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Using Large Databases and Interviews to Explore the Temporal Phases of Technology-Based Entrepreneurial Ecosystems

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Abstract: Entrepreneurial ecosystems have become an important concept to explain the birth and sustainability of technology-based entrepreneurship within regions. However, as a theoretical concept, the temporal evolution of entrepreneurship systems remain underdeveloped, making it difficult to understand their dynamic contributions to entrepreneurs. This paper argues that successful technology-based ecosystems go over three cumulative spawning stages: corporate spawning, entrepreneurial spawning, and community spawning. The importance of corporate incubation in vibrant entrepreneurial ecosystems is well documented in the entrepreneurial literature. Similarly, entrepreneurial spawning processes for venture capital-backed startups are well documented in the financial literature. In contrast, there is little understanding of both the third stage of entrepreneurial spawning (when a community of entrepreneurs become a source of firm spawning) and the temporal sequence in which spawning effects occur in a region. We test this three-stage model of entrepreneurial spawning using data from two large databases on firm births—the Secretary of State (160,000 observations) and the National Establishment Time Series (NEST with 150,000 observations)—and information collected from 60 11/2-hour interviews with startup founders and representatives of key entrepreneurial organizations. This temporal model is illustrated with case study of Austin, Texas ranked by the Kauffman Foundation as the number one entrepreneurial city in the United States in 2015 and 2016. The 11/2-year study founded by the Kauffman Foundation demonstrates the importance of taken into consideration the temporal contributions of both large and entrepreneurial firms in understanding the factors that contribute to the birth and growth of technology-based entrepreneurial regions. More important, these learnings could offer an important road map for regions that pursue to advance their entrepreneurial ecosystems.

Keywords: entrepreneurial ecosystems, entrepreneurial industrial clusters, high-technology, temporal changes

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