SHIFTING FINANCIAL GRAVITY: HOW FINTECH IS RESHAPING GLOBAL FINANCIAL HUBS

Piotr Łasak¹, dr Monika Bolińska², Laura Szafarczyk³

Institute of Economics, Finance and Management, Jagiellonian University, Kraków, Poland, Doctoral School in Social Sciences, Jagiellonian University, Kraków, Poland piotr.lasak@uj.edu.pl, monika.bolinska@uj.edu.pl, laura.szafarczyk@doctoral.uj.edu.pl

Abstract: The contemporary financial system is undergoing a dynamic transformation driven by the development of innovative financial technologies (FinTech). Traditional centers such as New York, London, and Tokyo have long dominated as hubs of capital concentration, institutional presence, and regulation. However, with the expansion of the FinTech sector, a shift in the global financial landscape is becoming increasingly evident — towards more distributed and innovation-driven ecosystems such as Berlin, Stockholm, and Silicon Valley. The objective of this study is to identify the key determinants behind the emergence of new technology-based financial centers through an analysis of FinTech firm locations and network connections. Preliminary findings highlight the growing importance of factors such as human capital, access to data, and digital infrastructure, which are reshaping the traditional logic of geographic centralization.

Keywords: decentralization, ecosystems, financial centers, FinTech, transformation

INTRODUCTION

In the perspective of the last two decades, the role of traditional financial centers is becoming the subject of intensive research in economic and financial geography. Works by authors such as Clark (2007), Coe, Lai and Woicik (2014) and Taylor et al. (2002) have focused on analyzing global capital flows, institutional structure and the importance of locations such as New York, London, Tokyo and Hong Kong. These centers dominated for decades as hubs of global finance - thanks to their banking infrastructure, concentration of professionals and favorable legal and regulatory frameworks. However, with the development of new financial technologies (FinTech), a significant shift in the structure of the global financial space can be observed (Lai and Samers, 2020; Wójcik 2020, 2021). Instead of a few centralized hubs, new, often dispersed centers of innovation - such as Berlin, Stockholm, Tel Aviv and Silicon Valley - are emerging to attract startups, VC capital and regulatory experiments (Arner et al., 2016). Flexible and decentralized ecosystems, in which digital infrastructure, human capital and an environment conducive to innovation are more important than the classic presence of large banks or stock exchanges, are growing in importance (Arslanian et al., 2019). The literature to date has focused primarily on framing FinTechs as an industry phenomenon (e.g., innovations in payments, crowdfunding or wealth management), overlooking their impact on spatial layout and structure in global finance (Clark, 2005; Pawlowska, 2023). This study fills this gap by analyzing the evolution of financial centers in terms of FinTech development and changes in their role and hierarchy. The results indicate a gradual shift in "financial gravity" toward more distributed and digitally integrated hubs, where not only traditional location factors, but also human capital with technological competence or access to investor networks play a key role. The study confirms that FinTech adaptation and integration is a determinant of the competitiveness of modern financial hubs, which has

¹ Piotr Łasak, Ph.D. Hab., Associate Professor, Institute of Economics, Finance and Management, Jagiellonian University, ul. Prof. S. Łojasiewicza 4, 30-348 Kraków, Poland, e-mail: piotr.lasak@uj.edu.pl (ORCID ID: 0000-0002-3726-3862)

² Monika Bolińska, Ph.D., Associate Professor, Institute of Economics, Finance and Management, Jagiellonian University, ul. Prof. S. Łojasiewicza 4, 30-348 Kraków, Poland, e-mail: monika.bolińska@uj.edu.pl (ORCID ID: 0000-0003-0361-7148)

³ Laura Szafarczyk, Ph.D. Candidate, Institute of Economics, Finance and Management, Jagiellonian University, ul. Prof. S. Łojasiewicza 4, 30-348 Kraków, Poland, e-mail: laura.szafarczyk@doctoral.uj.edu.pl

important implications for both the theory of financial geography and the practice of economic and innovation policy-making.

METHODOLOGY

Despite the former research dedicated to the current impact of financial technology on the transformation of financial companies, there is a research gap regarding the relationship between the development of financial technology and the transformation of the geography of financial centers. Investigating this relationship is important not only from the perspective of financial theory and economic geography, but also from a practical perspective - for regulators, investors, and urban and regional decision-makers. The study asks: (1) What are the determinants of the development of new FinTech-based financial centers? (2) Do the new centers overlap geographically with or replace traditional global financial centers? (3) What role do ecosystem elements - such as the regulatory environment, human capital and venture capital investment - play in this process?

The study is based on a theoretical framework that combines approaches from financial geography (Coe et al., 2014; Wojcik, 2013), innovation ecosystem theory (Isenberg, 2010; Mazzucato, 2021) and the concept of "networked finance," which emphasizes the role of relationships, knowledge and digital infrastructure in shaping modern financial centers. A spatial analysis of FinTech centers, understood as locations characterized by a high concentration of startups, VC funds related to financial technologies, was conducted. The main source of data is a compilation of available databases (e.g., Eurostat, OECD, World Bank - World Development Indicators, European Central Bank (ECB) reports and databases). The location, structure and functions of FinTech entities in selected centers in Europe (Berlin, Amsterdam, Stockholm, Warsaw), Asia (Singapore, Hong Kong) and the US (San Francisco, New York) were analyzed. A qualitative comparative analysis and elements of a network mapping approach, considering flows of capital, knowledge and innovation, were then applied. Thus, showing the effects of transformation.

FINDINGS

The data collected shows a clear concentration of FinTech players in specific locations, with a visible diversity in the profiles of these centers. Berlin and Stockholm stand out for their strong presence of startups in the areas of digital payments and mobile banking, while Amsterdam and Warsaw act as regional testing platforms supported by public policies and innovation incubators. In the U.S., San Francisco and New York remain important points in the global network but play different roles: the former as a center for product innovation, the latter as a point of contact with traditional financial institutions. The study's analysis also revealed that the evolution of financial hubs under the influence of FinTech is not just about geographic decentralization, but primarily about the transformation of their functions and network structures. The new financial hubs are seeing strong connections between diverse actors - startups, incubators, VC funds - which are creating dynamic innovation ecosystems. Traditional financial hubs retain the function of capital and oversight centers in many cases, while new locations specialize in rapid technology commercialization and regulatory experimentation (regulatory sandbox). In addition, a key growth factor is the increasing role of digital platforms and tools for knowledge and data sharing, which reduce the importance of physical proximity.

CONCLUSIONS

- (1) The findings support the thesis that financial technologies are a major force reshaping the spatial structure of global financial centers, promoting their dispersion and digital integration.
- (2) Traditional financial hubs maintain relevance primarily when they effectively adapt to the technological and regulatory requirements of the FinTech sector.
- (3) The most critical enablers for new hubs include a high level of technological expertise, access to digital infrastructure, and innovation-friendly regulatory conditions.
- (4) A key limitation of this study is the selective nature of the data and the relatively short time frame of the analysis, suggesting the need for further longitudinal research.

(5) In practical terms, the results highlight the importance of policies that promote digital skill development, investment in technological infrastructure, and regulatory flexibility to enhance the competitiveness and innovation potential of financial centers at both local and global levels. Additionally, future research should explore the mechanisms of cooperation and competition between traditional and emerging financial hubs to better understand how FinTech ecosystems evolve.

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