

**The Shadow of Death: Do Regional Differences Matter for Firm
Survival in Upper Bavaria?**

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ABSTRACT

The regional differences in number of newly established enterprises have been subject of interest to many social science researchers for some time (Armington and Acs, 2002). Nevertheless, insufficient attention has been paid to spatial variations in the survival performance of those enterprises. This is quite surprising as newly founded firms are seen as central to regional economic growth and structural change. They have been, therefore, the aim of many policy measurements at federal and regional level.

In addition, there exists evidence of a strong relationship between entry and exit, which has been proved at three levels: space, time and industry. The explanation for this positive relationship is twofold. Firstly, there are factors, which are inherent in newly established enterprises that limit their average life expectation (see for review Schutjens and Wever, 2000). This leads to the ‘revolving door’ regime described by Audretsch and Fritsch (1992). Secondly, newly founded companies compete with existing firms and force the latter to adapt or even to close, although closures of established firms are less frequent than the displacement of young firms by new ones. However, exit rates do not allow us to distinguish between the above-described effects. It remains open how long an enterprise existed before closure. Consequently, little can be concluded about the regional differences of the success of newly founded businesses without suitable longitudinal data sets.

Moreover, establishing a new enterprise and being a successful entrepreneur in a new economic, social and regional environment after overcoming the start-up stage are two considerably different subject matters. When overviewing the theoretical and empirical literature that has been devoted to the identification of success factors of new firms, in particular the survival, three groups of factors affecting success or failure can be distinguished: (i) individual characteristics of the founding person, (ii) characteristics of the new firm itself, and (iii) characteristics of the environment of the firm. The latter are often categorised into three classes: indicators of the level of regional demand; indicators of the regional reservoir of entrepreneurs (supply-side) and finally, indicators of structural differences.

Using a unique representative longitudinal data set derived from the Chamber of Industrial and Commercial Matters in Munich, we seek to provide significant evidence at regional level on survival performance of companies established in Upper Bavaria. The data

set consists of 110,250 companies that were either founded or liquidated in Upper Bavaria during the period 1997-2004. We develop several hazard models to predict the survival changes of newly founded companies by administrative districts in Upper Bavaria taking into consideration the above-stated group of factors.

The main finding of our survival analysis suggests that survival performance does vary across administrative districts in Upper Bavaria. Companies established in the Traunstein region, for instance, account for the best survival (5.63 years) while those operating in the region of Ingolstadt are the worst performer. We uncovered that the relationship between level of agglomeration and survival is non-linear and shows an inverted U-shaped pattern. More precisely, the positive impact of population density on the survival chances is weaker (0.04 per cent) in comparison to the share of foreign population resident in the particular administrative district (4.31 per cent).

Finally, the economic development of a particular administrative district also influences the survival performance of new firms functioning there. Measured by the unemployment rate and the tax trade collection rate, we found a positive relationship between them and the estimated hazard rate.

Keywords: Survival of newly established firms, regional differences, Upper Bavaria.

JEL Classification: R12, C41, J23, L25, M13

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