

Size Matters: The Benefits of Large Labor Markets for Job Seekers

Enrico Moretti (Berkeley and NBER)

Moises Yi (U.S. Census Bureau)

January 2023

Abstract. Economists have long hypothesized that large and thick labor markets facilitate matching between workers and firms (Marshall, 1920). Large labor markets are thought to enhance productivity by improving the likelihood of matching of workers to firms and increasing the quality of these matches. Market size should be particularly beneficial for workers with highly specialized human capital who may have a higher probability of finding employers who value their skills when the number of firms to choose from is large.

In this paper, we use administrative longitudinal data from the LEHD between 2010 and 2018 to follow 640,000 workers who lost their jobs due to a firm closure. We investigate whether the labor market outcomes after a layoff are different for workers who are located in a large labor market compared to otherwise similar workers located in a small labor market, holding constant the level of local market tightness. We also test whether labor market size is more important for workers with a college or master degree compared with workers with lower level of schooling. We use two alternative measures of labor market size: employment in the Commuting Zone; or employment in the Commuting Zone-industry pair.

First, we find that displaced workers in large labor market experience significantly shorter non-employment spells than otherwise identical workers in small markets. The difference is particularly pronounced for college educated workers. The implied difference in non-employment duration between large and small markets is economically significant. A college graduate located in the commuting zone-industry pair at the 90th percentile of the size distribution has a 13.4 percentage points (or 20.3%) higher probability of finding a new job within 6 months of separation compared to a college graduate located in the commuting zone-industry pair at the 10th percentile of the size distribution. For high school graduates, the corresponding difference in probability is 8.5 percentage points (or 14.0%). Thus, labor market size provides insurance against idiosyncratic employment shocks. This insurance is particularly valuable to highly educated workers, presumably because their human capital is more specialized.

Second, conditional on finding a job, the quality of the new match is better in larger markets. We use three measures of quality: (a) whether the industry of the new employer is a good

fit for the worker college major; (b) whether the displaced worker is reemployed in the same industry; whether the new job lasts one year or more. We find that after a firm closure, job seekers in large markets are significantly more likely to find jobs in industries that are a good fit for their college major; to find jobs in their previous industry; and find jobs that last at least one year. The elasticities of these three measures of match quality with respect to market size are significantly larger for college graduates compared to high school graduates.

Third, we find that displaced workers in larger market have a lower probability of having to move to a new commuting zone than displaced workers in smaller markets. Finally, we find that the spouses of displaced workers in large markets experience a significantly higher probability of employment one year after the focal worker's displacement.

Overall, our evidence is consistent with the existence of self-reinforcing agglomeration economies stemming from labor pooling. Our findings help explain the existence and growth of Silicon Valley-style high-tech clusters and, more broadly, the growing attraction of large cities to skilled workers.