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# FACTORS AFFECTING FINANCIAL REPORTING QUALITY IN AGRICULTURAL COMPANIES IN THE REPUBLIC OF SERBIA

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## ARTICLE INFO

Review Article

Received: 09 July 2024

Accepted: 15 September 2024

doi:10.59267/ekoPolj24031033D

UDC 657.6(497.11)

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### Keywords:

*Earnings management, discretionary accruals, manipulations, firm' characteristics, audit*

**JEL:** Q19, M41, M42

## ABSTRACT

The research objective is to establish the factors that influence financial reporting quality (FRQ) in agricultural companies in the Republic of Serbia. Based on a sample of 99 large and medium-sized companies in this sector (86.09% of the total population), and following the analysis of 2018-2022 financial statements and auditor's reports, we examine the conditionality of earnings management (EM) as a FRQ determinant at enterprise level. In order to achieve the defined objective, we apply statistical methods, i.e. correlation and multiple linear regression. The research results indicate that more profitable companies have better FRQ, i.e., a higher return on assets, than companies whose financial statements are audited by Big 4 audit firms and companies with low debts. Also, the research results indicate that FRQ of the sampled companies is not affected by their liquidity, board size and audit tenure.

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## Introduction

Making business decisions in order to effectively manage the company and improve its performance implies the existence of an adequate information base. Most of the required information can be found in regular financial statements, which, at the same time, have a public character and represent the primary source of information about the company's financial status and performance for external users. In order to have a positive impact and reduce the agency problem, increasing investment efficiency, financial market development and, ultimately, progressive national economy stand

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for fully justified efforts to improve financial reporting quality (FRQ). The role of regulatory bodies in this process is crucial; however, worldwide financial scandals and frauds impose the need to evaluate FRQ and financial statements that include important information. This also helps identify the leading factors that affect FRQ, all with the aim of observing the possibility of its improvement.

There is a large number of papers dealing with the issues of measuring FRQ and examining the factors affecting it. Financial reporting is indeed a very complex category so there is still no universally accepted definition of its quality. This explains difference in approaches and models of FRQ measurement. However, one of the main factors of FRQ violation is when managers use discretionary rights for their personal interests, which is why earnings management (EM) is very often used as a measure of FRQ. Also, when talking about the factors affecting FRQ, abundant research results are often contradictory as a result of different observation contexts.

The research objective is to examine the achieved FRQ level in agricultural companies in the Republic of Serbia and identify the factors affecting it. Discretionary accrual, as a measure of EM, calculated using the Kasznik (modified Jones model), is used as a proxy FRQ. Based on the literature review and the dominance of these factors in previous studies, we single out six variables as potential FRQ predictors. These are factors related to the company's financial characteristics (return on assets, leverage and liquidity), the corporate governance system (board size) and audit activities (size of audit firm and audit tenure).

We believe that this research will have a double contribution, both theoretical and practical. First, the research results will increase database on FRQ in agricultural enterprises in the Republic of Serbia and fill the research gap about factors affecting it. Also, the research results are expected to improve financial reporting practice in agricultural companies, and, even more importantly, enterprise management, bearing in mind that accountants and managers will be able to identify the key components of the reliability of financial reporting, and, consequently, achieve business sustainability.

This paper is structured as follows. After the introduction, the theoretical background that explains the research subject is presented. The following part gives an overview of literature and hypothesis, followed by a part on the applied methodology, research results and discussion. The conclusion reached in the paper are given at the very end.

### **Theoretical background**

As a product of financial reporting, financial statements are the most suitable way to provide stakeholders (current and potential investors, creditors, the state, the general public, etc.) with information about the company's financial status, its earning capacity and cash flow. Financial statements are the first source of information about the company and are used as a reference in preparing plans and making business decisions (Mbir et. al., 2020). According to Sahi et. al. (2022) in market economies, financial reporting has two key roles: valuation role – reduces information asymmetry by

ensuring transparency of information in order to adequately value the company, and stewardship role – allows external capital suppliers to assess management performance. Nevertheless, in order for financial statements, along with additional non-financial disclosures, to provide crucial support in making efficient and effective decisions (Echobu et. al. 2017), their quality must not be questioned. Only high-quality financial statements are a condition of security and trust in the business environment. Therefore, effective communication takes place if financial statements provide information that reliably interprets the company's economic reality, i.e. if they provide users with the opportunity to assess the company's financial and structural position and its exposure to risks, timely detect signals about the company's future and upcoming performance seen as future earnings and cash flows, assess management's ability to create added value, etc. The importance of high-quality financial statements not only for their users, but also for stronger financial system, financial markets, lower risk of financial crises, stronger national economy and better economic integration justifies the view that quality financial reporting is in the public interest.

FRQ is the ideal to which professional accounting regulatory bodies have always aspired. The adoption of international accounting standards (IAS/IFRS) has significantly improved FRQ, which numerous authors confirm (Rad, Embong, 2013, Dayanandan et. al., 2016, Wadesango et. al., 2016, Anto and Yusran, 2023). What the International Accounting Standards Board (IASB) intended was to define accounting principles and policies to be applied in the preparation and presentation of financial statements, all with the aim of producing useful information for users when making business decisions. With this in mind, the IASB defined the qualitative characteristics of the information to be found in financial statements: faithful representation, relevance, reliability, timeliness, and understandability, thus building a tool for assessing the quality of financial reporting. In this sense, the IASB determines FRQ by the achieved level of qualitative characteristics. However, defining accounting principles and policies and qualitative characteristics of financial statements, which set the standards for their quality, certainly does not mean that this issue has been completely resolved. More precisely, IAS/IFRS give a lot of flexibility in accounting procedures and objective judgment when defining measurement rules and recognition criteria (Abed et. al., 2022). In this regard, creative accounting is enabled as “application of advance accounting techniques & knowledge supported by existing laws and regulations” (Rahman et. al., 2023). Also, apart from the legitimate practice of abuse of accounting techniques and principles (Dechow, Skinner, 2000), managers often intentionally violate accounting regulations and omit material facts, all with the aim of misleading users of information found in financial statements. If the information is not complete, it is not possible to expect protection from opportunistic insider manipulation (White, 2020).

Free judgment and manipulation take different forms, but as “one of the most significant criteria for evaluating the performance and prospects of a business is earning measured by accounting” (Doan et. al., 2021, 131), earnings management is especially pronounced. It is about “management intervention to determine the amount of profit, i.e. showing

a higher profit and a better financial position or showing a lower profit and a worse balance sheet, depending on the interest” (Đorđević, Spasic, 2022). This practice, which produces false information about the company’s economic performance and thereby misleads users, is one of the main factors that ruins financial reporting quality (Tariverdi et.al., 2012). In this sense, FRQ should be viewed as a very complex category, bearing in mind the numerous, ever-present risks of deliberate, premeditated manipulation of information that reduces its reliability and objectivity. Numerous scandals in both non-financial and financial sectors confirm this, which imposes the need to address FRQ with special attention, or, as Pangaribuan et. al. (2023) says “Good quality and good financial reports are urgently needed”.

Bearing in mind the importance of FRQ, a large number of renowned authors in the field of accounting focused on its definition in their research. However, as academics, first of all, have not yet agreed on the universally accepted definition of FRQ, so no single formula for its measurement has been adopted (Almaqtari et. al., 2018). Given that IAS/IFRS leave the possibility for earnings management activities, numerous authors find that FRQ is a considerably complex phenomenon influenced by numerous factors, both at the external and at the company level. Thus, Cioncan et. al. (2021) observe FRQ in: (1) macroeconomic terms, considering that the political and legal system of a country, valid accounting regulations and the tax system are recognized as its essential factors, and (2) microeconomic terms, because the established system of corporate governance, the characteristics of the company itself and the audit specifics have a particular impact on FRQ. In a similar way, DeFond and Zhang (2014) see FRQ through the following equation: „ $FRQ = f(AQ, R, I)$  and  $FRQ/AQ > 0$ , where FRQ is a function of audit quality (AQ), the quality of the company’s financial reporting system (R) and characteristics of the company itself (I)”. It follows that achieving high FRQ is conditioned by the integrity of all participants in the financial reporting supply chain: accountants, managers, audit committees and external auditors (Barac, 2021).

### **Factors affecting FRQ – literature review and hypothesis development**

A large number of empirical studies on this topic confirm the importance of identifying factors that have a leading influence on FRQ. While some authors focus on factors outside the company, most of them look at internal factors as dominant: the company’s financial performance, corporate governance, external and internal audit, etc. (Hung et. al., 2023). The analysis of literature points to the conclusion that their results are very often contradictory; that is, in some cases certain factors are identified as having a large positive impact, in another case a negative one, while often having no connection with FRQ.

This research focuses on examining the impact of microeconomic factors, i.e. those at the company level, on FRQ. We select factors most often studied in previous research and whose impact on FRQ is particularly prominent. In this regard, we focus on company characteristics such as Return on Assets (ROA), Leverage (LEV), Liquidity (LIQ), then Board Size (BSIZE), related to the established corporate governance system, and finally factors related to audit quality – Size of the audit firm and Audit tenure.

*Return on assets (ROA)*

ROA is one of the leading indicators of the company's profitability, which indicates how much profit the company is able to generate from its assets. Rahman and Hasan (2019) emphasize that it is an indicator that is "much volatile and prone to be manipulated", which is why it is rightfully considered one of the significant factors of FRQ. As Cioncan et. al. (2019) point out, profitable companies tend to provide users with more extensive and better information in order to improve their reputation. Fathi (2013) is of a similar opinion, indicating that poorer financial performance is more easily subject to manipulative activities. What is more, Hung et. al. (2023) find that higher ROA gives better FRQ. Expectations of a positive relationship between ROA and FRQ can be explained by the fact that management in profitable companies has the need to justify their actions with better reporting, which maximizes the shareholder value and increases their compensation packages. Monday and Nancy (2016), Adebayo (2022), Balios et. al. (2021) and Ebrahimabadi and Asadi (2016) point to the opposite, that ROA has a significantly negative impact on FRQ, while Masud (2021), Cioncan et. al. (2019) indicate that the relationship does not even exist.

*Leverage (LEV)*

LEV points to the company's ability to cover all its obligations to creditors in the long term. Since the company's ability to operate smoothly in the long term depends on this ability, this factor is recognized as potentially influential on FRQ, which is why it was the subject in a large number of studies (Fathi, 2013, Takhtaei et. al., 2014, Okika et. al., 2019, Saleh et. al., 2020, Cioncan et. al., 2021, Bui, Nguyen, 2021, Balios et. al. 2021, Hung et. al., 2023). One of the starting points is that companies that are highly indebted, that is, those that strive to attract the necessary funds, have a greater motivation to provide high-quality information to investors Okika et. al., (2019). However, on the other hand, rising indebtedness without assets growth can be a reason for manipulation in accounting. LEV has often been used as a factor of FRQ. However, except for Takhtaei et. al. (2014), who indicate a positive relationship between these variables, and Adebayo (2022), Okika et. al., (2019), Bui and Nguyen, (2021), Masud (2021), who point to a negative relationship, other authors do not find a statistically significant relationship.

*Liquidity (LIQ)*

A company's liquidity presupposes its ability to pay all its obligations when they fall due. As it is a solid indicator of the company's financial stability, it is fully expected that companies with a high liquidity ratio also need to disclose high-quality information in their financial statements. This implies that liquidity and FRQ are in a positive relationship, that is, the higher the company's liquidity, the higher the FRQ, which Shehu and Ahman (2013) confirm. In contrast, Adebayo (2022), Echobu et. al. (2017) and Okika et. al. (2019) indicate that company management has a greater tendency to manage earnings (which negatively affects FRQ) in cases of higher liquidity. Apart from these contradictory results, Hung et. al. (2023) and Masud (2021) find that LIQ does not have a statistically significant effect on FRQ.

### *Board Size*

Board Size is one of the most frequently analyzed indicators among corporate governance factors (Cioncan et. al., 2019), bearing in mind that the company board has a significant role in monitoring and controlling managers' opportunistic behavior. Having that in mind, research results are contradictory. Fathi, (2013), Mahboub (2017), Bui and Nguyen (2021), Hung et. al. (2023) believe that boards with more members have more knowledge and competences, as well as the capacity to more effectively control management's potentially manipulative activities, which then improves FRQ. On the other hand, Ostadhashemi et. al. (2017) point to a negative relationship between board size and FRQ, due to the fact that boards with a small number of members assume easier work coordination and communication between members.

### *The Size of the Audit Firm*

By providing assurance on the truthfulness and objectivity of information in financial statements, audit is one of the main guardians of FRQ. „Strengthen external independent audits to evaluate the effectiveness of existing accounting policies and processes“ is one of the measure to limit profit adjustment, i.e. opportunistic management behavior (Hung, 2023). Therefore, the fulfillment of that role can only be expected from a well-conducted audit. One of the criteria that is often taken as a proxy for audit quality is the size of the audit firm, and some authors state that audit firms belonging to the Big 4 group are synonymous with quality (Cioncan et. al. 2019). The reason for that is that the Big 4 audit firms have a reputation that they want to preserve, and they are not inclined to take risks and be involved in scandals due to omissions in their work. In addition, the Big 4 audit firms are considered to have a better financial position, technology and a greater number of competent auditors. Lopes (2018), Alzoubi (2016, 2018), Cioncan et. al. (2019), Mesbah & Ramadan (2022) confirm this. On the contrary, Krismiaji (2021), Sharf and Abu-Nassar (2021), Masud (2021) are of the opinion that the superiority in identifying earnings management activities is not exclusively related to the Big 4 audit firms, which they prove in their research.

### *Audit Tenure*

Audit tenure, or the number of years an auditor has audited a company, is also recognized as a factor that particularly affects audit quality, and, indirectly FRQ. Mesbah and Ramadan (2022) distinguish long term audit tenure, which implies a period of auditor's work for the same client for more than three years, and short audit tenure, when that period is three years or less. Authors who have dealt with this relationship have a divided opinion on the impact of audit tenure on FRQ. On the one hand, a longer audit tenure with a client leads to a friendly auditor-client relationship, which threatens the auditor's independence and may decrease audit quality and FRQ. Mesbah and Ramadan (2022) and Salehi et. al. (2022), Alzoubi (2018) confirm this. On the other hand, Sharf and Abu-Nassar (2021), Krismiaji (2021) come to the conclusion that a longer tenure actually allows the auditor to better understand the client's business and thus has greater opportunities to spot irregularities and influence the reduction of earnings management.

Proceeding from the theoretical assumptions and previous research results, the following hypothesis has been defined:

H1: Return on assets (ROA), Leverage (LEV), Liquidity (LIQ), Board Size (BSIZE), Size of Audit Firm (SAF) and Audit tenure (AT) are factors that significantly affect financial reporting quality (FRQ) in agricultural companies in the Republic of Serbia.

## Methodology

### *Sample selection*

In order to examine the possibility of predicting financial reporting quality using the selected factors, the sample consists of private companies in the fields of agriculture, forestry and fishing in the Republic of Serbia. Bearing in mind that two predictors refer to audit, large and medium-sized companies that are liable for audit under the Law on Auditing (Article 26) are taken into account. According to the data available in the Serbian Business Registers Agency database, 115 private companies (8 large and 107 medium-sized) are actively operating in this sector, and they constitute the initial sample.

In order to test the quality of financial reporting and identify the factors affecting it, the primary sources of data were the companies' financial statements covering the period 2018-2022, as well as the accompanying auditor's reports available on the Serbian Business Registers Agency's website. Since 7 companies did not make all the necessary data available in their financial statements, they were excluded from the research. Also, no auditor's reports were available for 9 companies (7 companies did not have an auditor's report for any of the observed years, while 2 companies in the last two observed years moved from the small to medium-sized category and then became liable for audit). For these reasons, the final sample consists of 99 companies and 396 financial statements and auditor's reports over a four-year period. In this sense, the final sample makes up 86.09% of the total number of companies, which can be considered relevant for our research.

The collected data was analyzed using the statistical package for social sciences IBM SPSS Statistics 20.0 (Statistical Package for Social Sciences - SPSS, Version 20.0).

### *Selection and measurement of variables*

#### *Measurement of dependent variable*

The dependent variable in this research is Financial Reporting Quality (FRQ). In order to test the defined hypothesis as a measure of FRQ, we look at Earning Management (EM). There are numerous EM calculation models in literature; however, the models mostly applied are Discretionary accruals. In these models, the total calculation is divided into a non-discretionary part (economically determined calculation) and a discretionary part, which is the result of managerial discretion in the choice of accounting estimates and methods. In this sense, Discretionary accruals (DA) assume the measure of EM, i.e. a higher share of discretionary accruals in the total accruals indicates a higher level of EM and consequently lower FRQ.

We apply Kasznik (modified Jones model) for the purpose of discretionary accruals, which can be presented as follows:

$$(1) TA_{it}/A_{it-1} = \beta_0 1/A_{it-1} + \beta_1(\Delta REV_{it} - \Delta REC_{it}/A_{it-1}) + \beta_2(PPE_{it}/A_{it-1}) + \beta_3(\Delta CFO_{it}/A_{it-1}) + \varepsilon_{it}$$

where:

$TA_{it}$  - total accruals for the company  $i$  in the current period  $t$ ;

$A_{it-1}$  - total assets for the company  $i$  in the previous year  $t-1$

$\beta_0, \beta_1, \beta_2, \beta_3$  – estimated parameters or regression coefficients;

$\varepsilon_{it}$  – residual variable or Earnings management (EM) = Discretionary accruals (DA)

$\Delta REV_{it}$  – change in net sales revenues of the company  $i$  in the current year  $t$  compared to the previous year  $t-1$ ;

$\Delta REC_{it}$  – changes in net receivables from sales in the current year  $t$  compared to the previous year  $t-1$

$\Delta CFO_{it}$  - change in net cash flow from operating activities in the current year  $t$  compared to the previous  $t-1$

$PPE_{it}$  – gross value of property, plant and equipment for the company  $i$  in the current year  $t$

The DA procedure first implies the determination of the total accruals  $TA_{it}$  as follows:

$$(2) TA_{it} = Ni_{it} - CFO_{it}$$

Where:

$Ni_{it}$  is net income for the company  $i$  in current year  $t$ . Given that

$$(3) TA_{it} = NDA_{it} + DA_{it}, \text{ i.e. } TA_{it} = NDA_{it} + \varepsilon_{it}$$

In the next step we calculate  $NDA_{it}$  using multiple linear regression analysis. In the last step, we calculate the discretionary accruals as follows:

$$(4) DA_{it} (\varepsilon_{it}) = TA_{it} - NDA_{it}$$

It is especially important to divide all variables by the value of total assets at the beginning of the year  $A_{it-1}$  in order to mitigate potential heteroskedasticity.

After the steps performed using data related to the companies in the sample, the model of discretionary accruals has the following form:

$$(5) \varepsilon_{it} (DA_{it}) = TA_{it}/A_{it-1} - 1433,65/A_{it-1} + 0,02369 (\Delta REV_{it} - \Delta REC_{it}/A_{it-1}) + 0,03834 (PPE_{it}/A_{it-1}) - 0,63578 (\Delta CFO_{it}/A_{it-1})$$



*Measurement of independent variables*

In accordance with the theoretical background, the literature review and the defined hypothesis, the independent variables are: Return on assets, Leverage, Liquidity, Board Size, Size of audit firm and Audit tenure. An overview of the independent variables and their measurement methods is given in Table 1.

**Table 1.** Description of independent variables

Variables	Acronym	Measurement Techniques
Return on assets	ROA	The ratio of net income to total assets
Liquidity	LIQ	The ratio of current assets to current liabilities
Leverage	LEV	The ratio of total debt to total assets
Board Size	BSIZE	Number of members in board of directors
Size of the auditing firm	SAF	Assigned 0 for Big Four audit firms and 1 for Non Big Four audit firms
Audit tenure	AT	Assigned 0 – long audit tenure is when the same audit firm performed audits for more than 3 years Assigned 1 – short audit tenure is when the audit firm performed audit for 3 years or less

Source: author's own account

*Methods*

Testing the influence of the selected factors on FRQ, i.e. their predictive power, requires multiple linear regression. In this sense, the following regression model is developed:

$$(6) \text{FRQ}_{it} = \beta_0 + \beta_1 \text{ROA}_{it} + \beta_2 \text{LIQ}_{it} + \beta_3 \text{LEV}_{it} + \beta_4 \text{BSIZE}_{it} + \beta_5 \text{SAF}_{it} + \beta_6 \text{AT}_{it} + \varepsilon_{it}$$

$it$  indicates the observed predictor variables for firm  $i$  in time  $t$ .

**Research results and discussion**

The results of the analysis first refer to the descriptive statistics of all variables included in the model, which is presented in Table 2. The mean, minimum, maximum and standard deviation of the variables are shown for the total number of 396 observations.

**Table 2.** Descriptive Statistics

Operational Variables	Obs.	Minimum	Maximum	Mean	Std. Deviation
DA	396	-3,16845	,56585	-,03733	,25889
ROA	396	-5,86	10,79	3,09	1,35
LIQ	396	,08	6,27	1,90	,31
LEV	396	1,37	84,42	49,55	25,46
BSIZE	396	1	11	3,26	2,60
SAF	396	0	1	,89	,30
AT	396	0	1	,66	,47

Source: Authors' calculations

The preliminary analysis proves the assumption of normality of the variance, and in further analysis we determine the degree and direction of the linear relationship between the dependent and independent variables, as shown in Table 3.

**Table 3.** Correlation Matrix

Variables		FRQ	ROA	CLIQ	LEV	BSIZE	SAF	AT
DA	Pearson Correlation Sig (1-tailed)	1	-,552 ,000	,077 ,063	,520 ,000	-,328 ,005	-,358 ,026	,440 ,003
ROA	Pearson Correlation Sig (1-tailed)		1	,066 ,096	-,463 ,000	-,160 ,001	,181 ,000	,032 ,264
LIQ	Pearson Correlation Sig (1-tailed)			1	-,278 ,000	-,043 ,916	,069 ,084	-,520 ,000
LEV	Pearson Correlation Sig (1-tailed)				1	,146 ,002	-,025 ,311	-,298 ,000
BSIZE	Pearson Correlation Sig (1-tailed)					1	-,076 ,067	-,091 ,036
SAF	Pearson Correlation Sig (1-tailed)						1	-,007 ,442
AT	Pearson Correlation Sig (1-tailed)							1

*Source:* Authors' calculations

The correlation matrix, the correlation coefficients and the appropriate degree of significance ( $\text{Sig} < 0.05$ ) show that only ROA and LEV have a strong relationship with DA. ROA has a negative correlation ( $r = -.552, p < 0.05$ ), which means that DA decreases as ROA increases. LEV shows a positive correlation ( $r = .520, p < 0.05$ ), which implies that changes in LEV have the same direction as DA.

For other variables, we find the following relationships: BSIZE moderately negative, SAF moderately negative and AT moderately positive correlation with DA. LIQ has a weak relationship (below 0.3) with ROA, and this relationship is not statistically significant ( $p = .063$ ), which is why we believe that this variable should be excluded from further research.

In the correlation matrix, it is also necessary to look at the collinearity of the independent variables, because it is not recommended to include independent variables whose linear correlation is 0.7 or more in the same analysis. In our analysis this is certainly not the case. However, as problems with multicollinearity of independent variables cannot always be identified in the correlation matrix, the results stem from the Variance Inflation Factor (VIF) and Tolerance, as shown in Table 4.

**Table 4.** Multicollinearity of independent variables

Variable	VIF	Tolerance
ROA	1,272	,786
LEV	1,004	,996
BSIZE	1,026	,974
SAF	1,034	,967
AT	1,001	,999

*Source:* Authors' calculations

As already known, if VIF is above 10, and Tolerance is below 0.10, then there is the problem of multicollinearity. Table 2 shows that VIF does not go beyond 10 in any of the variables. What is more, Tolerance does not go below 0.10 in any of the variables, so there is no problem with multicollinearity between the variables in this research.

After proving that the assumptions of the regression have not been violated, the regression analysis starts using the SPSS. At the beginning, we evaluate the model with the help of  $r^2$  ie. coefficient of determination. This coefficient shows how much of the variance of the dependent variable is explained by the model. In our case,  $r^2 = 0.395$ , which means that the defined model explains 39.5% of the variance of DA. The model in our example is statistically significant (Sig= 0,0000,  $p < 0,05$ ).

**Table 5.** Variables in the Equation

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95,0% Confidence Interval for B	
	B	Std. Error	Beta			Lower Bound	Upper Bound
(Const.)	,058	,043		1,348	,178	-,027	,144
ROA	-,011	,001	,404	8,820	,000	,009	,014
LEV	,002	,000	-,332	-6,843	,000	-,003	-,002
BSIZE	-,004	,004	-,016	-,393	,694	-,009	,006
SAF	-,021	,034	-,025	-,612	,016	-,087	,046
AT	,016	,023	,029	,707	,148	-,029	,061

a. Dependent Variable: DA

*Source:* Authors' calculations

Given the data in the table, a classic linear regression model can be represented by the following equation:

$$(7) \text{FRQ}_{it} = 0,058 - 0,011 \text{ROA}_{it} + 0,002 \text{LEV}_{it} - 0,004 \text{BSIZE}_{it} - 0,021 \text{SAF}_{it} + 0,016 \text{AT}_{it} + \varepsilon_{it}$$

Bearing in mind that the FRQ measure is a discretionary accrual, Table 6 provides an overview of the impact of each variable on DA, and consequently on FRQ, and then we briefly explain it.

**Table 6.** Connection of variables

Independent Variables		DA	FRQ	Significance
ROA	Decrease	Increase	Decrease	
LEV	Increase	Increase	Decrease	
BSIZE	Decrease	Increase	Decrease	×
SAF	Decrease	Increase	Decrease	
AT	Increase	Decrease	Increase	×

Source: Authors' calculations

*Financial Reporting Quality and Return on Assets* - ROA is a variable whose influence on FRQ is statistically significant and which, taking into account the Beta coefficient, predicts FRQ to the greatest extent. It has a strong negative relationship with DA, i.e. decrease in ROA leads to an increase in DA, which actually reduces FRQ. Based on that, it can be concluded that the management has greater tendency to manipulate earnings when the company operates less profitably, i.e. more profitable companies have better FRQ. This finding is consistent with the results of the Fathi (2013) and Hung et. al. (2023) research.

*Financial Reporting Quality and Leverage* – LEV indicates the company's financial position and the degree of its indebtedness, and has a statistically significant and positive relationship with DA. It follows that managers in companies that borrow more are more likely to resort to manipulations, which consequently reduces FQR which is in line with the results of Adebayo (2022), Okika et. al., (2019), Bui and Nguyen, (2021) and Masud (2021) research.

*Financial Reporting Quality and Board Size* – BSIZE has a negative relationship with DA, which means that as the number of managers on the board increases, so does earnings management, while FRQ decreases. However, in companies operating in agriculture, mining and forestry sectors in Serbia, this influence is not statistically significant, bearing in mind that  $p > 0,05$  which is consistent with the result of Adebayo (2022) research.

*Financial Reporting Quality and Size of audit firm* – SAF has a negative relationship with DA, i.e. an indirectly positive influence on FRQ. As Lopes (2018), Alzoubi (2016, 2018), Cioncan et. al. (2019), Balios et. al. (2021) and Mesbah & Ramadan (2022) stated in their research, our results indicate that those companies whose financial statements are audited by Big4 companies are less likely to manipulate accounting information.

*Financial Reporting Quality and Audit tenure* – AT has a positive relationship with DA, which indicates that the longer the period of auditor's work for the same client, the greater the manipulation in financial statements and consequently the lower FRQ. These results are consistent with the results of Mesbah and Ramadan (2022) and Salehi et. al. (2022), Alzoubi (2018), however, in the selected sample, this influence is not statistically significant.

Summarizing the research results, it can be concluded that the hypothesis can only partially be proven. More precisely, ROA, LEV and SAF are factors that significantly influence FRQ, while LIQ, BSIZE and AT are without influence.

Based on the presented results, it can be said that the defined hypothesis has been partially confirmed, i.e. that Return on assets (ROA), Leverage (LEV) and Size of Audit Firm (SAF) significantly influence the quality of financial reporting (FRQ) in agricultural companies in the Republic of Serbia, while Liquidity (LIQ), Board size (BSIZE) and Audit tenure (AT) have no predictive power.

### **Conclusions**

The constant complication of business activities in companies subject to financial reporting, which brings greater opportunities for manipulating financial information, makes the issue of FRQ, although always present in accounting practice, especially popular. High-quality financial statements increase the trust of the company's stakeholders, thereby creating a favorable environment for investment and economic activity, but also strengthening the national economy and ensuring social well-being as the supreme goal of society.

As agricultural activity is one of the key drivers of the national economy, this research examines the factors affecting the quality of financial reporting in agricultural companies in the Republic of Serbia. On a sample of 99 large and medium-sized companies, three factors with the leading influence on FRQ are tested. Research has shown that more profitable companies are more responsible in disclosing high-quality information in their financial statements compared to less profitable companies. The same is true with companies whose level of indebtedness is at a lower level, as well as companies that hire audit firms from the Big4 group for the purpose of auditing their financial statements. In the case of the remaining two analyzed factors, board size and audit tenure, although they have a positive or negative correlation with FRQ, this correlation is not statistically significant, i.e. these factors do not significantly affect the realized level of FRQ in agricultural companies in the Republic of Serbia.

Regardless of the statistical significance of certain factors, we believe that their consideration by management is of key importance for the improvement of FRQ in these companies and at the same time for the improvement of their operations. Namely, the management of less successful and more indebted companies must be more careful in reporting because the disclosed financial position and performance may be the result of accounting manipulation. In addition, increasing the quality of disclosed information in financial statements opens up a greater possibility of attracting the necessary funds and thus improving the company's operations.

Also, the boards of directors, especially the smaller ones, should show greater responsibility in controlling and monitoring management's opportunistic behavior, especially when hiring audit firms. This is because research results show that longer period of cooperation with the same audit firm decreases FRQ. In this regard, special

attention must be paid to the importance of rotation of audit firms in order to avoid a possible drop in the auditor's independence, lower quality of the conducted audit activities, and consequently lower FRQ.

The presented research results should attract the attention of regulatory bodies that have significant responsibility in preserving the stakeholders' trust in FRQ. By analyzing the factors affecting earnings management, special attention should be paid to the improvement of control mechanisms, especially external auditing. Also, based on the research of Aničić et. al. (2023) special attention in the Republic of Serbia regarding the improvement of the FRQ should be focused on the greater participation of the accounting profession in the adoption of legal regulations, the establishment of national accounting standards, greater practical education and training of accounting staff, harmonization of legal regulations with EU Directive 2013/34 EU and so on.

### Conflict of interests

The authors declare no conflict of interest.

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