COVID-19 AND THE BUSINESS CLIMATE IN THE REPUBLIC OF MOLDOVA

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Abstract:
The activities of any enterprise are carried out under conditions of risk and uncertainty. The degree of uncertainty depends on both internal and external influencing factors. The paper considers the enterprise's ability to develop from a long-term perspective through competent management of its investment attractiveness. The article suggests seven-factor model of return on assets which estimates the level of investment attractiveness of business solely based on financial performance. The calculation of integral index of investment attractiveness of enterprises is given, which takes into account the internal indices or factors of influence on the activity of enterprises as much as possible. The integrated assessment of business environment also requires taking into account external impact factors. Accordingly, the paper analyzes the dynamics of key indicators of the national economy of RM for the period 2016-2020. In particular, this refers to the dynamics of GDP, inflation rate and bank interest rates, size of the state budget and money supply, volume of investments in fixed capital, etc. It concludes with a conclusion on the favorable conditions for Moldovan business under internal and external pressures.

Key words: Economic development of the country, Covid-19 pandemic, business environment, investment attractiveness of enterprises.

JEL classification: E51, M21, O11

INTRODUCTION

In a market economy, no business entity is able to implement its objectives and achieve its goals without the use of money as a means of organizing economic relations.

The results of its operational activities, the degree of financial stability and solvency depend on the completeness and timeliness of cash flow necessary for the normal functioning of the enterprise [12].

In view of the fact that the economic activities of enterprises are under the influence of the external operating environment created by the state, it seems interesting within the framework of this study to assess the conditions of business implementation.

To date, the most common objective indicators of the state of the economy in the world practice are the level of production, inflation rate, level of monetization of the economy, velocity of money supply circulation, level of non-payments in the economy, refinancing rate level and growth rate of investment in fixed capital.

In this study, the business environment in the Republic of Moldova (RM) will be interpreted from the perspective of assessing the evolution of the above-mentioned and some additional indicators.

As the purpose of the study is proposed objective assessment of the growth prospects of entrepreneurial activity, including through the use of information from the official financial statements of enterprises of any type of economic activity of the country, which eliminates the need to collect and systematize a voluminous amount of data.

The issues of assessing the involvement of the population of countries in the creation, development and maintenance of existing enterprises at the global level led to the launch in 2002 of the global project "Doing Business", implemented by the World Bank Group [16].

The initial report was published in 2003 [16], concerning 133 countries. As the project evolved, the coverage of the countries included in the annual global reports has steadily increased.

It is obvious that the issues of assessing the favorability of the business environment are of great interest on the part of the scientific world community.

Economists Djankov S. and Pohl G. carried out the introduction of the term «Ease of Doing Business Index» in 2003, as a definition of "ranking" countries (including assessment of dynamics) by means of established indicators characterizing various areas of the life cycle of an enterprise [17].

The increased interest in this topic has led to the emergence of a large number of scientific papers proposing various combinations of indicators proposed in the index. Nevertheless, to date, there is no universal mathematical model of entrepreneurship that allows taking into account the entire set of factors affecting the favorability of the business environment [18].

In addition, a number of other limitations (changing the methodology by year, limiting the scale of the study of regions of large countries, ignoring general conditions such as inflation and business profitability, shortcomings in the methodology of data collection, etc.) support the attention of scientists in the discussion of this issue.

RESEARCH METHODS

This article explores the patterns of development of the Moldovan economy over the period 2016-2020 (5 years).

The set of data used in the analysis covers the array of macroeconomic indicators at the country level, as well as the entire set of financial reporting data of economic entities engaged in activities in accordance with the Classifier of Economic Activities of Moldova.

The methodological basis of this study is the general research methods used in the economic field.

In particular, were used comparative analysis methods to assess the dynamics of the economic indicators under consideration.

Were used methods of deterministic factor analysis to assess the influence of factors on the growth and level of the result indicator based on a seven-factor additive model.

RESULTS AND DISCUSSION

The analysis of the indicators of the dynamics of the national economy of the Republic of Moldova will be presented below.

Figure no. 1 shows the growth rate of GDP of the RM (comparable prices) for the period 2016-2020.

The dynamics of changes in the level of GDP determines the success of the country's economy. Slowdown of GDP growth rate determines the decline of production, reduction of profit of economic agents as the main source of business financing at the expense of own capital. According to Figure no. 1, the economic situation in RM is characterized as unstable (a modest evolution of GDP). The highest growth rate was 4.7% in 2017, after which the growth of the national economy of the Republic of Moldova tended to slow down.
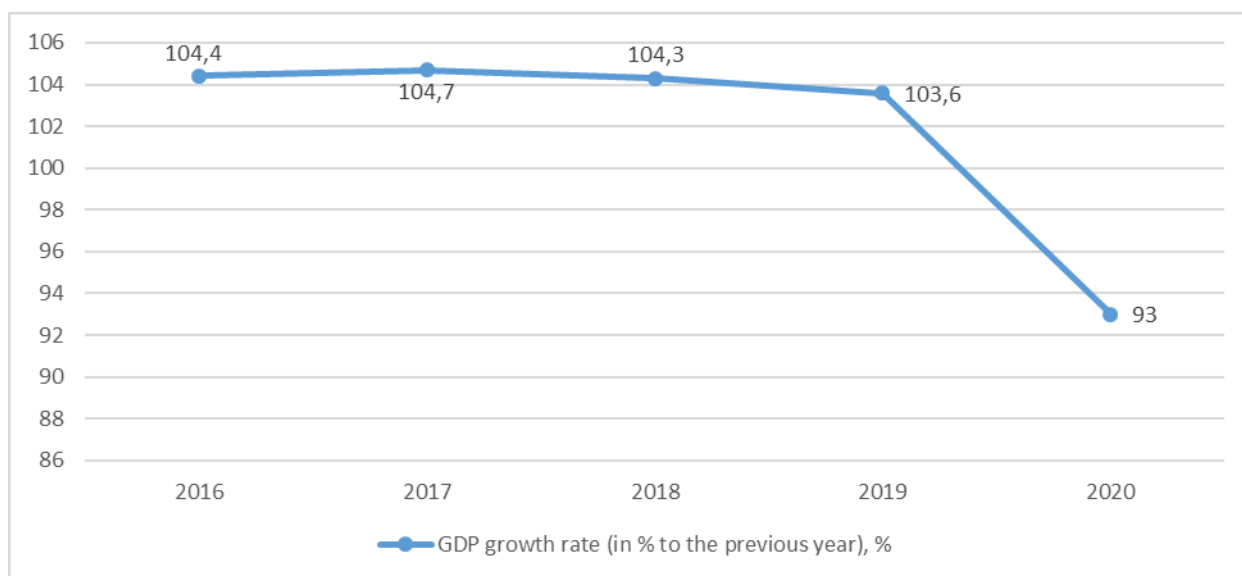
Figure no. 1. GDP growth rate
Source: compiled by the authors based on [7].

Negative GDP growth in 2020 is the result of serious economic consequences of the pandemic. The imposed quarantine measures led to a decrease in economic activity of enterprises, especially small and medium-sized ones, due to the fall in demand for services.

A World Bank survey of Moldovan enterprises in 2020 revealed a decline in monthly sales of more than half of the respondent firms of over 90% compared to the previous year's volumes [11].

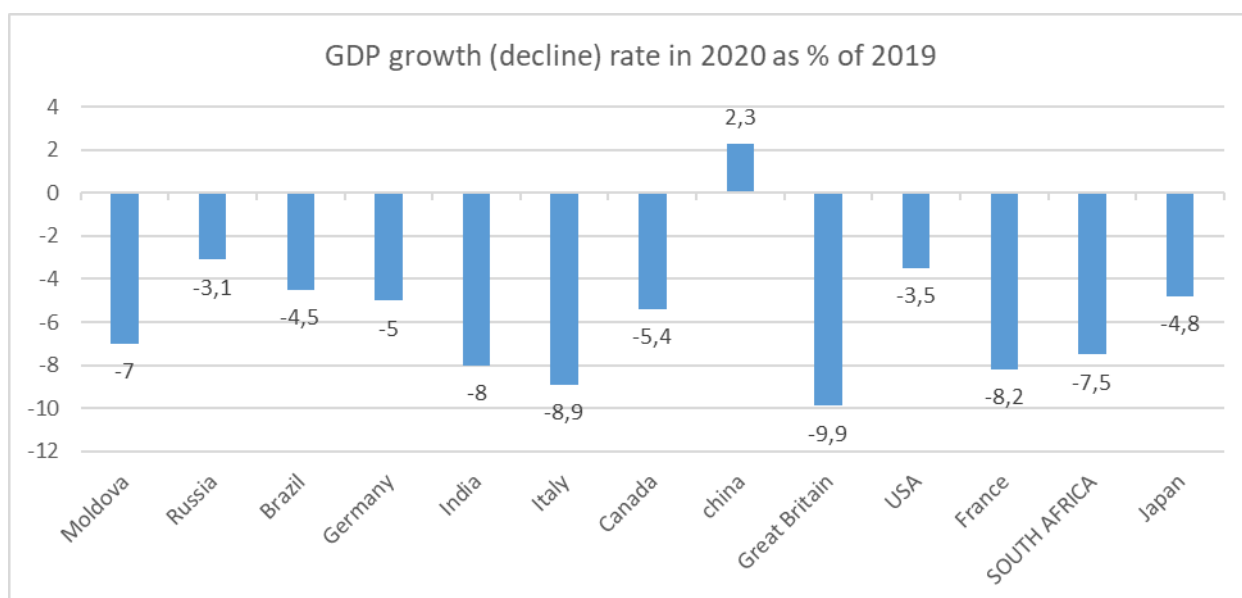The economy contracted globally over this period (Figure no. 2).

Figure no. 2. GDP growth rate in 2020 by country (chain)
Source: compiled by the authors based on [5].

Due to the fact that Moldova's domestic market is small and significantly affected by macroeconomic trends in its main trading partners (the European Union and Russia), business recovery may be delayed, given new outbreaks of the virus worldwide [15]. The inflation rate for 2016-2020 is presented in Figure no. 3.
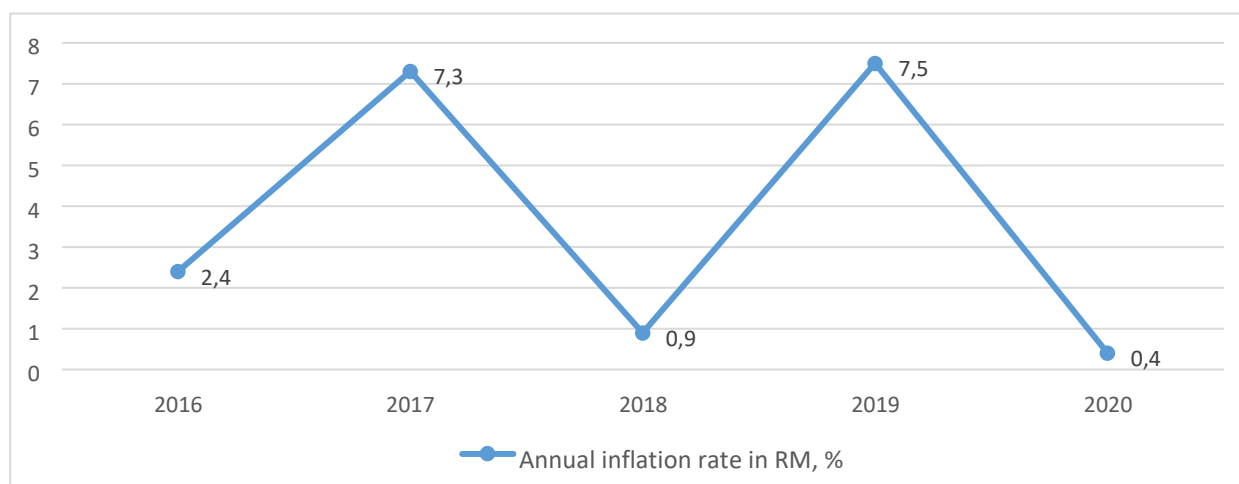
Figure no. 3. Evolution of annual inflation rate in Republic of Moldova.
Source: compiled by the authors based on [7].

The data presented in Figure no. 3 reflects the volatile dynamics of the inflation rate over the period 2016-2020. This situation is a consequence of price instability and indicates an imbalance between supply and demand. It should be noted that the acceptable level of inflation for a modern economy is 3-5% [6].

The monetary circulation indicators of the RM for the period 2016-2020 are presented in Table 1.

Table no. 1. Indicators of Money Circulation of the RM, 2016-2020

Indicators	2016	2017	2018	2019	2020
Money supply M2 (end of year), million lei	46427,6	53043,2	58349,8	63137,0	75890,8
Including: cash M0	17274,3	19106,5	21077,4	22953,2	29818,9
demand deposits	10818,4	15540,5	18091,7	19676,5	25476,0
M2 growth rate (chain), %	18,3	14,2	10,0	8,2	20,2
Specific weight of M0 in M2, %	**37,2**	**36**	**36,1**	**36,4**	**39,3**

Source: compiled by the authors on the basis of [2, 13].

The data in Table 1 show a stable dynamics of money supply growth (M2 aggregate). The structure of money supply is characterized by a high share of cash in the total volume of money supply (39.3% in 2020), which indicates the deficiencies of the monetary system of the RM. In countries with a sound banking system and developed market economy this indicator is much lower.

An important indicator of money supply is the monetization coefficient. This indicator shows to what extent the gross product is secured with money (Table 2)

According to Table 2 during the analyzed period the level of monetization was low and differed significantly from the level of the analogous indicator in the countries with developed market economies (70.0 - 80.0%) [8]. This situation allows us to conclude that the money supply does not meet the needs of the economy of the Republic of Moldova, which is also confirmed by the level of the inverse indicator - the velocity of money circulation. Thus, in particular, the velocity of money circulation from 2016-2020 was on average 3.2 revolutions per year, i.e., each leu was spent, on average, 3.2 times to service transactions.

Table no. 2. Monetization coefficient of RM, 2016-2020

Indicators	2016	2017	2018	2019	2020
Money supply M2, million. lei	46427,6	53043,2	58349,8	63137,0	75890,8
GDP of RM (current prices), million.	160815	178881	192509	210378	206352
Level of monetization, %	28,9	29,7	30,3	30,0	36,8
Velocity of money supply, number of turnovers	3,5	3,4	3,3	3,3	2,7

Source: compiled by the authors on the basis of [7, 2, 13].

The dynamics of revenues and expenditures of the budget of RM is presented in Table 3.

Table no. 3. National public budget of RM, million lei

Indicators	2016	2017	2018	2019	2020
Revenues - total	45953,9	53377,6	57995,9	62949,2	62655,3
Expenses - total	48462,6	54522,4	59608,9	65971,9	73274,9
Surplus (+), deficit (-)	-2508,7	-1144,8	-1613,0	-3022,7	-10619,6

Source: compiled by the authors based on [7].

Despite the fact that there is no state in the modern world that would not face a budget deficit, we can conclude from the data in Table 3 that there is a "chronic" budget deficit in RM over the period 2016-2020, whose value continues to increase every year (by 43.4% on average), which is assessed negatively.

One of the risks of excess of budget expenditures over its revenues is the problem of nonpayment in the country's economy [14].

During the crisis caused by the Covid-19 pandemic, the state budget experienced additional pressure due to a decrease in tax and customs revenues, as well as a sharp increase in public spending to support the health care system and social assistance programs [15].

The information regarding the share of overdue credits in the total balance of credit indebtedness of the entire banking sector of the Republic of Moldova is provided in Table no. 4.

Table no. 4. Share of overdue debt in total amount of loans

Indicators	2016	2017	2018	2019	2020
Outstanding loans (principal amount), million lei	34761,27	33473,29	35452,75	40375,46	45643,21
Including: Total overdue credits, million lei	4721,47	3774,53	2427,25	1921,98	2046,75
Share of overdue loans in the total amount of outstanding loans, %	13,6	11,3	6,8	4,8	4,5

Source: compiled by the authors based on [4].

According to Table 4, the share of overdue loans in the total amount of debt on loans in the banking sector of the Republic of Moldova does not exceed the benchmark for developed countries - 10.0%, which is assessed positively [9]. Fulfilment of financial obligations in the economy amounted to 95.5% in 2020. There is an increase in the solvency of debtors with regard to their financial obligations.

One of the indicators of the economic situation in the country (efficiency of economic processes) is the refinancing rate level or the base rate (Figure no. 4).
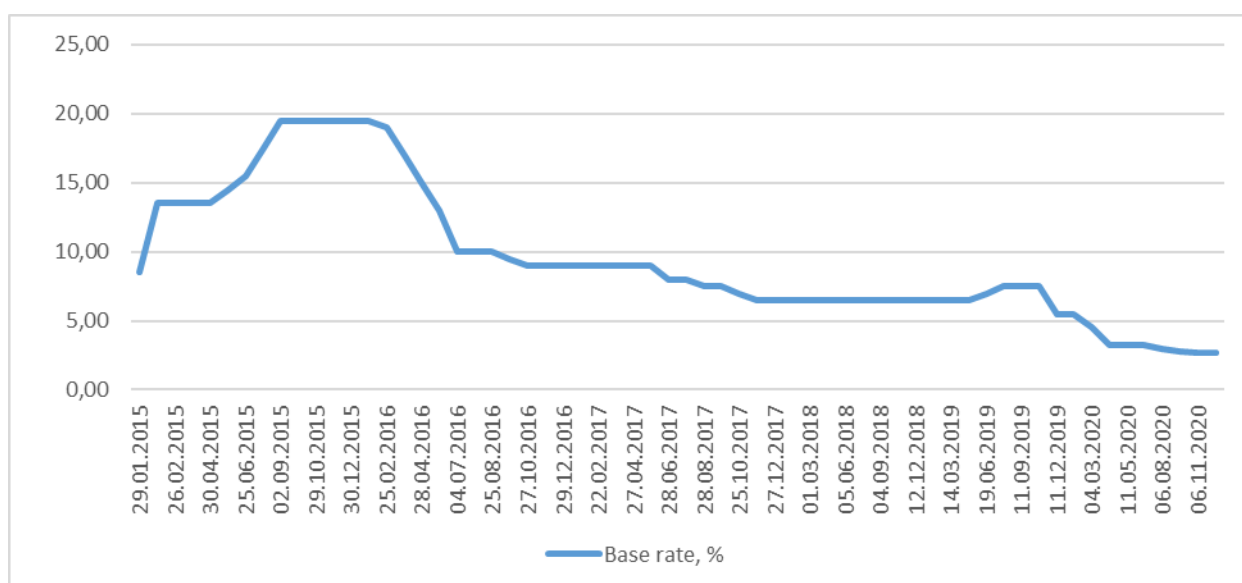

Figure no. 4. Dynamics of the refinancing rate of RM, 2011-2015
Source: compiled by the authors based on [10].

A positive moment in the economy of Moldova should be noted the improvement of business lending conditions due to the outlined dynamics of reduction of the refinancing rate level. In particular, this measure stimulates growth of investments in business due to availability of borrowed capital.

The lowest refinancing rates can be seen in 2020 as a government response to the Covid19 pandemic in order to improve the liquidity and financial stability of businesses.

The dynamics of investment in fixed assets is presented in Table no. 6.

Table no. 6. Investment in fixed capital, 2016-2020

Indicators	2016	2017	2018	2019	2020
Investments in long-term assets, million lei	19664,1	23498,3	27464,7	31253,2	27113,1
Growth rate to the previous year, %	93,1	119,5	116,9	113,8	86,8
Share of equity financed in long-term assets	67,0	65,4	61,1	62,3	56,8
Return on equity, %	9,8	14,9	12,2	12,3	lack of data

Source: compiled by the authors based on [7].

According to Table 6, an increase in investment activity was observed over the period 2016-2020. The volume of investment in fixed assets increased annually on average by 8.4%. There is a change in the structure of financing of long-term assets of enterprises in the direction of increasing the share of external funds of financing. This situation has a favorable effect on the dynamics of financial profitability, the possibility of attracting funds on a significant scale without the diversion of own capital from the economic turnover, etc.

Nevertheless, in 2020, there was a negative growth of the indicator under study, when there was a decrease in investments in fixed capital for the development of the economy and social

sphere of RM by organizations of all forms of ownership due to the epidemic of coronavirus COVID-19.

The financial situation of business entities (in the short term) can also be characterized by solvency indicators (Table no. 7).

Table no. 7. Main indicators of solvency of economic entities of RM

Indicators	2016	2017	2018	2019	2020
Absolute liquidity ratio at the end of the year, points	0,18	0,21	0,22	0,24	lack of data
Total liquidity ratio at the end of the year, points	1,24	1,28	1,30	1,37	lack of data

Source: compiled by the authors based on [2].

According to Table no. 7 for the period 2016-2020, Moldovan enterprises show a lack of financial equilibrium between available assets and their sources of financing. Even with sufficient cash available for immediate payment of short-term liabilities, the overall business solvency situation indicates a shortage of current assets to repay in full the liabilities.

More than 50% of current assets are accounts receivable, management of which, along with revision of conditions for using short-term liabilities, will allow any enterprise to ensure continuity and appropriate quality of business processes in times of economic instability.

Small and micro-enterprises (over 95.0% of all enterprises in the Republic of Moldova) are the most difficult to remain successful during such periods; they also need a "safety cushion".

In the current economic situation, it seems interesting to assess the current investment attractiveness and prospects of business development on the basis of the assessment of the achieved results of financial and economic activity of Moldovan enterprises.

The special literature describes certain aspects of investment activity assessment, there are various methods of its assessment. This is explained by the fact that for different investors the concept of investment attractiveness has different meanings.

By investment attractiveness we understand the solvency of a business entity, as well as its financial stability and efficiency of use of available property.

To this end, it is proposed to use the seven-factor model of return on assets, which evaluates the level of investment attractiveness of the business solely on the basis of financial performance.

In this model the investment attractiveness is determined by the state of assets available to the enterprise. The study makes it possible to measure the impact of selected factors on the dynamics of the resulting indicator. Obviously, the higher the return on assets, the more effectively the enterprise is functioning and is more attractive from the investor's point of view.

The general formula for calculating the return on assets as a result of converting a multiple model is transformed by the expansion method into a multiplicative model with a new set of factors. This method involves extending the original model by multiplying the numerator and denominator of the fraction by one or more new indicators.

The formula for calculating the return on assets (RA) takes the following form [3]:

RA = Net profit/Assets = Net profit/Sales revenue * Sales revenue/Current assets * Current assets/Current liabilities * Current liabilities/Short-term accounts receivable * Short-term accounts receivable/Short-term accounts payable * Short-term accounts payable/Borrowed capital * Borrowed capital/Assets,

(1)

Where:
▪   Net profit/Sales revenue - return on sales;
▪   Sales revenue/Current assets - turnover of current assets;

- ▪ Current assets/Current liabilities - current liquidity ratio;
- ▪ Current liabilities/Short-term accounts receivable - the ratio of short-term liabilities to accounts receivable;
- ▪ Short-term accounts receivable/Short-term accounts payable - receivables-to-payables ratio;
- ▪ Short-term accounts payable/Borrowed capital is the ratio of the organization's accounts payable to the amount of borrowed funds;
- ▪ Borrowed capital/Assets is the ratio of borrowed capital to total assets of the enterprise.

Factor analysis, performed by the method of chain substitution with the use of absolute differences.

Initial data for calculating the return on assets of enterprises using the seven-factor valuation model are presented in Table no. 8.

Table no. 8. Input data, million lei

Name of the indicator	2018	2019	Change
Net profit	19815	22344	+2529
Sales revenue	356663	397911	+41248
Current assets	225357	235934	+10577
Current liabilities	173039	171646	-1393
Accounts receivable	114364	117192	+2828
Accounts payable	114364	117192	+2828
Borrowed capital	273915	282073	+8158
Total assets	435996	463696	+27700

Source: compiled by the authors based on [1].

The value of the indicator Accounts payable is set at a level ensuring equal duration of accounts receivable collection.

The assessment of the investment attractiveness of enterprises, as well as the measurement of the influence of factors on the return on assets is performed in Table no. 9.

Table no. 9 shows that the level of return on assets in 2019 increased by 0.3 percentage points compared to the result of 2018. Nevertheless, the value of this indicator is insignificant, as each lei invested in assets provided 0.05 lei of net profit. In general, the financial condition of the companies is considered satisfactory.

The positive dynamics of the return on assets was significantly influenced by an increase in the turnover of current assets by 0.104 points, which resulted in an increase in the return on assets by 0.3 percentage points. An increase in the current liquidity ratio by 0.073 points resulted in an increase in the return on assets by 0.27 percentage points.

Table no. 9. Assessment of investment attractiveness of enterprises

Name of the indicator	2018	2019	Change	Impact on return on assets
Return on sales, %	5,5	5,6	+0,1	+0,082
Turnover of current assets	1,583	1,687	+0,104	+0,301
Current liquidity ratio	1,302	1,375	+0,073	+0,274

Current liabilities to accounts receivable ratio	1,513	1,465	-0,048	-0,164
Ratio of accounts receivable to accounts payable	1,000	1,000	0	0
Share of accounts payable in debt capital, %	41,8	41,5	-0,3	-0,036
Debt to assets ratio	0,628	0,608	-0,020	-0,158
Return on assets, %	**4,5**	**4,8**	**+0,3**	**x**

Source: compiled by the authors on the basis of Table no. 8.

Given that the financial condition of companies is largely dependent on external sources of asset financing (the share of debt capital in total sources was 39.2% in 2019), strict control over the ratio of debt capital to assets of the organization is required to increase its investment attractiveness in the future.

Below is the calculation of the index of investment attractiveness of enterprises (Table no. 10).

Table no. 10. Calculation of the index of investment attractiveness of the enterprise

Name of the indicator	Indicator change index, 2019-2018
Return on sales	1,018
Turnover of current assets	1,066
Current liquidity ratio	1,056
Current liabilities to accounts receivable ratio	0,968
Receivables to payables ratio	1,000
Share of accounts payable in debt capital	0,993
Debt to assets ratio	0,968
Integral index of investment attractiveness	**1,067**

Source: compiled by the authors on the basis of Table no. 9 data.

It follows from Table 10 that the value of the integral index of investment attractiveness, defined as the product of the indices of changes in the factors, indicates some increase in the level of investment attractiveness of Moldovan enterprises, as the value of the index is greater than 1.

Reducing the calculations to the final integral indicator allows for maximum consideration and assessment of internal indicators of enterprises, however, in a comprehensive assessment of the business environment also requires taking into account external factors, which also affect the performance of organizations. In this situation, most of the external factors considered in the study contributed to restraining economic growth.

CONCLUDING REMARKS

The conditions for the implementation of the activities of enterprises for the period 2016-2020 are shaped by the following economic situation in the country:

1. There is a slowdown in sustainable economic growth, indicating a worsening business environment, including on the back of volatile inflation, worsening budget deficit, the emergence of the COVID-19 coronavirus pandemic, etc.
2. Despite the confident growth of the money supply, its qualitative characteristics do not meet the current needs of the national economy. In particular, there is a restrained level of monetization - 36.8% in 2020. A high share of cash in the total amount of money supply

may indicate a lack of confidence in the banking system, as well as a high level of uncertainty about the dynamics of inflation. On the part of the government, further implementation of measures to bring legislation in line with international standards and create a safe and stable financial sector is required.

3. Improvement of business lending conditions due to reduction of refinancing rate to 2.65% by the end of 2020 can be noted as a positive economic trend. This situation has a favorable impact on the growth of real investment and gives hope for the revival of economic processes in the economy, creating the prerequisites for sustainable development of the country.

4. Increased availability of debt capital had a positive impact on the dynamics of financial profitability of business entities, as well as contributed to increased liquidity and solvency of business. Nevertheless, in order to improve the current financial condition and maximize the profit of enterprises, market participants should ensure the diversification and optimization of the structure of funding sources so as to continue to maintain their investment attractiveness at the level due to the competent management of cash flows.

5. Government efforts to improve the business climate should be aimed at ensuring price stability, increasing the share of non-cash settlements in the structure of the money supply, reviving the entire system of settlements between market participants, stimulating the financing of real investment, and supporting the process of continuing reforms.

6. The level of investment attractiveness, together with the dynamics of macroeconomic indicators for the last 5 years, allows us to conclude overall about the favorability of development of Moldovan business. In further studies of this topic, it seems interesting to assess the opportunities for development of entrepreneurial activity by different priority activities of the national economy, including a possible breakdown of enterprises by their size class.

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