
PhD Candidate. VĂSUȚ OVIDIU-MIHAI
BABES-BOLYAI UNIVERSITY, CLUJ-NAPOCA, ROMANIA.
Email: vasut11091984@yahoo.com

PhD. SECHEL IOANA CRISTINA
TECHNICAL UNIVERSITY, CLUJ-NAPOCA, ROMANIA.
email: isechel@yahoo.com

Abstract

The emergence of the "Coronavirus Crisis" worldwide and the impact on the economic environment and the capital market is a topic of novelty and interest that requires an approach from both a financial and social perspective. The links between the events generated by the SARS CoV-2 virus pandemic are not only with the social or medical environment, but they also extend to the economic and financial environment.

The aspects covered in this article concern the impact of the appearance and development of the SARS CoV-2 pandemic on the international capital market and implicitly on the main stock market indices. It is interesting how the BET index evolved during 2020, both from the perspective of external and internal factors, and implicitly their effects on the Romanian capital market.

Through the comparative analysis of the obtained data and their own processing, we tried to emphasize the importance of the contagion factor in the financial environment as well as the effects it has on the Romanian capital market. The obtained results revealed that, due to this factor corroborated with the globalization phenomenon, the evolution of the BET index is influenced to a much greater extent by the evolution of the indices on the developed markets, to the detriment of the internal factors. The Romanian capital market, through the BET index, also reacted to national events with an impact on the national economic ecosystem, in the context of the evolution of the pandemic and the restrictive measures imposed by the Romanian authorities.

The Romanian capital market is still influenced by the evolution of the SARS CoV-2 pandemic, both globally and nationally, but recently it has registered an increasing trend, managing to offer stability to both investors and issuers.

The "Coronavirus crisis" will continue in the next period, and its impact on the stock market environment will be a research topic of interest, especially in the context of starting the global vaccination process.

Keywords: coronavirus, stock market, economy, stock indices, emergency, capital market.

Introduction

The emergence of the global health crisis at the end of 2019 and its exacerbation in early 2020 had a major impact on all international economic sectors. Among the most affected areas was the financial one, mainly the international capital market, the effects of the SARS-CoV 2 pandemic being felt since February 2020. Known in the specialized environment as "Coronavirus Crisis", it was perceived as the fastest crisis in history, after the Wall Street crisis of 1929, the most drastic declines in the capital markets being recorded between 9-16 March, 2020, when the main American Dow Jones Industrial Average (DJIA) index of the New York Stock Exchange was on an unprecedented downward trajectory [2] (Bloomberg, 2020).

The feeling of panic on the American market determined on the one hand a series of significant decreases in DJIA, and on the other hand the takeover by the rest of the capital markets through the contagion factor, the evolution of the US market. The largest declines on the international financial markets took place in 3 distinct days, known as "Black Monday" – 9 March 2020, when the DJIA index decreased by 9%, "Black Thursday" – 12 March 2020, the decrease recorded being 10% and "Black Monday II" – 16 March 2020, DJIA marking a decrease of over 12% [5] (Market Watch, 2020). In the context of the increasingly intense globalization in recent years and the interconnection
of capital markets, the "Coronavirus Crisis" has been felt worldwide, including the Romanian capital market.

Considering the sensitivity of the Romanian capital market from the perspective of the impact of external and internal factors, we intend to highlight in this paper both the factors that had a negative impact on the domestic capital market and the effects that "Coronavirus Crisis" had them on the stock market activity in Romania.

**Domestic and international context**

In order to be able to analyze the evolution of the Romanian capital market, in the context of the effects of the SARS-CoV 2 pandemic, we consider relevant the analysis of the main index listed on the Bucharest Stock Exchange. BET - was the first index calculated on the Bucharest Stock Exchange (BVB), being launched on 19 September 1997 with an initial value of 1,000 points. BET represents the reference index of the Romanian capital market, being currently constituted by the first 17 most traded companies on the main market, being a price index weighted with the capitalization of free floatation, the main criterion being liquidity [3] (Stock Exchange of Bucharest Values, 2020).

The largest shares in BET index are the companies in the banking and energy financial field, the shares of Fondul Proprietatea (stock symbol FP) and those of Banca Transilvania (stock symbol TLV), these being the most traded securities on the main market, generating on the one hand a high degree of liquidity and on the other hand having the greatest impact on the evolution of the BET index.

The correlation between the evolution of constituents' actions and the evolution of the BET index is influenced on the one hand by external factors representing the evolution of international financial markets and on the other hand by internal factors, represented by economic, financial, social or legislative measures implemented in the national economy or the management of the respective companies.

![Share in BET of constituents](image)

**Fig. No. 1 – The share of constituents in BET at 11.12.2020**

Source: Own processing according to the data provided by BVB [3] (Bursa de Valori București, 2020)

The evolution of the share price of the companies that are part of the index directly influences its evolution, in this case for example, the impact of the SARS CoV-2 pandemic on the fields of activity of the companies concerned was different, the companies operating in the banking area, horeca or catering have felt the crisis much more intensely than those working in the fields of energy, communications or medical. In the first phase, all companies that interact directly with the population...
felt a decline in sales, even in banking, due to the introduction of traffic restrictions and the temporary suspension of commercial activities.

Table 1 – The constituents of the BET index on 11.12.2020
Source: [3] (Bursa de Valori București, 2020)

<table>
<thead>
<tr>
<th>Stock Symbol</th>
<th>Company Name</th>
<th>Reference price 11.12.2020</th>
<th>The share in BET (%) at 11.12.2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>FP</td>
<td>FONDUL PROPRIETATEA</td>
<td>1.35</td>
<td>19.99</td>
</tr>
<tr>
<td>TLV</td>
<td>BANCA TRANSILVANIA S.A.</td>
<td>2.23</td>
<td>19.98</td>
</tr>
<tr>
<td>SNP</td>
<td>OMV PETROM S.A.</td>
<td>0.35</td>
<td>16.3</td>
</tr>
<tr>
<td>BRD</td>
<td>BRD - GROUPE SOCIETE GENERALE S.A.</td>
<td>14.06</td>
<td>10.86</td>
</tr>
<tr>
<td>SNG</td>
<td>S.N.G.N. ROMGAZ S.A.</td>
<td>28.03</td>
<td>8.73</td>
</tr>
<tr>
<td>EL</td>
<td>SOCIETATEA ENERGETICA ELECTRICA S.A.</td>
<td>12.25</td>
<td>4.53</td>
</tr>
<tr>
<td>TGN</td>
<td>S.N.T.G.N. TRANSGAZ S.A.</td>
<td>286.00</td>
<td>4.49</td>
</tr>
<tr>
<td>DIGI</td>
<td>DIGI COMMUNICATIONS N.V.</td>
<td>34.02</td>
<td>3.65</td>
</tr>
<tr>
<td>SNN</td>
<td>S.N. NUCLEARELECTRICA S.A.</td>
<td>16.84</td>
<td>2.71</td>
</tr>
<tr>
<td>M</td>
<td>MEDLIFE S.A.</td>
<td>49.80</td>
<td>1.94</td>
</tr>
<tr>
<td>TEL</td>
<td>C.N.T.E.E. TRANSELECTRICA</td>
<td>24.80</td>
<td>1.77</td>
</tr>
<tr>
<td>ALR</td>
<td>ALRO S.A.</td>
<td>2.17</td>
<td>1.24</td>
</tr>
<tr>
<td>TRP</td>
<td>TERAPLAST SA</td>
<td>0.43</td>
<td>1.22</td>
</tr>
<tr>
<td>WINE</td>
<td>PURCARI WINERIES PUBLIC COMPANY</td>
<td>21.90</td>
<td>0.94</td>
</tr>
<tr>
<td>COTE</td>
<td>CONPET SA</td>
<td>75.80</td>
<td>0.7</td>
</tr>
<tr>
<td>BVB</td>
<td>BURSA DE VALORI BUCURESTI SA</td>
<td>22.90</td>
<td>0.49</td>
</tr>
<tr>
<td>SFG</td>
<td>SPHERA FRANCHISE GROUP</td>
<td>14.80</td>
<td>0.46</td>
</tr>
</tbody>
</table>

The companies listed on the stock exchange and which are part of the main index of the Romanian capital market are in a close correlation with the evolution of the national economy. On the one hand, they are affected by the government measures adopted, whether they are restrictions imposed or measures to stimulate the economic environment. On the other hand, the development of the activity of the companies concerned has a direct impact on the capital market. We can say that the evolution of the national economy has a major role in the stock market ecosystem, while the companies present on the stock exchange generate added value to the national economy and implicitly to the Gross Domestic Product (GDP).

From the perspective of the impact on GDP, the emergence of the crisis and the subsequent restrictions imposed by the SARS CoV-2 pandemic, generated an increase in the budget deficit in the first 9 months of 2020, from about 3% to 6.36% of GDP, at end of September 2020. [1] (Financial Supervisory Authority, 2020). The increase of the budget deficit has an impact on the capital market on the one hand in terms of decreasing available state resources and on the other hand, in terms of future measures to be implemented to recover or cover this deficit. From the perspective of deepening the budget deficit, the reasons are closely related to the emergence of the "Coronavirus Crisis" and are revealed by increased government spending due to measures to support the national economy, while declining state revenues in terms of reducing economic, financial and commercial activity at national level.

The measures applied by the state and which directly targeted the capital market, aimed on the one hand to provide fiscal facilities to the business environment and on the other hand, to obtain financing from the capital market by issuing government securities, with in order to boost investor activity and create stability and liquidity in the market. As a result, one of the factors that contributed to the establishment of a capital market stability and increased investor confidence was the presence of the state. Although the current financial crisis continues to have a major impact on the investment
environment, state intervention in the stock market has generated some stability in the second half of 2020, with lower market volatility compared to the first half of the year.

**Comparative analysis of the evolution of the BET vs. DJIA index**

Starting with 19 February 2020, the BET index registered a significant decrease, closely following the evolution of the American DJIA index, a trend that continued until 23 March 2020. As can be seen from the graphical analysis of the evolution of the two indices, the declines in DJIA were mainly due to changes in the monetary policies of the world's major central banks. The decrease of the minimum required reserves had as objective the increase of the liquidity degree within the financial systems, a necessary aspect in the context of the spread of the SARS CoV-2 pandemic at global level. The decline in stock market indices was also accelerated by the decline in the price of oil on the international market, due to declining demand due to restrictions imposed by security measures against the spread of the virus and the decline in the activity of most industries. All these measures were the basis for a feeling of insecurity in the international capital market, these being complemented by the decrease in interest rates on US government securities, thus generating a decrease in the price of the DJIA index. In this context, between 19 February 2020 and 23 March 2020, the US index decreased by 36.65% from a maximum of 29,348 points to 18,591 points in the same period [9] (Yahoo Finance, 2021), over time which BET index lost in the same period 31.02%, decreasing from a value of 10,204 points to 7,038 points [3] (Bucharest Stock Exchange, 2020).

![Fig. No. 2 – The evolution of the BET index during January – December 2020](image1)

*Source: [3] (Bursa de Valori București, 2020)*

![Fig. No. 3 – The evolution of the DJIA index during January – December 2020](image2)

*Source: [9] (Yahoo Finance, 2021)*

Considering the reference period, at the level of Romania the first military ordinance was published in the Official Gazette only on 18 March 2020 [7] (Ministry of Justice, 2021), until that date no restrictions were applied regarding the “Crisis Coronavirus”, it can be stated that the downward evolution of the BET index was largely generated by the decreases registered on the international capital market. The direct connections between the Romanian capital market and the
developed markets amplified the effects of the contagion factor, thus generating a series of negative effects on the stock market ecosystem in Romania.

From 23 March 2020 to 10 April 2020, the capital market has grown in line with international markets, with signs that stability will reach an average level. However, regardless of external factors and the evolution of international markets, between 10 and 21 April 2020, the BET index was marked by the introduction of Military Ordinance No. 8 of 10 April 2020 [7] (Ministry of Justice, 2021), which provided for the suspension exports during the emergency period of some agri-food products, aspect materialized in a decrease of the value of the BET index by 7.52%. The measure adopted had a negative impact on the capital market in terms of reducing the activity of some listed companies and whose activity was directly affected by the provisions of the ordinance. As of April 21, 2020, the capital market has returned to the upward trend, following the course of the international market.

At the beginning of June 2020, the Romanian Government submitted for approval a draft law which provided for the prohibition of the sale of state shares to companies in which it is a shareholder, for a period of 2 years. The impact of such a measure was appreciated by experts in the field as a negative one on the development of the capital market in Romania, by this measure blocking any listing of state-owned companies on the capital market. The effects on the stock market environment in Romania are mainly related to the stagnation of the development process, possible listings can generate an increase in market liquidity, a diversification of securities listed on the stock exchange, attracting new investors but also a high level of transparency within the companies concerned. On June 10, 2020, the Romanian Parliament adopted this law, generating a decrease in the value of the BET index by 7.13%, simultaneously with the establishment of a state of insecurity among the authorities in the Romanian capital market, the decreasing trend continuing until end of July 2020.

The July - September 2020 period can be characterized by a continuous increase in the value of stock market indices, both from an international and domestic perspective. The BET index followed the American index, appreciating by 12.22%, while the DJIA marked an increase of 12.73%. We can thus say that, although the global health crisis is intensifying, more and more countries are feeling the effects of the SARS CoV-2 pandemic, the capital market is on the rise, based largely on economic support measures both globally and nationally through the prism of various programs of fiscal, financial and monetary facilities, meant to have a role of stimulating the business environment. At the level of Romania, one of the measures intended on the one hand to stimulate the capital market and on the other hand to obtain financing by the state, was the "FIDELIS" program, developed by the Ministry of Public Finance (MFP), which aimed at three issues of government securities intended for the population [6] (Ministry of Public Finance, 2021), of which two in lei and one in euro. Between 15 July and 7 August 2020, through the capital market, the state managed to obtain after the 3 bond issues the amount of 1.22 billion lei and 168.4 million euros, money from both Romanian and foreigners investors.

The effects of the spread of the SARS CoV-2 virus worldwide marked the international capital market between September and October 2020, the Romanian market maintaining its evolution in a close correlation with the American market. DJIA decreased by 8.86% while BET depreciated by 9.47%, the main causes of macroeconomic nature being the uncertainty generated by the ability of governments to support national economies, an exponential increase in the number of infections both in Europe and the US, the depreciation of the national currency and last but not least the increased volatility of the US stock market due to the presidential election.

From the perspective of the Romanian capital market, the period 15 September - 30 October was marked by a continuous decrease, the BET index registering a decrease of 9.47% from a maximum of the period of 9,401 points to 8,510 points, in the context in which on 21 September, the new status of the Romanian capital market was announced. Thus, the global index provider FTSE Russell introduced in the composition of the FTSE Global Equity Index, the companies Banca Transilvania, Nuclearelectrica and Teraplast, the three together having a weight of 0.38% of the FTSE Global Equity Index, thus facilitating the attraction of new investors on the Romanian capital market [4] (FTSE Russell, 2020). Although this news produced a wave of enthusiasm among both
investors and regulators in Romania, the evolution of the BET index revealed this aspect through a relatively insignificant increase, maintaining its decreasing trend. The main reason for the evolution is closely related to the evolution of foreign markets, which in the same period recorded significant decreases, exemplified by the American index DJIA, which between 2 September and 30 October marked a decrease of 8.93%. It can be seen that the percentages of decrease of the 2 analyzed indices are significantly close, the decrease of the BET index being a little more accentuated, aspect due on the one hand to the much smaller size of the market compared to the USA, and on the other hand due to the much higher volatility.

The impact of Coronavirus on the evolution of the BET index

Starting with 1 November 2020, the evolution of the BET index has entered an upward trajectory, a trend that it will maintain until the end of the year, in close accordance with the evolution of international markets. The events that generated this trend were represented by several factors, including: the possibility of starting the vaccination process of the population since the end of 2020, the emergence of positive signals on the international economy by increasing the activity of the international economic environment and the completion of US presidential elections. However, there was a significant decrease in the BET index during the reference period, marked by the introduction of new restrictions from 9 November 2020 due to the increase in the number of infected cases at national level. Thus, the transition of teaching activities exclusively online, the obligation to wear a face mask at national level and the recommendations on work from home, generated a reaction of the capital market in a negative sense, the BET index marking a decrease between 09-17 November 2020 of 3.01%.

Following the analysis of figure no. 4, between November and December 2020, regarding the evolution of new cases of people infected with SARS CoV-2 virus, compared to the evolution of the BET index, we can say that there is an inverse proportion between the two indicators. More precisely, as the number of new confirmed cases increases, the evolution of the BET stock index is on a downward trend, there is clearly an inverse relationship between the two. With the decrease in the number of new cases of infection among the population, the evolution of the BET index returns to an upward trend. Thus, between 9-17 November 2020, the BET index was on a downward slope, its value decreasing from 9,126 points to 8,854 points, while for the same period, the number of new cases of infection increased from 6,752 to 8,262 new cases.

On the other hand, starting with 18 November 2020, the evolution of the BET index entered an upward trajectory, starting from the value of 8,936 points and reaching 9,805 points on 31
December 2020, marking an increase of 9.72%. The evolution of the number of new cases revealed a decrease in the values recorded, from 8,262 on 17 November 2020 to 2,620 new cases on 28 December 2020. We can thus conclude that one of the internal factors that have an impact on the evolution of the capital market, in the context of the Coronavirus pandemic is the evolution of the number of new diseases among the Romanian population. The explanation can be motivated by the restrictive measures imposed by the Romanian authorities in the context of increasing the number of new cases confirmed with SARS CoV-2 virus, which has a direct impact on the business environment and implicitly of companies listed on the Bucharest Stock Exchange.

Conclusions:

The year 2020 represented a challenge for the Romanian capital market, considering on the one hand the global health crisis generated by the emergence of the SARS CoV-2 virus and on the other hand the economic impact of the restrictions imposed by government administrations on the ecosystem stock market and the business environment. Globally, the international capital market has been characterized by a high level of volatility, due to the events generated by the "Coronavirus Crisis" but also by other events related to the health crisis. The contagion factor at the level of capital markets has significantly contributed to the spread of reactions in developed markets to emerging and border markets, often with negative effects on the investment environment in the countries concerned.

At the level of the Romanian capital market, it was found that the impact of the "Coronavirus Crisis" materialized in significant market declines, mainly in the first part of the year, even if at that time, the national health system and the Romanian population still did not fully feel the effects of the SARS CoV-2 virus. For the most part, the evolution of the BET index followed the course of the main indices on the international market, and a direct correlation can be observed between the trends registered by BET and DJIA, but its evolution was also marked by domestic events.

From an internal perspective, we can conclude that the capital market and the investment environment in Romania have been directly influenced by the evolution of the number of cases of new diseases among the population as well as by the restrictive measures imposed by government authorities. On the other hand, we can say that there were a number of internal factors that contributed to maintaining a positive trend in the evolution of the stock market and that contributed to the recovery of the capital market after the massive declines between February and March 2020. The Romanian state had an important role in supporting the capital market both by introducing economic and financial measures to support the business environment and domestic companies, and by obtaining financing through the capital market. The most significant events in 2020 and which contributed to the support of the capital market were represented by the issuance of government securities through the FIDELIS program and the promotion to the status of emerging capital market by Romania.

The effects of the “Coronavirus Crisis” generated significant losses in the capital markets, both internationally and nationally, losses that in most cases could not be recovered during 2020, estimating that the impact of the SARS CoV-2 pandemic it will be felt in the coming years. At the level of the Romanian stock market, the results recorded at the end of 2020 revealed significant losses both in terms of market capitalization and the values recorded by the BET index. Compared to the end of 2019, the market capitalization decreased by 14.64% at the end of 2020 [3] (Bucharest Stock Exchange, 2020), the largest decrease being registered in January - March 2020, when the value of capitalization decreased with 13 billion euros [3] (Bucharest Stock Exchange, 2020), as a result of the “Coronavirus Crisis”. From the perspective of the BET index, the effects of the pandemic generated a decrease of only 1.72% at the end of 2020, compared to the same period of the previous year, in the context in which the general trend of the index has been increasing since March 2020.

In order to continue the research of the subject for the next period, we propose and consider of interest, the analysis of the impact of the vaccination process on the evolution of the domestic

Reference:[3] Bucharest Stock Exchange, 2020
capital market, both compared to the evolution of the international capital market and the evolution of the pandemic among the Romanian population.

Bibliography:


