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EARNINGS MANAGEMENT IN THE CONTEXT OF THE CRISIS GENERATED BY THE COVID-19 PANDEMIC: EMPIRICAL EVIDENCE FROM THE ROMANIAN BUSINESS ENVIRONMENT

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Abstract
This study aims to analyze the impact of the crisis generated by the COVID-19 pandemic on earnings management practices by examining the evolution of discretionary accruals, building on the model used by Gorgan et al. (2012) in a study that analyzes the impact of the 2008–2009 financial crisis on discretionary accruals. Our analysis was based on 49,846 observations for a sample of Romanian non-financial companies whose financial data were extracted from the Orbis database. The period under analysis was 2018–2023, which made it possible to study not only the immediate impact but also the recovery dynamics. The results indicate that the COVID-19 pandemic led to a significant reduction in discretionary behavior in the financial reporting of Romanian non-financial companies, pointing to a disciplining tendency among them. Unlike the 2008–2009 crisis, the impact on discretionary accruals was immediate and pronounced, evidenced by a 12.7% decline in the absolute discretionary accruals indicator (ABSDAC) in 2020, a result supported by significant statistical tests. The partial rebound in the level of discretionary accruals in 2021, statistically insignificant, suggests the influence of government measures in easing the pressures on earnings management. Over the longer term, the persistent downward trend points to a possible structural effect, associated with improvements in audit quality and corporate governance. Overall, the conclusions support extending the existing theoretical framework to the context of the COVID-19 health crisis and an emerging economy, indicating an increase in the quality of financial reporting under conditions of severe uncertainty.
Keywords: *earnings management; discretionary accruals; audit quality; financial reporting quality; COVID-19 crisis.*
JEL Classification: M14; M41; M48.

1. INTRODUCTION

The literature reflects a constant concern with identifying and measuring earnings management, conceptualized as the practice of using discretionary accruals in the financial reporting process in order to distort economic reality (Healy and Wahlen, 1999). In this regard, the research conducted by Istrate and Carp (2026) points to two complementary methodological approaches. On the one hand, the use of Benford's Law makes it possible to detect potential anomalies in the distribution of reported figures, with deviations from the theoretical distributions interpreted as signals of the manipulation of financial indicators. Nevertheless, these results are considered insufficient in isolation, requiring correlation with other determinants of reporting quality, such as corporate governance characteristics, auditing, or the international context. On the other hand, the literature establishes the modified Jones model as the principal instrument for identifying accrual-based earnings management, through the estimation of discretionary accruals. Studies show that deviations from Benford distributions are positively associated with these discretionary accruals, suggesting that the combined use of the two methods can increase the accuracy of detecting the phenomenon (Istrate, 2019).

In the literature, audit quality is approached from the perspective of the auditor's ability to detect and prevent accounting manipulation, including earnings management practices. Afrăsinei et al. (2024) emphasize that financial statements represent an essential source of information for users; however, the flexibility of accounting rules may allow managers to influence the presentation of results according to discretionary objectives, aspects highlighted by Watts and Zimmerman (1990, cited in Afrăsinei et al., 2024). Within this framework, financial auditing constitutes one of the three main pillars for preventing accounting manipulation, alongside corporate governance and accounting regulations.

Earnings management denotes the use of management's professional judgment, within the applicable accounting standards, in order to influence the reported result (Healy and Wahlen, 1999). The literature distinguishes between accrual-based earnings management and real earnings management. The present study focuses on the first category, measured through discretionary accruals estimated according to the modified Jones model.

Accrual-based earnings management (AEM) is one of the most debated forms of accounting earnings management. Istrate et al. (2015) present AEM as the process whereby managers use abnormal discretionary accruals to "borrow" revenues from future periods in order to increase current results or, conversely, to defer the recognition of certain revenues, thereby reducing present results (Abernathy et al., 2014, cited in Istrate et al., 2015). Dechow and Skinner (2000) qualify this by noting that a certain level of earnings management is inherent to the

accounting process, since completely eliminating flexibility in financial reporting would negate the use of net income as a measure of economic performance.

The motivations underlying AEM are classified by Chen and Tsai (2010) and Hamid et al. (2012, cited in Istrate et al., 2015) into three categories: altruistic motivations, related to the intention of ensuring the company's profitability; speculative motivations, driven by managers' personal objectives; and pressures exerted by stakeholders, generated by the expectations of the users of the reported information. Graham et al. (2005) show that financial analysts consider net income to be more relevant information than cash flows for the users of financial reports, which amplifies the motivations to manipulate this indicator.

Regarding the effects of the transition to IFRS on AEM, Istrate et al. (2015) synthesize a series of European studies with contradictory conclusions. Barth et al. (2008, cited in Istrate et al., 2015) find that the voluntary adoption of IFRS is generally associated with a lower level of earnings management. Jeanjean and Stolowy (2008, cited in Istrate et al., 2015) report an increase in the prevalence of earnings management in France and a stabilization in the United Kingdom following the mandatory adoption of IFRS. Callao and Jarne (2010, cited in Istrate et al., 2015) indicate, for a sample of 11 EU countries, an intensification of earnings management after IFRS adoption, with significant increases in discretionary accruals over the long term in almost all the countries analyzed. Christensen et al. (2015, cited in Istrate et al., 2015) demonstrate that the voluntary adoption of IFRS is associated with a reduction in AEM, whereas companies that delayed adoption until 2005 show no improvement in accounting quality.

From the perspective of measuring audit quality, Afrăsinei et al. (2024) adopt the classification proposed by DeFond and Zhang (2014), grouping the indicators into two categories: output indicators—such as the quality of financial reporting, material misstatements, and the audit opinion—and input indicators—such as the size of the audit firm, audit fees, and auditor specialization. Authors such as Chi et al. (2017) and Garcia-Blandon et al. (2017) conclude in their studies on earnings management that a reduction in the magnitude of discretionary accruals, an established indicator of earnings management practices, constitutes a direct expression of increased audit quality. At the same time, the size of audit firms is frequently associated with higher audit quality, with Big 4 firms considered more effective in the literature on opportunistic managerial behavior (DeAngelo, 1981; DeFond and Zhang, 2014, cited in Afrăsinei et al., 2024).

Istrate and Carp (2026) hold that, in the context of the Romanian economy, the empirical results indicate the existence of significant differences between reported values and theoretical distributions, as well as an influence of accounting standards on the direction and intensity of earnings management, with IFRS

adoption being associated with an increase in the credibility of financial information.

In the specific context of companies listed on the Bucharest Stock Exchange (BVB), Matiș et al. (2010) validate the applicability of the Jones model to data provided by Romanian companies, with the other tested models (Dechow, Kasznik) proving insignificant. Brad et al. (2014) identify a more pronounced presence of earnings smoothing through the variability of net income in the period prior to IFRS approval.

The 2008–2009 economic crisis has been associated in the empirical literature with a reduction in earnings management, explained by heightened investor vigilance, stricter regulatory oversight, and the external constraints imposed by the progressive deterioration of financial performance (Cohen et al., 2008). The reference study by Gorgan et al. (2012) documents, on a sample of 30 large European companies from three industries (automotive, energy, and oil refining), a continuous decline in the absolute value of discretionary accruals (ABSDAC) from 0.0178 in 2007 to 0.0088 in 2009, with the 2009 decline relative to 2008 being the only one that is statistically significant ($t = 2.177$; $p = 0.038$). The central explanatory mechanism lies in the fact that, under crisis conditions characterized by gradual deterioration, managers have reduced incentives and limited opportunities for manipulation as external pressures intensify progressively.

The COVID-19 pandemic generated a structurally different context compared with the 2008–2009 crisis, with specific implications for financial reporting behavior. On the one hand, the external shock was instantaneous and generalized. On the other hand, the unprecedented government interventions mitigated the direct financial impact, reducing the pressure that usually motivates manipulation. Recent research (Lassoued and Khanchel, 2022; Xu and Liu, 2022) suggests that earnings management recorded a significant decline in 2020, followed by a partial recovery in 2021, a trend that differs from the monotonically decreasing one identified for the 2008–2009 crisis and that reflects precisely the distinct nature of the government intervention during the pandemic period.

An essential difference compared with previous studies also concerns the absolute level of discretionary accruals. Studies carried out on large companies listed on regulated markets and subject to mandatory auditing by Big Four firms consistently record ABSDAC values lower than those obtained for smaller companies or for emerging economies. This observation is relevant for interpreting the results of the present study, conducted on a heterogeneous sample of Romanian companies that also includes small and medium-sized entities with less stringent corporate governance standards. Studies on the financial reporting behavior of Romanian companies during periods of crisis are

relatively scarce, and the present study aims to contribute to filling this gap in the literature.

2. RESEARCH METHODOLOGY

2.1. Hypothesis Tested

H_1: Earnings management, measured through absolute discretionary accruals (ABSDAC), declined statistically significantly during the pandemic crisis period (2020–2021) compared with the pre-pandemic period (2018–2019) for Romanian companies.

2.2. Sample and Data

The data were extracted from the Orbis database (Bureau van Dijk) and comprise Romanian non-financial companies with data available for the period 2017–2023. The filter applied for data quality led to a final sample of 49,846 company-year observations distributed across six years of analysis (Table 1). Companies in the financial sector (NACE codes 64–66) and companies without sufficient data to compute the model variables were excluded. Consolidated accounts (C1, C2) were included alongside individual accounts (U1).

Table 1. Sample distribution by year

Year	N	NACE-2 sectors	Period
2018	8,025	68	Pre-pandemic
2019	8,205	71	Pre-pandemic
2020	8,377	72	Pandemic (year 1)
2021	8,496	73	Pandemic (year 2)
2022	8,572	72	Post-pandemic
2023	8,171	70	Post-pandemic
Total	**49,846**	—	—

Data source: Orbis (Bureau van Dijk), own processing. Companies in the financial sector (NACE 64–66) are excluded

2.3. Econometric Model

To estimate discretionary accruals (DAC), we used the cross-sectional version of the modified Jones model (Jones, 1991; Dechow et al., 1995; Kothari et al., 2005), applied to industry groups defined by the first two digits of the NACE Rev. 2 code, for each year separately, with a minimum requirement of 10 companies per group. The estimated model is:

$$TA_t / Assets_{t-1} = \alpha_0 + \alpha_1(1/Assets_{t-1}) + \alpha_2(\Delta Rev_t/Assets_{t-1}) + \alpha_3(PPE_t/Assets_{t-1}) + \alpha_4 ROA_t + \varepsilon_t \quad (1)$$

where *TA* is total accruals (a balance-sheet proxy); *Assets* — total assets; *ΔRev* — the change in operating revenue; *PPE* — property, plant and equipment; *ROA* — return on assets (the control variable); *ε* — the error term (the regression residual), which represents discretionary accruals (DAC).

3. RESULTS OF THE STUDY

3.1. Descriptive Statistics

The descriptive statistics of non-discretionary accruals (NDAC), discretionary accruals (DAC), and their absolute values (ABSDAC) are presented for each year analyzed (Table 2). A first relevant observation is that the absolute level of ABSDAC in the present study, with medians ranging between 0.056 and 0.073, is significantly higher *than that reported by Gorgan et al. (2012) for large European companies (medians between 0.009 and 0.018). This difference does not reflect a methodological inconsistency but rather structural characteristics of the sample: the Romanian* companies analyzed are on average much smaller, with less formalized corporate governance and external audits of lower standards compared with the Fortune 500 multinationals. A higher level of flexibility in applying accounting policies among small companies is a result confirmed in the international literature (Jeanjean and Stolowy, 2008).

Table 2. Descriptive statistics of discretionary accruals (2018–2023)

		NDAC	DAC		ABSDAC	
Year	*N*	*Median*	*Median*	*Std. dev.*	*Median*	*Mean*
2018	8,025	-0.0286	0.0022	0.1556	0.0728	0.1045
2019	8,205	-0.0253	0.0024	0.1488	0.0718	0.1021
2020	8,377	-0.0416	0.0043	0.1439	0.0627	0.0941
2021	8,496	-0.0060	0.0031	0.1460	0.0672	0.0972
2022	8,572	-0.0235	0.0021	0.1432	0.0674	0.0971
2023	8,171	-0.0393	0.0028	0.1288	0.0562	0.0844

Note: Discretionary accruals (DAC) are the residuals of the modified Jones model (Dechow et al., 1995; Kothari et al., 2005), estimated cross-sectionally by NACE-2 groups. ABSDAC = |DAC|.

With regard to temporal dynamics, the median ABSDAC declined from 0.0718 in 2019 to 0.0627 in 2020, representing a relative reduction of 12.7%. Compared with the reference study, which documents a decline that is similar in direction but slower in pace (from 0.0178 in 2007 to 0.0147 in 2008, i.e. -17.5% over two years), the present study records a faster and more pronounced reaction

in the first year of the crisis. The explanation lies in the different nature of the shock: the pandemic was instantaneous and entirely unanticipated, eliminating any possibility of a gradual adjustment in reporting behavior. A second difference from the reference study is the partial recovery in 2021 (median 0.0672), absent in the case of the 2008–2009 crisis. This probably reflects the effect of government interventions which, by easing financial pressure in the second pandemic year, allowed a partial return to previous accounting practices.

3.2. Testing Hypothesis H_1

To test hypothesis H_1, the paired-samples t-test (Table 3) and the non-parametric Mann-Whitney U test (Table 4) were used, in line with the methodology proposed by Cohen et al. (2008). A methodological difference from the reference study lies in the substantially larger sample size, which confers considerably greater statistical power and allows the detection of more subtle effects.

Table 3. Paired-samples t-test of ABSDAC: inter-period comparisons

Comparison	N	t-statistic	Sig. (2-tailed)	Mean ABSDAC	Conclusion
2019 → 2020 (Pre-COVID vs. COVID year 1)	8,182	7.324	0.000	0.1020–0.0917	Significant decline
2020 → 2021 (COVID year 1 vs. COVID year 2)	8,327	-1.293	0.196	0.0938–0.0957	Partial recovery
2021 → 2022 (COVID year 2 vs. post-COVID)	8,408	1.201	0.230	0.0971–0.0954	Stabilization
2018 → 2020 (Pre-COVID vs. COVID)	8,001	9.761	0.000	0.1045–0.0899	Significant decline
2019 → 2023 (Pre-COVID vs. post-COVID)	7,659	12.816	0.000	0.1012–0.0821	Downward trend

Note: Paired-samples t-test on matched companies. Variable: ABSDAC (the absolute value of discretionary accruals). Sig. < .050 indicates a statistically significant difference at $\alpha = 5\%$.

The results (Table 3) confirm a strongly statistically significant decline in ABSDAC in the first pandemic year (2020) compared with 2019 ($t = 7.324$; Sig. = 0.000) and with 2018 ($t = 9.761$; Sig. = 0.000), supporting hypothesis H_1. This difference suggests that the pandemic produced a more abrupt and immediate effect on reporting behavior than the financial crisis, consistent with its nature as an instantaneous shock. The partial recovery in 2021 relative to 2020 is not statistically significant in the paired t-test (Sig. = 0.196), which again differs

from the 2008–2009 crisis, where the declines were monotonic. The long-term evolution over 2019–2023 reveals a persistent downward trend (t = 12.816; Sig. = 0.000), indicating that the pandemic contributed to a structural reduction in earnings management that extends beyond the acute period of the crisis.

Table 4. Independent-Samples Mann-Whitney U Test — ABSDAC

Comparison	Mann-Whitney U	Sig. (2-tailed)	N (Year 1 / Year 2)	Conclusion
2019 → 2020	36,726,313	0.000	8,205 / 8,377	Significant
2020 → 2021	34,423,072	0.000	8,377 / 8,496	Significant
2021 → 2022	36,131,548	0.380	8,496 / 8,572	Not significant
2018 → 2020	36,077,108	0.000	8,025 / 8,377	Significant
2022 → 2023	38,423,246	0.000	8,572 / 8,171	Significant

Note: The Mann-Whitney U test (non-parametric) compares the ABSDAC distributions between independent groups. Two-sided alternative. Sig. < .050 indicates significantly different distributions.

The Mann-Whitney U test (Table 4) confirms the parametric results and adds a robust non-parametric perspective, independent of the normality assumption. The ABSDAC distribution in 2020 differs significantly from that in 2019 and 2018 (Sig. = 0.000 in both cases). The only comparison that does not yield significant differences in the t-test is 2021 vs. 2022 (Sig. = 0.380), although the Mann-Whitney U test detects significant differences between 2020 and 2021 (Sig. = 0.000), suggesting that the distributions change even if the paired means do not differ substantially, probably owing to the high sectoral heterogeneity of the Romanian sample compared with the homogeneous sample of 30 companies in the original study.

4. CONCLUSIONS

The present study set out to evaluate the financial reporting behavior of Romanian non-financial companies in the context of the pandemic crisis generated by COVID-19, through the lens of the evolution of absolute discretionary accruals (ABSDAC), estimated according to the modified Jones model (Dechow et al., 1995; Kothari et al., 2005). Analyzing a sample of 49,846 company-year observations distributed over the 2018–2023 interval, the results obtained confirm the central hypothesis of the research—namely, that earnings management recorded a statistically significant decline during the pandemic crisis period (2020–2021) compared with the pre-pandemic period (2018–

2019)—a conclusion supported both by the parametric paired-samples t-test and by the non-parametric Mann-Whitney U test.

The main finding aligns with a well-established tradition in the literature that associates periods of major economic turbulence with a disciplining of financial reporting behavior (Cohen et al., 2008). The present study demonstrates that this pattern also holds for a shock of a health-related nature and for a heterogeneous sample of companies from an emerging economy, thereby contributing to the generalizability of the existing theoretical framework.

Beyond confirming the general pattern, the study identifies three significant particularities. The first concerns the absolute level of discretionary accruals: Romanian companies display ABSDAC values with medians ranging between 0.056 and 0.073, appreciably higher than those reported for large European companies, a fact explained by the smaller size of the entities, less formalized corporate governance, and the variable quality of external auditing—a result in line with the international literature (Jeanjean and Stolowy, 2008; Istrate and Carp, 2026). The second particularity concerns temporal dynamics: the pandemic produced an abrupt contraction in ABSDAC of 12.7% in the first year of the crisis, unlike the gradual and monotonic decline documented for the 2008–2009 crisis. A further distinctive feature is the partial recovery in 2021, statistically insignificant in the t-test (Sig. = 0.196), explained by the massive government interventions that eased the pressures which had limited opportunistic managerial behavior in 2020—a dynamic also confirmed by Lassoued and Khanchel (2022) and Xu and Liu (2022). The third particularity concerns the promptness of the detected effect: the reduction in ABSDAC becomes statistically significant as early as the first year of the crisis ($t = 7.324$; $p < 0.001$), unlike the previous financial crisis, where statistical significance was obtained only in the second year.

The comparison of the 2019–2023 period also reveals a persistent and statistically significant downward trend in earnings management ($t = 12.816$; $p < 0.001$), suggesting that the disciplining effects of the pandemic contributed to a structural reduction—at least partially durable—in discretionary reporting practices. Among the explanatory mechanisms are stricter transparency requirements, the increase in external audit quality, highlighted by Afrăsinei et al. (2024) as an essential factor in preventing accounting manipulation, as well as the gradual improvement of corporate governance.

The study also presents several limitations that open up directions for future research. The use of the modified Jones model in its cross-sectional version may generate estimation errors, given the high sectoral heterogeneity and the dimensional diversity of the sample. In addition, although the sample is sectorally stratified, the study does not explicitly test the moderating effect of company size and audit quality on the intensity of earnings management during the pandemic period—variables of significant relevance documented in the literature (Afrăsinei et al., 2024; Istrate and Carp, 2026). Finally, the exclusive

focus on accrual-based earnings management, in the absence of an analysis of real earnings management, limits the comprehensiveness of the picture provided (Healy and Wahlen, 1999). These aspects constitute relevant directions for future research in the field.

References

1) Abernathy, J.L., Beyer, B. and Rapley, E.T. (2014). Earnings management constraints and classification shifting. *Journal of Business Finance & Accounting*, 41(5-6), pp. 600–626.
2) Afrăsinei, M.B., Carp, M. and Georgescu, I.E. (2024). Influența raportărilor de sustenabilitate asupra calității auditului: Analiză empirică la nivelul companiilor cotate la Bursa de Valori București. *Audit Financiar*, 22(173).
3) Barth, M.E., Landsman, W.R. and Lang, M.H. (2008). International accounting standards and accounting quality. *Journal of Accounting Research*, 46(3), pp. 467–498.
4) Brad, L., Dobre, F., Țurlea, C. and Brașoveanu, I.V. (2014). The impact of IFRS adoption in Romania upon the earnings management of the Bucharest Stock Exchange entities. *Procedia Economics and Finance*, 15, pp. 871–876.
5) Callao, S. and Jarne, J.I. (2010). Have IFRS affected earnings management in the European Union? *Accounting in Europe*, 7(2), pp. 159–189.
6) Chen, M.C. and Tsai, Y.C. (2010). Earnings management types and motivation: a study in Taiwan. *Social Behavior & Personality: An International Journal*, 38(7).
7) Chi, W., Myers, L.A., Omer, T.C. and Xie, H. (2017). The effects of audit partner pre-client and client-specific experience on audit quality and on perceptions of audit quality. *Review of Accounting Studies*, 22(1), pp. 361–391.
8) Christensen, H.B., Lee, E., Walker, M. and Zeng, C. (2015). Incentives or standards: what determines accounting quality changes around IFRS adoption? *European Accounting Review*, 24(1), pp. 31–61.
9) Cohen, D.A., Dey, A. and Lys, T.Z. (2008). Real and accrual-based earnings management in the pre- and post-Sarbanes-Oxley periods. *The Accounting Review*, 83(3), pp. 757–787.
10) DeAngelo, L.E. (1981). Auditor size and audit quality. *Journal of Accounting and Economics*, 3(3), pp. 183–199.
11) Dechow, P.M. and Skinner, D.J. (2000). Earnings management: reconciling the views of accounting academics, practitioners, and regulators. *Accounting Horizons*, 14(2), pp. 235–250.
12) Dechow, P., Sloan, R. and Sweeney, A. (1995). Detecting earnings management. *The Accounting Review*, 70(2), pp. 193–225.
13) DeFond, M. and Zhang, J. (2014). A review of archival auditing research. *Journal of Accounting and Economics*, 58(2-3), pp. 275–326.
14) Garcia-Blandon, J., Argiles-Bosch, J.M., Castillo-Merino, D. and Martinez-Blasco, M. (2017). An assessment of the provisions of Regulation (EU) No 537/2014 on non-audit services and audit firm tenure: evidence from Spain. *The International Journal of Accounting*, 52(3), pp. 251–261.

15) Gorgan, C., Gorgan, V., Dumitru, V.F. and Pitulice, I.C. (2012). Evoluția practicilor de contabilitate în timpul recentei crize economice: studiu empiric privind managementul câștigurilor. *Amfiteatru Economic*, 14(32), pp. 431–444.
16) Graham, J.R., Harvey, C.R. and Rajgopal, S. (2005). The economic implications of corporate financial reporting. *Journal of Accounting and Economics*, 40(1-3), pp. 3–73.
17) Hamid, F., Hashim, H.A. and Salleh, Z. (2012). Motivation for earnings management among auditors in Malaysia. *Procedia - Social and Behavioral Sciences*, 65, pp. 239–246.
18) Healy, P.M. and Wahlen, J.M. (1999). A review of the earnings management literature and its implications for standard setting. *Accounting Horizons*, 13(4), pp. 365–383.
19) Istrate, C. (2019). Detecting earnings management using Benford's Law: the case of Romanian listed companies. *Journal of Accounting and Management Information Systems*, 18(10), pp. 198–223.
20) Istrate, C. and Carp, M. (2026). Earnings management detection, from second digit frequencies to discretionary accruals: evidence from the alternative market of the Bucharest Stock Exchange. *Eastern European Economics*, 64(2), pp. 177–205.
21) Istrate, C., Georgescu, I.E., Carp, M., Robu, I.B. and Pavaloaia, L. (2015). Accruals earnings management in emerging markets under the transition to IFRS: the case of Romanian listed companies. *Transformations in Business & Economics*, 14(2A), pp. 393–411.
22) Jeanjean, T. and Stolowy, H. (2008). Do accounting standards matter? An exploratory analysis of earnings management before and after IFRS adoption. *Journal of Accounting and Public Policy*, 27(6), pp. 480–494.
23) Jones, J.J. (1991). Earnings management during import relief investigations. *Journal of Accounting Research*, 29(2), pp. 193–228.
24) Kothari, S.P., Leone, A.J. and Wasley, C.E. (2005). Performance matched discretionary accrual measures. *Journal of Accounting and Economics*, 39(1), pp. 163–197.
25) Lassoued, N. and Khanchel, I. (2022). Impact of COVID-19 pandemic on earnings management: an evidence from financial reporting in European firms. *Global Business Review*, 23(5), pp. 1228–1248.
26) Matiș, D., Vladu, A.B., Negrea, L. and Sucala, L. (2010). Jones, Dechow and Kasznik models significance in the Romanian economic environment. *Annales Universitatis Apulensis - Series Oeconomica*, 12(1).
27) Watts, R.L. and Zimmerman, J.L. (1990). Positive accounting theory: a ten year perspective. *Accounting Review*, pp. 131–156.
28) Xu, J. and Liu, F. (2022). The nexus between COVID-19 pandemic, business continuity and earnings management. *Frontiers in Psychology*, 13, 850699.