Direct and Indirect Effects of Mass Layoffs
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Evidence from Geo-Referenced Data

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Extended Abstract

Starting with Ruhm (1991) and Jacobson, LaLonde and Sullivan (1993), over the last 20 years a sizable literature has documented that mass layoffs have dramatic and long-lasting effects on employment and especially earnings prospects of directly displaced workers (Schoeni and Dardia, 2002, Couch, 2006, von Wachter, Song and Manchester, 2009, or Schmieder, von Wachter und Bender, 2010). Empirical studies have shown that mass layoffs can also have detrimental effects on many other outcome variables such as the consumption (Browning and Crossley, 2008), health or mortality (Browning and Heinesen, 2012) and fertility (Del Bono, Weber and Winter-Ebmer, 2012) of those directly displaced as well as their children’s earnings and propensity to receive unemployment insurance or social assistance (Oreopolous, Page and Stevens, 2008). Going even further, it has long been suspected that the losses experienced by directly displaced workers might only be one part of the general equilibrium response to shocks which would also include the labor-market impacts on other workers in the same community (Hamermesh, 1989).

In contrast to the sizable and well-established body of literature on mass layoffs’ direct effects – with the exception of a small number of very early case studies (Folbre, Leighton and Roderick, 1984, and Jacobson, 1984) – evidence on the impacts on indirectly affected workers is practically nonexistent. This is mostly because the data demands for a clean identification of such “local general equilibrium” effects are extremely high. First, linked employer-employee panel data are needed to document mass layoffs and their effects on indirectly affected workers. Second, these data need to contain detailed individual and firm characteristics including exact geographical information going beyond an identifier for counties, municipalities or similar localities. Third, because the indirect effects of mass

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layoffs can be conjectured to be of an order of magnitude smaller than the direct ones, the data need to be very reliable (ideally they should be administrative data) and large enough to provide enough power for the identification of even relatively small effects.

The objective of our study is to close the knowledge gap with regard to the “local general equilibrium” effects of mass layoffs with the help of a novel administrative data set that fulfills all three requirements. The data set we use contains precise geo-referenced data for the universe of German establishments, allows the identification of all mass layoffs that happened between June 30, 2008 and June 30, 2009 – a period marked by recession and rising unemployment – and links employer and employee data in a way that enables us to identify not only the direct effects of mass layoffs on employment and earnings but also any indirect impacts on the employment and earnings prospects of workers employed in the vicinity of an establishment being closed down.

Relying on the difference-in-difference approach pioneered by Ruhm (1991) and Jacobson, LaLonde and Sullivan (1993), we confirm that in the two years following a mass layoff, this event has significantly negative effects on the earnings and employment prospects of directly displaced individuals. In contrast, we find no evidence of additional adverse “local general equilibrium” effects on workers employed close by. The latter result is confirmed by an alternative specification inspired by the spatial economics literature that measures whether an establishment’s exposure to nearby mass layoffs or the intensity of this exposure have any effect on its subsequent employment growth. This approach again fails to find any adverse “local general equilibrium” effects.

References


