

Exploring Socioeconomic Drivers of Entrepreneurial Activity and Survival in Hungarian districts

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S58 – Entrepreneurial Ecosystems in Transformation: Digitalisation, Agency, and
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The research project on which this study is based aims to investigate the quality of entrepreneurial socioeconomic conditions in Hungarian subregions. Its main objective is to identify the key factors and bottlenecks that significantly shape the socioeconomic environment for entrepreneurs in these areas. By doing so, the project aims to create a detailed map of Hungary's entrepreneurial landscape, highlighting both regions with thriving business activity and those that face challenges in supporting productive companies.

Prior research shows that entrepreneurship is crucial for regional economic development (Dejardin, 2011), improved productivity (Erken et al., 2018), greater employment opportunities (Fritsch & Mueller, 2004, 2008), and innovation (Acs & Varga, 2005; Braunerhjelm et al., 2010). Beyond the characteristics of new market entrants—such as firm size and innovation—the entrepreneurial process is also shaped by industry attributes, like the maturity of technology and broader socioeconomic factors (Changoluisa & Fritsch, 2020). Each phase of a company's life cycle, from opportunity identification and market entry to ongoing operations, may be affected by these elements (Welter, 2011; Zahra & Wright, 2011).

Previous studies have further underscored the essential role of entrepreneurial ecosystems in fostering productive new enterprises, which helps explain regional differences (Content et al., 2020; Szerb et al., 2019). An entrepreneurial ecosystem centres on the entrepreneur and involves both aspiring and established business owners. Its interconnected components form a network that supports the emergence of innovative, growth-oriented companies in particular locations (Mason & Brown, 2014; Spigel, 2017; Stam, 2015). Spigel (2020) identifies four key models that define the structure of these ecosystems.

This study draws on Stam's (2015) theoretical framework, which argues that a well-functioning entrepreneurial ecosystem stimulates the emergence of productive companies and supports regional development. Accordingly, the study's main aim is to explore the key factors shaping entrepreneurial dynamics in Hungary's subregions by addressing two related research questions. First, it examines which socioeconomic factors play a critical role in influencing entrepreneurial activity in these regions. Second, it investigates whether existing socioeconomic conditions support the survival of new companies, or whether specific factors have a more direct impact on survival. By

answering these questions, the study seeks to deepen understanding of how regional socioeconomic environments affect firm survival and entrepreneurial development.

The empirical analysis uses data from the Company Register of the Hungarian Central Statistical Office (accessed via the ELTE CERS Databank), covering 2011 to 2019. For each year, companies are classified as new, operating, or exiting. Firms that appear in year 't' but not before are counted as entrants; those present in 't' but not after are considered exits. Operating companies in year 't' must exist at least since 't-1' and until at least 't+1'. After classifying companies for each year, we calculated overall, manufacturing, and service company survival rates. We also examined the survival rates of self-employed individuals, micro-companies (up to 10 employees), and all other firms. These survival rates are calculated at the district level and compared to the national average.

Settlement-level data from the National Spatial Development and Spatial Planning Information System (TEIR), along with information on labor market dynamics, education, and municipal transportation links, are aggregated to characterize entrepreneurial conditions in Hungarian subregions. To analyze the socioeconomic factors influencing entrepreneurship, the study applies two main methodological approaches. First, it uses the elements identified by Stam (2015) and Stam & van de Ven (2021), which also inform the Entrepreneurial Ecosystem Index (Leendertse et al., 2022). These include metrics related to (1) formal institutions, (2) entrepreneurial culture, (3) networks, (4) physical infrastructure, (5) finance, (6) leadership, (7) talent, (8) knowledge, (9) demand, and (10) intermediate services. These pillars may vary in importance at national, regional, and subregional levels. Second, the study draws on the methodological framework of the Regional Entrepreneurship and Development Index (REDI) (Szerb et al., 2017) and insights from REDI calculations in Hungarian agglomeration areas (Szerb et al., 2020).

We estimate several OLS regression models, using different company survival rates as the dependent variables for each year and district. The calculated entrepreneurial ecosystem pillars serve as control variables. Year-fixed effects are included to account for external factors affecting districts each year. Although the data suggested using fixed-effects panel regression, we also tested random-effects models.

Preliminary results suggest a link between firm survival rates and regional socioeconomic conditions. Notably, survival rates appear higher in more urbanised districts, which is particularly noteworthy given the expectation that stronger competition in such areas might reduce the likelihood of firm survival. Further research should also focus on developing more refined measures of the socioeconomic environment, incorporating variables that capture aspects such as outstanding firm performance or international experience. However, assessing institutional quality at the district level remains a methodological challenge. Finally, examining indicators beyond simple averages may reveal distinct survival patterns driven by factors such as competition or limited alternative opportunities, which shape regional business dynamics.

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