



## Firm Size and Employment Dynamics in Recessions and Recoveries

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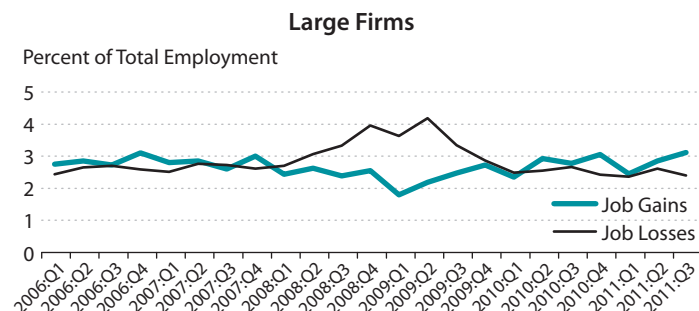
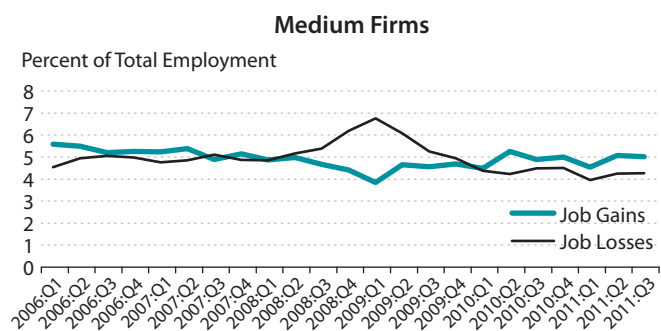
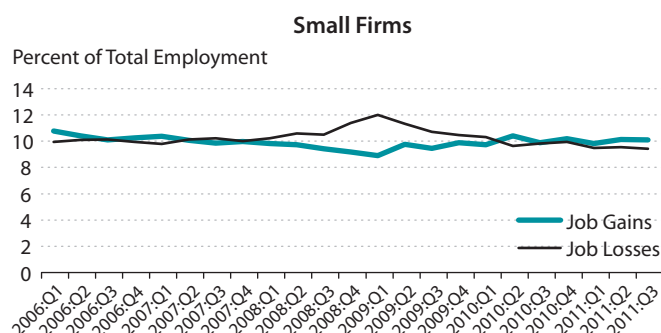
Does firm size matter for how a firm's employment base is likely to evolve during a recession and subsequent recovery? In their study of the 1990 and 2001 U.S. recessions, Moscarini and Postel-Vinay (2009) find that large firms are more severely affected by a recession but then grow faster relative to smaller firms in the subsequent recovery. In this article, we show the same pattern is evident in the most recent recession and recovery.

We examine the behavior of two time series: gross job gains (job creation) and gross job losses (job destruction). These measurements come from the Business Employment Dynamics survey of the Bureau of Labor Statistics. The Bureau of Labor Statistics defines gross job gains as the sum of all jobs *added* at either opening or expanding establishments, and gross job losses as the sum of all jobs *lost* at either closing or contracting establishments. The difference between the two is the *net change in employment*—a statistic widely reported in headlines. The chart displays the rates at which large, medium, and small firms gained and lost jobs from 2006:Q1 to 2011:Q3.<sup>1</sup>

Although this article mainly discusses the direction of changes across firms, the difference in the magnitude of changes across firms is worth noting. The *job turnover rate* is the sum of the gross job creation rate and the gross job destruction rate. The chart shows that this turnover rate decreases with firm size. The rate for small firms averages about 20 percent, whereas the rate for large firms averages only about 5 percent.

All three panels show V-shaped job gains regardless of firm size: All firms experienced a persistent decline in job gains until 2009:Q1, followed by a relatively sharp recovery. A major difference across firms, however, is the volatility of job gains. In 2009:Q1, job gains for large firms were 40 percent lower than in 2006:Q1. Medium firms experienced a similar decline

### U.S. Job Gains and Job Losses



over the same period; however, jobs gains for small firms were only 24 percent. During the recovery, job gains varied widely across firm size: To date, only large firms have managed to return to their pre-recession level. Although medium firms show stronger job gains than small firms, their gains have not returned to their 2006:Q1 level.

**Gross job losses for large firms were 60 percent higher in 2009:Q2 than in 2006:Q1, while those for medium and small firms were 42 percent and 12 percent higher, respectively.**

For all firms, the fluctuations of job losses over the business cycle move in the opposite direction of those for job gains. Since 2006, gross job losses display three major phases, regardless of firm size: (i) strong growth until the first half of 2009 followed by (ii) a sharp decline until 2010:Q1 and then (iii) a moderate decline thereafter. Overall, fluctuations were most severe for large firms, especially during the recession. Gross job losses for large firms were 60 percent higher in 2009:Q2 than in 2006:Q1, while those for medium and small firms were 42 percent and 12 per-

cent higher, respectively. For small firms, this observation mirrors that for job gains, suggesting small firms suffered the least in the recession. During the recovery, however, gross job losses for large firms decreased quickly and returned to their 2006:Q1 level in 2010:Q1. Gross job losses for small and medium firms replicate this trend, but not by the same magnitude, supporting the observation that large firms rebound faster than small firms.

Such analysis of job gains and losses may help to identify—or, at least, rule out—the type of disturbances responsible for shaping the 2007–09 recession. For example, it seems difficult to accept the hypothesis that tightening of credit was a key contributor of the recession because the least-affected firms—small firms—are actually the ones that depend more heavily on external financing. ■

### Note

<sup>1</sup> Firm sizes are defined as follows: small firms, 1 to 49 employees; medium firms, 50 to 499 employees; and large firms, 500 or more employees.

### Reference

Moscarini, Giuseppe and Postel-Vinay, Fabien. “The Timing of Labor Market Expansions: New Facts and a New Hypothesis,” in Daron Acemoglu, Kenneth Rogoff, and Michael Woodford, eds., *National Bureau of Economic Research Macroeconomics Annual 2008*. Volume 23. Chicago: University of Chicago Press, 2009, pp. 1–52.