

## **ENVIRONMENTAL RISK, REPUTATIONAL RISK, AND LEGAL RISK AS DETERMINANTS OF THE PERFORMANCE OF MANUFACTURING COMPANIES IN NIGERIA**

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### **Abstract**

*Most manufacturing firms focus on how to improve their effectiveness and pay less attention to the possible risks that can affect their profitability. The impact of environmental, reputational and legal risks on the performance of manufacturing firms was examined in this paper. An exploratory research design was used by the researcher. The population of this study is 305 senior staff from 10 manufacturing companies in Lagos state's Ikorodu Metropolis. The Logit Binary regression model was used to test the study's hypotheses. This model is thought to be suitable because it can predict the impact of independent variables on dependent variables. According to the findings of*

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*this study, environmental risk, reputational risk, and legal risk all have a negative significant impact on the performance of manufacturing firms. This study recommended that manufacturing company management give greater attention to their environmental, reputational, and legal risks by making sure that such risks are properly managed with the help of Enterprise Risk Management Tools and by offering valuable intelligence into their entire organization with Data-Driven Decision Making. Manufacturing firms should use Optimised Heat Maps and Charts to distinguish, analyze, and assess Environmental Risk, Reputational Risk, and Legal Risk in order to avoid or minimize such risks.*

**Keywords:** *environmental risk; reputational risk; legal risk, performance of manufacturing companies.*

**JEL Classification:** M11

### Introduction

Industries all over the world are subjected to various risks, including environmental risk, reputational risk, and legal risk, and this has a significant impact on their performance (AliBaba & VazirZanjani, 2021). The likelihood of a detrimental event occurring is defined as risk. The ambiguity that engulfs upcoming events and outcomes is referred to as risk. It expresses the probability and consequence of an event that has the potential to impact a firm's attainment of goals (Bhimani, 2020). Risk can be defined as a state in which there is a possibility of loss but also a possibility of gain (Boekestein, 2021). Based on the goal and point of view of a discussion, the concept of risk can also be described and explained in a variety of ways. According to Chapman and Ward (2021), a risk is a doubt associated with damage or loss. They imply that something that is indeterminate does not have to be risky; nevertheless, if an event is both vague and involves a loss, it can be classified as a risk. According to Essinger and Rosen (2021), risk is defined as "the possibility of unwelcome, adverse consequences to human life, health, property, or the environment." Because one would never risk a loss if there was no chance of winning, to realize the existence of a risk, one must be aware of both the gains and losses incurred and therefore a risk can be reflected as individual and relative to observer (Francis & Armstrong, 2019). All these definitions seek to make

known that risk is to be seen as part of daily life, and the presence of risk in any environment should not be a problem but the focus should be on how those risks are being managed and in turn minimizing their potential effect.

Risk management on the other hand deals with the process of identifying and controlling potential risks that can be faced by an organization. Risk management is about identifying the risk to be managed, risk to leave unattended and risk that need to be hedged. Risk management is recognized in today's business world as an integral part of good management practice. In its broadest sense, it entails the systematic use of management policies, procedures and practices to the tasks of identifying, analysing, assessing, treating and monitoring risk. Risk management refers to a practice of identifying loss exposures faced by an organization and selecting the most appropriate procedures for treating these particular spotlights effectively (Gordon, Loeb, & Tseng, 2019). Risk management is the identification, assessment, and prioritization of risks followed by coordinated and economical application of resources to mitigate, monitor, and control the probability and/or impact of unfortunate events or to maximize the realization of opportunities (Gupta, 2018).

Effective risk management can bring far payoffs to the company irrespective of what type it is. These paybacks include, superior financial performance, better basis for strategy setting, improved service delivery, better competitive advantage, less time spent firefighting and fewer unwanted surprises, increased likelihood of change initiative being achieved, closer internal focus on doing the right things properly, more efficient use of resources, reduced waste and fraud, and better value for money, improved innovation and better management of contingent and maintenance activities (Gupta, 2018). Risk management in manufacturing sector is about the categories and types of risks that can be opened to companies in the manufacturing industries and the approach which the companies adopt in managing those risks. The ways and manners which companies adopt in managing their risks can have either of positive or negative effect on their performance. Here are some of the risks that manufacturing companies can be exposed to; environmental risk, reputational risk, and illegal risk. Some factors that may cause companies to face various unpredictable risks are environmental complexity (Hoyt & Liebenberg, 2020), intense competition,

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advanced technology, development of information and communication technology, new methods of supplying goods and services, environmental issues and companies' movement from tangible to intangible assets. As a result, companies are faced with several risk management issues including enterprise risk management, business risk management and strategic risk management (Luo, 2017).

Currently, risk management is regarded as one of the most important concerns of executives and the risk management activities are expanding. However, regarding the peripheral effects and applications of risk management, few empirical researches have been done up until now (2021). In other words, despite rapid growth in importance of the topic, few applied studies have been done to determine whether environmental risk, reputational risk, and legal risk has practically undesirable effects on the firm's performance.

On the other hand, due to the conceptual complexities of risk management and variation in methods of controlling adverse effects of losses, the previous few attempts that have been made failed to offer a comprehensive and integrated framework. Risk management has several advantages. It inspires strong stimulus in company's major stockholders to increase their investments in the company. By increasing their investments such investors invest in company's specific assets. These assets are regarded as tools that provide better business opportunities toward obtaining proper and long-lasting competitive advantage. Therefore, it is concluded that lack of effective environmental risk, reputational risk, and legal risk management may lead to imposition of extra costs on both investor and investee and thereafter affects their performances.

### Research Objectives

The primary purpose of this paper is to examine the effect of environmental risk, reputational risk, and legal risk on the performance of manufacturing companies in Nigeria. The specific objectives are to:

1. determine the extent at which environmental risk impact the performance of manufacturing firms.
2. Examine the extent at which reputational risk influence manufacturing firms performance.
3. ascertain how legal risk influence manufacturing firms performance.

## Literature Review

### Risk

Risk in finance refers to the likelihood that actual outcomes will differ from predicted outcomes. Risk is described as the volatility of returns in the Capital Asset Pricing Model (CAPM). The "risk and return" concept holds that riskier investments should have higher expected returns to reimburse investors for the increased volatility (Mua, GangPengb, & Douglas, 2019).

### Types of Risk

As indicated by ParvizRad (2012), there are two types of risk: systematic risk and unsystematic risk. Systematic risk is an investment's market unpredictability, which means that it symbolizes external factors that affect all (or several) businesses in a sector or group. Unsystematic risk refers to asset-specific unpredictability that can influence an investment's effectiveness.

The following are the most vital types of risk to take into account when assessing investment options for a financial analyst:

### Environmental Risk

This is known as the risk that a particular business venture or activity will cause destruction to the surrounding natural environment. For example, if oil reserves were discovered in a national park, there would be the environmental risk that exploiting the reserves might harm or destroy some of the park's wildlife. While environmental risk implies some moral or at least reputational risk, it also carries economic consequences. A company with environmental risk often has to pay fees for exemptions from certain policies, and it is usually responsible for cleaning up the environment in case it causes a slow or sudden disaster (Shiller, 2021).

### Environmental Risk Management

Environmental risk management (ERM) helps to ensure that environmental risk is contained to acceptable levels, and ideally should be applied to all aspects of a mining operation in a structured process to ensure that all relevant issues are addressed. Criteria and objectives for risk assessment should be established during the planning stage. Results of monitoring should be fed into the risk assessment process to identify and reduce emerging problems as soon as possible. As ERM encompasses the entire

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mine iproject, imultiple iskills iare ineeded iand isufficient iresources imust ibe made iavailable ito ido ithe ijob ieffectively. iThe iresults iof ithe irisk ianalysis must ibe icommunicated ieffectively ithrough ithe icloud isystem, iand irisk management irecommendations ishould ibe iimplemented ipromptly ifor ithe iERM process ito isucceed(Maginn, iTuttle, iMcLeavey, i& iPinto, i2017).

### Reputational iRisk

This type of irisk istrikes iwwithout iwarning iand ishifts iyour icorporate landscape. iEven iworse, iit iinjects ian iunfavourable inarrative iinto iyour isearch results iwwhich iaffects icustomer iopinions iand iimpacts irevenue. iThere iare countless statistics about online reputation ithat isupport ithis iconclusion. iWe commissioned ia istudy iby iForrester iConsulting ito ifind iout iwwhat iexecutives at large ibrands ithink iabout iSEO iand ireputation(Elosegui, i2003).

Reputation irisk iis ievolving. iIt's ia istrategic iconcern ibecause iit iis connected ito iand imagnified iby iother ibusiness irisks. iAccording ito ia irecent DTTL isurvey, iReputational Risk, ithe imost iprevalent idrivers iof ireputation risk are irisks irelated ito iethics iand iintegrity, iphysical iand icyber isecurity, iand products iand iservices. iThird-party irelationship irisk iis ialso irapidly iemerging, as icompanies iare iincreasingly ibeing iheld iaccountable ifor ithe iactions iof vendors, ibrokers, iand isimilar iassociates. iSo ias ithose irisks iproliferate, reputation irisk iheightens ias iwwell.

Reputation irisk ikeeps ibusiness ileaders iup iat inight ibecause iit's ia imeta risk. iIt ican ioriginate iand ispread ifrom iinside iand ioutside ithe iorganization, at an ialarming ispeed. iThe iexecutives iinterviewed iin ithe iglobal isurvey expressed ithe iinherent ichallenges iin ithis isituation. iFor iexample, iperceptions can ivary ifrom igeography ito igeography, iso ian iissue ior ievent imay inot ipose a ithreat iin ione ilocale, ibut imay itrigger ia iworldwide imedia ifrenzy iin another iwith ivery ireal iconsequence ito ireputation (Jovanovic, i2015).

Adding ito ithe iconcern iis ithat isome iof ithe se irisks iare ibeyond ithe company's idirect icontrol. iRespondents ito ithe isurvey iwere iless iconfident about imanaging irisks ifrom ithird-party/extended ienterprise iissues, icompetitive attacks, iand ihazards ior iother icatastrophes ithan iabout imanaging irisks ithey can icontrol iinternally, isuch ias ithose irelated ito iregulatory icompliance ior employee imisconduct.



### Legal iRisk

Legal irisk iis ithe ilikelihood iof ifinancial ior ireputational iloss iresulting from a ilack iof iknowledge i(or imisunderstanding) iof ihow ithe ilaw iapplies ito iyour business, ior ioperating iwith ia ireckless iindifference ito ithe ilaw iand ihow iit applies (Mas-Colell, iWhinston, i& iGreen, i2019).

Legal irisk iw as idefined ias ipart iof ioperational risk iby ithe iBasel II accord in i2003. iIt iincludes ithe irisk iof ifinancial ior ireputational iloss iresulting ifrom any itype iof ilegal iissue. iThis icould iinclude ia ilack iof iawareness ior misunderstanding iof ithe iway ilaws iand iregulations iapply ito ia ibusiness. iBut companies ican itake iaction ito ireduce ithis irisk. iSo, ifor iexample, ia corporation imay irequire iall iits iemployees ito iundergo ihealth iand isafety training iin iorder ito ireduce iits ilegal irisk ifrom icompensation iclaims(Den i& Haan, i2019).

One iof ithe iprimary ireasons iw hy ilegal irisk iis iassociated iw ith ioperational risk iinvolves ifraud isince iit iis irecognized ias ithe imost isignificant icategory iof operational iloss ievents iand iconsidered ito ibe ia ilegal iissue ias iw ell. iThese, however, ido inot imean ithat ilegal irisk iis ionly iconfined ito ithis conceptualization ibecause iit iis idefined iin imore ithan iway. iFor iinstance, there are ispecific isets iof ilegal irisks ithat iare idefined iby ithe iEuropean Union (EU) Law. iIn i2005, ithe iEuropean Central Manufacturing companies ideclared ithat iit will idevelop iits iown ilegal irisk idefinition ito ihelp i"facilitate iproper irisk assessment iand irisk imanagement, ias iw ell ias iensure ia iconsistent iapproach between iEU icredit iinstitutions(Krusell i& iSmith, i2018).

### Risk iManagement iand iPerformance iof iManufacturing iCompanies

Adebisi i(2021) investigate ithe iconnection iof iethics ito irisk imanagement. They iargue ithat ithere iare icompelling ireasons ifor igood iethical ipractice ito be an iessential ipart iof irisk imanagement. iThey idiscuss ithat iexploring ithe relationship iof iethics iand irisk imanagement ihas isignificant icommercial outcomes. iNot ionly ithose ioutcomes ihelp ito iidentify ipotential iproblems, ibut they ialso ihelp ipreventing ifraud, ipreserving icorporate ireputation, iand ito mitigate ilitigation iagainst icompany iw hich ilead ito iincreased ilegitimacy. Likewise, iBhimani i(2021) isay ithat irisk imanagement ileads ito ihigher corporate ilegitimacy.

Using ia isample iof iChinese ifirms, iMua i(2021) iexamine ithe ieffect iof irisk management istrategy iover iperformance iof inew iproduct idevelopment. iThey

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find that risk management strategies that focus on technological, organizational, and marketing factors, individually and interactively improve the performance of new product development.

Gordon and Keni (2020) examine the relation of enterprise risk management (ERM) and performance. They argue that the relation of enterprise risk management and performance is contingent upon five firm-specific factors namely, environmental uncertainty, industry competition, firm complexity, firm size, and board of directors' monitoring. Finally, they argue that for implementing ERM firms should pay attention to the contextual variables that are surrounding the firm.

Andersen (2020) examines the firm-specific investment rationale as a plausible explanation for positive risk management effects. As a consequence of the firm-specific investment rationale, he finds that effective risk management outcomes are associated with superior corporate performance. Further, he indicates that firms that vary in levels of intellectual capital and investment in innovation also differ in their risk management effects.

Likewise, Gupta (2021) examines risk management in Indian companies and explores the reasons for the adoption or lack of adoption of an integrated approach to risk management. He shows that even though effective risk management can improve organizational performance, companies do not have adequate infrastructure to implement enterprise-wide risk management. He concludes that a sea change in risk perception is required to build up a risk culture across business segments and incentivize risk management adoption.

Risk management is an effective technique for minimizing undesirable effects of risks and optimizing the benefits of risky situations (Cohen & Kaimenakis, 2017). Manuel (2018) describes the aim of risk management as a process enhancement that is established through systematic identification, evaluation and mitigation of project risks. According to these definitions, risk management is defined as measures that are taken to decrease the potential risky consequences of specific phenomena, namely price variation, accidents, political hazards, disruption in supply of raw material, economic development, etc. Such risks represent a wide spectrum of a company's risks that are dealt with by various specialists. In other words, effective risk management deals with market risks that the company is facing and tries to take advantage of business opportunities that these risks might have. It is an effective tool of contending with external market threats that are out of management control and result in reduction of profit variances (Milost, 2017).



The tools and facilities that management uses to face external market threats are financial hedging, insurance contracts, management control systems, transportation of resources and careful decisions that are made to improve company's profitability. All of the aforementioned movements are made to reduce adversity of situations that the company might face with.

To cover environmental risk, reputational risk and legal risk, companies do risk management through derivatives via using insurance coverage and through examining integrative risk management approaches. In addition, in comparison with past risk management motivations, and historical financial obligations, there is higher tendency to risk management now. Indeed, it is obvious that company's accountability depends to its ability to utilize the new opportunities that are derived from changes in environment (Boekestein, 2021).

### Methodology

The researcher made use of an exploratory research design. The study population is employees of manufacturing firms in Ikorodu Area of Lagos state. A research questionnaire was utilized as an instrument for collection of data. The instrument was adequately subjected to reliability and validity test. The simple random sampling was used as sampling technique for this study which is targeted towards giving every respondent an equal opportunity of being selected. For the purpose of this study, Taro Yamane was utilized to determine the sample size.

$$ss = \frac{N}{(1 + N(e)^2)}$$

$$ss = \frac{305}{(1 + 305(0.05)^2)}$$

ss = 171.

The sample size for this study is the 171 respondents.

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### Reliability of the Research Instruments

**Table 1. Reliability Test Result**  
**Reliability Statistics**

Cronbach's Alpha	N of Items
.721	171

Source: SPSS 25.0 OUTPUT

The result of the reliability test in table 1 shows that Cronbach Alpha for all the items in the questionnaire is reliable. This means that the questionnaire is reliable enough for further research.

**Table 2. Kaiser-Meyer-Olkin (KMO) and Barlett's test of Sphericity**

#### KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.741
Approx. Chi-Square		3241.144
Bartlett's Test of Sphericity	Df	171
	Sig.	.000

Source: SPSS 25.0 output

This study conducted the KMO and Barlett's test of Sphericity. The KMO determines the sampling adequacy which should be close to 1.0 for a satisfactory factor analysis to proceed. Kaiser (1974) recommends 0.5 (value for KMO) as minimum (barely accepted), values between 0.7-0.8 acceptable, and values above 0.9 are superb. The table 4 shows that the value of KMO measure for the questionnaire is .6151 which is greater than 0.5 and therefore accepted that the sample was adequate.

From table 2, the test is significant (0.001) which infers that correlation matrix is not an identity matrix.

**Method of Data Analysis**

The hypothesis was tested using Logit Binary regression model. The Formula for Logit Binary regression model:

$$L = \ln \left[ \frac{Pl}{1 - Pl} \right] = \beta_0 X_t$$

Where:

L i= iLogit iRegression

ln i= iLog

Pi i= iEnvironmental iRisk, iReputational iRisk, iLegal iRisk,

1 i- iP i i= iEnvironmental iRisk, iReputational iRisk, iLegal iRisk,

$\beta$  i= iBeta

X i= iPerformance iof iManufacturing iCompanies.

Statistical iPackage ifor iSocial iSciences iSoftware i(SPSS) iversion i25 iwas used ifor ithe idata ianalysis.

**Data Presentation, Analysis and Interpretation**

Questionnaires were administered to respondents, out of the 171 questionnaires that was administered, 151 copies were filled correctly and returned.

**Data Analysis**

**Table 3. Model Summary**

Step	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
1	-44.124 <sup>a</sup>	.887	.754

Source: SPSS 25 Output

Table 3 shows that there is about 89% correlation between the performance of Environmental Risk, Reputation Risk, Legal Risk and the performance of manufacturing companies. This implies that poor management of these risk has about 89% chances of affecting the performance of manufacturing companies either positively or otherwise. This is also confirmed by the Nagelkerke R Square value of 75%.

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**Table 4. Variables in the Equation**

	B	S.E.	Wald	df	Sig.	Exp(B)
Environmental Risk	-4.141	3.212	2.211	4	.007	55.111
Reputational Risk	-5.141	3.221	3.321	4	.001	12.214
Legal Risk	-6.251	2.011	6.341	4	.000	1.214
Constant	5.141	22.117	5.141	4	.001	2.321

a. Variable(s) entered on step 1

Source: SPSS 25 Output

Table 4 revealed that Environmental Risk; Reputational Risk; and Legal Risk has a negative significant effect on the performance of manufacturing companies. Consequently, the Beta value of -4.141 (as shown in Table 4) simply means that Environmental Risk accounts for a unit effect of -4.141, Reputational Risk has a unit effect of -5.141, Legal Risk accounts for a negative effect of -6.251. The p-value (.007, .001, .000, and .001) is less than the significant level of 0.05. The result in Table 4 shows that the p-value is less than the level of significance of 0.05. Therefore, Environmental Risk; Reputational Risk; and Legal Risk has a negative significant effect on the performance of manufacturing companies.

### Conclusion

Bad management of Environmental, Reputational and Legal Risks may lead to the total collapse of a manufacturing firm. It was concluded in this study that all the risk factors (Environmental, Reputational and Legal Risks) negatively significantly affect the performance of manufacturing firms.

### Recommendations

Manufacturing firms' managers should give more attention to environmental, reputational, and legal risks, making sure that these risks are addressed with Enterprise Risk Management Techniques and giving valuable intelligence into their entire organization with Data-Driven Decision Making. These firms should use Optimal operational Heat Maps and Graphs to classify, analyze, and assess Environmental Risk, Reputational Risk, and Legal Risk in order to avoid or completely eradicate such risks.

## References

- [1] Adebisi, O. (2021). Ethics and risk management. *International Journal of Risk Management*, 74(12), 174 - 189.
- [2] AliBaba, M., & VazirZanjani, H. (2021). Risk Management; an innovative approach to improve effectiveness. *Sci. Edu. J. Manage., Tadbir monthly Journal*, 4(3), 50 - 62.
- [3] Andersen, M. (2020). The firm-specific investment rationale as a plausible explanation for positive risk management effects. *Journal of Accounting and Finance Management*, 18(7), 122 - 137.
- [4] Andersen, T. (2017). The Performance Relationship of Effective Risk Management: Exploring the Firm-Specific Investment Rationale. *Long Range Planning*, 47(5), 155 - 176.
- [5] Baldwin, J., & Li, Z. (2012). Impediments to advanced technology adoption for Canadian manufacturers. *Research Policy*, 8(5), 1 - 18.
- [6] Bhimani, A. (2020). Risk management, corporate governance and management accounting: Emerging interdependencies. *Management Accounting Research*, 11(5), 174 - 189.
- [7] Bhimani, O. (2021). Risk management leads to higher corporate legitimacy. *Journal of Management Sciences*, 144(27), 147 - 157.
- [8] Boeckstein, B. (2021). The relation between intellectual capital and intangible assets of pharmaceutical companies. *Journal of Intellectual Capital*, 9(4), 241 - 253.
- [9] Chapman, C., & Ward, S. (2021, April 4). *Project Risk Management - Processes, Techniques and Insights*. Retrieved from Project-Risk-Management-Processes: [www.amazon.co.uk/Project-Risk-Management-Processes](http://www.amazon.co.uk/Project-Risk-Management-Processes)
- [10] Chen, J., & Xie, Y. (2017). Measuring intellectual capital: A new model and empirical study. *Journal of Intellectual Capital*, 10(5), 85 - 100.
- [11] Cohen, S., & Kaimenakis, N. (2017). Intellectual capital and corporate performance in knowledge-intensive SMEs. *The Learning Organization*, 14(3), 241 - 262.
- [12] Den, T., & Haan, W. (2019). Comparison of Solutions to the Incomplete Markets Model with Aggregate Uncertainty. *Journal of Economics Dynamics and Control*, 79(19), 4 - 27.
- [13] Elosegui, P. L. (2003). Aggregate Risk, Credit Rationing, and Capital Accumulation. *Quarterly Journal of Economics and Finance*, 43(4), 668 - 696.
- [14] Essinger, J., & Rosen, J. (2021, April 4). *Using Technology for Risk Management*. Retrieved from Technology for Risk Management: [www.jisc.ac.uk/uploaded\\_documents/risk\\_assessment\\_guidance.doc](http://www.jisc.ac.uk/uploaded_documents/risk_assessment_guidance.doc).
- [15] Francis, R., & Armstrong, A. (2019). Ethics as a Risk Management Strategy. *The Australian Journal of Business Ethics*, 5(4), 74 - 91.
- [16] Gordon, E., & Ken, T. (2020). The relation of enterprise risk management (ERM) and performance. *International Journal of Management*, 6(2), 127 - 133.
- [17] Gordon, L., Loeb, M., & Tseng, C. (2019). Enterprise risk management and firm performance: A contingency perspective. *Journal of Accounting and Public Policy*, 10(6), 241 - 265.

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- [18] Gupta, I. (2021). Risk management in Indian companies and the reasons for the adoption or lack of adoption of integrated approach to risk management. *Integrated Journal of Social Sciences*, 48(7), 166 - 179.
- [19] Gupta, P. (2018). Risk management in Indian companies: EWRM concerns and issues. *Journal of Risk Finance*, 12(2), 121 - 138.
- [20] Hoyt, R., & Liebenberg, A. (2020). The Value of Enterprise Risk Management: Evidence from the U.S. *Working Paper, Mississippi University of Mississippi*, 12(7), 144 - 155.
- [21] Jovanovic, B. (2015). Micro Shocks and Aggregate Risk. *Quarterly Journal of Economics*, 102(2), 395 - 410.
- [22] Krusell, P., & Smith, J. (2018). Income and Wealth Heterogeneity in the Macroeconomy. *Journal of Political Economy*, 111(12), 867 - 896.
- [23] Luo, Y. (2017). Environment-Strategy-Performance Relations in Small Businesses in China: A Case of Township and Village Enterprises in Southern China. *Journal of Small Business Management*, 38(7), 14 - 29.
- [24] Maginn, J., Tuttle, D., McLeavey, D., & Pinto, J. (2017). *Managing Investment Portfolios: A Dynamic Process*. New Jersey: John Wiley & Sons.
- [25] Manuel, E. (2018). Innovation and Risk Management. *Working paper*, 12(4), 22 - 39.
- [26] Mas-Colell, A., Whinston, M., & Green, J. (2019). *Microeconomic Theory*. New York: Oxford University Press.
- [27] Milost, F. (2017). A dynamic monetary model for evaluating employees. *Journal of Intellectual Capital*, 18(2), 124 - 138.
- [28] Mua, J., GangPengb, H., & Douglas, L. M. (2019). Effect of risk management strategy on NPD performance. *Technovation Journal*, 26(7), 47 - 66.
- [29] Mua, O. (2021). The effect of risk management strategy over performance of new product development. *Journal of Strategic Management*, 177(19), 174 - 188.
- [30] ParvizRad, P. (2012). From performance measurement to performance management. *3rd International Conference on Performance Management*, 9(3), 34 - 46.
- [31] Shiller, R. (2021). Aggregate Income Risks and Hedging Mechanisms. *Quarterly Review of Economics and Finance*, 35(2), 119 - 152.
- [32] Tehran, U., & Wang, H. R. (2019). Risk Reduction through Acquisitions: The Roles of Firm-Specific Investments and Agency Hazards. *Advances in Mergers & Acquisitions*, 5(4), 25 - 49.
- [33] White, L., & Frame, W. (2014). *Emerging Competition and Risk-Taking Incentives at Fannie Mae and Freddie Mac*. New York: New York University - Leonard.
- [34] Woods, M. (2016). A contingency theory perspective on the risk management control system within Birmingham City Council. *Management Accounting Research*, 4(2), 69 - 81.