

# *Systematic Literature Review on Domestic and International Free Trade Zones*

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**Abstract:** Free trade zone is not only related to market competition, the vitality of economic development, the implementation of domestic strategies and economic transformation, as well as social firmness and efficiency in a number of aspects but also related to the growth of enterprises and the well-being of consumers in genera. In this paper, 240 papers on free trade zones in Web of science and 1535 papers in the CNKI database from 2001-2024 are statistically analyzed by the literature visualization tool CiteSpace, and draw knowledge maps with the help of CiteSpace to do literature co-citation analysis, cluster analysis, keyword co-occurrence analysis, and hot word burst detection. So we can explore the knowledge base, research hot-spots and evolutionary trends of free trade zone research home and abroad over the past 23 year. The study finds that the domestic and international free trade zone research literature has grown rapidly in the past 10 years: the United States and the United Kingdom are in the leading position in the field of free trade zone research, and with the development of the times China is becoming an important force in the global free trade zone research. Economics and political science are the main disciplinary fields of the domestic and international free trade zone research. Institutional innovation, gravitational modelling, and China-ASEAN free trade zone are the main topics. Based on this, the future outlook of China's free trade zone research is proposed.

## **1. Introduction**

The academia commonly refers to two concepts of this subject.<sup>[1]</sup>The first concept is Free Trade Area (FTA), which is an area formed by two or more countries or regions through signing agreements to liberalize trade with each other. Examples include North American Free Trade Area, China and ASEAN Free Trade Area and so on. The second one is the Free Trade Zone (FTZ), which refers to a specially designated area within a country or region that implements preferential tax policies and special economic regulatory policies, typically including free zones, free ports, export processing zones. Examples include the Rotterdam European Trade Zone, China (Shanghai) Pilot Free Trade Zone and so on. Specially, this paper utilizes CiteSpace as a research tool for the analysis of Mapping Knowledge Domains, which is a novel method for quantitative analysis in literature reviews. The version of CiteSpace used in this part is CiteSpace 6.1 R6 Advanced. Therefore, searching through the Web of Science database, SCI and CSSCI database, a comparative visual analysis was conducted to better understand the current research state, hot topics and development trend.

## 2. Studies on Free Trade Zone Aboard

In this foreign literature review part, it searches “free trade zone” as the topic keyword in the Web of Science Core Collection database as its data source for the thematic search. The search spanned from 1998 (access to the earliest document) to 2024 (data retrieved on May 10, 2024). The literature type was restricted to “articles”, excluding conference papers and other types. Only English-language documents were mainly refined. To exclude those articles clearly not relevant to this field, manual screening is needed. After the manual screening and deduplication process, a total of 240 articles were obtained as the analytical sample for this study.

### 2.1 Countries and Institutions Distribution

The data relating to countries and institutions distribution are presented in Figure 1 and Figure 2. Figure 1 gives details of country distribution of articles about free trade zone from 1998-2024 in web of science. The top five countries in terms of publication volume are the United States, China, the United Kingdom, Germany and Australia. The United States has the largest node and the most connections with other countries in the figure. It indicates its leading role and strong influence in the field of free trade zone research. China’s research on free trade zone started later, however the number of publications in domestic journals and the volume of papers published by China according to Figure 2, it can be concluded that institutions with a high volume of publications on free trade zone research are mainly located in economically developed areas, with limited cooperation between each other.

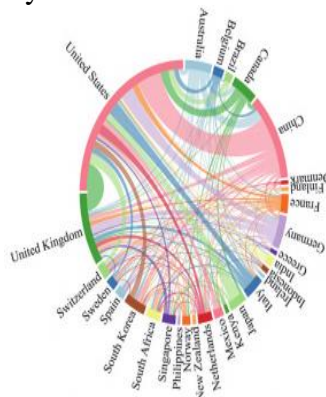


Figure 1: Countries analysis in WOS.



Figure 2: Institutions analysis in WOS.

### 2.2 Key Issues and Hot Topics

Figure 3 is the keywords co-occurrence network of free trade zone created by the CiteSpace software. In a network, the influence of a keyword may depend on how it is connected to other keywords in the network. The centrality of a node is a graph-theoretical property that quantifies the importance of the node’s position in a network.<sup>[2]</sup> A commonly used centrality metric is the centrality (Freeman, 1979). It measures the percentage of the number of shortest paths in a network to which a given node belongs. Nodes with high-centrality tend to be found in paths connecting different clusters. Since “free trade zone” and “pilot free trade zone” are the search terms of this study, they are excluded. In Figure 3, the top ten high-frequency keywords are “Openness”, “Impact”, “Policy”, “Free trade agreement”, “Efficiency”, “Foreign direct investment”, “Firm”, “Growth”, “Green total investment”, and “International free trade”. In Figure 3, there are four key nodes with the highest centrality, which are efficiency, openness, and growth. These keywords and the corresponding literature collectively reveal the focus on the role of free trade zone policies in the zone construction. It also illustrates the

international trade, confirming that the establishment and implementation of free trade zone agreements have facilitated regional and international economic growth.



Figure 3: Keywords Co-occurrence Network.

2.3 Categories

In foreign researches, the articles related to free trade zone primarily falls within the fields of environmental sciences, economics, environmental science, multidisciplinary science, sustainable development, and geography according to Figure 4. This indicates the interdisciplinary research trend. [3]Not only does it involve the field of economics, but it also includes environmental science, geography, and other fields, showing the diversified trend and the more varied dimension. The interdisciplinary research perspectives can help advance the high-quality development of free trade zone.

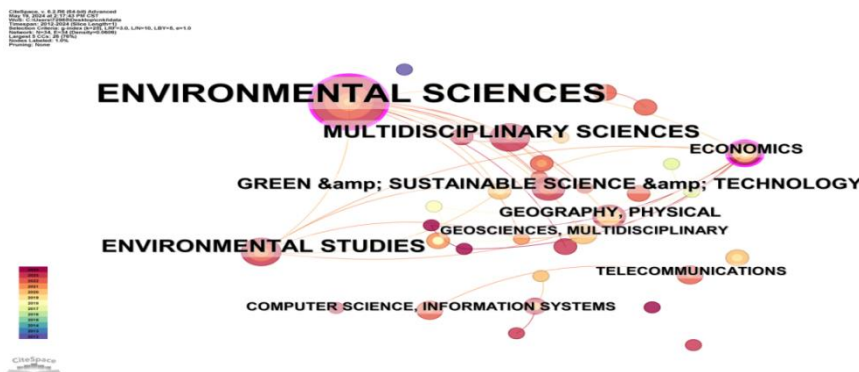


Figure 4: Categories Co-occurrence Network.

3. Studies on Free Trade Zone at Home

In the domestic literature review part, it searches “Free trade zone” as the topic keyword in SCI and CSSCI as its data source for the thematic search. The search spanned from 2001 (the time when China joined WTO) to 2024 (data retrieved on May 10, 2024). The literature type was restricted to “articles”, excluding conference papers and other types. [4] To exclude those articles clearly not relevant to this field, manual screening is needed. After the manual screening and deduplication process, a total of 1535 articles were obtained as the analytical sample for this study.

3.1 Categories

The annual publication trend demonstrates the varying levels of attention the field has received over time. Moreover, it provides a clearer depiction of the overall developmental trends within the field. According to Figure 5, the number of domestic article fluctuates quite frequently. The average annual number of publications is 60 articles, with peaks in publication occurring around the years

2003, 2005, 2010, and 2015. This is closely related to China's accession to the WTO in 2001, the assignment of the free trade zone agreement with the ten ASEAN countries in 2002, the establishment of the China (Shanghai) Free Trade Pilot Zone in 2013, and the implementation of the Belt and Road Initiative. Although the number of publications after 2015 has declined. Overall, it indicates that the field still maintains a high level of research interest within the domestic academia.

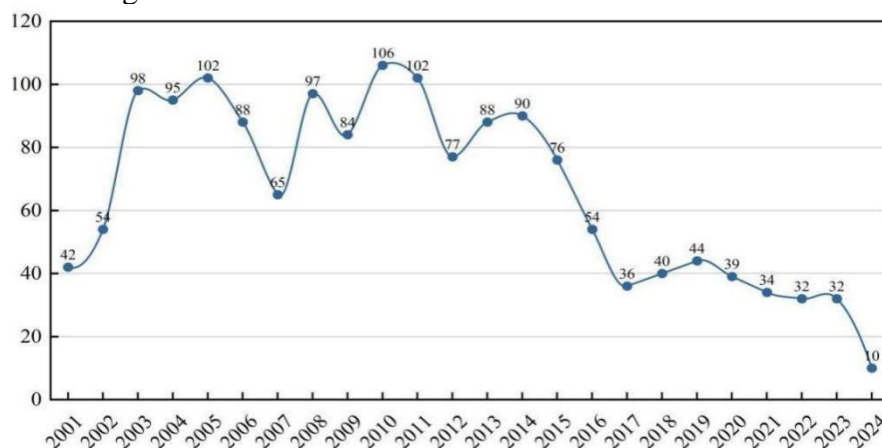


Figure 5: Published Items in Each Year

### 3.2 Institutions Distribution

In domestic study, a statistical analysis reveals that institutions with high publication volumes are primarily located in economically developed areas such as Beijing, Shanghai, and Guangdong. Furthermore, because of the natural geographical advantages, DongBei University of Finance and Economics also has a high number of publications, making it one of the main publishing institutions in the field of free trade zone research. Observing the names of institutions with a higher number of publications, it is evident that schools of economics, centers for business administration, and research institutes are the backbone of the research in this field.<sup>[5]</sup>

### 3.3 Key Issues and Hot Topics

Regarding the key issues, domestic studies on free trade zone cover a wide range of topics, including “ASEAN-China”, “the gravity model”, “the GTAP model”, “the Belt and Road Initiative”, “trade effects”, “regional economic cooperation”, and “regional economic integration”. The GTAP model, gravity model, and economic effects are of high centrality. It is evident that in terms of research methodology, the gravity model is an important economic model for empirical analysis in the field of international trade. Chinese scholars prefer employing the gravity model as a principal quantitative research methods to examine and analyze economic effects between different countries and regions.

In terms of research subjects, it illustrates “China-ASEAN Free Trade Area” and countries along the “Belt and Road” are the key subjects. These are the primary subjects of domestic free trade zone research. The China-ASEAN Free Trade Area, as one of the earlier developed and more mature trade zone in our country, has achieved significant accomplishments in cooperation among its member countries since its official inception in 2010. Therefore, research on the China-ASEAN Free Trade Area has been a core topic in the field of domestic research.

### 3.4 Categories

Domestically, the literature related to free trade zone is primarily distributed into four academic disciplines: economics, law, political science, and management. Figure 6 indicates that economics and political science are the main academic domains for free trade zone research in China. Literature in Economics account for nearly fifty percent of the publications, indicating an uneven distribution of research disciplines. Compared to foreign research, domestic studies are restricted in certain limitations. This is not conducive to the high-quality development of the research in this field. Although the free trade zone research appears to be confined to management and economics, it can also be approached from the perspectives of cultural and knowledge management, sociolinguistics, and foreign languages and literature. Future efforts should focus on enhancing interdisciplinary collaboration and integrating the resources and strengths of various disciplines.<sup>[6]</sup>

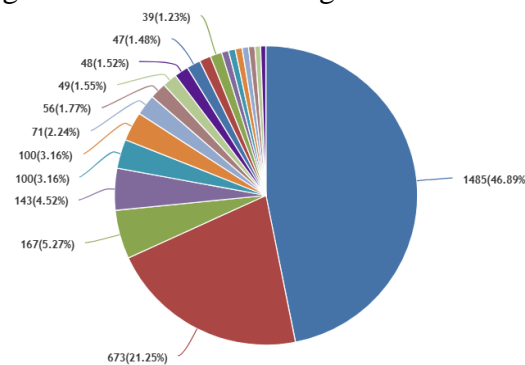


Figure 6: Categories Co-occurrence Network

Therefore, Domestic institutions and scholars should increase opportunities for communication and strengthen cooperation among each other in order to boost the output of high quality research in the field of free trade zone.<sup>[7]</sup> This should be accomplished by multiple research perspectives and various research methods.

### 4. Summary of Related Previous Studies

As reviewed above, it can be seen that linguistic landscape research is a hot point for scholars abroad and at home. Scholars have had rich achievements, making it a mature research field. According to literature review, it can be known that researches in the name of linguistic landscape origin from Landry and Bourhis (1997).<sup>[8]</sup> With scholars' efforts, it has formed a complete theoretical system. They define it, deduce its functions and categorize its types. Concerning theoretical framework, they introduce interdisciplinary theories into linguistic landscape. Based on theoretical frameworks, linguistic landscape researches move to empirical studies.

However, there still needs deeper investigation. Research on linguistic landscapes abroad is increasingly showing an interdisciplinary trend. There is a gradual emergence of a trend where linguistics serves as the nucleus, blending with other fields like sociology and educational studies. Consequently, domestic research must also reflect an interdisciplinary framework. The linguistic landscape serves as a carrier for language service. The research perspective on language service is quite novel.

Economic globalization has increased cross-border trade and investment activities. Overcoming language barriers to expand international business has spurred the demand for professional language service. Language service has already become a key instrument in supporting international economic activities. This has driven the formation and expansion of the linguistic servicescape. Touchstone (2017) introduced the concept of the linguistic servicescape, referring to the language used in service



environments, including language interactions between service personnel and customers, linguistic expression of service information, and language design within the service environment. Therefore, it is clear that researching linguistic landscapes from the perspective of language services is of high significance. However, the literature review reveals that domestic research combining linguistic landscape with the perspective of language service often focuses on the translation of multilingual signs. Therefore, this study, by adopting the perspective of language service to investigate linguistic landscape, addresses a gap in this field. To some extent, it will enrich the empirical research on linguistic landscape.

In terms of the research subject, most domestic researches on free trade zones focus on economic and political fields. Studying the linguistic landscape of free trade zones from the perspective of language services also enriches the research perspectives on domestic free trade zones.

## 5. Suggestions

At present, the construction of China's free trade zone is further promoted. The intensity of opening up continues to increase, and the areas of opening up are gradually increasing. As one of the important contents of the new pattern of opening up to the whole world, the important role of free trade zone in leading a high-level opening up is further highlighted. The quality of its construction will directly affect the implementation effect of China's opening up strategy. In the context of the restructuring of international economic and trade rules, to give full play to the important role of free trade zones in promoting high-level opening up and building a new system of open economy at a higher level, it should construct from a comprehensive way. Admittedly, this study also has certain limitations. On the one hand, the collected data did not include all the literature related to the free trade zone. The selection of this paper only targeted at a certain foreign data base for retrieval and analysis, so there would be some omissions. On the other hand, the analysis of the data is not enough, and it is difficult to dig out the deep reasons behind it. However, I hope this paper can play a role in attracting the attention of domestic scholars and deepening the research on free trade zone.

## Acknowledgement

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