



Effect of Activation on Reservist Earnings

RAND RESEARCH AREAS

- THE ARTS
- CHILD POLICY
- CIVIL JUSTICE
- EDUCATION
- ENERGY AND ENVIRONMENT
- HEALTH AND HEALTH CARE
- INTERNATIONAL AFFAIRS
- NATIONAL SECURITY
- POPULATION AND AGING
- PUBLIC SAFETY
- SCIENCE AND TECHNOLOGY
- SUBSTANCE ABUSE
- TERRORISM AND HOMELAND SECURITY
- TRANSPORTATION AND INFRASTRUCTURE
- WORKFORCE AND WORKPLACE

The more intensive use of the reserves since 9/11 has been accompanied by concerns that many reservists suffer substantial financial losses when they are activated—concerns that are reinforced by survey-based evidence suggesting that a large fraction of activated reservists suffer a decline in earnings when activated and that those earnings losses can be substantial. This evidence, in turn, has stimulated legislative proposals to improve the financial position of reservists and a congressional requirement for the Department of Defense (DoD) to survey reservists about earnings loss.

But such surveys have limitations that can lead to misleading results. First, the surveys instruct reservists to report pretax earnings, thus missing a large part of reservist compensation that is not subject to taxation. Second, survey responses are self-reported and are therefore likely to measure earnings changes with substantial error. And third, survey and item response rates in the most recent surveys are low, raising the possibility that only a selected sample of reservists are responding to the earnings loss questions.

RAND Corporation research presents new evidence on how activations affect earnings. This evidence is based on grouped administrative data from the Defense Manpower Data Center and the Social Security Administration that allow researchers to avoid the problems inherent in survey-based estimates. In particular, the research focuses on how activation affects the earnings of reservists activated in 2002 and 2003, but it also provides preliminary estimates of the effect of activation on earnings while activated in 2004 and following the period of activation.

Do Activated Reservists Suffer Large Earnings Losses During Activation?

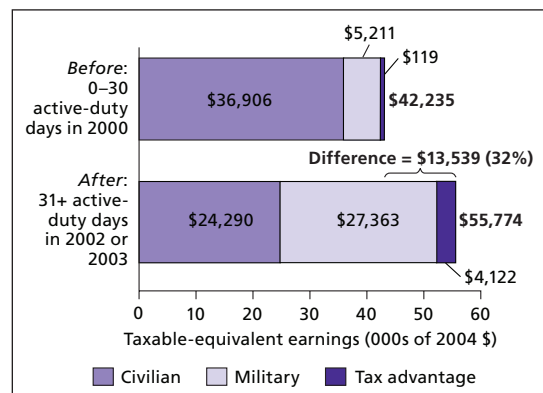
While the policy debate has been driven by the perception that a large fraction of reservists suffers an earnings loss when activated, our results suggest that such earnings losses are relatively uncommon and that, in fact, average earnings gains are sub-

Abstract

With the increased use of reservists, concern has grown that reservists might suffer financially from activation. Using military and civilian payroll data, this research shows that, contrary to recent survey evidence, earnings losses attributable to activation are relatively uncommon and that, in fact, average earnings increase substantially when reservists are activated. And although data are limited, analysis of a sample of reservists also finds little evidence that activated reservists suffer significant earnings losses following activation.

stantial. Our estimate of the gross effect of activation is based on the change in earnings between a base year with minimal active-duty days (i.e., 0–30 days)—in this case, 2000—and out-years with more than 30 active-duty days—in this case, 2002 and 2003. The figure shows the estimated gross effect.

In this group, average earnings were \$42,235 in 2000, whereas the earnings of these same reservists averaged \$55,774 in 2002 and 2003 (see the figure). Thus, average earnings increased by \$13,539 between the base and out-years, an increase of 32 percent over base-year earnings. The research shows that mean earning gains rise as active-duty days



This product is part of the RAND Corporation research brief series. RAND research briefs present policy-oriented summaries of individual published, peer-reviewed documents or of a body of published work.

Corporate Headquarters
1776 Main Street
P.O. Box 2138
Santa Monica, California
90407-2138
TEL 310.393.0411
FAX 310.393.4818

© RAND 2006

served increase. As shown in the figure, additional military pay more than compensates for the loss in civilian pay, with an additional benefit coming from the preferred tax treatment.

Despite the aggregate gains, about 17 percent of these reservists did experience a loss in earnings, 6 percent experienced a loss of more than \$10,000, and 11 percent experienced a loss of more than 10 percent of their base-year earnings. By comparison, survey data suggested that 49 percent experienced an earnings loss.

In addition, we find that 40 percent of reservists who were not activated in either 2000 or 2002/2003 also experienced an earnings loss. Thus, the net effect of activation is to reduce the probability of experiencing an earnings loss by 23 percentage points (40 percent minus 17 percent). This means that activation makes it less likely that a reservist will experience an earnings loss.

Finally, work under way with even more recent data suggests that the pattern of large earnings gains and few reservists with earnings losses is likely to hold for reservists serving on active duty in 2004 and 2005.

Although these findings differ greatly from those based on available survey evidence, they are consistent with research showing that full-time military pay compares favorably to the full-time pay of civilians with similar education and experience. Moreover, reservists serving on active duty often receive special pays and tax breaks, which we find to be important.

Do Activated Reservists Suffer Large Earnings Losses After Activation?

As reservists return from long periods on active duty, policy interest will shift to the effect of active-duty service on earnings following the activation. Our ability to analyze the effect of activation on post-activation earnings is limited by the lack of data on civilian earnings beyond 2003. Nonetheless, for reservists activated for 0–30 days in 2000 and 2003 and more than 30 days in 2001 and 2002, we find little evidence that activated reservists suffer significant earnings losses following activation. On average, net earnings increased between 2000 and 2003 for reservists activated for more than 30 days in 2001 and 2002, and the net probability that a reservist experienced an earnings loss declined slightly. We

note that these results apply to a select group of reservists and thus should be viewed with caution.

Policy Implications

Inasmuch as our findings accurately characterize earnings loss from activation, they weaken the equity argument that underlies congressional proposals to compensate reservists having losses. The argument posits that reservists should not suffer serious financial harm as a result of their reserve service and so should be compensated for their financial loss.

We also note that efforts to replace earnings of reservists who experience an earnings loss while activated will inevitably compensate some reservists who would have experienced an earnings loss even if they had not been activated. Earnings replacement also would fail to compensate reservists whose earnings would have grown by an even larger amount had they never been activated. Thus, in the course of addressing one set of inequities, earnings replacement would create another set of inequities that could be just as harmful.

Even though our estimates suggest that most reservists experience large earnings gains, those gains might still not be sufficient to compensate for the hardships of activation (e.g., expenses associated with being away from one's family and the emotional cost of family separation), which can be substantial.

More broadly, enlistment and retention will likely be positively correlated with such potential earnings gains or losses. Thus, reservists who stand to suffer large losses (e.g., the self-employed or those with high civilian salaries) may not be a good match in the aggregate for a reserve force that DoD expects to use with considerable frequency over the next few years. Then again, if such individuals possess specific valued skills, additional targeted compensation may be appropriate. Earnings replacement, however, is not likely to be the most targeted and cost-efficient means of compensating these reservists.

Future research should consider what kind of compensation reforms are likely to be most cost-efficient in attracting and retaining reservists in an era in which the probability of activation is substantially above historic norms. ■

This research brief describes work done within the RAND National Defense Research Institute documented in *Activation and the Earnings of Reservists*, by David S. Loughran, Jacob Alex Klerman, and Craig Martin, MG-474-OSD (available at <http://www.rand.org/pubs/monographs/MG474/>), 2006, 163 pp., \$20, ISBN: 978-0-8330-3971-2. The RAND Corporation is a nonprofit research organization providing objective analysis and effective solutions that address the challenges facing the public and private sectors around the world. RAND's publications do not necessarily reflect the opinions of its research clients and sponsors. RAND® is a registered trademark.

RAND Offices Santa Monica, CA • Washington, DC • Pittsburgh, PA • Jackson, MS • Doha, QA • Cambridge, UK • Leiden, NL



NATIONAL DEFENSE RESEARCH INSTITUTE

THE ARTS
CHILD POLICY
CIVIL JUSTICE
EDUCATION
ENERGY AND ENVIRONMENT
HEALTH AND HEALTH CARE
INTERNATIONAL AFFAIRS
NATIONAL SECURITY
POPULATION AND AGING
PUBLIC SAFETY
SCIENCE AND TECHNOLOGY
SUBSTANCE ABUSE
TERRORISM AND
HOMELAND SECURITY
TRANSPORTATION AND
INFRASTRUCTURE
WORKFORCE AND WORKPLACE

This PDF document was made available from www.rand.org as a public service of the RAND Corporation.

This product is part of the RAND Corporation research brief series. RAND research briefs present policy-oriented summaries of individual published, peer-reviewed documents or of a body of published work.

The RAND Corporation is a nonprofit research organization providing objective analysis and effective solutions that address the challenges facing the public and private sectors around the world.

Support RAND

[Browse Books & Publications](#)

[Make a charitable contribution](#)

For More Information

Visit RAND at www.rand.org

Explore [RAND National Defense Research Institute](#)

View [document details](#)

Limited Electronic Distribution Rights

This document and trademark(s) contained herein are protected by law as indicated in a notice appearing later in this work. This electronic representation of RAND intellectual property is provided for non-commercial use only. Permission is required from RAND to reproduce, or reuse in another form, any of our research documents for commercial use.