Job Creation by Small and Large Firms over the Business Cycle

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The Great Recession caused establishments of all sizes to make significant cuts in their employment. To get a picture of those losses, we turn to the Business Employment Dynamics (BED) data collected by the Bureau of Labor Statistics (BLS), the best data to look at for employment gains and losses at the establishment level. BED data provides gross job gains and losses at the establishment level going back to the early 1990s and breaks down the data to several size categories. We aggregate those categories into three classes to simplify our analysis: small firms (1-49 employees), medium size firms (50-499), and large firms (500 and more employees).

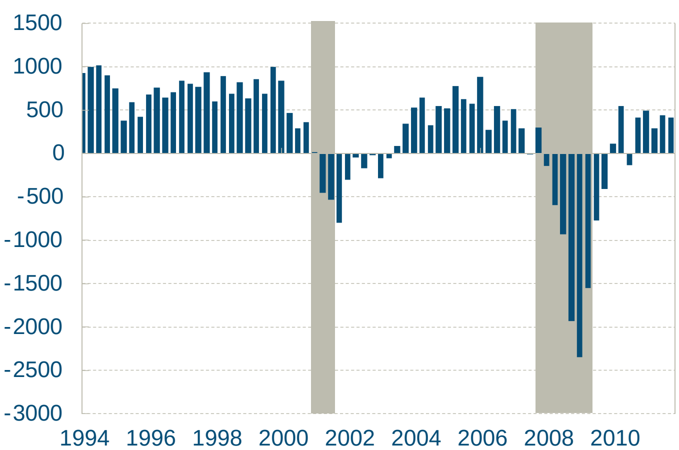
Between the first quarter of 2008 and the second quarter of 2009, firms in every size class destroyed more jobs than they created, implying negative rates of job creation throughout the recession. Small firms, on net, cut their workforces by 485,000 per quarter on average. Medium size firms cut theirs by 329,000, and large firms cut theirs by 538,000. These net job losses contrast sharply with the average quarterly net gains in the years leading up to the recession (2003:Q2 to 2007:Q4): small firms added 124,000 new jobs over this period, medium size firms added 118,000, and large establishments added 145,000. The subsequent negative trend in net job creation did not stop until further into the recovery. It was not until mid-2010 that firms of all size classes started to report positive quarterly net job creation figures.

Net job creation did vary somewhat across establishments of different size over time, but the divergence was never significant. What is more striking is that the net job creation levels of all three sizes of establishment moved together over the business cycle, especially during the recessions.

It would be useful to know whether a specific size class leads the employment loss during the recession or the overall job gains during the recoveries, but

Payroll Employment Quarterly Change

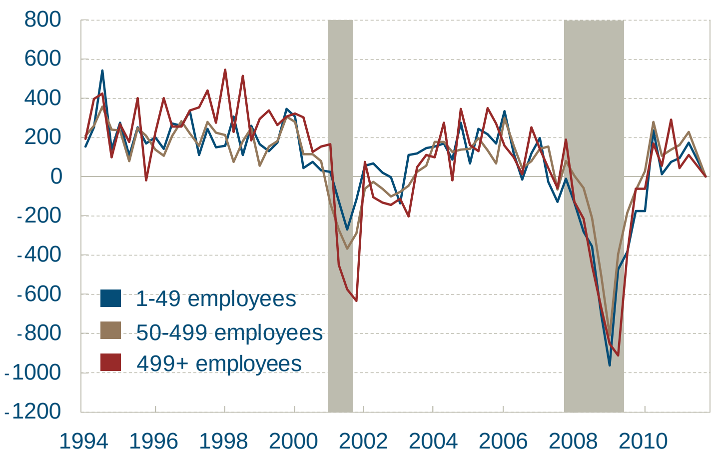
Seasonally adjusted, thousands



Note: Shaded bars indicate recessions.
Source: Bureau of Labor Statistics.

Net Job Creation

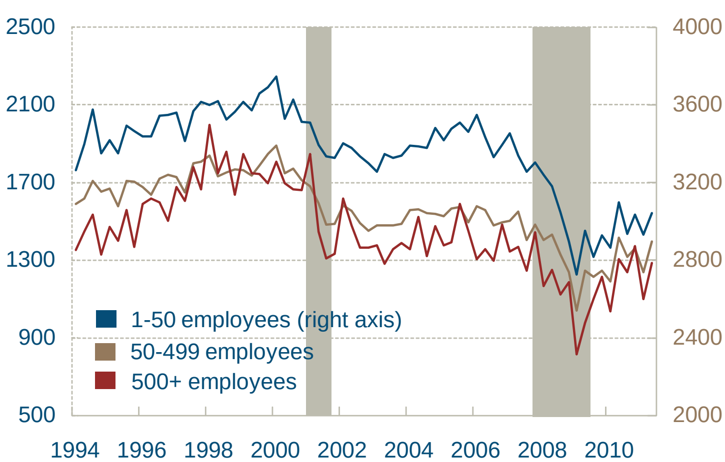
Seasonally adjusted, thousands



Note: Shaded bars indicate recessions.
Source: Bureau of Labor Statistics.

Gross Job Gains

Seasonally adjusted, thousands



Note: Shaded bars indicate recessions.
Source: Bureau of Labor Statistics.

it is not possible to determine this from the chart above. Looking at the underlying gross job gains and losses separately for different size firms sheds more light on the question.

Looking at gross job gains from 1994 to 2011 reveals that in any given quarter, U.S. establishments generated millions of jobs. Even during the worst-performing period—the Great Recession—establishments created around 5.3 million jobs per quarter. This is significantly less than the average of 6.3 million jobs per quarter over the entire period. Nevertheless, it clearly shows the underlying dynamism in the U.S. labor market.

Another feature we observe in the data is that small firms account for more than half of the gross job gains in every period. Medium-size and large establishments each contribute about a quarter of total gains.

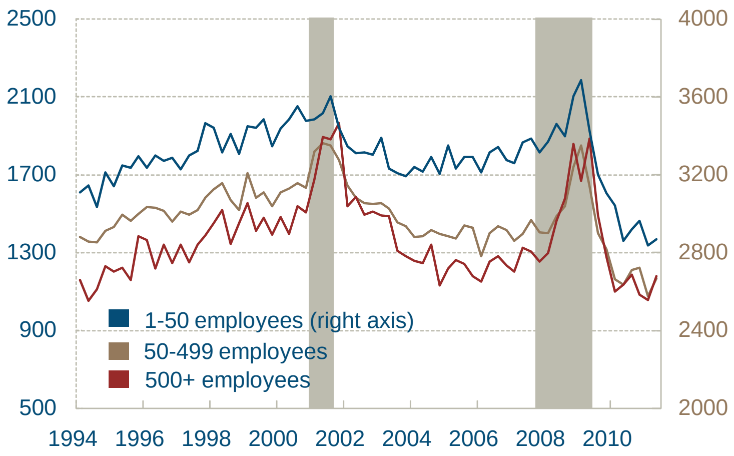
Finally, it is clear that all establishments experienced significant declines in gross job gains over the course of the last recession. Large establishments cut the most, reducing gross job gains by about 43 percent from their pre-recession peak to their recession trough. The relative decline was almost 30 percent for medium-size firms and only 17 percent for small firms. The rebound in gross job gains after the recession seems to also differ by establishment size: Large firms recovered much faster than the others.

On the flip side, we observe that small firms also account for slightly more than half of the aggregate job losses at the establishment level over time—about 3.3 million of the 6.1 million jobs destroyed every quarter since 1994. Once again, the sheer size of the gross job losses highlights the significant degree of churning that goes on at the establishment level in the United States. Even in good times, for instance, between the second quarter of 2003 and the fourth quarter of 2007, job losses averaged around 5.9 million per quarter.

Finally, the pattern of gross job losses for different size firms resembles the picture of gross job gains: Large firms led the pack with a relatively large increase of around 50 percent of their pre-recession trough to their recession peak.

Gross Job Losses

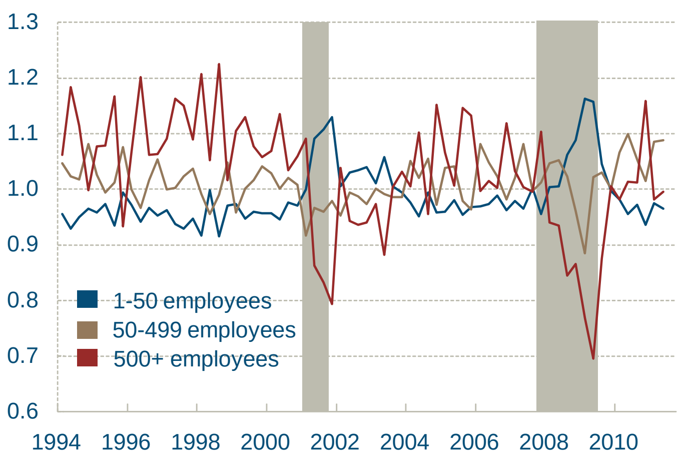
Seasonally adjusted, thousands



Note: Shaded bars indicate recessions.
Source: Bureau of Labor Statistics.

Contribution to Job Gains Relative to Job Losses

Seasonally adjusted



Note: Shaded bars indicate recessions.
Source: Bureau of Labor Statistics.

The overall picture of gross job flows shows that behind the relatively small numbers of net job creation there are large gross flows with a lot of labor market churn. Moreover, there are cyclical changes that affect every establishment regardless of size. Even though small firms in general account for more than half of the total job gains and losses each quarter, large firms seem to lead the timing of employment adjustment, contributing significantly to gross job losses early in recessions and rebounding relatively quickly afterwards.

However, all these differences are not immediately clear from the data on net employment changes across establishments. This is due to the fact that the contribution of job gains and losses by each size class to the overall gains and losses is remarkably constant over time. For instance, while small firms create a lot of jobs, they also tend to shed a lot at the same time, implying that their contribution to net job creation stays proportionately the same relative to large and medium size firms.

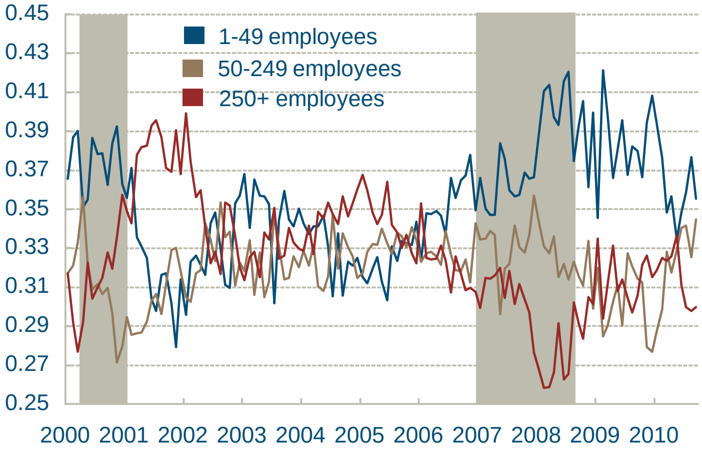
One alternative way of looking at this issue is to compare the share of job gains in each size class relative to the class's share of losses. If the ratio is more than one, it means that establishments of that size are contributing more to gross gains than to gross losses. Looking at this ratio over time for the three size classes shows that small firms in fact contribute a lot more toward gross job gains during recessions, implying that they are dampening overall net losses during downturns. However, this role turns around during recoveries, when they tend to contribute more to losses. This relationship has held so far during the current recovery.

The fact that small firms are not rebounding as much in terms of gross job gains does not seem to be due to weak demand for labor. For information on this aspect of the labor market, we look at the establishment level data on job openings from the Job Openings and Labor Turnover Survey (JOLTS).

The number of job openings declined sharply in the aggregate economy over the course of the recession, and it is still far below its pre-recession levels. However, labor demand measured this way behaved somewhat differently across size classes. Even though size is classified slightly differently than

Contributions to Job Openings

Seasonally adjusted



Note: Shaded bars indicate recessions.
Source: JOLTS.

in the BED data, we can see that small firms have been consistently accounting for more than one-third of the overall job openings since mid-2006, higher than the other size classes. More interestingly, however, is that their demand for labor did not decline (relative to others) until the recession was over. Since then, their share has been declining, whereas the share of large firms has risen significantly.