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The Nonlinear Relationship Between Firm Size and Growth in The Automotive Industry from Timis Region from Romania

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Abstract

The automotive industry dominates the economy of the west part of Romania and certainly represents one of the most important economic activity in the Timis region. Therefore, understanding the drivers of firm growth within this industry is crucial for the local economy and manufacturing strategies of automotive companies. Accordingly, the purpose of our paper is to analyse the non-linear role of firm size in influencing the firm growth, assessed in terms of capital stock's dynamics. To do so, we use a panel quantile regression with fixed effects for a set of 19 automotive companies over the period 2007 to 2015, while controlling for the role of research and development activities and firm's financial performances. Our findings show that firm size positively sustains firm growth at all quantiles, whereas this relationship is stronger for companies that growth less fast (that is, for lower quantiles). At the same time, the research and development activities positively influence the firm growth but only for middle quantiles, whereas the profitability matters for growth at both middle and upper quantiles. Finally, the liquidity ratio has a negative impact on capital accumulation. These results are robust to different samples, considering the potential agglomeration effect for the companies located in the metropolitan area of Timisoara.

Keywords: Firm size, firm growth, panel quantile regression, automotive industry, nonlinear relationship, Timis region