

Readability of Annual Reports and the Agency Problem of Corporation in the Context of Pakistan

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Abstract

This study is conducted to investigate the issue of readability of the annual report, which caused the conflict between the shareholders and the management. Annual reports are the integral source of information for the shareholders regarding their investment. The most important thing here is the readability of the financial statements. Moreover, as the decisions of investors based on the financial information stated in the financial statements so the reliability of the financial is another important aspect. To explore this important aspect, this study is an effort to facilitate the investors to do their investment decisions, especially in developing countries like Pakistan. It is a fact that the Pakistani majority of the investors are not from the financial background and to understand and readability of the financial statements is all the time issue for them. To investigate the importance of the readability, we took the data of 21 non-financial companies which are in the KSE-30 index of Pakistan for the 10 years (2008-2017). The findings of our results depict that those firms whose annual report is more readable as compare to other facing low problem of the conflict between the shareholders and the management. Further results of this study indicate that under the better quality measures, relevant audit increases the readability of the annual report, which reduces the agency cost.

Keywords

Financial Reports, Shareholders, Integral Source and Pakistan

Received: May 23, 2019 / Accepted: June 13, 2019 / Published online: June 25, 2019

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1. Introduction

Readability is the main characteristics of any message which help out the readers to grab the actual sense of information which the sender wants to deliver. Bundle of researches have been already conducted on the readability into different fields like in law, military and medicine [1]. In the capital market, the readability is the major concern for the investors for taking investment decisions. Annual reports are the major source of providing the information to shareholders regarding the joint stock company. Many minority shareholders and outsider investors extract the information of financial position, cash flows and performance from the annual report of the joint stock company. On the other side, the joint-stock companies are injecting non-financial information in the

annual reports, which results in the discontinuity in the readability for shareholders, which affect the communication process. In Pakistan, the trend is building to maximise the annual report length, which causes the problems of readability for the investor because they faced discontinuity and not attention to grab the actual financial information. Many other types of research are already done on the readability effect on the information quality available in the financial statements. Maximum researches are conducted in English speaking countries, but in Pakistan native language is in Urdu, but companies financial reports are in English. This issue generates a more readability issue from a lengthy financial reports. For the effectiveness of the financial reports concerning empowering the outsider shareholders are giving them useful information regarding the financial performance of the joint stock company. In terms, they can get to know the

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management aptitude and the performance of the management.

In this research paper, we want to point out that the readability issue generates the agency cost problem. Agency cost occurred due to the management and the stakeholder conflict. Higher the conflict then higher the agency cost. Further, in this research paper, we discover that under the better governance measures, the conflict between the shareholders and the management can be reduced. This study contains the well governance measure as the quality of external auditors.

This study consists of 21 non-financial companies which are listed in the KSE-30 index. The time frame of the study lies from 2008 to 2017.

2. Literature Review

Luo, Li et al. have researched on how the readability of the annual report cause the agency problem between the management and the stakeholder in concerning China. The finding of their study depicts that the Organization who has better readability reduce the agency problem and on the other hand those companies who have the poor readability generate the issue between the management of the organisation and shareholders of the organisation [2].

You and Zhang have done their studies to discover how the readability issue affects the decisions of the shareholders. They discovered that the firms which are involved in hiding the information in different reports of the annual report have negatively affected the economically decisions for achieving their goals of stakeholders [3].

An organisation who are involved in the manipulation of the earning depict the few less readability information in their annual report for misleading the shareholders [4].

Nelson and Pritchard found that the organisations who have more chances of facing more risk for legal actions from the shareholders present their disclosure more readable as compare to those companies who have less chance of filling suits from the shareholders [5].

Ertugrul, Lei et al. have researched the readability of the annual report in the context of the ambiguity. They discovered those annual reports whose file size is greater than 10-Ks show the maximum risk of fall the share prices [6]. They also point-out that readability and vague issues of annual reports for the stakeholders are done on behalf of the management desire.

Different words which are represented by the management in the disclosure of the annual report effectively influence the communication between the stock market and the

organization. This vagueness of the words in the disclosures easily mislead the stakeholder [7].

Tan, Wang et al have conducted the experimental research on the judgment of the investors and how this judgment of investor effect from the readability of the annual report. They suggested that effective and well readability enhance the judgment process of the stakeholders regarding their future decisions of investment [8].

Further finding related to the readability depict that if the disclosure of the companies do not provide the information well and reliable than the shareholder emphasise on the information which they receive from the outside of the company [9].

Kim, Kim et al found in their research that the readability issues of the annual report also harm the value of the firm. The readability issue relevant to the disclosure of the annual report caused the lack of trust in the management of the firm. Finally, the lack of trust leads to less investment into the company, which ultimately led to a decrease in the value of the firm [10].

Lang and Stice-Lawrence have researched the Non-America companies with a very big sample. The findings of their research represent that by refining the information concerning disclosures of the annual report of the firms plays a positive role for the firms [11].

Bonsall and Miller have discovered through their research that readability issues of the annual reports affect the rating regarding the Bond Agencies. Their results show that companies which have the issues of readability of annual report suffer from the low rating given by the Bond Agencies [1].

Biddle, Hilary et al have identified in their research that there is a positive relationship exist between the efficient investment of corporation concerning the better readability. They depict better, and understandable readability of the annual reports helped the firm to overcome the issue of more and less investment [12].

De Franco, Hope et al have emphasised on the forecast analysis regarding the readability of the firm. Their finding revealed that the effective readability of the annual report reduces the expenses which occurred on the collection of the information and further it also influences the volume of the trading stock [13].

Ben-Amar and Belgacem have researched the big firms which are listed in the stock exchange of Toronto in the context of the readability of the disclosures and the firms which are socially responsible. The findings of the research are depicted that the multifaceted and complex information of the text represented in the social performance report has a positive relationship with the social performance of society [14].

3. Research Gap

This study is directed to examine the effectiveness of readability of the Annual Report incorporation to reduce the agency cost under the better measures of the corporate governance concerning the context of Pakistan.

3.1. Research Questions

Do more readability helpful for minimising the cost of agency in the corporation?

Do the readability helpful for minimising the cost of agency in the corporation under the better corporate measure as Quality of the audit into the firm?

3.2. Research Objective

To investigate that the more readability decreases the conflict between the management and the shareholders because more readable annual reports help the shareholders for better decision making.

3.4. Conceptual Frame Work

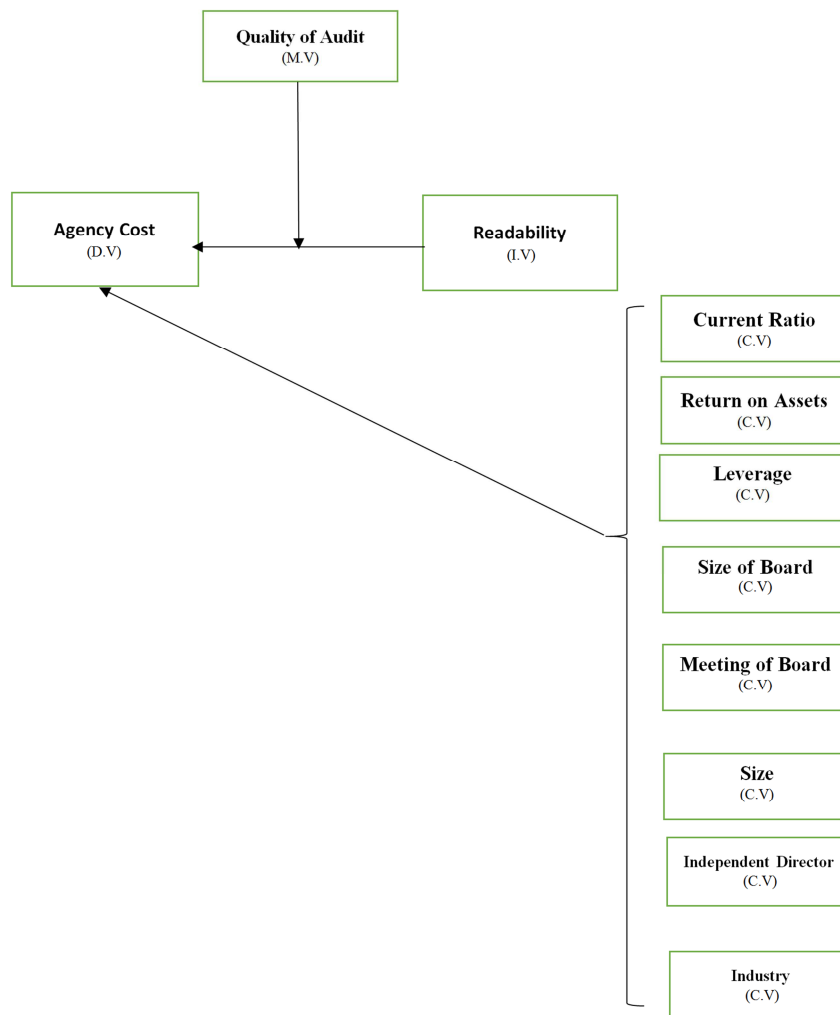


Figure 1. Conceptual Frame Work Author Propose.

To examine that the more readability under the better quality control of audit decrease the conflict between the management and the shareholders because more readable annual reports help the shareholders for better decision making.

3.3. Theoretical Frame

Different studies have been conducted on better corporate governance to enhance the performance of the company. Many types of research have suggested different measures that company management should adopt to enhance the efficiency and performance of the organisation. Corporate governance if done well it eliminates the issues between the shareholders and the management of the corporation. Better measures are taken for only the purpose of corporation improvement reduce the agency cost. Agency theory depicts that the organisation suffer situations badly when there are conflicts created between the management and the shareholders.

3.5. Hypothesis

On behalf of fame work as conceptual, we construct our hypothesis.

H1: Readability of the annual reports help to reduce the agency cost

H2: Readability of the annual reports more help to reduce the agency cost under the quality of audit.

3.6. Research Methodology

The research paradigm of this study concerning ontology. The secondary data is collected for this research. In our study, we do get into the experiment, so our study is relying on the concept of objectivity concerning epistemology.

Overall companies of Pakistan which are listed in the Pakistan Stock Exchange are the population of our study.

For this study, we choose the KSE-30 index non-financial companies. There are 24 non-financial companies in the Pakistan Stock Exchange according to the date of 30-June-2018. Only 21 corporations meet the criteria regarding the availability of data for this research.

The period consists from 2008 to 2017 for this research.

3.7. Sampling Technique

In this study, we opted the Convenience Based sampling technique regarding choosing the non-financial firms which are listed in the Pakistan Stock Exchange.

3.8. Source of Data

For this study, secondary data is gathered from the annual reports of the listed companies in the Pakistan Stock Exchange.

3.9. Observations

For conduct, the analysis, the total observations consist of 210.

4. Statistical Analysis

Panel regression is done on the data by checking fixed and the random effect and then by using the HAUSMAN test, we opted in between panel regression through fixed or random.

4.1. Measurement of the Variables

Table 1 represents how the variables of this study are measured.

Table 1. Variable Measurement.

Variable	Descriptuon and Measurement
Agency Cost	The ratio of the addition of administrative expenses and selling expense to the sales (Luo, Li et al. 2018)
Readability	Reciprocal of the natural log of the pages of the Annual Report
Audit Quality	Top four audit firms in the world (Luo, Li et al. 2018)
Board Independence	Independent directors divided by total numbers of directors
Board Size	Natural log of total directors present in a specific board
Board meetings	Natural log of the number of board meetings conducted in a year
Leverage	Total liability to total assets
Return on Assets	Net Income to the total assets
Current Ratio	The proportion of the current assets to current liability
Size	Natural log of total assets
Industry	Using the Dummy Variable for the industry

4.2. Results and Discussion

The results and discussion of this research is done on behalf of the descriptive and inferential

4.3. Descriptive Statistics

Table 2 is representing the value of the maximum, minimum, mean and stander deviation of 210 observations of each variable of this study.

Table 2. Descriptive Statistics.

Variable	Observation	Mean	STD	Minimum	Maximum
AGENCOST	210	0.072167	0.087371	0.002366	0.459756
ROA	210	0.096941	0.092812	-0.08099	0.405
LEV	210	0.547717	0.343617	0.024082	4.213462
SIZE	210	24.7464	1.143662	21.5547	27.16467
INDBOARD	210	0.267303	0.235119	0	1
BOARDMEE	210	1.84297	0.354491	1.098612	3.178054
BOARDSIZE	210	2.24549	0.288875	1.791759	3.091043
READ	210	0.199701	0.016317	0.168495	0.279055

Variable	Observation	Mean	STD	Minimum	Maximum
INDUSTRY	210	4.333333	3.249341	1	10
AUDITQUAL	210	0.761905	0.426935	0	1
CR	210	1.690228	1.109675	0.5	6.67

4.4. Correlation Matrix

Table 3 shows the correlation among the variables,

Table 3. Correlation Matrix.

	AGENCOST	ROA	LEV	SIZE	INDBOARD	BOARDMEE	BOARDSIZE	READ	INDUSTRY	AUDITQUAL	CR
AGENCOST	1.00										
ROA	0.00	1.00									
LEV	-0.03	-0.23	1.00								
SIZE	-0.40	-0.09	0.06	1.00							
INDBOARD	-0.03	0.21	-0.11	0.28	1.00						
BOARDMEE	-0.15	-0.04	0.11	0.48	0.29	1.00					
BOARDSIZE	0.10	-0.01	0.24	0.29	0.42	0.30	1.00				
READ	0.04	-0.06	0.00	-0.28	0.02	-0.22	-0.06	1.00			
INDUSTRY	-0.02	-0.08	-0.07	-0.68	-0.36	-0.38	-0.19	0.16	1.00		
AUDITQUAL	-0.15	-0.02	0.12	0.16	0.22	0.10	0.27	-0.10	-0.18	1.00	
CR	-0.09	0.41	-0.44	0.20	0.23	0.12	-0.14	-0.15	-0.11	-0.21	1.00

The value of the correlation among the independent variables is very low, which represent that there is no issue of the multi-collinearity among the independent variables.

4.5. VIF Matrix

The following table shows the VIF results

Table 4. VIF Test Results.

Variable	VIF
SIZE	2.49
INDUSTRY	2.12
CR	1.81
INDBOARD	1.63
BOARDSIZE	1.53
BOARDMEE	1.42
ROA	1.38
LEV	1.36
AUDITQUAL	1.2
READ	1.15

Table 4 of VIF depicting that there is no issue of multicollinearity because all the values of VIF are less than 5 (Cohen, Cohen et al. 2003).

4.6. Regression Analysis

Model: 1

$$AGENCOST = \beta_1(INDBOARD) + \beta_2(ROA) + \beta_3(LEV) + \beta_4(SIZE) + \beta_5(C.A) + \beta_6(BOARDSIZE) + \beta_7(BOARDMEE) + \beta_8(READ) + C + \epsilon$$

According to the equation in our model AGENCOST is using as the dependent variable, the READ as the independent variable and further ROA, CR, LEV, BOSIZE, INDBOARD and BOME.

Table 5. GLS Regression (Random Effects) Results in AGENCOST as Dependent.

R-squared: 0.4407			
Wald chi = 157.59 (0.000)			
Variables	Coefficient	Std. Error	Prob.
ROA	-0.1793927	0.0583565	0.002
CR	0.0112304	0.0054363	0.039
SIZE	-0.0738846	0.0063705	0.000
INDBOARD	-0.0497946	0.024708	0.044
BOARDMEE	-0.0100383	0.0154989	0.517
BOARDSIZE	0.1083457	0.0196589	0.000
LEV	-0.0251239	0.0156716	0.109
READ	-0.5181454	0.3019138	0.086
INDUSTRY	-0.0178684	0.0020688	0.000
Constant	1.882138	0.1772544	0.000

Table 6. GLS Regression (Fixed Effects) Results.

R-squared: 0.4318			
F-test = 19.54 (0.000)			
Variables	Coefficient	Std. Error	Prob.
ROA	-0.1864279	0.0577184	0.001
CR	0.0108142	0.0053963	0.046
SIZE	-0.0807487	0.00659	0
INDBOARD	-0.0390981	0.0252108	0.123
BOARDMEE	-0.0104791	0.0154372	0.498
BOARDSIZE	0.1087146	0.0197689	0
LEV	-0.0250085	0.0158987	0.117
READ	-0.0709565	0.322558	0.826
INDUSTRY	-0.0196312	0.0020929	0
Constant	1.968782	0.1771224	0

Table 7. Hausman Test Results.

Chi-square	Probability
14.71	0.0992

Penal regression is applied to the model both through fixed and the random effect, and then we calculated the Hausman test to identify which is better to apply rather random or fixed. Chi-square probability of our test is insignificant (Above that

0.05) which indicate that random test is better for our study. The Wald Chi-square value is significant, which indicate that our model is good for the analysis. Further, the R-Square value of the random effect is 0.447, which indicate that the variation in agency cost is explained by 44.7% by our variables of the model. The probability value of the random effect is significant concerning Readability, which indicates that Readability of the annual report affects the agency costs in the scenario of Pakistan.

The finding of this research depicts that the readability of the annual report significantly negatively impact on the agency cost. So we reject our Null hypothesis and accept our alternate hypothesis # 1, which indicate that readability of annual report reduces the agency cost. The coefficient of the Readability regarding annual report showing the negative relation with agency cost.

The negative sign is showing that that corporation whose annual report readability is high leads to removing the conflict between the management and the shareholder. Higher readability helps the shareholders for getting relevant information from the reports conveniently. Our result is supported by the other researches which were done in the past like [2, 3, 6].

Model 2:

$$READ = \beta_1(INDBOARD) + \beta_2(ROA) + \beta_3(LEV) + \beta_4(SIZE) + \beta_5(C.A) + \beta_6(BOSIZE) + \beta_7(BOME) + \beta_8(READ)*AUDITQUAL + C + \epsilon$$

According to the equation in our model READ is using as the dependent variable, Quality of the Audit is taken as moderator and further ROE, CR, LEV, BOSIZE, INDBOARD and BOME.

Table 8. GLS Regression (Random Effects) Results READ as Dependent.

R-squared: 0.4610			
Wald chi = 171.04 (0.000)			
Variables	Coefficient	Std. Error	Prob.
ROA	-0.1639216	0.0571599	0.004
CR	0.007815	0.0054702	0.153
SIZE	-0.071104	0.0061625	0
INDBOARD	-0.0412775	0.0244174	0.091
BOARDMEE	-0.0089341	0.0151192	0.555
BOARDSIZE	0.1164625	0.0194211	0.000
LEV	-0.0258421	0.0153872	0.093
READ*AUDITQUAL	-0.1869483	0.0574843	0.001
INDUSTRY	-0.018112	0.0020328	0.001
Constant	1.72135	0.1481862	0.000

Table 9. GLS Regression (Fixed Effects) Results.

R-squared: 0.4578			
F-test = 21.81 (0.000)			
Variables	Coefficient	Std. Error	Prob.
ROA	-0.1778097	0.056118	0.002
CR	0.0067847	0.00539	0.21
SIZE	-0.0798158	0.006414	0

R-squared: 0.4578			
F-test = 21.81 (0.000)			
Variables	Coefficient	Std. Error	Prob.
INDBOARD	-0.0247035	0.024893	0.322
BOARDMEE	-0.0119852	0.014946	0.424
BOARDSIZE	0.1156711	0.019355	0
LEV	-0.025689	0.015465	0.098
READ*AUDITQUAL	-0.1838203	0.05618	0.001
INDUSTRY	-0.0199492	0.002034	0
Constant	1.950396	0.156273	0

Table 10. Hausman Test Results.

Chi-square	Probability
31.08	0.0003

Penal regression is applied to the model both through fixed and the random effect, and then we calculated the Hausman test to identify which is better to apply rather random or fixed. Chi-square probability of our test is significant, which indicate that random test is better for our study. Chi-square probability of our test is insignificant (Below than 0.05) which indicate that Fixed test is better for our study. The F-statistics value is greater than 4, and the probability is significant, which indicate that our model is fit. The probability value of the fixed effect is significant concerning Readability under the moderation of the quality of the audit which indicates that Readability of the annual report affects the agency costs under the better Audit of the companies in the scenario of Pakistan. Further, after applying the moderation of Audit quality, the R-Square value of the model also increased, and readability becomes significantly more at 1%.

The finding of this research depicts that the readability of the annual report significantly negatively impact on the agency cost. So we reject our Null hypothesis and accept our alternate hypothesis # 1, which indicate that readability of annual report under the better audit control reduces the agency cost. The coefficient of the Readability concerning audit quality regarding annual report showing the negative relation with agency cost. The negative sign is showing that if Audit is done from the top auditing firms in the world of the corporation, their annual report readability increased which remove the conflict between the management and the shareholders. The same result is obtained by the [2].

4.7. Robust Result

To verify our above result, we apply the regression on our basic model by taking Robust standard errors (Table 11) the findings of our above results same through panel regression using fixed or random effect.

The R-square value of the model is 44.07% that indicates that 44% variation in our Agency Cost dependent variable is explained by our independent variables. The f-stat value is also greater than 4, which means that our model is fit. In

Roubusted result Readability of annual report also significant with the negative sign, which means higher the readability

eliminate the agency problems among the shareholders and the management.

Table 11. Regression Results (Fixed Effect).

R-squared: 0.4407				
F-test = 12.62 (0.000)				
Variables	Robust Std. Err.	Coefficient	t-Value	Prob.
ROE	-0.17939	0.051861	-3.46	0.001
CR	0.01123	0.003954	2.84	0.005
SIZE	-0.07388	0.008272	-8.93	0
INDBOARD	-0.04979	0.034917	-1.43	0.155
BOARDMEE	-0.01004	0.014928	-0.67	0.502
BOARDSIZE	0.108346	0.026011	4.17	0
LEV	-0.02512	0.011562	-2.17	0.031
READ	-0.51815	0.217294	-2.38	0.018
INDUSTRY	-0.01787	0.002887	-6.19	0
Constant	1.882138	0.208738	9.02	0

5. Conclusion

The findings of our results suggested that those annual reports which have greater readability as compare to others minimise the cost of an agency. The negative sign of readability indicates that those companies whose annual reports are more readable reduce the conflict between the shareholders and management. So, better readability reduces the agency problem. More readability of the annual reports helps the shareholders to extract the relevant information regarding the investment decisions other than those annual reports which have less readability.

Further, the results indicate that under the better quality of Audit of the corporation accounts enhance the readability of the annual report, which helps the shareholders for extracting the specific information more easily for their investment. Additional to check the reliability of our result, we get the robust results of our model. The finding of robust results indicate the same results, which also indicate that more readability of annual reports minimising the conflict between the management and shareholders. Many organisation incorporated the irrelevant information in the annual report, which causes the distraction for the shareholders, and they cannot get the relevant information. So Readability of the annual report should be more because in Pakistan, English is the second language and majority annual reports in English. So readability of the annual report should high to avoid the conflict between the shareholders and the management.

Research Implication

The findings of our research suggested the SECP (Security Exchange Commission of Pakistan) take steps to enhance the readability by restricting the corporations not incorporate the irrelevant information into the annual report. The annual report is the major source of information for the shareholder,

which help them to take financial decisions. So, the corporation should not provide irrelevant information in the annual report because irrelevant information distracted the shareholders, and this raises the issue of the agency problem.

Limitation

Our Sample for this research consists of the 21 companies for 10 years

We do not take the Financial analysts as the moderator because of the unavailability of the data in Pakistan

Future Research

In future research, the readability impact can also find out on the investment done by the shareholder

Further moderation of variables can also be checked in future research regarding the family or non-family firms, financial analysts, etc.

References

- [1] Bonsall IV, S. B., Leone, A. J., Miller, B. P., & Rennekamp, K. (2017). A plain English measure of financial reporting readability. *Journal of Accounting and Economics*, 63 (2-3), 329-357.
- [2] Luo, J. H., Li, X., & Chen, H. (2018). Annual report readability and corporate agency costs. *China Journal of accounting research*, 11 (3), 187-212.
- [3] You, H. and X. Zhang. (2009). Financial Reporting Complexity and Investor Underreaction to 10-K Information. *Review of Accounting Studies*, 14, 559-586.
- [4] Ajina, A., Laouiti, M., & Msolli, B. (2016). Guiding through the Fog: Does annual report readability reveal earnings management?. *Research in International Business and Finance*, 38, 509-516.
- [5] Nelson, K. K., & Pritchard, A. C. (2007). Litigation risk and voluntary disclosure: The use of meaningful cautionary language.

- [6] Ertugrul, M., Lei, J., Qiu, J., & Wan, C. (2017). Annual report readability, tone ambiguity, and the cost of borrowing. *Journal of Financial and Quantitative Analysis*, 52 (2), 811-836.
- [7] Loughran, T., & McDonald, B. (2014). Measuring readability in financial disclosures. *The Journal of Finance*, 69 (4), 1643-1671.
- [8] TAN, H. T., Ying Wang, E., & Zhou, B. O. (2014). When the use of positive language backfires: The joint effect of tone, readability, and investor sophistication on earnings judgments. *Journal of Accounting Research*, 52 (1), 273-302.
- [9] Asay, H. S., Elliott, W. B., & Rennekamp, K. (2016). Disclosure readability and the sensitivity of investors' valuation judgments to outside information. *The Accounting Review*, 92 (4), 1-25.
- [10] Yang, W. S., Park, B. W., Jung, E. H., Jeon, N. J., Kim, Y. C., Lee, D. U.,...& Seok, S. I. (2017). Iodide management in formamidinium-lead-halide-based perovskite layers for efficient solar cells. *Science*, 356 (6345), 1376-1379.
- [11] Lang, M., & Stice-Lawrence, L. (2015). Textual analysis and international financial reporting: Large sample evidence. *Journal of Accounting and Economics*, 60 (2-3), 110-135.
- [12] Biddle, G. C., Hilary, G., & Verdi, R. S. (2009). How does financial reporting quality relate to investment efficiency? *Journal of accounting and economics*, 48 (2-3), 112-131.
- [13] De Franco, G., Hope, O. K., Vyas, D., & Zhou, Y. (2015). Analyst report readability. *Contemporary Accounting Research*, 32 (1), 76-104.
- [14] Ben-Amar, W., & Belgacem, I. (2018). Do socially responsible firms provide more readable disclosures in annual reports?. *Corporate Social Responsibility and Environmental Management*, 25 (5), 1009-1018.