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Activation and the Earnings of Reservists

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Summary

Introduction

In conducting the Global War on Terrorism (GWOT), the Department of Defense (DoD) has relied heavily on the reserve components. A large fraction of the reserve force has been activated at least once since September 11, 2001, and many of these activations have lasted for more than a year. This more intensive use of the reserves has been accompanied by concerns that many reservists suffer substantial financial losses as a result of being activated.[1] There are two reasons for this concern. First, what we term the "equity perspective" posits that reservists in harm's way should not also be subject to significant financial harm. Second, what we term the "compensation perspective" posits that actual and expected financial losses during and after activation might discourage reservists from reenlisting and potential reservists from enlisting.

These concerns are reinforced by survey-based evidence, such as from the May 2004 Status of Forces Survey of Reserve Component Members (SOFRC), suggesting that three-fifths of activated reservists suffer a decline in earnings when activated and that those earnings

[1] We use the term "activated" throughout this document to refer generically to a state of serving on active duty beyond the standard 30 days of annual active-duty training, whether it be for training or serving on active duty voluntarily or involuntarily as part of a mobilization or other call to active duty.

losses can be substantial. This survey-based evidence has stimulated several legislative proposals to improve the financial position of activated reservists and a congressional requirement for the DoD to survey reservists about earnings loss. However, for a variety of reasons, these survey data could lead to false inferences regarding earnings losses attributable to activation.

This study presents new evidence on how activations affect the earnings of reservists based on administrative data that allows us to avoid the problems inherent in survey-based estimates. Specifically, we combine administrative earnings data from the Defense Manpower Data Center (DMDC) and the Social Security Administration (SSA) to estimate how earnings change between years in which a reservist does and does not serve on active duty for more than 30 days. (We take 30 days of active duty service to represent a typical level of reserve service for reservists in a year in which they were not mobilized for a specific contingency). Our measure of earnings is comprehensive and precise. It includes virtually all civilian earnings, all military pays and allowances, and an imputed value of the tax preference accorded to some of those pays and allowances.

We use these data to compute what we refer to as the gross and net effect of activation on earnings. The gross effect of activation is the change in earnings between a base year (e.g., 2000) with minimal active duty days (i.e., 0–30 days) and an out year (e.g., 2003) with more than 30 days served on active duty. The net effect of activation is the difference between earnings when activated and what earnings would have been had the reservist not been activated. We estimate this net effect by comparing the difference in earnings between a base and out year for activated reservists with the difference in earnings between a base and out year for unactivated reservists (i.e., reservists who served 0–30 days on active duty in both the base and out year).

Key Findings

In our analysis, we focus primarily on how activation impacts earnings while activated in 2002 and 2003. We also present preliminary esti-

mates of the impact of activation on earnings while activated in 2004 and the impact of activation on earnings following activation. We discuss the results of all three analyses below.

Main Results for 2002 and 2003 on Activations and Earnings

Our estimates suggest that earnings loss attributable to activation is less common than suggested by survey-based analyses. Our simple estimate of the gross effect of activation is based on reservists who served 0–30 days on active duty in 2000 and more than 30 days on active duty in 2002 and 2003.[2] In this group, average earnings were $42,235 in 2000, while the earnings of these same reservists averaged $55,774 in 2002 and 2003. Thus, average earnings increased by $13,539 between the base and out year for this sample, an increase of 32 percent over base year earnings. We further estimate that, on average, activated reservists in this sample experienced a net gain in earnings of $11,165 over what they would have earned had they not been activated.

Even though earnings increase with active duty days served, some reservists do suffer an earnings loss when activated. Among the sample of reservists serving 0–30 days on active duty in 2000 and 30 or more days on active duty in 2002 or 2003, about 17 percent experienced 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.

Importantly, though, our results indicate that an even larger fraction—40 percent—of reservists who were not activated in either 2000 or 2002/2003 also experienced an earnings loss. That is, unactivated reservists are even more likely to experience an earnings loss than are activated reservists. Thus, our estimates imply that being activated actually lowers the probability of experiencing an earnings loss by 23

[2] Our main results do not employ 2001 as a base year since 2001 included activations that occurred both pre- and post-September 11, 2001. Results from analyses that employ 2001 and 2002 as base years are included in an appendix and do not differ substantively from those reported in the main body of the text.

percentage points. This does not mean that no reservist experienced an earnings loss because of activation, but simply that activation makes it less likely, on average, that a reservist will experience an earnings loss.

The body of the document reports estimates by a variety of deployment and reservist characteristics, including year activated, active-duty days served, rank, component, and self-employment status. The general findings reported above—substantial mean earnings gains and, compared to survey-based estimates, relatively small fractions of reservists with earnings losses—holds across all activation patterns and groups of reservists.

There are a number of reasons why our estimates of earnings loss attributable to activation differ from estimates based on survey data. First, a considerable portion of the military earnings of activated reservists is tax-preferred. However, the surveys typically instruct reservists to report pretax earnings. In contrast, our estimates explicitly include an estimate of the value of the tax preference. We estimate that the value of the tax advantage accounts for close to one-third of the mean gain in earnings experienced by activated reservists. Second, the survey responses are categorical and self-reported and so likely measure earnings changes with substantial error and perhaps bias (Bound and Krueger, 1991). Our estimates are based on administrative data that measure earnings with great precision and without significant bias. Third, the survey questions refer to the most recent activation. Sometimes, those activations occurred several years earlier. For several reasons, our estimates suggest that earnings losses are less common for more recent activations. Finally, survey and item response rates in the most recent surveys (the SOFRC) are low, which raises the possibility that a selected sample of reservists is responding to these earnings loss questions.

Although our findings on earnings loss differ significantly from those based on available survey-based evidence, these findings are what might be expected given that the Department of Defense sets active duty pay above mean full-time pay of civilians with similar education and experience (OSD/P&R, 2002). Moreover, reservists serving on active duty often receive special pays, allowances, and tax breaks in

addition to regular military compensation. Thus, while regular military compensation is above mean civilian wages, total compensation when activated is often much higher.

Results for 2004

Civilian earnings data for 2004 are not yet available, but military earnings data for that year are available. Using a method similar in spirit to that described and employed in Klerman, Loughran, and Martin (2005), we assess whether reservists activated in 2004 are likely to have significantly different experiences with respect to earnings gains and losses than reservists activated in 2002 and 2003. We conclude from this analysis that the finding of substantial average earnings gains among activated reservists is likely to hold when civilian-earnings data for 2004 become available.

The Effect of Activation on Postactivation Earnings

As reservists return from long periods on active duty, policy interest will shift to the effect of active-duty service on earnings following the period of activation. Our ability to analyze the effect of activation on postactivation earnings is limited by lack of data on civilian earnings beyond 2003. Nonetheless, for a sample of 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 earnings losses following activation. On average, net earnings increase between 2000 and 2003 for reservists activated for more than 30 days in 2001 and 2002, and the net probability that a reservist experiences an earnings loss declines slightly. We emphasize, however, that these results apply to a select group of reservists and, therefore, should be viewed with some caution.

Implications for Policy

Supporters of congressional proposals to directly replace lost earnings of reservists who hold civilian jobs in the federal government and provide tax breaks to private-sector employers who do the same for their

reserve employees argue that these proposals would enhance equity and help DoD meet enlistment and retention goals. Their equity 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 losses. Our results indicate that this particular inequity is suffered by far fewer reservists than is suggested by available survey data.

In addition, we note that efforts to replace earnings of reservists who experience an earnings loss while activated will compensate some reservists who would have experienced an earnings loss even if they had not been activated. Compensating these reservists for losses they would have incurred regardless would not be perceived as fair to other reservists who did not experience an earnings loss simply because their base year earnings happened to be relatively low. Moreover, reservists whose earnings would have increased by an even larger amount had they not been activated would not be compensated for their implicit losses.

These findings do not mean that existing reserve compensation is sufficient to maintain the desired reserve force. Even though our estimates suggest that most reservists experience substantial earnings gains, those gains might not be sufficient to compensate reservists for the hardship of activation. The potential pecuniary costs of being activated (e.g., expenses associated with being away from one's family, possible loss of spousal earnings, a decline in earnings following activation), as well as the nonpecuniary costs of being activated (e.g., emotional cost of family separation, risk of injury), can be substantial; it is unclear whether the increase in earnings for the average reservist we estimate here will be enough to offset those costs.

More broadly, we should expect that in the future, enlistment and reenlistment in the reserves will be positively correlated with potential earnings gains (or negatively correlated with potential earnings losses). To some extent, the departure from the reserves of reservists with the potential for significant earnings losses is beneficial. Reservists who stand to suffer large losses, like maybe the self-employed or individuals who command large civilian salaries, may not be a good match in aggregate for a reserve force that DoD wishes to use with some fre-

quency. However, inasmuch as these individuals possess specific skills that are particularly valued by the reserves, additional targeted compensation may be appropriate.

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 historical norms. Whatever the mechanism, it is likely that the most cost-efficient compensation mechanisms will target groups of reservists experiencing particularly low rates of reenlistment who DoD wishes to retain. These reservists may or may not be reservists that happened to have experienced an earnings loss when activated.