

CEG Small Grant Proposal - Michel Serafinelli
Good Firms, Worker Flows and Agglomeration Advantages

Localities in many countries are characterized by important and persistent differences in productivity. For instance in the United States, total factor productivity (TFP) of manufacturing firms in areas at the top of the TFP distribution is three times larger than TFP in areas at the bottom of the distribution. Remarkably, these differences largely seem to have been persistent over the last 30 years. Economists have long suspected that this large spatial heterogeneity may be due the presence of agglomeration economies. In the past twenty years, a significant amount of work has been devoted to studying the importance of these economies, which exist when productivity rises with density. Despite the difficulties involved in estimating the exact magnitude, researchers seem to accept that important agglomeration advantages exist for many industries. However, the field has still not reached a consensus on the relative importance of different explanations of these advantages (Glaeser and Gottlieb, 2009). The potential sources of agglomeration economies include: learning, labor market pooling, proximity to providers of intermediate non-tradable goods and services and the proximity of the firms to consumers.

This paper has two objectives. First, I evaluate the role of labor turnover as a mechanism for the transfer of efficiency-enhancing knowledge. Second, I examine the extent to which worker flows can explain evidence on agglomeration advantages. For this purpose, I use a matched worker-firm dataset for the Veneto Region of Italy (Card, Devicienti, Maida, 2010). Employing the method in Abowd, Creedy and Kramarz (2002), I estimate wage equations where both firm and worker effects can be identified and I define good firms as high-wage-firms (HWFs), i.e. those establishments with top values of the estimated firm effects. I show that the HWFs are more productive and have higher capital (in particular intangible capital) per worker. Then, I construct firm-specific measures for the share of workers in Venetian firms with experience gained at good firms. This is a measure of the explicit contact between good firms and other local firms. By using this measure within a productivity regression framework, I can evaluate whether employees trained at good firms who later join other local firms bring with them some of the knowledge that they have acquired. In the sample of firms that hire from HWFs during the period, the estimates imply that a one standard deviation increase in the share of workers from HWFs increases productivity by about one percent. These results are not likely to be driven by unobservable productivity shocks. Having found evidence in favor of an important role of labor turnover as a mechanism of knowledge transfer, I then turn to the question of the extent to which worker flows can explain evidence on agglomeration advantages. Exploiting information on the location of firms, I show that for a non-HWF, the probability of hiring a worker with HWF experience is increasing in the share of HWFs in the local labor market where the non-HWF is located. Put differently, firm location is of importance because distance acts as a barrier for workers' job mobility. My results are then consistent with the model in Combes and Duranton (2006), where firms that cluster in the same local labor market benefit from better access to workers whose knowledge enhances efficiency.

This research is of interest to the Center for Equitable Growth for two reasons. First, identifying the ultimate causes of agglomeration advantages is helpful for understanding persistent labor market differences across areas. This is not only of interest for regional economists, but also for growth economists. As pointed out by Moretti (2011)

"within country differences in productivity [...] are possibly even more remarkable than cross-country differences, since the mobility of labor and capital within a country is unconstrained and differences in institutions and regulations are small relative to cross-country differences. As a consequence, it is difficult to understand why some countries are poor and other countries are rich without first understanding why some cities within a country are poor and others are rich".

Furthermore, understanding the causes and consequences of agglomeration of economic activity is also crucial for understanding the economic rationale for location-based policies (Kline, 2010; Kline and Moretti, 2011).

See full draft of the paper for more details