

Literature Review and Content Analysis: Internet Finance, Green Finance, and Sustainability

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Abstract. Internet finance, green finances, and sustainable development have not only become an important breakthrough in the reform of financial supply side, but also a hot topic of academic research. Based on the MDPI journal "Sustainability" in May 2019 deadlines for the special issue "Internet Finance, Green Finance and Sustainability", this paper uses a content analysis method to make a literature review and test cross-analysis of 23 papers in this special issue. The analysis shows that the paper in this special issue does not fully demonstrate the trend of green finance and sustainable development to readers.

1. INTRODUCTION

With the development of science and technology and the deepening understanding of green ecology, sustainable development has received more and more attention in various fields. "Green finance" and "sustainable development" is part of the hottest arguments in the current environment. At the same time, with the rapid progress of information, Internet finance has been developing with amazing momentum, bringing unexpected innovation and efficiency to the financial sector. In recent years, a large number of scholars have been studying Internet finance, green finance, sustainable development, and other fields to be explored by further discoveries.

In the special issue "Internet Finance, Green Finance and Sustainability", which was made available in MDPI's journal "Sustainability" in May 2019, it has included 23 scholarly literature on financial, network, green, and sustainable topics, and cover all major topics including banking, venture capital, financial management, grandstanding, etc.; it is involved in the fields of tourism, agriculture, cultural distance, and covers a variety of research technologies and directions. Before this paper, scholars Kai Wang (2019) [1] summarized the literature review for the main contents of the special issue. In order to find the cross-literature relationship under the three topics not mentioned by this scholar, this paper, aiming at the depth and cross-links not covered by this scholar, conducts a literature review on the three main topics of "Internet finance, green finance and sustainable development", so as to provide a more valuable focus and literature review.

2. INTERNET FINANCE IN THE INFORMATION AGE

In recent years, the development of network-based technology (such as mobile payment, social network, search engine, and Cloud Computing) is translated into the paradigm shift in the financial field. The change of Internet finance to personal or corporate financing has far-reaching significance in financial progress [2]. With the advent of the mobile era, mobile payment has gone into the banking business. Insung son (2018) in the study of apple and Samsung, through the analysis of the alliance entering the mobile payment service market, it is divided into an upstream and downstream alliance of the value chain and found that different alliances have different effects on different companies [3].

At the same time, Internet technology innovation has not only diversified the way of entrepreneurship but also changed the financing approach of entrepreneurs. Emerging financing ways, such as Internet microcredit, Internet grandstanding and P2P (partner to partner) lending, have greatly enriched the form of the financial market. Pingfan song (2018) pointed out that P2P online loans, as one of the typical business models of Internet finance, is easy to provide loans to low-income and other people, which are likely to bring opportunities for China's sustainable development. Moreover, the research results show that risk management ability is of great importance for the P2P industry [4]. The emerging new financing mode of Internet start-ups not only provides enough financial support for enterprise innovation but also has a low-cost and free working environment, which is also loved by entrepreneurs seeking additional financing mode. Yan, Z. et al. (2018) put forward the research in the field of online finance. From the theoretical perspective of social network behavior, entrepreneurial leaders may attract investors' attention through various social network behaviors [5]. As a new investment platform, grandstanding provides favorable and powerful opportunities for sustainable economic development. From the perspective of the two-way market, Wenqing Wu (2018) developed a grandstanding platform model integrating quality and matching services, providing some valuable insights on how to maximize the profits of the grandstanding platform [6]. Although Internet finance has brought a broader and diversified perspective, its risks can be overlooked. Among them, the spread of supply chain financial credit risk in the network will bring about serious consequences to the economy [7]. Nier (2007) studied the banking network and found that the network structure would affect the spread of credit risk [8].

3. Green Finance Cover

With the concept of "green" being paid more and more attention in the field of finance, the term "green finance" has become more and more widely used in all aspects of the financial field. Although green production and carbon emission reduction have become an inevitable trend, some companies cannot pay the high cost of emission reduction. As a result, more and more companies are concentrated on the cost of carbon emissions.

At present, the financial risks brought about by climate change are escalating. Scholars Hu, X. (2016) believe that as an important means and method to optimize resource allocation and capital redistribution, finance will play a significant role in the development of China's low-carbon economy [9]. Moreover, Lei Yang's (2018) research results show that the SCCF model can help improve the emission reduction rate of the whole supply chain, and carbon financing can help enterprises reduce the financing pressure brought by carbon emission reduction [10].

In SCM, with the continuous consumption of resources, pollution control, waste recycling, and social responsibility become very important. Therefore, the closed-loop supply chain (CLSC) plays an increasingly critical role in real life. By following the rules of protection during the life of the material, it can be ensured that the waste of the material is minimized. In closed-loop supply chain management, a reasonable and scientific financial operation is necessary, especially when customer demand is uncertain [11]. Liu, m (2018) designed a green closed-loop supply chain (garlic), in which the demand is uncertain considering the environmental problems [12].

4. Sustainable Development Trend

Sustainable development involves many aspects. Not only the exhaustion of resources and the deterioration of the environment but also the phenomenon of cultural destruction and social unrest can be attributed to the unbalanced economy of natural resources and development. The excessive consumption of the ecosystem and society is the biggest problem at present. Barbier (1987) asserts that these problems can be prevented if the economy continues to develop [13]. For enterprises, to promote the sustainable development of the real economy, we need to strengthen efficiency. Low financial efficiency and low or high financial competition will reduce the R & D efficiency of the company [14]. Elena fern á nude Rodr íGuez (2019) pointed out in the study of Spanish

sustainable enterprises that the tax preference provided by law to support its sustainability may make the effective tax rate of state-owned enterprises lower than that of non-state-owned enterprises [15].

For the banking industry, Lin, J.Y (2009) put forward the theory of "optimal financial structure", emphasizing the importance of the banking industry scale and structure to economic growth [16]. At the same time, Sumei Luo (2018) also pointed out that the banking industry structure should adapt to the industrial structure to achieve the sustainable and stable development of the real economy, and the research results show that improving the scale ratio of small and medium-sized enterprises in the banking industry can significantly reduce the financing constraints of small and medium-sized enterprises [17].

At the same time, more and more enterprises pay greater attention to the sustainable development of supply chain construction and investment. From the perspective of sustainable development, Xuedong Liang (2018) et al. Put forward TOPSIS based on the triple bottom line (economic, environmental and social) theory [18], which combines fuzzy multi-criteria evaluation method with supply chain finance [19]. Research of Feng x (2015) shows that small and medium-sized enterprises in the supply chain can reduce the cost of capital through revenue sharing contracts and repurchase contracts, so as to reduce the financing constraints they face [20]. In addition, Lei Xu (2018) pointed out that after the successful compounding activities, grandstanding resale can improve the sustainability of clean technology business, thus providing effective support for sustainable development [21].

5. Research Method

5.1. Content Analysis

This paper uses content analysis to analyze 23 papers in the special issue. Content analysis is defined as a systematic and reproducible technique that compresses many words in a text into fewer content categories according to pure coding rules[22,23,24,25]. In the classification of text subject, the text is set to ten categories. In the process of research, the content analysis makes it relatively easy for researchers to screen large amounts of data in a systematic way [24]. This approach can be a useful technique for researchers to discover and describe the focus of the unusual, group, institutional, or social concerns [25]. It also allows inferences to be carried out, which can then be verified using other data collection methods.

5.2 Rresearch Process

This study reviews the published MDPI journal "Sustainability" in May 2019 deadline of the special issue "Internet Finance, Green Finance and Sustainability" 23 papers under, and through two independent experts on the 23 papers in the special issue with the content browsing after the summary, its thesis on the classification, and then through the results than the discussion, and then read the summary to be consistent with the classification results, to ensure that level of confidence, but also are more likely to allow readers to produce the same meaning. Accordingly, the final results were tabulated, as showing in figure 1. With the degree of association of each of the ten themes of lecture content and step-up, gradually increasing numbers, 1 represents the highest degree of association.

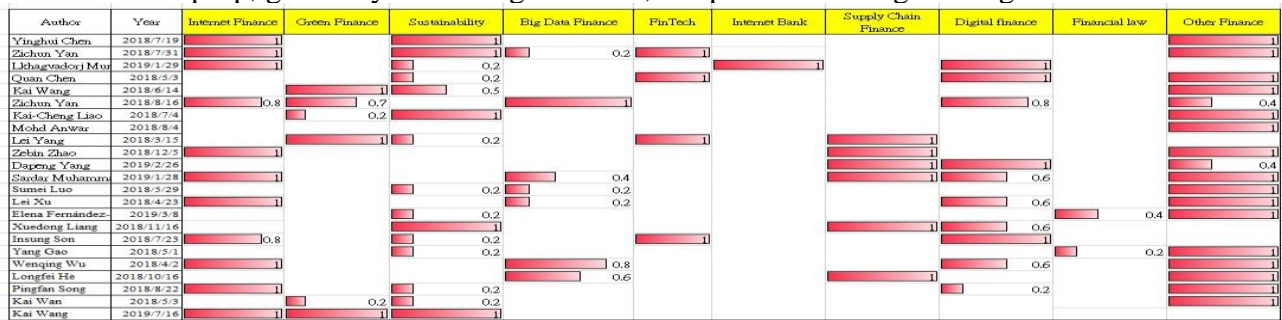


Figure 1 Topic classification of 23 papers

6. Conclusion and Discussion

Through the visualization results in figure 1, it can be pointed out that the papers in this special issue mainly focus on the topics of "Internet finance" and "other financial". Being a function of statistics, the number of papers related to the two major topics is greater than or equal to 0.8 accounted for about 1/2 of the total number of papers. Secondly, although there are numerous papers on the topic of "sustainable development" (e.g. [26,15]), its relevance is very low (about 0.2) and only slightly mentioned. Finally, as one of the three topics also included in the special issue, "green finance" is all the more singular, with only three papers correlating 0.7 or greater (i.e. [10,27,28]). It shows that the theme papers in this special issue are not "green" or "sustainable" enough, so it is critical for scholars to study and explore these two important fields.

Based on the cross-classification analysis of the contents of the 23 thesis papers, it can be observed that the research under the theme of Internet finance mainly concentrates on the impact of research on individuals or enterprises. While bringing new opportunities for economic development, Internet finance also brings new risks. Second, the theme of green finance concentrates on the environment. More and more enterprises are using green technologies to protect the environment and foster economic growth. Third, the theme of sustainable development involves all walks of life, focusing not only on persons or enterprises but also on the sustainable development of society. More researchers agree with the triple bottom line theory of "economy, environment and society", namely sustainable development theory. Also, with the advent of the era of big data, digital finance [29], big data finance [6], supply chain finance [30] and other financial topics [31] have attracted researchers' attention. The emergence of relevant literature indicates that people's interest in this research field is increasing.

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