

MAPPING THE RECENT TRENDS IN INFRASTRUCTURE & FINANCIAL PERFORMANCE OF COMPANIES IN INDIA: A BIBLIOMETRIC REVIEW

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Abstract

Purpose- The main objective of this study is to identify emerging trends that are transforming the infrastructure of finance companies and influencing their financial performance. The findings suggest that the integration of modern information technology with well-planned strategies plays a significant role in this transformation. At the same time, continuous innovation has become essential for organizations to keep pace with ongoing changes in the business environment. Together, these factors support improvements in infrastructure and contribute to stronger financial outcomes. The study also reviews gaps in existing literature, pointing out areas that require further attention and offering directions for future research. *Design/methodology/approach-* The researcher evaluates the patterns in this research area by collecting papers from the Scopus database. Following an extensive review of papers on the subject (199 papers), we narrow our focus to analyze in-depth the 57 most relevant papers in this domain. The present investigation is conducted by using 57 research papers related to the growing currents trends in companies to enhance the financial performance from 2000 to present. Considering its advantages and versatility in doing network research, the VOS-viewer application is utilized for performing a bibliographic assessment. *Findings-* This investigation presents a comprehensive bibliometric assessment of previous studies on the topic of the, and it highlights shortcomings that point out the way for upcoming studies. *Growth & Trends in Financial Performance of selected Infrastructure Finance Companies in India* and it highlights shortcomings that point the way for upcoming studies. *Originality* This investigation presents a comprehensive bibliometric assessment of previous studies on the topic that highlights shortcomings that point the way for upcoming studies. *Paper type-* Bibliometric Paper

Keywords: Financial performance, Growth, Trends, Infrastructure, VOS-Viewer

INTRODUCTION

Financial performance is the extent to which monetary goals have been met and is crucial for financial risk management. Financial analysis basically means looking at numbers from a company's financial reports to figure out if it making money and staying afloat. It helps check things like how viable the business is or if it has enough cash on hand and can pay its debts. This stuff is super useful for deciding whether to invest or not. Analysts usually dig into the income statement, the balance sheet, and the cash flow one, and sometimes they try to guess what might happen next based on what has gone before. I think that's the main point of it all.

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In developing countries, infrastructure development seems really important for boosting the economy and making things more productive. But the big problem is always getting the money to build all that stuff, like roads or power plants. This study I'm looking at wants to check out the current situation with infrastructure and how it's funded right now. It aims to look closer at the ways projects get financial backing and maybe tweak those methods a bit. Overall, the goal is to get a better grip on funding processes for key infrastructure and see if they can be improved somehow. That part feels a little unclear to me, like not everything is spelled out.

Lately, infrastructure has been playing this vital role in trends, especially with projects that take a long time. Commercial banks can't really handle financing PPP infrastructure projects that last 15 to 20 years because of that asset liability mismatch issue. It makes sense, their short-term assets don't line up with those long repayments. One way around it is if banks can transfer the loan after about 5 or 6 years, which is usually the construction phase. Then it goes to another financial institution, and that solves the mismatch. They call this takeout financing. The loan gets moved off the bank's books within a set time, say a year after the project starts operating.

There's this idea in the text about two different lenders working together on a project. The first one starts it off, and the second steps in for the long-haul funding. It keeps things going with money from multiple sources over time. Also, there's mention of a payment shifting from the second lender to the first one. We're not totally sure what that's for exactly, but it seems like part of how they collaborate financially. That mechanism stands out as important, though the details on changing the payment are kind of vague.

This bibliometric review covers research from 2000 up to now. It's trying to systematically look at how diversity affects how well organizations do overall. Some studies show it helps performance in certain ways, others maybe not so much. It gets a bit messy trying to tie it all together. The study intends to offer a structured understanding of the existing scholarly work on this topic. By analyzing patterns in the literature, the review seeks to identify key trends and insights in Financial Performance of selected Infrastructure Finance Companies in India.

METHODOLOGY

To begin with, the study with a big collection of works, this was then narrowed down. To work on this bibliometric analysis, a comprehensive search of relevant literature was performed using academic databases, such as Scopus. The research terms included "financial performance" AND "growth" OR "Trends" AND "Infrastructure" and related keywords. Here research was limited to scholarly Conference Paper in English, and the publication period was set from 2014 to the present. The result of the dataset was analyzed using bibliometric techniques, including bibliographic coupling, and keyword analysis. We in this research, the researcher employs the same bibliometric methodology used in previous studies to evaluate the true effect that infrastructure of finance companies increases the financial performance.

Search Strategy

The study was performed using data gathered from 2014 to present. "Conference papers" and "financial performance" AND "growth" OR "Trends" AND "infrastructure" are some of the sources gathered. were used to search library descriptions and headings for inclusion of potential papers. When I did the search in the Scopus database, it turned up 2289 publications overall; only 929 of those looked promising enough for the analysis on infrastructure position. That makes sense because the rest did not quite fit. I expanded the original search after thinking about it more. It covered areas like business, management, and accounting, plus

multidisciplinary stuff. The reason was my interest in how infrastructure might help with financial performance. Kind of analyzing if it contributes to better results there. I added conference papers as the manuscript type. Before that, I looked into some initial research on infrastructure's role in boosting financial performance.

This part gets a bit tricky to explain fully. The updated search ended up with 929 conference papers in total. Some repetition in the numbers, but that is what came out.

Table 1 outlines the systematic approach used to select the papers for review, along with a summary of the information collection method.

Table 1: Search criteria and article selection process

Filtering criteria	Accept	Reject
Search Criteria:		
Search engine: Scopus	929	1360
Search term: "financial performance" AND "growth" OR "Trends" AND "Infrastructure"		
Subject area: “Business, management and accounting”, “Multidisciplinary”	695	234
Document type: “Conference papers”	449	246
Language Screening: Include English document only		12
Content screening: Include conference papers If “Title” abstract & keywords indicate relevance to the scope of study only.	263	179
Quality screening of papers: include documents of journal ranked in Australian Business	199	64

By applying these filtering criteria, the researchers ended up with a subset of 199 high-quality articles that align with the study's focus on exploring the relationship between "Infrastructure," "finance" and "Performance" in business or organizational settings. Through bibliometric analysis, we investigate a subset of 199 studies extracted from the Scopus database. Our primary objective is to explore the research landscape concerning the relationship between Infrastructure and Financial Performance of Organizations from the year 2000 to the present. Following an extensive review of papers on the subject (199 articles), we narrow our focus to analyses in-depth the 57 most relevant papers in this domain.

Data Analysis Tool

This study employed a VOS- viewer software used to analyze the data. VOS-viewer is the software for constructing and visualizing bibliometric networks. These networks are constructed based on citation, bibliographic coupling, or co-authorship relations taken from a corpus of scientific literature.

Unit of Analysis

Conference paper was broken based on year, nation, journal, authorship, and affiliation to determine a general trend in the representation of underrepresented groups on boards. To conduct this research, bibliographical information was used which was obtained from the SCOPUS library and performed the necessary calculations. From the SCOPUS library, the

bibliographical information was pulled for the whole sample, which was later used to generate a network file in Bib Excel. Using a VOS - viewer, individual network files for each kind of study (citation network, co-citation)

Leading Publication Countries

Table 2 reflects the publishing activity of the top 05 countries in the field of financial performance in infrastructure finance companies. The United States, United Kingdom, Malaysia, Indonesia and India rank among the top five countries in terms of total citations and cover 71% of total publications in the database. The United Kingdom has the most intellectual contribution with the highest number of citations and publications (72 publications, 249 citations). This indicates that the United Kingdom play a very major role in the development of this topic. Findings suggest that most of the contributing countries are advanced countries.

Table 2: Top authors and the contributions of different countries based on citations Rank

Rank	Author	Total Documents	Total Citations	Country	Total Documents	Total Citations
1	Zhang, yu	1	193	United States	09	183
2	Sharif, Arshian	1	193	United Kingdom	06	249
3	Fawcet, Stanley e.	1	59	Indonesia	07	14
4	Songer, Anthony	1	44	Malaysia	06	200
5	Song, jiamin	1	37	India	07	30

Most Influential Author

Table 2 shows the list of 05 highly cited authors out of 163 authors from different organizations in this field. According to the analysis Zhang, yu and Sharif, arshian was the most influential and impactful author based on citations, with 193 citations each. The most prolific author in terms of the number of publications is Fawcet, Stanley e., who has published 1 article and has received 59 citations. Figure 1 provides a network visualization of collaboration among authors. The network has 8 nodes (authors) and 28 links (co-authored relationships). Out of 163 authors, only 08 authors were establishing links which indicate that most of the research works were done independently with no co-operations among authors. Further, it was found that the most collaborative author is McCutcheon, Gerard having 7 links.

Co-occurrence Analysis of Keywords

Table 3 demonstrates some of the most popular keywords associated with this research field. This analysis is important to identify the main spots of research in this area. As the findings suggest, financial performance (52 frequency), infrastructure (49 frequency), and Growth (44 frequency) are the three most recognized keywords in this field of research.

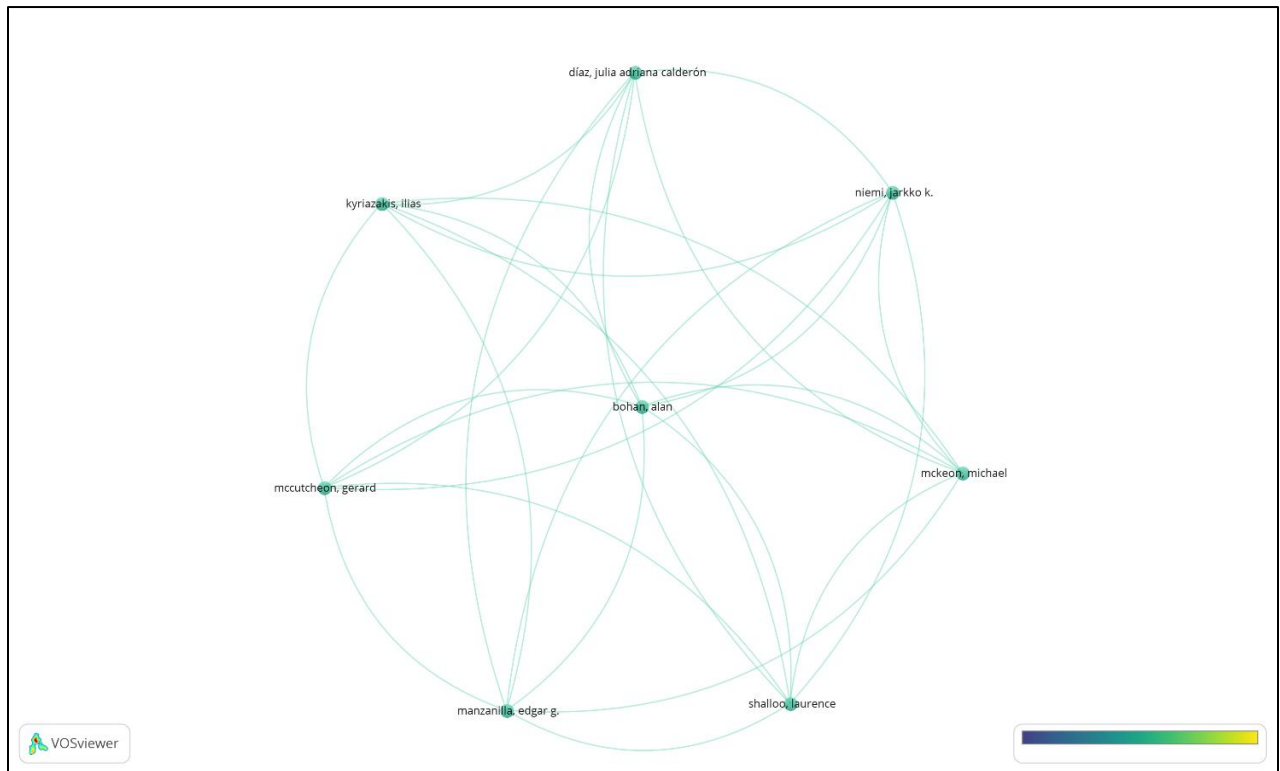


Figure 1: Co-authorship network of authors

Table: 3 Top keywords based on frequency /Figure 2: Co-occurrence analysis of keywords with five minimum frequencies

Keywords	Occurrences	Keywords	Occurrences
Financial performance	52	year	12
infrastructure	49	analysis	23
Growth	44	innovation	23
Study	33	paper	12
Importance	10	impact	23

Figure 2 presents a co-occurrence network visualization of keywords. The keyword network has 12 nodes and 64 links. The network was divided into two clusters.

Cluster 1

The largest cluster is “Financial Performance” which has 19 members. Studies in this cluster investigate the impact of infrastructure on financial performance. There is a significant relationship between Infrastructure and Financial performance, with a mediation effect of cognitive and affective performance.

mitigation. It provides the necessary financial tools, systems, and policies to support operations, investment, growth and Wealth.

- d) Development strategies based on infrastructure A development strategy based on infrastructure focuses on building and enhancing physical, financial, and digital systems to drive sustainable economic growth and business performance. This approach ensures long-term stability, operational efficiency, and competitive advantage.

Negative effects of infrastructure on financial performance

- a) High Initial Investment and Maintenance Costs Developing infrastructure demands considerable initial financial outlay for aspects like land, building, machinery, and specialized personnel. Furthermore, consistent upkeep is crucial for infrastructure to remain functional. Ineffective management of these significant expenditures can result in financial difficulties such as budget shortfalls, greater debt, or diminished earnings.
- b) Infrastructure Project Delays and Revenue Loss Infrastructure projects frequently suffer from delays stemming from issues like regulatory hurdles, supply chain problems, and insufficient labour. Such postponements not only inflate project expenses but also postpone the point at which revenue can be realized. These inefficiencies ultimately diminish productivity and harm overall financial results for the affected projects and systems.
- c) Cybersecurity's Financial Impact on Institutions Financial institutions face growing cybersecurity risks due to their reliance on digital systems. Successful cyberattacks can cause significant financial harm through direct losses, regulatory penalties, and damage to their public image.

AVENUES FOR FUTURE RESEARCH

The significance of infrastructure beyond purely financial analysis for evaluating a company's condition. The way things are in the economy now, it's all changing so fast, and I think the old school financial statement analysis just doesn't cut it anymore. Companies need something new, like better infrastructure, to really push their performance and keep things going strong over time. That could even help with stock prices getting higher, it seems. Infrastructure stuff touches on so many areas in investments, and it's basically what makes operations run smoother for a business. You know, without it, everything feels stuck or inefficient.

But then there are these risks, especially in developing countries where projects might not pay off in market terms. The social side, like benefits to people, often ends up being bigger than what you get back financially. To handle that, maybe concessional financing could work, along with helping out the end users directly. It might make sustainable development happen, leading to better overall performance, though I am not totally sure how smooth that would go.

CONCLUSION

An examination of selected infrastructure companies in India shows that their financial performance differed across firms. Even with difficulties faced by both the infrastructure sector and the broader Indian economy during the period, the companies generally

maintained acceptable levels of profitability. Although there were some fluctuations, these did not seriously affect their overall functioning.

The study further highlights that key profitability indicators, including gross profit and return on net worth, played an important role in determining the financial position of these firms. To strengthen the sector and achieve better outcomes, there is a need for higher investment and expansion of project activities. Additionally, relying solely on traditional financial measures, such as cash flow ratios and standard financial condition analysis, is no longer adequate in today's changing economic environment.

Companies need innovative infrastructure to enhance financial performance and achieve long-term market sustainability. Infrastructure development is not limited to businesses but is a necessity for all sectors of society. Infrastructure projects in developing countries are prone to significant risks and generate substantial positive externalities. Support mechanisms like concessional financing and direct income support may be necessary for infrastructure projects in developing countries. Building sustainable infrastructure is crucial for future performance efficiency.

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