

Firm Productivity and Cities: The Case of Colombia

Borrador número 1032 Keep in mind

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In this paper we study the determinants of firm-level productivity in Colombia. We are interested in the effects of agglomeration forces that explain why manufacturing economic activity tends concentrate geographically as well as the effect of forces that can hurt productivity in high-density areas. An unfortunate major example of the latter forces in Colombia is its high levels of crime and terrorist attacks. We carry out this study by exploiting two very rich data sources: a firm-level panel which allows us to estimate firm-level productivity and a panel of municipality characteristics. To address selection and endogeneity issues in the estimation of firm-level productivity we use a control function approach. Our main findings are the following. First, scale economies do not seem to affect firm-level productivity. Second, we do find evidence of location economies (industrial specialization has a positive effect on productivity). Industrial variety, on the other hand, lowers productivity. It seems that firms in Colombia benefit from forming clusters and locating in cities with less industrial variety. We also find non-trivial effects of city fiscal performance, education level and quality, and crime and violent attacks.