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Editorial

Internet Finance, Green Finance, and Sustainability

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Abstract: This special issue, "Internet Finance, Green Finance, and Sustainability", is focused on the prosperous financial industry and the relationship between finance and sustainability. It especially gathers papers pertaining to the hot topic of internet finance and green finance in this field, as well as the manuscripts exploring the operating mechanism between finance and sustainability, both of which are closely linked to the hot spots and pressing demands of society. Therefore, this special issue is of particular valuable for both academic research and the development of society.

Keywords: financial industry; internet finance; green finance; sustainability

Introduction

The financial industry is closely related to various other industries. The rise and fall of the financial industry is related to the development of social economy. With the rapid development of the Internet, internet technology was applied to the traditional financial industry; the explosive penetration of the Internet and mobile Internet, laid a sound foundation for internet finance [1], which has been expanding rapidly, which constantly broadens financing channels for enterprises, providing solutions to their financing problems. In addition, with the deterioration of the environment, the financial sector regards environmental protection as a basic policy; any potential environmental impact shall be considered in investment and financing decisions, and the potential return, risk, and cost correlated with environmental conditions shall be merged into financial business. Green finance is a new financial pattern which integrates environmental protection with economic profits, emphasizing "green" and "finance", the two of which are controversial issues [2,3]. Therefore, nowadays, internet finance, green finance, and sustainability have becoming emerging, hot topics. This special issue focuses on these two topics and has received many valuable manuscripts which are meritorious for their focus on the better development of society and academic research in related fields [4–6].

The special issue is divided three parts. Firstly, the financial industry is an important part of the whole economy, thus many important issues need to be discussed. In this special issue, some manuscripts explore problems that urgently need to be addressed. The paper, "Financial Structure and Financing Constraints: Evidence on Small- and Medium-Sized Enterprises in China", written by Sumei Luo, used data on 161 listed companies on the Small and Medium Enterprise Board from 2009 to 2013 to carry out an empirical test on the correlation between the financial structure factors and the financing constraints of small- and medium-sized enterprises. The study showed that the promotion of the scale ratio of small- and medium-sized enterprises in the banking industry was able to significantly alleviate the financing constraints of small- and medium-sized enterprises. The paper, "How Does a Staggered Board Provision Affect Corporate Strategic Change? Evidence from China's Listed Companies", by Kai Wang, used a sample consisting of China's listed companies from 2007

to 2014, and empirically tested two channels through which a staggered board provision affected the extent of corporate strategic change based on agency theory and prospect theory. It found that the existence of a staggered board provision decreased the extent of strategic change; shareholders' restriction on directors through governance mechanisms can weaken the role of a staggered board provision in determining strategic change. Besides, external environment dynamism can strengthen the relationship between a staggered board provision and the extent of strategic change. The paper "Nonlinear Effect of Financial Efficiency and Financial Competition on Heterogeneous Firm R&D: A Study on the Combined Perspective of Financial Quantity Expansion and Quality Development", by Yang Gao et al., used manufacturing firm data and district financial quantity and quality indicators for 2005–2007 combined with heterogeneous firm characteristics based on panel data and the threshold panel method to analyze the impact of firm R&D. Through empirical tests, the paper concludes that only improvements in financial efficiency and moderate competition can significantly promote firm R&D. Therefore, to effectively reduce the impact of financial inefficiency on firm R&D in China, it is important to move from simple expansion to improved financial quality. The paper, "An Empirical Research on Bank Client Credit Assessments", by Quan Chen, investigated client credit quality criteria and focused on the expert opinions of bank managers. Using a decision-making trial and an evaluation laboratory method, they compared and analyzed the similarities and differences in how banks evaluate their clients' character, ability, financial capability, and collateral. The result contributes to the literature and can also be applied to real-world practice in the financial industry. The paper, "An Empirical Study on Effective Tax Rate and CEO Promotion: Evidence from Local SOEs in China Based on the analysis of listed local SOEs in China from 2004 to 2010", tests the relationship between CEO promotion and tax payment. In addition, the moderating effect of pyramid layer was tested. The paper found that there was a significant positive relationship between effective tax rate and CEO promotion, which suggests that CEOs may be aggressive in tax payment to please local governments, who ultimately own the local SOEs. These conclusions enrich the literature on CEO turnover and the role of pyramid structure, which are also helpful for the SOEs' reform in China and other developing countries. The paper on "Optimal Replenishment for Perishable Products with Inventory-Dependent Demand and Backlogging under Continuous and Discrete Progressive Payments", by Longfei He et al., focuses on optimizing the replenishment policy for a channel with stock-dependent demand considering item deterioration and order backlogging under two financial schemes of progressive trade credit periods. Their experiments showed that the CPR scheme is dominant prior to DPR for long replenishment time intervals, whereas it is exactly the opposite for short time intervals.

Secondly, in the last two decades, internet technologies, such as cloud computing, mobile communications, social media, and big data analytics have brought tremendous changes to our society and reshaped business in various industries. Specifically, mushrooming innovations in the financial area, fertilized by information and communication technologies, indicate the advent of the Internet finance era [6]. In this special issue, internet finance refers to an emerging financial model implementing fund accommodation, as well as payment and infomediary services, by means of internet and mobile communication technologies. Some authors researched internet finance from different perspectives. Wenqing Wu et al.'s paper, "Optimal Quality Strategy and Matching Service on Crowdfunding Platforms", explores the impact of different factors (i.e., the quality threshold of admission and the matching efficiency on crowdfunding platforms) on the optimal quality threshold and matching service in the context of crowdfunding from the perspective of a two-sided market by the derivative method. Conclusively, this paper identifies the mechanism for how parameters influence the optimal quality threshold and matching service, demonstrating that excluding low-quality projects is profitable when funder preference for project quality is substantial enough. The paper "Financing Target and Resale Pricing in Reward-Based Crowdfunding", by Lei Xu et al., builds a two-stage crowdfunding model and uses analytical and numerical studies to explore the effect of funding volume on resale pricing and profit, as well as the effect of backers' strategic purchasing behavior in resale on the design of financing targets in crowdfunding. The results showed that large funding helps the

creator build a high level of capacity that satisfies the target demand and does not vary resale prices; low funding only allows a low level of capacity, which pushes up the resale price due to the rationing effect and mitigates price fluctuations due to the alterations in backers' patience. The paper "Access to the Internet and Access to Finance Theory and Evidence", by Yinghui Chen et al., develops a theoretical model to explore how access to the Internet affects the credit availability of firms using China household finance data from the China Household Finance Survey to test the impact of access to the Internet on access to finance of small and microbusinesses. The empirical results confirmed the positive role played by access to the Internet in alleviating the financing difficulty of those firms. Moreover, they also found evidence that access to the Internet can reduce borrowers' dependence on physical branches of banks when making bank choice decisions for loan applications. These results imply that access to the Internet is conducive to the sustainable development of small and microbusinesses via mitigating their financing difficulty. The paper "Does the Role of Media and Founder's Past Success Mitigate the Problem of Information Asymmetry? Evidence from a UK Crowdfunding Platform", by Sardar Muhammad Usman et al., developed and tested a model that examines the signaling interaction between the founder and a potential backer through media and the founders' past success. This model also examines how these two signals (i.e., media and past success) interact so as to mitigate the problem of information asymmetry and to make the project successful. A total of 14,887 projects were extracted from a reward-based platform named Crowdfunder. The data was analyzed by performing Tobit and logistic regression and the model was validated using the robustness technique, obtaining some valuable results. First, the success rate was positively significant with the role of media, which means if a project is presented using meaningful videos and images, then the project has higher chances of success. Second, the statistical results revealed that the success rate is positively significant with founder's past success. The results strongly mitigate the problem of information asymmetry, which improves the rate of success in projects floated on the Crowdfunder platform. The paper "Performance Analysis of Peer-to-Peer Online Lending Platforms in China", by Pingfan Song et al., checked the performance of peer-to-peer online lending platforms in China. With a sample of 66 leading big peer-to-peer platforms, and a novel two-stage slacks-based measure data envelopment analysis with non-cooperative game, the performance efficiency of each stage as well as the comprehensive efficiency were evaluated. The results showed that the leading big platforms were good at managing risk; they also found that the average performance efficiency of the platforms that are located in non-first tier cities was higher than that in first tier cities. They also conducted a further study to determine the sources of inefficiency, finding that it mainly arises from the shortage of lenders, the lack of average borrowing balance, and the insufficient transparency of information disclosure. The paper "Credit Risk Diffusion in Supply Chain Finance: A Complex Networks Perspective", by Zebin Zhao et al., used the "1 + M + N" complex network model with BA scale-free characteristics to study the credit risk diffusion in a supply chain finance network, where the credit risk diffusion process is simulated by the SIS epidemic model. It examines the impacts of various key factors, including the general financing ratio, cure time, network structure, and network scale on the credit risk diffusion process. It found that credit risk diffusion rarely occurs in a network with a low average degree. When the average degree of the network increases, the occurrence of the credit risk diffusion becomes more frequent. Besides, the degree of the initially infected nodes with credit risk does not affect the density of the infected nodes in the steady state, while a higher degree of the core nodes helps restrain the diffusion of credit risk in the supply chain finance network. Finally, the simulation results based on the supply chain finance network with a core node indicates that the diffusion of the credit risk diffusion in sparse supply chain finance networks with low average degrees is unstable. The results provide better understandings on the credit risk diffusion in supply chain finance networks. It is estimated that transitioning to a low carbon and climate resilient economy, and more broadly, greening growth over the next 20 years to 2030 will require significant investment, and consequently, private sources of capital on a much larger scale than previously understood. Thus, it is definitely necessary to research finance options.

Thirdly, as with the development of society, strained resources and environmental damage is beginning to appear as well. The ongoing conflict between the goals of environmental conservation and economic growth in some countries are partly a conflict between state agencies charged with these contrasting missions [7]. We must develop a low-carbon economy and implement economic transformation and sustainable development [8]. National governments, international institutions, academics, and civil society have called for greater information, not only to inform policymakers, but also to enable populations with the "right-to-know" regarding the environmental impacts of industry and economic development [9]. Green finance means the financial sector regards environmental protection as a basic policy, any potential environmental impact shall be considered in investment and financing decisions, and the potential return, risk, and cost correlated with environmental conditions shall be merged into day-to-day financial business. Some papers of this special issue discuss the relationship between finance and environment. Green finance is a new financial pattern to integrate environmental protection with economic profits, emphasizing "green" and "finance", both of which are controversial issues [10]. The paper "An Empirical Study on Internet Startup Financing from a Green Financial Perspective", by Zichun Yan et al., uses the multivariate least squares model and concludes that entrepreneurs' technical educational backgrounds, offline entrepreneurial experiences, and online entrepreneurial experiences all have positive effects on internet financing. The weaker the value that the uncertainty avoidance in the entrepreneurs' host countries has, the stronger the facilitation and promotion from offline and online entrepreneurial experiences on internet financing. Furthermore, the level of uncertainty avoidance in the entrepreneurs' countries has a moderating effect as well. The paper "Agricultural Internet Entrepreneurs' Social Network Behaviors and Entrepreneurship Financing Performance", by Zichun Yan et al., used the data-mining method to capture and collate data regarding 7585 venture projects on an internet crowdfunding platform between 2014 and 2017. Applying ordinary least squares (OLS) and probit models to conduct empirical tests, the results showed that first, compared with other industries, the effect of agricultural entrepreneurs' quality information disclosure on entrepreneurship financing performance was lower, whereas the effect of their social network interaction was higher. Second, the entrepreneurial team size had a positive moderating role on the former and a negative moderating role on the latter. This research is of significance for agricultural enterprises to raise their financial performance in internet crowdfunding, especially for Chinese agricultural micro-enterprises. This research is particularly beneficial for the ecodevelopment of the whole of society.

Lastly, some scholars combine finance with sustainability. The paper "Cooperation Modes of Operations and Financing in a Low-Carbon Supply Chain", by Lei Yang et al., researched supply chain carbon finance patterns to help firms obtain green loans from the bank and discussed how firms make their pricing and carbon emission reduction decisions under different cooperative levels and financing by two financing methods: delay-in-payment and bank loans and two cooperation decisions—carbon emission reduction cooperation and price cooperation. Finally, the paper demonstrates that SCCF can reduce financial costs and improve the supply chain profit compared to traditional carbon finance patterns on some occasions. The paper "Small- and Medium-Sized Enterprises Sustainable Supply Chain Financing Decision Based on Triple Bottom Line Theory", by Xuedong Liang, based on the theory of the triple bottom line (economy, environment, and society) from a sustainable development perspective, innovatively proposes an SME financing evaluation model for supply chain finance that applies a fuzzy multi-criteria evaluation method combined with Topsis. The paper concludes that, first, to ensure sustainable development, when commercial banks are deciding on SME supply chain financing, they need to fully consider all stakeholders. Second, based on the triple bottom line theory, SMEs can benchmark and compare themselves and develop better products and processes to improve their sustainability performances. Third, the research perspective for SME supply chain financing performance evaluations has changed with more scientific development concepts gradually becoming the guiding ideology so that the SME supply chain financing evaluations are not only based on profitability, but also based on the "triple bottom line", which can result in a win–win situation for

the economy, the society, and the environment. The paper "An Evaluation of Coupling Coordination between Tourism and Finance" established a comprehensive index system and evaluated the coupling coordination based on an integrated approach, and the dynamic relationship between tourism and finance through applying coupling coordination degree modeling, the Granger causality test, and an impulse response function based on the regional coordination theory and system theory. This valuable paper reached three conclusions: firstly, the development of finance was readily influenced by economic factors and political influence; secondly, the development of tourism is influenced by policy, infrastructure, transportation, natural disasters, and tourists' attitudes; thirdly, the relationship between tourism and finance can be described as an interaction, which has also been observed in previous literature.

In general, the question of sustainability affects all areas of human activity [11]; business ethics, social responsibility, and specifically, environmental management should be taken into account by decision makers [12]. Although internet finance is a new format of finance [13–15], it has already evoked spindrift in the economy. The studies in this special issue on these topics are particularly illuminating, which is valuable to both financial theory and economic development. We are delighted to share this special issue with readers interested in the financial industry as well as other fields.

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