

# Book of Abstracts

---

2022 4th International Conference of  
Innovation Management and Information  
Systems

2022 6th International Conference of  
Economics, Finance and Management  
Science

May 28, 2022  
Virtual Conference



2022 4th International Conference on Innovation Management and Information Systems

2022 6th International Conference on Economics, Finance and Management Science

## **Book of Abstracts**

May 28, 2022

Virtual Conference

Organized by Shanghai Laixi Conference Services Co., Ltd

Published by  
Science Publishing Group  
1 Rockefeller Plaza, 10th and 11th Floors,  
New York, NY 10020 U.S.A.  
<http://www.sciencepublishinggroup.com>

ISBN: 978-1-940366-97-5



© 2022 The author(s) and/or their employer(s)

The book of abstracts is published with open access by Science Publishing Group and distributed under the terms of the Creative Commons Attribution License (<http://creativecommons.org/licenses/by/4.0/>) which permits any use, distribution, and reproduction in any medium, provided that the original author(s) and source are properly credited.

# Introduction

2022 4th International Conference on Innovation Management and Information Systems (ICIMIS2022) and 2022 6th International Conference on Economics, Finance and Management Science (ICEFMS2022) are organized by Shanghai Laixi Conference Services Co., Ltd. According to the similarity among the topics of ICIMIS2022 and ICEFMS2022, ICIMIS2022 is held in conjunction with ICEFMS2022 virtually on May 28, 2022.

ICIMIS2022 and ICEFMS2022 serve as an optimal platform for specialists, scholars and researchers in the field related to Innovation Management and Information Systems, Economics, Finance and Management Science to facilitate academic communications and exchange ideas. The conferences offer an academic space known for its interdisciplinary approach as well as a space for academics and practitioners.

Major themes of the Conferences included:

**Innovation Management:** Innovation Management, Business Innovation, Virtual Innovations, Digital Innovation Management, Business Models, Innovation Training & Teaching, Circular Innovation, Innovation Leadership, Measurement of Innovation, Responsible Innovation, etc.

**Information Systems:** Foundations of Information Science, Mathematical Linguistics, Automata Theory, Cognitive Science, Theories of Qualitative Behavior, Artificial Intelligence, Computational Intelligence, Soft Computing, Semiotics, Computational Biology and Bio-informatics, etc.

**Economics:** Microeconomics, Marxian Economics, Neoclassical Economics, Classical Political Economy, Keynesian Economics, Production, Cost, and Efficiency, Supply and Demand, Welfare, Unemployment, Inflation and Monetary Policy, etc.

**Finance:** Capital Markets, Financial Institutions, Corporate Finance, Corporate Governance, The Economics of Organizations, Personal Finance, Accounting, Public Finance, Investment Management, Risk Management, etc.

**Management:** Human Resources, Advertising Management, Business Management, Engineering Management, Information Management, Enterprise Management, Intellectual Capital Management, Management in Tourism, Management Psychology, Energy Management, etc.

The abstracts that were selected had a complete peer review process. Selected papers are also published at the cooperating journals of each conference. They show the richness in interdisciplinary approaches, theories, models and applied research presented in the conference.

We would like to thank you for your scientific contribution to ICIMIS2022 and ICEFMS2022 and look forward to having the opportunity to showcase and disseminate your research.

Special thanks also to the organizing committee, and all the people that worked hard, to bring in light this considerable event.

Sincerely,

ICIMIS2022 and ICEFMS2022 Organizing Committees

# CONTENTS

<b>Research on the Influence of Regional Industrial Dependence on the Effect of Green Credit Policy -- Based on the Perspective of Innovation Efficiency</b>	
Wang Cong, Dong Fanglin.....	1
<b>Research on Peer Effect of Stock Repurchase</b>	
Min Han, He Wang .....	2
<b>The Impact of Unemployment Insurance on the Allocation of Family Risky Financial Assets in China -- Stata15 Empirical Analysis Based on 2017 CHFS Database</b>	
Fang Mingyuan .....	3
<b>Research on the Impact of Financialization of Manufacturing Enterprises on Corporate Innovation Based on Capital Market Cycle</b>	
Chen Yong.....	4
<b>Research on the Influence of Enterprise Sustainable Development and Enterprise Value -- Based on the Moderating Effect of Enterprise Innovation</b>	
Li Zeyue .....	5
<b>Research on the Influence of Self-Service Interactivity on Consumers' Purchase Intention -- Take Vending Machine as an Example</b>	
Changsheng Huang, Xin Zhou.....	6
<b>The Portfolio Performance Comparison and the Optimization Analysis of Robo-advisors in China</b>	
Xi Gao.....	7
<b>Research on the Influence of Financial Literacy on Family Risk Financial Asset Allocation Under the Background of Digital Inclusive Finance</b>	
Zhao Wenrui.....	8
<b>The Impact of Narrative Perspective of Product-harm Crisis on Social Media Engagement</b>	
Shiyao Wang .....	9
<b>Green Finance, Technological Innovation and Economic Growth -- Based on Multi-sector Endogenous Growth Model</b>	
Junfang Deng.....	10
<b>The Influence of CEO's Education Background on Corporate Innovation -- Data Verification from Shanghai and Shenzhen A-share Listed Companies</b>	
Yuan Jiangjin.....	11
<b>An Empirical Study on the Impact of Green Bonds on the Green Innovation Capability of Enterprises</b>	
Lang Wei.....	12
<b>How Environmental Decentralization Affects Carbon Emission Intensity: Based on the Analysis of Urban Heterogeneity</b>	
Wang Jun, Yu Zhiwen .....	13
<b>Visualization Analysis of Domestic Literature on Financial Risks in the Energy Industry</b>	
Junwei Huang.....	14

<b>The Impact of Green Finance Development on China's Regional Energy Efficiency Under the Background of Carbon Peaking and Carbon Neutrality Goals</b>	
Meiling Liu .....	15
<b>Travel Mode Choice Behavior Under Dynamic Perception and Cumulative Prospect Theory Based on Bayesian Updating</b>	
Li Leiming, Fan Qing .....	16
<b>A Study on the Effect of Advertising Repetition on Advertising Attitudes in Repetitive Advertisement</b>	
Hao Dong .....	17
<b>Research on the Evaluation System of Intelligent Electric Vehicle Competitiveness Under the Background of Carbon Neutrality</b>	
Qifan Xue.....	18
<b>Economic and Social Considerations of Long-term Care Insurance Policy in China: Taking Jinjiang as an Example</b>	
Min Chen, Yucen Weng .....	19
<b>Predicting Stock Prices Using Stacking-based Ensemble Learning and Seasonal and Trend Decomposition Using Loess</b>	
Chenhao Wu.....	20
<b>Hot Topics and Frontier of the Healthcare Leadership from Bibliographic Analysis</b>	
Qin Xiaoping, Fan Zixuan, Zhao Jinhong, Szewei Wang, Huang Yuni, Liu Tingfang, Wang Binglong .....	21
<b>Research on the Influence of Household Financial Risk Asset Allocation on Consumption Upgrading</b>	
Huang Xinying, Feng Qi.....	22





# Research on the Influence of Regional Industrial Dependence on the Effect of Green Credit Policy -- Based on the Perspective of Innovation Efficiency

Wang Cong<sup>\*</sup>, Dong Fanglin

School of Economics and Management, China University of Petroleum (East China), Qingdao, China

**Email address:**

df120190406@163.com (Dong Fanglin)

**Abstract:** Green credit policy, as a monetary policy, promotes heavily polluting enterprises to improve innovation efficiency and accelerate transformation to achieve green development by restricting the financing scale and financing cost of polluting enterprises. Based on previous research, this paper uses the 2015 "Guidelines for Energy Efficiency Credit" as the exogenous shock variable to construct a quasi-natural experiment, selects A-share listed companies from 2009 to 2020 as a sample, uses the PSM method to group, and uses the DDD method to test green credit policies. In terms of the impact on the innovation efficiency of enterprises, the study found that the green credit policy will significantly improve the innovation efficiency of heavily polluting enterprises, and the impact on enterprises in the eastern and central regions is more obvious. Further analysis using regional industry dependence grouping found that a higher regional industry dependence will weaken the implementation effect of green credit policies, and through DEA analysis, it is found that companies with high regional industry dependence have a certain degree of innovation efficiency loss. The research results of this paper show that the influence of intermediary factors on the transmission mechanism of monetary policy needs to be considered when implementing green credit policy, and effectively guiding capital flow to enterprise innovation and transformation is an effective means to speed up the transformation of economic development mode and promote the construction of ecological civilization.

**Keywords:** Green Credit Policy, Innovation Efficiency, Regional Industry Dependence, PSM-DDD, DEA

# Research on Peer Effect of Stock Repurchase

Min Han\*, He Wang

School of Economics and Management, Chinese University of Petroleum, Qingdao, China

**Email address:**

hmwbz@upc.edu.cn (Min Han), upcwanghe@163.com (Her Wang)

**Abstract:** This paper takes the non-financial listed A-share companies in Shanghai and Shenzhen stock markets from 2015 to 2020 as the research sample, taking whether the company repurchased shares and the ratio of share repurchase amount to assets as the dependent variables, and the ratio of partner companies repurchased shares and the ratio of share repurchase amount to assets as the independent variables. Taking stock idiosyncratic rate of return as the tool variable, this paper makes an empirical study on the existence of peer effect of stock repurchase by using IV-Probit and IV-Tobit first-order and second-order regression, and discusses the heterogeneity of peer effect of stock repurchase of listed companies. The conclusions of this paper are as follows: (1) The share repurchase policy of the partner company will significantly positively influence the share repurchase policy of the company, and the repurchase amount of the partner company will also significantly positively influence the repurchase amount of the company; (2) By classifying and regressing the company size and listing time, it can be concluded that the peer effect of large-scale companies is more significant than that of small-scale companies, and that of companies with longer listing time is more significant than that of companies with shorter listing time.

**Keywords:** Peer Effect, Stock Repurchase, Heterogeneous

# The Impact of Unemployment Insurance on the Allocation of Family Risky Financial Assets in China -- Stata15 Empirical Analysis Based on 2017 CHFS Database

**Fang Mingyuan**

Department of Economics, China University of Petroleum (East China), Qingdao, China

**Email address:**

768317452@qq.com

**Abstract:** China's financial market is booming, but the development of family finance is limited. Only a few families participate in the risky financial market, and their investment portfolios are not diversified enough, which is called "mystery of limited participation". Meanwhile, the global economy has been frustrated by the COVID-19, and the unemployment rate rises sharply. So study the impact of unemployment insurance on the allocation of family risky financial assets shows great value of research and innovation. It fits the current economic environment, and can contribute to the development of China's family financial market. For this reason, this paper adopts Stata15 and CHFS 2017 database. We selects Probit model and Tobit model to empirically analyze the impact of unemployment insurance and other factors on the allocation of family risky financial assets. The instrumental variable method and the propensity score matching method are used to deal with the endogenous problems caused by unemployment insurance, which is methodological innovation in this research field. Sub-samples regression of families in different ages, different regions, and different income groups are conducted to analyze the heterogeneity. The research finds that: firstly, unemployment insurance significantly increases the possibility and proportion of families holding risky financial assets, with statistically significant marginal effect, which indicates it improves the breadth and depth of Chinese families' participation in the risk financial market. Secondly, the increasing effect of unemployment insurance on allocation of family risky financial assets is more significant in young families, which indicates elder families face greater background risk and unemployment risk. Thirdly, its increasing effect is more obvious in families in eastern areas, which indicates the regional imbalance of China's economic and social development. Finally, its increasing effect is more significant in high-income families, mainly because the income effect of unemployment insurance is smaller in high-income families. Considering the empirical conclusion, unemployment insurance system should expand the coverage, and give policy preferences to elder families, central and western China families, and low and middle-income families. Financial institutions should enrich financial products linked to social security, and broaden channels of family financial investment. Families should improve their financial literacy, and promote the diversification of family investment portfolios. These measures can improve the level of social welfare, enhance the breadth and depth of family participation in risky financial market, and solve the "mystery of limited participation" in China's financial market.

**Keywords:** Allocation of Family Risky Financial Assets, Unemployment Insurance, Instrumental Variable Method, Propensity Score Matching

# Research on the Impact of Financialization of Manufacturing Enterprises on Corporate Innovation Based on Capital Market Cycle

**Chen Yong**

School of Economics and Management, China University of Petroleum, Qingdao, China

**Email address:**

guanghua\_cy@163.com

**Abstract:** Manufacturing industry is the core pillar of the real economy. Based on the hot issue of the current real economy, this paper studies the influence of the financialization of manufacturing enterprises on enterprise R&D and innovation. Theoretically, financialization has "reservoir" and "crowding out" effects on enterprise innovation development, and their relative size determines the net effect of financialization on enterprise innovation. Beyond that, what role does the prosperity of the capital market cycle play? Taking the manufacturing industry as the core pillar of real enterprises, this paper selects the annual data of all listed Chinese A-share manufacturing enterprises from 2007 to 2020, and empirically analyzes the impact of financialization on enterprise innovation and the moderating effect of capital market cycle from the perspective of financial asset holding, and considers the lag effect. In this paper, the bidirectional fixed effect method is used for panel data regression, and the dynamic panel model is introduced and the robustness test is carried out by systematic GMM method. The results show that: (1) financialization inhibits R&D investment of manufacturing firms, indicating that the "crowding out" effect of financialization is greater than the "reservoir" effect. (2) Adding the moderating term of capital market cyclical prosperity, we find that the prosperity of capital market in the previous period will intensify the inhibition effect of corporate financialization on R&D investment in the current period, while the prosperity of capital market in the current period will ease the inhibition effect of corporate financialization on R&D investment in the current period. (3) Through heterogeneity analysis of listed manufacturing enterprises with different financing constraints, property rights and regions, it is found that financialization of enterprises has an overall inhibiting effect on each sub-sample of enterprise innovation. In addition, the previous capital market boom will intensify the inhibition effect of enterprises with weak financing constraints, while the current capital market boom will ease the inhibition effect of enterprises with strong financing constraints. Non-state-owned enterprises are more sensitive to the prosperity of capital market than state-owned enterprises. Compared with other regions, the eastern region is more sensitive to the capital market than other regions, and the adjustment effect is more obvious. The research of this paper provides empirical evidence on the micro level for the impact of financialization on enterprise innovation, and has certain reference value for the government to guide enterprise capital into the channel of innovation under different capital market cycles.

**Keywords:** Financialization of Entity Enterprises, Enterprise Innovation, Capital Market Cycle

# Research on the Influence of Enterprise Sustainable Development and Enterprise Value -- Based on the Moderating Effect of Enterprise Innovation

Li Zeyue

School of Economics and Management, China University of Petroleum (East China), Qingdao, China

**Email address:**

lizeyuee@126.com

**Abstract:** Global warming has become a crisis and challenge faced by all countries in the world. At present, as the micro-subject of the market, the pursuit of high-quality sustainable development has become the new goal and direction of the enterprise, which has also aroused the public's extensive attention to the performance of the enterprise's environment, society and corporate Governance (ESG). This paper takes Shanghai and Shenzhen A-share listed companies from 2010 to 2020 as samples to study the correlation between enterprise sustainable development and enterprise value, and the mediating effect of enterprise innovation between them. The research finds that ESG performance has a significant positive impact on the enterprise value of listed companies. On the one hand, it directly improves the enterprise value; on the other hand, good ESG performance improves the enterprise value by enhancing the innovation level of enterprises. It indicates that good ESG performance of enterprises can significantly improve the value of enterprises, so as to achieve high-quality sustainable development of enterprises. This paper strengthens the understanding between the sustainable development ability of enterprises and enterprise value, guides the government, enterprises and investors to pay attention to and strengthen ESG concept, enables the regulatory authorities to pay attention to relevant policies and regulations, and helps investors to make corresponding investment choices, pointing out a new way for enterprise development.

**Keywords:** Enterprise ESG Performance, Enterprise Value, Enterprise Innovation, Sustainable Development

# Research on the Influence of Self-Service Interactivity on Consumers' Purchase Intention -- Take Vending Machine as an Example

Changsheng Huang, Xin Zhou \*

School of Economics and Management, China University of Petroleum (East China), Qingdao, China

## Email address:

glhcs@126.com (Changsheng Huang), 937843586@qq.com (Xin Zhou)

**Abstract:** In the context of business innovation, with the development of information technology and business intelligence, self-service technologies (SSTs) is increasingly valued by the retail industry. In particular, the normalization of COVID-19 prevention and control and contactless consumption has greatly promoted the application and popularization of self-service technologies. The "self-service" of SSTs is a mark that distinguishes traditional commercial services, and also makes the "interactivity" perceived by consumers become the key to the success or failure of self-service. How to enhance the interactivity of self-service to promote consumers' purchase intention has become a new challenge for retailers. Due to the wide range of application scenarios and large market share of vending machines, this study selects vending machines as a typical representative of self-service. Based on S-O-R theory, technology acceptance model (TAM) and the actual experience, this study defines self-service interactivity as "consumer-machine interaction" and "consumer-merchant interaction", and the two dimensions are divided into four factors: "perceived ease of use", "perceived usefulness", "professionalism" and "entertainment". This study collects data through expert interviews and questionnaires, and uses SPSS 22.0 and AMOS 24.0 to build a structural equation model (SEM) to empirically examine the influence mechanism among self-service interactivity, consumer trust and purchase intention. Finally, The study concluded that: 1) all four factors of self-service interactivity positively affect consumer trust; 2) the "perceived usefulness" and "entertainment" of self-service interactivity positively affect purchase intention; 3) consumer trust positively affects purchase intention; 4) in addition to "perceived usefulness", consumer trust plays a mediating role between self-service interactivity and purchase intention.

**Keywords:** Self-service, Interactivity, Consumer Trust, Purchase Intention

# The Portfolio Performance Comparison and the Optimization Analysis of Robo-advisors in China

**Xi Gao**

College of Economics and Management, China University of Petroleum (East China), Qingdao, China

**Email address:**

365681931@qq.com

**Abstract:** With the development of the macroeconomic environment, the financial needs of Chinese residents continue to increase, and traditional financial channels are difficult to meet. On this occasion, major companies and institutions entered the market to carry out robo-advisors. However, as time passed, this industry entered a bottleneck period. The reason is that poor performance is the most critical factor. Therefore, from the perspective of portfolio management, this article studies the factors affecting robo-advisor portfolio performance, and proposes targeted optimization suggestions. This research mainly uses a combination of qualitative and quantitative analysis methods, in the form of case papers, through the comparison of robo-advisor portfolio performance, analyzes the main factors affecting performance, and then optimizes the combination of these influencing factors. First, based on the perspective of robo-advisors portfolio management, analyze four domestic robo-advisors from four dimensions. Cases, find out the similarities and differences of these robo-advisors, and on this basis, use the backtesting engine as a performance evaluation tool, through the comparison of income and risk indicators, research on key factors affecting robo-advisor performance, and targeted portfolio optimization. The main conclusions of this research are as follows: First, it is found that the four robo-advisors prefer active management strategies, and the rate and cost are higher than the US ETF robo-advisor. The difference is that the asset allocation strategy is quite different, especially in the weight of foreign stock markets and domestic bond markets. Secondly, it is found that the high fee rate of public funds greatly affects the performance of robo-advisors, increasing the weight of foreign stock markets and domestic bond markets, and reducing the weight of the money market will increase the income of robo-advisors. The ability of robo-advisors to match investors' risk appetite is relatively weak. Finally, it was found that the domestic ETF market can meet the needs of robo-advisors asset allocation. The robo-advisors investment portfolio based on domestic index ETFs can significantly reduce the rate and cost while following the concept of passive investment and tracking the market to obtain good returns.

**Keywords:** Robo-advisor, Portfolio Management, Performance Analysis, Backtesting, Portfolio Optimization

# Research on the Influence of Financial Literacy on Family Risk Financial Asset Allocation Under the Background of Digital Inclusive Finance

**Zhao Wenrui**

College of Economics and Management, China University of Petroleum (East China), Qingdao, China

**Email address:**

zwr\_cheer@163.com

**Abstract:** As a new type of financial service, digital inclusive finance has been continuously contacted and integrated with various fields, which has promoted the diversification of financial innovation and increased the participation rate of family financial business. The investment subject based on family is an important subject to promote China's economic growth. Its financial market participation has a significant impact on the level of social and economic development. At the same time, financial literacy is an important factor affecting family investment decision-making. Therefore, under the background of digital Inclusive Finance, this paper discusses the impact of financial literacy on the family risk financial asset allocation and its influence mechanism in China. Based on the data of China Household Finance Survey in 2017, the paper uses the maximum likelihood method of factor analysis to extract the comprehensive indicators of financial literacy, and empirically analyses the impact of financial literacy on the family risk financial asset allocation. And it introduces digital inclusive finance to analyse its moderating effect in the impact of financial literacy on the family risk financial asset allocation. The results show that the higher financial literacy families have, they are more inclined to hold more types of risky financial assets, and the improvement of digital inclusive finance level can promote the allocation of family risk financial assets. Moreover, under the introduction of the moderating effect of digital Inclusive Finance, the higher level of development of digital inclusive finance, the dependence of the allocation of family risk financial assets on financial literacy is greater. In addition, the level of digital inclusive finance is divided into high-level and low-level groups for in-depth research, and the coefficient difference test between groups is carried out through Permutation test. The research shows that the high-level group's financial literacy plays a more significant role in promoting the allocation of family risk financial assets. In order to test whether the above results are robust, the financial literacy index is reconstructed through principal component analysis to measure the level of financial literacy. The conclusion has no substantive change.

**Keywords:** Financial Literacy, Allocation of Family Assets, Risky Financial Assets, Digital Inclusive Financial, Moderating Effect



# The Impact of Narrative Perspective of Product-harm Crisis on Social Media Engagement

**Shiyao Wang**

College of Economics and Management, China University of Petroleum (East China), Qingdao, China

**Email address:**

18937855176@163.com

**Abstract:** Product-harm crisis (PHC) is one in which defective products cause harm to consumers and has a serious negative impact on the company. As social media becomes the main source of information for consumers, the viral amplifies the negative impact faced by companies in PHC. The extent to which consumers engage in an event on social media can be measured by social media engagement. Only by understanding the factors and mechanisms of consumer social media engagement in PHC can corporates take actions to protect themselves from secondary crises on social media. Based on observations on social media, different narrative approaches to the same event may influence engagement, specifically, when a narrative perspective is used to describe a PHC, consumer social media engagement tends to be higher. We propose the mediation driving this effect is narrative transportation theory, which leads to imagination for the event, as well as empathy for the protagonist of the event. Furthermore, empathy and imagination cause higher social media engagement. Corporates strategies can moderate the main effect, which means, via a combination of apologies and remediation, consumer engagement will be weakened. We test our hypotheses through three laboratory experiments, by examining these three processes, our study makes up for the neglect of the role played by the narrative perspective in PHC, which has not been given sufficient attention in previous studies. Meanwhile, this research gives insight into how corporates can exert influence on social media engagement through their strategies, in case of improving brand image and restoring from PHC.

**Keywords:** Narrative Perspective, Product-harm Crisis, Social Media Engagement, Corporate Response Strategies

# Green Finance, Technological Innovation and Economic Growth -- Based on Multi-sector Endogenous Growth Model

**Junfang Deng**

School of Economics and Management, China University of Petroleum, Qingdao, China

**Email address:**

1967946632@qq.com

**Abstract:** The development of green finance is of great significance to promoting the green transformation of China's economy and society and implementing sustainable development strategies. This paper constructs a multi-sector endogenous growth model based on Romer's endogenous growth model, and introduces heterogeneous financial sector, R&D sector, and intermediate product sector. Then we discuss in depth the impact of financial development on economic growth, and further analyze the mechanism between green finance and economic growth through theoretical models. The study finds that: (1) Financial development can promote economic growth through technological innovation and human capital accumulation; (2) Green finance will support the green R&D sector through financial functions such as resource allocation, and will accelerate technological innovation by increasing its output efficiency in the green R&D sector, which will in turn promote economic growth. (3) The interest rate gap between green and traditional financial sectors is positively correlated with economic growth. The larger the gap between the two financial sectors, the stronger the support of green finance to the green industry, the better the green financial sector develops, the faster the technological innovation and the higher the economic growth rate.

**Keywords:** Green Finance, Economic Growth, Technological Innovation, Endogenous Growth Model, Resource Allocation

# The Influence of CEO's Education Background on Corporate Innovation -- Data Verification from Shanghai and Shenzhen A-share Listed Companies

**Yuan Jiangjin**

School of Economics and Management, China University of Petroleum (East China), Qingdao, China

**Email address:**

yuanjiangjin@126.com

**Abstract:** In 2018, General Secretary Xi Jinping pointed out in his report to the 19th National Congress that the national innovation system shall be strengthened. Innovation is an important driving force for China's economic transformation and long-term sustainable growth, and enterprise-oriented innovation is the source of economic growth momentum. Educational background has a significant impact on CEO's expertise and cognitive patterns. As decision makers in business management, is there any difference in the impact of CEOs with economics & management education background on firm innovation compared to CEOs with other backgrounds? Based on higher-order theory and managerial defense theory, this paper investigates the impact of CEO's economics & management education background on corporate R&D behavior in a sample of Chinese listed companies from 2010 to 2020. Compared with firms managed by CEOs with non-managerial education background, this paper finds that CEOs with managerial education background reduce both the intensity and the amount of R&D investment of firms. The inhibitory effect of a CEO's economics & management education background on the intensity of R&D investment is stronger in non-state-owned firms than in state-owned firms. We conclude that CEOs' backgrounds in economics & management education inversely inhibit firms' R&D activities, and this inhibitory effect differs between SOEs and non-SOEs. This paper not only enriches the literature on higher-order theory and corporate innovation, but also has implications for the selection of CEOs of listed companies.

**Keywords:** Economics & Management Education Background, R&D Investment, Property Type

# An Empirical Study on the Impact of Green Bonds on the Green Innovation Capability of Enterprises

**Lang Wei**

School of Economics and Management, China University of Petroleum (East China), Qingdao, China

**Email address:**

1828251661@qq.com

**Abstract:** Based on the number of green patent applications of listed companies and the data of green bond issuance of listed companies, this paper empirically verifies the impact of green bond issuance on enterprises' green innovation ability by constructing a double difference model. This paper focuses on the impact of the issuance of green bonds on the green innovation activities of heavily polluting enterprises. The research shows that the issuance of green bonds can significantly promote the green innovation of enterprises as a whole, but the overall promotion effect for heavily polluting enterprises is not significant. The role played by heavily polluting enterprises in issuing green bonds depends on their own attitude towards green transformation. The issuance of green bonds can significantly promote the green innovation of heavily polluting enterprises that actively fulfill their social responsibilities, while heavily polluting enterprises that bear less social responsibilities do not have an obvious promotion effect. The issuance of green bonds by heavily polluting enterprises is a phenomenon of strategic innovation. The issuance of green bonds can promote the increase of green utility model patent applications, but it does not significantly promote the increase of green invention patent applications. For heavy polluting enterprises with high financing constraints, such as non-state-owned heavy polluting enterprises or heavy polluting enterprises in areas with low financial development, green bonds can significantly promote the development of their green innovation and play an important role in their green transformation.

**Keywords:** Green Bonds, Green Innovation, DID Method

# How Environmental Decentralization Affects Carbon Emission Intensity: Based on the Analysis of Urban Heterogeneity

Wang Jun, Yu Zhiwen\*

School of Economics and Management, China University of Petroleum (East China), Qingdao, China

**Email address:**

yuuuzw@163.com (Yu Zhiwen)

**Abstract:** How does the distribution of environmental management powers between the central government and local governments affect the pattern of carbon emission intensity? Based on the panel data of 284 prefecture-level cities in China from 2005 to 2018, this paper explores the impact of environmental decentralization on urban carbon intensity, and uses the mediation effect model to analyze the mechanism of action. The results show that the impact of environmental decentralization on carbon intensity presents a significant nonlinear "inverted U-shaped" characteristic; the mediating effect analysis shows that environmental decentralization promotes carbon intensity by hindering urban environmental governance and technological progress. In addition, the impact of environmental decentralization differs significantly in different cities. Decentralization of environmental management has a significant effect on the carbon intensity of eastern, central and western cities, and the effect is the strongest in western cities; environmental decentralization significantly increases the carbon intensity of large cities and small and medium-sized cities, but has no obvious effect in megacities; environmental decentralization increases the carbon intensity of resource-based and non-resource-based cities, but the effect is not significant in non-resource-based cities. Therefore, in order to realize the positive role of environmental decentralization in reducing carbon intensity, it is necessary to improve the joint management strategy of central-local multi-level government as soon as possible, promote urban environmental governance and technological progress, and make differentiated division of environmental authority based on the actual situation of the city.

**Keywords:** Environmental Decentralization, Carbon Intensity, Mediating Effect, Urban Heterogeneity

# Visualization Analysis of Domestic Literature on Financial Risks in the Energy Industry

**Junwei Huang**

School of Economics and Management, China University of Petroleum (East China), Qingdao, China

**Email address:**

junweih777@163.com

**Abstract:** Preventing and defusing systemic financial risks has become one of the most important topics in national economic life. Although the academic community has not formed a unified understanding of systemic financial risk, they all agree that systemic financial risk is not only a risk in the financial industry. Previous studies have shown that the real economy is not less important to systemic risks than in the financial industry. Energy industry is an important real industry. The energy industry itself has the strong financial attribute that makes the energy industry and financial institutions more and more closely connected. At the same time, the energy industry, as the upstream industry of the industry chain, is easy to produce financial contagion to the downstream, and in the face of international financial risks, the energy industry is also the weakest resistant. Now that the COVID-19 epidemic is not over, while the war between Russia and Ukraine has cast a shadow over the previously tense international relations. The combination of various factors poses major challenges to national energy and systemic security. At this moment, the analysis of the research related to the energy industry financial risks is of great practical significance. This paper uses the bibliometric software CiteSpace to sort out the relevant researches on the financial risks of the energy industry in the CNKI database. Important authors and institutions in the field and their cooperative relationships are identified, and the development status, research hotspots and frontiers of related research are summarized. Through the cooperation analysis of authors and institutions, it is found that the influential authors are mainly TAN Zhongfu and ZHOU Hao, and the institutions that publish the most papers are North China Electric Power University, Zhejiang University, and Xi'an Jiaotong University. There is no close cooperative relationship between these authors or institutions. Through keyword analysis, it is found that as time progresses, the research hotspots in this field are oil price fluctuation, electricity sales and electricity purchase strategies in the electricity market, oil futures market and related risk assessment, spillover effects and risk management, and possible fronts include topics such as risk spillover networks, time-varying spillovers, and carbon bubbles.

**Keywords:** Energy Industry, Financial Risk, CiteSpace

# The Impact of Green Finance Development on China's Regional Energy Efficiency Under the Background of Carbon Peaking and Carbon Neutrality Goals

**Meiling Liu**

Department of Economics and Management, China University of Petroleum (East China), Qingdao, China

**Email address:**

2256196737@qq.com

**Abstract:** In the process of achieving the goals of "carbon peaking" and "carbon neutrality", developing green finance and improving energy efficiency are important means to achieve energy conservation and emission reduction while ensuring economic growth. On the basis of sorting out the impact mechanism of green finance on regional energy efficiency, this paper takes the panel data of 30 provinces in China from 2011 to 2017 as a sample, uses the entropy weight method to calculate the green finance development index, and uses the non-radial distance function to calculate the regional energy efficiency, and empirically test the impact of green finance development on regional energy efficiency through the Tobit model. The calculation results show that China's green finance development level and regional energy efficiency are both on the rise, but the development is not balanced among regions. Empirical research finds that after using instrumental variables to overcome endogenous problems and conduct a series of robustness tests, the development of green finance can significantly reduce regional energy efficiency. The impact mechanism test shows that the development of green finance improves energy and environmental efficiency by optimizing the industrial structure. Heterogeneity analysis shows that the development of green finance significantly promotes the development of energy efficiency in the eastern and central regions, but inhibits the development of energy efficiency in the western region. This paper provides empirical evidence and policy implications for promoting the development of green finance and formulating policies for energy conservation and emission reduction.

**Keywords:** Green Finance, Energy Efficiency, NDDF Model, Tobit Model

# Travel Mode Choice Behavior Under Dynamic Perception and Cumulative Prospect Theory Based on Bayesian Updating

Li Leiming, Fan Qing\*

School of Economics and Management, China University of Petroleum (East China), Qingdao, China

## Email address:

19920005@upc.edu.cn (Li Leiming), fqinglu@163.com (Fan Qing)

**Abstract:** In recent years, the traffic congestion situation has become increasingly serious with the rise of online car platforms and the increasing number of private cars. As one of the most effective ways to relieve traffic congestion, how to improve the utilization rate of public transportation and relieve traffic congestion is the main problem facing current travel. By studying the travel mode choice behavior of different crowds, this paper is of great significance to realize the behavioral transition from private travel to public travel, increase the public transportation travel rate and improve the current traffic situation. In this paper, we consider the dynamic changes of travel time from day-to-day, and proposed a Bayesian updating model of dynamic perceived travel time to reproduce the dynamic changes of travel time under the influence of travelers' previous travel experience and Advanced Traveler Information System (ATIS). The cumulative prospect value of travel time under uncertainty environment is introduced to replace the traditional utility value, as well as a Mixed Logit travel choice model based on travel time and other decision variables is established to analyze the travel choice behavior of different crowds and the change of traveler behavior in different contexts by considering the demographic heterogeneity. This paper simulates the actual travel contexts by designing travel experiments in different travel scenarios, and obtains the dynamic perceived travel time model of travelers as well as the Mixed Logit travel choice model in uncertain environments. The experimental results show that heterogeneity in travel choice behavior is more obvious when the travel scenario change, and the shift of travel choice is influenced by the change of travel prospect, while ATIS plays an important role in this shift, and in achieving the shift from other modes of travel to public transportation travel behavior, the public travel system needs to make corresponding adjustments for different crowds and different travel contexts.

**Keywords:** Travel Mode Choice, Dynamic Perception, Bayesian Updating, Adaptive Expectation, Cumulative Prospect Theory, Mixed Logit Model, Travel Experiments



# A Study on the Effect of Advertising Repetition on Advertising Attitudes in Repetitive Advertisement

**Hao Dong**

School of Economics and Management, China University of Petroleum (East China), Qingdao, China

**Email address:**

d.upc@foxmail.com

**Abstract:** Repetitive advertising refers to a form of advertising in which an advertising work is repeated multiple times and continuously launched through a specific carrier in each round. In recent years, with the development of the new media industry, advertisements based on new media have more intensive exposure frequency and shorter exposure time, and repetitive advertisements are gradually favored by advertisers because of their "brainwashing" advertising content, more and more advertisers tend to use repetitive advertising formats to replace other types of advertising formats. Existing studies have shown that a modest increase in the number of repetitions of a single advertisement can lead to higher consumer memory and advertising effectiveness. Therefore, it is of great significance to explore the advertising effect of repetitive advertisements at different levels of repetition of a single advertisement. This paper conducts an empirical study through a 3×2 experimental design (number of repetitions of a single advertisement × whether it is a repetitive advertisement) to explore the effects of advertisement type and number of repetitions of a single advertisement on processing fluency and advertising effect, and distinguish advertising effect as advertising effect. Attitude, brand attitude and purchase intention are three dimensions. The results show that the advertising effect of repetitive advertisements is significantly higher than that of non-repetitive advertisements at the low and medium repetition levels of a single advertisement, while the opposite conclusion is drawn at the high repetition level; with the increase of the number of single advertisement repetitions, different types of advertisements have a trend of increasing first and then decreasing; processing fluency is the mediating variable between advertisement effect and repetition times.

**Keywords:** Repetitive Advertisement, Processing Fluency, Advertising Repetition, Advertising Performance

# Research on the Evaluation System of Intelligent Electric Vehicle Competitiveness Under the Background of Carbon Neutrality

Qifan Xue

School of Economics and Management, China University of Petroleum (East China), Qingdao, China

**Email address:**

475543306@qq.com

**Abstract:** 2021 is considered to be the first year of carbon neutrality, a series of environmental problems caused by climate degradation have had a serious impact on the world, governments continue to adjust low-carbon policies to control and reduce carbon emissions, "30, 60" double carbon targets proposed, indicating that China is now very proactive to seize the opportunity of carbon emission reduction. The automotive industry is the largest industrial industry, with a long industrial chain and strong driving force, and it is also a key part of achieving the goal of carbon neutrality. With the rapid promotion of the development of smart cars in terms of policies, environment, and industry, smart electric vehicles are gradually accepted by consumers. Since 2019, the sales of smart electric vehicles have shown explosive growth, some cities have introduced policies to support the development of intelligent electric vehicles, and given extremely high subsidies, and some developed provinces in China have put the cancellation of fuel vehicle license plates on the agenda. Smart electric vehicles have a great tendency to replace fuel vehicles in terms of policy support and market trends. At the same time, almost all traditional auto giants have begun to electrify the transformation, stepping up the launch of electric vehicle models, the global sales ranking TOP20 vehicle companies (2020 total sales of 90% of global sales), of which 18 have announced their electrification strategy, 2022 smart electric vehicle brand offensive and defensive battle has entered a white-hot stage. This paper will analyze the current competitive pattern of domestic intelligent electric vehicle brands by constructing an evaluation index system for the competitiveness of intelligent electric vehicles, and provide certain reference significance and theoretical basis for the automobile industry that is undergoing transformation and upgrading like electrification and intelligence.

**Keywords:** Carbon Neutrality, Intelligent Electric Vehicles, Competitiveness Evaluation, Industrial Transformation

# Economic and Social Considerations of Long-term Care Insurance Policy in China: Taking Jinjiang as an Example

Min Chen<sup>1,2,\*</sup>, Yucen Weng<sup>1,2</sup>

<sup>1</sup>Health Research Institute, Fujian Medical University, Fuzhou, China

<sup>2</sup>Fujian Medical Reform Research Association, Fuzhou, China

## Email address:

minchen@fjmu.edu.cn (Min Chen), yucenw@outlook.com (Yucen Weng)

**Abstract:** In the 21st century, aging and the risk of disability in the elderly are not just problems that a particular country needs to face, but a social risk that is globally facing. Countries around the world have actively advanced the construction of long-term care policy systems to provide assistance for the caring services of the disabled elderly. Based on the pilot experience of long-term care insurance (LTCI) in Jinjiang, Fujian, China, this paper explores and reflects on current economic and social considerations on the practice of LTCI policy in China and look forward to its future development direction. After introducing the policy background, the paper firstly explains the choice and importance of the case. As to an LTCI pilot project, Jinjiang has improved the personalized governance scheme, including the collective batch and gradual participation mode, the financing mechanism of classified collection and mutual assistance, the management mechanism of independent operation and fixed expenditure based on income, and the treatment enjoyment mechanism covering all residents and all age groups. Secondly, it discusses the economic problems encountered in the construction of the system, including financing, pricing and caring services allocation, as well as the trial solutions in Jinjiang. Thirdly, taking Jinjiang as a representative, the paper expounds on the benefits of the implementation of long-term insurance from social and economic profitabilities. Finally, it summarizes that the current LTCI practice is still conservative. The main goal is to explore the "socialization" path of LTCI financing mode on the basis of ensuring that the risk to the medical insurance fund is minimized and the financial burden is affordable. It suggests that the market take the initiative to form the price system and try to avoid improper government intervention. For social welfare public service projects, the average level and cost of service provision should be listed as the main reference basis for pricing. Also, more suitable service content which adjusts to disability level and care needs should be established.

**Keywords:** Long-term Care Insurance, Disabled Elderly, China, Jinjiang

# Predicting Stock Prices Using Stacking-based Ensemble Learning and Seasonal and Trend Decomposition Using Loess

**Chenhao Wu**

School of Journalism and Communication, Wuhan University, Wuhan, China

**Email address:**

863687885@qq.com

**Abstract:** With the development of the economy and the increasing awareness of people to invest in their own assets, stocks have become the most common way for people to manage their money. However, stocks also have strong risk and uncertainty. The emergence of artificial intelligence techniques has contributed to improving the stock forecast stability, so the stock market forecasting through artificial intelligence, in particular, machine learning algorithms has become a popular research area. In this study, a hyper-parametric stacking-based ensemble learning model based on seasonal and trend decomposition using Loess (SEL-STL) is proposed. Firstly, the normalized preprocessing is performed on the raw data. Then, the preprocessed data is decomposed by means of seasonal and trend decomposition using Loess (STL). Subsequently, the Bayesian optimization algorithm is employed to optimize the hyper-parameters of the base prediction models. After that, the SEL-STL model is obtained by combining the competitive base prediction models using the stacking-based ensemble learning method. Finally, the SEL-STL model is improved by further optimizing its performance using the adaptive boosting. In the experiments, the datasets with three different stock exchange indices are used to evaluate the performance of the proposed model in stock price prediction. The experimental results show that the proposed model outperforms the other baseline prediction models in solving the stock price prediction problem.

**Keywords:** Seasonal and Trend Decomposition Using Loess, Stacking-based Ensemble Learning, Bayesian Optimization, Adaptive Boosting, Stock Price Prediction

# Hot Topics and Frontier of the Healthcare Leadership from Bibliographic Analysis

Qin Xiaoping<sup>1</sup>, Fan Zixuan<sup>2</sup>, Zhao Jinhong<sup>2</sup>, Szewei Wang<sup>3</sup>, Huang Yuni<sup>4</sup>, Liu Tingfang<sup>2</sup>, Wang Binglong<sup>2,\*</sup>

<sup>1</sup>School of Public Health, The University of Sydney, Sydney, Australia

<sup>2</sup>School of Health Policy and Management, Chinese Academy of Medical Sciences & Peking Union Medical College, Beijing, China

<sup>3</sup>Affiliation Program of Data Analytics and Business Computing, Stern School of Business, New York University, New York City, United States of America

<sup>4</sup>National Taiwan University, College of Public Health, Taipei, China

## Email address:

wangbinglong@sph.pumc.edu.cn (Wang Binglong)

**Abstract:** The objective of the study is to explore the status and trends in healthcare leadership management by using bibliometric visual analysis. The study conducted the Web of Science database for literature published from 1900 to October 2021 and generated high-frequency keywords and keyword clustering. The frequency of publications by author, institution and country was developed to identify healthcare industry leaders with significant influence. Finally, the distribution of core journals and significant literature in the field was determined through journal and literature co-citation networks. The study included a total of 6869 articles related to healthcare leadership management, with a steady increase in the number of articles published each year since the first article was published in 1974. An overview of the development of the industry shows that most of the literature and research has come from developed countries such as the US, UK, and Canada. Developing countries such as Kenya, UAE, and Turkey have gradually become active in recent years. However, the leading research institutions are still dominated by North American universities such as the University of Toronto, University of Washington, and Harvard University. Model and performance of leadership is a hot research topic in healthcare leadership management. In the early years of the industry (1974-1992), "Health care" was the only burst keyword, reflecting the relatively homogeneous nature of the research. After 1992, healthcare leadership management research was dominated by the keywords "Cost", "Physician", and "Reform" and remained popular for more than ten years. The hotspots were replaced by "Complexity", "Turnover intention", and "Moderating role" until recently. In conclusion: Although there are certain gaps in healthcare leadership research among countries, healthcare leadership management research has gradually become an international healthcare management research hotspot from the beginning in developed countries, and the exploration of research perspectives has gradually diversified and complicated. Academically, the historical trajectory and future focus of research on healthcare leadership management can be identified from this study.

**Keywords:** Leadership, Healthcare, Bibliographic Analysis

# Research on the Influence of Household Financial Risk Asset Allocation on Consumption Upgrading

Huang Xinying, Feng Qi

School of Economics and Management, China University of Petroleum, Qingdao, China

**Email address:**

912655133@qq.com (Feng Qi)

**Abstract:** Taking the cross-sectional data of the 2018 China Family Panel Studies (CFPS) as a sample, the proportion of household financial risk assets in total household financial assets is defined as the investment ratio of financial risk assets, and the household consumption is structurally divided into survival, development and enjoyment consumption, and the impact of financial risk asset investment ratio on household consumption upgrading is empirically studied. The results show that the increase in the investment ratio of financial risk assets will significantly promote household consumption expenditure and have the greatest positive impact on enjoyable consumption. In addition, the positive impact of the increase in the ratio of investment in financial risk assets on high-income households and urban households on enjoyment-oriented consumption is greater than that of low-income households and rural households.

**Keywords:** Household Finance, Venture Asset, Consumption Upgrades





Science Publishing Group (SciencePG), an open access publisher with experienced and eminent reviewers and editorial board members, is mainly attaching importance to developing journals, books and conferences which have owned unique characters respectively. Here is the website of SciencePG: <http://www.sciencepublishinggroup.com>

ISBN 978-194036697-5

