

Empirical Analysis of Knowledge Spillovers and Competitive Dynamics in Fintech Ecosystems: A Case Study from Singapore

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Abstract. This study investigates the intricate dynamics of knowledge spillovers within fintech ecosystems using Singapore as a case. Employing social network analysis and econometric modeling, we map the flow of information between startup hubs and established financial entities. Our findings indicate significant impacts of regulatory environments and collaborative networks on the diffusion of innovations. The implications for managing competitive advantage in dynamic markets are discussed.

Keywords: knowledge spillovers, fintech ecosystems, competitive dynamics, social network analysis, economic growth, Singapore, regulatory frameworks

Introduction

The rapid evolution of financial technologies, or fintech, represents a global shift in how financial services are delivered and consumed, carrying profound implications for economic growth and stability. The ability of firms to leverage knowledge spillovers—whereby information and technologies developed by one entity become accessible to others—is crucial in sustaining competitive advantage in this fast-paced sector. Singapore, a global fintech hub, offers a unique environment with its robust regulatory framework and dense network of innovative firms, making it an ideal context for examining these

dynamics. Expanding upon existing literature, this paper employs advanced social network analysis and econometric techniques to systematically evaluate how fintech firms within Singapore's ecosystem exchange and utilize knowledge. More specifically, we analyze the role of strategic partnerships and regulatory policies in facilitating or hindering knowledge transfer. This study is structured as follows: First, we review relevant literature and identify key variables of interest. Next, we detail our methodological approach, including data collection and analytical techniques. Subsequently, we present our empirical findings, followed by a discussion on the implications for theory and practice in the field of management science. Finally, we offer conclusions and suggest directions for future research.

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