ANALYSIS OF PROFITABILITY, SOLVENCY, LIQUIDITY AND FINANCIAL DISCIPLINE OF ROMANIAN ENTERPRISES

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Abstract: *Performance is a fundamental concept of economic analysis, a permanent concern for practice, and an economic climate conducive to entrepreneurship brings positive effects throughout society: financial balances in the economy are restored, production and services increase and include new activities, employment increases and the standard of living of the population rises. This paper analyses whether the dynamics in Romanian enterprises confirm the empirical observation that between 2014/2016 and 2021 the performance of Romanian enterprises has been increasing. Specifically, the paper finds that enterprises in Romania have increased their capacity to produce profit, the financial structure of the enterprise has improved, in terms of increasing capitalization and reducing debt. Enterprise solvency and liquidity are also increasing, and although financial discipline seems to be improving, there are still segments of the economy/sectors of activity with discipline problems, with many economic agents unable or unwilling to pay their debts because they do not collect their claims or do nothing to receive them.*

Keywords: *profitability, solvency, liquidity, financial discipline, Romanian enterprises.*
JEL Classification: *E44.*

1. Introduction

In recent years, for which statistical information is available, entrepreneurial structures in the Romanian economy have recorded significant growth, their performance generating important benefits for Romanian society as a whole. Unfortunately at the moment, in the absence of reliable information on the evolution of Romanian companies over the last two years, it is impossible to predict whether the trend at the end of the second decade and the beginning of the third has continued. In particular, after the pandemic crisis, the world and Romanian society continued to face major upheavals, with important consequences for economic structures: the disorganisation of logistics chains prior to the health crisis and their rebuilding along different lines, the two wars, the almost continuous energy crises, the climate crisis and, last but not least, the technological changes brought about by the digitisation of work, administrative and domestic activities, which are disrupting customs and traditions.

Performance is a fundamental concept of economic analysis, a permanent concern in practice. Performance results from reference to various internal or external variables, past results or the output of other operators. It is also often possible to equate performance with competitiveness (Niculescu, 2005, p. 42).

An economic climate favourable to entrepreneurship has positive effects on society as a whole: financial balances in the economy are restored, services increase and include new activities, employment increases and the standard of living of the population rises.

This paper aims to analyse whether the dynamics of enterprises, seen through a series of aggregated financial indicators, confirm the empirical observation that the performance of Romanian enterprises has been on the rise during the period mentioned above.

As working methods, ratios are used, as well as a series of common financial indicators, with a predictive role for post-factum analysis.

2. Profitability of Romanian enterprises

The ability of the enterprise to produce profit is expressed by the profitability category. Profits, and therefore the profitability of enterprises, result from the prices set by the supplydemand ratio, from income exceeding expenditure, from the orientation of the production of goods and services in relation to the needs of the public. Profitability is expressed by two measures, an absolute one, when we refer to profit seen in absolute terms, and a relative one, as the rate of profit, when we refer the mass of profit to the capital or resources of the enterprise or the flows that generate it (turnover, value added) (Gheorghiu, 2004, p. 189).

Profits of Romanian companies increased between 2018 and 2021 by more than 60 billion, i.e. about 80% of the value they had in 2018, with the biggest increase in 2021 (40 billion out of 60 billion recorded for the whole period) and explained by the resumption of economic activities after the lockdown during the pandemic crisis in 2020. About 60% of the total profit in the economy is generated by services and trade (about 46 billion lei in 2018 and 81 billion in 2021). Next, industry - mining, manufacturing and utilities - generated profits of about 20 billion lei in 2018 and about 35 billion in 2021. From the data in Table 1 we also notice the variability of profits generated by agriculture, due to the permanent dependence on weather conditions.

Table 1. Evolution of net profit for all enterprises in Romania and by sector of activity (billion lei)

Sector of activity	2018	2019	2020	2021
Agriculture	4,09	3,55	2,33	8,02
Extractive industry	4,48	5,09	3,21	5,04
Services	23,96	29,53	28,26	41,09
Utilities	0,63	1,11	4,37	4,91
Real estate	4,24	4,12	4,71	7,50
Construction	6,54	8,99	11,60	11,73
Manufacturing industry	14,97	12,42	15,46	24,24
Commerce	21,81	26,26	29,98	39,92
Economy total	**80,72**	**91,07**	**99,92**	**142,45**

Source: BNR, www.bnr.ro, Secțiunea Statistică, *Rapoarte asupra stabilității financiare: serii de date statistice utilizate în grafice*, *https://www.bnr.ro/Rapoarte-asupra-stabilitatii-financiare--7673.aspx*, accessed on 10 Nov. 2023

Table 2. Evolution of some rates of return - % (calculated for all enterprises in Romania)

Indicator	2014	2015	2016	2017	2018	2019	2020	2021
Commercial rate of return (EBIT margin ratio: operating result/turnover) - %	-	-	6,2	7,1	7,1	7,4	8,0	9,1
Financial rate of return (operating result/equity) - %	11,2	14,5	17,3	19,3	19,5	19,6	18,9	22,7

The same high values are observed for the dynamics of rates of return (Table 2.). Thus, between 2016 and 2021, the commercial rate of return, calculated by relating the operating result to turnover, which basically speaks of the efficiency of the company's commercial and pricing policy (Hristea Ana Maria, 2013, p. 143) (Niculescu Maria, 1997, p. 309), increases by 50%, to an average of 9%. Basically, out of 100 lei received by the enterprise, 9 lei are profit, compared to only 6 lei in 2016.

Large increases are also noted in financial profitability, a doubling between 2014 and 2021, from 11% to 22%, but their dynamism hides an unresolved reality of the Romanian economy, the undercapitalisation of many small and medium-sized enterprises with capital at the legal minimum of 200 lei.

Table 3. Evolution of commercial rate of return (net profit margin: net profit/operating income) in Romania, total and by sector of activity for companies with a turnover of more than the RON equivalent of 1 million euro) - %

Sector of activity	June 2015	June 2016	June 2017	June 2018	June 2019	June 2020	June 2021	June 2022
Agriculture	4,34	6,66	9,85	8,93	3,67	0,39	2,93	12,45
Commerce	2,30	3,41	3,35	3,17	3,50	3,91	4,10	4,56
Construction	0,92	2,54	2,90	4,70	6,11	8,06	4,76	4,01
Real estate	3,89	13,68	14,38	17,63	14,40	14,49	13,61	22,91
Extractive industry	14,62	12,98	21,30	18,02	23,40	17,23	15,67	20,60
Manufacturing industry	5,48	4,76	3,97	4,43	2,70	2,48	5,10	4,54
Services	5,75	5,78	7,26	7,07	7,74	6,51	5,88	6,86
Utilities	6,56	6,07	5,89	6,11	5,59	8,26	8,47	11,73
Economy total	**4,38**	**4,70**	**4,99**	**5,04**	**4,82**	**4,83**	**5,26**	**6,47**

Table 3 captures some information on the commercial rate of return, calculated on the basis of net profit, by sector of activity. The data only cover major enterprises in the Romanian economy, with a turnover of more than one million euro, but with 80% of the economy and more than 60% of the workforce. Thus, the commercial rate of return increases by 50% between 2015 and 2021, from 4.38% to 6.47%. By economic sector, the highest returns are seen in real estate, mining and quarrying, utilities, and when weather conditions are good, agriculture.

In conclusion, the ability of the enterprise to produce profit, both in terms of profit mass and rates of return, shows positive trends between 2014/2016 and 2021:

- increase in absolute profit size by more than 60 billion;
- increase in the commercial rate of return (profit margin) by 50% from 6% to 9%;
- doubling the financial return (on equity) from 11% to 22%;
- growth across the board in most sectors, except manufacturing.

3. Financing of Romanian enterprises

Beyond the accounting categories that we find in the balance sheet, and which is the source for financial analysis, assets, liabilities, equity, it mirrors how the assets and receivables held by the firm were obtained (Berman et al, 2011, p. 103).

Between 2015 and 2021, Romanian enterprises have strengthened their financial autonomy, equity has increased its contribution to the financing of the enterprise from 30% to 37% and correspondingly debt has decreased from 62% to 57%.

Romanian enterprises finance themselves through debt mainly from suppliers, with trade debt contributing 17%, i.e. one out of six lei comes from their trading partners.
Another source of company financing comes from affiliated entities or shareholders, including loans from parent companies, who contribute between 11 and 12% of debt.

Banks, non-bank financial institutions and foreign financial institutions provide 10% of the resources of Romanian companies, because in relation to the other debts they have important costs attached and also come with a number of restrictions and external control over the debtor companies.

Table no. 4. Financing structure of non-financial companies in Romania - %

Indicator	**2015**	**2020**	**2021**
1. Capital	30	35	37
2. Provisions and deferred income	8	7	7
3. Total debt, of which:	62	58	56
3.1. External private financial debt	-	2	2
3.2. Domestic loans (banks and NFIs)	-	8	8
3.3. Trade debts	-	17	17
3.4. Debts to the state	-	4	4
3.5. Liabilities to affiliated entities and shareholders (including external parent-subsidiary loans)	-	12	11
3.6. Other debts	-	15	14

In conclusion, there is an improvement in the company's financial structure, greater autonomy in decision-making and reduced vulnerabilities due to the highly variable economic environment.

4. The risk of bankruptcy of romanian companies (solvency and liquidity)

Bankruptcy risk is the analysis of the firm's ability to meet its commitments to third parties, and therefore the assessment of the solvency and liquidity of the firm (Stancu and Stancu, 2012, p. 37).

However, before exploring, the solvency and liquidity of Romanian enterprises, I think we should analyse the ability of enterprises to generate income, through assets held: asset turnover. Asset turnover, in fact, evaluates the management of the company's assets or in other words the sales generated by each monetary unit invested in assets (Helfert, 2006, p. 123).

Between 2016 and 2021, asset turnover increases by 5%, from 90%, to over 95% and only in 2020, the pandemic year, did it fall below the limits of the range analysed. Presumably, the increase in asset utilisation efficiency, in the absence of primary data, is explained by increases in turnover, which are higher than the increase in asset value.

The leverage effect (assets/equity, also called the financial capital structure (Brezeanu, 2008, p. 361) or capital multiplication factor (Halpern et al., 1998, p. 119) increases until 2016, after which it declines. The value at the end of the interval however remains well above the initial value. The development in the first part, the increase in the value of leverage, can be explained by the first meaning of the indicator, the financial structure of the company, in the sense that the process of falling interest rates or lax conditions in the economy make companies finance their investments from debt (whatever, bank, commercial, from their own shareholders), the decrease after 2016 is explained by the second meaning of the ratio, capital multiplication, which slows down against the background of increasing equity. By whichever name it is called, it is a cause of financial returns. While it dominates the increase in the financial rate of return between 2014 and 2016 (see the information in Table 2), the much more modest increases in this profitability after 2016 are explained by the absence of the impact of this variable.

Table 5. Evolution of certain financial indicators
(calculated for all enterprises in Romania) - %

Indicator	2014	2015	2016	2017	2018	2019	2020	2021
Asset turnover (turnover/assets) - %	-	-	90,3	93,7	92,5	94,5	87,4	95,5
Leverage (assets/equity) - %	221,6	212,0	306,3	290,9	296,3	281,4	271,6	259,5
Short-term debt ratio (short-term debt/assets) - %	-	-	47,7	46,8	44,5	43,4	42,6	41,8
Long-term debt ratio (medium and long-term debt/assets) - %	-	-	19,6	18,8	21,7	21,1	20,6	19,7
Solvency ratio (debts/equity) - %	-	-	206,3	190,9	196,3	181,4	171,6	159,5
Overall liquidity (current assets/short-term liabilities) - %	90,4	92,4	95,3	98,5	103,3	107,0	111,6	118,3
Immediate liquidity (current assets without inventories/short-term liabilities) - %	-	-	90,4	92,4	73,3	76,2	80,5	83,0
Liquidity at sight (cash and financial investments/short-term liabilities) - %	16,2	19,6	20,0	20,9	21,4	23,1	25,9	27,3

The increase in the financial autonomy of enterprises (strengthening of the share of equity financing of enterprises), seen in the previous paragraph, obviously leads to a decrease in indebtedness visible only at the level of short-term debt, because long-term debt remains in 2021 at a level of about 20%, the same value as in 2016.

Solvency decreases arithmetically, which shows a decrease in the vulnerabilities of the company and is a direct result of the reduction in short-term debt and the increase in equity.

Liquidity also shows positive trends:

- general liquidity increasing by about 30%, available short-term assets being about 20% higher than the liabilities due during the year;

- immediate liquidity is approaching the 30% threshold, a lot as ca. 90% of Romanian companies are small, and the optimal threshold for them is much lower (I even consider that they have excess liquidity, negatively affecting profitability);

- partial liquidity (called immediate liquidity in works published by the NBR), though decreasing, ends the interval above the optimal threshold of 80% (in the two pre-trend years against a background of an increase in inventories below optimal values).

In conclusion, the indicators analysed to assess the impact of financial risks on the company show positive trends, which tells us that the solvency and liquidity of the company are increasing and the potential risks are decreasing.

5. Financial discipline of Romanian enterprises

Tables 5 and 6 provide a range of information on the dynamics and structure of the enterprise's debts, respectively, on the time taken to collect them, including some data on the sectorial characteristics of this last indicator.

The analysis of the evolution of indebtedness indicates processes of reduction of short-term indebtedness. In structure, the magnitude of these declines is different:

- it is much larger in the case of debts to suppliers, where the decrease is around RON 20 billion, decreasing in percentage terms by a third between 2013 and 2021;

- the magnitude of the decrease is much smaller for debts to public budgets and the category "other creditors". Thus, although the two are each reduced by around 2 billion at the end of the analysis period compared to the beginning, within the period we have many steep sinusoids, even reaching maximum values, which does not indicate that the reduction trend will last.

However, even if short-term debt (to suppliers, budgets and other creditors) decreases from 101 billion lei in 2013 to 78 billion lei in 2021, this category of debt remains high, accounting for about 60% of net profit in 2021.

Table 6. Evolution of certain debts of non-financial companies in Romania (billion lei)

Year	Debts to suppliers	Debts to public budgets	Other creditors
2013	56,25	23,22	21,19
2014	53,71	18,51	20,31
2015	52,43	24,63	19,69
2016	46,81	26,10	19,71
2017	44,85	23,27	22,01
2018	48,01	17,28	20,21
2019	45,05	17,05	18,67
2020	40,71	19,75	22,40
2021	37,47	20,69	18,69

Reducing short-term leverage, while beneficial for increasing financial discipline, still means a reduction in corporate financing. From Table 7, it can be seen that the firm's financing problems increase slightly, with the firm recovering its debts more slowly.

While on average, the time to recover receivables increases by only 4 days between 2017 and 2020 (within the range even decreasing in 2018 and 2019), contradictory movements are observed by sector of activity:

- in the construction, real estate and utilities sectors, there are quite significant decreases in the recovery period (e.g. 75 days in real estate);

- the time taken to recover debts is increasing in agriculture, mining and quarrying and services, even by 30 days in some sectors;

- but there is also relative stability in the recovery period in manufacturing and trade, i.e. in more than 50% of the economy.

Table 7. Evolution of the recovery period of claims at the level of all companies in Romania and by sector of activity (days)

Sector of activity	2017	2018	2019	2020
Total / Average	**88**	**87**	**85**	**92**
Real estate	276	260	247	201
Agriculture	146	153	157	164
Extractive industry	120	115	106	151
Construction	156	148	134	134
Enterprise services	117	117	117	133
Utilities	124	122	105	116
Population services	60	67	72	94
Manufacturing industry	79	77	75	82
Commerce	58	59	58	59

In conclusion, although financial discipline seems to be improving, there are still segments of the economy/sectors of activity with discipline problems, with many economic agents unable or unwilling to pay their debts because they do not collect their claims or do nothing to recover them.

5. Conclusion

The company's ability to produce profit, both in terms of profit mass and rates of return, we note positive trends between 2014/2016 and 2021:

- increase in absolute profit size by more than 60 billion;

- increase in the commercial rate of return (profit margin) by 50% from 6% to 9%;
- doubling the financial return (on equity) from 11% to 22%;
- growth across the board in most sectors, except manufacturing.

There is an improvement in the company's financial structure, greater autonomy in decision-making and reduced vulnerabilities due to the highly variable economic environment.

The indicators analysed to assess the impact of financial risks on the enterprise show positive trends, which tells us that the solvency and liquidity of the enterprise are increasing and the potential dangers are decreasing.

Although financial discipline appears to be improving, there are still segments of the economy/sectors with discipline problems, with many economic agents unable or unwilling to pay their debts because they do not collect their claims or do nothing to recover them.

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