

Current Status of China's Business Environment Research Based on CiteSpace Bibliometric Analysis

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Abstract: A good business environment is not only a necessary condition for the healthy development of enterprises, but also an important reflection of the core competitiveness of a country and region. A comprehensive overview of the current status of business environment research is conducive to understanding business environment research. Based on CiteSpace's metrological and graphical analysis of 1,168 core journals in the CNKI database from 2000 to 2022, it is found that the hotspots of business environment research in China are mainly focused on the reform of "management and service," "high-quality economic development," "government services," and "the path of optimizing business environment.' The clustering results and high-frequency word clouds show that the keywords of business environment have evolved into several subthemes, including several research clusters, such as decentralization, soft business environment, and private economic development. With the development of high-quality economy, the conversion and integration of research paths in business environment, as well as the expansion and updating of research perspectives, the research on optimizing business environment will become a new academic growth point in research.

Keywords: Business environment; Mapping analysis; Visual econometric analysis; CiteSpace

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1. Introduction

In the recent years, China has continuously strengthened its management and service reform, as well as optimized its business environment. The optimization of its business environment by accelerating the transformation of government function to create a relaxed market environment is China's top priority. Optimizing the business environment stimulates market vitality and enhances the endogenous power of high-quality economic development, as well as further accelerates the construction of a modernized economic system [1-3]. Its domestic business environment continues to improve, and its world ranking continues to rise, reflecting the potential and resilience of China's economic development. The market is constantly changing; therefore, the business environment should also be optimized accordingly. Although there is a significant improvement in the business environment, it is still not ideal. At present, China's economy is steadily recovering, achieving a stable development state and improving; however, it should be clear that the overall development environment of the world economy is facing many risks and uncertainties, such as the incident of the global new crown pneumonia pandemic, thereby the domestic consumption

power is still weak ^[4-6]. Under such circumstances, optimizing the business environment is an extremely important initiative to further boost the vitality of market players, unlock consumers' consumption potential, and subsequently enhance the momentum of economic growth. In order to explore the evolution of business environment research in China and deepen the research basis, research hotspots and frontiers in this field should be conducted. This paper will use the mapping visualization software CiteSpace to conduct econometric and mapping analysis on previously published literatures related to business environment from 2000 to 2022, in order to demonstrate the ins and outs of business environment research in China from a panoramic view, with an aim to provide references for further research on business environment.

2. Data sources and research methods

This paper uses the China Academic Journals (CNKI) (Online Edition) database (2000-2022) as a data source and integrates econometric analysis and information visualization through the use of CiteSpace to identify the temporal and network distribution characteristics of business environment research by exploring the research hotspots and development directions of business environment, so as to provide theoretical support and reference for scholars to analyze the current situation of business environment research, and subsequently develop the latest research frontier. In order to ensure the quality of the literature and the authority of the data, the literatures are collected from Chinese core journals (Peking University Core), Chinese Social Sciences Citation Index (CSSCI), and Chinese Science Citation Database (CSCD). A total of 1,218 documents were retrieved from the database; however, after elimination of duplication and invalid documents, such as briefings, conference announcements, book reviews, recommendations, advertisements, and some other unrelated documents to the research topic, only 1,168 documents remained for subsequent analyses.

3. Business environment optimization research spatio-temporal knowledge mapping and its analysis

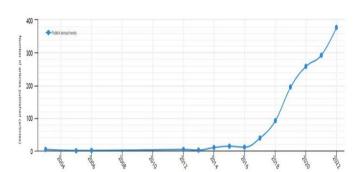


Figure 1. Distribution of the number of research literature

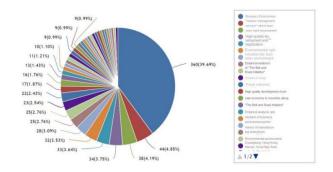


Figure 2. Distribution of research themes related to business environment

3.1. Bibliometric analysis

To understand the research on business environment over the years, the distribution of 1,168 literatures is shown in **Figure 1**. In general, the number of publications on business environment research from 2000-2022 is in an upward trend. Meanwhile, the number of publications and the trend of business environment literature every year from 2000 to 2022 is also shown in **Figure 1**. In the year 2000 to 2016, the number of publications remained rather low. However, from 2016 onwards, a rapid rise in the number of literatures on business environment research was observed, with the largest number of publications in 2022, with 400 publications, indicating that academics are taking an interest in the field of business environment. This also

shows that the literature research heat is closely related to relevant policies and the actual situation of business environment. Therefore, scholars should closely focus on the policy background and social reality of business environment development in China for their research.

3.2. Literature topic distribution

According to **Figure 2**, it can be seen that the research themes related to business environment are commonly concentrated in the areas of decentralization, high-quality economic development and enterprise performance assessment. Therefore, optimizing the business environment in China is very urgent, because it is not only the realistic need for an international competition, but also the voice of China's enterprise development. In the future, by reducing systemic transaction costs, deepening the government's own reform, and working on measures, such as administrative and service reform, it is possible to guide the market expectations and reassure entrepreneurs. Only in this way the innovative energy of enterprises can continue to burst forth, thereby supporting the economics' high-quality development [7-11].

4. Analysis on the content of business environment research and its evolution

4.1. Business environment keyword co-occurrence mapping analysis

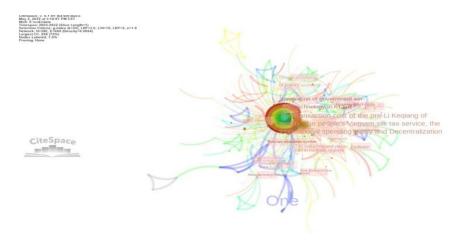


Figure 3. Business environment keyword co-occurrence network mapping

CiteSpace provides a node type; for example, the keywords are used for statistical analysis by determining the frequency of the keyword used, so as to grasp the hotspots and trends in the related fields. Co-occurrence analysis is performed using keywords to obtain a keyword co-occurrence knowledge map on the study of business environment optimization as shown in Figure 3. Among them, the time span of the study is set to "Years", the "Minimum Spanning Tee" algorithm is used, and other default format of the system is adopted, as shown in **Figure 3**. The size of the node represents the size of the frequency of the keyword occurrence, in which the larger the node, the higher the usage of the keyword, and the easier for it to become a research hotspot. Figure 3 shows that the largest node is business environment, which appears the most frequent in these documents. On the one hand, it is because the main subject of this paper is regarding business environment, therefore the other keywords will also focus on business environment as well; on the other hand, it is because most scholars consistently and habitually list business environment as a keyword in their research or articles. Other keywords with larger nodes, including technological innovation, credit regulation, tax and fee reduction, government services, simplification and decentralization, and business environment, indicate that these are the hotspots that scholars and experts have been paying more attention to and studying over the past years [12-15]. With the development of the economy, different research hotspots will be presented at different times and in different contexts. In addition, to better understand the concerns of

scholars in the field of business environment in each time period, it is best to divide literatures of different years into different time periods.

4.2. Analysis of the evolution of hot topics on business environment



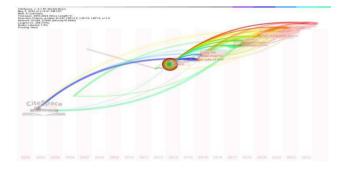


Figure 4. Timeline view of business environment research keywords

Figure 5. Time zone distribution of business environment research keywords

A time zone mapping was generated by keyword co-occurrence analysis of business environment research as shown in **Figure 4**; the nodes were gathered in the same time zone, and the time was arranged in the order from far to near; network modularity was obtained by cluster analysis shown in **Figure 5**.

The graph shows the new business environment research themes that emerged each year, from 2000 to 2022 in the time dimension. In the time zone diagram, the size of the font indicates the degree of the centrality of the word, where the larger the font, the more important the keyword in the network. **Figure 5** shows that the hot keywords since 2013 are "administrative and service reform," "rule of law," "decentralization," "high-quality development," "credit supervision," and others ^[16]. Based on the hot keywords added after 2013 in the keyword frequency analysis, the role of business environment, decentralisation reform, and structural reform in promoting high-quality economic development, the role and effectiveness of structural reform in optimising the business environment, and the business environment of countries are the frontier areas of business environment research.

5. Research conclusion

5.1. Research findings

In this study, research literatures related to business environment in China were searched on CNKI, and information mining and collation were conducted by using CiteSpace metric visualization software to demonstrate the change in literature volume, distribution of carrier journals, and core authors over 22 years from 2000 to 2022. In addition, the frequency of important keywords was analyzed, and keyword clustering was performed. Subsequently, the following conclusions were obtained; (1) Compared with previous studies, in terms of the volume of articles issued, the research on business environment by domestic scholars increased rapidly after 2016 and maintained a high development trend; (2) In recent years, the frontier areas of business environment research mainly focused on the role of business environment in promoting high-quality economic development, the role and effectiveness of management and service reform and structural reform in optimizing business environment, as well as the business environment of the countries; (3) In terms of research content, systematic research is still lacking, therefore systematic analyses and explorations of research content are still required; (4) In terms of research themes, most of the existing studies are simply follow-ups after the introduction of national policies, which are sufficient to explain, but not to create and play guiding roles, therefore there is still a need to further improve forward-looking

research themes; and (5) In terms of research extension, the existing research extension is still insufficient, therefore there is still a need to promote interdisciplinary crossover and deepen the research in the field of business environment through multi-vision extension and multi-disciplinary crossover.

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Disclosure statement

The authors declare no conflict of interest.

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