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P2P Lending Research: A Bibliometric Exploration of Emerging Patterns

*Brajesh Singh
**Dr. Garima Jaiswal Chandra

Abstract

P2P Lending Platform is a virtual market that is used to connect trusted borrowers searching for unsecured business and personal loans with lenders looking to increase returns from their lending funds as compared to other investment avenues. Peer-to-peer lending is a procedure of financing that doesn't involve any intermediary banking services, and it is like a debt.

The objective of the present research is to do the bibliometric analysis of peer-to-peer lending literature that was the part of Dimension database from banking, finance, and investment perspectives. The data for this research was obtained from the Dimensions Database in January 2023 and a total of 355 research papers have been analysed. The results show an upward trend in publications in 'P2P Lending'. Lin and Mingfeng were found to be the most influential researchers, and have been cited most frequently. With a citation count of 2414, the United States is the most frequently cited authors country in research publications related to P2P lending. Most of the research in 'P2P Lending' was found to have been published in the disciplines of Economics and Applied Economics.

KEYWORDS: Bibliometric Analysis, Citation Count, Co-authorship, NBFC, P2P lending.

Introduction

P2P lending is like an online way for people to lend money to each other. Instead of going through a bank, individuals can directly borrow money from other people. It's all done through websites that connect lenders and borrowers. (Rajeshwari, 2019)

In recent years, P2P lending has become very popular in China. It is considered to be a big and new idea in the world of everyday banking.

In 2005, a special way for people to borrow and lend money started in the United Kingdom. It's called P2P lending, and the first platform was Zopa. In China, similar online platforms began in 2006, and since then, many more have been created. Right now, the biggest P2P lending platform is Lending Club, with around $4.6 billion in transactions. At first, P2P lending was seen as a risky, but potentially profitable way for people to invest their money. The government has since created more supportive policies for P2P lending. Over the years, the number of P2P lending platforms and the amount of money being borrowed and lent have been steadily going up.

P2P lending works like this: there are people who need to borrow money (borrowers) and people who want to lend money (lenders). They connect through the internet on platforms like Zopa or Lending Club. Borrowers share information about themselves and their finances, and lenders decide if they want to lend money to them based on their assessment of risk.

P2P lending has become popular because it makes it easier for people to borrow and lend money without involving banks or other traditional financial institutions. Websites like www.Indialends.com, www.i2ifunding.com, and FinTech Early Salary let individuals get loans or invest money through P2P lending.

Faircent is a lending platform in Gurugram, India. It was started by Nitin Gupta, Rajat Gandhi, and Vinay Mathews in 2013. Faircent helps people who need money borrow directly from those who want to lend, without any middlemen. This way, both borrowers and lenders can get better interest rates.

*Assistant Professor, Department of Business Administration, LSM Government PG College, Pithoragarh, Uttarakhand
**Assistant Professor, Department of Business Administration, LSM Government PG College, Pithoragarh, Uttarakhand

Pushpa BV and Phani Satish's (2016) research article tried to look at how P2P lending or marketplace lending works and what's happening with it in Indian financial market. This study also describes the P2P lending model in India.

According to Iyer et al., (2016) study, one good thing about P2P platforms is that they have a lot of credit information. This helps lenders decide if someone is good at repaying loans or not. It also affects how much interest they charge.

Another study by Bachmann et. al. (2011), has looked at online P2P lending. They looked at some articles published until 2010. Their focus was on how things like age and other personal details influence P2P loans.

Peer-to-peer lending is like a win-win situation. It gives people who lend money better profits, and it makes it easier for people who need money to get it at lower costs. This is especially helpful for those who might find it hard to get a loan from a traditional bank. According to experts like Milne & Parboteeah (2016) and Wardrop et al. (2016), this kind of lending can do better than conventional lending in the retail sector.

Numerous studies have explored the possibility of P2P lending as a substitute for conventional financing, as demonstrated by Liu et al. (2022) and others.

According to Eugenia (2018), the expenses associated with operation and maintenance were minimal since the complete management of P2P entities was conducted online.

Further Kittu & Satya Prakash (2019), stated that if P2P (Peer-to-Peer) starts using new and advanced technologies like blockchain early on, it will have a long-lasting advantage.

Shivangi's (2019) research in India showed that P2P (peer-to-peer) advancement started with I-LEND creating a tech-based credit market in 2012. After that, more than 30 companies joined this industry.

Khatri's (2019) study pointed out that the online lending business was expected to grow a lot, around 51.5% every year from 2016 to 2022. This info came from reports by Research and Markets. However, there were some problems that lenders, borrowers, and platform operators needed to handle.

The main aim of the present study is to conduct a thorough methodological analysis of the literature on P2P lending, focusing on the perspectives of banking, finance, and investment, and contribute valuable insights to the existing body of literature. The study will focus specifically on the structural aspects of P2P lending literature in these fields.

... needs money, they can use peer-to-peer lending (P2P Lending). This ... borrow money directly from another person ... the strict rules of regular banks. Traditional ... about how much money you need, what ... them as security, high-interest rates, ... and lots of documents that take a long ... work, and lots of documents. ... with online P2P lending, you can skip all that. ... but with online P2P lending ... have huge markets in the USA, China, ... Singapore, and Indonesia. In India, they started in ... the Reserve Bank of India (RBI) made rules ... should work.

... years, a lot of researchers from around the world ... getting into P2P lending. They are studying it to find ... for problems in related areas. Countries like the USA ... done many studies on P2P lending.

... studies looked at numbers and information about ... In a study by Ariza-Garzon et al. (2021), they found ... research and trends in P2P lending using a method ... bibliometric analysis. However, in this study, they were ... information from the WoS database. Another study ... -climent et. al. (2018) also looked at a similar topic, ... focused on crowdfunding and its financial returns using ... database. They found that, when you consider the ... side of things, P2P lending seems more interesting to ... than crowdfunding with equity-based loans. This ... is based on the number of research papers published ... this area.

... group of researchers, led by Himmatul Kholidah and others in ... studied a similar topic. They wanted to conduct a ... bibliometric analysis of P2P lending literature from an economic ... and business viewpoint. This means they looked at articles ... P2P lending in journals that are recognized by Scopus. ... This research is unique because it's the first time someone has ... used VOSviewer for a bibliometric analysis of P2P lending ... literature as per the researcher. They mainly looked at the ... authors, countries, organizations, and keywords that were most ... popular in the literature.

... Now, this study is a bit different. This study gathered information ... from journals listed in the Dimension Database.

Literature Review

... (2011) talked about the P2P lending market. They looked at ... what makes P2P lending work and studied the determinants of ... P2P. They also focused on the differences between the financial ... and demographic characteristics of the borrower. The study ... found that online P2P lending has become more important in ... the world recently.

The significance of this study lies in its potential to identify current research trends and publications in the global P2P lending landscape. To achieve this, the study will use the Dimension Database, covering the period from 2012 to the present.

While there have been various bibliometric analyses of peer-to-peer lending, most have concentrated on specific regions or countries. As a result, there is a dearth of comprehensive bibliometric studies that cover the global landscape of P2P lending research. Furthermore, although some studies have examined citation patterns and research trends in P2P lending, very few have looked at co-citation patterns and rational structure of the field, which could provide valuable insights into relationships and knowledge flow among researchers and research topics in the domain.

Considering that no research has been conducted using the Dimension database, while other studies have mainly relied on Scopus and Web Science databases, a bibliometric analysis that combines both citations and comprehensively examines the global landscape of P2P lending research, thereby filling this research gap.

Research Objectives
The objective of this study is to examine the research patterns in the P2P lending domain throughout the years. Specifically, this study aims to achieve the following research objectives:

1. Investigate the top 10 P2P lending startups in India.
2. Analyze the publication trends in the P2P lending domain over time
3. Identify the primary journals that publish research on P2P lending.
4. Determine the most influential researchers in a particular P2P lending field based on citation count.
5. Identify the top author countries and organizations whose research on P2P lending is most frequently cited.

Research Methodology
To accomplish the research objectives, this study employed a quantitative research approach and the bibliometric review method. The data analyzed in this study consists of 355 research articles published between 2012 and January 20, 2023, and was sourced from the Dimension database. Bibliometric analysis is a widely utilized approach to examining the origins of any research topic (Li, C., Wu, K., & Wu, J. 2017), and this study utilized various tools such as publication trends and citation network analysis.

For data analysis, this study utilized VOSviewer software, which provides a map to examine the relatedness of items based on the distance between them. The software was used to analyze the collected data and generate visual representations of citation network analysis.

Table 1: Design of research study.

DATA SCREENING	STEP-1	Identification of P2P lending literature based on banking, finance, and investment perspective indexed in Dimension Database
	STEP-2	Search papers by looking for the article title and abstract using the keywords "Peer to Peer Lending."
	STEP-3	Subject area selection based on "Banking, Finance and Investment" and "Economics, Applied Economics, and Accounting"
	STEP-4	Select a publication document "all types publication", publication stage "Final", source type "Journal", language "English" and publication period from "2012 to 20 Jan 2023"
RESULT ANALYSIS	STEP-5	The number of articles identified in the Dimension Database based on above mentioned specific criteria was 355 documents results

Source: *Author's elaboration*

Findings & Discussion
The research findings, concerning the five research objectives discussed above, are presented below.

Top 10 P2p Lending Startups In India
A recent report by Boston Consulting Group (BCG) says that Fintech, which is about using technology in finance, has been growing a lot. The part of it that involves lending money online is

advantage of this opportunity. This will make a bigger market for the growing industry in the country.

Publication trends in the domain of P2P Lending with respect to time.

Peer-to-peer lending, which means people lending money to each other online, is a fresh idea in research. More and more studies have been done about it in recent years. The first online peer-to-peer lending platform that got noticed was "Zopa" in 2006. But in 2007, "Prosper.com" made its platform's data available to the public, and this increased the number of research studies on the topic. From 2006 to the end of 2010, there were about 43 research papers written about it (Bachmann, et al., 2011). Based on table 2 it seems that there is an upward trend in P2P research. The number of publications increased from 6 in 2014 to 76 in 2021, showing significant growth over time.

...become a $1 trillion industry in the next five years. ...ment is working to make India more digital, and as ...use the internet, it will create a big market for this ...industry.

...P2P lending startups in India:

...rent: This is a Gurugram-based P2P lending platform, founded by Nitin Gupta, Rajat Gandhi, and Vinay Mathews in 2013.

...lingkart: Is an Ahmedabad based fin tech startup founded by Harshvardhan Lunia and Mukul Sachan in 2014.

...ay: This is a Bengaluru-based P2P lending startup founded by Abhinandan Sangam, Amit More, Vishwas Dixit and Apoorv Gowde in 2016.

...i Funding: Is a Noida-based fintech startup founded by Abhinav Johary, Manisha Bansal, Neha☐ Aggarwal, Raghavendra Pratap Singh, and Vaibhav Pandey in 2015.

...Lend: Is a Hyderabad-based P2P-NBFC platform founded by Mukesh Kothari, Niti Gupta, and VVSSB in 2012.

LenDenClub: Is a Mumbai-based P2P lending startup founded by Bhavin Patel and Dipesh Karki in 2015.

PaisaDukan (BigWin Infotech): Is a Mumbai based P2P lending startup founded by Rajiv Ranjan in 2018.

RupeeCircle: Is a Mumbai-based fintech startup founded by Ajit Kumar, Abhishek Gandhi, Ashish Mehta, and Piyush Saurabh in January 2018.

Monexo: Is a Mumbai-based P2P NBFC founded by M. Sundar, Mukesh Bubna, and Sonal Bengani in 2014.

Cashkumar: Is a Bengaluru-based fintech startup founded by Dhiren Makhija, Kannana Kandappan and Yogesh Joshi in 2012.

The new companies will make it easy for people to borrow money without it costing too much. They will also help people who lend money to make good profits by cutting out middlemen. As more and more people in India use the internet, we expect more of these financial technology startups to take

Table 2: Publication trends in the domain of P2P Lending with respect to time.

Year	No. of Publication
2014	6
2015	14
2016	18
2017	16
2018	42
2019	54
2020	56
2021	76
2022	54
2023	4

Source: *Authors' elaboration based on Dimension Database*
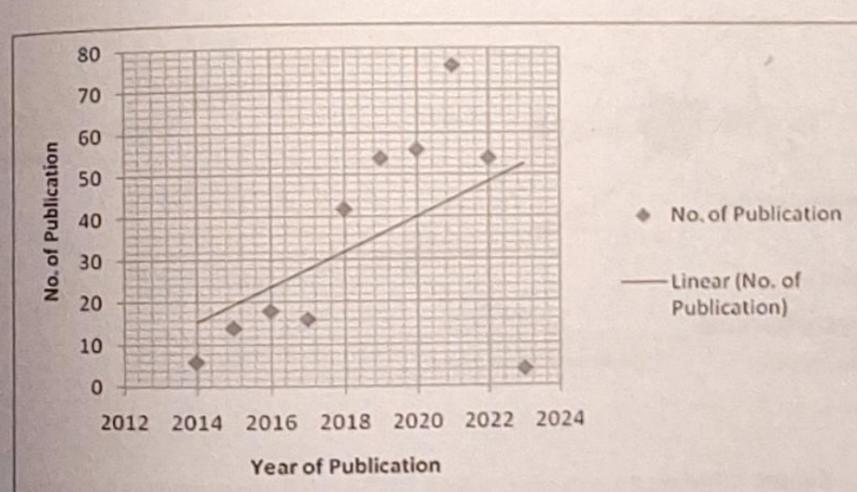
Source: *Authors' elaboration based on Dimension Database*

The most prominent journals published research in P2P Lending

Table 3 and Figure 2 show that the bulk of research in 'P2P Lending' has been published in the SSRN Electronic Journal with 73 documents and it was followed by Finance Research Letters with 10 documents. Look at Figure 2 below, it's about important journals that share research about P2P Lending. It also shows the collaboration network between journals in publishing P2P lending research. The size of the circle cluster shows the number of papers published by authors in the journal. The biggest circle cluster in the center represents SSRN Electronic Journal, which is the top journal with the most P2P lending publications.

Table 3: Most prominent journals that published research in P2P Lending.

Sr. No.	SOURCE	DOCUMENTS
1	SSRN Electronic Journal	73
2	Finance Research Letters	10
3	Electronic Commerce Research	7
4	Financial Innovation	6
5	Emerging Markets Finance And Trade	5
6	Journal Of Corporate Finance	5
7	Information Systems Research	4
8	Managerial Finance	4
9	Eurasian Studies In Business And Economics	3
10	Expert Systems With Applications	3
11	Journal Of Banking & Finance	3
12	Journal Of Behavioral And Experimental Finance	3
13	Lecture Notes In Networks And Systems	3
14	Management Science	3
15	Pacific-Basin Finance Journal	3
16	Smart Innovation, Systems And Technologies	3
	Total	138

Source: Authors' elaboration based on Dimension Database
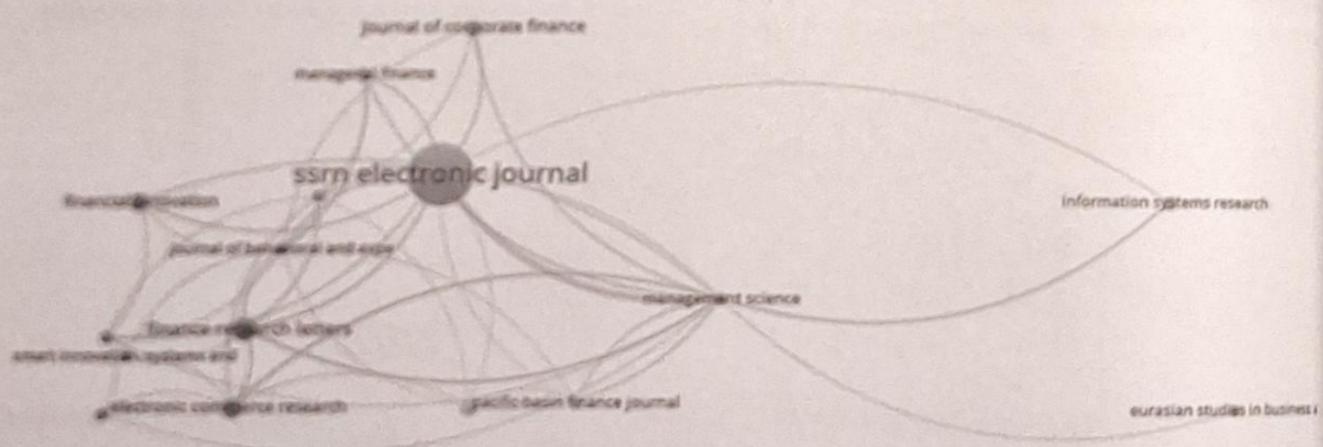
Source: VOSviewer
Figure 2: Most prominent journals published research in P2P Lending.

...called VOSviewer to study citations, it was ...car Lin, Mingfeng's work got 926 citations (shown in

Table 4 and Figure 3) and has a total link strength of 39. This means that Lin, Mingfeng's research on P2P lending is highly recognized and frequently referenced by other researchers in the same field.

Table 4: Most influential researchers in the field of P2P Lending in the domain based on Citation Count

Sr. No.	Author	Documents	Citations	total link strength
1	Lin, Mingfeng	6	926	39
2	Wei, Zaiyan	6	175	15
3	Gonzalez, Laura	9	146	10
4	Byanjankar, Ajay	4	93	5
5	Liao, Li	6	68	9
6	Wang, Zhengwei	5	57	8
7	Yang, Jun	4	27	3
8	Wang, Bo	4	27	8
9	Sohn, So Young	5	24	2
10	Wang, Yan	5	10	4
11	Nigmonov, Asror	4	8	10
12	Ni, Xuelei Sherry	4	7	3

Source: Authors' elaboration based on Dimension Database.
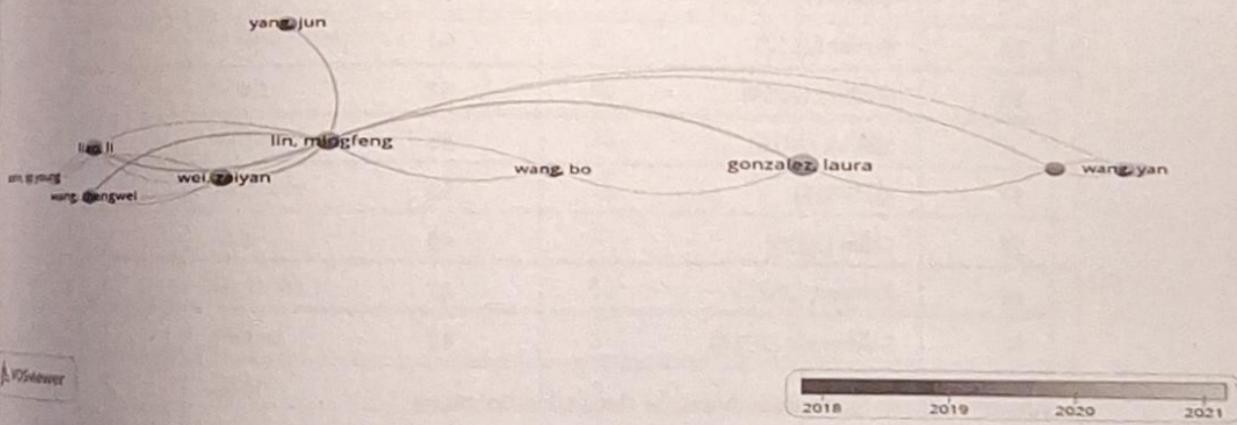
Figure 3: Most prominently cited authors in the field of P2P Lending in the domain based on Citation Count

Most Influential Research Papers in P2P Lending as per Citation Analysis

Citation analysis is like checking how important a research paper is by counting how many times other papers mention it (Waltman & Van Eck, 2012)

When we talk about the "citation count," we mean the number of times people refer to a specific paper over time. If lots of papers mention it, we think that paper is really important. Citation analysis is a great way to figure out how much impact a research paper has (Tsay, 2009).

To identify the most influential research papers on P2P Lending, the data was analyzed through VOSviewer software. Table 5 shows the list of the top 20 research papers on P2P Lending which are cited most frequently from 2012 to till date. As per citation count, Lin (2013) is on the top of the list with 752 citations followed by Duarte (2012) with 642 citations and Bruton (2015) with 492 citations. Figure 4 below is related to the influential research paper on P2P Lending. It shows a citation network on P2P Lending made with the help of VOSviewer. It also shows the collaboration network between authors in the field of P2P lending research studies. The size of the circle cluster represents the number of times the paper was cited by the other researcher. Figure 4 below clearly indicates Lin (2013) as the top author with respect to citations.

Table 5: Top 20 research papers on 'P2P Lending' based on citation count, during the period 2012–2023, retrieved from Dimension database.

Sr. No.	Research Paper	Citations
1	Lin (2013)	752
2	Duarte (2012)	642
3	Bruton (2015)	492
4	Michels (2012)	209
5	Dorfleitner (2016)	193
6	Wei (2017)	148
7	Morse (2015b)	121
8	Gonzalez (2014)	87
9	Byanjankar (2015)	84
10	Wang (2020a)	70
11	Martínez-Climent (2018)	65
12	Mild (2015)	63
13	Bussmann (2020)	63
14	Butler (2017)	62
15	Bastani (2019)	57
16	Balyuk (2016)	55
17	Xu (2018)	52
18	Chen (2020)	48
19	Bollaert (2021)	47
20	Caldieraro (2018)	47

*Source: Authors' elaboration based on Dimension Database*

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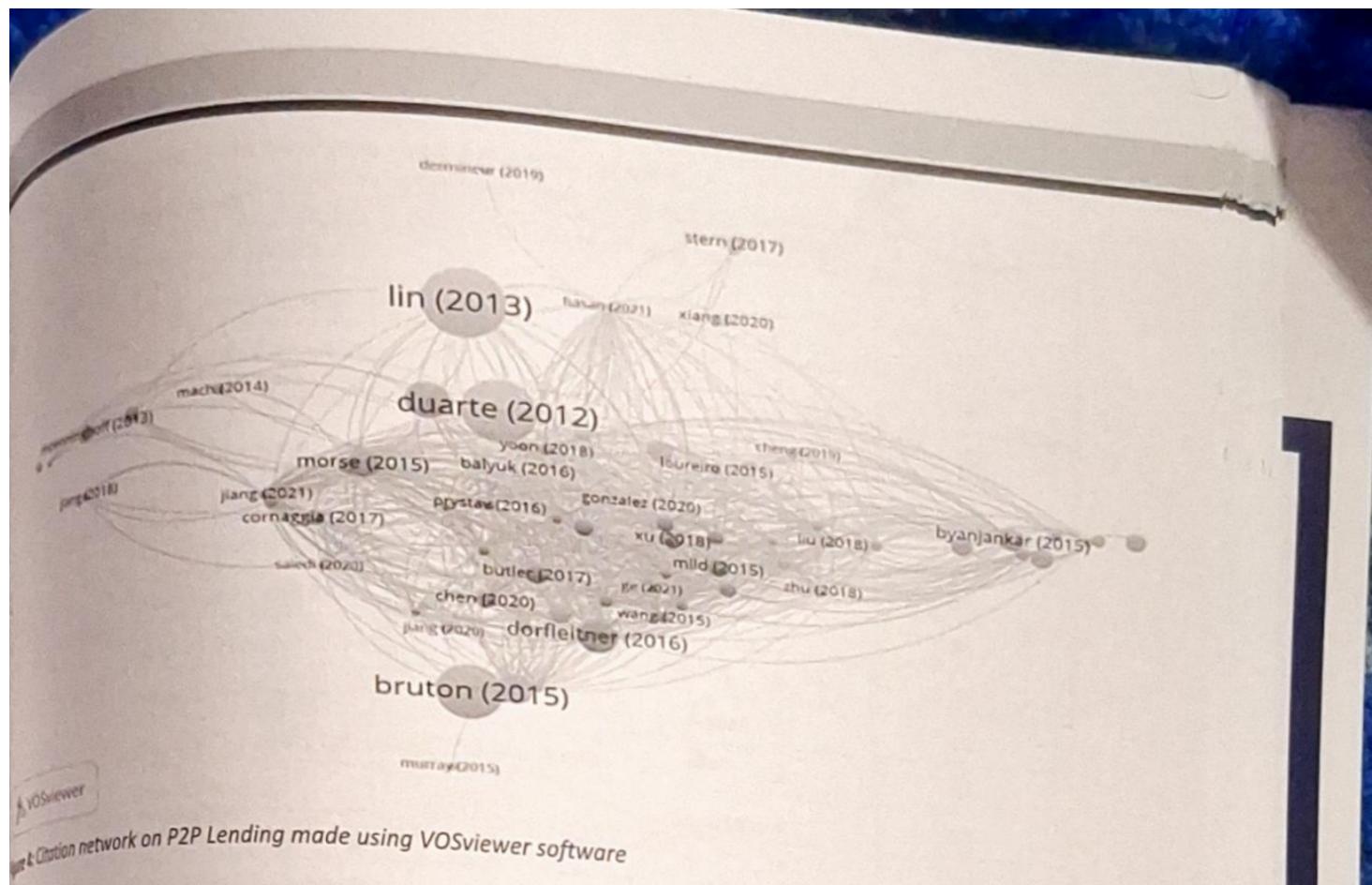
Figure 4: Citation network on P2P Lending made using VOSviewer software

Authors Country and Organisation in the field of 'P2P Lending' which is mostly cited by the researcher

Looking at Table 6, it was found that most of the researchers of the work from the United States (which had 2414 citation counts in 67 documents). After that, China was cited 765 times with documents, and the United Kingdom was cited 694 times in documents.

Figure 5 below is related to the authors' countries in P2P Lending. It also illustrates the collaboration network between authors' countries in the field of P2P lending research studies. The size of the circle cluster represents the number of documents published by authors' countries in the area of P2P lending. Additionally, it demonstrates the citation network on P2P Lending created with the help of VOSviewer. Figure 5 below clearly indicates that the United States is the leading country of authors in terms of citations."

Table 6: Top 10 Authors Countries whose research study was highly cited

Sr. No.	Country	Documents	Citations
1	United States	67	2414
2	China	86	765
3	United Kingdom	28	694
4	Germany	11	297
5	Italy	6	91
6	South Korea	11	64
7	Ireland	3	55
8	Japan	4	52
9	Australia	11	50
10	France	3	50

Source: Authors' elaboration based on Dimension Database

P2P Lending Research: A Bibliometric Exploration of Emerging Patterns

france

malaysia

germany

italy

ireland   taiwan

indonesia   united states   philippines

finland   china   japan

india   greece

canada   australia

new zealand

VOSviewer
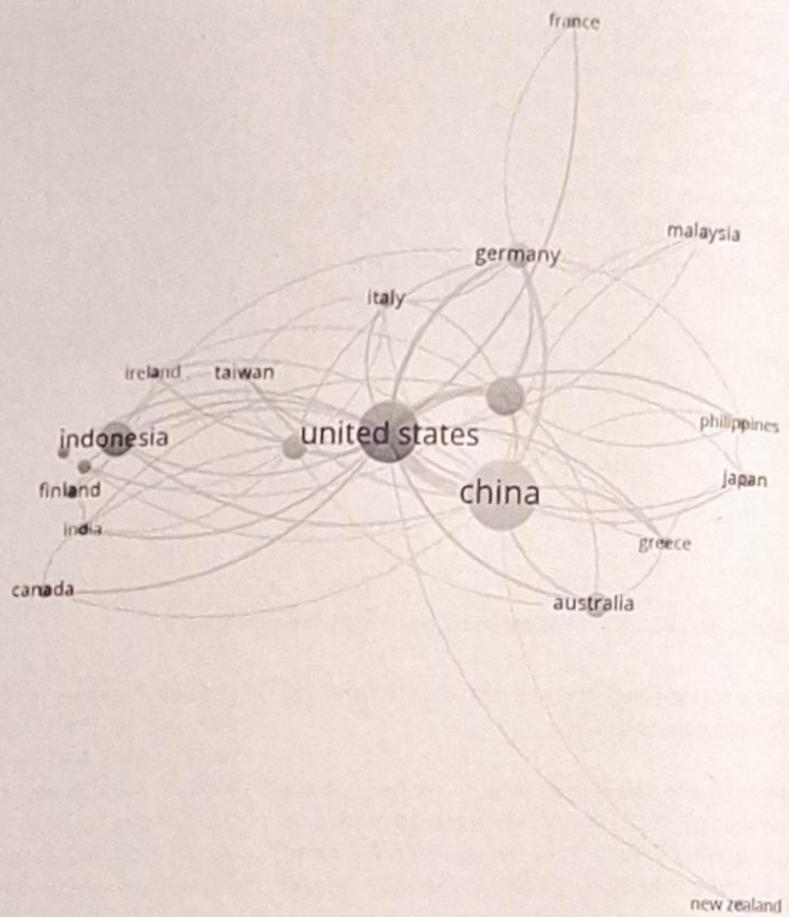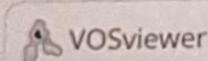
Figure: 5 *Authors Countries highly cited in this field*

According to Table 7, University of Arizona research documents received the highest number of citations, totaling 910 across 4 documents. Following closely are Purdue University West Lafayette, with 175 citations across 6 documents, and Pennsylvania State University, with 142 citations across 4 documents

Figure 6 below is related to the author's organizations on P2P lending. It also shows the collaboration network between authors' organizations in the field of P2P lending research studies. The size of the circle cluster represents the number of documents published by author organizations in the area of P2P lending. It also shows the citation network on P2P Lending made with the help of VOSviewer. Figure 7 below clearly indicates the University of Arizona is the top author's organization concerning citations.

Table 6: Top 15 Organizations mostly cited by the researcher in this field

Sr. No.	Organization	Documents	Citations
1	University Of Arizona	4	910
2	Purdue University West Lafayette	6	175
3	Pennsylvania State University	4	142
4	Southwestern University Of Finance And Economics	7	128
5	Fordham University	4	127
6	Renmin University Of China	8	85
7	The University Of Texas At Dallas	3	81
8	Chinese University Of Hong Kong	5	80
9	Tsinghua University	9	70
10	Peking University	11	66
11	Zhejiang University Of Finance And Economics	3	63
12	Jinan University	6	62
13	University Of Cambridge	3	62
14	University Of Washington	4	62
15	Shandong University	5	41

Source: Authors' elaboration based on Dimension Database
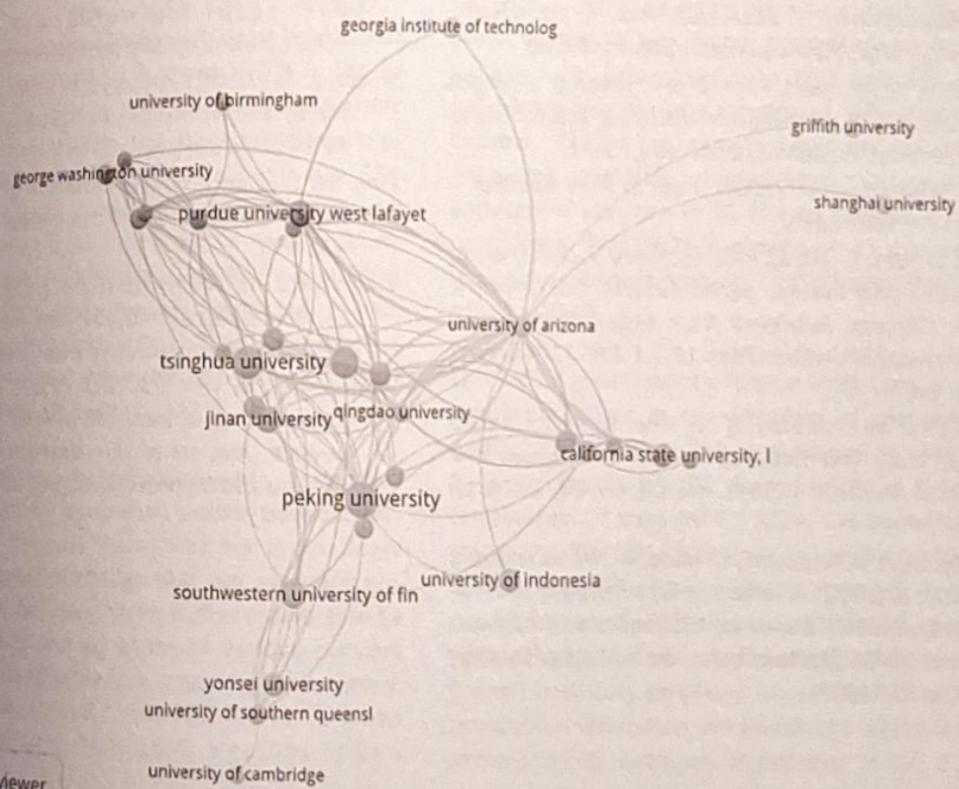
Figure 6: Author's Organisation, which is mostly cited by researchers in this field

Conclusion, Limitation, and Future Scope

The study field of 'P2P Lending' holds immense importance for financial Institutions and academia. This study has tried to throw some light on the bibliometric analysis of 'P2P Lending' between 2012 and 20 Jan. 2023 by using data from the Dimensions database. This study provides a comprehensive overview of 'P2P Lending' by determining the top 10 P2P Lending platforms, publication trends, top journals, top authors, top countries, and top organizations based on citation count. In this study researcher used only the Dimensions database which is a limitation of the study. For future studies, researchers can consider other databases like Scopus and Web of Science with different period for bibliometric analysis.

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