If the Draft Is Abolished: Can the Cost Be Estimated?

In Wallis's editorial "Abolish the draft" (17 Jan., p. 235), he makes estimates of the cost of abolishing the draft ranging from \$3 to \$13 billion. The wide range reflects lack of definitive evidence concerning what a volunteer army would actually cost. Estimates that have been made probably only add to the confusion.

It is frequently pointed out in discussions of eliminating the draft that Pentagon estimates of the cost range from \$4 to \$17 billion per year, with implied or direct emphasis often placed on the higher figure. An analysis of these estimates raises a serious question as to whether they deserve any credence. A further question is the interpretation of any such figure.

The estimates were derived from a study carried out in 1964 by the Economic Analysis Section of the Department of Defense Study of the Draft (1). By making several assumptions, such as the size of the military force required, it is concluded that in the absence of a draft, enlistment rates would have to be increased from 58 to 88 percent (depending on civilian unemployment rates) over what could be expected under present pay scales. Some of these assumptions are, of course, open to criticism, but this is not central to the argument presented here.

The problem then was to estimate how much salaries would have to be increased to raise enlistment rates to an acceptable level. (Again, it is assumed that only pay scales or bonuses are open to change, and educational opportunity variables or other social variables are ignored.) Since direct data on this question were not available, indirect data were utilized: the enlistment rates in nine regions of the country were compared to civilian pay and unemployment rates for men aged 16-21 in these regions. (The use of short-term pay expectancy for a single alternative to military service is quite arbitrary and limited in meaningfulness. Enlistment decisions are based on longer term expectancies and on availability

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of other alternatives, such as college or apprenticeships.) Since military pay is constant from one region to the other, boys from a region in which they could expect low civilian pay would be attracted by military pay scales. From this regional data, the economists conducting the study derived an elasticity equation relating expected enlistment rates to the ratio of military pay to civilian pay and to unemployment figures on a national level. It is this procedure that we question.

It is true that, overall, regions in which civilian pay is lower tend to have higher enlistment rates. However, this is a long way from saying that they have higher enlistment rates because of the discrepancy between civilian and military pay. Other factors may be confounding the results. Specifically, the three regions of the country that have the highest enlistment rates (nondraftmotivated) are the South, the South Atlantic, and the Western South. These three regions also have the lowest civilian pay for young men. If these three regions are excluded from the analysis, the relationship between civilian pay and enlistment rates disappears. In particular the "elasticity" or responsiveness of enlistments changes drastically indicating the tenuous nature of their results. Thus, the finding of a relationship between relative military pay and enlistment rates is really the finding that young men in the southern regions of the country enlist at a higher rate than young men in the rest of the country. It may be true that the civilian pay in these regions is lower than in the rest of the country, but this certainly does not prove that relative military pay causes a certain level of enlistment rates. One could more plausibly attribute the relationship to the more limited educational opportunities or the military tradition in the South, or both. Far less is this the sort of data on which a quantitative estimate of the cost of a volunteer army should be made. Yet this is exactly what seems to have been done.

However, there is more figure juggling to be played on the data. Based on the above regional data, the best

estimates of the cost of providing an adequate volunteer military force were from \$5.4 to \$8.3 billion per year, depending on civilian unemployment rates (2). Where, then, does the estimate of \$4 to \$17 billion come from? Because of the nature of the data, and because the estimate is based on data grossly aggregated into a very small number of cases (the nine regions of the country), the standard error of the above estimates are huge, especially on the high end; \$17 billion is one standard error above the upper limit of the best estimate of the cost of a volunteer army. Instead of admitting that an estimate with such monstrous unreliability is useless, the Pentagon concluded that a volunteer army could cost from \$4 to \$17 billion. But even if the reliability of the estimate is disregarded, the fact remains that the best estimate from the data used in this study is \$5.4 to \$8.3 billion. It is deceptive to cite \$17 billion without specifying what is meant by it. No one predicted that a volunteer army would cost that much; yet this figure has been used to frighten people away from a volunteer army. Moreover, if a volunteer army did in fact cost \$17 billion, this magnitude would reflect the previous indirect claim of the military to this value of real economic resources whether or not this is a part of the ordinary budgetary accounting.

Finally, the bearing of an estimate of the cost of eliminating the draft on the preference one holds for taking that step depends on his values; the sword cuts both ways. The economic cost is more hidden now, since it comes about by coercion on a limited, largely disenfranchised segment of the population; but it is probably at least as great as the cost of an all-volunteer army, a cost that would be shared more widely (3). Perhaps it is more than a coincidence that opposition to the current war is greatest in that group asked to bear a disproportionate share of the cost.

> WILLARD RODGERS JOHN SONQUIST FRANK STAFFORD

Institute for Social Research, University of Michigan, Ann Arbor

References and Notes

- 1. S. H. Altman and A. E. Fechter, Amer. Econ. Rev. 57, 19 (May, 1967); Review of the Ad-ministration and Operation of the Selective ministration and Operation of the Selective Service System, hearings before the Committee on Armed Services, U.S. House of Representa-tives, 22-30 June 1966 (Government Printing Office, Washington, D.C.), p. 9952.
 This includes an estimate for the necessary increase in officer salaries which is based on different data; this may be open to much the same criticism as that presented above, but is

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1515 Massachusetts Ave., NW Washington, D.C. 20005 not presented in sufficient detail to be sure. The proportion of the increased salaries to be given to officers is only 5 to 10 percent of the total increase, so is not as critical.
3. See W. L. Hansen and B. A. Weisbrod [Quart. J. Econ. 81, 395 (1967)] for a discussion of the implicit economic transfer from draftees to the public at large.

Arbiters of the Pesticides

Robert van den Bosche's opinion of toxicologists and chemical company sales personnel is noted (Letters, 2 May). But surely the highly trained and well-informed research and extension personnel of the many experiment stations and universities are the ones who decide what pesticides are applied, and where, in the United States. Wouldn't it be fair to state then that these people, together with the huge block of competent scientists in the USDA, "dominate" the pest control field?

... The members of the pesticide industry are painfully aware of the ecological disasters which can go hand-inhand with their profession [see the fine paper on this whole subject by Hennberry, Bull. Entomol. Soc. Amer. 14, No. 3 (1968)]. To label most toxicologists and pest control salesmen as being either ignorant of or indifferent to ecological problems is foolish! These men have been trained in the biological sciences and in most, perhaps all, cases have had at least a basic course in both ecology and applied entomology. In fact to become a salesman (the term Field Technical Representative is preferred) with most reputable companies today, one must have a Ph.D. in entomology or some related field. ... H. DESMOND BYRNE

108 Texas Lane, Ithaca, New York 14850

Does "the Gap" Really Exist?

Margaret Mead in "The generation gap" (11 Apr., p. 135) asserts, "Nowhere in the world are there any elders who know what their children know." This is the sort of craven, trumped up assertion that leads the new generation to despise their elders. In many years of the practice of medicine I have had to encounter issues of life and death and make decisions affecting them. My husband, as a war correspondent, entered Hiroshima 30 days after the bomb fell. Our children have had nothing of this kind of experience with the real issues of life. They are content in knowing that we know far more than they and are in fact the happier for it. They are aware that their turn will come.

Mead states that all of us who grew up before the war are "immigrants in time." Of course. And so are our children, and so will be their children. For if we are not to regard life as but a treadmill, then it must be a pilgrimage with fresh encounters at every turn. The judgment upon us is the degree to which we meet these encounters with poise, courage, wit, determination, and steadfast faith. To be an "immigrant in time" is nothing new. It is common to all generations.

My husband and I and our children simply do not experience "the generation gap" and neither, I suspect, do many others. One reason is that we are one in our understanding that disappointment, sorrow, conceit, frustration are but a few among the evidences of human frailty. But there is also our common joy, which is our strength. For if human frailty is a universal . . . it can be celebrated with laughter, especially at ourselves. Laughter is a healing, conciliatory grace among all generations.

"We have to realize that no other generation will ever experience what we have experienced," Mead intones. So, history will cease to repeat itself! That is something new! How can one refute what is so obviously false?

Mead's major weakness is that she fails to take into account a radical distinction between adolescence and maturity. There are qualities in maturity that stand over, above, and beyond time, place, and culture; they are valid for all generations. To assign them a value equivalent to adolescent potherings is to betray maturity.

GUILA F. BEATTIE Post Office Box 326, Sherwood, Oregon 97140

Some of us who were involved in the public school education of this "new generation" might remember the group as being rather spoiled. At the time, this was somewhat understandable largely because their parents wanted them to have everything they didn't have as children. However, the very bothersome question to me now concerns the children of this rather spoiled generation. What real chance do they have? NORMAN R. MOLLOY

Post Office Box 15, Fontana, California 92335

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