Brief Economic Analysis of the Financial Position of a SME in the Agricultural Sector. Analysis Model

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A B S T R A C T

This study aims to assess the performance of the largest SME by turnover in 2023, from the S-W Oltenia region, Romania in the field of agriculture, by using the rate method. The economic analysis has the role of assessing the quality of management in terms of the level of performances achieved, but also of knowing aspects regarding the management of economic patromony, at the same time foreshadowing the requirements for the future survival of SME. In this regard, a brief analysis of the annual financial situation of the analyzed SME, namely the balance sheet for the period 2021-2023, was carried out. The economic analysis focused on the rate method, highlighting the economic characteristics and financial diagnosis. The research question was: Can the rate method constitute a model of economic analysis? The results showed that it is useful to use the rate method in assessing the efficiency of the activity carried out, but most importantly, their interpretation, since economic analysis represents the main source of information necessary to assess the performance and financial situation of any economic entity.

1. Introduction

The proper functioning of a SME will increasingly depend on the quality of the information collected, on its correct processing, but also on the speed of reporting the conclusions in order to identify the optimal solutions to be taken based on them. Financial and accounting information is a factor of interest in the economic growth of SMEs, it is the main tool used to monitor the activity, imposing in this context the need for permanent improvement of the means and techniques of collection, processing, archiving, provision of data and information made available to users. The economic analysis allows the valorization of the data provided by the accounting system, with the objective of informing internal and external users about the materialization of economic and financial performances, but also of the causes that were the basis of any deviations. The economic analysis also takes into account the evaluation of the technical and economic capacity of the economic entity, considering the two sides: diagnosis and regulation.

The rate method complements the economic analysis and allows comparisons to be made in space, in order to better situate the entity in the competitive environment, or in time, in order to appreciate its evolution. The rates thus determined highlight the financial characteristics of the economic entity, namely: the possibility of assets to transform into liquidity, the autonomy and financial independence of the economic entity. The financial position of SMEs is important on the one hand in choosing financing and investment policies, in forecasting the cash flows to be generated, and on the other hand in knowing the changes that have occurred at the level of economic resources and the rights over them.

2. Literature review

SMEs represent an essential subject of economic activity in any country, the development and formation of the very structure of the economy being almost impossible without their participation. Thus, the role of SMEs is significant, allowing for an increase in the number of jobs and implicitly the development of competition and, as a result, improving the quality of goods (Syzdykova, A., Azretbergenova, G., 2025). The economic analysis is a powerful tool available to managers, which allows for knowledge of profitability, development and innovation. In the economic analysis, annual financial statements are used that include information on assets, liabilities, capitals but also the development possibilities in the near future of economic entities and implicitly of SMEs (Mirea, M., 2019). The financial position of an economic entity is established

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taking into account the activity carried out, the main resources at its disposal, the investment cycle carried out, but also the patrimonial structure of the company (Grigorescu, L., D., 2019). The analysis of the evolution and structure of the economic resources in the patrimony of an economic entity is carried out using structural rates, a method that provides information that may be relevant when making dynamic comparisons at the level of the same economic entity over several years or when making comparisons between economic entities in the same branch of activity (Podbeglîi, A., 2017). The rate method constitutes a particularly important analysis at the level of financial position and performance, being approached as ratio-type indicators that involve various directions, such as the use-resource structure, management/rotation or profitability (Gomoi, B., C., 2022). The rate method represents an operational tool in the process of analyzing the economic entity. In the economic-financial diagnosis of economic entities, the following operational categories of rates of the financial potential and equilibrium can be used (Robu, V., Georgescu, N., 2000):

◇ the liquidity and solvency rates express the economic entity's ability to honor its short-term payment obligations;
◇ the financial equilibrium rates reflect a series of proportionalities that are established within and between different financial flows;
◇ the management rates measure the efficiency with which the economic entity uses its assets;
◇ the debt management rates explain the extent to which the economic entity is financed through loans;
◇ the profitability rates measure the effectiveness of the management team, as it results from the income obtained and the return on investments.
◇ The financial analysis using the rate method must meet a series of conditions (Filip, A., Știrbu, V., 2018):
◇ to use representative, useful rates;
◇ the rates calculated over several successive periods must be comparable with each other;
◇ to avoid comparing rates between economic entities that have radically different business activities.

The main objective of the analysis of patrimonial structure is to establish and monitor the evolution of the weight of patrimonial elements. In this sense, the structure rates of the assets and liabilities measure the relative importance of their component elements in the total assets, respectively liabilities of the economic entity (Grigorescu, L., D., 2019). The information summarized in the annual financial statements represents the support that underlies the calculation of a series of financial indicators which, through the results provided, allow for a pertinent analysis of the economic position and performance (Mirea, M., 2019). The financial position is based on the balance sheet, as a component part of the annual financial statements.

3. Study on the economic analysis by applying the rate method
3.1. Brief presentation of an SME
To carry out the applied analysis, the largest SME in the S-W Oltenia region, Romania, was selected based on its turnover in 2023 in the agricultural sector. In this sense, the website https://membri.listafirme.ro/pagini/p1.htm was accessed and the following selection criteria were applied:
Active companies;
Gorj, Vâlcea, Dolj, Mehedinți and Olt Counties;
Fields of activity: Agriculture;
Sort companies by turnover in descending order;
Filter: Currency lei, Number of employees minimum 1, maximum 249.

Further, for confidentiality reasons, the generic name of the analyzed economic entity will be SME. In this sense, SME has as its main field of activity, reported in the balance sheet: Activities in mixed farms - crop cultivation and animal husbandry, according to NACE code 0150. The SME is located in Vâlcea County, was established in 2014, and it recorded a turnover of 415,170,925 lei in 2023.

3.2. Research methodology
The study is based on the quantitative research method, with content analysis, observation of changes that occurred during the period 2020-2023 on the analyzed SME and interpretation of the collected data. The rate method is a method of quantitative analysis, being an analysis tool that allows knowledge of economic and financial phenomena, whether historical or forecast, but also of the elements and factors that determine them. The rate method aims to establish a ratio between two comparable quantities from a logical-economic point of view. In order to carry out the economic analysis and answer the research question, we reviewed the SME's balance sheets to reflect its information possibilities and proceeded to use the rate method, with the following structure:
1. asset structure rates;
2. management rates;
3. liability structure rates;
4. solvency.

3.3. Research results

The starting point in the economic analysis and financial diagnosis of the analyzed SME is the balance sheet, reflected according to Table 1 below:

Table 1. SME balance sheet in the period 2020-2023

Component patrimonial elements	Year -lei-		
	2023	**2022**	**2021**
Fixed assets	121029855	94368938	62252343
Stocks	103403595	64598016	56054401
Debts	50196766	60340801	48775889
Cash availability	7049361	7273386	6646423
Current assets	160649722	132212203	111477713
Advance expenses	692214	1323345	857141
Total active	282371791	227904486	174587197
Equity	86722342	66664078	42451286
Liabilities	178732345	149835180	120378382
Advance income	16917104	11405228	11757529
Total passive	282371791	227904486	174587197

Source: processing based on the annual financial statements

At the level of the structure of patrimony components of assets, we note the supremacy of current assets, a normal and natural aspect taking into account the object of activity. Current assets focus, in particular, on inventories, which register a significant increase of 60% in 2023 compared to 2022. The high level of inventories is validated, mainly, by the seasonal nature that implies a high demand in certain periods of the year. At the same time, there is also an increase in the fixed assets, respectively by 28.25% in 2023 compared to 2022, which means that investments in fixed assets have also taken place within the SME. At the level of patrimony items, the supremacy of debts is noted, thus reflecting the debts that the SME has to pay over a shorter or longer period of time.

✓ Analysis of the solvency rates
The rates on asset structure allow us to record the share of fixed and current assets in the total patrimonial assets. The indicators calculated for the analyzed SME are detailed in Table 2 as follows:

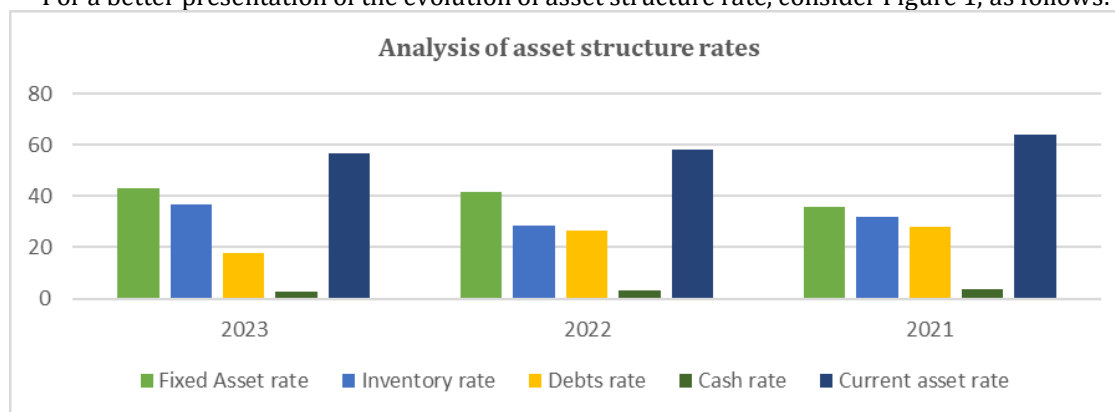**Table 2. Analysis of asset structure rates**

Rate name	Year -lei-		
	2023	**2022**	**2021**
Fixed Asset rate	42,86	41,41	35,66
Inventory rate	36,62	28,34	32,11
Debts rate	17,78	26,48	27,94
Cash rate	2,50	3,19	3,81
Current asset rate	56,89	58,01	63,85

Source: processing based on the Annual financial statements

Analyzing Table 2, an increase in the fixed assets rate is observed, registering 42.86% in 2023, which reflects the share of assets that have always existed in the SME's assets. By complementarity with the fixed assets rate, a significant share of the current assets rate is observed, with over 50% in all three years analyzed, but decreasing. From a dynamic point of view, in 2022 the fixed assets rate registered an increase of 16.12% compared to 2021 as a result of the increase in fixed assets by 51.59% corroborated with the increase in total assets by 30.54%. In 2023, there is also an increase in this rate, but which registers lower values compared to the increase in the previous year. In this regard, in 2023 compared to 2022, there is an increase in the fixed assets rate by 3.50% due to the increase in fixed assets by 28.25% and total assets by 23.90%.

Regarding the current assets rate, a decreasing trend is observed, recording the value of 56.89% in 2023, which surpasses the fixed assets rate in the three years analyzed. The high level of this rate is also due to the object of activity, with inventories ranking first among current assets. Thus, in 2022 compared to 2021, the current assets rate decreases by 9.15% as a result of the increase in total assets by 30.54% compared to the increase in current assets of 18.60%. In 2023, compared to 2022, there is a further decrease in the current assets rate, the cause is represented by the greater decrease in total assets compared to current assets, which continues this year.

For a better presentation of the evolution of asset structure rate, consider Figure 1, as follows:

Figure 1. Evolution of rates regarding the structure of assets
Source: processing based on data from the Annual financial statements

✓ Analysis of management rates

The management rates reflect the turnover duration of assets and liabilities using the turnover for the three consecutive financial years and are presented, according to Table 3, as follows:
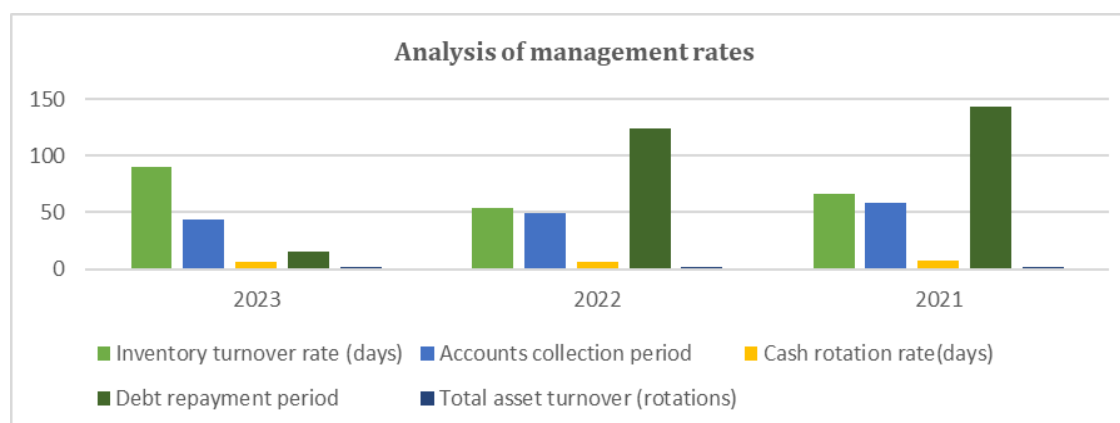
Table 3. Analysis of management rates

Rate name	Year -lei-		
	2023	**2022**	**2021**
Inventory turnover rate (days)	89,66	53,33	66,50
Accounts collection period	43,53	49,82	57,87
Cash rotation rate (days)	6,11	6,00	7,89
Debt repayment period	15,60	123,70	142,81
Total asset turnover (rotations)	1,47	1,91	1,74

Source: processing based on data from the Annual financial statements

Analyzing Table 3, a fluctuating inventory rotation rate is observed, with an average rotation duration of 70 days, due to the relatively non-perishable nature of the inventory it has. The receivables recovery duration exceeds the normal limit of 30 days, which has a negative impact on the treasury. However, taking into account the debt repayment duration, the SME is in a favorable area in the first two years analyzed, which is longer compared to the receivable's recovery duration. In 2023, a shorter debt repayment duration compared to the receivable's recovery duration is observed, an unfavorable aspect for the SME under analysis. Regarding the rotation of total assets, the SME reaches constant values, which signifies the efficient use of controlled resources.

Graphically, the evolution of management rates is presented according to Figure 2 as follows:

Figure 2. Evolution of management rates
Source: processing based on data from the Annual financial statements

✓ Analysis of rates regarding the structure of liabilities

The rates regarding the structure of liabilities express the share of equity and debt in total patrimonial liabilities and are detailed, according to Table 4 as follows:
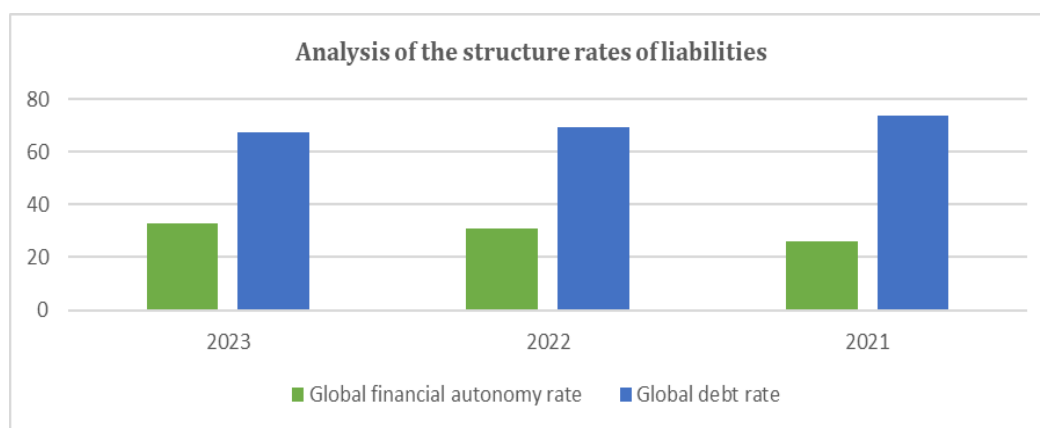
Table 4. Analysis of rates regarding the structure of liabilities

Rate name	Year -lei-		
	2023	**2022**	**2021**
Global financial autonomy rate	32,67	30,79	26,07
Global debt rate	67,33	69,21	73,93

Source: processing based on data from the Annual financial statements

In terms of the global financial autonomy rate, according to Table 4, the SME presents values below the recommended value of 33%, but records an increasing trend of this indicator, which allows it to continue its activity under normal conditions. Regarding the global debt rate, against the background of complementarity with the global financial autonomy rate, decreasing values are observed, a favorable aspect for the analyzed SME. Thus, in 2023, a recovery of this indicator is observed, approaching the maximum allowed value of 66%. However, the SME records values above this level, a negative aspect being a consequence of the value of debts that have a much more obvious weight within total liabilities compared to equity.

For a clearer presentation of the results, Figure 3 is considered, as follows:

Figure 3. Evolution of rates regarding the structure of liabilities
Source: processing based on data from the Annual financial statements

✓ Analysis of solvency rates

Solvency represents the capacity of the economic entity to meet its medium and long-term maturities. The analysis of solvency rates is reflected in Table 5, as follows:

Table 5. Analysis of solvency rates

| Items	Um	An -lei-		
		2023	**2022**	**2021**
Asset solvency rate	%	**0,31**	**0,29**	**0,24**
General solvency rate	%	**1,58**	**1,52**	**1,45**

Source: processing based on data from the Annual financial statements

Taking into account the optimal level of the patrimonial solvency rate of 0.5, it is observed that in none of the three years analyzed does the SME manage to record values above this threshold. However, the reported values are increasing, which reflects a favorable trend by restoring the balance. From a dynamic point of view, in 2022 compared to 2021, the indicator records an increase of 20.83% as a result of the increase in equity by 57.04% corroborated with the increase in liabilities by 30.54%. In 2023, the patrimonial solvency rate also recorded an increase, but compared to the previous year it is lower, namely by 6.90% as a result of the increase in equity by only 30.09% compared to 2022.

Regarding the general solvency rate, it is found that the SME records values above 1, which indicates stability and a good financial balance that allows long-term debt to be covered from net assets and which reflects its ability to honor its obligations to third parties. Taking into account the safety threshold of 1.66%, it is found that the SME has values between 1-1.66%, which reflects the existence of a moderate insolvency risk.

From a dynamic point of view in 2022, the indicator shows an increase of 4.83% compared to 2021 due to the increase in total assets by 30.54%, which outranks the increase in total debts of 24.47%. In 2023, the general solvency rate records an increase of 3.95% compared to 2022 as a result of the increase in total assets by 23.90%, but also of the increase in total debts by 19.29%.

For a clearer presentation of the results, Figure 4 is considered, as follows:
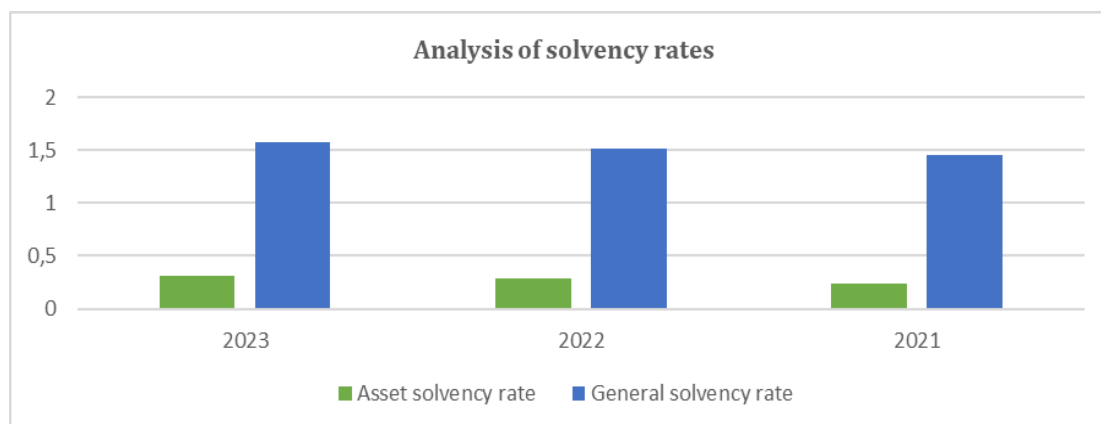
Figure 4. Evolution of solvency rates
Source: processing based on data from the Annual financial statements

4. Conclusions

Following the research conducted on SMEs in the S-W Oltenia region during the period 2021-2023, we can answer the research question: Can the rate method constitute a model of economic analysis? by presenting the role of this method in financial analysis at the SME level. Thus, the rate method represents a fundamental tool in carrying out economic analysis, contributing to establishing performance, being effective in the process of quantification, evaluation and control. For the selected SME, the rate method allowed knowledge of the financial position, respectively the structure of asset and liability rates, management rates and solvency. Also, the rate method allowed a comparative analysis of the SME, representing an effective tool in the economic analysis of the financial position. The SME subject to analysis, as could be observed, is located in a favorable area in terms of management rates, which signifies the efficient use of controlled resources. From the point of view of the global financial autonomy rate, the SME presents an increasing trend of this indicator, which allows it to continue its activity under normal conditions. Regarding the overall debt rate, against the background of complementarity with the overall financial autonomy rate, decreasing values are observed, a favorable aspect for the analyzed SME. Regarding the general solvency rate, it is found that the SME records values that indicate stability and good financial balance that allow covering long-term debts from net assets and which reflect its ability to honor its obligations to third parties.

The rate method can therefore constitute an economic analysis model allowing the rapid observation of structural changes or the anticipation of imbalances by comparing data from previous years.

In this sense, the information contained in this research provides answers to administrators, but also to other interested parties, to issues such as:

- *the financial position of the SME* on the one hand by choosing financing and investment policies, in forecasting the cash flows to be generated, and on the other hand in knowing the changes that have occurred at the level of economic resources and the rights over them;

- *solvency* by establishing the SME's capacity to meet average and long-term maturities;

- *return* by comparing the level of the results and the means used to obtain them, determining the return related to growth, efficiency and competitiveness;

- *business development* by knowing how the entire activity was carried out throughout the analyzed period and the pace of development recorded, formulating judicious conclusions, relevant for future steps.

The economic analysis using the rate method allows the decision to continue the activity, or not, by knowing the benefits brought by each patrimonial element in particular. In this sense, the accounting information found in the financial statements published at the end of a fiscal reporting period can allow the determination of relevant indicators for establishing the strengths and weaknesses that define financial management. The correct choice of rates that are desired to be calculated and interpreted is taken into account, depending on the requirements of the user of financial-accounting information and the proposed objectives. More precisely, the financial analysis based on the rate method is a perimeter in which more does not necessarily mean better, since the use of a very large number of rates does not implicitly determine an increase in the relevance of the analysis.

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