

LANDSCAPE OF FINTECH AND TRUST RESEARCH: PARTNERSHIP NETWORKS AND THEMATIC EVOLUTION

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Purpose: The purpose of this study is to map and assess the development of academic research on the relationship between fintech and trust between 2016 to 2024. It aims to identify the most active countries, institutions, and sources of publications, analyze collaboration networks, and uncover emerging thematic areas that define interdisciplinary field.

Design/methodology/approach: Through a bibliometric approach based on Scopus and Web of Science data, the study explores how research productivity, partnership networks, and conceptual focuses have evolved over research period, identifies publication trends.

Findings: The analysis reveals a dynamic and growing interest in the topic of fintech and trust, with publications increasing from a single paper in 2016 to over 120 in 2024. The results show that China, India and Malaysia are leading contributors, although countries such as the UK and the USA demonstrate stronger international collaboration. Two main models of research activity are observed: nationally focused hubs (e.g. China, India) and intentionality connected networks (e.g. UK, USA, Malaysia).

Research limitations/implications: Dataset covers the period 2016-2024 more recent publications or ongoing research trends might not be fully visible. Future research should build: comparative cross-cultural analyses, with describing differentiation in the perspective rules and cultural environments. Exploration of emerging technologies, and their influence on trust formation and risk perception.

Originality/value: The research provides comprehensive bibliometric overviews of the fintech and trust literature, offering a structured view of how the field has evolved and where research gaps remain. By using bibliometric approach is reveal not only who leads this research area, but also how international cooperation and thematic directions have evolved from 2016 to 2024. The findings add value by clarifying the structure of this research domain and emphasizing the central role trust in sustainable digital finance development.

Keywords: fintech, customer behavior, trust, bibliometric analysis.

Category of the paper: Research paper.

1. Introduction

The issue fintech and trust is important because it addresses one of the most dynamic and transformative areas in modern finance. The rise of financial technologies (fintech) has revolutionized how financial services are delivered, creating new business models, reshaping consumer behavior, and challenging traditional institutions. However, this rapid technological advancement also raises critical questions about trust, which is fundamental element for relation in the financial market. Research clearly indicates that customer trust is one of the most important factors influencing the willingness to use fintech services. Trust surpasses other aspects such as easy of use or innovation, and directly translates into both the intention to use and actual usage of these services (Zhao et al., 2024; Amnas et al., 2023; Roh et al., 2024; Rhanoui, 2022; Hu et al., 2019). A lack of trust, stemming, for example, from concerns about data security, technical failures, or unclear policies, effectively discourages customers from adopting fintech solutions (Jafri et al., 2023; Chawla et al., 2023).

Among the main factors contributing to building trust, the following were mentioned. Data security and privacy. Users expect robust safeguards, clear privacy policies, and transparent communication regarding data protection (Zhang et al., 2023; Adelaja et al., 2024; Chawla et al., 2023). The next factor was reputation and regulatory compliance. Platforms perceived as trustworthy, compliant with regulations, and committed to consumer protection foster greater trust (Adelaja et al., 2024; Chawla et al., 2023). Additionally, important factors included the quality of customers service and support, such as prompt responses to issues, personalized communication, and the experiences shared by other users (Rhanoui, 2022; Chawla et al., 2023, Czechowska et al., 2024).

Considering the social significance and importance of the topic research studies connected acting fintech with clients trust identity which areas are most developed, and where research gaps remain. By examining potential partnership networks, it possible to see how countries, institutions, and research collaborate, revealing the global nature of financial innovation and knowledge exchange. The analysis of thematic evolution shows how research topics have shifted over time. From for example early studies on digital payments to current interest in blockchain, artificial intelligence, and cybersecurity (Rahman et al., 2023). This leads to insight into emerging priorities and trends. Eventually clarify how fintech and trust interact to shape modern financial ecosystems and identify the factors which foster sustainable innovation, financial inclusion, and client confidence in digital financial systems (Czechowska, Padaszyńska, 2024b). Financial sector institutions are very active in using and applying digitization technologies. The banking sector has many achievements in this area, which are related to adopting digital banking instead of traditional banking methods (Czechowska, Padaszyńska, 2024a).

The main aim of this study is to identify and assess the map of the development of academic research on fintech and trust between 2016 to 2024.

The study seeks the answer for research questions about:

1. The most active countries, institutions, and publication sources.
2. The patterns of research collaboration across regions.
3. The emerging thematic areas that have shaped this field.

To achieve these goals and answer these questions, a bibliometric analysis was used based on data extracted from the Scopus and Web of Science databases. The dataset includes peer-reviewed articles containing the keywords *fintech* and *trust*. Using bibliometric tools such as Bibliometrix (R package), the study examined publication trends, co-authorship networks, and the co-occurrence of keywords to reveal both structural relationships and conceptual dynamics within this research domain (Aria, Cuccurullo, 2017).

2. Research method

In this study, a bibliometric analysis was performed to examine research trends in fintech and trust, using data obtained from both the Scopus database and the Web of Science Core Collection (Clarivate Analytics). These are scientific databases that provide access to high-quality research materials. The bibliometric package (*bibliometrix*, www1) developed by (Aria, Cuccurullo, 2017) and available in R software (version 4.5.1) was used, which allows the implementation of many bibliometric analysis methods. It is an open source tool.

The first stage involved searching selected scientific databases for trust and fintech. The search included titles, abstracts, and keywords assigned to research papers. The study covered scientific articles and reviews written in English. The research period was limited to the last full year, that is, 2024 (so that it would be possible to compare the results obtained with those covering subsequent years and reproduce the procedure using the same bibliographic sources). Ultimately, the research period covered the years 2016-2024. The individual stages of the research process are shown in Figure 1.

In the research process, using the *bibliometrix* tool, it is possible to implement data downloaded from the Scopus and Web of Science databases (each scientific article contains several fixed elements such as authors' names, keywords, etc.). The export file can be read and converted using R with the *convert2df* function (*bibliometrix*, www1). Using the *marge* function, it is possible to combine both sets. After removing duplicate scientific articles, a final database was obtained consisting of 453 records.

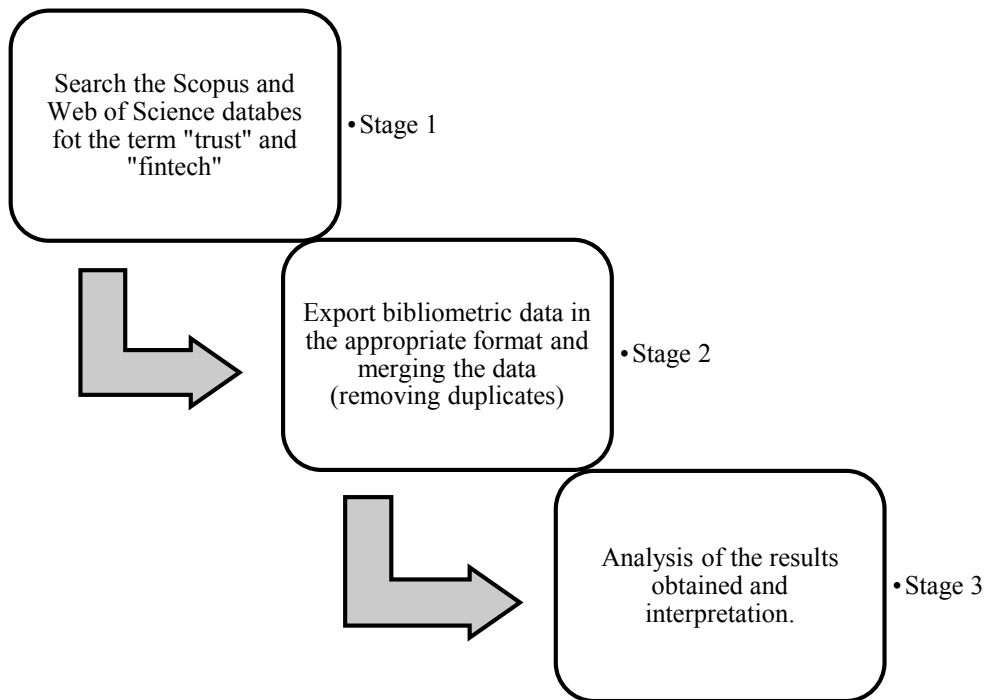


Figure 1. Stages of the bibliometric analysis.

Source: own study.

Using the *biblioAnalysis* function (*bibliometrix*, *www1*), it is possible to present descriptive statistics for the implemented bibliographic data. In turn, using the *summary* command (*bibliometrix*, *www1*), it is possible to present main information about the bibliographic data frame and several tables, such as annual scientific production, top manuscripts per number of citations, most productive authors, most productive countries, total citation per country, most relevant sources (journals), and most relevant keywords (Aria, Cuccurullo, 2017).

The results of the procedures carried out in the field of publication analysis, international cooperation between authors, and keyword co-occurrence analysis are presented in the next section.

3. Main findings

The first step of the study involved a numerical analysis of publications on fintech and trust issues between 2016 and 2024 (Figure 2).

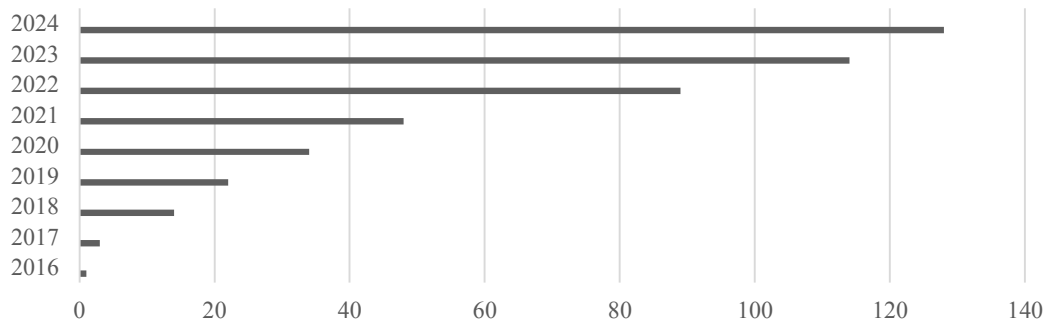


Figure 2. Number of scientific articles in the field of fintech and trust in 2016-2024.

Source: own study using the bibliometrix tool within the R software.

The results reveal a dynamic and rapidly expanding field, with the annual number of publications increasing from only one in 2016 to over 120 in 2024. The annual growth rate of publications in the studied area in the years considered was approximately 83.4%.

As part of descriptive statistics, the *biblioAnalysis* function (*bibliometrix*, `www1`) was used to present the most frequently cited scientific articles (Table 1).

Table 1.

Ten most frequently cited scientific articles in the field of trust and fintech

Author(s) (year)	Title of article and DOI number	TC	TC PER YEAR	NTC
Chen, Bellavitis (2020)	Blockchain Disruption and Decentralized Finance: The Rise of Decentralized Business Models DOI: https://doi.org/10.1016/j.jbvi.2019.e00151	493	82,2	9.25
Gai et.al. (2018)	A survey on FinTech DOI: https://doi.org/10.1016/j.jnca.2017.10.011	258	32.2	2.45
Anagnostopoulos (2018)	Fintech and Regtech: Impact on regulators and banks DOI: https://doi.org/10.1016/j.jeconbus.2018.07.003	248	31.0	2.36
Albayati et al. (2020)	Accepting financial transactions using blockchain technology and cryptocurrency: A customer perspective approach DOI: https://doi.org/10.1016/j.techsoc.2020.101320	239	39.8	4.48
Hu et al. (2019)	Adoption Intention of Fintech Services for Bank Users: An Empirical Examination with an Extended Technology Acceptance Model DOI: https://doi.org/10.3390/sym11030340	229	32.7	4.52
Jünger, Mietzner (2020)	Banking goes digital: The adoption of FinTech services by German households DOI: https://doi.org/10.1016/j.frl.2019.08.008	180	30.0	3.38
Tseng et al. (2018)	Governance on the Drug Supply Chain via Gcoin Blockchain DOI: https://doi.org/10.3390/ijerph15061055	169	21.1	1.61
Cai (2018)	Disruption of financial intermediation by FinTech: a review on crowdfunding and blockchain, DOI: https://doi.org/10.1111/acfi.12405	156	19.5	1.48
Lim et al. (2019)	An Empirical Study of the Impacts of Perceived Security and Knowledge on Continuous Intention to Use Mobile Fintech Payment Services DOI: https://doi.org/10.1080/10447318.2018.1507132	156	22.3	3.08
Arias-Oliva et al. (2019)	Variables Influencing Cryptocurrency Use: A Technology Acceptance Model in Spain, DOI: https://doi.org/10.3389/fpsyg.2019.00475	156	22.3	3.08

Note.

TC – Total number of citations.

TC per year – Total number of citations per year;

NTC – Normalized Total Citations (calculated by dividing Total Citations by the average number of citations of articles published in the same year as the analyzed publication; a value above 1 indicates that the article is cited more frequently than the average of other publications from the same year.

Source: own study using the bibliometrix tool within the R software.

The works presented in Table 1 are characterized by a number of citations ranging from 156 to 493. High TCperYear values for most items indicate the continuing, current impact of the analyzed publications in scientific literature. In turn, the use of the NTC indicator allows for a more objective comparison of citation rates, eliminating the effect of time differences between older and newer publications.

The most influential work was that of Chen & Bellavitis (2020), for which the TC is 493 and the TC per year is 82.2 citations per year, indicating a significant role in the analyzed area. The high NTC value (9.245) demonstrates its key importance for the development of scientific discourse in the area of trust in the context of financial innovation. In this article, the authors assess the benefits of decentralized finance enriched with innovative solutions such as blockchain technology.

The next step was to analyze the countries of origin of the research centers declared by authors dealing with fintech and trust issues. An overview of the 30 countries with the highest number of publications in the studied area was presented, paying attention to the local and international scope of the research undertaken (Table 2).

Table 2.

Countries with the highest number of publications on fintech and trust

No.	Country	No. of articles	Freq	SCP	MCP	MCP ratio
1.	China	41	0.132	25	16	0.390
2.	India	35	0.113	32	3	0.086
3.	Malaysia	29	0.093	14	15	0.517
4.	United Kingdom	24	0.077	12	12	0.500
5.	USA	23	0.074	11	12	0.522
6.	Korea	19	0.061	13	6	0.316
7.	Spain	13	0.043	11	2	0.154
8.	Indonesia	12	0.039	11	1	0.083
9.	Australia	9	0.029	5	4	0.444
10.	Germany	8	0.026	8	0	0.000
11.	Pakistan	7	0.023	4	3	0.428
12.	Vietnam	7	0.023	7	0	0.000
13.	Brazil	6	0.019	5	1	0.167
14.	Italy	6	0.019	5	1	0.167
15.	Bangladesh	4	0.013	1	3	0.750
16.	Hungary	4	0.013	1	3	0.750
17.	Jordan	4	0.013	4	0	0.000
18.	Saudi Arabia	4	0.013	3	1	0.250
19.	Sweden	4	0.013	2	2	0.500
20.	Canada	3	0.010	3	0	0.000
21.	France	3	0.010	1	2	0.667
22.	Israel	3	0.010	1	2	0.667
23.	Portugal	3	0.010	3	0	0.000

Cont. table 2.

24.	Qatar	3	0.010	3	0	0.000
25.	Switzerland	3	0.010	1	2	0.667
26.	Bahrain	2	0.006	0	2	1.000
27.	Denmark	2	0.006	0	2	1.000
28.	Finland	2	0.006	0	2	1.000
29.	Morocco	2	0.006	1	1	0.500
30.	Poland	2	0.006	2	0	0.000

Note.

Freq – is a country's share in the total number of publications analyzed.

SCP (Single Country Publications) – the number of publications in which all authors are from the same country.

MCP (Multiple Country Publications) – the number of publications produced in international collaboration.

MCP_Ratio – an indicator expressing openness to international collaboration (something is shown or evidenced by a high level of international collaboration in research publications).

Source: own study using the bibliometrix tool within the R software.

According to the data in Table 2, most publications on fintech and trust come from China (the number of publications in the years under review was 41, accounting for 13.2% of all publications covered by the analysis). India (11.3%), Malaysia (9.3%), the United Kingdom (7.7%), and the USA (7.4%). These five countries account for more than half of the analyzed publications (English-language scientific articles and reviews) in the field of fintech and trust in 2016-2024 included in the Scopus and Web of Science databases. These data show that in the years under review, Asian countries were very active scientifically in the field of trust in financial innovation.

The SCP and MCP show which countries dominate independent research and which countries engage in international cooperation. The higher the MCP ratio, the more scientific articles have been produced as a result of international cooperation. A high MCP ratio (i.e., above 50%) was recorded in countries such as the US, the United Kingdom, Malaysia, but interestingly also in Bangladesh and Hungary, where the ratio reached 75%, which indicates that a large percentage of scientific articles were produced as a result of international cooperation.

On the other hand, countries such as India (8.6%) and Indonesia (8.3%) had a very low MCP ratio (below 10%). In several countries, taking into account the period under review, all publications on the subject in question were exclusively local in nature, e.g., in Germany, Vietnam, Jordan, Canada, and Poland.

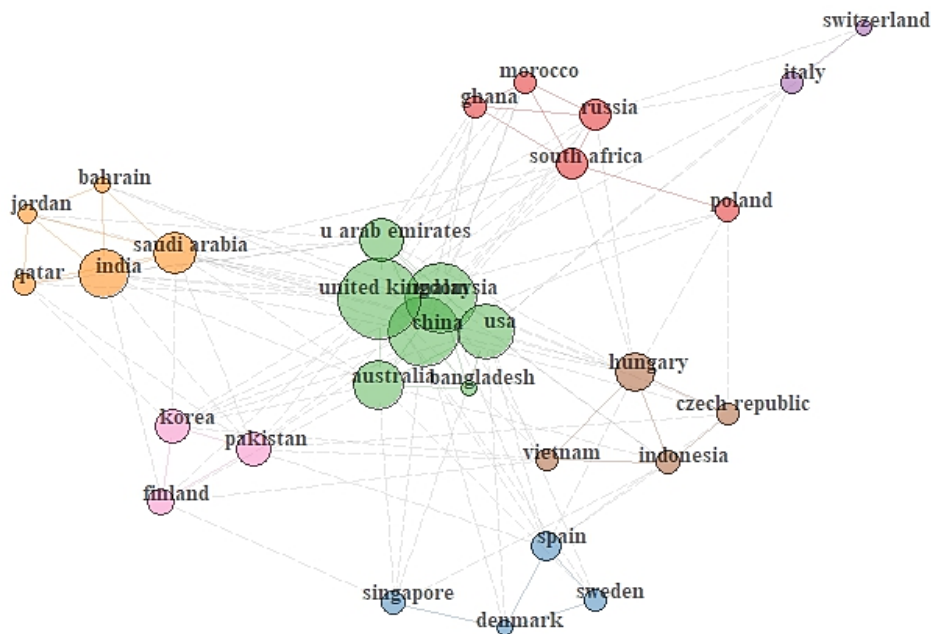


Figure 3. International cooperation network.

Source: own study using the bibliometrix tool within the R software.

Figure 3 shows the cooperation network between countries. The larger the node (circle), the greater the number of publications for which the country is responsible. The thickness of the connections (lines connecting the circles) corresponds to the intensity of cooperation, and the position in the network (i.e., location in the center of the network) shows which countries connect different research centers. The analysis showed the key role of research centers from countries such as China, the United States, the United Kingdom, and Australia due to their central location in the network. There are a large number of connections, which corresponds to the intensity of international cooperation. The diverse nature of the network shows that the issue of trust in the context of financial innovation is gaining importance globally. The topic is considered from an interdisciplinary perspective, combining various research themes.

It should be emphasized that the US and the UK are characterized by a high share of international publications (the MCP ratio exceeds 0.5). Their intensive cooperation with Asian and European countries can be observed. Malaysia (with a high MCP ratio) is an interesting example. Despite having fewer publications than China or India, this country plays an important role in the international cooperation network. Although there are fewer publications than in China or India, it is a country with strong links to many other countries. Other examples of countries with strong international cooperation are Hungary and Bangladesh. Pakistan, Australia, and Sweden also stand out with a balanced profile, where a significant proportion of publications are international. Indonesia and Vietnam are countries where publications are mainly produced locally, mostly independently, so their nodes will be relatively isolated in the network. Other examples include Germany, Vietnam, and Canada, where there are no strong links with other research centers.

Table 3.*Scientific journals with the highest number of publications in the field of fintech and trust*

No.	Sources	No. of articles
1.	Sustainability	12
2.	International Journal of Bank Marketing	11
3.	Journal of Financial Services Marketing	10
4.	Technological Forecasting and Social Change	8
5.	Heliyon	7
6.	IEEE Access	6
7.	Journal of Islamic Marketing	6
8.	Journal of Open Innovation: Technology Market and Complexity	6
9.	Journal of Risk and Financial Management	6
10.	Electronic Commerce Research and Applications	5
11.	Financial Innovation	5
12.	Fintech	5
13.	Journal of Asian Finance Economics and Business	5
14.	Research In International Business and Finance	5
15.	Sage Open	5

Source: own study using the bibliometrix tool within the R software.

An analysis of scientific journals in which the authors published articles in the field of fintech and trust (Table 3). The results show that the research is interdisciplinary and diverse. Journals related to banking, such as the International Journal of Bank Marketing (11 publications) or financial services marketing, such as the Journal of Financial Services Marketing, play an important role. A large number of publications are found in open access and wide-reaching journals, such as Sustainability (which ranks first with 12 publications) Heliyon (7 publications), and IEEE Access (6 publications). Publications also appear in journals with a narrower thematic focus, such as the Journal of Islamic Marketing. In addition, there are journals strictly related to the digital transformation of the financial sector, such as fintech and Financial Innovation.

The analysis covered the most frequently occurring author keywords (Table 4). The most frequently occurring keywords in relation to the chosen research area were fintech (255 articles), trust (83 articles), and blockchain (69 articles).

Table 4.*Most frequently occurring author keywords*

Author keyword	Number of articles
Fintech	255
Trust	83
Blockchain	69
Artificial Intelligence	26
Perceived risk	26
Financial technology	20
Financial inclusion	19
Adoption	17
TAM	16
Technology acceptance model	16
COVID-19	15
Social influence	15
UTAUT	15

Cont. table 4.

Cryptocurrency	14
Financial services	14
Fintech adoption	13
Malaysia	12
Mobile payment	12
Peer-to-peer lending	12
Perceived trust	12
Behavioral intention	11
Fintech services	11
Innovation	11
Bitcoin	10
Intention to use	10
Islamic Fintech	10
Perceived usefulness	10
Privacy	10
Blockchain technology	9
Crowdfunding	9

Source: own study using the bibliometrix tool within the R software.

An analysis of the co-occurrence of author keywords allowed us to identify the main research topics in the literature on fintech and trust. The keyword network reveals several distinct thematic clusters (Figure 3).

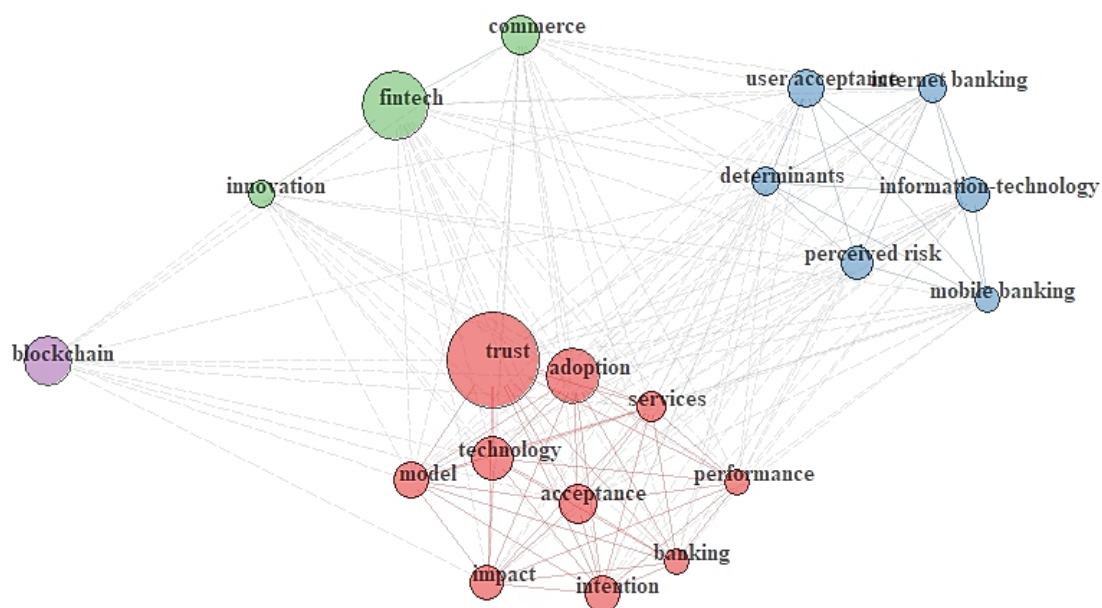


Figure 3. Co-occurrence network based on author keywords.

Source: own study using the bibliometrix tool within the R software.

The nodes in the diagram refer to the most frequently occurring author keywords, and the thickness of the edges refers to the co-occurrence between keywords within the same publications. Individual thematic clusters are marked with different colors. The diagram shows that four main research clusters can be distinguished.

The red (most numerous) cluster in the very center contains the concept of trust (the most frequently occurring author's keyword). This term is found in the same cluster as such author's keywords as adoption, acceptance, technology, intention, impact, and model. This group

reflects the key importance of trust in the process of adoption and adaptation to the use of modern technologies in financial services (Broby, 2021). Trust is a key factor determining the degree of use of digital solutions by society (Khera et al., 2022).

The green cluster contains references to keywords such as fintech, innovation, and commerce. This shows the importance of research into modern business models and digital transformation in finance. The next cluster, purple, illustrates research into blockchain technology (Kowalski et al., 2021, Cai 2021). This cluster shows a strong connection with the two previous ones, which included the topics of fintech and trust. Another cluster (blue) concerns aspects related to technologies and their use. It includes keywords such as mobile banking, information technology, perceived risk, and user acceptance. The research topics in this area illustrate the growing importance of risk perception and factors determining the adaptation of technological solutions among users of modern financial services.

The results suggest that researchers devote considerable attention to behavioral and technological issues, demonstrating the role of trust in the process of accepting financial innovations (Bajunaied et al., 2023; Chan et al., 2022). The second pillar of research is the sphere of innovation and organization, which refers to research on the impact of financial innovations on business models implemented in entities, taking into account the perspective of user trust (Elliott et al., 2021). The network of keyword interdependencies allows us to conclude that the topic of fintech and trust has an interdisciplinary dimension and requires consideration of economic, social, and technological perspectives.

4. Discussion and Implications

The analysis showed that interest in the role of trust in the context of fintech is constantly growing, with researchers discussing various perspectives. Countries such as China, India, and Malaysia have been shown to be leaders in this field, accounting for over a third of the research in this area based on quantitative publication analysis, collectively accounting for more than a third of all publications. Although China and India focus primarily on domestic research, other research centers in countries such as Malaysia, the United Kingdom, and the United States demonstrate significant international collaboration. Smaller countries also demonstrate significant international collaboration activity, including Bangladesh and Hungary. The collaboration network analysis highlights two distinct models of research activity: nationality focuses hubs (represented by China and India) and internationally connected network (centered around the USA, UK, and Malaysia). Finally, the keyword and thematic analysis identifies three main research clusters:

1. Technological foundations of trust, focusing on *fintech, blockchain, and security*.
2. Customer behavior and adoption, exploring *trust, perceived risk, and digital banking*.
3. Financial inclusion and innovation, linking *fintech development* with *social and ethical aspects* of trust.

These findings suggest that the field of *fintech and trust* is interdisciplinary and globally diverse, integrating perspectives from technology, economics, and behavioral sciences.

The results of this study highlight several important implications for both the academic community and the beneficiaries of the financial sector. Trust is not a soft value. It is a critical asset for the development of the financial system. The regional concentration of fintech and trust research, particularly in Asia, shows that the region is becoming a driving force in digital finance innovation. However, the relatively low international collaboration ratio in some leading countries, such as China and India, indicated an untapped potential for cross-border research partnerships. Strengthening such cooperation leads to more comparative studies and broader theoretical frameworks that capture cultural and regulatory differences in trust formation. The high visibility of interdisciplinary journals (such as *Sustainability and Technological Forecasting and Social Change*) demonstrates that the study extends beyond traditional finance. Integrates insights from technology, psychology, marketing, and ethics, reflecting the complex nature of digital trust in financial ecosystems. From the point of view of the keyword trust, we can observe its combination with many aspects. The evolving research themes from blockchain and security to consumer trust and financial inclusion suggest a shift toward human centered perspectives in fintech research. This evolution emphasizes that technological advancement alone is insufficient. Trust transparency and user confidence remain central to sustainable fintech development. The findings encourage greater international collaboration, interdisciplinary dialogue, and policy-relevant research to support a more secure and inclusive financial landscape.

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Protection of consumers' economic interests and their loyalty attitudes in the credit market (University of Lodz; Internal Research Grant, project no. B2511200002367.02).

References

1. Adelaja, A.O., Ayodele, O.F., Umeorah, S.C., AMOSU, O. (2024). Enhancing consumer trust in financial services: The role of technological security innovations. *Finance & Accounting Research Journal*, 6(10), 1746-1759.
2. Albayati H., Kim S.K., Rho J.J. (2020). Accepting financial transactions using blockchain technology and cryptocurrency: A customer perspective approach. *Technology in Society*, vol. 62, 101320. <https://doi.org/10.1016/j.techsoc.2020.101320>
3. Amnas, M.B., Selvam, M., Raja, M., Santhoshkumar, S., Parayitam, S. (2023). Understanding the determinants of FinTech adoption: Integrating UTAUT2 with trust theoretic model. *Journal of Risk and Financial Management*, 16(12), 505. <https://doi.org/10.3390/jrfm16120505>
4. Anagnostopoulos, I. (2018). Fintech and regtech: Impact on regulators and banks. *Journal of Economics and Business*, vol. 100, 7-25. <https://doi.org/10.1016/j.jeconbus.2018.07.003>
5. Aria, M., Cuccurullo, C. (2017). bibliometrix: An R-tool for comprehensive science mapping analysis. *Journal of Informetrics*. 11(4). pp. 959-975. <https://doi.org/10.1016/j.joi.2017.08.007>
6. Arias-Oliva, M, Pelegrín-Borondo, J, Matías-Clavero, G. (2019). Variables Influencing Cryptocurrency Use: A Technology Acceptance Model in Spain. *Front Psychol*. <https://doi.org/10.3389/fpsyg.2019.00475>
7. Bajunaied, K., Hussin, N., Kamarudin, S. (2023). Behavioral intention to adopt FinTech services: an extension of unified theory of acceptance and use of technology. *Journal of Open Innovation: Technology, Market, and Complexity*, 9(1), p. 100010. <https://doi.org/10.1016/j.joitmc.2023.100010>
8. *Bibliometrix*. Retrieved from: <http://www.bibliometrix.org/>, (www1), 29.09.2025.
9. Broby, D. (2021). Financial technology and the future of banking. *Financial Innovation*, 7(47). <https://doi.org/10.1186/s40854-021-00264-y>
10. Cai, C.W. (2021). Triple-entry accounting with blockchain: how far have we come? *Accounting and Finance*, 61, pp. 71-93. <https://doi.org/10.1111/acfi.12556>
11. Cai, C.W. (2018), Disruption of financial intermediation by FinTech: a review on crowdfunding and blockchain. *Account Finance*, 58, 965-992. <https://doi.org/10.1111/acfi.12405>
12. Chan, R., Troshani, I., Rao Hill, S., Hoffmann, A. (2022). Towards an understanding of consumers' FinTech adoption: the case of open banking. *International Journal of Bank Marketing*, 20(4). 886-917. <https://doi.org/10.1108/IJBM-08-2021-0397>
13. Chawla, U., Mohnot, R., Singh, H.V., Banerjee, A. (2023). The mediating effect of perceived trust in the adoption of cutting-edge financial technology among digital natives

- in the post-COVID-19 era. *Economies*, 11(12), 286. <https://doi.org/10.3390/economies11120286>.
14. Chen, Y., Bellavatis, C. (2020). Blockchain disruption and decentralized finance: The rise of decentralized business models. *Journal of Business Venturing Insights*, 13. <https://doi.org/10.1016/j.jbvi.2019.e00151>
 15. Czechowska, I.D., Padaszyńska, M. (2024a). Digital Banking Performance on the Example of PayTech Solutions: Polish Perspective. *Procedia Computer Science*, 246, 1770-1779. <https://doi.org/10.1016/j.procs.2024.09.679>
 16. Czechowska, I.D., Padaszyńska, M., Jędrzejczak, R., Sadowski, A. (2024). Information as a consumer protection instrument on the consumer credit market. *Technological and Economic Development of Economy*, 30(5), 1352-1371. <https://doi.org/10.3846/tede.2024.21496>
 17. Czechowska, I., Padaszyńska, M. (2024b). Factors driven the client's satisfaction on the housing loans market. evidence from Poland. *Zeszyty Naukowe Politechniki Śląskiej. Organizacja i Zarządzanie*, 209.
 18. Elliott, K., Price, R., Shaw, P., Spiliotopoulos, T., Ng, M., Coopamootoo, K.P.L., Van Moorsel, A.P.A. (2021). Towards an equitable digital society: artificial intelligence (AI) and corporate digital responsibility (CDR). *Society*, 58, pp. 179-188. <https://doi.org/10.1007/s12115-021-00594-8>
 19. Gai, K., Qiu, M., Su, X. (2018). A survey on FinTech. *Journal of Network and Computer Applications*, vol. 103, 262-273. <https://doi.org/10.1016/j.jnca.2017.10.011>
 20. Hu, Z., Ding, S., Li, S., Chen, L., Yang, S. (2019). Adoption intention of fintech services for bank users: An empirical examination with an extended technology acceptance model. *Symmetry*, 11(3), 340. <https://doi.org/10.3390/sym11030340>
 21. Jafri, J.A., Amin, S.I.M., Rahman, A.A., Nor, S.M. (2024). A systematic literature review of the role of trust and security on Fintech adoption in banking. *Heliyon*, 10(1). <https://doi.org/10.1016/j.heliyon.2023.e22980>
 22. Jünger, M., Mietzner, M. (2020). Banking goes digital: The adoption of FinTech services by German households. *Finance Research Letters*, vol. 34, 101260. <https://doi.org/10.1016/j.frl.2019.08.008>
 23. Khera, P., Ng, S., Ogawa, S., Sahay, R. (2022). Measuring digital financial inclusion in emerging market and developing economies: a new index. *Asian Economic Policy Review*, 17, pp. 213-230. <https://doi.org/10.1111/aepr.12377>
 24. Kowalski, M., Lee, Z.W.Y., Chan, T.K.H. (2021). Blockchain technology and trust relationships in trade finance. *Technological Forecasting and Social Change*, vol. 166. <https://doi.org/10.1016/j.techfore.2021.120641>
 25. Lim, S.H., Kim, D.J., Hur, Y., Park, K. (2019). An Empirical Study of the Impacts of Perceived Security and Knowledge on Continuous Intention to Use Mobile Fintech

- Payment Services. *International Journal of Human–Computer Interaction*, 35(10), 886-898. <https://doi.org/10.1080/10447318.2018.1507132>
26. Rahman, M., Ming, T.H., Baigh, T.A., Sarker, M. (2023). Adoption of artificial intelligence in banking services: an empirical analysis. *International Journal of Emerging Markets*, 18(1), pp. 4270-4300. <https://doi.org/10.1108/IJOEM-06-2020-0724>
27. Rhanoui, S. (2022). Banking goes digital: the main determinants of the clients' satisfaction and trust toward fintech-based services. *International Journal of Economics and Financial Issues*, 12(5), 10. <https://doi.org/10.32479/ijefi.13358>
28. Roh, T., Yang, Y.S., Xiao, S., Park, B.I. (2024). What makes consumers trust and adopt fintech? An empirical investigation in China. *Electronic Commerce Research*, 24(1), 3-35. <https://doi.org/10.1007/s10660-021-09527-3>
29. Tseng, J.-H., Liao, Y.-C., Chong, B., Liao, S.-w. (2018). Governance on the Drug Supply Chain via Gcoin Blockchain. *International Journal of Environmental Research and Public Health*, 15(6), 1055. <https://doi.org/10.3390/ijerph15061055>
30. Zhang, W., Siyal, S., Riaz, S., Ahmad, R., Hilmi, M.F., Li, Z. (2023). Data security, customer trust and intention for adoption of Fintech services: an empirical analysis from commercial bank users in Pakistan. *Sage Open*, 13(3), 21582440231181388
31. Zhao, H., Khaliq, N., Li, C., Rehman, F.U., Popp, J. (2024). Exploring trust determinants influencing the intention to use fintech via SEM approach: Evidence from Pakistan. *Heliyon*, 10(8). <https://doi.org/10.1016/j.heliyon.2024.e29716>