

FINANCIAL CONDITION OF BULGARIAN ENTERPRISES IN THE CONTEXT OF INFLATION

Yanko Hristozov¹

Abstract: *The topic of poly-crises and the inflation caused by them has been particularly relevant recently. High price levels have led to a number of problems for businesses. The purpose of the study is to track the financial condition of Bulgarian enterprises in the context of inflation in the years of poly-crisis. The research focuses on the years 2019 to the beginning 2022. Inflation levels in Bulgaria for the period will be tracked and basic financial indicators of Bulgarian non-financial enterprises from the three largest sectors - trade, manufacturing and energy - will be analysed. The idea is to track the impact of inflation on the financial performance of non-financial corporations from the three biggest Bulgarian economic sectors.*

Keywords: *financial statement, financial Bulgarian non-financial corporations, inflation,*

JEL: *D0, E3*

Introduction

Financial and economic crises are one of the most frequently discussed topics, giving scientists the opportunity for numerous studies on the topic. Despite the serious experience of the Great Depression, the 2008 crisis, the COVID-19 crisis and the crisis caused by the war in Ukraine, it seems that we scientists, politicians and businesspeople are still surprised and often unprepared and fail to foresee the deterioration of the economic indicators in our countries or the financial indicators of the enterprises we manage. This was the case with the COVID-19 crisis and the crisis caused by the war in Ukraine, for the reason that no one had forecast the two events that gave rise to the crises.

Perhaps now it will happen again with the war between Israel and Hamas. The discussion in this report is related to the question, that such unpredictable phenomena often shatter many economic and financial theories, laws and trends. Therefore, it is necessary to change and update our thinking on a number of topics. What is interesting about these crises is that they have led to different problems for businesses. The closest and most interesting crises for researchers are those caused by the war in Ukraine and the pandemic. Unfortunately, there is not yet enough data to draw clear and definitive conclusions about what impact they have had on businesses.

My personal observations as a researcher and a person running a business are that the pandemic crisis has disrupted supply chains and had a negative effect on the finances of enterprises, due to lack of goods and raw materials, due to difficult logistics and transportation. At the beginning, this crisis led to a significant drop in fuel and energy prices, to a drop in real estate prices. But this was only observed in the first few months, while still no one knew what was going on. In the

¹ *Yanko Hristozov, Assoc. Prof. Dr., University of National and World Economy, Bulgaria, +359887443586, yankohristozov@unwe.bg, 01.09.2023*

months that followed, many businesses suffered severely due to the newly created and unforeseen situation.

We observed a number of corporate bankruptcies. At the same time, those who managed to regroup, rethink their business and strategy, adapt to the new environment, managed to profit from this crisis. After all, in a financial and economic crisis, some businesses gain a lot because of the atypical situation, others lose a lot. Of great importance is not only management, but also the sector, the branch, the state, etc.

V. Yotsov, G. Minasyan et al. (2022) highlight several important moments for economies and business and among them are the tightening of monetary policies, unfavorable financial conditions and phenomena, including high inflation, the sharp deterioration of international political relations, environmental problems, increasing the risk of social unrest and protests. Evil Zlatkov (2022) makes an interesting attempt to answer the question, is it possible, by combining several cyclical theories, to obtain clear information about the financial performance of the company and its possible development in the constantly changing macroeconomic environment? This is another approach to analyzing the impact of crises on corporate finances.

The main purpose of this report is to track inflation levels in Bulgaria for the period 2019-2022. At the same time, the main financial indicators of the enterprises from three large and key sectors for the Bulgarian economy - trade, processing industry and energy - should be measured. To trace whether there is any relationship between inflation and these key indicators for enterprises. The study suffers from a lack of data. For inflation, these are available to date, but data are missing from the annual financial statements for 2022. The latest data available is for 2021, so this research should be developed soon when the data is available.

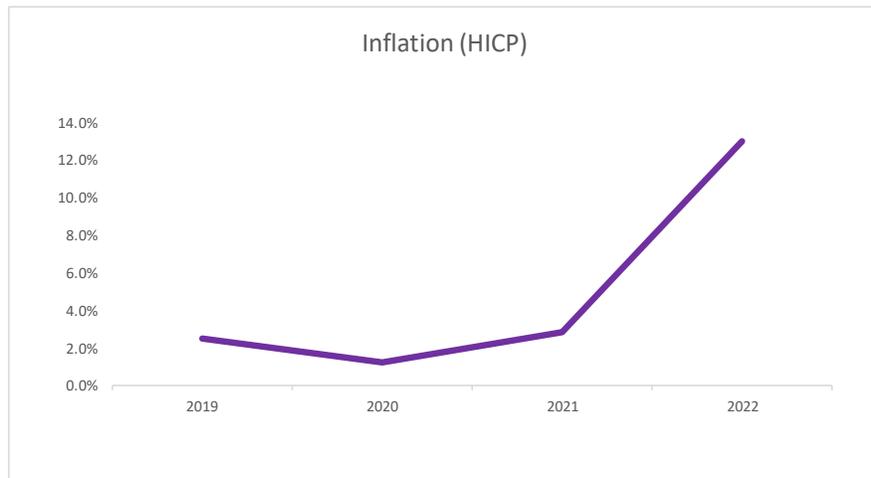
1. Inflation

Inflation is one of the main indicators in the economy and has a significant impact on business development and the finances of enterprises. The last three years, which have passed under the threat of the Covid-19 pandemic, the measures of governments around the world to contain it, the war in Ukraine in 2022 and the deepening economic crisis with rising inflation rates, have significantly influenced the behavior of consumers and traders of small (Dimitrova, V., 2022).

If they want to prevent negative events, enterprises must monitor and analyze global trends in their industry, changes in the prices of raw materials used for their business, changes in world stock market indices, labor market data and other key factors that affect cost of goods. For this reason, the report will look at inflation levels for the period 2019-2022. For a moment we thought that maybe the peak had passed, but with the recent events of October 2023 (Israel-Hamas) no accurate predictions can be made.

In 2022, inflation reached levels not seen in decades. The long and comfortable period of ultra-low inflation and low interest rates ended abruptly after the onset of COVID-19. As a result of the high rates, central banks around the world moved to raise interest rates sharply to cool demand and tame inflation. The effect is yet to be felt. Inflation rates (HICP) are presented in the following figure. As can be seen from 2019 to 2021 the levels are low and almost unchanged, in the range of 1.2 to 2.8. But in 2022 there is a significant increase to 13%. The situation was similar throughout Europe and Bulgaria is not a precedent.

Fig. 1. Inflation (HIPC), annual data, average index and rate of change



Source: Eurostat, own illustration

These low inflation rates were quite favorable for business. They allowed credit to increase excessively, and every pundit knew that excessive credit would increase the money supply, with the result that inflation would inevitably increase. Perhaps no one predicted the high levels of the end of 2022 and the beginning of 2023, but we witnessed an increase in the required minimum reserves for the first time since 2008 from 10 to 12%, yes to this instrument of monetary policy in Bulgaria rarely resorted to. This was done in order to limit high inflation. As a result of crediting, economic growth was also achieved. Business development was upward. This can be traced below in the analysis of the financial indicators of the enterprises. Due to the limited volume of the research, the author focuses on the three largest (as a total amount of assets) economic sectors according to the NSI classifier. These are sector G. Trade; repair of cars and motorcycles, C. Manufacturing, D. Production and distribution of electric and thermal energy and gaseous fuels.

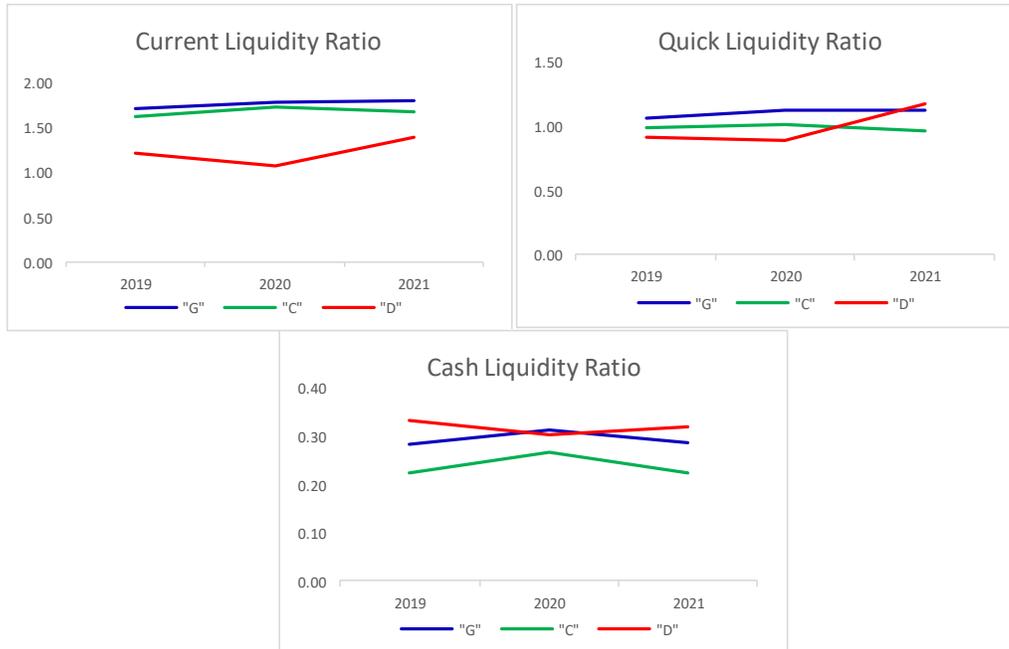
Financial statements are essential to track the facts of the economic reality and to take adequate actions to overcome the adverse consequences and overcome the potential risks in the conditions of extraordinary events such as the COVID-19 pandemic (Savova, K., 2022). For this reason, the following points will track the levels of key financial ratios.

2. Corporate Liquidity

Liquidity is an indicator that enterprises analyze and do not underestimate, because it shows their current ability to pay their debts, it is often perceived as a measure of the risk that these debts will not be covered on time. Liquidity has many manifestations and can be measured in different ways. In this report, the typical and most common indicators for its measurement are applied - the coefficients, which are ratios between different balance indicators. The three indicators differ in that each subsequent one represents a stricter test of the companies' solvency. In the following figures, the results of the enterprises can be traced. The primary data used in the figures is

provided for the report from the National Statistics Institute of Bulgaria and the calculations and illustrations are from the author.

Fig. 2. Corporate Liquidity Ratios



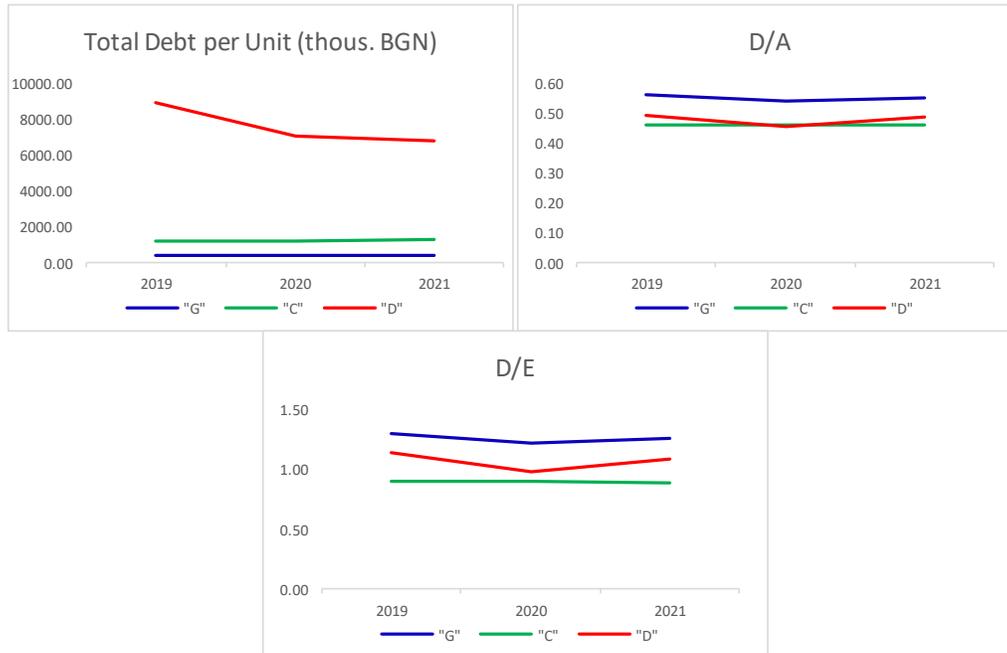
Source: NSI, own calculations

Current liquidity for all three sectors is above 1, indicating that, in general, businesses manage to pay off their short-term liabilities at the expense of their current assets. The levels are highest in sector G. (1.72 to 1.79) and lowest in sector D (1.08-1.4), and in sector C (1.62 - 1.72). A significant change for the studied period is observed only in sector D, where the difference is 32 percentage points. There are no significant changes in the remaining two sectors. In terms of quick and cash liquidity, again the most significant differences are observed in sector D. These significant differences are due to the change in the amount of short-term assets between 2019, when they are BGN 7.95 billion, and 2021, when they are BGN 13.08 billion. The number of enterprises in the sector increased by about 260, perhaps a part of this high difference can be sought in this, but it should be noted that short-term liabilities do not increase as intensively as current assets. Interestingly, the quick liquidity for all three sectors is close to 1. That is, the sectors have serious buffers against the risk of insolvency. Cash liquidity for all three sectors is within the limits that manage to cover between 22 and 33% of short-term liabilities due to cash in hand and on accounts. There are no risk phenomena or particular changes in liquidity indicators. It will be of interest to follow what happens to corporate indebtedness in these sectors.

3. Corporate Debt

The following figure presents two key debt ratios and one absolute value measure.

Fig. 3. Corporate Debt



Source: NSI, own calculations

On fig. 3, it is observed that the total debt on the basis of one enterprise from the sector remains unchanged for sector G (about 360 thousand BGN) and C (about 1200 thousand BGN). Indebtedness according to this indicator for these two sectors is low, while for sector D it is high (about 7-9000 thousand BGN), but a significant decline has been observed in the last year. This indicator is determined by dividing the total debt for enterprises in the sector by the total number of enterprises for the respective years.

The debt on the accounting balance sheet of the enterprise represents certain financial obligations that it has assumed in order to develop its main activity. The D/A ratio shows how much of the company's assets are financed with debt in one form or another. This leverage ratio shows how a company has grown and acquired its assets over time. The coefficient values for all three sectors are around 0.5 and no significant changes are observed.

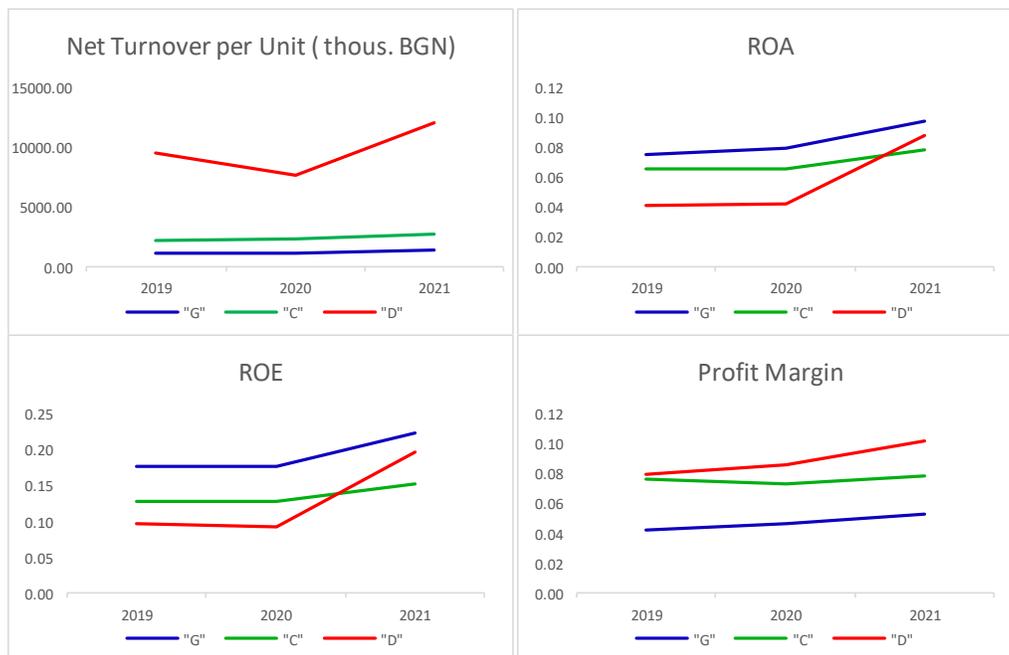
The D/SC ratio helps the company's management and its creditors to assess the risk of the company's financial structure. The coefficient helps in making financial decisions and can consider possible risks in the repayment of obligations. The debt-to-equity ratio reveals the company's share of debt as a percentage of its total market value (Hristozov, 2020). In this case, the coefficient D/SK has the lowest values in sector "C" and is below unity, but the levels are around 0.9. This shows that the sector is financed nearly 90% with borrowed capital and only 10% with own capital. The situation in other sectors is more worrying. For them, the ratio D/SC

is close to and above 1, which shows that sectors G and D are mainly financed with borrowed capital. However, the data does not give rise to problems in the sectors, because if an analysis is made years back, the values are much higher.

4. Corporate Profitability

The following figure shows the levels of some of the key profitability indicators in the enterprise.

Fig. 3. Corporate Debt



Source: NSI, own calculations

Net turnover on an enterprise basis differs for the three sectors. It is lowest in the Trade sector, slightly higher in Manufacturing and highest in Energy, where a decline is observed in 2020, but a significant increase in net turnover in 2021. In the three ratios, the numerator is the net profit of the enterprises from the sectors.

ROA shows the ability of the company to generate income based on the use of assets, i.e. the rate of return on assets as a whole. Corporate management, analysts, and investors use ROA to determine how efficiently a company is using its assets to generate profit. A higher ROA means that a company is more efficient and productive in managing its balance sheet to generate profits, while a lower ROA indicates that there is room for improvement. All three sectors saw an

increase in this indicator. It is most significant in sector D. In the last year, the indicator for all three sectors is the highest, around 0.8-0.1, with sector D ahead of sector C.

ROE is one of the most important and key financial indicators in an enterprise. It is perhaps the most comprehensive indicator of a company's performance. It is often said to be a measure of the efficiency with which the manager manages the company's equity because it shows the extent to which the owners (shareholders) achieve the minimum required rate of return on the capital invested by them. Interestingly, despite having the highest turnover, sector D shows a low return on equity in the first two years. In 2021, the sector ranks second. The values are highest in the Trade sector, close to 20%.

The Profit Margin coefficient shows the share of net profit in net sales revenue, or in other words, how much profit the company makes per BGN 1 of net sales revenue. This indicator gives information about the profit margin. Sector D had the highest values, although this was not the case for the other two ratios. The lowest margins are observed in sector G. In all three sectors, the net profit based on net revenues is below 10%. No significant changes were observed in this indicator during the studied period.

5. Conclusion

The topic of inflation and the performance of enterprises from the non-financial sector is particularly relevant and interesting in years of instability, pandemics and wars. It would be interesting to track what impact inflation has on key business metrics. It is also important if NSI provides data on inflation by economic sector, because in this case the general inflation for the country is included. In the current report, it was shown that the inflation levels reached high values only in 2022, this phenomenon is also observed in 2023. Unfortunately, the latest NSI data from the annual financial reports of enterprises is until the beginning of 2022.

That is, for the period 2019-2021, due to the low levels of inflation, there are no significant changes in the financial indicators of the three largest sectors of the Bulgarian economy. The author looks forward to the release of the new NSI data for 2022, which will happen in February 2024, to track the impact of the poly-crises on corporate finances. High inflation in 2023 is expected to have a negative effect on financial enterprises, but my prediction is that there will be a lag and this effect will show itself over time, perhaps as late as 2024. In the future, I plan to produce an analysis where to look for the dependencies between inflation and the financial indicators of enterprises.

References

- Violeta Dimitrova. "The Inflation Expectation and Consumer Perceived Risk – Retail Management Challenges". Notices of the Union of Scientists - Varna. Economic Sciences Series, 2:124-132
- D. Nenkov, Hristozov, Y. 2020. Corporate Finance. Textbook, UNWE, Sofia
- Hristozov, Y. 2020. Corporate Debt in Bulgaria. Book. UNWE, Sofia
- Hristozov, Y. 2020. Liquidity of Non-financial Corporations: Evidence from Bulgaria. Economic Alternatives Journal, UNWE, Sofia
- Savova, K. (2022) "Effects of COVID-19 in the Financial Statements for a Year of Global Pandemic – Evidence from Bulgaria". Economic Studies, 3:111-129



Yotsov, V., Minasyan, G., Lukanova, P., Zlatinov, D., Sariyski, G. (2022). Balgarskata iekonomika po vreme na pandemiyata (Bulgaria's economy during the pandemic). *Economic Thought Journal*, 67(2): 121-149
Zlatkov, Zl. 2022. "Investment in Cyclic Economy and Investment Growth," *Ikonomiceski i Sotsialni Alternativi*, University of National and World Economy, Sofia, Bulgaria, 3: 18-32,

The publication contains the results of a study funded by a targeted subsidy of the University of National and World Economy, Contract No: NID NI-1 / 2023, led by Assoc. Prof. Dr. Yanko Hristozov.