of the former, since it records the budget costs associated with a specific factor of production, regardless of its defense function. The Operations and Maintenance account, on the other hand, records some of the costs associated with the defense function of "operations and maintenance" and therefore includes a vast array of specific resource inputs—civilian personnel, contractor services, supplies and materials, utilities, and so on.

With this method of structuring the budget accounts, it is sometimes difficult to identify the costs of specific factors of production. For example, the costs and usage of contract hires are buried in the Operations and Maintenance accounts along with numerous other expenditures. As a result, accurate estimates of con-

\textsuperscript{37} Military retirement is entirely "unfunded." so by "net unfunded liability" we mean the difference between current budget outlays and the currently accrued liability.

\textsuperscript{38} Actually, retention is also a key factor, since today's forces could be smaller than yesterday's, but more of those in today's forces could be accruing retirement liabilities because of higher expected retention rates. The estimates shown in Table 2-7 attempt to account for the changes in retention rates caused by different numbers of draftees in the force (draftees generally had a very low probability of remaining until retirement).

\textsuperscript{39} There is also a more subtle factor at work, one that concerns the timing of payments for retirement. If payments are made during an individual's career (i.e., contributed to a retirement fund), less will have to be contributed than if payments are not made until the individual is on the retired rolls, simply because payments made during the time in service earn interest. Therefore, even in the steady state, where force sizes (both active and retired) are constant, the accrual retirement method results in smaller annual expenditures than the current budget outlay approach since, under the accrual method, payments are made during the individual's career (and, hence, are earning interest). The "cost" in both cases is the same, however. The difference merely reflects the time preference for money.
tract-hire costs cannot be obtained, thus considerably complicating the problem of determining the possible efficiency gains of different resource allocation schemes.

Another general problem with the structure of the budget accounts concerns those manpower-related "costs" that are not included in the defense budget. The three major items of this type, as shown in Table 2-8, are the so-called tax advantage, the unfunded civilian personnel retirement liability, and the GI Bill.

Table 2-8
Manpower Budget Costs Not in the DoD Budgeta
($ billions)

<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>Tax Advantage</th>
<th>GI Bill</th>
<th>&quot;Unfunded&quot; Civilian Retirement</th>
<th>Net &quot;Unfunded&quot; Military Retirementb</th>
</tr>
</thead>
<tbody>
<tr>
<td>1956</td>
<td>0.4</td>
<td>0.8</td>
<td>0.6</td>
<td>1.9</td>
</tr>
<tr>
<td>1964</td>
<td>0.9</td>
<td>n11</td>
<td>0.9</td>
<td>1.9</td>
</tr>
<tr>
<td>1968</td>
<td>1.3</td>
<td>0.5</td>
<td>1.3</td>
<td>1.8</td>
</tr>
<tr>
<td>1972</td>
<td>1.1</td>
<td>1.9</td>
<td>1.6</td>
<td>0.7</td>
</tr>
<tr>
<td>1974</td>
<td>1.1</td>
<td>3.1</td>
<td>1.7</td>
<td>-0.4</td>
</tr>
<tr>
<td>1976</td>
<td>1.3</td>
<td>5.7</td>
<td>1.9</td>
<td>-1.9</td>
</tr>
</tbody>
</table>

aSee text.
bFrom Table 2-6.

Because the so-called tax advantage represents a tax not collected rather than a budget outlay, it does not appear in the defense budget.40 In essence, this means that the Treasury Department is subsidizing the DoD by an amount equal to the aggregate tax advantage. This implicit subsidy has grown somewhat faster over

40The tax advantage (TA) equals the difference between (1) the amount of taxable income in the form of allowances (TI) the individual would have to earn in order to have the same after-tax income as provided by nontaxable allowances and (2) the amount of the allowances (A):

\[ TA = TI - A. \]

The tax advantage therefore puts military income on the same (taxable) basis as income earned by nonmilitary wage earners in society.

Because the tax advantage does not enter the budget accounts but instead represents an implicit subsidy from the Treasury Department, there are no official cost figures for it, so it must therefore be estimated. Assuming that the marginal tax rate is r, we have

\[ A = (1 - r)TI, \]

so that

\[ TA = \frac{r}{1 - r} A. \]

Given r and A, we can estimate the tax advantage TA. Based on the distribution of personnel by pay grade, years of service, and family size, estimates of the tax advantage were constructed for each individual in the force on the basis of past Federal tax rate schedules by the formula above. The aggregate tax advantage was then estimated by simply summing over the total force.
time than have total active duty personnel costs, since raises in military pay have moved individuals into higher tax brackets, thus increasing the "value" of nontaxable allowances.

In the case of the second major item, the "unfunded" civilian personnel retirement liability, the Civil Service maintains an actuarially based retirement system. However, the assumptions used to determine the annual contributions to fund future Civil Service pensions seriously underestimate what would be necessary to make the fund "actuarially sound"—hence, the unfunded liability. As with military retirement, these are costs that are incurred on behalf of the current force. Since this "cost" is estimated to be about 12.5 percent of annual reported civilian personnel costs, the total had grown to about $1.6 billion by fiscal 1976.

The last major item includes the costs for veterans' readjustment benefits for education and training—the GI Bill. Although these costs fall under the budget of the Veterans Administration, they are manpower-related. Largely as a result of

Like the military retirement system, the Civil Service Retirement System can be viewed on an actuarial basis. Because the 14 percent retirement contribution for each employee—7 percent each by the employee and the employing agency—is not sufficient to fund the system, an unfunded liability is generated each year. Since the Federal Government is obligated to pay future retirement benefits, whether or not there are sufficient funds in the retirement account, this annual increment to the unfunded liability is viewed as a cost to the Federal Government, even though it does not appear in the defense budget.

By the Civil Service's own estimates, the Civil Service Retirement System had a $156 billion unfunded liability as of 30 June 1972, assuming a modest 4 percent inflation. See the Fifty-Second Annual Report of the Civil Service Retirement System.

The exact magnitude of the unfunded liability is open to some question. In general, it can be shown that the percentage of civilian salaries that would have to be set aside in order to maintain an actuarially sound retirement system is a function of age at entry, career length, promotion patterns, and retention behavior for the civilian work force in total, as well as a number of economic factors (see Cooper, "Imputing the Economic Cost ...", op. cit., App. C). Lacking good estimates of these key parameters, it has instead been necessary to approximate the percentage "contribution" that would be required.

The Office of Management and Budget (OMB), for example, estimated that the forcewide percentage contribution was 24.7 percent of civilian personnel salaries (see OMB circular A-76). Bowing to pressure from Federal employees (since the "full" cost of Federal employees is supposed to be used to determine whether specific functions should be performed in-house or contracted out), OMB acknowledged the "softness" of the 24.7 percent and agreed to roll it back to 14.7 percent (which was determined by dividing current outlays for Civil Service retirees by the current Civil Service salary outlays—an obviously inappropriate procedure), pending review of the actuarial assumptions used to calculate the implicit retirement contribution. Conversations with OMB officials and Civil Service officials, as well as independent calculations by the author, suggest that the appropriate number is between 20 and 30 percent.

Assuming that the implicit contribution required to fund Civil Service retirement is 25 percent of the total Civil Service wages and salaries, the percentage of the total Civil Service wage bill (which includes salaries and wages, health insurance payments, and the DoD's 7 percent contribution) that would be required to fund Civil Service retirement equals 14.2 percent (i.e., Civil Service salaries equal 91.3 percent of the Civil Service payroll, so that 0.25 × 0.913 = 0.142). Thus, the 12.5 percent implicit contribution shown in Table 2.7 is probably not unreasonable, though the entire issue of Civil Service retirement clearly deserves more careful attention.

Recognizing this, President Gerald Ford requested that the Congress terminate the GI Bill effective 31 December 1975. The DoD argued against the termination of the program on the grounds that the GI Bill was an incentive for potential recruits to join the military. The President countered that if the GI Bill was such an important incentive, the program should be funded by the DoD. The result of this was the passage of Public Law 94-502, which calls for (1) a cost-sharing arrangement between the individual and the government for post-service education and training benefits (for every dollar the individual pays, the government will contribute two), and (2) the DoD to bear the costs of the government's contributions.

There is some question about the appropriate agency to fund post-service education and training, however. It can be argued that during the draft the program should have been funded as it was, under the Veterans Administration. The country did have a moral obligation to those who were forced to serve in the military, and the program also served the larger social goal of educating and training a large segment of the work force. With the end of the draft, the moral obligation disappears, but the second argument may still be valid. In a sense, then, PL 94-502 provides a compromise between defense and social objectives.
the Vietnam War and the considerable inflation during the 1970s, GI Bill costs have skyrocketed, increasing more than tenfold since 1968. Thus post-service education and training benefits have become a major element of the budget and must be considered at least partially related to defense manpower.

**Implications.** The most obvious implication about "outside" manpower costs is their effect on total manpower expenditures: As shown in Table 2-8, they add some 10 percent to the manpower total. Thus, the manpower problem is, if anything, larger than the standard measure of manpower costs imply.

Far more important, however, are the effects of the method of accounting and the budget structures on the utilization and management of defense resources. If the DoD responds to budget incentives, cash accounting methods and the exclusion of certain manpower items from the defense budget encourage inefficiencies in the allocation of defense resources when viewed from the larger perspective of the Federal budget and society's resources.

Military retirement again serves to illustrate the problem. Although outlays for military retirement are part of the overall defense budget, they are not part of the budgets of the individual military services. The result is that the military services, whose personnel policies determine future retirement costs, do not necessarily have the direct budget incentives to adopt policies that are cost-effective in the broader sense—specifically, there may be no direct incentive to economize on future retirement costs. For example, an individual Service can reduce current costs by retiring personnel earlier in their careers, since the cost of retired pay is not charged to their budget but comes from the general DoD budget for retired personnel.

There are similar effects with, say, the GI Bill. The military services, particularly the Army, have used the benefits provided by the GI Bill extensively in their advertising campaigns to attract new recruits, even though the DoD did not pay for these benefits. Moreover, because of these post-service benefits, the military may have had to pay more, in the form of bonuses, to retain military personnel beyond their initial period of obligation.

The passage of Public Law 94-502 eliminated some of these problems, but some still remain. For example, although the government's share of the modified GI Bill costs will be borne by the DoD (as opposed to the Veterans Administration), the costs will be carried in a general DoD account, rather than in the individual Service budgets. In other words, even though the costs will be largely the result of individual Service policies, the Services themselves will not bear the costs. Moreover, because GI Bill costs were not historically paid by the DoD, care must be taken in interpreting future defense manpower cost trends, which will include these costs.

The more general point, of course, is that the structure of the budget accounts and the method of accounting may not encourage efficient use of society's resources. With respect to such defense-specific issues as retirement, the problems center on developing budget incentives to encourage the DoD generally and the individual Services specifically to make the best use of society's resources. In the case of policies that transcend defense, such as the GI Bill, the problem becomes one of developing mechanisms for carefully balancing the sometimes conflicting defense and nondefense objectives.
MANPOWER AND DEFENSE

The nature of the problem facing defense and manpower planners can be brought into better focus by examining manpower spending in the larger context of defense spending, alternative uses of the defense budget, and the defense budget as it compares with aggregate U.S. economic activity. By viewing defense spending in this broader context, we can see the effects of the choices that society has made with respect to the question, How much defense? Alternatively, by examining the component parts of defense spending, we can see how some of the allocation issues have been resolved in the past.

Using the GNP price deflator to convert current dollar expenditure figures to 1974 constant dollar equivalents, we see in Fig. 2-4 the five main periods of defense policy since the end of World War II. After a peak spending level of $220 billion in 1974 constant dollars during World War II, defense spending declined to a relatively modest $20 billion following the war. The advent of the Korean War caused real defense spending to increase dramatically, peaking at some $80 billion in 1974 constant dollars.

Following the Korean War, and prior to the Vietnam buildup, defense spending remained relatively constant, averaging about $75 to $85 billion in 1974 constant dollars. Vietnam spending reached a peak of some $104 billion constant dollars, somewhat less than half the peak World War II expenditures.

Since the Vietnam withdrawal, there has been a steady decline in real defense spending up to fiscal 1978. In fact, by fiscal 1975, real defense spending was only 2 percent above the pre-Vietnam benchmark year of 1964. In general, it would appear that post-Vietnam real defense spending will be roughly comparable, or

![Fig. 2-4 — Defense spending](image)

**Source:** See text.
perhaps modestly above, the real amount of defense expenditures between the Korean and Vietnam wars.

An alternative way of viewing the aggregate allocation issue is to measure defense spending in terms of its proportion of the nation's economic output—gross national product (GNP)—as also shown in Fig. 2-4.14 A somewhat different perspective emerges from this comparison, for with the exception of the brief rise during the Vietnam buildup, the percentage of GNP devoted to defense has declined rather steadily since the end of the Korean War. In fact, for the first time since the beginning of the Korean War, the country is spending less than 6 percent of the GNP on its defense effort. Thus, society is devoting a smaller share of its economic resources to defense.

Given these broad trends in aggregate defense spending, it is likewise important to examine the components of spending. As stated earlier in this chapter, manpower costs (conventionally defined) have risen markedly over the past 20 years. As shown in Fig. 2-5, the "real" amount of manpower costs has also risen.45 Indeed, the real rate of spending for manpower in fiscal 1975 is more than 30 percent above the rate in fiscal 1964.

The implications are obvious: Less real resources are available for nonmanpower items. The effects have been particularly pronounced on procurement spending, the source of new capital equipment and force modernization. As a result, real

Fig.2-5—Manpower costs, defense costs, and GNP: fiscal 1974 constant dollars (billions of dollars)

Source: See text.

44 The usefulness (and shortcomings) of measuring defense in terms of GNP is discussed in Hitch and McKean, op. cit.

45 It will be shown in Chap. 11, however, that the economic cost of military manpower has declined from its pre-Vietnam levels, a result of the fact that budget costs substantially underestimated the real resource cost of defense manpower under the draft.
procurement expenditures in fiscal 1975 were more than 40 percent below their 1964 level.

The above discussion clearly emphasizes the crucial role that manpower has come to play in the defense planning and budgeting process. In fact, if expenditures for military retirement are excluded from total defense expenditures (also shown in Fig. 2-5) under the rationale that these represent the result of past defense effort and should not therefore be included in the current budget account, *real defense expenditures toward current and future capability have actually declined relative to the pre-Vietnam period.*

Moreover, the problem can be expected to be more pronounced in the years ahead, since the increase in manpower costs has been at least partially contained by sizable force reductions. Assuming that force strengths will remain near their fiscal 1976 levels, manpower costs can be projected to increase in the long run at about 2 percent per year, given the real wage increases that can be expected to occur in the civilian sector. And the traditional solution of simply cutting force strengths in response to rising manpower costs is a much less viable option for achieving cost "savings" in the future than it has been in the past.
PART I
THE DRAFT AND ITS REMOVAL
Chapter 3
THE MOVE TO END THE DRAFT

"We have lived with the draft so long," declared Richard M. Nixon during his campaign for the Presidency, "that too many of us accept it as normal and necessary." This statement probably reflects the way a majority of Americans felt toward the draft as an institution during the late 1950s and early 1960s.

However, the draft was to become the subject of considerable public debate and controversy during the mid to late 1960s, particularly as opposition to the Vietnam War mounted and became more visible. Indeed, this movement gained so much momentum and became such a politically attractive stand that it was incorporated as a major platform issue in Nixon's 1968 bid for election.¹

THE DRAFT DEBATE

The advent of the All-Volunteer Force (AVF) in 1973 was preceded by almost 10 years of extensive public dialogue concerning the efficacy of draft and volunteer manpower procurement policies. The initial stages of this debate were generally limited to brief exchanges in the Congress when the Selective Service System came up for periodic review and to discussions within the academic community; and for the most part, they were carried on with little public fanfare. This is not to say that the public enthusiastically supported the draft; more probably, they accepted it as "normal and necessary."

But the growing inequity of the draft, probably more than any other single factor, transformed the debate into one of major public concern. That is, although the Vietnam War served to dramatize the draft issue and indeed acted as a catalyst for the debate, the inequity of the draft was clearly the dominant issue. The concern centered on whether it was equitable to force some members of society to bear the burden of military service while others could escape that responsibility.

The growing importance of the equity issue was evidenced by the number of public inquiries into the efficacy of the Selective Service System, including the final report of the National Advisory Commission on Selective Service, *In Pursuit of Equity: Who Serves When Not All Serve.*² The equity issue is examined in greater detail later in this chapter.

In addition to the equity issue, a number of other issues were argued during the course of the draft debate. Proponents of the draft argued that each (male) citizen has a moral responsibility, or duty, to serve his country and that the draft provided a vehicle for institutionalizing this responsibility. In support of their position, these individuals frequently cited the long U.S. tradition of citizen partici-

¹ It is noteworthy that a pledge to end the draft was also part of Barry Goldwater's campaign for the Presidency in 1964 and Adlai Stevenson's in 1956 and, in fact, became a part of George McGovern's belated primary run in 1968.

participation in the common defense of the nation, i.e., the "citizen military." In response to this proposition, opponents of the draft argued that although participation in the military might be part of U.S. tradition, the use of coercion to allocate resources was certainly not. They stated that the use of coercion runs counter to the main thrust of U.S. social policy and that the draft should be rejected on moral grounds alone.

Along with these ethical questions, several more practical concerns surfaced during the debate—concerns that played a major role in the ultimate decision to end the draft. Foremost among these was the issue of cost: Could the United States afford the cost of an all-volunteer military? Throughout the post-World War II period, especially during the 1950s when force size requirements were large relative to the population base, the draft had enabled the military to procure and maintain a force for a considerably smaller budget cost than would have been required with a volunteer force. The question was, therefore, How much would ending the draft increase budget expenditures, and was this increase an amount the American taxpayer was willing to pay?

Another major practical concern centered on socioeconomic effects on the military. Some felt that ending the draft would lead to a professional military "elite" with a separate military ethos, which could pose a threat to civilian authority, individual freedoms, and the nation's democratic institutions. Opponents of the draft countered that these are important concerns with any military establishment, draft or volunteer, but that there was no reason to suspect that ending the draft would have any effect on general military attitudes.

The other major socioeconomic concern was whether a volunteer military would come to have a disproportionately high percentage of blacks and those in the lower socioeconomic classes. This concern is ironic, since one of the principal complaints about the draft was that disproportionately large numbers of blacks and others in the lower socioeconomic classes were forced to serve—individuals who generally had fewer resources to spend trying to avoid the draft. Similarly, the disproportionately large share of combat casualties suffered by blacks in Vietnam was frequently cited as evidence of the lack of social representation engendered by the draft. Nevertheless, the possible socioeconomic effects on the composition of the Armed Forces continued to be a major issue in the public debate over ending the draft and carried well into the Congressional debate that followed the Gates Commission recommendations.

The Participants and the Evolution of the Draft Debate

Having evolved over a considerable period of time, the draft debate really began to build momentum around 1966. The date is significant first because of the

---

3 In many ways, the question of cost was a ruse for the subtler issue of who was to bear the cost, the taxpayer or the individual forced to serve.

4 There were several corollaries to this argument. For example, some felt that a volunteer military would be more prone to expeditionary adventures than a draft-induced force.

5 This appears to be a key part of the rationale for the current French conscription policy: there is some feeling that the French military had become a "professional elite" with its own ethics during the 1940s and 1950s (even though a draft was partially used during this period), the result of which, it is argued, was the military "revoilt" over the Algerian issue.
1966 study of the draft conducted by the Department of Defense (DoD). Although the question of ending the draft became moot with the Vietnam buildup between 1965 and 1969, the 1966 DoD draft study marked the first major and systematic public review of draft policy since the reintroduction of peacetime conscription in 1948. This was also the year in which one of the first coordinated efforts was made by the academic community to review the implications of the draft: The American Economic Association devoted a session of its December 1966 meetings to the economics of manpower procurement.7

These events are important because of the subsequent dialogue and debate that they encouraged. For example, a considerable literature on the economics of draft and volunteer forces began to develop following the 1966 American Economic Association meetings.8 Prior to that time, the subject of conscription had received relatively little attention from the economics profession,9 even though economic issues such as the cost of a volunteer military were clearly key to the resolution of the draft issue. The involvement of the economics profession thus raised a number of specific issues (such as the economics of the "conscription tax" discussed in Chap. 5) and served to develop much of the expertise needed to resolve such key policy issues as how much it would cost to support an all-volunteer military.10

Just as the 1966 American Economic Association meetings served as the forerunner of considerable economics involvement, the 1966 DoD draft study was the forerunner of several commissions and other public investigations into the draft. In 1967, two official advisory groups were established to consider a restructuring of manpower procurement for the Armed Forces: (1) a Presidential board, the National Advisory Commission on Selective Service (referred to as the Marshall Commission, after its Chairman, Burke Marshall); and (2) a legislative advisory commission, the Civilian Advisory Panel on Military Manpower Procurement (named the Clark Panel, after its Chairman, Retired General Mark Clark). Both reports studied alternatives to the Selective Service System, and both rejected the feasibility and concept of an all-volunteer military.11

The Marshall Report concluded that a volunteer military was insufficiently flexible to respond to changing world conditions; was too costly (though no cost

---

6 The origins of the 1966 DoD draft study can be traced back to 1964, when a bipartisan group of Senators (Gaylord Nelson, Thomas Curtis, Barry Goldwater, and Dennis Keating) requested that the Congress undertake such a study. President Johnson preempted the Congress, however, by establishing a defense of the draft under a study headed by Bill Gorham. This study, eventually known as the 1966 DoD draft study, was completed by late June 1965, but the results were not released until August 1966, when the study was reported out before the House Armed Services Committee.


9 It is noteworthy that Hitch and McKean, op. cit., perhaps the best known economic analysts of defense, fail to deal even with manpower, let alone the draft.

10 An important by-product of this involvement in the early stages of the draft debate was the significant role that economists played in the Gates Commission (see Chap. 6). In fact, Walter OI and Stuart Altman, two of the original contributors to the 1966 American Economic Association meetings, were two of the four Directors of Research on the Gates Commission.

estimates were presented); and could lead to undesirable social effects such as the erosion of patriotic spirit, lopsided racial balance, and the possible further isolation of the military into either an elite or a mercenary force. The Clark Report concurred on all major points regarding the undesirability of an all-volunteer military force.

In contrast to these three publicly commissioned efforts, all of which recommended continuation of the Selective Service draft, there were several unofficial studies during this period that came out favoring removal of the draft. Included in these was an effort sponsored by several members of the House of Representatives. This report, How to End the Draft, concluded that a volunteer military was not only feasible, but also desirable. The Draft, a collection of papers prepared by a number of prominent economists and social scientists which was presented to a 1966 conference in Chicago chaired by famed anthropologist Sol Tax, came to essentially the same conclusion.

In addition to these formal efforts addressed to the question of the draft, broad-based support of the notion of an all-volunteer military began to be expressed by prominent public figures representing the full range of the political spectrum—Linus Pauling, Adlai Stevenson, Barry Goldwater, George McGovern, John Kenneth Galbraith, Milton Friedman, and Norman Thomas, among others.

The culmination of the draft debate came with the report of the President’s Commission on an All-Volunteer Armed Force—the so-called Gates Commission—in 1970 and the subsequent discussions about the Gates Commission recommendations that took place in Congress and elsewhere.

Although these various commissions and study groups were comprised of individuals representing a variety of backgrounds, the economists were probably the dominant intellectual force during the debate. And they were clearly the mainstay of the Gates Commission, as discussed in Chap. 6.

There was some minor involvement on the part of other social scientists—particularly the historians, social psychologists, sociologists, and political scientists. With only a few exceptions, however, the social scientists did not play a particularly significant role in the debate or in the solution of the draft issue. This can be at least partially attributed to the fact that debate increasingly focused on the cost of ending the draft, clearly an economic concern.

Nevertheless, this absence is striking, since the social sciences have had a long tradition of analyzing military institutions, especially the relationships between the military and civil sectors. The early dialogue was generally confined to specific academic disciplines, but the commonality of interests grew sufficiently during the postwar decades that by the late 1960s interdisciplinary forums began to appear. The Inter University Seminar on Armed Forces in Society, founded by long-time student of the military, Morris Janowitz, is perhaps the best example. The lack of participation by the social scientists in the 1960s debate is therefore clearly not attributable to a lack of interest, for not only has study of the military long been

---

14 Named for its Chairman, former Secretary of Defense Thomas S. Gates, Jr.
15 See, for example, Albert D. Biderman, "What Is Military," in Tax, op cit.
an integral part of the social sciences, but social scientists were among the first to develop interdisciplinary approaches to the problem.

A more likely explanation stems from the tendency of the American social sciences to view the military as an intact social entity, rather than as an institution requiring reform. Post-World War II studies, such as the ground-breaking *American Soldier*, conducted by such men as Speir, Lasswell, Lerner, Huntington, Janowitz, Moskos, and Stouffer focused on the social dynamics within the military or between the military and civilian sectors. Their analyses were concerned largely with such issues as the integration of the military into the larger civilian society, rather than with the types of policy reforms that the economists addressed. The draft, however, was clearly a policy issue, one requiring analysis of the implications of alternative forms of manpower procurement.

Thus, partly because of the nature of the issues that made up the 1960s debate and partly because of the style with which the social scientists approached their analyses of the military, the noneconomic social sciences were a relatively minor part of the draft debate. Perhaps one of the greatest shortcomings of the draft debate, then, was the failure to develop an effective dialogue between the economics profession and the social scientists on the draft and the alternatives to it.

**The Policy Options**

There is one other important aspect of the draft debate that should be noted: The debate was focused primarily on the dissatisfactions with the Selective Service System and the corresponding advantages possible under an all-volunteer military. Thus, the debate is of interest not only for the topics that were explored, but also for those that were not.

Whereas the obvious alternative to the postwar draft was an all-volunteer military, the choice of a military manpower procurement policy is not binary. There are many forms of conscription, including selective service (lottery and otherwise), universal military training, universal military service, and national service. To be sure, each of these alternatives was given at least some notice during the course of the debate, but for all practical purposes, the 1960s draft debate was addressed

---

16 Under a *national service policy*, all young men (and, on occasion, all young women) are viewed as having an obligation to their country which they fulfill by providing labor services that benefit the national purpose. Such service can include helping disadvantaged members of society (e.g., working in hospitals or programs such as VISTA), forestry and park services, and military service. Under a policy of *universal military service*, the nation’s young men are viewed as having a specific obligation to serve in their country’s military forces; this policy differs from that of national service in that nonmilitary service does not fulfill the obligation. A *universal military training* policy requires that all young men receive military training, even though not all will actually serve in the standing forces; some are instead assigned to reserve or militia forces. The common element of these three forms of conscription is that all young men (and, in some cases, young women) are required to fulfill their service obligation, whether that obligation consists of military service, some other national service, or just military training.

A *selective service* conscription policy, on the other hand, differs from these forms in that not all young men must serve or even receive training; instead, although all are usually subject to the possibility of being conscripted, only some will actually serve, since military strength requirements are too small to absorb all who are eligible. There are many different forms of selective service conscription, but these alternatives differ only in the method of selection, not in concept. For example, the selection process can be random (i.e., lottery), a system with deferments and exemptions, or some other systematic process such as the Civil War system, where prospective inductees could purchase their way out of the service.

17 The Gates Commission, for example, gave brief mention to national service. Similarly, both the National Advisory Commission on Selective Service and the Civilian Advisory Panel on Military Manpower Procurement briefly explored other methods of conscription but rejected them in favor of selective service.
to two primary policy options: the selective service draft (and ways to improve its implementation) and an all-volunteer military. The lack of attention to other alternatives to selective service is particularly interesting in view of the fact that other forms of conscription have enjoyed wider acceptance than either selective service or volunteerism in Western Europe.

It is not clear whether the almost exclusive focus on volunteer and selective service military manpower procurement policies in the 1960s occurred because the United States was not ready to consider another type of conscription or because the economists, with their focus on voluntary military forces, provided most of the intellectual leadership in the debate. What is clear is that the focus on an all-volunteer military as the prime alternative to the selective service draft may have influenced the final outcome of the debate as much as the various arguments that were presented during the course of the dialogue.18

THE EQUITY ISSUE AND DEMOGRAPHIC TRENDS

Historically, the inequity of conscripting young men (and, on occasion, women) for military service has been a controversial subject nearly every time the draft has been imposed. However, as the result of some demographic trends—the number of young men eligible for military service more than doubled in the 20 years between 1955 and 1975—the equity issue became critically important beginning in the late 1950s. Not only was the burden of conscription limited to a relatively small segment of society—young men of military age—but the growing number of such young men (because of the post-World War II "baby boom"), combined with relatively stable force sizes, resulted in some of the age group not being required to serve, making conscription more inequitable over time. In other words, with constant manpower requirements, the increasing number of young men eligible for military service meant that an increasingly smaller proportion would have to serve.

The equity issue thus became the single most important factor in the move to end the draft and was composed of two major components: (1) the burden imposed on young men of military age and (2) the selective way in which this burden was applied.19

The Burden of Conscription

Those individuals subject to the Selective Service draft were forced to bear a burden that other members of society were able to avoid.20 This burden included

---

18 It is argued in Chap. 7 that neither universal military service nor universal military training is a practical alternative for the United States. Thus, the U.S. policy options boil down to selective service, national service, or a volunteer military.

19 Canby took a somewhat different approach to the equity issue, though the two views lead to essentially the same conclusion. Since Canby's principal objective was to develop a framework for selecting the "best" manpower procurement policy (if, indeed, one exists), he chose to analyze each of a number of specific equity issues, such as pay equity, the equity of free choice, etc. The concern here, however, is to trace the process which led to the removal of the draft, so the analysis takes a more global perspective by focusing instead on the two main components of the equity issue: the burden (pay, disruption, risk, etc.) and the application of this burden. See Steven L. Canby, Military Manpower Procurement: A Policy Analysis, D. C. Heath and Company, Lexington, Massachusetts, 1972, pp. 23-38.

20 This is not to imply that military service is necessarily undesirable; there are large numbers of individuals who would prefer to serve in the military, other things being equal. Rather, it means that when coercion is used to allocate individuals, some will almost necessarily view military service as a burden.
the risk of death and injury and the disruption in the lives of those subject to the draft. It is not that nonmilitary occupations lack some of these attributes, but rather that individuals in such occupations are there voluntarily.

Not the least of the burdens, particularly during periods of peacetime, was the financial burden imposed on those having to serve in the military. The draft enabled the military (and, therefore, the general taxing public) to pay those serving not only less than would have been required for them to join voluntarily, but also less than they could earn from civilian employment. Therefore, in addition to the nonmonetary burdens of conscription, those forced to serve also paid a financial price, which was substantial in some cases.

We can examine the magnitude of this financial burden by comparing an individual's military wage with an estimate of the wage he could have expected to earn from civilian employment. In this comparison, military wages are defined as the average regular military compensation (RMC) per year for enlisted personnel earned during the first two years of military service. This particular definition was chosen for two reasons. First, RMC is probably the most appropriate measure of pay for comparison with civilian income. Second, the two-year time horizon was chosen because it is the minimum commitment length (for inductees and some enlistees) and because it is the experience range over which the draft had the most depressing effect on military wages.

The appropriate variable to represent civilian earnings forgone is more difficult to define, since any individual's expected civilian income depends, among other things, upon his age (as a proxy for experience) and education. Therefore, the appropriate annual civilian income variable for comparing with annual military income depends on the mix of individuals joining the Services. If, for instance, the draft applied only to 19 year old high-school graduates, then the appropriate civilian income variable would be the median annual civilian earnings for 19 and 20 year old males (because of the two-year induction/enlistment obligation).

Civilian wages in fact vary significantly with age and education. For example, a 26 year old high-school graduate can expect to earn more than twice as much as an 18 year old high-school graduate, according to data collected under the Current Population Survey conducted by the Bureau of the Census. Similarly, a 26 year old college graduate can expect to earn about 20 percent more than a 26 year old high-school graduate. Thus, the relevant civilian income variable depends on the age and education mix of those subject to the draft. This is an important concern,

21 Although the "fringe benefit" portion of military pay is alleged to be larger than that for civilian employment, fringe benefits were not included in either military or civilian pay estimates because of the difficulty in costing both, especially prior to 1967, and because many of these fringe benefits (e.g., retirement) were not available to inductees.

22 Military pay does not differ according to education and prior experience (or age), while civilian pay is likely to be a function of both. Therefore, to compare military and civilian pay properly, we must know the mix of attributes (e.g., education) of those eligible for the draft.

23 Actually, this would provide the basis for computing the median value of the financial burden of conscripting 19 year old high-school graduate inductees. Conscription is a peculiar form of taxation, since it results in the confiscation of 100 percent of the amount of earnings above military pay (and 0 percent of the earnings less than military pay). Thus, the correct measure of civilian earnings forgone for the individual would be that individual's actual forgone civilian wages and salaries. By using median civilian wages and salaries, we thus get a measure of what the typical individual within a given classification (such as 19 year old, white high-school graduates) would have given up.

since Selective Service policy changed considerably during the 25 years following reintroduction of the draft in 1948.\textsuperscript{25}

Insufficient data make it impossible to provide a fully comparable measure of civilian income, appropriately weighted by the age and education mix of those eligible and/or serving. However, we can gain some insight into the magnitude of the financial burden for the typical individual by using the median annual income for all full-time employed male 18 to 24 year olds, since this represents the primary pool from which inductees and enlistees were drawn during the draft era.\textsuperscript{26}

The extent of the financial burden can then be estimated as the difference between civilian income forgone, as measured above, and military income.\textsuperscript{27} From Fig. 3-1 we see that military wages during the first two years of service were only about $200 per year less than estimated civilian wages for all full-time employed 18 to 24 year olds in 1949.\textsuperscript{28} By 1964, however, this difference had grown to some $2100 per year, with military earnings being only about half as much as average civilian earnings. This is because military pay for the first two years of military service did not rise at all between 1952 and 1964, while civilian earnings for all 18 to 24 year old full-time employed males rose by more than 50 percent.

Beginning in 1965, there were annual increases in pay for those in their first two years of military service.\textsuperscript{29} However, civilian pay rose even more, so that by 1970, military pay was $3200 per year less than civilian pay and still remained at roughly half the level of that in civilian employment. Thus, those forced to serve in the military during the draft paid a large financial price, in addition to the other burdens. The typical individual who was drafted in 1970 could expect to forgo about $6300 during his two years of service.

We can also see the effects of the volunteer pay raise which became effective November 14, 1971.\textsuperscript{30} Between 1971 and 1972, the pay for those in the first two years of service rose by some 60 percent, bringing military pay to rough parity with the mean income for 19 to 20 year old full-time employed high-school graduates.\textsuperscript{31}

\textsuperscript{25} Not only did draft policy change from an oldest-first to a youngest-first system, but because of variations in the number drafted every year and other factors, the age and education mix of new accessions varied considerably in the post-World War II period. For example, the median age of inductees changed from 21.5 years in 1954, to 23.5 years in 1963, to 20.5 years in 1965, to 19.6 years in 1972.

\textsuperscript{26} In a sense, this is subject to two biases, possibly offsetting. On the one hand, we would expect those who are legally ineligible to serve (for mental, medical, and other reasons) to have lower civilian income opportunities, so the 18 to 24 year old mean civilian income may underestimate the civilian earning opportunities for the pool of those subject to the draft. On the other hand, those with higher incomes would be expected to have a better chance of avoiding the draft by entering sheltered occupations, going to school, etc.

\textsuperscript{27} Military earnings (RMC) are estimated as the sum of basic military pay, allowance for quarters (assuming no dependents, allowance for subsistence at the published daily rates), and an estimate of the Federal tax advantage (assuming the standard deduction for Federal income tax). Median civilian wage and salary earnings for 1967 through 1974 are based on Current Population Survey data (calculations by Cooper, Gowen, and Haggstrom). Estimates for 1949 to 1966 were constructed on the basis of the 1967 CPS estimates (earlier CPS data were not available; the 1967 CPS estimates were adjusted year by year back to 1949 by using the average weekly earnings in nonagricultural employment, as reported in the Economic Report of the President, op. cit.

\textsuperscript{28} It is interesting to note that military pay in 1949 was actually more than $250 per year higher than civilian pay for 19 to 20 year old full-time employed white male high-school graduates, the primary pool from which the military draws its enlisted personnel in the post-draft environment.

\textsuperscript{29} By way of contrast, there have been some pay increases for personnel beyond the first two years since 1949. For example, the base pay for a Sergeant (E-5) with four years of service increased by nearly 50 percent between 1952 and 1964, while that for an individual with less than two years remained unchanged during this entire period.

\textsuperscript{30} For simplicity, Fig. 3-1 does not show the pay increase taking effect until January 1, 1972.

\textsuperscript{31} Although the appropriate comparison during the draft environment is probably all 18 to 24 year old males, the enlisted forces in the post-draft environment draw their personnel primarily from the 19 to 20 year old age group.
Selectivity

The imposition of a burden does not by itself constitute inequity. Society must frequently impose "burdens" upon its citizens, usually in the form of taxes. However, when the burdens are applied selectively, so that only some of the citizens must pay the price, the issue of inequity arises.

Conscription can be viewed as always inequitable, simply by the fact that it is usually limited to young men. On the other hand, it can be argued that universal military service, in which all must serve (or at least all males), makes conscription equitable; for although conscription falls selectively on a narrow age cohort at any point in time, in the long run all will end up serving. When only some end up serving, however, the equity of conscription becomes a serious issue.

It is in this latter regard that some simple population dynamics brought the equity issue to the forefront of public policy beginning in the mid to late 1950s. Except for the period of the Vietnam conflict, between 1966 and 1970, the number of annual accessions into the military required to man the active duty forces has remained roughly constant since the late 1950s (in fact, it has actually declined

---

32 Other such "burdens" include the right of eminent domain, the prohibition of illegal acts, etc.
33 This does not mean that the burden must be shared equally to be considered equitable, but rather that there must be some design to distribute the burden equitably across society's members. Thus, for example, the progressive income tax is not considered inequitable because it is based on the notion that those who are better able to pay should pay proportionately more. In contrast, it will be shown later that conscription extracts proportionately more from those least able to pay.
modestly—see Fig. 3-2). However, beginning in 1954, the number of young men turning 19 increased every year, and dramatically so starting about 1961.34

If we exclude those not legally eligible to serve for mental, medical, or other reasons, we find that roughly 85 percent of those eligible to serve in 1954 could have been expected to actually serve. The proportion required to serve had fallen to 50 percent in 1964 (38 percent of the total population), and by fiscal 1980 it is estimated that the proportion required to serve will be only 20 percent. Even if the reserve forces are included,35 only 70 percent of those legally eligible were required to serve in 1964, and by 1980 this is projected to decline to 25 percent. Until the volunteer pay raise in 1971, therefore, fewer (or at least a smaller proportion) had to bear a larger burden—hence, the importance of the equity issue.

Fig.3-2—Military manpower procurement and population size

SUMMARY

By the late 1960s, the draft had become one of the most hotly debated topics in public circles. The question of the draft and the subsequent debate were certainly

34 In any given year, the military can of course draw from more than one age cohort. In the long run, however, the age cohort is the relevant base. See Binkin and Johnston, op. cit.

35 It can be argued that the reserve forces should not be included (particularly during the draft), since those serving in the reserves do not have to bear the same burden as those in the active forces: the reserves are essentially a second job.
not new in and of themselves. The subject had been frequently, and often more
vehemently, debated in the past. Yet, the debate of the 1960s accomplished some-
ting the previous debates did not, the maintenance of a large peacetime force
without conscription.

In many respects, the debate of the 1960s stands apart from its historical
predecessors, and it is useful to compare this debate with those that preceded it.
Particularly interesting is the comparison with the debate of the 1940s, which led
to the 25 years of peacetime conscription following World War II.

The questions of the 1940s focused on the morality of inducting young men into
military service during periods of peacetime, something that had been done only
once before in American history, just before the U.S. entrance into World War II.
Senator Vandenburg expressed these concerns in an address before the U.S. Senate
in 1940:

I am opposed to tearing up one hundred and fifty years of American history
and tradition, in which none but volunteers have entered the peacetime
Armies and Navies of the United States, unless there is valid reason to
believe that this reliance in 1940 has become a broken reed for the first time
in a century and a half.

There must have been sound reasons all down the years why our pre-
decessors in the Congress always consistently and relentlessly shunned this
thing which we are now asked to do. These reasons must have been related
in some indispensable fashion to the fundamental theory that peacetime
military conscription is repugnant to the spirit of democracy and the soul
of Republican institutions, and that it leads in dark directions.

Though he was addressing specifically the prewar introduction of peacetime con-
scription, Senator Vandenburg’s thoughts accurately reflect much of the debate
that took place as part of the decision to implement peacetime conscription in 1948.

Despite the tremendous opposition to conscription in the late 1940s and its
particular focus on the morality of using the draft during periods of peace, the
United States had essentially two choices: (1) to have a small volunteer military,
as it had following World War I, or (2) to maintain a large peacetime military
establishment by using the draft. That is, the population base was simply not large
enough to support a volunteer military at a cost the American taxpaying public
would have been willing to pay. In essence, then, the 1940s debate about the draft
boiled down to one of whether to have a large or small military.

Something new was therefore introduced into the debate of the 1960s. In con-
trast to the earlier situation, where the choice was simply one of whether to
maintain a large or a small military force, the choices had expanded to include a
large force without the draft.
Chapter 4

HISTORICAL AND INTERNATIONAL PERSPECTIVE OF CONSCRIPTION

The issues and concerns about conscription that developed during the 1960s are not without precedent, either in American history or in the experiences encountered by other nations. The questions of how best to provide the manpower to meet a nation's defense needs has always been a vital issue. This chapter briefly reviews the issues as they have developed and been resolved in the United States and in other nations, particularly those of Western Europe with traditions and backgrounds similar to those of the United States.

HISTORY OF CONSCRIPTION

When the draft ended in 1972, more than half of the U.S. population was under 33 years old and, for practical purposes, had never known a time without conscription. This explains the almost commonplace acceptance of the draft that characterized the 1940s, 1950s, and 1960s. Yet, when we consider a larger historical context, we find that nationwide conscription for the Armed Forces has been used for only about 35 out of the 200 years since the Declaration of Independence. Moreover, major controversy has erupted nearly every time the draft has been considered. The use of conscription has thus been far more the exception than the historical norm in the United States.

A review of the history of conscription in the United States adds an important perspective to our discussion of the move to end the draft, for it illustrates how the draft issue has been resolved in the past and how various factors came to affect this process of resolution. Also, and equally important, the draft debate of the 1960s had its roots deep in America's past; in the words of one author, "The polemics of conscription abound with reference to history and tradition ...." Not only were

---

1 The author is indebted to Geraldine Walter for preparing much of the background information used in this section.


3 Actually, the draft was not used for one year following World War II as the law permitting conscription during the war lapsed on March 31, 1947, and the new law permitting conscription in the postwar period did not take effect until June 24, 1948.

4 Rufuse, op. cit., p. III-1.1.
"history and tradition" a cornerstone in the arguments of those favoring the draft, they were also central to the case for an all-volunteer military, as volunteer force proponents were quick to cite the long American "tradition" of opposition to conscription.

The Revolutionary War

Any review of conscription in America must begin at Concord in 1775 with "the shot heard round the world," since in many ways, the War of Independence formed the basis of the civilian and military relations that persist to this day. The "armed peasantry" that began the Revolution at Concord redefined the social and political military balance in a uniquely American manner. The concept of the "citizen militia" was born—the idea that to be a citizen of the nation state was to have the right and obligation to bear arms in defense of that nation state. No longer was the military a class apart, its function limited to executing kingly prerogatives; each individual was to share in the defense of his nation. Perhaps Washington's view was most representative:

It may be laid down as a primary position, and the basis of our system that every Citizen who enjoys the protection of a free Government, owes not only a pro- portion of his property, but even of his personal services to the defense of it.

In this way, the conduct of war and often foreign policy came increasingly within the sphere of influence of the general populace, a heretofore unthinkable situation. This was a major change from the existing 18th century military-political system and a challenge from which that system never recovered. The right and the obligation of citizen participation in armies was to become the future standard of American military tradition.

Also emergent in the Revolution, and at odds with the above, was the longbrooding concept of individual rights against the state. The constant American concern was to be the relation of the individual to the state, along with the relations among individuals. The American government was dedicated to the proposition of individual liberties, and as a result it concerned itself mainly with limiting government and excluding it as much as possible from the life of the normal citizen. Indeed, the United States was born out of the forceful assertion of the principle of individual liberty. This liberalism was to form the main force of American intellectual and political development; it was truly the "ideological constant."

Prior to the Revolution, the only military manpower plan in the United States was the militia, by which every able-bodied man was considered part of the colonies' "defense establishment." With the Revolution, consolidation into a continental army became necessary. Since the Continental Congress had no legislative power to raise an army, it had to appeal to the separate colonies to fill its manpower needs. The colonies in turn called up volunteers or militia men to fill these requests, sometimes enacting "draft" legislation when insufficient numbers of men were forthcoming. Throughout the Revolutionary period, then, the Congress confined

---


6 An insightful discussion of American civilian and military relations can be found in Huntington, op. cit., from which this term comes.
itself to establishing component parts of the Armed Forces and recommending that they be filled by the states.

After the war, George Washington, in "Sentiments on a Peace Establishment" (1783), suggested a plan whereby each 19 year old would train several weeks for three summers. He felt that this military system would be most beneficial for the new America because these trained men would be available to supplement the regular Army if the need arose. This plan obligated every able-bodied man to serve and was a reflection of the belief that every man should serve. The Knox Plan, presented a few years later, also combined the idea of the citizen's right to bear arms with the concept of universal service.

This idea of universal service was accepted in theory but was never implemented. Not only were the states against the idea of universal service, they were too suspicious of standing Federal armies to condone the development of such a potentially overbearing force. In addition, the cost of maintaining such a force would have been enormous. Luckily, the advantage of America's geographical position allowed this view, that "standing armies in time of peace are inconsistent with principles of republican government." Until the next war, then, the states were to provide military manpower when necessary, through their militias.

The War of 1812

The War of 1812 is considered by some historians to be an attempt by expansionists to complete the Revolution by taking the Floridas and Canada. The failure of this attempt has historically been ascribed to the inefficiency of dual state and Federal control of the military. Those in power at the time recognized this weakness and presented alternative plans. James Monroe, then Acting Secretary of War, proposed the enactment of the first compulsory selective service law. This plan, in which President Madison requested the authority to draft 40,000 men, was the first executive request for Federal legislation to raise troops by imposing liability for service upon all male citizens.

This legislative request also contained the beginnings of selective service and local draft administration, as well as the idea that military law could be imposed directly on the citizenry without going through the states. However, fierce debating about this proposal in Congress delayed action on the request so long that the war had ended before the bill was accepted by both Houses of Congress. Opposition to the war and the possible introduction of the draft became so strong that the New England states refused to raise a militia and, in fact, threatened to secede from the Union. It was therefore not until the Civil War that the first real draft legislation was enacted.

\(^7\) Ibid., p. 144.

\(^8\) It is ironic that the proposal in these draft bills was much closer to a volunteer force than to the post-World War II draft. Basically, the bills would have had 18 to 45 year old males responsible for providing the necessary manpower. Those not serving would have been taxed so that those who did serve would have earned a wage competitive (or at least comparable) with wages in the civilian sector. The only difference between this and the current AVF is that under present law, the entire taxpaying public bears the tax "burden" of paying competitive wages to military personnel. Under the bills in Congress during the War of 1812, this burden would have been restricted to the 18 to 45 year old male population.

\(^9\) The conscription issue was one of several issues which led to the serious consideration of secession by the New England states. The other major issue was opposition to the war itself, and the economic consequences (primarily the effects on trade) that the war was having on New England.
The Civil War

Since the United States had little more than 15,000 regular army troops at the beginning of the Civil War, President Lincoln immediately called for volunteers from the state militias upon assuming office, a call that met with more than adequate response. However, since the call-up was only for three months, per existing Federal law, most troops were marching home by the time of the first battle. The President then renewed the call, this time for three-year volunteers. The response was substantial, providing more than 700,000 men. As a result, the Federal Government, lacking the bureaucratic or physical means to process or maintain so large a number, directed that no new regiments be formed.

A year later, in 1862, the War Department decided that existing forces were sufficient and closed all recruiting offices. But two months later, the Secretary of War ordered the recruiting offices reopened because battle casualties, desertion, and disease had reduced U.S. forces drastically. The initial enthusiasm for the war had worn off in the face of grim reality, so enlistment quotas were filled slowly. This situation led to the passage of the Militia Act of 1862, wherein states were required to furnish men through enlistments or draft if necessary.

There was much outspoken opposition to the Militia Act. The specifics of the act itself were ill-considered. Bounties and paid substitutes were allowed, which therefore destroyed any further volunteer efforts. There was widespread state opposition to the inequities that were created, and eventually this act proved unwieldy and ineffective. To remedy this, manpower procurement was shifted to the Federal Government through the Enrollment Act of 1863. This was the country's first draft law.

The concept of a Federal draft, unsuccessful in the 1814 conscription debates, was now forcefully stated in the form of an act that gave the Federal Government authority (overriding that of the states) to draft men as needed. Despite the errors and weaknesses of the legislation, it was the first major step toward the draft system most Americans came to know so well. Under this law, $300 bought an exemption which the Army then used to purchase a substitute. A substitute was also allowed to serve in the draftee's stead, so many wealthy persons paid others to serve for them.

The obvious injustice of this measure incited rioting and violence, which led to a suspension of habeas corpus and widespread imprisonment of dissidents. In order to avoid another outbreak of violence, increased state bounties were offered to help fill the quotas, and "volunteers" were again forthcoming. Intense rivalries developed between communities attempting to attract sufficient volunteers. Prospective volunteers would shop around for the highest bounties, which frequently led to fraud—often ingenious—involving bounty jumpers, bounty brokers, and a host of corrupt local and Federal officials. Throughout the call-ups, bounties were offered, amounting at one point to as much as $1,500. The entire experience was unjust and chaotic, and all concerned were adamant that some other system of raising troops would have to be found for future wars.

For all the shortcomings of the methods of manpower procurement used, the Civil War experience demonstrated that essentially voluntary recruitment methods could be used, even during times when large forces were needed and in the face of adverse circumstances. Only 46,000 actual inductees—2.3 percent of the military manpower raised during the war—were recruited from the 250,000 draft notices issued in the North.
World War I

Except for the short war with Spain, where the popularity and brevity of the war resulted in more than sufficient manpower, there was no need for the United States to consider the question of conscription again until the outbreak of World War I. By 1916, however, war had become a different proposition because of its increasingly managerial and technological nature. This necessitated a different kind of manpower, requiring more lead-in time and training. For the first time, industrial mobilization was necessary to manufacture weapons and machinery based on the new technology, and training was necessary to equip the new managers of the technology.

It was not the outbreak of war in Europe, however, but rather incidents on the Mexican border in 1916 that caused attention to be drawn to the lack of preparedness of the U.S. Armed Forces. As a result, the National Defense Act of 1916 was passed, one of the most comprehensive pieces of military legislation in U.S. history. The Army was reorganized into the Regular Army, the Volunteer Army, the Officers Reserve, the Enlisted Reserve, and the National Guard, and a standing force of 175,000 men was authorized. Less than a year later, America declared war. The National Defense Act contained no provision for compulsory service, so the Congress subsequently (in fact, less than a month after the declaration of war) enacted the Selective Service Act of 1917.

With the disastrous conscription experience of the Civil War still in mind, the author of the Selective Service Act, Enoch Crowder, was careful not to repeat some of the major errors made during that war. To this end, a report written by Brigadier General James Oakes was extremely helpful. An AssistantProvost Marshall General of Illinois, Oakes had administered conscription in Illinois and subsequently had written a lengthy critique. Many of the recommendations of Oakes’s report were incorporated into the 1917 Act, the most important being:

We must depend in every time of national peril not on a standing army nor yet upon a reserve army, but upon a citizenry trained and accustomed to arms...a system by which every citizen who will volunteer for the training may be made familiar with the use of modern arms.

Opposition to standing armies was still strong, and in addition, some legislators voiced opposition to conscription on the basis that it was offensive to the American people. Senator Reed of Missouri felt that the mere implication that insufficient men would volunteer was an insult to the "manhood of America." In addition, he said that it was a violation of the American democratic system:

[Conscription]...is not democratic, it is autocratic; it is not republican, it is despotic; it is not American, it is Prussian. Its essential feature is that of involuntary servitude.

Many others shared this view and felt that volunteerism had never been given a proper chance. Grant Hamilton, a representative of the AFL, and Jane Addams of Hull House in Chicago were among those who pleaded in House hearings for a preliminary attempt to raise an army solely through volunteers. Many senators

10 This report served as the basis of selective service policy in the United States until the introduction of the lottery.
11 Congressional Record, 1913, p. 1084.
and others felt that, given proper cash inducements, young men would willingly enlist for practical and patriotic reasons.

However, the arguments presented in favor of the Selective Service Act were ultimately to win the vote with an overwhelming majority. Duggan neatly sums up the views of the proponents of selective service:

"Cumulatively the Senators in favor of selective service undertook to prove the thesis that, on the one hand, volunteering is haphazard, inefficient, disruptive of industrial and economic stability, wasteful, and operatively unequal in spreading the obligations of citizenship and on the other hand, conscription is the fairest, most democratic, most efficient and most patriotic method of raising an army."

Conscription thus became the basis for all enlisted manpower procurement in 1917, since enlistments were halted so as not to disrupt the "orderly" flow of individuals through the draft system. All male registrants were classified into one of five categories according to their "value" to the civil sector. Those individuals deemed most valuable to the civilian sector (generally those with the highest civilian earnings opportunities) were categorized as Class V, while those least valuable were put in Class I. Registrants were then inducted in order of their "value," with those in Class I drafted first. This, of course, led to an overrepresentation of the poor and black, as illustrated by the fact that blacks constituted 9.6 percent of all registrants but accounted for 13 percent of the inductions.

The complete reliance on conscription during World War I made it possible for the Congress to raise a large military force without having to raise military pay correspondingly, as shown in Table 4-1. Whereas increases in military pay helped to inhibit widespread use of the draft during the Civil and Spanish-American Wars, military wages fell more than 10 percent below civilian manufacturing wages during World War I and nearly 40 percent below during World War II.

Thus, the first widespread use of truly national conscription began in 1917, 141 years after the signing of the Declaration of Independence. The effect of the passage of this legislation should not be underestimated, since for the first time the conscious decision was made that voluntarism was not practical. This concept continued to exert its force throughout World War II and into the 1960s.

**World War II**

In many ways, the debate prior to World War II was a reechoing of 1917, as there was a strong foreign policy aspect to it. Because of the grave threat posed by the war in Europe, a "hemisphere defense" was necessary, and to be totally effective, this strategy would have to be supplemented by a strong element of "preparedness." The country therefore had to begin mobilizing before actual war was declared; i.e., a peacetime draft had to be enacted.

The lessons of World War I gave some measure of credence to this strategic viewpoint. The logical result was that a large mobilization effort was deemed necessary. To accomplish this mobilization and at the same time meet both industrial and military needs required a solid organization, such as the proposed Selective Service System. The view that peacetime compulsory service—selective service—was integral to defense had many powerful and vocal supporters.

---

12 Joseph Duggan, op. cit., p. 72.
Table 4-1
Comparison of Annual Military Enlisted Earnings with Average Annual Earnings in Manufacturing

<table>
<thead>
<tr>
<th>Period</th>
<th>Annual Military Pay and Allowances</th>
<th>Manufacturing Earnings</th>
<th>Percentages of Forces Drafted</th>
</tr>
</thead>
<tbody>
<tr>
<td>Civil War (1865)</td>
<td>$427</td>
<td>$410</td>
<td>2</td>
</tr>
<tr>
<td>Spanish-American War (1898)</td>
<td>444</td>
<td>394</td>
<td>0</td>
</tr>
<tr>
<td>World War I (1918)</td>
<td>870</td>
<td>980</td>
<td>59</td>
</tr>
<tr>
<td>World War II (1945)</td>
<td>1,587</td>
<td>2,469</td>
<td>61</td>
</tr>
<tr>
<td>Korean War (1952)</td>
<td>2,584</td>
<td>3,721</td>
<td>27</td>
</tr>
<tr>
<td>1960</td>
<td>3,034</td>
<td>5,020</td>
<td>15</td>
</tr>
<tr>
<td>1965</td>
<td>3,567</td>
<td>6,130</td>
<td>16</td>
</tr>
</tbody>
</table>


Despite the military base of the argument, the most visible supporters of selective service were civilians. Chief among these were Granville Clark and Henry Stimson (later Secretary of War). It was Clark who, with others including Harold Dodds, President of Princeton, and President James Bryant Conant of Harvard, drafted the first selective service bill. This bill, sent to Congress on June 20, 1940, was sponsored by Senator Burke of Nebraska and Representative Wadsworth of New York and was referred to as the Burke-Wadsworth bill.\(^\text{13}\)

Much debate centered around passage of this bill. Those in favor of the bill cited the above-mentioned importance of preparing a defense, a view supported by various influential journals. *The New Republic* was representative and succinct in its statement of July 1, 1940: "The primary reason for universal service, whatever else may be said for it, is dire necessity." This view held that the same factors that were so important in World War I—i.e., the coordination of manpower to meet both industrial and military needs—were important now and that if America became involved in the war, only by registering and cataloging all available manpower could the most efficient use be made of human resources. As in World War I, the increasing mechanization of war required increased industrial production, manpower training, and long-range planning, since no longer would a war be lost or won by an enthusiastic but untrained and unprepared militia. Those having this pragmatic view of the situation felt that conscription through selective service was the only way to prepare for our inevitable entry into war.

Supporters of conscription marshaled other important arguments for their cause. The then present-day experience was pointed to as a proof of the inadequacy of volunteerism, though there is some question about the validity of this "proof." All quotas were filled. The Army maintained that they were setting quotas especial-

\(^{13}\) The 1940 draft law had two particularly interesting features. First, as with World War I conscription, the law explicitly prohibited the payment of bounties and the use of substitutes. Second, conscripts could be forced to serve for only one year and only in the Western Hemisphere or in U.S. territories and possessions (reminiscent of the militia laws during colonial times).
ly low, since they could not expect to achieve the "true" quotas, although this was never demonstrated. In addition, emphasis on the duty of the citizen was generally stressed by military and government officials, those most closely involved with manpower planning or practical considerations. Obviously, the strengths of this argument lay in the belief, generally held by proponents of selective service, that under conscription, all eligible men would in some way serve.

On the other side of the argument, those who advocated citizens’ rights as regards the state tended to emphasize opposition to governmental interference, especially peacetime conscription. Interestingly enough, the arguments and points brought to the fore by this group (which consisted mainly of elected officials, educators, and pacifist organizations) were many of the same ones that were later quantified and polished for the final AVF debate of the 1960s.

The arguments against the Burke-Wadsworth Bill represented an interesting combination of ideological and pragmatic considerations. On September 6, 1940, Senator Robert Taft of Ohio stated on a national radio broadcast:

The draft . . . is absolutely opposed to the principles of individual liberty which have always been considered a part of American democracy. This country has always been opposed to a large standing army.

In this, he reiterated the traditional American stance toward the military, in which it is considered at best an unwanted necessity.

The same "ideological constant" was echoed in the "Declaration Against Conscription" authored by the Committee on Militarism in Education, which was signed by 299 prominent educators in July 1940. A month later, the "Lawyers to Keep the United States Out of War" submitted a brief to the Federal Government on its right to draft. They maintained, through historical and legal argument, that with respect to conscription the Federal Government had

. . . no inherent power, no express power, no implied power and that such power is incompatible with the general nature and object of the Constitution.

The majority of arguments against conscription reflected this liberal philosophical base. They emphasized the Bill of Rights, individual liberty, and historical tradition. United States foreign policy was viewed through this same ideal: It was considered best to leave others alone, with the result that isolationism and neutrality were perceived as best serving the American interest. Burton Wheeler, an isolationist Senator from Montana, stated this viewpoint as follows:

The democracy which we hail in our country . . . means different things to different people; but it is certain that to every one of us democracy means at least the right to choose freely our own occupations and to conduct our lives with the greatest amount of freedom consistent with the general welfare . . . the essence of democracy is to leave the individual unmolested in the enjoyment in the words of a declaration promulgated by great Americans of the "inalienable" rights of life, liberty and the pursuit of happiness.

Although of secondary importance to the debate at this time, practical arguments were also put forth. In one of their journals, the American Federationist, labor unions came out strongly against conscription on broadly stated economic grounds. Their position was that compulsory conscription of millions of soldiers was wasteful and extravagant and not yet needed. It would destroy the structure of the
unions in such a way that they might never recover, even after a war. They felt that such questions as Social Security, restitution of position, and seniority of conscripted men had never been clearly answered, certainly not to their satisfaction. The actual pay of conscripts was another unanswered point, since the unions felt that adequate pay for men subjected to military service was an essential factor in any selective service program.

Labor was primarily concerned with practical considerations and plans, or the lack thereof. The labor unions were concerned lest their interests be damaged in a hasty, ill-conceived call to military service. The prevalence of this concern can be seen in another Senate speech by Taft of Ohio:

The principle of a compulsory draft is basically wrong. If we must use compulsion to get an army, why not use compulsion to get men for other essential tasks? Why not draft labor for [essential] occupations at wages lower than the standard? . . . In short, the logic of the bill requires a complete regimentation of all labor and the assignment of jobs to every man. This is actually done in the Communist and Fascist states which we are now apparently seeking to emulate.

This kind of argument, placing practical considerations in the shadow of larger ideological issues, is characteristic of the debate of the 1940s. That the debate was basically unresolved is apparent in the passage of the Burke-Wadsworth Bill by one vote, though this lack of resolution of course became moot on December 7, 1941, with the attack on Pearl Harbor.

Pearl Harbor immediately changed the mood of the Congress and the country. Philosophical, historical, and economic arguments against conscription lost all relevance in the face of obvious and imminent peril. On December 13, 1941, territorial restrictions on the use of conscripts were abolished, and the term of service was lengthened to the duration of the war plus six months afterwards. A week later, eligibility for conscription was extended from 18 to 31 years to 18 to 44 years of age. In 1942, all men between 18 and 65 were required to be registered. By 1943, in order to better control and organize crucial production needs, no volunteers were being accepted. The induction process was totally responsible for military manpower procurement as it had been in World War I, and for the rest of the war a variety of regulations and deferments were enacted to meet specific industrial and military needs.

Thus, by the end of the largest war in the world's history, conscription had become truly integrated into American society and a supposed obligation for all citizens was apparently accepted (though it should be noted that only 16 million of the 45 million registrants actually served).

In August 1945, the Japanese surrendered. The draft continued for 18 months after the war had ended and was allowed to lapse in March 1947. However, this lapse was to be just that, a brief pause in the 25 years of uninterrupted conscription to follow.

Post-World War II

The draft law expired 1½ years after the war officially came to a close. However, an increasingly tense international situation, coupled with a seeming inability to recruit enough volunteers, persuaded President Truman to request a reenactment of the draft in 1948.
Very solid facts argued for a larger standing army than the United States had ever previously maintained, since Germany and Japan were to be occupied and new bases in the Pacific had to be staffed. In addition, the European situation had worsened. America was emerging as a significant world power in counterbalance to the obviously hostile Soviet Union. Added to this was the change in warfare itself that required more sophisticated weapons and the trained personnel to man them. The organization of this “new” military was problematic, but the general consensus among those involved was that it would have to be big. The required size, it was felt, could not be achieved solely through volunteers.\(^{14}\) Many pointed to the 1947 experience, when volunteers were insufficient to meet manning levels, as proof that in the post-World War II situation conscription was a necessity.

Those favoring continuation of the draft again, predictably, spoke from a more practical podium. They pointed to the position America would have to take in the future and the necessity of maintaining vigilance. Persons of diverse backgrounds shared this view, as would again be the case in the 1960s. Charles Seymour, then President of Yale, stated:

... Unless we set up a system of guaranteeing complete adequacy for any reasonable contingency, we shall, as in the past, find ourselves without any preparation at all. We may be sure that for many years the state of world confusion will be such that it is better for us to be overprepared than underprepared.

Many other educators agreed with Seymour. In addition, they all seemed to ascribe to military training a certain beneficial moral influence and enlightening social experience.

Others were less interested in social objectives, being instead primarily concerned with preparedness. To this end, they supported universal military training. As historian W. F. Tompkins put it:

The fact remains that generation after generation, we have paid an unnecessarily high price in blood for the doubtful privilege of military improvisation. It is a historical fact that until the time of World War II, the U.S. has consistently failed to make adequate preparation, even on the eve of battle, for the military implementation of the national will.

Henry L. Stimson, Secretary of War, shared this view. Indeed, many proponents of universal military conscription seemed to base their ideas on a view of the world which saw wars as unavoidable. As Stimson stated:

If as history shows, wars recur, we owe it to our young men to provide a system of military training in peacetime . . . . In the future, we may again be forced to send our young men into combat against armies of sudden aggression. We have no right to gamble on the hope that our country, for the third time, will have even the little breathing space she has had in these two wars for hasty preparation. We have fully experimented with unpreparedness as a means for avoiding war. It has not prevented war and has led to staggering costs and sacrificed lives.

It is interesting to note that in the immediate postwar debate the issue at hand was universal military training. Much as George Washington had done almost 200

\(^{14}\) Note the importance of the population base, for not only was the number of men in uniform required to be large, but, as shown in Fig. 3-2, about 75 percent of all young men would have to serve, simply because of the limited number of young men of military age.
years before, advocates of UMT pointed out the responsibility of every male citizen to assist in providing for the common defense. The new technology and the vastly different international situation certainly disallow an exact comparison with Washington's Revolutionary War, but the similarity of the political and philosophical issues is interesting. There were those who felt that every (male) citizen should bear responsibility for mutual defense, while others were concerned lest this (governmentally defined) responsibility infringe on individual liberty.

The dominance of one view over the other was mainly dictated by outside circumstance. The more obvious the necessity, whether apparent through threat or real during actual war, the more likely that the military view would prevail. This was the situation before both World Wars and after World War II.

Another point of similarity between World War I and World War II was the totality of commitment. In both these wars, there was total mobilization of military and industrial resources. Everyone was involved in the war effort. That this sense of national commitment was not present in the two succeeding wars contributed, with other factors, to the increasing dissatisfaction with the Selective Service System during the 1950s and 1960s.

The main dissatisfaction came from the fact that it was just that, a selective service that spread the burden of military service quite unequally, perhaps even unfairly. But it must be remembered that selective service was not the point of debate after World War II. Universal military training was the issue at hand. Had the proponents of UMT been able to foresee the reality that would result—i.e., selective service for progressively fewer "selectees"—their support might have been less unequivocal, or at least ways for distributing the burden more fairly might have been developed.

Those against UMT spoke out for values of individual choice. They challenged the real necessity of military preparedness, maintaining that the solution to international problems lay elsewhere. As Grayson Kirk, Professor of Government at Columbia, stated:

... These considerations suggest the conclusion that the fundamentals of our future security are essentially political rather than military. Skillful statesmanship supported by a reasonably strong force in being ... gives us the maximum likelihood of future security. For this combination, the strongest standing military force alone is not a satisfactory substitute.

Senator Taft again led the more pacifistic and perhaps idealistic opponents of compulsory military training. In an address in May 1945, he reiterated his stance:

Military conscription is essentially totalitarian ... because it is the most extreme form of compulsion, military conscription will be more the test of our whole philosophy than any other policy .... It is against the fundamental policy of America ... and if adopted, will color our whole future.

In addition, Taft and others felt that the military should be made a sufficiently attractive occupation to enlist enough volunteers to meet military needs. In this way, the military purpose would be served with no loss of personal liberty. Unfortunately, this was never seriously considered.
LESSONS FROM THE PAST

It is always difficult to draw lessons from the past, and the history of conscription in the United States offers no exception. Substantial changes have taken place in the political, economic, and military circumstances facing the United States, while technology and management become increasingly important in every phase of American life, including warfare. Indeed, so rapid, so numerous, and so profound have the changes been that they have frequently overridden the importance and relevance of history and tradition.

Yet, certain basic themes do emerge. Chief among these is the inherent liberalism of the American people, tempered by a considerable practicality. The antipathy toward large standing armies, the insistence on civilian control, and the avowal of individual liberty are all manifestations of the former, while the search for reasonable compromise and the willingness to bear hardship for the national good are illustrative of the latter.

These basic themes keynote much of the American experience with conscription. America was founded at least partially on the notion that individuals should be free to choose their own destiny, which logically includes the right of individuals to choose their own occupation, unencumbered by governmental interference. Similarly, the notion of "just compensation" has been a hallmark of American political and social belief. The founding fathers recognized, however, that to be a viable nation state, the government also had to have certain rights, including the right to property and person. This right, however, was not that of totalitarian confiscation used in many other nations of the world, but rather the result of reasoned discourse between the nation's citizens and its government. In fact, what is perhaps most interesting is the confluence of individual rights and state rights, as illustrated by the coupling of the right to bear arms and the obligation to bear arms in the nation's defense.

The historic American attitude toward conscription reflects these basic themes. Although conscription can hardly be viewed as an integral part of American tradition—voluntary recruitment methods have dominated the course of American history—military (and militia) service and conscription have played a key role at various crucial moments, particularly since 1940. Thus, idealism and liberalism, balanced against the practical needs of the nation, have set the basic tone for the use of conscription.

The dominance of volunteerism in the United States stems principally from doubts about maintaining large standing armies and from opposition to conscription itself. American skepticism of large standing armies extends back before the Revolutionary War, as the colonists had witnessed what happened under the large standing armies of Cromwell, Charles II, and James II of England. Early Americans chose instead to rely on local militia; even during periods of war, such as the War of 1812, it was each state's responsibility to raise sufficient manpower through the militia. That reliance contributed significantly to the historical reluctance to impose a draft, since without large standing armies, there was no need for conscription.

There was also strong opposition to conscription itself, based largely on opposition to taxation without representation and on the belief in free choice. Conscription was quite rightly viewed as imposing a tax on those who were forced to serve, many of whom could not even vote.
Given this historical opposition to the draft, where did the notion of the "citizen-soldier" and the "tradition" of the draft arise? Alternatively, if opposition to conscription has been such a part of U.S. history, how and why did the draft ever come to be used, particularly in the "peacetime" conditions following World War II?

The confusion about the history and tradition of the draft in America probably comes from the distinction between nationwide conscription and the militia. From its very inception, the United States has obliged all able-bodied males (within certain age limits, usually 18 to 45) to belong to the militia. In fact, the National Defense Act of 1916, which is still in effect today, specifies that every able-bodied male between 18 and 45 belongs to the militia, either the National Guard, the Naval Militia, or the Unorganized Militia.\textsuperscript{15}

The use of this argument as a basis for a national draft is misdirected, however, since the principal purpose of the militia has historically been to provide local, or home, defense, while national conscription has historically been used (or proposed) for raising an army for other purposes as well. The value of militia for other than home defense, however, is open to some question:

The militia proved less useful when they were not fighting directly and obviously in defense of their own homes. The New England expeditions that took Port Royal in Acadia in 1690 and 1710—facing weak opposition—and the famous expedition that seized the fortress of Louisbourg in 1745—despite much stronger opposition—were exceptions. In general, the colonial militias were not a reliable instrument of offensive war distant from their own firesides.

The reasons are evident. Few men came to America to be soldiers. More likely, they came in part to escape soldiering. They would fight when they had to, to preserve the homes and farms and way of life they had crossed the ocean to find. But they did not wish to abandon homes and farms for months or a season, to go off soldiering in pursuit of objects only remotely connected with their own aspirations or security. Militia training did not prepare them for extended campaigns, nor did militia organization befit the maintenance of long expeditions. A long campaign to distant fields that also involved meeting Indian tactics of stealth and ambush was a campaign for which colonial militia, except units recruited from frontiersmen, were especially unsuited. When the French and Indian War demanded such campaigns, the militia system did not suffice. Therefore, regiments of British regular army appeared in America, to fight the French and their Indian allies and to add their contribution to the influences that were to shape the United States Army.\textsuperscript{16}

The militia was therefore never envisioned as a national army or for engaging in "foreign" wars and, moreover, when it was called upon to serve in such a role, its performance was often far from exemplary.

For the most part, history seems to tell us that there has been a basic tendency for America to rely on volunteerism when practical. However, when it has not been practical, such as during World War II, the nation has resorted to conscription. This

\textsuperscript{15} In a sense, this couples the right to bear arms guaranteed by the Bill of Rights with the obligation to bear arms in the local defense. Though it never became law, the Knox Plan (named for its author, Henry Knox, Secretary of War under President Washington) would have explicitly tied together citizenship with participation in the militia.

was particularly the case following World War II, when U.S. defense policy, for the first time in a "purely" peacetime setting, called for the maintenance of a large standing army. As shown in Fig. 3-2, it simply was not practical to attract sufficient volunteers to man the postwar military, since about 7 out of every 10 eligible members of the pool would have had to volunteer. It is notable, then, that the very reason the postwar draft was instituted—the relation of manpower demands to the available pool—was also the reason for its demise.

INTERNATIONAL PERSPECTIVE

Just as the general issues and questions about the military and manpower procurement that surfaced in postwar America are not entirely unique when viewed in the broader context of American history, neither are they unique with respect to the practices, problems, and policies of manpower procurement found in other nations. To be sure, different policies are used in different countries, because of differences in supply conditions, force requirements, and budget constraints, as well as differences in social and political attitudes. Yet a common thread does run through all of them.

Of particular concern to the draft debate of the 1960s was the fact that the conditions that led to the removal of the draft in the United States were likewise asserting themselves in other nations. The equity issue, coupled with the simple demographics of a growing population base, was the major factor in the decision to abolish peacetime conscription in America. This same problem developed in most of the industrialized Western nations, yet the solutions to the problem varied markedly by country.

An examination of the international experiences with different procurement policies helps to put the American volunteer force into perspective. Although volunteerism is found in a variety of settings, the U.S. volunteer experiment is in many respects unique. Moreover, since some nations have resolved the equity issue by means other than ending the draft, a review of these alternatives illustrates why the draft may have been an attractive alternative for them, but not for the United States.

We can begin by examining the frequency of occurrence of volunteer and draft methods of manpower procurement across countries. In general, we would expect any given country's tendency toward using the draft to be a function of the budget costs required to support a volunteer military. Other things equal, a country will be more inclined toward conscription as the budget costs of a fully volunteer military increase. Of course, other factors such as the use of conscription as an element of social policy are also significant, but budget considerations will always be a very important determinant of public policy.

The budget costs required to support a volunteer military depend on the supply of volunteers. The supply of voluntary manpower is certainly a function of many factors, such as patriotism, the popularity of the military, and other nonpecuniary aspects of military service. Although these factors and their importance may vary substantially across countries, two of them are likely to be important in almost all countries: (1) the number of volunteers required and (2) the availability of attrac-

---

17 Such is likely to be the case in much of the Communist bloc.
tive civilian employment offers. To attract more volunteers, the military must offer more, whether in cash or nonpecuniary incentives (e.g., better working conditions); that is, the supply curve is upward sloping as a function of pay and other rewards to serving. Furthermore, when the returns from civilian employment are larger, the military will have to offer more to compete effectively against civilian employers. A volunteer military is likely to be more costly to maintain in countries where force requirements mean that a larger fraction of the population must serve and where more attractive civilian employment opportunities exist, other things being equal. In the absence of precise data on the flow demand for manpower relative to the eligible population base and on the civilian employment alternatives for each country’s youth, we must resort to some proxy measures: (1) the percentage of the total population serving in the military and (2) the per capita GNP.

The data based on these proxy measures, shown in Table 4-2, help to explain much of the variation in manpower procurement policies as used by different countries. Although conscription remains the predominant method of manpower procurement, a number of countries have had for some time or have recently adopted volunteerism instead of the draft. But, with the exception of the United States, these countries are either poor (e.g., Jordan) or have small forces (e.g., Canada), or both (e.g., India). Thus, the poorer the nation and the smaller the force, the easier it is to attract a sufficient number of volunteers.

If the military pays better than the civilian sector, and if the civilian sector is at or near a subsistence standard of living, the military finds it much easier to attract potential recruits. Such conditions have made many military establishments able to rely on volunteers alone—in fact, countries with these conditions have usually had large queues waiting to join the military. When the standard of living is higher, the military finds it more difficult to recruit personnel without the pressure of the draft, not necessarily because military service is inherently unattractive, but because it must compete with many employers.

As shown in Table 4-2, none of the major advanced nations employing a voluntary military—Australia, Canada, Great Britain, and Japan—maintains a force anywhere near the size (either in total numbers or as a fraction of the population) of that maintained by the United States. Of the five other nations shown to have a volunteer military, three also have only a small proportion of their population in their Armed Forces. The two nations that have a higher percentage of their population in the military than the United States have a standard of living much closer to a subsistence level, as measured by GNP per capita. Thus, only a relatively few nations man their Armed Forces without conscription, and of those, only the United States both maintains a large force and enjoys a high standard of living.

Turning to the equity issue, which is somewhat more germane to the debate of the 1960s, the international comparisons provide valuable insights into the reasons why the solutions chosen by some countries may not be appropriate for others. Of

---

18 By the measures shown in Table 4-2, Libya would seem to be an exception to the above statement, since a large proportion of its population is in the military and it has a sizable GNP per capita (relative to the other Arab nations). However, this apparent exception is in fact a result of the shortcomings of GNP per capita as a measure of the standard of living. In nations such as the United States where the wealth is reasonably well distributed across all citizens, GNP per capita is a reasonably good measure of the (relative) standard of living, but when the wealth is not well distributed, the median standard of living will be well below the measured GNP per capita. Such is the case for Libya, since most of Libya’s wealth derives from oil interests and is concentrated in a relatively small segment of the population.
<table>
<thead>
<tr>
<th>Country</th>
<th>Force Size&lt;sup&gt;d&lt;/sup&gt; (000s)</th>
<th>Population (millions)</th>
<th>Military Service (percent)</th>
<th>GNP Per Capita&lt;sup&gt;c&lt;/sup&gt; ($ U.S.)</th>
<th>Type of Military Service</th>
<th>Type of Military Service</th>
</tr>
</thead>
<tbody>
<tr>
<td>United States</td>
<td>2,130</td>
<td>216</td>
<td>0.99</td>
<td>6,475</td>
<td>Voluntary</td>
<td></td>
</tr>
<tr>
<td>Canada</td>
<td>77</td>
<td>23</td>
<td>0.34</td>
<td>4,610</td>
<td>Voluntary</td>
<td></td>
</tr>
<tr>
<td>Belgium</td>
<td>87</td>
<td>10</td>
<td>0.88</td>
<td>5,507</td>
<td>Draft: 10-12 mos.</td>
<td></td>
</tr>
<tr>
<td>Britain</td>
<td>345</td>
<td>57</td>
<td>0.61</td>
<td>3,333</td>
<td>Voluntary</td>
<td></td>
</tr>
<tr>
<td>Denmark</td>
<td>34</td>
<td>5</td>
<td>0.74</td>
<td>6,709</td>
<td>Draft: 9 mos.</td>
<td></td>
</tr>
<tr>
<td>France</td>
<td>503</td>
<td>53</td>
<td>0.96</td>
<td>5,161</td>
<td>Draft: 1 yr.</td>
<td></td>
</tr>
<tr>
<td>Germany (FRG)</td>
<td>495</td>
<td>63</td>
<td>0.79</td>
<td>6,211</td>
<td>Draft: 15 mos.</td>
<td></td>
</tr>
<tr>
<td>Netherlands</td>
<td>112</td>
<td>14</td>
<td>0.82</td>
<td>5,117</td>
<td>Draft: 16-21 mos.</td>
<td></td>
</tr>
<tr>
<td>Germany (GDR)</td>
<td>143</td>
<td>17</td>
<td>0.84</td>
<td>2,376</td>
<td>Draft: 18 mos.</td>
<td></td>
</tr>
<tr>
<td>Hungary</td>
<td>105</td>
<td>11</td>
<td>0.97</td>
<td>1,807</td>
<td>Draft: 2 yrs.</td>
<td></td>
</tr>
<tr>
<td>Poland</td>
<td>293</td>
<td>34</td>
<td>0.87</td>
<td>1,811</td>
<td>Draft: 2-3 yrs.</td>
<td></td>
</tr>
<tr>
<td>Egypt</td>
<td>322</td>
<td>38</td>
<td>0.86</td>
<td>477</td>
<td>Draft: 3 yrs.</td>
<td></td>
</tr>
<tr>
<td>Iran</td>
<td>250</td>
<td>33</td>
<td>0.75</td>
<td>1,072</td>
<td>Draft: 2 yrs.</td>
<td></td>
</tr>
<tr>
<td>Israel</td>
<td>156&lt;sup&gt;e&lt;/sup&gt;</td>
<td>3</td>
<td>4.64</td>
<td>3,482</td>
<td>Draft: 24-36 mos.</td>
<td></td>
</tr>
<tr>
<td>Jordan</td>
<td>80</td>
<td>3</td>
<td>2.94</td>
<td>366</td>
<td>Voluntary</td>
<td></td>
</tr>
<tr>
<td>Libya</td>
<td>32</td>
<td>2</td>
<td>1.38</td>
<td>2,543</td>
<td>Voluntary</td>
<td></td>
</tr>
<tr>
<td>Saudi Arabia</td>
<td>47</td>
<td>9</td>
<td>0.53</td>
<td>1,347</td>
<td>Voluntary</td>
<td></td>
</tr>
<tr>
<td>Syria</td>
<td>178</td>
<td>7</td>
<td>2.41</td>
<td>393</td>
<td>Draft: 30 mos.</td>
<td></td>
</tr>
<tr>
<td>Australia</td>
<td>69</td>
<td>13</td>
<td>0.53</td>
<td>5,611</td>
<td>Voluntary</td>
<td></td>
</tr>
<tr>
<td>China (PRC)&lt;sup&gt;g&lt;/sup&gt;</td>
<td>3,250</td>
<td>850</td>
<td>0.38</td>
<td>200</td>
<td>Draft: 2-6 yrs.</td>
<td></td>
</tr>
<tr>
<td>China (Taiwan)</td>
<td>494</td>
<td>16</td>
<td>3.00</td>
<td>809</td>
<td>Draft: 2 yrs.</td>
<td></td>
</tr>
<tr>
<td>Japan</td>
<td>236</td>
<td>115</td>
<td>0.21</td>
<td>4,174</td>
<td>Voluntary</td>
<td></td>
</tr>
<tr>
<td>Korea (So.)</td>
<td>625</td>
<td>341</td>
<td>1.82</td>
<td>509</td>
<td>Draft: 30-36 mos.</td>
<td></td>
</tr>
<tr>
<td>India</td>
<td>956</td>
<td>602</td>
<td>0.16</td>
<td>144</td>
<td>Voluntary</td>
<td></td>
</tr>
<tr>
<td>Thailand</td>
<td>204</td>
<td>40</td>
<td>0.51</td>
<td>287</td>
<td>Draft: 2 yrs.</td>
<td></td>
</tr>
</tbody>
</table>


<sup>a</sup>Countries were selected to provide a representative cross-section of population sizes, force strengths, service obligations, and wealth. The large representation of Middle East nations appears because of the number of countries with a volunteer military; an attempt was made to represent a variety of major voluntary military systems.

<sup>b</sup>Force size generally refers to regular forces.

<sup>c</sup>Estimates of 1974 GNP in $ U.S.

<sup>d</sup>Type of military service refers to whether or not conscription is used. The times shown here give the length of time a conscript is obligated. Ranges on the obligations refer to the fact that a conscript's obligation depends on his particular service.

<sup>e</sup>Represents 30,000 regular forces and 85,000 conscripts in service at any one time. In addition, 300,000 reserve personnel can be mobilized within 72 hours.

<sup>f</sup>Men are obligated for 36 months; women for 24 months. In addition, individuals are required to participate in annual training (after leaving the military) until a specified age limit.

<sup>g</sup>Estimates for China (PRC) are extremely approximate. Population is estimated between 750 million and 850 million. The GNP estimate of $170 billion is based on a speech by the Prime Minister. Other estimates for 1972 GNP have ranged between $120 billion and $220 billion.
particular interest in these comparisons are the countries of Western Europe, especially the NATO nations in Central and Northern Europe. These countries are social democracies with cultures and traditions broadly similar to those of the United States; they have faced the same general problem of a growing population base and constant or moderately declining force sizes over the postwar period; and, by their agreements with NATO, they all maintain roughly the same size forces, expressed as a fraction of the population base.

In each of these countries, the inequities imposed by conscription—together with the fact that a growing population base was making it impossible for all in the relevant age group to share this burden equally—became a major public concern. In fact, the equity issue has probably received more attention and concern in most of these European nations than it ever did in the United States. Given the problem of a growing population base and constant or declining force strengths, there are essentially four options for dealing with the equity issue: (1) end the draft altogether; (2) decrease the length of time a conscript must serve; (3) devise an offset procedure where those who are inducted receive some special or extra compensation, while those who are not inducted must pay a special tax; and (4) ignore the problem. Each of these options has been used by some countries. For example, the United States followed the fourth option until 1973, and then the first.

Britain's experience is probably the best known, as its transition to a volunteer force was cited frequently during the U.S. draft debate of the 1960s. A 1957 British White Paper announced Britain's intention to end the draft and, in 1961, the British officially converted to a volunteer military. Britain, however, was the only major European country to follow this route; the others have all retained conscription.

Of the remaining options, the most generally popular—and the one usually implemented first—has been a reduction in the length of time a conscript must serve. By decreasing the length of service, the flow-through can be increased, for a given force size, so that a larger number of individuals participate in the military. As shown in Table 4-3, there has been a clear trend toward reducing the length of service for conscripts since the mid-1960s. For example, the length of a Danish conscript's tour, which was 14 to 20 months (depending on the specific service and rank) in 1964, was reduced to 9 months by 1975.

In general, the conscription tour can be set so that all members of the age cohort serve, since as the population base grows, the length of the tour can be shortened sufficiently that all in the age cohort bear the same burden. At the same time, shortening the tour length is not costless. With shorter conscription tours, more individuals must be trained, there is more down time (e.g., check-in and check-out), and those in the force are less experienced. Each of these factors impairs military capability—seriously, if the tour is short enough. Thus, an inductee's tour was set at two years in the postwar United States, despite the fact that this meant a smaller proportion could serve. The rationale was that a shorter tour simply meant too much unproductive time and was not cost-effective.

Although it might seem logical to include Australia and Canada, because of their similarities to the United States, both of these countries have long relied on volunteer forces (Australia did return to the draft for a while in the 1960s but removed it again). Thus, the equity problem did not become a major policy issue during the 1960s, since both countries had implicitly resolved it before it arose.

In particular, Belgium, Britain, Denmark, France, West Germany, the Netherlands, and Norway. Although France is not militarily part of NATO, France was included because of her general similarity to the others.
Table 4-3
Minimum Length of Service for Conscript Forces in Western Europe\(^a\)
(months)

<table>
<thead>
<tr>
<th></th>
<th>1964</th>
<th>1968</th>
<th>1972</th>
<th>1976</th>
</tr>
</thead>
<tbody>
<tr>
<td>Belgium</td>
<td>12</td>
<td>12</td>
<td>12-15</td>
<td>10-12</td>
</tr>
<tr>
<td>Denmark</td>
<td>14-24</td>
<td>12-14</td>
<td>12</td>
<td>9</td>
</tr>
<tr>
<td>France</td>
<td>18</td>
<td>12-15</td>
<td>12-15</td>
<td>12</td>
</tr>
<tr>
<td>Germany (FRG)</td>
<td>18</td>
<td>18</td>
<td>18</td>
<td>15</td>
</tr>
<tr>
<td>Italy</td>
<td>18-24</td>
<td>15-24</td>
<td>15-24</td>
<td>12-18</td>
</tr>
<tr>
<td>Netherlands</td>
<td>20-24</td>
<td>16-21</td>
<td>16-21</td>
<td>16-21</td>
</tr>
<tr>
<td>Norway</td>
<td>16-18</td>
<td>12-15</td>
<td>12-15</td>
<td>12-15</td>
</tr>
<tr>
<td>Sweden</td>
<td>10-22</td>
<td>10-23</td>
<td>9-15</td>
<td>9-15</td>
</tr>
<tr>
<td>Average(^b)</td>
<td>17.9</td>
<td>15.6</td>
<td>15.1</td>
<td>13.2</td>
</tr>
</tbody>
</table>

\(^a\) The length of commitment in some countries is a function of the Branch of Service or rank (e.g., privates, NCOs, and officers). Where there are differences, minimum LOS are presented as ranges.

\(^b\) A simple unweighted average.


As the countries on the Continent reduced tour length, they began to approach the point where it was no longer feasible to maintain a conventional standing army. Some—most notably Denmark, the Netherlands, and Norway—chose a different route, somewhat similar to the Israeli approach.\(^21\) These countries view the conscription tour as a means for providing training, so relatively little time is spent in regular units. Upon completion of this tour, the individual rejoins the civilian sector but is a member of the reserves.\(^22\) Because of the relatively small area of each of these countries, their reserves can be mobilized rapidly (at least in theory).\(^23\) Thus, they have dealt with the selection problem by moving from a system of universal military service to essentially one of universal military training.

As Germany is the main front in Central Europe, the Germans have been in a somewhat different position. Operating under the assumption that universal military training alone would not provide sufficient security, they have been reluctant to reduce the conscription tour below 15 months. As a result, the equity and selection problem has arisen anew and has received much attention in the German literature. To deal with it, the Germans essentially try to alleviate the burden for

\(^{21}\) However, the Israelis have adopted this approach for other reasons—because of scarce manpower, not surplus manpower.

\(^{22}\) This is not altogether unlike the Selected Reserves in the United States.

\(^{23}\) Of these, perhaps the best known are the Dutch RIM battalions. Under the RIM concept, units serving together during their tour of conscription would, if the occasion arose, be mobilized together to serve in the same units again, after their tour. See, *Oom De Veiligheid Van Het Bestaan: Defensiebeleid in De Jaren 1974-1983*, The Hague, July 1974.
those forced to serve. For example, conscripts are given three months of free (civilian) training at the completion of their 15 months of service.24,25

Finally, France uses a system of universal service where conscripts spend one year in the military. However, French conscription policy would seem to be motivated as much by political reasons as social reasons. The French military was more professionally oriented before the Algerian uprising, a fact which was at least partially held to blame for the military’s political involvement during the Algerian episode. The mixing of the military and politics served to remind the French of the dangers of a professional elite, and as a result, the French sought to depoliticize the military as much as possible. One of the methods for doing so was a heavy reliance on short-term conscripts—about 65 percent of the French forces are conscripts—and hence, the integration of political and social policy.

We thus find two general approaches to the manpower procurement problem in the Western developed nations: (1) the Anglo-American model of voluntary military service, the major examples being the U.S., British, Australian, and Canadian systems; and (2) the Continental model of conscription, generally modified so as to approach universal service (or training). For the United States, universal service was not practical (nor was it deemed politically necessary), yet the inequities of conscription posed major social policy questions. As a result, the thrust of public policy began to move toward ending the draft, much as it had in Great Britain 10 to 15 years earlier.

THE ALL-VOLUNTEER FORCE IN PERSPECTIVE

The discussion in this chapter has examined the move to end the draft in terms of the major issues responsible for the removal of the draft, the character of the debate of the 1960s, and how these fit into the broader context of American history and the experiences of other nations. Of all the issues discussed and raised, though, perhaps the most important and relevant for the 1970s are those related to the uniqueness (and lack thereof) of the AVF:

- As a concept, volunteerism is far from unique in the military, either in the United States or in foreign nations. In fact, volunteerism has more of a tradition in the United States than conscription.
- The AVF as a specific institution at a specific time is unique both historically and by the standards of other nations. Never in modern history has a nation maintained such a sizable military force without the threat or use of conscription.

We can put the latter point in some perspective by considering the British experience in more detail. When the British removed their draft in 1961, there were 700,000 men in the Armed Forces. However, force strengths were programmed to

---

24 One result of this is that German conscripts are officially in the military for 18 months, the last three of which are spent in civilian training. But they can be called back into military service during this three-month period, even in the absence of a full-scale mobilization.

25 To further deal with the equity problem, there was a proposal in the early 1970s to give a 1500 DM tax credit to conscripts at the completion of service; conversely, those not serving would have been subject to a special 1500 DM tax levy. Due to political opposition and to the difficulties of administering such a system, however, this proposal was never adopted.
decline so that by 1975, British Armed Forces numbered about 350,000—50 percent less than when their draft was ended. The British experiment was therefore aided not only by having to maintain a smaller force, but by rapidly declining force strengths during the process of transition. In the United States, however, force strengths declined only modestly after the draft was removed—from 2.35 million on December 31, 1972, to 2.13 million on December 31, 1974. In sum, achieving and maintaining the AVF is clearly a public policy experiment of major proportions.