DRAFT: SHIFTING FINANCIAL GRAVITY: HOW FINTECH IS RESHAPING GLOBAL FINANCIAL HUBS

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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 Wojcik (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

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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 important implications for both the theory of financial geography and the practice of economic and innovation policymaking.

THE GEOGRAPHICAL DIMENSION OF FINANCE DIGITISATION

It is noteworthy that the world's leading international financial centres are currently undergoing dynamic transformations aimed at enhancing openness, diversification, and alignment with the principles of environmental sustainability. These centres are not only expanding their scope of operations into emerging fields such as fintech and green finance, but are also leveraging advanced technologies to improve service efficiency and quality while reducing operational costs. Furthermore, they actively promote green financial products and services, thereby providing substantial support for the development of a global green economy (Zhang, 2024).

The integration of financial technologies into the operations of traditional financial institutions brings numerous positive outcomes. Fintech-driven innovations—based on technologies such as artificial intelligence (AI), blockchain, big data analytics, and cloud computing—have enabled the delivery of faster, more efficient, and cost-effective financial services (Kazmi, 2025). These innovations also generate significant socioeconomic impacts, including increased financial inclusion, enhanced customer experience, and more streamlined banking operations.

The increasingly extensive application of modern financial technologies across various areas of the financial sector, is generating profound structural transformations in the functioning of financial markets. The contemporary financial system is undergoing a dynamic transition, primarily driven by the advancement of innovative financial technologies (FinTech). There is increasing overlap between the financial and non-financial sectors as financial sectors increasingly imitate the behaviour of ICT companies and incorporate advanced financial technologies into their activities (Hendrikse et al., 2020). In financial markets, these transformations are largely spatial in character. Key processes in this context include the formation of global financial networks and the restructuring of global financial centers. Notably, there has been a shift in the relative importance of traditional financial hubs, accompanied by the growing significance of new centers underpinned by digitalization and the deployment of advanced financial technologies. In these changes, leading international companies play a dominant role, acting as "drivers and shapers" of the processes taking place. The issue of global financial centres is approached in the academic literature through a dual analytical lens. One strand focuses on the development of Global Financial Networks (GFNs) and the processes underpinning this evolution. The other examines the increasing significance of International Financial Centres (IFCs) as strategic nodal points for the operations of global capital.

The concept of the Global Financial Network was introduced by Coe et al. (2014), who conceptualize the spatiality of finance as a multidimensional logic of specialization among financial centres across distinct functional domains. The authors highlight that the global economy is propelled by processes of strategic coupling between actors embedded in specific regional contexts—including governmental agencies, local enterprises, and business associations—and lead firms within Global Production Networks (GPNs), understood as “powerful firms that

orchestrate and coordinate complex GPNs within their respective industries." According to this framework, the objective of regional development is not merely to integrate a region into global production circuits, but also to enhance and capture value locally through mechanisms such as taxation, human capital development, and infrastructural investment. Both the value capture process and the effectiveness of coupling depend on the relative bargaining power of regional institutions vis-à-vis lead firms, resulting in fluid and contingent configurations of corporate and non-corporate actors. This constitutes a fundamentally two-dimensional approach. Subsequent research has aimed to expand the GFN framework by introducing additional dimensions.

Haberly et al. (2019) contribute to this line of inquiry by proposing a modified GFN framework that conceptualizes the organizational and geographical logic of the digital platform economy within finance. Diverging from the framework proposed by Coe et al. (2014), their expanded model underscores the transformative impact of digital technologies and the internet on the spatial dynamics of financial centre development. It is important to underscore, however, that the conception of the Global Financial Network articulated by Haberly et al. (2019) reflects a platform-based logic of financial organization. As such, their approach is more explicitly oriented toward ecosystems, whereas the development trajectories of International Financial Centers (IFC) remain more closely aligned with the notion of ecologies rather than ecosystems.

Gancarczyk and Rodil-Marzábal (2022) define financial ecosystems and financial ecologies. According to their concept, the financial sector has recently been redefined as a financial ecosystem to reflect its exposure to dynamic and sometimes disruptive changes. As subunits of the financial ecosystem, "financial ecologies" represent interconnected financial intermediaries and other economic actors focused on the provision of and access to financial services within specific territories. Global financial centers can be treated as such ecologies.

There are many different factors that can influence the development of financial centers. Brexit was one such examples. This event contributed to the diminishing role of London. This results from the fact that Brexit created significant uncertainty for start-ups, tech companies, and innovative activities, discouraging them from remaining in the face of prolonged and chaotic negotiations. In this context, New York emerges as a clear winner, primarily due to its current

advantage in venture capital financing. At the same time, there has been a rise in the significance of other financial centres, such as the Asian hubs in Hong Kong and Singapore (Lai & Pan, 2021). However, as noted by Cassis (2018), a greater threat to traditional financial centres stems from the impact of fintechs on their functioning. It should be emphasized that fintech represents both an entrepreneurial opportunity and a threat to established actors in the financial sector. Views on this matter are often optimistic, assuming that newly emerging tech start-ups do not possess the same transformative potential as Apple, Amazon, Facebook, Google, or Microsoft once did. As a result, it is more likely that new entities will be integrated into the structures of traditional financial institutions, rather than fundamentally revolutionizing them. Cassis and Wójcik (2018) evaluate the performance of traditional financial centres positively, arguing that international financial centres have fared surprisingly well in recent years. Nevertheless, despite the positive developments so far, they point out that some new financial centres—such as San Francisco in the United States—have the potential to gain a significantly stronger position within the network of global financial centres than they have had to date.

It should be noted that the activity of fintechs and their influence on financial centres is very unevenly distributed. Fintechs tend to concentrate in cities that already have existing technology industries or financial services sectors, which may lead to unforeseen transformations of financial markets based on the combined strength of both sectors—technological and financial. At the same time, fintechs allow for the leapfrogging of entire stages of financial and economic development. Although the advancement of the financial sector requires a certain degree of convergence between technology and financial centres, with the growth of fintechs, technology hubs are expected to gain increasing importance within global financial networks, while traditional financial centres that fail to incorporate fintech may lose their competitive edge. Moreover, fintech contributes to the expansion and fragmentation of the value chains of financial services, facilitating outsourcing and the relocation of various processes from traditional centres such as London or New York to cities in developing countries or to locations outside the established financial hubs.

In the context of the changing role of traditional financial centers and the rise of new, technologically advanced financial hubs, several processes can be identified (Ash et al., 2016):

- the transformation of financial firms, involving modifications to business models as well as changes in their geographical reach and modes of operation;
- spatial restructuring, manifested through shifts in international capital flows and the emergence of new financial centers and ecosystems grounded in technological innovation;
- the development of financial ecosystems linked to the decentralization of finance, particularly through decentralized finance (DeFi) mechanisms.

In relation to the transformation of financial firms, notable developments include the establishment of proprietary digital platforms, integration with third-party digital infrastructures, and the digital conversion of traditional financial institutions (Meyer et al., 2023). Spatial restructuring encompasses the evolution of financial hubs in various geographic locations, with their significance considered across four key dimensions (Hall et al., 2023; Węgrzyn, 2025):

1. Infrastructure - the machine based physical infrastructure matters for how finance works - infrastructures are spatially grounded and the existing infrastructure contributes to the development of financial centers (for example, the proximity of trading servers to exchanges is a vital competitive advantage in high-frequency trading).
2. Institutional – referring to the geographic expansion of financial institutions (such as banks, funds, and investors) and their increasing role within national and global economies.
3. Social – denoting the influence of finance on the everyday lives of individuals and the functioning of local economies.
4. Political, administrative and managerial – involving public policy at both national and subnational levels concerning financial governance, including budgeting and funding mechanisms as well as transnational financial management.

Decentralized finance (DeFi) may be conceptualized as an ecosystem of decentralized applications built on smart contract platforms, aimed at replicating and expanding traditional financial services (Eikmanns et al., 2023). Understanding the ecosystem dynamics allows an analysis of which financial centres might ultimately benefit from the rise of Fintech. The ecosystem produces variation in startups, initiatives, and applications that might prove valuable. Which ones survive is dependent on the selection environment, but also the degree to which ecosystem actors – primarily incumbents and startups – engage in symbiosis or any other form of competitive or collaborative co-existence (Hendrikse et al., 2020).

FINTECH-DRIVEN CHANGES OF TRADITIONAL FINANCIAL CENTERS

Traditional financial institutions—such as banks, insurance companies, and investment firms—have historically operated through brick-and-mortar branches, relying on highly regulated and centralized processes. However, in the context of far-reaching digital transformation across various sectors of the economy, these institutions are increasingly adapting to ongoing technological changes. In particular, this shift is reflected in the formation of strategic partnerships with FinTech firms and investments in innovative technologies (Kazim, 2025). It is important to emphasize that this description is a simplification. The implementation of financial technologies within the business models of traditional financial institutions, as well as their collaboration with FinTech companies, may take diverse forms. Detailed discussions of these aspects can be found in works such as Arslanian and Fischer (2019), Davradakis and Santos (2019), Gancarczyk et al. (2022), Gomber et al. (2018), and Łasak and Gancarczyk (2021).

Currently, the dynamic development of financial technologies is observable not only at the level of individual institutions but also from the broader perspective of international financial centres. Even traditional financial actors are increasingly integrating advanced digital solutions, relying on international information and communication technology (ICT) systems, as well as various financial innovations (Sidenko, 2021). Nevertheless, the advent of digital technologies has fundamentally challenged the existing status quo, leading to the rise of FinTech startups offering innovative, user-friendly, and cost-effective alternatives to traditional financial services. The rapid development of the FinTech sector may significantly alter competitive dynamics and, consequently, the financial standing of international financial institutions and also the whole financial centers (Huang & Yeung, 2022).

The current development of the world's largest international financial centers, based on FinTechs, brings with it many opportunities, but also many challenges. These centers must continually innovate and evolve to maintain their dominant position. As a result of the development of financial technologies, traditional financial centers are undergoing dynamic transformation. It can be assumed that their position is gradually diminishing in favor of new financial centers. Wójcik and Iannou (2020) argue that local and regional financial centers are expected to lose their position, and that the territories outside the core regions and financial centers will have to rely on retail

banking and the public sector to fund investment and sustainable development. These smaller ecologies will coexist with global financial networks, which are worldwide networks of financial centers and investment banks (Gancarczyk & Rodil-Marzábal, 2022).

Regardless of the negative impact of FinTechs on the development of traditional financial centers, their continued development without advanced technologies would be very difficult, and their decline would certainly be much more rapid. For this reason, traditional financial centers are also increasingly relying on advanced financial technologies to operate. As Lai & Samers (2020) point out, financial technologies are also being actively promoted by governments and private entities in major traditional international financial centers. They are viewed as essential infrastructure enabling the expansion of new markets and the development of new opportunities that would strengthen the status of existing financial centers. FinTechs are believed to be capable of strengthening traditional financial institutions, enabling them to improve their efficiency, thus increasing their competitiveness, and ensuring that financial products and services better meet customer expectations.

In addition to long-term processes, short-term actions also impact the functioning of the financial sector and certain financial institutions, and consequently, the functioning of global financial centers. An example of such an impact is the Covid-19 pandemic, which has caused significant changes in the functioning of financial sectors. In this context, an assessment of the pandemic's impact on the functioning of global financial centers is presented. Referring to the two contexts described above (the growing importance of Global Financial Networks and the development of International Financial Centers), it can be assumed that the pandemic's impact on the development of Global Financial Networks was much greater than on the change in the position of International Financial Centers (Wójcik & Iannou, 2020). This suggests that not every change, even one involving the active participation of FinTechs, necessarily has a significant impact on traditional financial centers. This leads us to believe that in-depth research is needed to identify the impact of various factors on traditional financial centers. Comparative research on the development of modern financial centers is also needed.

DEVELOPMENT OF NEW FINANCIAL HUBS

The global financial technology (FinTech) market is undergoing rapid transformation, with various cities emerging as new industry leaders. A central feature of FinTechs' integration into the financial sector is their growing specialization. Locations such as Bangalore, Berlin, San Francisco, and São Paulo have increasingly gained attention as emerging financial centers, each cultivating distinct FinTech ecosystems that challenge the dominance of traditional financial hubs.

The determinants driving the development of new financial centers have been the subject of extensive academic inquiry. Phung et al. (2023) proposes a comprehensive framework of such determinants, categorizing them into six primary groups: economic growth, governance and business environment, financial development, labor force, infrastructure accessibility, and a country's international reputation and political stability. Węgrzyn (2025) further distinguishes between "hard" and "soft" location factors. The hard factors include the size of the domestic economy, time zone advantages facilitating cross-border trade, and favorable regulatory and tax conditions. In contrast, soft factors refer to business culture, language environment, and the strength of the educational ecosystem. Węgrzyn highlights the regulatory framework and government policies aimed at supporting the development of financial centers as particularly decisive for long-term competitiveness. Building on this, Lu (2024) introduces the concept of International FinTech Centers (IFCs), framing them as strategic nodes within the global innovation infrastructure. According to Lu, these centers rival traditional financial hubs—such as New York, London, and Hong Kong—not only in terms of market relevance but also due to their distinctive advantages: access to highly skilled talent, availability of venture capital, academic and research institutions, and supportive legal and regulatory frameworks.

Moreover, Arslanian et al. (2019) underscores the rising importance of flexible and decentralized ecosystems, in which digital infrastructure, human capital, and an innovation-enabling environment outweigh the presence of conventional financial institutions such as large banks or stock exchanges.

In the context of FinTech ecosystems, several critical features have been identified as essential for effective development and operation (Alaassar et al., 2022; Haddad & Hornuf, 2019; Yáñez-Valdés & Guerrero, 2023):

- Institutional configuration: Most FinTech applications are not designed to replace traditional financial institutions but to collaborate with them—particularly with banks—to deliver enhanced digital services.
- Technological infrastructure: The availability and utilization of technologies such as high-speed and reliable telecommunications networks, open banking APIs, cloud computing, and shared data standards are foundational to FinTech activity. FinTech firms increasingly leverage user data from incumbent financial institutions to provide more accessible, personalized, and efficient services.
- Consumer engagement: Consumers remain at the center of financial innovation. Their willingness to adopt digital financial services and to share their financial data with third-party applications plays a critical role in ecosystem viability.
- Data networks: Often overlooked, data networks are arguably the most fundamental element of FinTech ecosystems. They provide the backbone that links financial institutions, technology providers, and consumers, ensuring interoperability and secure access to financial applications.

Understanding the emergence of new financial centers because of FinTech-driven transformation requires a multidimensional approach. It is essential to analyze not only the evolving role of these new hubs but also the structural determinants that are shifting the global "center of financial gravity" toward more decentralized, digitally integrated, and innovation-led ecosystems. In this context, cities such as San Francisco, São Paulo, Berlin, and Bangalore serve as illustrative case studies of how FinTech can reshape the global financial landscape through both structural and technological change.

One of the most prominent new financial centers is the San Francisco Bay Area, which is closely integrated with the Silicon Valley technology ecosystem. This region is characterized by a culture of rapid innovation, the presence of substantial venture capital, and proximity to major technology companies. These features create a natural foundation for the growth of FinTech startups. Notably, 9 out of the 10 largest FinTech companies in the United States—including Stripe, Coinbase, SoFi,

Plaid, Chime, Credit Karma, Ripple, Opendoor, and Robinhood—are headquartered in this region. The intensive use of emerging technologies by these firms has positioned San Francisco as a global epicenter of next-generation financial services. A critical factor in the development of this ecosystem is the proximity of leading academic institutions such as Stanford University, UC Berkeley, and UCSF, which ensure a steady supply of highly skilled professionals. Additionally, the region offers easy access to funding and benefits from a robust support and networking infrastructure, including the presence of technology incubators and accelerators.

In the Brazilian context, São Paulo hosts one of the world's most dynamic FinTech markets. The city is home to the largest stock exchange in Latin America by market capitalization and serves as the operational base for approximately 166 FinTech companies. This ecosystem is driven by a robust startup scene, including 12 of Brazil's 17 unicorns, all headquartered in São Paulo. The rapid development of the Brazilian FinTech sector is largely attributed to the high demand for financial services among previously unbanked populations. São Paulo plays a leading role in financial innovation in Latin America, particularly through the promotion of digital banking and alternative credit solutions. Government initiatives promoting open banking and instant payments, along with other regulatory reforms favorable to FinTech development, have further accelerated growth. Moreover, the city benefits from strong demand for financial inclusion and digital services, a dense network of FinTech incubators and accelerators, access to venture capital, and other advantageous location-specific factors.

Berlin has emerged as another key European FinTech hub, with German digital banking leaders such as N26 gaining global recognition. The city's rise in the FinTech sector is supported by its strong technological foundation and startup-friendly regulatory environment. A notable feature of Berlin's ecosystem is the concentration of FinTech firms, accounting for roughly one-third of all German FinTechs, with approximately 300 active tech startups. Furthermore, Berlin attracts around 85% of all FinTech-related venture capital investment in Germany, making it a critical node in the national innovation system. The city's position within the European Union also provides easy access to a broad and integrated financial market.

Lastly, Bangalore, often referred to as India's Silicon Valley, represents a leading center for both technological and financial innovation. Its FinTech ecosystem is rapidly expanding, fueled by unicorn startups and a broad-scale digital payments revolution occurring across India. The Indian government has also played a pivotal role through various initiatives supporting digital transactions, cashless economy programs, and startup funding schemes. Bangalore is a key player in India's digital transformation and the construction of a national digital financial ecosystem. As a result, the city hosts over 40% of India's FinTech startups and attracts approximately 48% of the country's venture capital investment in this sector. The ecosystem is further supported by numerous technology incubators and accelerators, modern technology parks, and robust internet infrastructure, including 5G coverage across nearly 90% of the city.

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?

Quantitative study

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.

Panel data were used for the quantitative analysis to visualize and model the development of new financial centers in comparison to traditional ones. Traditional centers included New York, London, Hong Kong, and Tokyo, while new centers comprised San Francisco, São Paulo, Berlin, and Bangalore. The analysis covered the period from 2010 to 2023. Fixed-effects panel regression was applied to estimate the growth of the Global Financial Centres Index (GFCI):

$$GFCI_{it} = \alpha_i + \beta_1 * t + \beta_2 * New_i + \beta_3 * (t* New_i) + \varepsilon_{it} \quad (1)$$

Where:

$GFCI_{it}$ - represents the GFCI score for financial center *i* in year *t*.

α_i - denotes the fixed effect for each financial center — capturing its individual intercept (initial GFCI level).

t - is time (year), treated either as a continuous or annual variable (e.g., t=1,2,...,25t = 1, 2, ..., 25t=1,2,...,25).

New_i - is a binary variable: 1 for new centers (e.g., São Paulo), 0 for traditional ones (e.g., New York).

t* New_i - represents the interaction term between time and the "new center" status.

ε_{it} - is the random error term, assumed to be uncorrelated with the fixed effects.

The purpose of the fixed-effects OLS regression was to examine whether new financial centers grow faster than traditional ones, with a particular focus on the interaction variable *(New × Time)*.

RESULTS AND DISCUSSION

Our analysis indicates that new financial centers are growing more rapidly and gaining prominence more dynamically than traditional hubs such as London, New York, Tokyo, or Hong Kong. While these established centers still dominate the global financial landscape, their lead is diminishing quickly. This is statistically supported by the significantly positive interaction coefficient (New × Time) in the panel regression model, which points to a faster increase in the GFCI index among next-generation centers. This trend reflects the convergence of structural, technological, and regulatory-political factors that are reshaping the geography of global finance.

Results of Fixed-Effects OLS Regression (2010–2023):

Variable	**Value**	**p-value**	**Interpretation**
Time	1.20	**< 0.001**	Average GFCI Growth Per Year for Traditional Centers
New	-43.46	**< 0.001**	New centers start with a lower GFCI (about 43 points less)
New × Time	1.38	**0.001**	New centers grow **faster** – by an additional ~1.38 GFCI points per year

First, new financial centers benefit from the so-called *catch-up effect*. Starting from a relatively lower level of development, they can achieve a faster pace of competitiveness growth. Simultaneously, they can adopt best organizational and technological practices developed by older hubs, thereby shortening the path toward market maturity.

Second, these emerging centers often bypass the costly process of modernizing outdated financial infrastructure, allowing them to leapfrog directly into implementing innovations. Centers such as Bangalore, Berlin, and the San Francisco Bay Area are marked by a rapid expansion of the fintech sector, a growing number of startups, and widespread adoption of technologies such as blockchain, artificial intelligence, and digital payment systems. Regulatory flexibility and proactive state involvement further accelerate the commercialization of innovation.

Third, the rise of new centers is fueled by global trends toward financial decentralization. Investment flows, once concentrated in a few dominant locations, are now distributed more evenly—especially toward emerging markets. São Paulo, Bangalore, and Dubai are gaining traction as strategic regional hubs, offering access to affordable labor, large consumer markets, and extensive engineering talent pools.

Governments in developing economies are playing an increasingly active role in promoting the development of international financial centers. Pro-innovation policies, supportive regulatory frameworks, preferential tax regimes, and streamlined licensing procedures create favorable conditions for financial sector growth. Such approaches are particularly evident in India, Brazil, and the United Arab Emirates. Additionally, new centers offer advantages in terms of cost efficiency, demographics, and digital adaptation. Younger, tech-savvy populations, lower operational costs, and greater organizational flexibility enable the rapid emergence of neobanks, cryptocurrencies, and integrated payment platforms. Finally, we observe mechanisms of a positive feedback loop: the growth in the number of fintech firms, venture capital investments, and IPOs creates a signaling effect that attracts further investors and financial institutions. Examples such as the San Francisco Bay Area, Berlin, and Singapore demonstrate that a reputation for innovation is becoming one of the key strategic assets for cities in the digital economy era.

FINDINGS

The data collected shows that FinTech players in specific locations enable for development of new financial centers. Such centers like the analyzed San Francisco, Berlin, Bangalore and Sao Paulo stand out for their strong presence of startups in the areas of digital payments and mobile banking. As a result, a two-tiered map of global financial centers is emerging. A prime example of this is

the United States, where 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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