

# Research Hotspot and Frontier Analysis of Business School International Accreditation

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## Abstract

International accreditation is the only way for the internationalization of colleges and universities. This article takes 380 articles in the field of business schools international accreditation in the Web of Science database as the research object, and uses the method of scientometrics and VOS viewer knowledge map analysis software to perform co-occurrence analysis on keywords, and finally reveals the research hotspot and development trend of business school international accreditation.

**Keywords:** *Business School International Accreditation; Scientometrics; Research Hotspot*

## 1 INTRODUCTION

In the context of globalization, internationalization has become the goal of domestic business schools. Chinese management education started late and there is no authoritative index system of international construction. Therefore, by analyzing the related information of international accreditation and the development trend of business school education, we can promote the development of domestic business schools and their pace of international accreditation.

By collecting, sorting, reading and summarizing the articles in the field of business school international certification in CNKI, this paper concludes that the research in the filed of business school international accreditation in China can be divided into three categories: the first category focus on the articles that introduce information such as the standards and procedures of international accreditation. Zhang Jianru et al [1] (2006) made a comparative study on three accreditation systems in terms of number, qualification, standard and process. Zhang Jie [2] (2013) made a comparative analysis on the new and old AACSB accreditation standards. The second focus on the case studies based on the empirical analysis. Zhang Jie and Liu Songhe [3] (2015) took Shanghai University of Finance and Economics as an example to focus on the impact of international accreditation on the construction of the teaching staff. Wang Xiaoxia [4] (2013) took Guanghua School of Management of Peking University as an example to analyze the impact of AACSB on the school's educational philosophy and quality assurance. The third is to explore the role of international accreditation in other education. Ye Rong et al [5] (2014) took the school of economics of Ljubljana University as an example to explore the feasibility of AACSB and EQUIS accreditation for overseas promotion of Confucius Institute for business. Li Yuelin et al [6] (2014) discussed the reference significance of AACSB accreditation to the quality management of undergraduate library education. It can be seen that most Chinese scholars only introduce the information and impact of business school international accreditation, and the depth of analysis of business school accreditation needs to be strengthened. Therefore, it is necessary to understand the focus of scholars from a global perspective, so as to provide some reference for the research of Chinese scholars and the development of Chinese business schools.

Based on the above analysis, this paper takes Web of Science as the data source, VOSviewer software as the research tool, and combines the method of scientometrics to make statistical and visual analysis on the literature of business school international accreditation from 1990 to 2019. This paper aims to summarize the research hotspot and phased frontier direction in this field by means of quantification and visualization, so as to provide reference for the relevant

research in the field of business schools international accreditation.

## **2 RESEARCH FOUNDATION**

### ***2.1 Research Methods and Tools***

Scientometrics can process information such as authors, research institutions, and keywords of related documents, and can analyze theoretical basis, document characteristics and development trends by means of the principle of mathematical statistics and computer analysis, and further reveal the discipline's internal development laws [7]. In order to transform massive data into clearer and instructive information, Nees Jan vanEck and others at Leiden University in the Netherlands developed VOSviewer software. This software is developed by the Java language, and bases on path-finding network algorithm and co-citation analysis theory to scientifically measure the literature in a specific field. By drawing a series of visual maps, it can detect the current research situation, and explore the potential dynamic mechanism of discipline evolution and research frontier. At the same time, it can intuitively identify the evolutionary path of literature and research frontiers through the visualization of the literature information in the subject area [8].

Therefore, this article uses VOSviewer knowledge map analysis software as the tool, based on the keyword data of the literature in the field of business school international accreditation, and uses VOSviewer's keyword co-occurrence analysis function to draw the keyword co-occurrence knowledge map in this field. Then based on the cluster analysis, frequency analysis, average occurrence time analysis and average citation frequency analysis of keywords, this paper explores the hot research directions and development trends in this field.

### ***2.2 Data Sources***

The data of this paper comes from Web of Science database, with the subject words of "accreditation + business school", "accreditation + management school", "accreditation + business education", "accreditation + management education", "accredited + business school", "accredited + management school", "accredited + business education", "accredited + management education", "accreditation + school of business", "accreditation + school of management", "accredited + school of business", "accredited + school of management", "AACSB", "EQUIS" and "AMBA", and these articles are retrieved in an exact match. The search date is June 1, 2019, and the search document types are "Article", "Proceeding paper" and "Review ", excluding documents that are irrelevant to the topic, and finally obtained 380 articles from 1991 to 2019 as the basic data for this study.

## **3 RESEARCH HOTSPOT AND FRONTIER ANALYSIS**

### ***3.1 Research Hotspot***

Research hotspot are topics that have attracted the common attention of scholars in a certain academic field. It refers to the academic issues or topics discussed in a set of documents that contain more documents and are internally connected within a certain period of time [9]. Keywords are the author's refined summary of the content and research methods of the paper, and the research hotspot of a certain academic field can be concentrated by the keywords with high frequency. Therefore, by analyzing the co-occurrence map of high-frequency keywords, research hotspot and their evolutionary paths in this field can be obtained. The 380 articles selected in this paper have a total of 912 keywords. Selecting the minimum number of occurrences to be "4", 35 keywords meet the conditions. This paper uses the VOSviewer's modular clustering algorithm to analyze the 35 keywords. And the visual knowledge map of the network co-occurrence and clustering density of keywords in the field of business schools international accreditation is shown in Figures 1 and 2. In Figure 1, each circle represents a keyword. The larger the circle and the font, the greater the number of occurrences of the keyword; the thicker the connection between the two circles, the greater the number of co-occurrences; the shorter the distance, the higher the similarity between the two. And different clusters are distinguished by color. In Figure 2, the brighter the color, the higher the frequency of keywords.

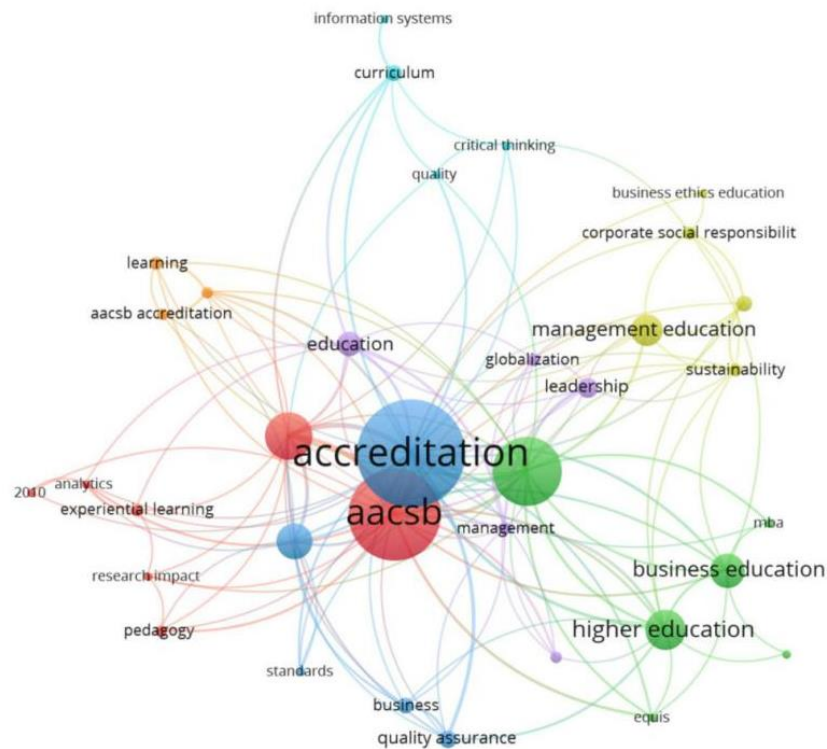


FIGURE 1 KEYWORDS CO-OCCURRENCE NETWORK VISUALIZATION MAP

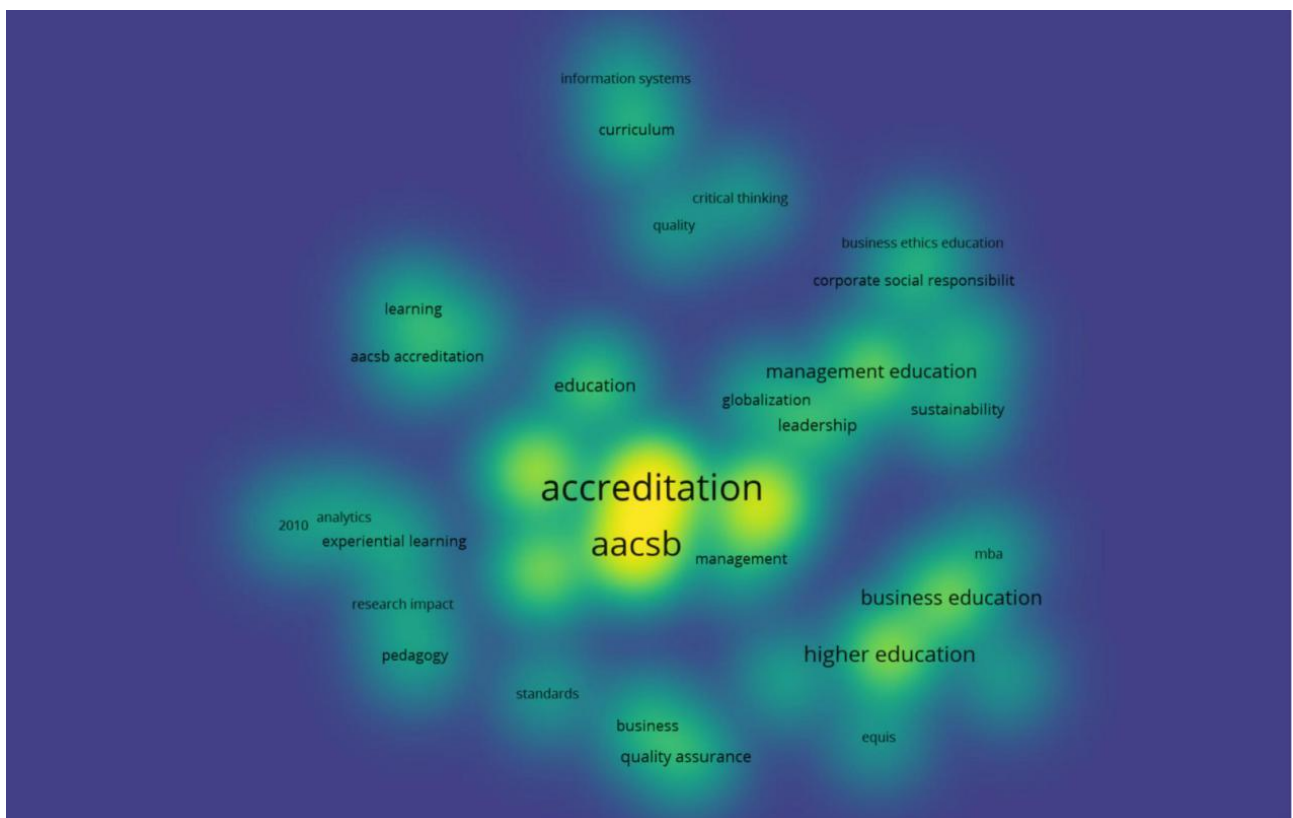


FIGURE 2 KEYWORDS CO-OCCURRENCE CLUSTER DENSITY VISUALIZATION MAP

It can be seen from Figure 1 and Figure 2 that 7 clusters represented by "accreditation", "aacsb", "business schools", "management education", "education", "learning" and "curriculum" are formed. Table 1 shows the research topics, keywords and frequency of each keyword in each cluster.

TABLE 1 CLUSTER ANALYSIS OF BUSINESS SCHOOLS INTERNATIONAL ACCREDITATION

Research topics	Keywords clustering (frequency)
AACSB-based accreditation system	aacsb (40), assessment (21), experiential learning (5), pedagogy (5), research impact (4), 2010 (4), analytics (4)
Education system of business schools	business schools (30), higher education (18), business education (15), equis (4), supply chain management (4), mba(4)
Sustainable development of management education	management education (14), ethics (7), corporate social responsibility (6), sustainability (6), business ethics education (4)
Assurance system of business school accreditation	accreditation (47), assurance of learning (16), quality assurance (8), business(7), standards (4)
Curriculum system of business school	curriculum (7), information systems (4), quality (4), critical thinking (4)
Impact of AACSB accreditation	learning (6), aacsb accreditation(5), teaching(5)
Globalization of business school education	education (11), globalization (6), accounting(5), leadership (9), management(6)

### 1) Research hotspot 1: AACSB-based accreditation system

AACSB has been committed to improving and promoting education in the fields of business management and accounting. It represents the highest achievement of business schools worldwide. AACSB-accredited business schools are also regarded as top-quality business schools. Kundu, GK & Bairi, J [10] (2016) analyzed in detail the standards related to learning and teaching in AACSB accreditation. Hinnenkamp, C et al [11] (2019) provided five suggestions for AACSB accreditation of a small university.

### 2) Research hotspot 2: Education system of business schools

The education system of business school refers to the process of training business talents through all-round education. Krivogorsky, v et al [12] (2019) proposed a new teaching mode in business schools. By teaching courses across multiple functional areas, they can provide students with valuable insights, so as to help students become competent managers in the global business environment.

### 3) Research hotspot 3: Sustainable development of management education

With the continuous development of management education, sustainability and social responsibility have gradually become the trend of business schools. Reficco, e et al [13] (2019) show that the teaching methods of business ethics and environmental sustainability have a positive impact on the development of Latin American business schools.

### 4) Research hotspot 4: Assurance system of business school accreditation

The assurance system of business school accreditation includes quality assurance system and learning assurance system, which is the guarantee for the business school to pursue excellent development. Kundu, GK & Bairi, J [14] (2017) focused on analyzing the AACSB standards related to strategic management and innovation, and developed a model that can guarantee the sustainable development of business schools.

### 5) Research hotspot 5: Curriculum system of business school

The curriculum system of business school is the sum of teaching content and process, which determines what kind of knowledge and ability students will obtain through learning. Garner, BR et al[15](2019) examined the views of business school alumni of North Georgia University on the core curriculum and provided relevant information for the update of the curriculum system. Yang, SC [16](2019) surveyed cybersecurity master's program in American business school and developed a new, graduate-level cybersecurity course model for the business school.

### 6) Research hotspot 6: Impact of AACSB accreditation

Obtaining AACSB accreditation has a certain impact on the scientific research, teaching and student management of business schools. Wheeling, Barbara [17] (2015) recorded changes in the learning ability of business school students after obtaining AACSB accreditation.

#### 7) Research hotspot 7: Globalization of business school education

The globalization of business school education has become an inevitable trend. In recent years, many scholars have conducted research on the globalization of business schools. Zammuto, RF [18] (2018) show that the globalization of business education and the development of certification are two long-term trends that may affect the enrollment market of business schools at home and abroad in the United States.

### 3.2 Research Frontier Analysis

By analyzing the average year of occurrence of keywords, the development process of literature in a specific field can be obtained, and the average frequency of keyword citations can indicate the research focus and future development direction of a specific field. As shown in Figure 3 and Figure 4, there are the keyword co-occurrence knowledge maps superimposing by the average year of occurrence and average citation frequency of each keyword. Different colors in the map represent different average years and average citation frequency. The top 8 high-frequency keywords in this field are shown in Table 2.

In Figure 3, the keywords that have appeared in recent years are "accounting", "critical thinking" and "analytics". Accounting is one of the AACSB accreditation projects. Meier, HH & Smith, DD [19] (2016) show that the short-term study abroad program has played a vital role in the globalization of the AACSB accounting plan. Critical thinking is the ability that teachers and students of business school should have. D'Alessio, FA et al [20] (2019) pointed out that training students' critical thinking has a positive effect on the average academic performance. Analytical method is a method to conduct research on the information of business school certification, and it is also a learning method that students should master. Woodside, JM [21] (2019) analyzes the consistency of the learning objectives of the undergraduate business courses with the AACSB standard, and makes recommendations for the development of business schools. Thus, the research in the field of business school accreditation has gradually changed from focusing on standards and requirements to focusing on teaching and learning.

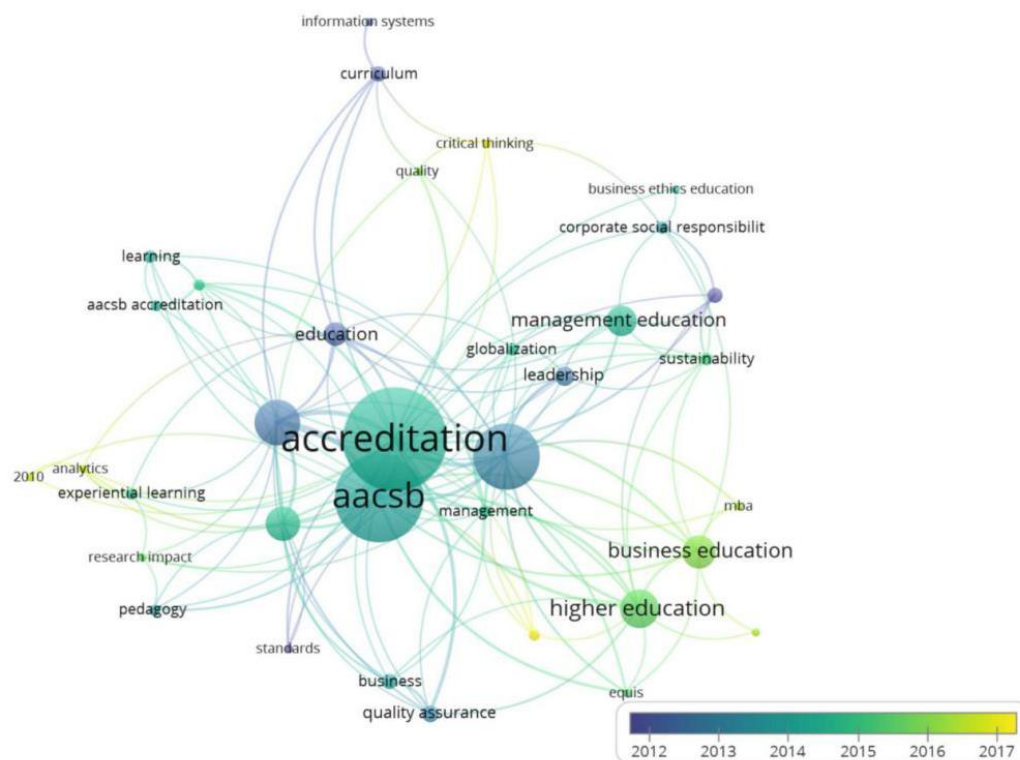


FIGURE 3 KEYWORDS AVERAGE YEAR VISUALIZATION MAP

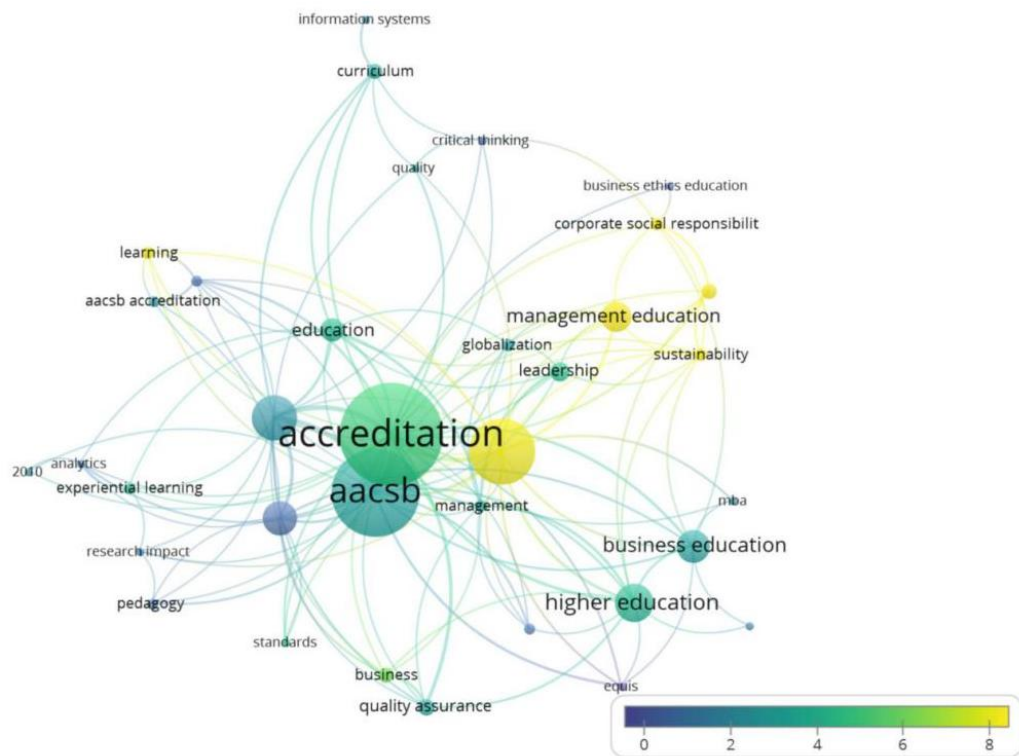


FIGURE 4 KEYWORDS AVERAGE CITATION FREQUENCY VISUALIZATION MAP

TABLE 2 TOP 8 HIGH-FREQUENCY KEYWORDS

Keywords	Frequency	Keywords	Frequency
accreditation	47	higher education	18
aacsb	40	assurance of learning	16
business schools	30	business education	15
assessment	21	management education	14
assessment	21	management education	14

In Figure 4, the keywords "business schools", "management education", "sustainability", "ethics" and "corporate social responsibility" are cited more frequently on average. And from figure 3, "sustainability", "ethics" and "corporate social responsibility" appear later. Therefore, sustainable development, ethical and corporate social responsibility are the focus of business school research, and also the focus of future research in this field. Mendoza, JMF et.al [22] (2019) studied how to realize sustainable management of higher education institutions by implementing circular economy, and pointed out the importance of sustainable development. Thus, the sustainable development and responsibility education of business school will become the future development direction.

In Table 2, the frequency of keywords "accreditation", "AACSB", "business schools" and "assessment" is more than 20, indicating that these keywords have always been the research focus of business school international accreditation.

## 4 CONCLUSION

Based on the scientometrics, this paper analyzes 380 articles in the field of business school international accreditation with the knowledge map visualization function of Vosviewer. Through co-occurrence and cluster analysis of keywords, this paper systematically summarizes the research hotspot and development trend of business school international accreditation.

There are seven research hotspot groups in the field of business school international accreditation, namely AACSB-based accreditation system, the education system of business schools, sustainable development of management

education, assurance system of business school accreditation, curriculum system of business school, impact of AACSB accreditation, and globalization of business school education.

Accounting, critical thinking and analysis are the keywords appeared in recent years, which shows that the research in the field of business school accreditation has gradually changed from focusing on the standards of accreditation to focusing on the thinking and methods of teachers and students. Sustainable development, ethics and corporate social responsibility are the key research directions in this field in the future. AACSB, business school and accreditation have always been the research focus in this field.

Although this article has certain value for exploring the international accreditation of business schools, there are also deficiencies. First, limited by the number of documents included in the database, some representative documents are not included in the analysis, so the research accuracy will be affected. Secondly, this article does not explore the research hotspot of different periods from a dynamic perspective, so the analysis of the change laws is slightly insufficient.

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