

# Bibliometric Analysis of Research Related to Small and Medium-Sized Enterprises in Vietnam

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**Abstract.** Small and medium-sized enterprises (SMEs) play a major role in economic growth in developing countries. For Vietnam, research on issues related to SMEs has grown significantly, as evidenced by increased interest and publication momentum by academic scholars. This study contributes an overview of the intellectual structure of research trends on SMEs via the Scopus database and addresses the lack of a comprehensive understanding of research patterns related to SMEs in Vietnam. This study uses a bibliometric analysis method to provide an overview of the kinds of articles, publication frequency, themes of research, etc. We found significant developments in a range of disciplines, but increased attention should be given to unsolved problems. The results reveal that the issue of innovation in SMEs has become the topic of greatest interest. Other dominant topics include knowledge management (KM), business environment issues, and issues of management in transitional economies. Business environment issues and management in transitional economies are favored by researchers, and thus we suggest that future research on Vietnamese SMEs should focus on innovation ecosystems for the entrepreneur and the characteristics and benefits of KM in developing countries such as Vietnam.

Keywords: Bibliometric Analysis · SMEs · Vietnam

### 1 Introduction

An enterprise or a company is an economic organization with a name, assets, stable transaction office, and business registration following the law to carry out business activities. There is no universally accepted definition for small and medium-sized enterprises (SMEs), as the meaning depends on where it is being defined. Enterprises employing fewer than 250 persons represent the majority of firms in the world [1]. According to the size criterion for classifying SMEs given in Decree No. 39/2018/ND-CP 2018 of the government of Vietnam, small enterprises have fewer than 100 employees and medium-sized enterprises do not exceed 200 employees [2].

SMEs play a significant role in current and future economic development [1, 3] and thus represent the backbone of many national economies. Estimates suggest that more than 95% of firms worldwide are small or medium-sized enterprises and that these



Fig. 1. Map of search data from Google Trends Source: Google Trends

contribute up to 60% of employment and around 40% of GDP [4]. SMEs continue to play a major role in Vietnam. Specifically, Vietnamese SMEs account for around 95% of all enterprises, contribute 45% of GDP, and provide 31% of total annual budget revenue [2].

On 15 December 2021, we searched online using the term "Doanh nghiệp vùa và nhỏ (Small and medium enterprise)" to observe how frequently the given search term has been entered into Google's search engine. It is apparent that the regions in Vietnam that have a large concentration of industrial zones have had many users search this topic (Fig. 1).

A series of difficulties surround Vietnamese SMEs. Their failure rate is quite high, and many fail shortly after their commencement. SMEs are sensitive to their surroundings and face many challenges that need to be solved [5]. Over the past few decades, a body of scientific literature has emerged on SMEs. A survey of this literature shows several studies on SMEs in the Vietnamese context. The aims of this study are to identify promising research areas that need development, to reveal scientific gaps that can be filled by examining the main topics of current scientific research, and to point out emerging trends in research.

# 2 Research Methods

We used a bibliometric analysis to obtain the aims of the present study. The method employs visual quantitative analysis tools to explore publication trends and the relationships between scientific articles. This method provides the potential to trace research trends and popular issues [6, 7].

#### 2.1 Stage 1: Collecting Data

This stage involves developing a protocol for observations or measurements. The methodology of this paper is based on an analysis of secondary data sources. A lot of material needed to be gathered. Too much data is unwieldy because of the mix of accurate and false information, trustworthy and unreliable statistics, and useful and unusable data. Therefore, we had to establish some specific search standards:

- a. Internationally recognized electronic database: Scopus.
- b. Boolean string: (TITLE (small AND medium AND companies) OR TITLE (small AND medium AND enterprises) OR TITLE (SMEs) AND TITLE (Vietnam)).

We delimited the results using the following inclusion criteria:

- a. Peer-reviewed articles and conference proceedings.
- b. Covered period: Before 1 January 2022.

# 2.2 Stage 2: Analysis

A mapping analysis was performed with flexible software applications such as the Scopus built-in tool, VOSviewer, ScienceScape, and Gephi to analyze and visualize the relationships among the title, keyword co-occurrence, etc. The tools mentioned above have often been used in previous studies. Furthermore, thematic content analysis (one bibliometric instrument) was added to reveal current research trends and suggest future directions.

### 3 Results and Discussion

SMEs face many difficulties in the context of international integration. In a competitive environment, it is necessary to have solutions to survive and thereby contribute to the country's socio-economic development. A total of 103 articles in English were collected indicating the research area. Results show that the Economics-Management-Social Sciences sector accounted for more than 70% of the total research (Fig. 2).

Research on issues related to SMEs in Vietnam has increased rapidly in recent years. From 2018 to 2021, there has been a remarkable growth in the number of studies on SMEs in Vietnam. The number of publications in 2021 is more than 10 times the average of the period from 2004 to 2018 (Fig. 3). In the top 3 most productive affiliations of authors, we find National Economics University (n = 15), Foreign Trade University (n = 8), and University of Economics Ho Chi Minh City (n = 7). The top 3 accounts for nearly 30% of the total publications (Fig. 4). It is difficult to assess the quality of the research. However, looking at the Sankey diagram, only a few journals are included in the ADBC (Australia) or AJG (UK) journal lists. Moreover, many journals on the lists were discontinued and are no longer indexed in Scopus.

In the Sankey diagram (Fig. 5), the left column gives the scholars' names, the middle column shows the most-used keywords by the author, and the right column gives the journal names. As shown in the diagram, many research topics are related to manufacturing enterprises. Emerging research issues include enterprise KM, innovation, leadership in SMEs, sustainability of SMEs, government support for business, business environment, and financial issues (IFRS, financial leverage, accessibility to credit, lack of financing, etc.).

The results of the Gephi analysis show that the data are relatively concentrated (Fig. 6). In a connected graph, closeness centrality carries a value from 0 to 1 [8]. The results confirm that the included articles tend to aggregate into some specific areas.

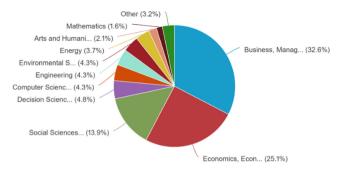


Fig. 2. Article distribution by journal area of research Source: Scopus

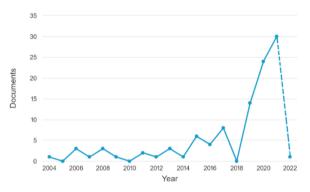


Fig. 3. Article distribution by year of publication Source: Scopus

## Documents by affiliation (1)

Compare the document counts for up to 15 affiliations.

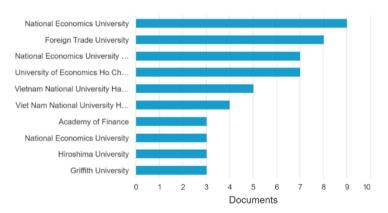


Fig. 4. Article distribution by author affiliation Source: Scopus

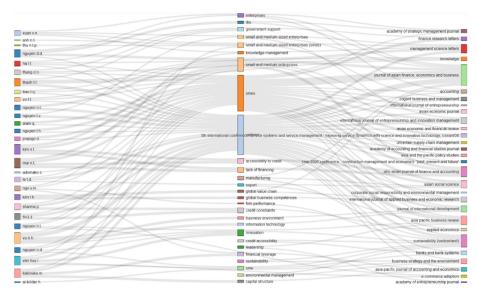


Fig. 5. Sankey diagram of the relationships between authors, keywords, and journals Source: Science Scape

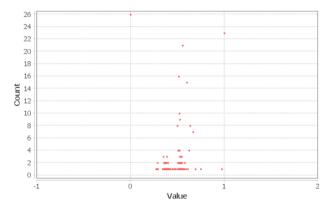


Fig. 6. Closeness centrality distribution Source: Author analysis with Gephi

Figure 7 has four obvious research directions represented by the red, green, blue, and yellow regions, while the purple areas are undefined. Green and blue areas represent less noticeable issues, including exports, global value chain, competitiveness issues, and methods to achieve sustainability. In addition, many small and medium-sized enterprises in Vietnam are still limited in their ability to optimize their performance.

The red area represents the dominant research topic, which is research on innovation. By extension, the researchers are interested in the topics of business environment and knowledge in transitional economies. This is confirmed by the yellow area, which represents the issue of management in transitional economies. It is noteworthy that the innovation-related issue that appears in red has a thicker line and wider circle than

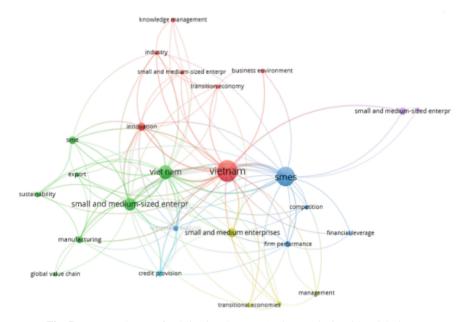


Fig. 7. Keyword map of publication Source: Author analysis with VOSViewer

the others, so this is the research issue of most interest concerning Vietnamese SMEs. Compared with other countries, the key reasons for SMEs not entering manufacturing, according to a 2019 Bangladesh bank report, are financial constraints, the dismal state of utilities, technology, and policy discrimination [9]. The study is similar to that of Wafa et al. [10] and Mwika et al. [11] who find that many SMEs face several increasing challenges, including a lack of managerial capabilities and access to quality management and technology. In addition, as with other emerging and developing economies, it shows relative problems with the financial structure of SMEs [12].

We identified four main research themes through content analysis. The findings are compared with aspects of SMEs in developing countries to determine research gaps.

# 3.1 Innovation by SMEs

In this research direction, the authors focused on understanding whether innovation by SMEs improves export performance, the business environment, innovation persistence, and how leadership assessment influences workplace innovation. The authors examined innovation strategy or technology innovation and firm performance, how innovation by SMEs affects credit accessibility, the determinants of marketing innovation, and the effects of tax administration corruption on innovation and its results. They also examined the relationship between innovation, gender, and labor productivity.

Prior research has provided insights for a better understanding of innovation and firm performance, enablers, and barriers. A review article [13] has proposed potential future research directions that should receive attention in developing countries. In particular, it

is necessary to consider regional entrepreneurial ecosystems and to have specific research on various policies and processes for different regions (urban, peri-urban, and rural) [13].

# 3.2 Knowledge Management

The advantage is that all investments in KM are linked to high-level business objectives. The findings reveal research on knowledge management with a focus on discovering factors affecting knowledge sharing and developing conceptual knowledge in cross-cultural skills for training in SME internationalization. The findings provide a robust roadmap for further investigations in this field. A consequence of the lack of understanding by the business sector in developing countries of the importance of KM is a low level of interest by the scientific community in these countries to research KM characteristics and benefits [14].

#### 3.3 Business Environment Issues

The business environment issues most searched include the effects of the legal environment, the approach for enhancing adaptive capacity in SMEs, and the environment necessary for entrepreneurship development. Much research in Vietnam has been conducted on these topics. Otherwise, we have not recorded any literature review on business environment issues in developing nations.

### 3.4 Management in Transitional Economies

As with business environment problems, we do not have any literature review manuscripts on the topic of management in transitional economies. Vietnam is favored as the research background on this issue. Current research themes include employment contracts and SME innovation in developing and transitional economies, compliance with accounting standards by SMEs in transitional economies, and user perceptions and uses of SME financial reports.

#### 4 Conclusion

In summary, this study surveyed current progress and emerging research trends on SMEs. It is hoped the results can elucidate robust and holistic knowledge that can support researchers engaged in the field to sharpen future research directions based on the evolutionary pathway figured out in research. More attention from researchers increases the belief that the problem exists as a serious and unresolved problem. Dominant topics include innovation, knowledge management, the business environment issue, and the issue of management in transitional economies. However, innovation is the topic that gets the most attention. Issues that have received less attention are export issues, the global value chain that firms engage in, competitiveness issues, methods to achieve sustainability, and performance maximization.

Business environment issues and management in transitional economies are favored topics by researchers. However, there is still room for further research. Clear evidence

was found that demonstrates that the Vietnamese literature on SMEs is highly fragmented. This is reflected in the research on innovations in SMEs in which we have not considered innovations for entrepreneurs. Additionally, it is necessary to examine the characteristics and benefits of knowledge management to accelerate its application in developing countries such as Vietnam.

Finally, the main limitation may be that scientific databases such as Scopus do not guarantee coverage of all reputable publications. In addition, for content analysis, we suspect that omissions exist and that some articles may not timely reflect research trends. As a basis for future research, attention should be paid to these unresolved problems.

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