

An Analysis of the Effect of Reserve Activation on Small Business

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Purpose

Military reservist activations have risen in recent years. This study seeks to assess the effects of these activations on small and large employers. Understanding these impacts is necessary to ensure that the relationship between reservists and their employers remains strong.

Overall Findings

Military reserve activations have small but negative effects on a firm's revenues. Small firms (fewer than 100 employees) were more affected than larger firms. And not surprisingly, longer activations had larger impacts on a firm's sales than shorter call-ups.

Highlights

- The number of military reservist activations increased sharply after 2001, peaking in 2003.
- About 70 percent of the private-sector employers of military reservists have fewer than 100 employees.
- Military reserve activations are relatively rare for employers. Including non-reservists, about one in 1,000 employees are called up for 30 days or more.
- Because small firms are smaller, individual reserve activations affect a larger share of individual small firms' employment when they do occur. But because small firms are much more numerous, they had a lower average activation rate per firm overall than large firms, 0.15 employees per small firm compared with 2.4 employees per large firm.

- Extended absences were found to have a disproportionate impact on small businesses. Of firms with reserve activations of 30 days or more, small businesses had a 1.9 percent decrease in sales compared with larger firms; and of firms with reserve activations of 180 days or more, small firms had a 3.0 percent decrease compared with larger firms.
- The marginal effect of one additional employee being activated was a decrease in sales of 0.30 percent on small firms and a decrease of 0.02 percent for large businesses. This 15-fold difference in the magnitude of activation effects would indicate that small businesses bear a heavier burden than large firms when reservist employees are activated.

Scope and Methodology

The study uses civilian employer information from the Department of Defense's Defense Manpower Data Center to look at reservist activations. This information is matched to Dun & Bradstreet's private data source on employers. There were 633,893 unique individuals in the activation dataset who were activated between September 2001 and February 2008, but only 39,521 had activation end dates. Activations of over 30 days and over 180 days were studied.

Some records were excluded from the analysis because of missing data or what appeared to be inaccurate data (such as unusually large sales swings). The matched data set runs from 2001 to 2007 and averages 91,359 records per year for 16,181 firms (or unique headquarters). Matching differing datasets entails difficulties and imperfections, but results in

a rich set variables that is needed to evaluate topics such as firm performance impacts of activations.

From the data, models tested the impact of reservist call-ups on a firm's change in sales (normalized to 1 to -1) for small and large firms, taking into account the firms' industries and the economy. Each record in the model represented a change in sales from one year to the next for each firm. An interaction term of the percent activated for small firms was included in the model.

A probit model on reserve activations' impacts on business bankruptcy was also conducted, but the results were nebulous (explanatory variables were not statistically significant).

The paper generally defined small firms as those with fewer than 100 employees. The self-employed were excluded because of data limitations

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