Financial performance management and economic cycle variations. Evidence for textile industry

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Abstract. The study analyses the dynamics of the financial performance of the companies in the textile industry in Romania and aims to identify its main determinants, corresponding to the different stages of the economic cycles. The selected sample was mixed; therefore, the econometric analysis (based on panel data) was performed on accounting data collected from secondary sources (for 2000-2019). Because some of the companies in the sample showed negative financial results, the financial performance was assessed based on sales’ volume. The regression model used included seven determinants related to the company (internal determinants) and three external variables (GDP growth rate, inflation rate and unemployment rate). The results of the analyses indicated that (for the whole period) 51% of the sales dynamics can be explained due to the variation of the determinants included in the model. The analysis at the level of internal determinants indicated that all seven variables have a significant statistically influence on financial performance. From the perspective of macroeconomic determinants, the study showed that performance is negatively and significantly correlated with the inflation rate and unemployment rate. Applying the regression model to distinct periods (pre-crisis, crisis and post-crisis) provided very useful information from a practical point of view.

1. Introduction

The literature focused on research methodology in business and management highlights that financial performance is a more sensitive but fascinating topic [1]. Proof of this is the fact that the debate on performance has been and continues to remain in the attention of theorists and practitioners. The benchmark that fuelled researchers' interest was that, at the organizational level, the essence of performance consists in long-term growth and survival [2], and continuous performance improvement is an important goal. In the context of this research, performance has been accepted as an artifact based on which the success of an organization is appreciated, in the context of a free, competitive and globalized market [3].

The research topic of this article requires a theoretical, methodological and empirical assessment of the cause-effect relationship between financial performance and its determinants. This is because, depending on the stage of the economy, but also on their internal health, companies develop their own strategies to adapt to the economic and social context in which they operate. We consider at least three types of strategies: growth (adapting to the macroeconomic context), financing and performance strategies. The interdependencies between these strategies are very close. Moreover, these strategies have features specific to the fields of activity in which they are implemented. For this reason, this study focuses on the analysis of financial performance for a sample of companies in the textile industry.
The textile industry has an old tradition in Romania. Although the industry has focused on higher value-added production, recent official reports [4] indicate that identifying the determinants of modest performance in the textile industry (in the context in which it has made an important contribution to international trade) is a priority. Similar to the trends in other countries [5], from the 1990s to the present, the clothing industry in Romania has been characterized by an unfavourable evolution of financial performance indicators, respectively, by a decrease in the employed workforce. The main cause was the inability of national companies to cope with imports (especially those from China).

Starting from this identified problem, this study aims to assess the impact of the main determinants on the financial performance of companies in the textile industry. In order to achieve the assumed objective, the article was structured as follows. The next section presents a summary of the literature review on financial performance and its determinants. The third section presents the research methodology. The fourth section presents the analysis, interprets the results of performance measurement, details the impact of determinants and initiates discussions so that the analysis can be useful for increasing the performance of textile companies. The last section presents the conclusions and considerations regarding future research directions.

2. Literature review regarding to financial performance and its determinants
Over time, performance management has been assigned two important roles: a) to support organizations in formulating and assessing strategy, to motivate human resources, and to communicate the performance of all stakeholders [6,7]; b) to continuously measure the effectiveness and efficiency of capitalizing strategic and operational resources, human and information resources, marketing and financial perspectives [8,9].

The importance and necessity of measuring and assessing organizational performance was recognized early on. Since 1996, Sinclair and Zaire [10] have argued that measuring performance helps managers adopt long-term perspectives, develop more effective communication, motivate and encourage the adequacy of organizational behaviour, facilitate change management, allocate resources more efficiently, and adopt a more efficient operating, planning and control system. Later (in 1999), Wagoner, Neely and Kennerley [11] showed that measuring performance has multiple purposes: controlling performance and identifying areas that require special attention; increasing employee motivation; improving internal communication; strengthening the accountability of all stakeholders.

In general, financial performance was defined from the perspective of companies' financial results. Therefore, in order to admit that a company is financially successful, for a certain period of time, the income must be higher than the expenses of the income-generating activities. Financial performance was also defined from the perspective of the efficiency and effectiveness of the organization in achieving its objectives [12]. In other words, a superior performance is the proof of the proper management and use of the company's resources [13, 14], respectively, the proof of the effectiveness and efficiency of the management of resource use. Other authors [14] argued that financial performance reflects a company's ability to create economic value, respectively, to attract and generate profits for investors [15, 12].

From a macroeconomic perspective, performance reflects the ability of companies to contribute to a country's economy in general [16]. Achieving superior financial performance amplifies the positive influences of companies on society and the natural environment [17].

Studies that have focused on the analysis of financial performance have mainly used two tools: financial rates (which allow the diagnosis of the financial health of companies) and cash flow (which allows managers to manage liquidity - for operational, financial and investment activities - so as to ensure the sustainability of the business). Most studies of financial performance determinants use causal models between a dependent variable (financial performance) and one or more independent (explanatory) variables. The dependent variable (financial performance) is assessed on the basis of two categories of data: accounting and market. Accounting measures are calculated based on performance over time, such as return on assets (ROA), return on equity (ROE), return on sales (ROS), return on investment (ROI), earnings per share (EPS), net profit margin (NPM), volume of sales, operating cash flow and others. Market-based measures (TobinsQ value and the company's market value) assess the
company's performance from a market perspective. Unlike market-based measures, accounting-based measures can reflect the internal decision-making process and performance of managers [18].

The determinants of financial performance are grouped into two categories: internal (specific to the company) and external factors (specific to industry and/or the national economy). Therefore, it is recognized that financial performance depends on micro and macroeconomic variables. Microeconomic variables (financing structure, product/service, costs of production factors, quality, organizational culture, etc.) determine a company's position in its competitive environment. The main macroeconomic variables with an impact on financial performance are: economic growth rate, inflation rate, unemployment rate, indebtedness of companies, etc.).

Pantea, Gligor and Anis [19] showed that concerns about performance determinants are divided into two levels: one based on economic tradition (emphasizing the importance of external factors, related to the market), and another one focused on behavioural and sociological paradigm (centred on organizational factors and their correlation with the environment). The authors also emphasize that little attention is paid to the company's competitive position, respectively, to the company's internal factors.

Dinu and Vi{t}ilă [20] grouped external factors on two levels: economic environment (customized by current legislation, market preferences and purchasing trends of the population) and the economic situation of the country (assessed by the cost of financing, inflation rate, capital market development, international trade relations, exchange rate, current account deficit/surplus, demand and supply of goods, prices of raw materials and utilities, income per capita). In the category of internal factors, the authors work with the following structure: factors related to the business itself, factors related to its operations, ownership, management, employees, products/services and strategy.

Capon, Farley and Henig [21] conducted extensive research to identify factors that affect financial performance. Of these, the most representative determinants with a positive impact on financial performance were: industry concentration; increase in assets and sales; market share; company size (measured as sales' volume); capital investment intensity. The authors also noted that most research focused on financial performance in terms of the impact of environmental factors (concentration, industry size, imports and exports, barriers to entry) and organizational strategy (growth, capital investment, advertising, market share, research and development, debt, diversification, product/service quality, vertical integration, corporate social responsibility). Identifying few studies that address the companies' problems, the authors argued that more attention is needed "for this general family of determinants of financial performance".

Starting from the hypothesis that belonging to a cluster generates valuable benefits for companies (with positive effects on performance), Pavelkova et al. [5] conduct an analysis of the financial performance of companies in traditional industrial sectors in the Czech Republic - plastics and textiles. They used financial indicators such as ROA, ROS, labour productivity and economic added value to measure financial performance. Although the results of their research did not confirm the hypothesis, their work was a reference for this research because it signals differences in the level of performance of companies in the textile industry and the level of performance of companies in other industries.

Analysing the impact of capital structure on the performance of listed textile companies (90 companies, 2008-2017), Ullah et al. [22] showed that financial performance (assessed by ROE) is influenced by capital structure (degree of indebtedness), company size, asset turnover and sales’ growth. Specifically, the authors provided evidence on: the negative and significant influence of capital structure on financial performance; the positive and significant influence of sales’ growth (including export sales) on financial performance.

The literature also notes that companies in the textile industry have a modest competitiveness due to low productivity and product quality, poor product diversification, high costs of production factors and underdeveloped infrastructure [23]. In order to assess the financial performance of companies in the textile industry, some authors have proposed [24] and applied [25] diagnostic methods and tools with several criteria associated with financial, marketing, technological and quality activities, general management and human resources.

3. Methodology

The literature [26, 27, 28] points out that organizational performance research is exposed to risks related
to: the correct identification of determinants and their measuring instruments; choice of data sources (secondary sources provide historical information; primary data - based on observation - are not relevant for longer periods of time); representativeness of samples (lack of homogeneity limits representativeness; focusing on certain areas / industries limits generalization).

Taking into account these considerations, we constructed the sample based on the following criteria: object of activity (companies were selected according to CNEA 1413 - Manufacture of other clothing, excluding underwear); the volume of sales for the last year of the analysis period (companies with annual sales of at least 2 million euros were selected). From the total number of companies identified, 120 companies were selected, of which only 63 submitted data for the entire analysis period. The total sales of these companies (in 2019) were 665 million euros (representing 42% of total sales). Of the 63 companies, those with more than three years of losses were eliminated. The final sample was represented by 47 companies.

To track the impact of financial performance determinants in different phases of economic cycles, we opted for a 20-year analysis (2000-2019). The selected sample was mixed (comprising both large and medium-sized companies); therefore, the statistical analysis was based on accounting data collected from secondary sources (available on www.mfinante.ro). The usefulness of accounting information was also confirmed by [25], which analysed the performance of companies in the Romanian textile industry.

Because some of the companies presented (during the analysed period) negative financial results, the financial performance was assessed on the basis of sales’ volume (considered a dependent variable in the regression model). The independent variables, their determination methodology and the predicted impact are presented in table 1. Due to the fact that some indicators are calculated in absolute terms, to obtain correct results in future analyses we calculated natural logarithm.

| Variables                          | Symbol    | Determination methodology                                      | Estimated impact* |
|------------------------------------|-----------|-----------------------------------------------------------------|-------------------|
| Sales’ volume                      | LN_S      | Natural logarithm of turnover                                   |                   |
| Return on assets                   | ROA       | (Gross profit / Total assets) x100                              | +                 |
| Return on equity                   | ROE       | (Net profit / Equity) x100                                      | +                 |
| Return on sales                    | ROS       | (Gross profit / Turnover) x100                                  | +                 |
| Share of trade receivables in turnover | Tt      | (Trade receivables / Turnover) x100                             | + / -             |
| Level of indebtedness              | LI        | (Liabilities / (Liabilities + Equity) x100)                    | + / -             |
| Level of liquidity                 | Liq       | (Cash availability/Liabilities) x100                            | +                 |
| Labour productivity                | Lp        | (Turnover/No. of employees)                                     | +                 |
| Logarithm of Lp                    | LN_Lp     | Natural logarithm of LP                                         | +                 |
| Firm size_1                        | Ne        | Number of employees                                             |                   |
| Logarithm of Ne                    | LN_Ne     | Natural logarithm of Ne                                         | + / -             |
| Firm size_2                        | TA        | Total assets                                                    |                   |
| Logarithm of TA                    | LN_TA     | Natural logarithm of TA                                         | + / -             |
| GDP growth rate                    | GDP       | -                                                               | +                 |
| Unemployment rate                  | UR        | -                                                               | -                 |
| Inflation rate                     | IR        | -                                                               | -                 |

Note: * According to literature review. Source: Processed by authors.

In order to identify the interdependent relations between S and its determinants, we performed correlation and regression analyses. Data Analysis (from Excel) software was used to perform statistical analysis for the identified econometric model. Because the data in our sample consider a set of 12 indicators, for 47 companies, over a period of twenty years, the regression analysis was adapted to panel data. The general equation of the regression model applied is as follows:

$$ X_{it} = Y_{it} \times \beta_1 + Z_{it} \times \beta_2 + u_{it} $$ (1)
where: \( i \) represents the companies included in the analysis, \( t \) is time (2000...2019); \( X_o \) is the dependent variable (in our case sales’ volume); \( Y_o \) is the independent variables; \( Z_o \) is the control variables (in our case the size of the company, appreciated by total assets and number of employees); \( \beta_1 \) and \( \beta_2 \) represent the coefficients; \( u_o \) is the error term.

4. Results and discussions

As described in the previous section, for identifying the interdependent relationships between \( S \) and its determinants, we performed the correlation and regression analyses. Before performing these, we analysed the results obtained for descriptive statistics (see table 2). The results highlight the fact that the indicators considered in the analysis varied significantly during the analysed period, registering also important differences depending on the company and the period.

| Table 2. Descriptive statistic. |
|--------------------------------|
| \( LN_S \) | ROA | ROE | ROS | \( T_t \) | \( LI \) | \( Liq \) | \( LN_Lp \) | \( LN_Ne \) | \( LN_TA \) | GDP | UR | IR |
| Mean | 16.6 | 17.9 | 40.9 | -84.6 | 120.1 | 42.1 | 99.1 | 10.9 | 5.7 | 16.3 | 4.0 | 6.5 | 9.6 |
| Median | 16.7 | 12.8 | 19.7 | 9.2 | 15.3 | 40.3 | 21.1 | 10.9 | 5.8 | 16.5 | 4.3 | 6.8 | 5.7 |
| Standard deviation | 1.5 | 18.0 | 258.2 | 2445.1 | 3073.0 | 271.4 | 187.4 | 1.3 | 1.3 | 1.4 | 3.7 | 1.0 | 11.6 |
| Minimum | 0.0 | -48.4 | -1887.0 | -73000.0 | 0.0 | 1.8 | -309.2 | 0.0 | 0.0 | 8.1 | -5.5 | 3.9 | -1.5 |
| Maximum | 19.8 | 94.1 | 7411.2 | 75.6 | 94233.3 | 146.1 | 1429.4 | 18.7 | 8.1 | 19.2 | 10.4 | 8.1 | 45.7 |
| Count | 940 | 940 | 940 | 940 | 940 | 940 | 940 | 940 | 940 | 940 | 940 | 940 | 940 |

Source: Processed by authors.

Usually, the lowest value of salles was recorded in the first years of the analysis, because some of the companies were precisely established in 2000. Through the sales’ logarithm operation, these differences have been ameliorated. Rates of return (ROA, ROE) recorded average values of 17.9%, respectively,40.9%. The superiorit of ROE over ROA indicated that the sampled companies used borrowed capital which led to increased efficiency in the use of equity. For this reason, these variables were considered to have a positive impact on sales’ volume (S). The average value for ROS was negative, which indicated that, on the whole sample, sales did not cover the costs associated with the production of the goods sold.

The average \( T_t \) is higher than 100% (120.1% respectively), which indicates that many companies do not immediately collect the value of sales. The facilities granted to customers to pay invoices can have a positive (if customers’ loyalty is achieved) or negative impact on sales (because they reduce the company's cash flow). The average level of indebtedness is below 42.1%, and indebtedness has a positive effect on ROE; the predicted sign for the impact of this indicator was a positive one. Holding cash facilitates the purchase of other factors of production, a fact for which we estimated that it has a positive impact on sales. Average labour productivity is 116 euro/ employee; this variable usually has a positive impact on performance. The company’s size was assessed by two indicators: total assets and number of employees. Usually, larger companies have higher sales, which is why it was estimated to have a positive impact on performance (appreciated by sales’ volume).

For the three macroeconomic variables (GDP, UR and IR) we estimated a different impact on performance. A positive GDP growth rate indicates an economic environment with increasing activity, which can be considered a premise for increasing the performance of companies. Instead, the unemployment rate and the inflation rate indicated certain macroeconomic imbalances, which can have a negative impact on financial performance of the companies. Correlation analysis indicated strong associations between some variables (TA and S, Lp and S; bolded in Table 3), which required their exclusion from the regression analysis.
The results of the regression analysis are centralized in Table 4. The statistical assumption for modelling was 95%, and the assumed significance threshold was 0.05.

The results obtained for the regression model coefficients (see Table 5) indicate that - with one exception (GDP) - all independent variables have a significant impact (statistically) on sales (S). The free term indicates that there are other variables that influence the volume of sales, and whose influence is statistically significant (P-value <0.05). This information suggests that financial performance also depends on non-financial variables. The results of the regression analysis are summarized in Table 4.

|        | LN_S | ROA | ROE | ROS | Ti | Liq | LN_Lp | LN_Ne | LN_TA | GDP | UR | IR |
|--------|------|-----|-----|-----|----|-----|-------|-------|-------|-----|----|----|
| LN_S   | 1    |     |     |     |    |     |       |       |       |     |    |    |
| ROA    | -0.17| 1   |     |     |    |     |       |       |       |     |    |    |
| ROE    | -0.14| 0.18| 1   |     |    |     |       |       |       |     |    |    |
| ROS    | 0.42 | 0.06| -0.01| 1 |    |     |       |       |       |     |    |    |
| Ti     | -0.33| -0.06| 0.00| -0.23| 1 |    |       |       |       |     |    |    |
| Liq    | -0.15| -0.12| 0.12| -0.10| 0.11| 1 |       |       |       |     |    |    |
| LN_Lp  | 0.49 | -0.09| -0.07| 0.31| -0.24| -0.10| 0.08 | 1     |       |     |    |    |
| LN_Ne  | 0.56 | -0.10| -0.09| 0.17| -0.14| -0.07| 0.05 | -0.34| 1     |     |    |    |
| LN_TA  | 0.88 | -0.30| -0.17| 0.18| -0.19| -0.21| 0.21 | 0.51 | 0.51 | 1   |    |    |
| GDP    | -0.02| 0.05 | 0.00 | 0.02 | -0.01| 0.06 | -0.08| -0.09| 0.07 | -0.05| 1 |    |
| UR     | -0.25| 0.23 | 0.06 | -0.02| 0.01 | 0.16 | -0.13| -0.30| 0.01 | -0.29| -0.14| 1 |
| IR     | -0.51| 0.25 | 0.17 | -0.12| 0.10 | 0.36 | -0.27| -0.53| -0.05| -0.53| 0.03 | 0.30| 1 |

Source: Processed by authors.

In order to eliminate the problem of the existence of multicollinearity and to obtain the most accurate results, we formulated regression models as follows:

\[ LN_S = \beta_1 ROA + \beta_2 ROE + \beta_3 ROS + \beta_4 Ti + \beta_5 Liq + \beta_6 LN_Lp + \beta_7 LN_Ne + \beta_8 LN_TA + \beta_9 GDP + \beta_{10} UR + \beta_{11} IR + \epsilon \] (2)

The results of the regression analysis are summarized in Table 6. The null hypothesis was rejected in favour of the alternative hypothesis. The statistical assurance assumed for modelling was 95%, and the assumed significance threshold was 0.05.

The values obtained for the regression model coefficients (see Table 5) indicate that - with one exception (GDP) - all independent variables have a significant impact (statistically) on sales (S). The free term indicates that there are other variables that influence the volume of sales, and whose influence is statistically significant (P-value <0.05). This information suggests that financial performance also depends on non-financial variables. The results of the regression analysis are summarized in Table 6.
To identify the impact of independent variables on performance at different stages of economic cycles, we organized research over three periods: pre-crisis (2000-2008); crisis (2009-2015) and post-crisis (2016-2019). The regression model presented above was applied for each period. The results are summarized in Table 7.

Applying the regression model over the three periods (pre-crisis and post-crisis) indicated the following:

- for the period 2000-2008, 51% of the variation S can be explained by the change of the independent variables included in the model; for the other periods the representativeness of the model decreases to 49% during 2016-2019 and to almost 26% between 2000-2008;
- Significance F - for all three periods - has a lower value than the set significance threshold (0.05), which means that the regression equations are significant at the global level (noting that some coefficients may not be significant);
- for the three periods, the free term varies between 4 and 6, which indicates that there are other variables with significant influence on sales (because P-value <0.05);
- ROA variation has a significant and negative impact in the pre-crisis period (2000-2008); during the crisis (2009-2015) this variable changes its direction of influence (being positively correlated with

**Table 5. Regression analysis.**

| Variables          | Symbol | Coefficients | Standard Error | t Stat | P-value | Lower 95% | Upper 95% |
|--------------------|--------|--------------|----------------|--------|---------|-----------|-----------|
| Intercept          |        | 5.9148       | 0.2202         | 26.8819| 0.0000  | 5.4827    | 6.3469    |
| ROA                |        | 0.0027       | 0.0009         | -2.8726| 0.0042  | -0.6045   | -0.0009   |
| ROE                |        | -0.0002      | 0.0001         | -2.5046| 0.0124  | -0.0038   | 0.0000    |
| ROS                |        | 0.0001       | 0.0000         | 10.5786| 0.0000  | 0.0001    | 0.0001    |
| Tt                 |        | 0.0000       | 0.0000         | -7.6713| 0.0000  | -0.0001   | 0.0000    |
| LI                 |        | 0.0018       | 0.0007         | 2.4577 | 0.0142  | 0.0004    | 0.0033    |
| Liq                |        | 0.0003       | 0.0001         | 2.9865 | 0.0029  | 0.0001    | 0.0005    |
| LN_Lp              |        | 0.3446       | 0.0341         | 10.1165| 0.0000  | 0.2778    | 0.4115    |
| GDP                |        | 0.0017       | 0.0042         | 0.3950 | 0.6929  | -0.0066   | 0.0009    |
| UR                 |        | -0.0375      | 0.0164         | -2.2867| 0.0224  | -0.0005   | -0.0035   |
| IR                 |        | -0.0152      | 0.0017         | -8.7167| 0.0000  | -0.0186   | -0.0118   |

Source: Processed by authors.

**Table 6. Variables of regression model.**

| Variables                   | Symbol | Estimated impact* | Obtained results | Degree of significance | Hypothesis |
|-----------------------------|--------|-------------------|------------------|------------------------|------------|
| Return on assets            | ROA    | +                 | -                |                        | Infirmend  |
| Return on equity            | ROE    | +                 | -                |                        | Infirmend  |
| Return on salles            | ROS    | +                 | +                |                        | Confirmed  |
| Share of trade receivables in turnover | Tt   | + / -            | +                | Significant             |            |
| Level of indebtedness       | LI     | + / -             | +                |                        | Confirmed  |
| Level of liquidity          | Liq    | +                 | +                |                        | Confirmed  |
| Labour productivity         | Lp     | +                 | +                |                        | Confirmed  |
| Logarithm of Lp             | LN_Lp  | +                 | +                |                        | Confirmed  |
| GDP growth rate             | GDP    | +                 | +                | P-value > 0.05         | Insignificance |
| Unemployment rate           | UR     | -                 | -                | Significant            | Confirmed  |
| Inflation rate              | IR     | -                 | -                | P-value < 0.05         | Confirmed  |

Note: * According to literature review. Source: Processed by authors.
the volume of the sales);
- the variation of ROE is maintained with a negative influence, but it is only representative for the crisis and post-crisis periods;
- as expected, the share of receivables in total sales has a negative and statistically significant influence in the crisis and post-crisis periods; also, during this period, the degree of indebtedness has a positive and significant impact on sales;
- labour productivity is the only variable that remains positive and significantly correlated with the volume of the sales (the statistical significance of the results is confirmed both for the entire period, 2000-2019, and for the pre-crisis, crisis and post-crisis periods); by comparison,
- the GDP growth rate is variable without statistical significance (both at the level of the whole period and in the pre-crisis, crisis and post-crisis periods);
- labour market imbalances (assessed by the unemployment rate) do not have statistically significant influences on the volume of the sales;
- the change in the inflation rate is maintained with a negative and significant influence only in the pre-crisis period; during this period (2000-2008) the inflation rate varied between 45% and 79%; in the period 2009-2016, the inflation rate changes from positive values (6.5%) to negative values (-0.6), a variation that is not significant in the regression model run in this research; this variable remains statistically insignificant in the period 2016-2019 (time in which the transition from deflation to moderate inflation is marked with a growth rate of 3.8%).

Table 7. Regression analysis.

| Regression Statistics | 2000-2008 | 2009-2015 | 2016-2019 | 2000-2019 |
|-----------------------|-----------|-----------|-----------|-----------|
| Multiple R            | 0.71      | 0.51      | 0.70      | 0.72      |
| R Square              | 0.51      | 0.26      | 0.49      | 0.51      |
| Adjusted R Square     | 0.50      | 0.24      | 0.46      | 0.51      |
| Standard Error        | 0.55      | 0.37      | 0.32      | 0.46      |
| Observations          | 423       | 329       | 188       | 940       |
| Significance F         | 2.31E-57  | 2.7E-16   | 3.49E-21  | 2E-138    |

| Regression | Coefficients | P-value | Coefficients | P-value | Coefficients | P-value | Coefficients | P-value |
|------------|--------------|---------|--------------|---------|--------------|---------|--------------|---------|
| 2000-2008  |              |         |              |         |              |         |              |         |
| Intercept  | 6.035        | 0.000   | 4.937        | 0.005   | 5.000        | 0.000   | 5.9148       | 0.0000  |
| ROA        | -0.004       | 0.006   | 0.009        | 0.015   | 0.009        | 0.063   | -0.0027      | 0.0042  |
| ROE        | 0.000        | 0.094   | -0.007       | 0.003   | -0.007       | 0.020   | -0.0002      | 0.0124  |
| ROS        | 0.000        | 0.000   | -0.005       | 0.126   | -0.008       | 0.039   | 0.0001       | 0.0000  |
| Tt         | 0.000        | 0.000   | -0.003       | 0.035   | -0.006       | 0.000   | 0.0000       | 0.0000  |
| Li         | -0.002       | 0.142   | 0.007        | 0.000   | 0.009        | 0.000   | 0.0018       | 0.0142  |
| Liq        | 0.000        | 0.499   | 0.000        | 0.000   | 0.000        | 0.001   | 0.0003       | 0.0029  |
| LN_Lp      | 0.299        | 0.000   | 0.262        | 0.000   | 0.411        | 0.000   | 0.3446       | 0.0000  |
| GDP        | 0.004        | 0.730   | 0.007        | 0.518   | 0.004        | 0.832   | 0.0017       | 0.6929  |
| UR         | -0.005       | 0.905   | 0.156        | 0.546   | 0.047        | 0.705   | -0.0375      | 0.0224  |
| IR         | -0.012       | 0.000   | -0.032       | 0.126   | 0.019        | 0.640   | -0.0152      | 0.0000  |

Source: Processed by authors.

The results of the econometric analysis are of great practical use because they provide important benchmarks in substantiating long-term organizational strategies. Companies’ managers in the textile industry must take into account that: in pre-crisis and crisis periods the goal of increasing sales is more important than the goal of maximizing earnings; credit sales (which generates trade receivables) does not contribute to the increase sales’ volume; labour productivity is one of the important factors of performance (appreciated by sales’ volume); significant monetary imbalances have a negative impact on sales.
5. Conclusions
This study focuses on the analysis of financial performance for a sample of companies in the textile industry which has an old tradition in Romania. The identified research problem (the unfavourable evolution of the financial performance in the last 20 years) determined us to identify which are the factors that set up this evolution.

The bibliographic research carried out indicated that the identification of the determinants of financial performance is a current and important concern. This is because performance management aims to support companies in formulating and assessing the strategy, taking into account both the microeconomic and macroeconomic context.

The empirical research aimed to determine the meaning and intensity of the influences of the determinants of financial performance (appreciated by the volume of sales). The statistical analysis performed on a sample of companies in the textile industry (inhomogeneous sample in terms of company size) provided representative information both for the period 2000-2019 and by subdivisions of this period (pre-crisis, crisis and post-crisis). The regression model used included ten internal determinants (ROA, ROE; ROS; share of receivables in total sales; labour productivity, indebtedness and liquidity) and three external variables (GDP growth rate, inflation rate and unemployment rate).

The results of the analyses performed for the whole period (20 years) indicated that all ten internal variables have a significant influence (from a statistical point of view) on the financial performance. From the perspective of macroeconomic determinants, the study showed that performance is negatively and significantly correlated with the inflation rate and the unemployment rate. The results of the analyses performed over shorter periods (pre-crisis, crisis and post-crisis) indicated that most of the determinants analysed had a different impact. The only variable that keeps the same impact on performance is labour productivity (with the stipulation that the intensity of the impact increases in post-crisis periods). Debt has a positive and significant impact only for the crisis and post-crisis periods.

In the literature review we did not identify assessments of the impact of performance determinants on different economic phases (growth, crisis or decline). Therefore, we admit that this study fills the existing research gap in the field of performance management and presents evidence for companies in the textile industry in Romania. The elements that give originality to the research are: the selected sample (which ensures the representativeness of the results at the level of the textile industry); the analysed period (extended for 20 years, so as to include pre- and post-crisis periods) and the results obtained (which can be very useful in substantiating organizational strategies).

The study has some limitations. Data were collected from simplified annual financial statements, which reduced the number of variables with a potential impact on performance. In the regression model applied, the free term varies between 4.9 and 6.03, which indicates that there are other variables with a (statistically significant) impact on financial performance. In future research we intend to identify these factors, so as to expand knowledge about the determinants of financial performance of companies in the Romanian textile industry.

6. References
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