

AN EMPIRICAL STUDY ON THE INFLUENCES OF ACCOUNTING POLICIES, ORGANIZATIONAL CLIMATE, AND FINANCIAL REPORTING DISCLOSURES ON THE PERFORMANCE OF NON-FINANCIAL LISTED COMPANIES

Victoria BOGDAN, Dorina Nicoleta POPA, Mărioara BELENEȘI

Department of Finance and Accounting, Faculty of Economic Sciences, University of Oradea, Oradea, Romania

victoria.bogdan10@gmail.com,

dlezeu@uoradea.ro

marioarabelenesi@gmail.com

Abstract: *This paper seeks to analyze the impact of disclosures on managers' characteristics, business climate information, and key accounting policy variables on financial performance. Data were extracted from the annual reports of the non-financial listed companies on the Bucharest Stock Exchange. Fifty-seven companies from eight industries have been investigated over five years. The least-squares method for panel data (Panel Least Squares) was used in estimating eight models that proved to be valid for the Fisher test. The findings showed that a high level of disclosure of information about managers increases performance. In contrast, the increased disclosure of business climate information and the average degree of internal control is leading to lower company performance. From the analysis of key accounting policy variables, the estimated models showed that the overall level of provisions has a significant positive influence on the performance of the companies. In two models also the estimates of decommissioning costs of tangible assets have a significant positive impact on performance. A significant negative impact on performance is exerted by uncertainties in recognition, accounting valuation, or presentation of assets, judgments, and assumptions on contingencies, litigation risks, and R&D innovation costs. The existence of the audit report and the type of auditor do not significantly influence the performance of the examined companies. However, the existence of the corporate governance report is significantly and positively impacting financial performance.*

Keywords: *disclosure, financial performance, managers, business climate, accounting policies, listed companies*

JEL Classification: M41, M21, C12

1. Introduction

The interest of researchers, as well as practitioners in recent decades in the study of factors influencing the performance of companies, has increased significantly due to the concerns of managers in the direction of streamlining strategies for optimizing performance measurement indicators. Studies conducted by Quayes and Hasan (2014), Pavlopoulos et al. (2019), Sari et al. (2020), Wang et al.

(2020), Escamilla-Solano et al. (2021), Liu et al. (2021), Ali et al. (2021), Thuy et al. (2021), Abdi et al. (2022) showed that increasing the disclosure degree and transparency of information in companies' annual reports influences performance indicators. It depends on the company's management team how much attention pay to these disclosure practices. Also, they choose specific accounting policies that are advantageous for the company's financial reporting (Odo Onyemaechi and Isamade Burabari 2021, Onipe et al., 2015). Therefore, financial position and performance depend significantly on accounting policies and estimates made (Sacer et al., 2016).

Our approach consisted of an empirical study on a sample of non-financial companies listed on the Bucharest Stock Exchange (BSE), for five consecutive years which aims to examine the influence of the disclosure degree of information on managers' characteristics, business climate, and accounting policy variables on the aggregate indicator (composite index) for measuring financial performance determined by Multivariate Principal Component Analysis (MPCA), based on panel data. The remainder of this paper contains a brief literature review on the topic followed by a description of the used methodology, continued by the section dedicated to the description of the obtained results, and in the end findings, limits and further research paths can be found.

2. Literature Review

Abdi et al. (2022) in their study conducted on airlines companies shows that involvement in social and environmental actions leads to an increase in financial performance. The governance initiatives in exchange lead to the growth of the firm's market-to-book ratio. In the relationship between these two dependent variables and ESG, the firm size has a moderating role, while the firm age was not found to be a significant moderator for this sample. To assess the performance of Nigerian listed oil and gas companies, Mohammed Sani (2018) investigates the volume of social and environmental (ES) disclosure, before and after the introduction of the requirements to publish this information. Findings revealed that the volume of disclosures has increased in the last years, the extent of disclosures on environmental information is higher than social, and corporate size has a positive and significant effect on disclosure. With a focus only on environmental disclosure, Wang et al. (2020) tracks the behavior of Chinese listed companies along five years and finds that environmental disclosures directly and positively impact financial performance. Based on GRI Standards in quantifying the main independent variable, Thuy et al. (2021) investigate the possible link between corporate social responsibility (CSR) disclosure and financial performance. Based on data obtained from 225 companies in Vietnam, over five consecutive years, the authors showed that CSR disclosure has a positive impact on financial performance, and financial statement comparability has a mediating effect on this relationship.

From the perspective of the usefulness of integrated reporting (IR), Bernardi and Stark (2018) note that with the introduction of IR in South Africa, the levels of ESG disclosures and, in particular, the levels of environmental disclosure, are associated with the analyst forecasts accuracy. Pavlopoulos et al. (2019) examined the IR disclosure behavior of listed companies in 25 countries, from 2011 to 2015,

to identify any link between the quality of IR and a firm's market valuation. Their results proved a positive association between the two variables. Abnormal stock returns being positively associated with earnings quality are also the effects of more effective use of IR. Similar to Pavlopoulos et al. (2019), but on Chinese companies, Sun et al. (2022) noted that IR higher disclosures on six types of capital lead to a greater firm value. Also, in terms of corporate water disclosure, Ali et al. (2021) anchors their study on water issues and the achievement of SDG 6 and analyze the effect of corporate disclosures on the financial performance of electric utility companies. Results showed that to increase EPS, companies in the sector should disclose more on resource reduction policy and water efficiency. Following the objective of SDG 5, Escamilla-Solano et al. (2021) aim to analyze the impact of gender equality disclosures on the profitability of Spanish-listed companies. From content analysis of the CSR reports examined from 2016 to 2018, and the panel data analysis it can be noted the importance of gender equality policies implementation and disclosures on accounting business performance. The positive impact on asset return (ROA) and return on equity (ROE) encourage managers to reduce inequality and disclose these initiatives as a source of competitive advantage.

Similar to Ali et al. (2021) a study on FR quality was conducted by Liu et al. (2021), on Chinese listed companies. Through regression analysis, the authors obtain evidence that water disclosures can significantly improve the quality of FR. Companies that have constantly disclosed water information have recorded increased social focus and corporate transparency. Water disclosures reduce the level of financing constraints and mitigate the costs of debt. Quayes and Hasan (2014) examined the link between financial disclosures and performance. Their analysis conducted on microfinance institutions in 75 countries shows that better disclosure has a statistically significant positive impact on operational performance. Environmental management accounting practices have a positive impact on organizational performance, according to the study done by Sari et al. (2020) based on the responses obtained from management accountants of large manufacturing companies. By questionnaires and thematic interviews analysis, Badulescu et al. (2021) argued that the development of accounting practices brings a new contribution to the performance of companies, and in the view of Domil et al. (2019) the existence of accounting policy manual directly, positively and significantly influences the performance of the accounting information system. Odo Onyemaechi and Isamade Burabari in their article published in 2021, appreciate that disclosures on inventories accounting policies and disclosures of receivables significantly affect ROA. From the perspective of management accounting practices' influence on business performance, Otieno et al. (2021) from data collected questionnaires and applying multiple linear regression analysis, found that internal control practices lead to a higher level of performance. Among the accounting practices analyzed on SMEs, Balagobei (2020) shows that a significant positive influence on organizational performance has the budgeting practices.

3. Methodology

Following previous works (Bogdan et al. 2017a, Bogdan et al. 2017b), this paper aims to assess the impact of managers' characteristics disclosures, business

climate, and key variables of accounting policy on the level of performance of selected companies. Performance was measured based on the construction of an aggregate indicator, the performance index. The analysis is performed on panel data using Eviews 9.5.

The study takes into analysis fifty-seven companies listed on the Bucharest Stock Exchange from eight sectors of activity, in five consecutive years and uses the following independent variables:

- ✓ the average degree of managers' characteristics information disclosure ($di_managers$);
- ✓ the average degree of disclosure on business climate information ($di_business_climate$);
- ✓ the average degree of internal control disclosures ($di_control_intern$) is determined as an average score based on the level of presentation of information disclosed related to management control, budgetary control, controlling, and internal audit;
- ✓ the key accounting policy variables are determined based on the principal component analysis (PCA): total provisions; uncertainties regarding the recognition, accounting valuation, and presentation of assets, debts, contracts but also cloud accounting system; estimates of decommissioning costs of property, plant, and equipment (provisions for decommissioning); contingency judgments and assumptions (assets and contingent liabilities); litigation risks; research and development costs, innovation, and creativity. Accounting policy variables have been transformed using percentile rank to create the same unit of measurement as the companies' performance index;
- ✓ auditor type (Big4 or others) as a binary variable that takes the value of 1 if the auditor is one of the companies in the Big4, 0 for others;
- ✓ the existence of the audit report is a polyichothomic variable that takes the values 0 if there is no audit report, 1 if it is prepared and signed by others outside the Big4, and 2 if the audit report is prepared and signed by one of the Big4 audit company;
- ✓ the existence of the corporate governance report is a polyichothomic variable that takes the values 0 if there is no governance report, 1 if there is only one (for example, the corporate governance report), and 2 if there is more than one published report on governance issues;
- ✓ the branch of activity is a polyichothomic variable that takes values from 1 to 8 for the eight sectors of activity included in the analysis.

To exemplify the methodology followed, we present below the examined issues in the case of the variable business climate and the statistical correlations analyzed. Therefore, to determine the average disclosure degree of business climate information for the investigated period, the aim was to highlight the issues related to financial reporting and regulatory framework (IFRS, National Securities Commission, and other specific regulations), express reporting and communication requirements for certain industries (eg. segment reporting), external environmental factors of competitive pressure (performance, time, environmental and social responsibility, volunteering, patronage), customer satisfaction, organizational culture, limited resources (time, staff, budget, other restrictions), other external factors that may generate pressure to change the culture of the organization

(political, cultural, socio-educational, religious and others). Thus, the closer the average disclosure degree is to 3, the higher the volume of business climate information presented in the annual reports of companies. Analyzing the evolution of the average disclosure scores for the business climate information for the investigated period, we can see a strong upward trend, this indicator registering the value of 1.06 in the first year and the value of 1.7 in the last year, increasing the volume of information provided on the business climate. Analyzing the correlation between the average disclosure index of business climate information for the fifty-seven sampled companies with the synthetic designed performance index, it can be highlighted that the empirical results of the Pearson coefficient revealed (Table 1) that the intensity of the link between the two variables is extremely low and in addition statistically insignificant (Sig (2-tailed) is above the maximum significance threshold of 10%).

Table 1: Analysis of the correlation between the average disclosure index of business climate information and the performance index

		Average disclosure index of business climate information	Composite index
Average disclosure index of business climate information	Pearson Correlation	1	0.164
	Sig. (2-tailed)		0.224
	N	57	57
Composite index	Pearson Correlation	0.164	1
	Sig. (2-tailed)	0.224	
	N	57	57

Source: own processing of the data

Analyzing the potentially significant differences in the average disclosure score for disclosing information on business climate by industry, the results of the ANOVA analysis showed that there are significant differences in the business climate disclosures depending on the industry in which the company activates (Sig. is less than the 1% significance threshold). Thus, the highest disclosure degree of information on business climate is recorded in the last examined year by companies carrying out professional scientific and technical activities (2.75) followed by those in the extractive industry sector (2.56) and those in production, supply of electricity, heat, gas, and water (2.43). On the other hand, there are companies in the hotel and restaurant sector with a low degree of disclosure of business climate information (Table 2).

Table 2: The average disclosure index of business climate information by industry

		Average disclosure index of business climate information
		Mean
Industries	Extractive industry	2.563
	Production and supply of electricity and heat, gas, hot water, and air conditioning	2.438

Construction	1.313
Hotels and restaurants	1.292
Professional scientific and technical activities	2.750
Wholesale and retail trade	1.344
Transport and storage	2.031
Manufacturing industry	1.580

Source: own processing of the data

Also, in the analysis, we followed Majdalany and Henderson (2013) approach who argued that several studies have shown that there is an inevitable time lag between increasing transparency on the one hand, and performance on the other hand; and this time lag is generally perceived as a year (Aksu and Kosedag, 2005). Thus, we considered that there is a time gap between the disclosure degree of information and the company's performance.

The general form of the panel data regression model is:

$$\begin{aligned}
 Perf_{indice}_{it} = & \alpha_0 + \alpha_1 \cdot di_{business_{climate}_{it-1}} + \alpha_2 \cdot di_{managers_{it-1}} + \alpha_3 \\
 & \cdot di_{control_{intern}_{it}} + \alpha_4 \cdot tip_{auditor}_{it} + \alpha_5 \\
 & \cdot existenta_{raport_{audit}_{it}} + \alpha_6 \\
 & \cdot existenta_{raport_{guv_{corp}_{it}} + \sum \alpha_i \cdot var_{politica_{contabila}_{it}} \\
 & + \varepsilon_{it}
 \end{aligned}$$

where: the dependent variable is the performance index of companies calculated according to previous works (Bogdan et al. 2017a); the independent variables are the average disclosure degree on business climate information, the average disclosure degree on managers attributes information, the average disclosure degree on internal control, key accounting policy variables, type of auditor, the existence of audit report, the existence of corporate governance report; and ε_{it} are the model errors. The model estimation was initiated with a fixed-effects model by fixed cross effects and periodic fixed effects, using the least-squares method (OLS). The temporal effects included in the models were aimed at capturing, over time, those developments that are common to all companies. Redundant Fixed Effects testing was used to decide which of these models is suitable for our data set (fixed effects for periodic effects, cross effects, or both). The Hausman test was used to identify whether a fixed-effects model (FEM) or a random-effects model (REM) was more appropriate. A low probability in the Hausman test suggests the use of FEM (fixed effects models), while a high probability in the test emphasizes REM (random effects models). The problem of cross-heteroscedasticity in the estimation framework was addressed using standard corrected heteroskedasticity errors based on the improvement of standard estimator errors, without changing the values of the coefficients. Another basic hypothesis of the model that needs to be verified states that there is no linear relationship between two or more explanatory variables (absence of collinearity) (Jula, 2003). Because the correlation analysis refuted the presence of collinearity between the accounting policy variables, they will be considered as a set within the models. Testing the

autocorrelation of errors in model estimation involves the application of Durbin-Watson (DW) statistics which may suggest 1st order autocorrelation of residues. The existence of collinearity can be corrected using the Generalized Least Squares (GLS) method. Determining the validity of the model involves the application of the Fisher test. The interpretation of the results considered the critical probability related to the Fisher test (prob. or significance). Thus, if this probability is less than the significance threshold set by the risk specification, then the established model is considered valid.

4. Discussion of Results

Given those mentioned in the methodology section, the first step was to estimate models with fixed effects for both sections (companies) and periods, using the least-squares method. Subsequently, the results of the redundant fixed effects test led to the rejection of the null hypothesis of redundant fixed effects for periods but proved the validity of the fixed effects at the level of companies. Therefore, we concluded that the appropriate model is the one with fixed effects for cross-sectional data. In the second stage, the models were estimated assuming the existence of random effects, and the Hausman test was used to decide between the use of fixed or random effects. The empirical results of the Hausman test showed that the fixed effects estimator is consistent, with a probability (significance level) below 1%. Therefore, the following models were estimated using the least-squares method for panel data (Panel Least Squares) and proved to be valid for the Fisher test. The most important empirical results of the estimation process for the proposed models are presented in Table 3.

Table 3: Empirical results of models that highlight the analysis of variables that influence the performance of the sampled companies

Variables	M1	M2	M3	M4	M5	M6	M7	M8
Disclosure index for managers(t-1)	0.836*			-1.01			-0.248	
Disclosure index for business climate(t-1)		-1.26*			-0.65***		-0.09	
The average score of internal control			-2.21*			-5.23*		-3.59*
Accounting policy variables								
Total provisions				0.03*	0.03*	0.03**	0.03*	0.03*
Uncertainties*				-0.10*	-0.09	-0.034*	-0.09*	-0.02***
Estimates of decommissioning costs of property, plant and equipment				-0.016	-0.0035	0.116*		0.085*
Contingency judgments and assumptions				-0.02*	-0.012**	0.063	-0.009***	
Litigation risks				-0.06*	-0.048*	0.019	-0.052*	
R&D costs				-0.06*	-0.058*	-0.086*	-0.053*	-0.087*
The existence of the audit report	2.98							
Auditor type	-4.38	-5.93	-2.30	-2.64	-3.54	-2.37		
The existence of the corporate governance report		2.53*	1.47*	0.0005	0.204	0.487	0.265	0.875**
Constant	47.95*	51.48*	49.92*	63.78*	62.12*	46.71*	62.95*	49.87*
Observations	285	285	285	285	285	285	285	285
Adj.R2	0.997	0.997	0.997	0.99	0.985	0.98	0.99	0.99
F-test	1352.48*	1338.73*	1406.37*	331.28*	233.00*	216.39*	355.97*	476.00*

F-test for all individual company effects = 0	14.71*
F-test for all time effects = 0	0.053
Hausman Test	9.02*

* recognition, accounting valuation and presentation of assets, debts, contracts, but also cloud accounting system

Source: own processing of the data

The empirical results of the first three models showed a positive impact of the average disclosure degree of managers' characteristics on the performance of analyzed companies and a negative impact of the average disclosure degree of business climate and internal control information on companies' performance. Analyzing the values of the regression coefficients in the three models, it can be seen that the influence of the average disclosure degree of managers' attributes is positive and strongly statistically significant, at the threshold of 1%. In contrast, the average disclosure degree regarding the business climate or the average disclosure degree of internal control shows a negative and significant impact on the future performance of companies, at the threshold of 1%. Thus, if the average disclosure degree of managers' information in the past period increases one unit, then the company's current performance will increase by 0.84 units on average, while increasing the degree of disclosure on the business climate leads rather to a decrease in the performance of the companies, in the current period by approximately 1.26 units, *ceteris paribus*. Also, the average disclosure degree of internal control information leads to a decrease in the performance of companies by approximately 2.21 units, *ceteris paribus*. It is found that the type of auditor and the existence of the audit report does not significantly influence the performance of the analyzed companies. Regarding the quantification and the influence of key accounting policy variables on the performance of sampled companies, it can be seen that the average disclosure degree of managers' characteristics information no longer shows a significant impact on company performance, instead, the business climate and internal control disclosures maintain significant influence on company performance. Among the key accounting policy variables, the ones that show a significant influence on the performance of the analyzed companies are total provisions with a positive impact on the companies' performance, uncertainties regarding the recognition, accounting measurements, and presentation of assets, judgments, and accounting estimates on contingencies, litigation risks, R & D and innovation costs exert a negative impact on company performance.

Examining the simultaneous influence of the average disclosure degree of managers' attributes information and business climate information, but also the accounting policy variables on the performance of companies, it can be seen that the average degree of disclosure of information at the level of managers and business climate does not have a significant impact on the performance of selected companies. Instead, the accounting policy variables with a statistically significant impact on companies' performance are total provisions, uncertainties regarding the recognition, accounting measurements, and presentation of assets, judgments, estimates, and assumptions regarding contingencies, litigation risks, and RDI costs. Given the medium intensity connection between the average business climate disclosure score and the average internal control disclosure score quantified by Pearson's correlation coefficient of 0.587, the variables will be incorporated into different models. Thus, the optimal model is the model that

captures the influence of the average internal control disclosure score and the accounting policy variables, but also the type of auditor and the existence of the corporate governance report. Consequently, an excessive internal control shows a significant but negative impact leading to a decrease in the performance of the analyzed companies. Accounting policy variables, such as total provisions and estimates of decommissioning costs of property, plant, and equipment lead to an increase in the performance of companies, while uncertainties regarding the recognition, accounting measurements, and presentation of assets and contracts and high RDI costs generate a decrease in the performance of sampled listed companies. We note that the type of auditor does not show a significant influence on the performance of companies, while the existence of the corporate governance report leads to an increase in the performance of companies.

5. Conclusion

An element of originality of this paper is given by the determinants of accounting policies on the financial performance for the selected companies using the multivariate analysis in main components specific to panel data for five consecutive years, which can highlight the most important groups of companies based on performance using classification analysis. Thus, PCAmixdata was used for mixed data, having the particularity of using the version specific to multivariate analysis - Multiway Principal Components Analysis (MPCA), which is based on panel data. Further on, the average disclosure degree of managers' attributes information was determined based on eight items, and the average disclosure degree on business climate information was based on seven elements, but also the average internal control disclosure score. Statistical testing and processing of the differences in these disclosures indices were also performed at the level of managers and business climate information depending on the activity sector, the type of auditor, the existence of the audit report, or the existence of the corporate governance report using specific statistical tests like analysis correlation, ANOVA analysis, nonparametric tests - Mann Withney or Kruskal-Wallis.

This paper integrates the results obtained in previous studies (Bogdan et al. 2017a, Bogdan et al. 2017b) and is dedicated to quantifying the impact that the average disclosure degree of managers' characteristics information, business climate, internal control, and key accounting policy variables have on the performance level of the companies measured through the performance composite index built using panel data analysis. The results showed that the average disclosure degree of managers' traits leads to an increase in the performance of companies, while a higher degree of disclosure on business climate or internal control leads to a decrease in the performance of companies. Accounting policy variables such as total provisions and estimates of decommissioning costs of property, plant, and equipment lead to an increase in the performance of companies, while uncertainties regarding the recognition, accounting measurements, and presentation of assets, and contracts, and high RDI costs lead to a decrease in the performance of sampled listed companies. It is worth mentioning that the type of auditor does not show a significant influence on the performance of companies, while the existence of the corporate governance report leads to an increase in the

performance of companies. This study finds its main limits in the sampled companies, the choice of variables for determining the average score for the disclosure degree information, and the design of the composite index to express performance. Future research aims to expand the database, grouping companies into performance classes based on the correlations investigated and identifying new possibilities for modeling the relationship between information disclosure indices and company performance.

References

1. Abdi, Y., Li, X., Càmara-Turull, X. (2022) "Exploring the impact of sustainability (ESG) disclosure on firm value and financial performance (FP) in airline industry: the moderating role of size and age", *Environ Dev Sustain*, vol. 24, pp. 5052–5079, <https://doi.org/10.1007/s10668-021-01649-w>.
2. Aksu, M. and Kosedag, A. (2005) "The relationship between transparency & disclosure and firm performance in the ISE: Does IFRS adoption make a difference?" [Online], Available: www.efmaefm.org/efma2006/papers/818447_full.pdf [15 February 2022].
3. Ali, I.M., Husin, N.M., Alrazi, B. (2021) "The Effect of Corporate Water Disclosure on Financial Performance", *IOP Conf. Ser.: Earth Environ. Sci.* vol. 943, Art. no. 012035, [doi:10.1088/1755-1315/943/1/012035](https://doi.org/10.1088/1755-1315/943/1/012035).
4. Badulescu, D., Akhtar, M.N., Ahmad, M., Soharwardi, M.A. (2021) "Accounting Policies, Institutional Factors, and Firm Performance: Qualitative Insights in a Developing Country", *J. Risk Financial Manag.*, vol. 14, Art. no. 473. <https://doi.org/10.3390/jrfm14100473>.
5. Balagobei S. (2020) Accounting Practices and Organizational Performance: Evidence from Small and Medium Scale Enterprises in Sri Lanka, *Indian Journal of Finance and Banking*, vol. 4, no. 1, pp. 69-75, <https://doi.org/10.46281/ijfb.v4i1.526>.
6. Bernardi, C. and Stark, A.W. (2018) "Environmental, social and governance disclosure, integrated reporting, and the accuracy of analyst forecasts", *The British Accounting Review*, vol. 50, no. 1, pp. 16-31, <https://doi.org/10.1016/j.bar.2016.10.001>.
7. Bogdan, V., Ban, O.I., Popa, D.N. (2017) "Applying MPCA analysis to evaluate financial performance of Romanian listed companies", *Annals of Faculty of Economics, University of Oradea, Faculty of Economics*, Tom XXVI, no. 1, pp. 235-246.
8. Bogdan, V., Sabău Popa, C.D., Beleneși, M., Burja, V., Popa, D.N. (2017) "Empirical Analysis of Intellectual Capital Disclosure and Financial Performance – Romanian Evidence", *Economic Computation and Economic Cybernetics Studies and Research*, vol. 2, no. 51, pp. 125-143.
9. Domil, A. E., Bogdan, O., Caraiman, A. (2019) "The impact of the accounting policies on the performance of the accounting information system", *Quaestus*; Timisoara, no. 15, pp. 27-34.

10. Escamilla-Solano, S., Paule-Vianez, J., Blanco-González, A. (2022) "Disclosure of gender policies: do they affect business performance?", *Heliyon*, vol. 8, no. 1, Art. no. e08791, <https://doi.org/10.1016/j.heliyon.2022.e08791>.
11. Jula, D. (2003) *Introducere în econometrie*, Ed. Professional Consulting, București.
12. Liu, C., Su, K., Zhang, M. (2021) "Water disclosure and financial reporting quality for social changes: Empirical evidence from China", *Technological Forecasting and Social Change*, vol. 166, Art. no. 120571, <https://doi.org/10.1016/j.techfore.2021.120571>.
13. Majdalany, G. and Henderson, J. (2013) "Voluntary Disclosure of Intellectual Assets and Intellectual Liabilities: Impact on Financial Performance in Publicly Listed Firms in the United Arab Emirates", *Electronic Journal of Knowledge Management*, vol. 11, no. 4, pp. 325-338.
14. Mohammed Sani, D. (2018) "Mandatory Social and Environmental Disclosure: A Performance Evaluation of Listed Nigerian Oil and Gas Companies, Pre- and Post-Mandatory Disclosure Requirements", *Journal of Finance and Accounting*, vol. 6, no. 2, pp. 56-68, [doi: 10.11648/j.jfa.20180602.12](https://doi.org/10.11648/j.jfa.20180602.12).
15. Odo Onyemaechi, J. and Isamade Burabari, A. (2021) "Implications of accounting policies on firm performance in Nigeria", *International Journal of Advanced Research in Management and Social Sciences*, vol. 10, no. 9, pp. 19-37.
16. Onipe, A.Y., Musa, J.Y., Isah, S.D. (2015) "International Financial Reporting Standards' Adoption and financial statement effects: evidence from listed deposit money banks in Nigeria", *Research Journal of Finance and Accounting*, vol. 6, no. 12, pp. 107-122.
17. Otieno, J.O., Tefer, O., Onyango Owino, E. (2021) "Influence of Management Accounting Practices on Performance of Kisumu County Government", *Middle East Journal of Applied Science & Technology*, [Online], Available: <https://ssrn.com/abstract=3888301> [15 February 2022].
18. Pavlopoulosa, A., Magnisb, C., Iatridis, G.E. (2019) "Integrated reporting: An accounting disclosure tool for high-quality financial reporting", *Research in International Business and Finance*, vol. 49, pp. 13-40, <https://doi.org/10.1016/j.ribaf.2019.02.007>.
19. Quayes, S., Hasan, T. (2014) "Financial disclosure and performance of microfinance institutions", *Journal of Accounting & Organizational Change*, vol. 10, no. 3, pp. 314–337, <https://doi.org/10.1108/JAOC-12-2011-0067>.
20. Sacer, I.M., Malis, S.S., Pavic, I. (2016) "The Impact Of Accounting Estimates On Financial Position And Business Performance – Case Of Non-Current Intangible And Tangible Assets", *Procedia Economics and Finance*, vol. 39, pp. 399-411, [https://doi.org/10.1016/S2212-5671\(16\)30341-0](https://doi.org/10.1016/S2212-5671(16)30341-0).
21. Sari, R.N., Pratadina, A., Anugerah, R., Kamaliah, K. and Sanusi, Z.M. (2021) "Effect of environmental management accounting practices on organizational performance: role of process innovation as a mediating variable", *Business Process Management Journal*, vol. 27, no. 4, pp. 1296-1314, <https://doi.org/10.1108/BPMJ-06-2020-0264>.
22. Sun, Y., Qiao, X., An, Y., Fang, Q., Wu, N. (2022) "Does Multiple Capitals Disclosure Affect the Capital Market? An Empirical Analysis in an Integrated

Reporting Perspective”. *Front Psychol.*, vol. 13, Art. no. 837209, [doi: 10.3389/fpsyg.2022.837209](https://doi.org/10.3389/fpsyg.2022.837209).

23. Thuy, C.T.M., Khuong, N.V., Canh, N.T., Liem, N.T. (2021) “Corporate Social Responsibility Disclosure and Financial Performance: The Mediating Role of Financial Statement Comparability”, *Sustainability*, vol. 13, Art. no. 10077, <https://doi.org/10.3390/su131810077>.

24. Wang, S., Wang, H., Wang, J., Yang, F. (2020) “Does environmental information disclosure contribute to improve firm financial performance? An examination of the underlying mechanism”, *Science of The Total Environment*, vol. 714, no. 2, Art. no. 136855, <https://doi.org/10.1016/j.scitotenv.2020.136855>.