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ASSESSMENT OF FACTORS INFLUENCING MARKET LEADERSHIP AND INNOVATION OF FINTECH COMPANIES IN THE DIGITAL ECONOMY

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Introduction. The fintech industry has focused on its potential, as it has rethought the possibilities and put the provision of financial services in a digitally developed world on a completely different level. The digital transformation of financial services, made possible by the rapid development of new technologies that ensure reliable transactions, has boosted the growth of FinTech companies.

Aim and tasks. The study aims to comprehensively assess the determinants of the ability of FinTech companies to achieve market leadership, sustain innovation activity, and ensure regulatory compliance in the context of the financial sector's digital transformation.

Results. The expert survey developed a standardised codebook to evaluate 15 FinTech companies grouped into three clusters, resulting in a composite index and validating hypotheses about the factors determining growth. The regulatory environment (RE, 0.148), trust and security (TS, 0.139), and access to finance (AF, 0.117) form the core determinants, followed by technological infrastructure (TI, 0.111) and team quality (TQ, 0.108), and the remaining factors have lower relative weights (<0.09). The inter-firm differences are mainly explained by the performance on the regulatory-trust and financial-technology determinants, and the sensitivity analysis shows that a 1-point (0–5) increase in RE/TS/AF increases the index by approximately +0.030/+0.028/+0.023, which quantitatively confirms their leading roles. A comparative analysis of the cohorts showed that the leaders (C1–C7) demonstrated high results (≥4 points on 9–10 factors out of 10) and significant superiority in technology infrastructure (TI) and team quality (TQ). At the same time, the remaining groups of companies had more fragmented profiles with pronounced weaknesses.

Conclusions. FinTech growth relies on a core of regulatory stability (RE), trust and security (TS), and access to finance (AF), complemented by technological infrastructure (TI) and team quality (TQ). Predictable regulation, access to capital, high-security standards, and targeted partnerships maximise the chance of "gazelle" or "unicorn" growth. A predictable regulatory environment and access to investment capital play a key role in accelerating the growth of the FinTech ecosystem. FinTech management should prioritise investments in technology infrastructure, developing highly skilled teams, creating targeted partnerships and ecosystems (PEs), and developing scalability and international expansion (SIEs) to transform high-growth companies into leaders.

Keywords: Digitalisation, Innovation Management FinTech, Regulation, Technological Infrastructure.

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1. Introduction.

Over the past few years, the FinTech industry has focused on its potential, as it has rethought the possibilities and put the provision of financial services in a digitally developed world on a completely different level. The digital transformation of financial services, made possible by the rapid development of new technologies that ensure reliable transactions, has boosted FinTech companies. Given the specifics of the sector, a large part of these companies have become fast-growing companies, taking advantage of, on the one hand, the ever-improving technological conditions that allow for secure operations and transactions in the digital reality. On the other hand, the growing popularity among users is winning them over due to the benefits provided (among other things, but not without importance, the possibilities for personalisation, speed, convenience, etc.).

However, despite the undeniable success of FinTech companies and ecosystems, it should be emphasised that this seemingly remarkable success is highly uneven. Only a relatively small number of companies operating in the FinTech industry have developed sustainable business models and achieved market acceptance. Most of these companies face the burden of several barriers and restrictions imposed on the sector, including a complex regulatory framework with ever-increasing requirements. At the same time, these companies must justify and meet data and transaction security requirements, on which the reliability and customers' decision to trust them are built. This leads to the need for a systematic analysis and approach that explains the factors from the external and internal environment that can lead to the rapid success of a company in the fintech industry, as well as to explain the conditions under which these factors can manifest themselves.

2. Literature review.

The FinTech industry has garnered significant interest from the research community, which is easily understandable, considering its enormous potential and its role in leading the digital transformation of financial services. Recent studies have highlighted the importance of the industry, revealing its various aspects and characteristics.

2.1. Fintech and Its Impact.

Xiao et al. (2024) explored the role of FinTech in reducing the environmental footprint in the EU by supporting the circular economy and technological innovation. Based on data from 27 countries (2013–2021), their research found that greater resource use increases the environmental footprint, while circular practices and innovation significantly reduce it.

From this perspective, FinTech is a moderator that helps strengthen sustainable policies while simultaneously acting as a barrier and limiting the adverse impact of resource intensity. In this way, conditions are created for much more efficient resource management and the provision of financing in favour of sustainable, environmentally friendly behaviour. Similarly, the results of a study by Ahmad et al. (2024) are relevant. FinTech, globalisation, and urbanisation will stimulate the transition to green energy. Specifically, developing the FinTech industry indirectly leads to a reduction in ecological footprints. The authors also believe that this leads to a more serious attitude and recommend future policies aimed at sustainable development. Pizzi et al. (2021) add another aspect of the green economy and the FinTech industry.

Based on the fact that FinTech is a direct result of Industry 4.0, scientists argue that it helps small and medium-sized enterprises (SMEs) overcome organisational barriers. According to them, this industry directly supports SMEs in implementing sustainable models and practices in the circular economy. In defence of their theory, scientists analyse qualitative case studies from different sectors, confirming the essential role of FinTech in this process. In line with their study, Abbasi, Alam, Du and Huynh (2021) conclude that FinTech positively impacts the overall performance of SMEs. Karim and Lucey (2024) delve into the two-way effect of BigTech and FinTech financing on traditional banking indicators, including services such as consumer lending, credit risk, and bank performance. According to their study, the results show a negative relationship between consumer lending and credit risk. According to the authors, this indicates serious future challenges for traditional financial services.

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At the same time, however, the authors also reveal a positive relationship with overall bank performance and opportunities for adaptation to blockchain-based financial mechanisms. Hmoud, Magableh, Badwan and Almashaqbeh (2025) conclude that the rapid development of FinTech leads to increased financial inclusion.

However, it was also pointed out that this leads to inefficient capital allocation. According to the development of FinTech companies and the services they provide, especially in countries with developing economies, the opportunities for financing companies that show more effective results are reduced. This phenomenon is associated with increased credit market competition and stock market transactions. Consequently, they believe that a more balanced approach should be implemented to integrate innovations characteristic of the FinTech industry in a way that allows for a more favourable combination of expanding the portfolio of financial services for more companies while simultaneously combining the benefits of the allocation of investments in terms of efficiency.

2.2. Fintech and Regulatory Frameworks.

Ferrari (2022) focused on perceptions of technology and its impact on EU policies to facilitate the transition to a platform economy. The author rightly points out that digitalisation empowers consumers. However, insufficient attention has been paid to the risks associated with this rapid development, such as monopolisation and various forms of vulnerabilities. The study emphasises that a more critical attitude towards the development of the technological future is needed, taking into account various alternative scenarios.

Xu and Bao (2023) found that the interaction between regulators and financial institutions, while Ni et al. (2023) studied the interaction between FinTech and banking risk and found a complex and dynamic relationship. Scientists believe that FinTech reduces banking risk. However, it should also be noted that the effect follows an inverted U-shaped curve; the risk increases in the early stages of development and decreases as it progresses.

Hence, financial regulation is crucial for overcoming the negative consequences of the initial stage of FinTech implementation. Wang and Hu (2023) extended their research to regulation and corporate financialisation. According to their results, FinTech limits the financialisation of enterprises, FinTech regulations acting as a moderating factor. The study also empirically proves that the negative effect is more pronounced in public enterprises, companies in low-polluting sectors, and companies operating in regions with less-developed market conditions.

Barbosa et al. (2024) focus on fee regulation and its impact on traditional and FinTech conglomerates in Brazil and assess its impact. According to the researchers, introducing a fee cap increases the profitability of FinTech conglomerates. However, it has also led to a decrease in traditional financial institutions. They also highlight that regulation reduces the profits of all conglomerates that offer higher financial complexity and credit growth. Meanwhile, Liu et al. (2024) analysed the impact of FinTech regulation on liquidity formation in Chinese banks and found that regulation stimulated deposit inflows, thereby reducing the dependence on interbank funding, improving banks' ability to convert existing liabilities into illiquid assets.

Al-Khazaleh et al. (2025) examined the relationship between FinTech, financial regulation, and corporate financialisation among listed industrial firms in Jordan and Palestine (2014–2023). Fintech initiatives can constrain financialisation, but effective regulation can mitigate its economic effects. The impact is powerful for companies operating in less developed market regions, state-owned enterprises, and low-polluting industries.

Nenavath (2025), who analyses Indian manufacturing companies (2014–2023), approaches this from a slightly different perspective. The author believes that FinTech also limits financialisation, but financial regulation strongly modifies the effect, which can either strengthen or weaken it.

This effect varies across state-owned enterprises, firms in less-developed regions, and non-polluting industries.

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This study highlights the need for further applied research in developing countries, which is in line with previous studies. Based on official data, Tang et al. (2025) examined the impact of government digital regulation on FinTech innovation among Chinese listed companies (2011 to 2021). Digital regulation is believed to hinder FinTech innovation by increasing external risks and internal transaction costs, especially for individuals, financial resources and high-tech enterprises. However, the combination of digital regulation and targeted institutional innovation strategies can lead to positive governance outcomes and stimulate FinTech growth.

Zhao and Man (2025) found that the findings can be included in this study because FinTech development increased state legitimacy in China (2011–2021). The findings were robust to control groups for various endogenous factors.. Different influences were related to individual provinces in China. The results of their study could be complemented by those of Ma et al. (2025). They developed and introduced the China Fintech Innovation Regulation Index (CFIRI) based on three main dimensions: objectives, methods, and regulation mechanisms. This index assesses the regulatory environment, policies, and security mechanisms in individual Chinese provinces. According to the authors, the empirical results confirm the effectiveness of the CFIRI in capturing the specifics and dynamics of the regulation of FinTech innovation.

2.3. Researches on FinTech Companies.

Kowalewski and Pisany (2023) conducted a cross-country analysis examining the emergence of FinTech. Their results indicate that FinTech companies thrive in countries with limited access to bank credit and high levels of technological development. In addition, the quality of research and collaboration between universities and industries also supports their growth, while strict regulations can be an obstacle. Simultaneously, the study pointed out that factors vary between developed and developing countries.

Pu and Cai (2025), exploring data from Chinese companies, reveal that financial technology significantly improves digital innovation by reducing financial barriers between banks and firms and optimising resource allocation. It was argued that the effect is powerful for firms with low financial degrees, high-tech companies, private enterprises and manufacturing firms.

Chaklader et al. (2023) present a systematic overview of the development of FinTech companies and their integration with artificial intelligence, machine learning, and blockchain in the context of innovation and entrepreneurship.

Merello et al. (2022) analyse how the sustainability profile of Fintech companies affects their market value, with sustainability increasing with the publication of a CSR report, a high CSR RepTrak score, and larger company/board size, but more green certifications/higher Green Rank are associated with lower market value.

Further studies of European FinTech (2014–2022) show that publishing ESG reports can improve fundraising performance, as investors view them as a sign of trustworthiness in high-risk, growing industries, and FinTech contributes to achieving sustainability goals (Carré et al., 2023). However, detailed ESG assessments and certifications do not have a significant impact, highlighting the importance of both transparent baselines and real sustainability performance (Giacomello et al., 2024).

Merello et al. (2023) analyse the sustainability of companies operating in the fintech and insurtech sectors by assessing their profile across three key areas: looking at aspects such as carbon emissions, the presence of environmental certifications, and compliance with the UN Sustainable Development Goals (SDGs), based on a panel of 95 companies (2010–2019). The results show that companies are likelier to report on corporate social responsibility (CSR), promote volunteerism, and demonstrate a more sustainable profile. Using data from a FinTech company, Wang et al. (2022) examine the role of so-called “soft” information (in a social and psychological context) in credit analyses.

Furthermore, improving the quality of this information leads to much greater accuracy in assessing the risk of default on loans on P2P platforms. Combining it with "hard" information leads to better predictions and increases the effectiveness of Fintech credit analysis.

Kaniadakis and Foster (2024) show how FinTech companies and large banks jointly develop trust in blockchain, adapting the technologies for the mainstream financial market and creating interdependent strategies in the new blockchain sector. Finally, Kou, Yang and Chen (2024) examine the development of the FinTech sector in three stages and divide it into four main areas: online banking, lending platforms, automated trading and blockchain. According to them, the main challenges are the effective use of blockchain, new business models in FinTech integration, improving financial accessibility, and controlling risks and regulations in the sector.

In support of this view, findings from the empirical research developed by Chambefort (2025) highlight that strategic partnerships between banks and FinTech companies and according to author, represent the most sustainable model for enhancing competitiveness and fostering innovation in the industry. As a general conclusion from the literature analysis, the FinTech industry enjoys increased academic interest, mainly related to its impact and power on overall economic development and improving access to business financing.

Particular attention is paid to financial technology and innovation, particularly its relationship with green innovation and sustainable development, as well as the rules these companies follow to ensure the integrity of their transactions. However, there are not many studies that focus on FinTech companies themselves and how they develop in the complex business world.

3. Methodology.

This study provides an opportunity to explore the experience of FinTech companies in achieving rapid growth as part of an industry based on high-tech development and innovation.

This study identifies and assesses the main factors that can turn companies into gazelles, some of which become unicorns. Based on this aim, the following hypothesis was formulated:

H1: The rapid growth of FinTech companies is determined to a large extent by access to financing and the quality of the regulatory environment, with levels of Trust and security (TS) making a significant complementary contribution to development.

H2: Leading companies (leaders) are distinguished by a "broad front" of high results and have a greater number of factors with a score ≥ 4 and higher average values for the performance determinants TI (technological infrastructure) and TQ (team quality) compared to other companies.

The methodology to achieve this goal and to explore and analyse the hypothesis is as follows: The present study applies a mixed methodology with two consecutive phases: (i) qualitative expert elicitation to identify the relevant factors ("Top-N"), and (ii) a compact quantitative procedure for weighting the importance (constant-sum, 100 points) and evaluating the companies on a unified scale of 0–5, leading to a composite index (CI). This choice was determined by the small size of the samples we handled (experts and companies).

First, a short elicitation is conducted among 12 experts (investors, founders, product and regulatory specialists) with an open question: "Which five factors most strongly influence the early success of a fintech company?" The responses received were coded and aggregated by frequency; a short list of 10 factors with the highest frequency of mention was constructed. This step increased content validity: the factors arose from practice, not a presupposed theoretical framework.

A constant-sum scale was used to avoid the high cognitive load of pairwise comparisons; each expert distributed 100 points among the selected factors in proportion to their perceived importance. A codebook was developed for each factor with clearly defined thresholds for values 0–5 (0=absent/very low; 5=strong/excellent criterion coverage). The codebook reduces measurement variability and increases the reliability of the possible joint assessments.

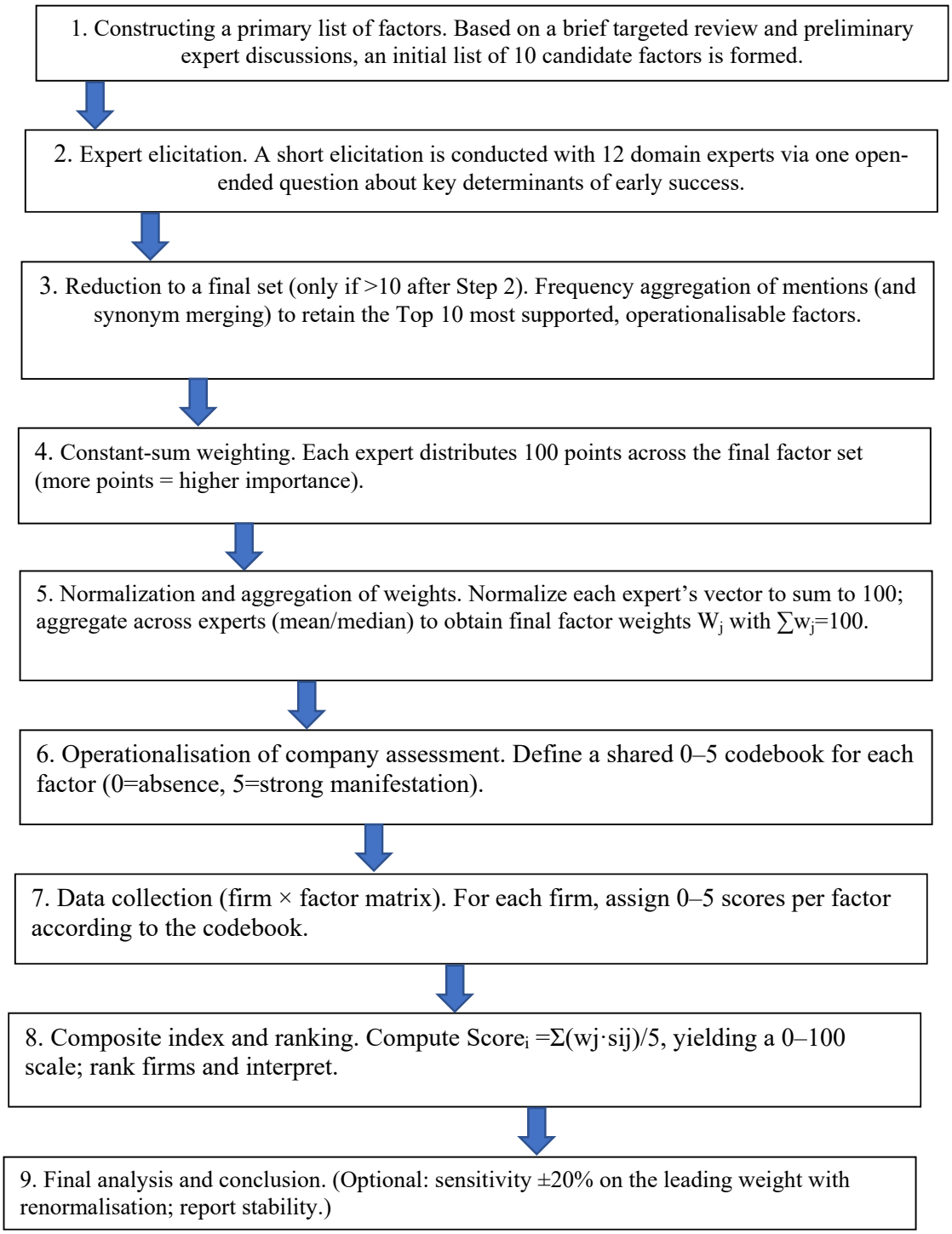

Fig. 1. Methodological Framework of the Study.

The final score for company X is calculated using a linear weighted sum with scaling to the interval [0, 100]. The proposed "Top-N combined with constant-sum and 0–5" approach is methodologically proportionate to the available constraints, providing transparent and interpretable weights (sum = 100).

It also enables a unified assessment of companies and produces a comparable composite index ranging from 0 to 100. The combination of median aggregation, sensitivity, and leave-one-expert-out provided sufficient robustness for the purposes and specifics of the present study.

4. Results.

4.1. Factors Identification.

Based on detailed desk research, 15 factors most frequently mentioned in various reports from and about the fintech industry, scientific articles, and the overall discussion of practitioners and academics concerning the development of fintech companies were identified (Table 1, column A).

In addition, 12 representatives of fintech companies asked the following open-ended question: "What are the main factors for the success of fintech companies?" After analysing their answers, additional factors were identified (Table 1, column B). It was consolidated by eliminating synonymous, partially overlapping factors and reducing them to the 10 most important factors with which to continue the research (Table 1, column C).

Table 1. Factors Determining Market Leadership and Innovation in FinTech Companies.

Initial Factors (Desk Research)	Expert Factors (Open-Question Research)	Consolidated Final Factors (Based on A and B column)
A	B	C
Access to venture capital and investments	Access to financing	Regulatory environment (RE) – flexible and predictable rules that enable innovation without hindering development
High degree of digitalization and mobile technologies	Customer trust	Access to finance (AF) – availability of venture capital, funds, and investors ready to support growth
Flexible and adaptive regulatory framework	Technology infrastructure	Trust and security (TS) – protection of personal data, cybersecurity, and reliable mechanisms against fraud
Personalization of financial services through big data analysis	User experience and usability	User experience (UX/UI) – convenient and easy-to-use applications that attract and retain customers
Partnerships with traditional banks and other financial institutions	Speed of innovation	Technology infrastructure (TI) – stable and scalable IT solutions based on cloud, AI, and automation
Integration of blockchain and decentralized technologies	Team quality	Team quality (TQ) – access to highly qualified specialists in IT, data, and finance
Availability of talents with technological and financial competencies	Customer acquisition costs	Partnerships and ecosystems (PE) – cooperation with banks, regulators, and technology companies
Cybersecurity and trust in data protection	International expansion	Speed of innovation (SI) – rapid implementation and adaptation of new solutions before competitors
Ability to quickly scale the business model	Speed of innovation implementation	Scalability and international expansion (SIE) – ability to expand the business model beyond the local market
Culture of innovation and entrepreneurship	–	Competitive pressure (CP) – strong competition stimulates companies to become more innovative and efficient
Improved user experience and convenient interfaces	–	–
Support from government initiatives and innovation policies	–	–
Globalization and access to international markets	–	–
Process automation through artificial intelligence and machine learning	–	–
Competitive pressure that stimulates accelerated implementation of new solutions	–	–

Once the final 10 aggregate factors favouring the rapid growth of companies operating in the FinTech industry were identified, 12 business experts (including founders and employees) were asked to determine their importance. Experts were asked to distribute 100 points among the factors according to their importance, with more points for the more important factors. The results are shown in Table 2.

Table. 2. Expert-Level Factor Scoring Table (heat map).

Factor	Expert 1	Expert 2	Expert 3	Expert 4	Expert 5	Expert 6	Expert 7	Expert 8	Expert 9	Expert 10	Expert 11	Expert 12
RE	10	12	17	15	16	8	20	14	16	19	14	17
AF	25	18	13	10	12	5	10	14	9	6	10	8
TS	15	16	15	10	15	7	18	10	15	13	16	17
UX/ UI	5	9	10	5	9	13	6	12	8	11	12	7
TI	10	10	12	10	11	14	10	10	9	14	10	13
TQ	5	12	14	10	10	13	12	15	10	9	10	9
PE	5	8	6	10	9	12	8	5	10	10	8	12
SI	10	5	6	15	7	16	4	10	9	8	8	6
SIE	10	7	6	10	7	10	8	5	7	6	6	7
CP	5	3	1	5	4	2	4	5	7	4	6	4
Total	100	100	100	100	100	100	100	100	100	100	100	100

Based on Table 2, different experts assess the relative weights of the factors for the rapid success of FinTech companies differently. Despite the individual differences, several factors with higher values were observed. Three leading factors stand out in the experts' assessment as decisive for the rapid development of FinTech companies: these are Access to Finance (AF), Trust and Security (TS), and Adequate Regulatory Environment (RE). The speed of innovation (SI) also receives a high ranking, although it is not in the top three places. At the same time, however, this high score is logical, considering the dynamism of the entire FinTech industry and the idea that it is based on and a result of ICT development.

Simultaneously, it is impressive that most experts rated factors such as competitive pressure (CP) and partnerships and ecosystems (PE) relatively low. Their position can be explained by an indirect influence on the basic conditions determining the development of a given company in its most important first years of growth. User experience (UX/UI) and team quality (TQ) occupy intermediate positions; according to experts, these factors are not too dominant, but at the same time, they could be defined as essential for the competitiveness and rapid development of FinTech companies.

In summary, the data confirm that a stable institutional framework, access to capital, and Trust in technological infrastructure are the important drivers of rapid success in the sector.

Simultaneously, the remaining factors act as supporting but not leading elements. An interesting aspect that stands out from the expert assessments is the balance between factors related to the external environment and those that depend on the internal organisational capabilities of the companies. While the regulatory framework, access to financing, and Trust in security are decisive for the ability of FinTech companies to enter and establish themselves in the market, factors such as team quality, user experience, and building partnerships are key to sustainable development and maintaining a competitive advantage. This combination leads to the conclusion that in order for FinTech companies to succeed, a set of circumstances is required: on the one hand, a favourable institutional environment in which the company can develop, but also an absolute management and innovation capacity that the company must possess. The company's sensitivity, rapid response, flexibility, and rapid adaptation to complex and changing business environments can be guaranteed.

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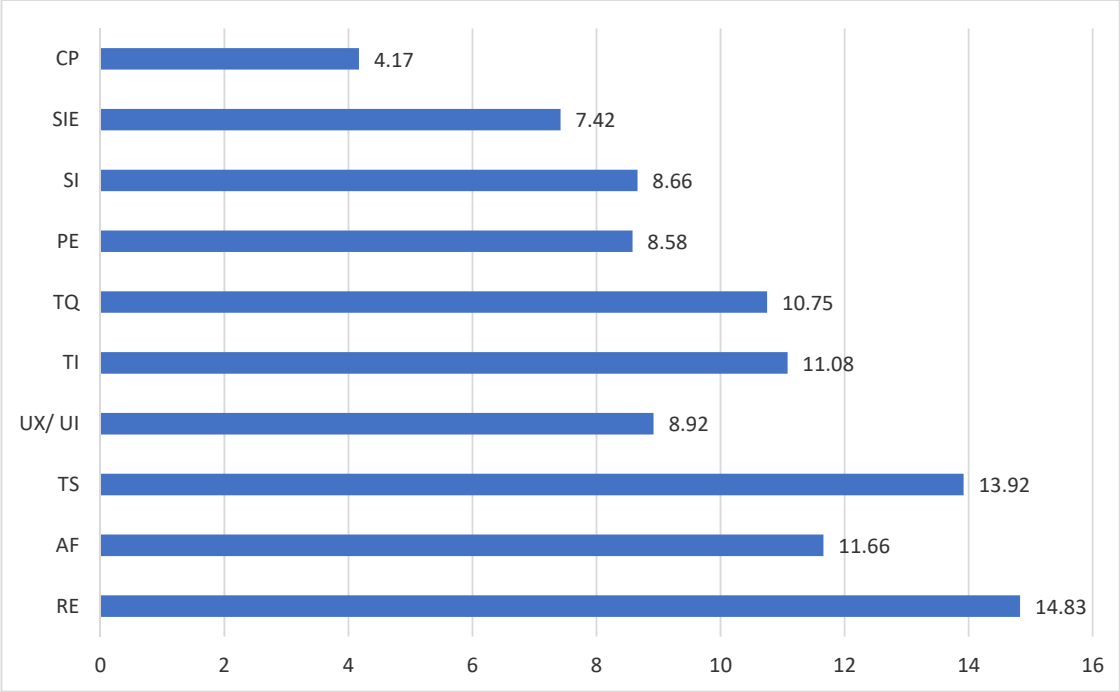

Fig. 2. Expert assessment of factors (average score).

The average values presented in the graph even more clearly outline the hierarchical relationship between the studied factors. The highest value obtained for the Regulatory Environment (RE), which occupies the first place, confirms its enormous importance in ensuring the rapid success of FinTech companies. Following closely with similar results are Access to Finance (AF) and Technology Infrastructure (TI).

This shows that, in addition to a stable regulatory environment, the availability of capital and the construction of a reliable technological base are critical conditions that enable real market expansion and innovation implementation.

Slightly lower but still significant values are received by team quality (TQ) and user experience (UX/UI), suggesting that human capital and user orientation play an important supporting role in the competitiveness of companies.

In the lower range fall Partnerships and ecosystems (PE), Speed of innovation (SI), and Scalability and international expansion (SIE) factors that are perceived as secondary in the early stages but potentially key for long-term sustainability. Competitive pressure (CP) remains at its lowest value, indicating that external competitive pressure is assessed as less critical than internal resources and structural conditions for development, such as “donation” and lower costs for such campaigns. Simultaneously, environmental investments usually require greater financial and technical resources.

The relative closeness of the values of some of the factors is also striking, suggesting that experts do not perceive success in the FinTech sector as the result of a single dominant element but rather as a combination of interconnected conditions. High scores for regulation, financing, and technological infrastructure build the foundation of the environment. However, simultaneously, the role of the team, user experience, and partnerships outline the need for a balanced organisational capacity. This emphasises the systemic nature of FinTech innovations, in which the strategic interaction between institutional and intra-organisational factors is crucial for accelerated market adoption.

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Table 3. Aggregated Factor Weights (constant-sum 100; n=12 experts).

Factor	Average	Weight
RE (Regulatory environment)	14.833	0.1483
AF (Access to finance)	11.667	0.1167
TS (Trust & security)	13.917	0.1392
UX/UI (User experience & interface)	8.917	0.0892
TI (Technology infrastructure)	11.083	0.1108
TQ (Team quality)	10.750	0.1075
PE (Partnerships & ecosystems)	8.583	0.0858
SI (Speed of innovation)	8.667	0.0867
SIE (Scalability & international expansion)	7.417	0.0742
CP (Competitive positioning)	4.167	0.0417

The individual distributions were normalised (each column sums to 100) and aggregated by factor using the mean/median to obtain a final vector of weights interpretable as the relative percentages of importance (Table 3). For presentation in the calculations, the weights were converted into shares that sum to one (e.g. if a factor has 14.8%, its share is 0.148).

The table ranks the ten factors that accelerate the development of fintech companies in order of importance, with the average scores converted into relative weights (summing to one). A clear top three emerges: the regulatory environment (RE, ~14.8%), trust and security (TS, ~13.9%), and access to finance (AF, ~11.7%), which together explain approximately 40% of the total importance. This suggests that, given the highly regulated and risk-sensitive nature of financial services, transparent and predictable regulations, high standards of cyber and operational security, and the availability of capital are the necessary conditions for rapid growth. In the "second line" fall technological infrastructure (TI, ~11.1%) and team quality (TQ, ~10.8%) – performance factors that convert regulatory and financial prerequisites into real innovation and scalable products.

The remaining determinants have moderate weight: user experience (UX/UI, ~8.9%), speed of innovation (SI, ~8.7%), and partnerships and ecosystems (PE, ~8.6%) are almost equal, indicating that market implementation and coopetition are important but secondary to "hard" conditions.

Scaling and international expansion (SIE, ~7.4%) appear to be less decisive in the early stages, when local compliance and sustainability of the model dominate, and competitive pressure (CP, ~4.2%) is the least influential, probably because its effect manifests itself indirectly by stimulating innovation and optimisation. In sum, the distribution of weights suggests a model in which regulatory, trust, and financial prerequisites are first ensured, then organisational and technological capabilities determine the growth rate, and market and geographical factors act as accelerators, but not as primary drivers.

To implement the next part of the methodology, it was selected data from an analysis of 15 companies, of which 7 are world leaders, 3 are international but with relatively short experience, and 5 are the top Bulgarian companies in FinTech. From a development perspective, international companies represent six unicorns, three public companies, and one gazelle, while one unicorn and two gazelles are among the Bulgarian representatives. Global companies (such as Stripe, Revolut, and Ant Group) are used to show how the key success factors work in different markets and regulatory conditions. This provides a "benchmark" – a global standard to which the results can be compared. When we add Bulgarian examples (Payhawk, Paynetics, EasyPay), how many of the same factors impact a local context can be analysed. This verified whether the derived criteria were universal or varied according to the ecosystem.

Global companies illustrate "best practices" and provide an empirical basis for the theory of why certain factors are critical to rapid success. Bulgarian cases make the analysis useful for specific areas. The methodology can be applied locally.

It makes it more realistic and valuable for researchers, investors, and entrepreneurs.

To make the analysis results comparable, the study used the following codebook, applicable to the assessment of each participating company (Table 4).

Table 4. Codebook of Factors and Indicators for Company Assessment.

Factor	Score 0	Score 3	Score 5
RE (Regulatory environment)	No permits; non-compliance	Clear plan; partial coverage; participation in regulatory sandbox	Full compliance; timely approvals; no violations
AF (Access to finance)	No funding	Seed/angel investment ≤ €2–3m	Series A/B or equivalent; strong strategic investors
TS (Trust & security)	Frequent incidents; no standards	ISO/SOC or equivalent certification in progress	Certified; 2FA/KYC/AML fully implemented; no breaches
UX/UI (User experience & interface)	Poor ratings; low retention	Satisfactory onboarding	High ratings; strong retention; NPS > 40
TI (Technology infrastructure)	Monolithic; manual processes	Partial automation; basic cloud adoption	Scalable; cloud-native; IaC/CI/CD; full observability
TQ (Team quality)	No relevant experience	Core team with 1–2 senior professionals	Strong core team with proven fintech/data/regulation expertise
PE (Partnerships & ecosystems)	None	One significant intermediary/channel partner	≥2 Tier-1 partners, or bank/scheme plus distribution channels
SE (Speed of innovation)	Infrequent releases	Monthly releases/pilots	Bi-weekly releases; rapid pilots into production
SIE (Scalability & international expansion)	Local only	Processes ready; entry into one new market	Multi-market presence; localization and compliance established
CP (Competitive positioning)	Indistinguishable from competitors	Clear niches; defined USP	Strong differentiation; rapid response to competition

The developed codebook standardises the assessment of each company on the ten factors on a scale of 0–5, where 0 means no or very low manifestation of the criterion, 3 means operationally satisfactory level according to quantitative anchors (e.g. scope/speed/certifications), and 5 means high and sustainable coverage of the most demanding thresholds. The levels are defined by observable indicators and numerical ranges (e.g. onboarding completion rate, time to first value, ISO/SOC certifications, release frequency, partnership scope, funding rounds, and regulatory status) to minimise subjectivity and ensure comparability across companies. The assessments are based on public sources and/or verifiable internal data from the last 12 months. In the case of missing values, clearly labelled proxies were used, and the weights in the index were renormalised on the available factors.

Procedurally, the same codebook was applied to all companies and assessed by two independent reviewers (Table 5). Discrepancies were discussed and resolved according to predefined rules (preference for a more reliable source, more recent data, and stricter interpretation in borderline cases).

Source traces (links/documents and access dates) are maintained for transparency, and short notes explain atypical solutions. The codebook is an operational standard: it is specific enough to be reproducible and universal enough to cover the diversity of FinTech models.

Table 5. Firm-Level Factor Scoring Table.

Factor	C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15
RE	4	5	5	4	3	4	4	4	4	5	5	4	5	5	4
AF	5	5	5	5	5	5	5	5	5	5	5	3	3	3	4
TS	4	5	5	4	4	4	4	3	5	4	5	3	4	4	3
UX/ UI	4	4	4	4	4	4	4	4	4	3	4	4	3	4	3
TI	5	5	5	5	5	5	5	5	4	4	5	4	4	3	3
TQ	5	4	5	5	5	4	5	4	4	4	5	4	4	4	4
PE	5	5	5	5	5	5	5	5	5	5	5	4	5	5	3
SI	5	4	5	5	4	4	4	4	4	4	4	5	4	3	3
SIE	5	5	5	5	5	5	5	0	4	3	5	3	4	2	1
CP	5	4	5	5	4	4	5	4	4	4	4	3	4	4	3

Note: From C1 to C7 – Leaders in FinTech; from C8 to C10 – New fast-growing companies; from C11 to C 15 – top 5 Bulgarian Fintech companies.

The companies are grouped by maturity level, growth rate and region (Table 6).

1. Leaders (C1–C7). The profile is close to the "ceiling" in most rows: high values in RE (Regulatory Environment/Compliance), AF (Access to Finance), TI (Infrastructure), TQ (Team), and PE (Partnerships). Good SIE (Scaling/International Expansion) is also visible, as is the maturity of operations and ecosystem connections. Variation is low; weaknesses are almost non-existent (apart from typically more moderate scores in CP, which reflect the environment rather than a manageable lever).

2. New fast-growing companies (C8–C10). The profile is "overrated": distinctly strong UX/UI and often high TS (Trust/Security), plus decent SE (Speed of Innovation). Compared to leaders, there are more moderate levels in AF and PE, and SIE is not yet "unlocked" to the maximum; product and pace are their strengths. However, capital, partnerships, and international distribution are still catching up.

3. Bulgarian companies (C11–C15). There is a "defensive" strength: stable TS scores and often good RE (regulatory discipline), while AF and especially SIE are lower, with limited access to scale capital and slower internationalisation. UX/UI and TI are relatively moderate (with some exceptions), and PE is variable.

There are partnerships, but not at the depth/scope of the leaders. The most apparent differences between cohorts are SIE (Scaling) and PE (Ecosystems) – leaders dominate; UX/UI and SE drive new internationals; TS and RE are relatively strong among Bulgarians. AF distinguishes mature from local players (capital/investors), whereas TI is more even. This suggests that for the Bulgarian cluster, the priorities for convergence towards the leaders are:

– partnerships and channels (PE);
– scaling outside the country (SIE);
– capital/strategic investors (AF), while maintaining strength in TS/RE and accelerating UX/UI when it is below the median.

Table 6. Assessment of FinTech Companies According to the Factors Weight.

Factor	C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	Weight
RE	4	5	5	4	3	4	4	4	4	5	5	4	5	5	4	0.148333
AF	5	5	5	5	5	5	5	5	5	5	5	3	3	3	4	0.116667
TS	4	5	5	4	4	4	4	3	5	4	5	3	4	4	3	0.139167
UX/ UI	4	4	4	4	4	4	4	4	4	3	4	4	3	4	3	0.089167
TI	5	5	5	5	5	5	5	5	4	4	5	4	4	3	3	0.110833
TQ	5	4	5	5	5	4	5	4	4	4	5	4	4	4	4	0.107500
PE	5	5	5	5	5	5	5	5	5	5	5	4	5	5	3	0.085833
SI	5	4	5	5	4	4	4	4	4	4	4	5	4	3	3	0.086667
SIE	5	5	5	5	5	5	5	0	4	3	5	3	4	2	1	0.074167
CP	5	4	5	5	4	4	5	4	4	4	4	3	4	4	3	0.041667
	0.9247	0.9350	0.9822	0.9247	0.8693	0.8775	0.9073	0.7755	0.8683	0.8375	0.9565	0.7430	0.8057	0.7543	0.6448	

The data in Fig. 1 reveal several emerging trends. First, the strongest approval, with over 60%, is the understanding that customers and partners expect business organisations to be socially responsible. This recognition by business representatives shows the inevitability of the development and its future direction. At the same time, the respondents largely agree (slightly over 50%) that implementing such a policy by the organisation will encourage the opening of new perspectives, allow entering new markets, and lead to new partnerships.

Regarding public procurement, the idea of CSR's supporting role is not as widely represented as in the previous two statements. Slightly over 30% agree with the statement that CSR is a factor in public procurement, which may be evidence of two possibilities: the Bulgarian public administration has not yet imposed such requirements on candidates, and (hand – the respondents themselves are representatives of companies that do not have much interaction with the public administration, at least in terms of public procurement. However, owing to external environmental pressure, this alternative is not as well recognised as the previous ones.

Regarding the barriers to implementing more in-depth CSR, the respondents did not outline any substantial challenges. Surprisingly, the most serious barrier concerns the lack of adequate state policy supporting CSR initiatives and practices, with more than half of the respondents supporting this statement. Second is the passive role of the employees, who do not respond sufficiently to CSR activities – slightly less than half of the respondents agree that employees rarely support such policies. This passivity may be due to several factors: in general, CSR is not widely represented in the practices of Bulgarian micro and small enterprises, as they are mainly faced with other significant problems as a priority. On the other hand, for some Bulgarian businesses, CSR is still perceived as exotic, part of marketing and PR, inherent to large corporations, and for earning additional benefits. The statement that CSR requires considerable financial resources is the least agreed upon. This means that respondents still have an obvious idea of the diverse activities within this policy and the possibility of volunteering or several social opportunities that would require a budget commensurate with the capabilities of the business organisation itself.

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5. Verification of Hypotheses.

The first hypothesis (H1) states that the rapid growth of fintech companies is primarily determined by access to financing and the quality of the regulatory environment, with trust and security also making a significant, contribution to their development.

First, the aggregated ranking of factors shows a "top three" in which the regulatory environment (RE, ~14.8%) and access to finance (AF, ~11.7%) are among the highest in relative weight, and trust and security (TS, ~13.9%) occupies an intermediate high position, that is, it functions as a complementary but crucial determinant of rapid growth. This distribution of weights is obtained through a constant sum of expert assessments and normalisation, which allows for interpretation as relative percentages of importance and clearly suggests that predictable regulation and the availability of capital are basic prerequisites, while trust and security "lock in" consumer trust and operational sustainability.

Additionally, the analysis of the "impact gradients" shows that a 1-point increase (0–5) in RE and TS increases the composite index by approximately ~+0.030 and ~+0.028, and in AF by ~+0.023, which quantitatively supports the thesis of the primary role of RE and AF and the concomitant high contribution of TS.

Second, the cohort reading of the 15 companies confirms that the combination of high RE, AF, and TS scores differentiates the leaders from the rest. The profile of the "Leaders" (C1–C7) is "close to the ceiling" in RE and AF, with stable values also in TS, while the "new fast-growing" (C8–C10) compensate with strong UX/UI and TS, but lag behind in AF, and the Bulgarian companies (C11–C15) demonstrate "defensive strength" in TS and often good RE, but lower AF and especially SIE. These differences are directly reflected in the composite indices (for example, C3=0.9822; C11=0.9565 vs. C15=0.6448), with fluctuations in the regulatory-trust and financial determinants explaining the main variation between companies. The cohort model confirms H1, where growth accelerates with favourable regulation and access to finance, and trust and security support high performance.

The second hypothesis (H2) Leading companies (leaders) are distinguished by a "broad front" of high results and have a greater number of factors with a score ≥ 4 and higher average values for the performance determinants TI (Technological Infrastructure) and TQ (Team Quality) compared to other companies.

The firm × factor data support the "broad front" hypothesis for the leaders. The C1–C7 profile is "near ceiling" in most rows, with consistently high RE, AF, TI, TQ, and PE values and low variance, with no apparent weaknesses (excluding moderate CP). According to the matrix itself, leaders have a score ≥4 on at least nine out of ten factors (in five out of seven cases – 10/10), while in the remaining cohorts, 1–2 "subthreshold" values, including zeros on SIE (Scaling/International Expansion), for example, C8, are more frequently observed.

The determinants critical to performance are noticeably stronger in the leading companies: for TI, the average score in C1–C7 reaches the maximum (5.0), compared with 4.0 in C8–C15, while for TQ it is 4.7 versus 4.1. These quantitative differences align with the qualitative observations of 'mature operations' and 'virtually no weaknesses' in the leaders. The comparison by cohorts completes the picture: the "new fast-growing" (C8–C10) compensate with UX/UI and TS, but remain with moderate AF and PE and incompletely "unlocked" SIE; the Bulgarians (C11–C15) have "defensive strength" in TS and often good RE, but lower AF and SIE, and TI is "more evenly" distributed in the sample compared to the other factors.

Even with this uniformity, the leaders consistently stand at a maximum in TI and above the average in TQ (e.g., the rows for TI and TQ in Table 4), which empirically distinguishes the "broad front" of high results among them from the more fragmented profiles of the other groups. Taken together, the combination of (i) a greater number of factors with a score ≥4 and (ii) higher TI and TQ averages supports the hypothesis of leaders as companies with balanced and deep operational strengths rather than a narrow set of strengths.

6. Conclusions.

The study outlines a clear hierarchy of determinants for accelerated growth in FinTech, in which the Regulatory Environment, Access to Finance, and Trust & Security form the "structural foundation" of success. Aggregated expert assessment rank to Regulatory Environment & Compliance, Trust & Security, and Access to Finance as the top three, followed by Technological Infrastructure and Team Quality as execution capabilities that translate structural prerequisites into scalable products and market realisation. International expansion and competitive pressure factors have complementary but secondary effects, especially in the early stages. This supports H1 with a stable regulatory framework, capital provision, and high service reliability are primary growth drivers.

An analysis of 15 companies confirms H2 and shows that leading companies score higher (≥4) on many dimensions, demonstrating clear strengths in Technology Infrastructure and Team Quality but with minor weaknesses on other dimensions.

At the same time, "new fast-growing" companies compensate with User experience & interface and Trust & Security.

However, lag in Access to Finance and Scalability & International Expansion, and Bulgarian companies show "defensive strength" in TS and often good RE, in need of acceleration in Partnerships & ecosystems, Scalability & International Expansion, and access to larger-scale capital.

The composite index and distribution of contributions confirm that the variation between companies is explained primarily by the performance on the "heavy" regulatory-trust and financial-technological determinants, while ecosystems and geographic expansion act as accelerators on an already established foundation. The practical conclusion is twofold: for policies, predictable regulation and incentives to finance scaling; for management, investment in Technology infrastructure and Team quality, purposeful building of partnerships, and expansion channels.

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REFERENCES

Abbasi, K., Alam, A., Du, M. A., & Huynh, T. L. D. (2021). FinTech, SME efficiency and national culture: Evidence from OECD countries. Technological Forecasting and Social Change, 163, 120454. https://doi.org/10.1016/j.techfore.2020.120454

Ahmad, M., Pata, U. K., Ahmed, Z., & Zhao, R. (2024). Fintech, natural resources management, green energy transition, and ecological footprint: Empirical insights from EU countries. Resources Policy, 92, 104972. https://doi.org/10.1016/j.resourpol.2024.104972

Al-Khazaleh, S., Badwan, N., Saleh, Q., Almashaqbeh, M., & Qubbaj, I. (2025). Corporate financial trends, dynamics of FinTech impact and financial regulation: Joint evidence from Jordan and Palestine. Digital Policy, Regulation and Governance, 27(5), 553–570. https://doi.org/10.1108/DPRG-09-2024-0226

Barbosa, K., Rocha, B. de P., Pereira, L. M., & Passos, L. F. (2024). Payment card interchange fee regulation and financial institutions: The effects on traditional and fintech financial conglomerates. Finance Research Letters, 64, 105491. https://doi.org/10.1016/j.frl.2024.105491

Carè, R., Boitan, I. A., & Fatima, R. (2023). How do FinTech companies contribute to the achievement of SDGs? Insights from case studies. Research in International Business and Finance, 66, 102072. https://doi.org/10.1016/j.ribaf.2023.102072

Chaklader, B., Gupta, B. B., & Panigrahi, P. K. (2023). Analyzing the progress of FINTECH-companies and their integration with new technologies for innovation and entrepreneurship. Journal of Business Research, 161, 113847. https://doi.org/10.1016/j.jbusres.2023.113847

Chambefort, C. (2025). Alliance with fintech: Are banks opening the Pandor box? In N. Apergis (Ed.), Encyclopedia of Monetary Policy, Financial Markets and Banking (1st ed., pp. 427–430). Academic Press. https://doi.org/10.1016/B978-0-44-313776-1.00117-3

Ferrari, M. V. (2022). The platformisation of digital payments: The fabrication of consumer interest in the EU FinTech agenda. Computer Law and Security Report, 45, 105687. https://doi.org/10.1016/j.clsr.2022.105687

Giakoumelou, A., Salvi, A., Bekiros, S., & Onorato, G. (2024). ESG and FinTech funding in the EU. Research in International Business and Finance, 69, 102233. https://doi.org/10.1016/j.ribaf.2024.102233

Hmoud, A., Magableh, F., Badwan, N., & Almashaqbeh, M. (2025). Impact of FinTech on capital allocation: Empirical evidence from Jordan and Palestine. Borsa Istanbul Review, 25(5), 1068–1084. https://doi.org/10.1016/j.bir.2025.06.004

Kaniadakis, A., & Foster, P. (2024). The role of fintech startups and big banks in shaping trust expectations from blockchain use in mainstream financial markets. Technological Forecasting and Social Change, 203, 123376. https://doi.org/10.1016/j.techfore.2024.123376

Karim, S., & Lucey, B. M. (2024). BigTech, FinTech, and banks: A tangle or unity? Finance Research Letters, 64, 105490. https://doi.org/10.1016/j.frl.2024.105490

Kou, M., Yang, Y., & Chen, K. (2024). Financial technology research: Past and future trajectories. International Review of Economics & Finance, 93(A), 162–181. https://doi.org/10.1016/j.iref.2024.03.032

Kowalewski, O., & Pisany, P. (2023). The rise of fintech: A cross-country perspective. Technovation, 122, 102642. https://doi.org/10.1016/j.technovation.2022.102642

Liu, S., Wang, B., & Zhang, Q. (2024). Fintech regulation and bank liquidity creation: Evidence from China. Pacific-Basin Finance Journal, 84, 102276. https://doi.org/10.1016/j.pacfin.2024.102276

Ma, C. Q., Xiong, Y. K., & Chen, X. Q. (2025). Fintech innovation regulation in China: An index-based comprehensive evaluation. Finance Research Letters, 85(D), 108209. https://doi.org/10.1016/j.frl.2025.108209

Merello, P., Barbera, A., & De la Poza, E. (2022). Is the sustainability profile of FinTech companies a key driver of their value? Technological Forecasting and Social Change, 174, 121290. https://doi.org/10.1016/j.techfore.2021.121290

Merello, P., Barbera, A., & De la Poza, E. (2023). Analysing the determinant factors of the sustainability profile of Fintech and Insurtech companies. Journal of Cleaner Production, 421, 138437. https://doi.org/10.1016/j.jclepro.2023.138437

Nenavath, S. (2025). Exploring the dynamics of fintech impact, financial regulation, and corporate financial trends: An analysis of India. Asia Pacific Management Review, 30(1), 100336. https://doi.org/10.1016/j.apmrv.2024.11.006

Ni, Q., Zhang, L., & Wu, C. (2023). Fintech and commercial bank risks–The moderating effect of financial regulation. Finance Research Letters, 58(C), 104536. https://doi.org/10.1016/j.frl.2023.104536

Pizzi, S., Corbo, L., & Caputo, A. (2021). Fintech and SMEs sustainable business models: Reflections and considerations for a circular economy. Journal of Cleaner Production, 281, 125217. https://doi.org/10.1016/j.jclepro.2020.125217

Pu, Y., & Cai, Y. (2025). FinTech and corporate digital technology innovation. Finance Research Letters, 85(B), 108007. https://doi.org/10.1016/j.frl.2025.108007

Tan, W., Tang, Q., Sun, W., & Du, X. (2025). Unintended consequences: Examining the effects of government digital regulation on corporate fintech innovation in China. Emerging Markets Review, 64, 101221. https://doi.org/10.1016/j.ememar.2024.101221

Wang, Q., & Hu, C. (2023). Fintech, financial regulation and corporate financialization: Evidence from China. Finance Research Letters, 58(B), 104378. https://doi.org/10.1016/j.frl.2023.104378

Wang, Y., Drabek, Z., & Wang, Z. (2022). The role of social and psychological related soft information in credit analysis: Evidence from a Fintech Company. Journal of Behavioral and Experimental Economics, 96, 101806. https://doi.org/10.1016/j.socec.2021.101806

Xiao, A., Xu, Z., Skare, M., Xiao, J. L., & Qin, Y. (2024). Unlocking the potential of FinTech: A pathway to sustainable resource management in the EU. Resources Policy, 98, 105358. https://doi.org/10.1016/j.resourpol.2024.105358

Xu, Y., & Bao, H. (2023). FinTech regulation: Evolutionary game model, numerical simulation, and recommendations. Expert Systems with Applications, 211, 118327. https://doi.org/10.1016/j.eswa.2022.118327

Zhao, Y., & Ma, F. (2025). Will fintech enhance financial regulation? Research in International Business and Finance, 78, 103005. https://doi.org/10.1016/j.ribaf.2025.103005