European Journal of Business Startups and Open Society

Vol. 4 No. 9 (Sep - 2024): EJBSOS

http://innovatus.es/index.php/ejbsos

Methodological Problems of Assessing the Capital Value of Companies in the Conditions of the Coronavirus Pandemic

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Abstract: The article examines the methodological problems of assessing companies' capital value in the context of the coronavirus pandemic and describes the scientific and theoretical aspects. Also, the degree of influence of factors influences the assessment of capital value. In particular, the capital risk assessment methodology highlighted, taking into account changes in the country risk premium, country risk premium, and the country's credit default swap spreads. Simultaneously, the coronavirus pandemic on assets in the capital market of Uzbekistan has been studied, and its consequences have been described. The prevalence of COVID-19 infection was also analyzed in the market value of shares of large enterprises traded in RSE "Tashkent". The causes and consequences of the decline in the market value of shares of these enterprises are described. At the same time, scientific and practical recommendations for assessing the capital of companies in a pandemic environment have been developed.

Key words: capital risk premium, country risk premium, market index, stock, pandemic, stock market, market value, stock value.

INTRODUCTION

Today, the worldwide spread of the coronavirus infection (COVID-19) has a negative impact on the production, health care, transport, logistics, consumer demands and services of developed countries. The spread of the coronavirus infection also affected the world capital market. According to an article in the World Economic Forum, in March of this year, during the outbreak of the spread of COVID-19, the Dow Jones index experienced the largest decline in its history. For example, the Dow Jones index has been observed to fall by 20%, indicating that the market value of its securities has fallen by 20% [1]. Also, as a result of the negative impact on financial market indices of Spain, Germany, France and England, investors lost their financial resources [2]. The coronavirus pandemic led to a sharp decrease in the production volume in the economies of developed countries, a sharp reduction in consumption volumes, derailment of the production chain and trade integration, a sharp drop in financial market indices and a sharp drop in the prices of raw materials, resulting in an irregular situation in the world financial market.

In particular, in order to mitigate the impact of these factors on the economic system of our country, a 10 trillion soum anti-crisis fund was established under the Ministry of Finance, and it is planned to spend it to support the rapidly developing sectors of the economy and ensure their stability [3]. Therefore, all the countries of the world are taking measures to mitigate the global crisis in the economy along with the fight against the spread of the coronavirus pandemic. Currently, major research and financial institutes in the world are saying that due to the coronavirus pandemic, a recession will occur in the financial market at an accelerated pace. According to Goldman Sachs, the largest US companies will sharply reduce investment costs in 2020. According to the analysis of global analysts, these companies' investment in the S&P 500 stock exchange is expected to decrease by 20%. This, in turn, indicates that these companies will pay dividends this year from 50 percent to 23 percent [4]. In addition, a 15% drop in the income of large companies in the US due to the coronavirus pandemic was observed, which was not seen since the third quarter of 2009 [5].

ANALYSIS OF LITERATURE

In the context of the pandemic, research organizations, professional rating organizations and analysts from around the world have conducted various studies to assess the impact of the COVID-19 crisis on market returns and risk premium. Also, a panel of valuation experts in Australia made recommendations to consider market risk premiums and risk-free rates when valuing capital. The reason is that the risk-free rates and risk premium rates in the financial market fluctuated dramatically during the pandemic. Damodaran, a foreign economist, showed in his research that the capital risk premium in the US capital market is 6.5 percent. The premium for capital risk was estimated at 5.8 percent before the pandemic. Duff & Phelps, an international financial consulting company, has shown in its research that the capital risk premium in the US capital market is 6.5 percent, compared to 5.0 percent before the pandemic. The valuation company Value Trust estimated that the premium for capital risk was 9.1 percent when the European capital market was studied, compared to 7.8 percent before the pandemic. It can be seen that during the pandemic, the expected return on equity has increased significantly in almost all capital markets.

The Australian capital market has been affected by the Covid-19 crisis, according to a report by KPMG, a major financial services company. According to their research, expected returns from the Australian capital market and stock volatility have increased significantly. Also, during the depression, the liquidity of securities in the capital market decreased significantly. In addition, Australian bond and credit default swap spreads have also increased[6]. "The outbreak of COVID-19 has caused an unprecedented response to the financial market and the real economy, and as such, there are several challenges to forecasting uneven cash flows and estimating the cost of capital in a pandemic," researchers at Duff&Phelps said in a study. They also explored accounting for the post-SovID-19 pandemic surge in unexpected cash flows and determining the discount rate. This is because discounted cash flow methods provide an alternative to estimating the cost of capital. The risk premium for capital in the US capital market is set at 6 percent by researchers at Duff & Phelps. This was caused by changes in the financial and economic markets during the pandemic [7].

Despite the downward trend of the economy during the pandemic, problems with the valuation and financing of the equity capital of the joint stock company continue. In this period, companies should take into account the SOVID-19 environment when choosing evaluation methods. In addition, a valuation should be performed by considering the potential for impairment of intangible assets, valuation allowances, financial statements and taxation. It is appropriate to take into account the following adjustments when taking into account the discount rate when determining the cost of capital of companies in the context of a pandemic. First, it is necessary to take into account the risk-free rate in the long-term interval in order to keep the interest rates unchanged. In particular, the risk-free interest rate should be taken as the 90-day bond interest rate. Taking the long-term risk-free interest rate into account when estimating the cost of capital will be highly variable in the COVID-19 environment, resulting in an overestimate of the cost of capital. Secondly, in order to reduce the impact of short-term capital volatility, it is necessary to revise the long-term beta coefficient, which is constructed taking into account the movement towards the average index of the capital market (in Blum's method, Blumberg's method and Vasichek's method) [8].

According to the research of foreign economist Markus Bartl, when assessing the business value of a company, it is necessary to take into account "all relevant information that can be carefully obtained up to the date of valuation". At the same time, the COVID-19 crisis has affected the company's business. Under such conditions, the appraisers of the capital value of the company should reconsider their methods and approaches. In particular, the COVID-19 crisis will affect the company's income situation and lead to changes in the parameters of the capital market. It is not necessary to make a conclusion taking into account the income status of companies, but it is appropriate to evaluate the capital value and form conclusions taking into account the leverage ratio. As a result of changes in the parameters of the capital market during the pandemic, it is necessary to take into account the credit spread indicator to estimate the cost of debt capital and the average cost of capital. Therefore, corrections were made to the capital assessment, taking into account the parameters of the capital market [9]. Also, in the context of the spread of SOVID-19, many factors are uncertain. Therefore, the future cash flows of companies are variable and require different scenarios. Due to the sharp drop in liquidity and the accompanying increase in the risk of insolvency, it is impossible to accurately forecast future cash flows. The credit spread can also be seen in the fact that the risk of default is high [10]. In addition, the terminal value should be taken into account, because the terminal value is the most important indicator in assessing the business value. There is no guidance on how to make long-term valuations in the context of a pandemic, because the basic business value valuation model is useful [11]. In our view, it would be appropriate to assess the value of the business taking into account initial growth rates, such as the European Central Bank's long-term inflation target, expected earnings, growth rates and indicators of reinvestment plans.

According to economists Andrea Adler and Matthew Sanchez: "In the period of COVID-19, companies need to take into account uncertain economic volatility in the process of assessing the cost of capital." Also, the change in discounted cash flows, which is considered the most important indicator in the assessment of capital value, is also taken into account. If the weighted average cost of capital is not adjusted, the interest rate on risk-free assets will be chosen low, causing it to be lower than the discount rate in volatile market conditions. A low discount rate leads to an overestimation of the cost of capital, which in turn leads to under-reporting of companies' high levels of risk during the COVID-19 crisis. The following parameters should be taken into account when assessing the capital value of industrial enterprises during the pandemic [12].

According to Tanvi Pahwa, an international economic expert, it is necessary to take into account the decrease in cash flows due to the uncertainty of risk, scenario growth and increase in capital value when using the income method in the assessment of capital value in the context of a pandemic. the following should be taken into account. Also, the capital asset valuation model cannot assess the risk that arises during the COVID-19 epidemic. Therefore, when using the capital asset valuation tool, the valuation should take into account the risk premium for COVID-19. Such an assessment leads to an increase in the cost of capital. In the context of the pandemic, a revision of the traditional valuation method of capital value is required. Capital cost appraisers correct the valuation method by making adjustments to financial indicators forecasts, income and discount rates [13]. According to PwC research, a decrease in the rate of risk-free assets cannot cause a decrease in capital value. Also, a higher cost of debt capital leads to a higher leverage ratio. It is necessary to estimate the cost of capital, taking into account the short-term risk premium, taking into account the uncertainty in the conditions of the pandemic [14]. In conclusion, it can be noted that in the context of the pandemic, it was appropriate to take into account several factors when evaluating the capital value of the company. Also, the percentage change of risk-free assets is the most important indicator. An increase in the interest rate on risk-free assets indicates an increase in the cost of capital. In addition, the risk premium must also be considered. It is appropriate to determine the risk premium taking into account the risk arising from the COVID-19 crisis. At the same time, it is necessary to determine the capital value through credit spreads and financial leverage indicators.

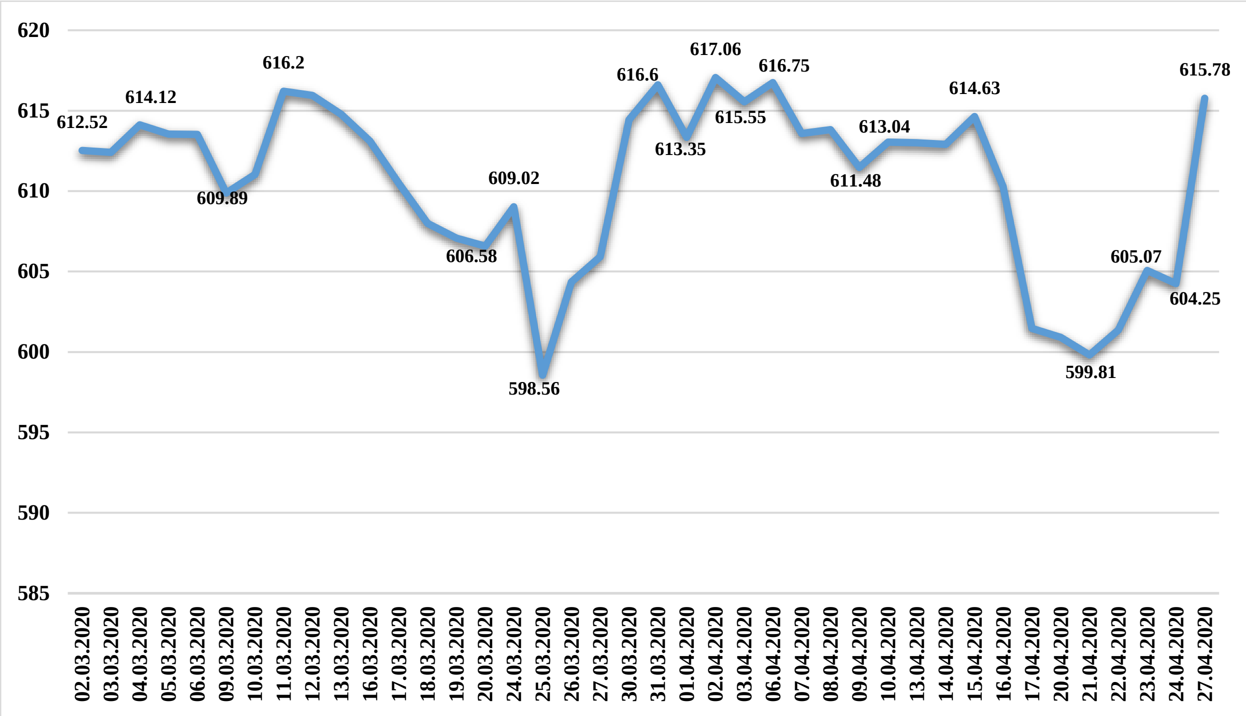
Research methodology

In the context of the pandemic, the parameters used to determine the capital value of companies were calculated, the premium for capital risk, the premium for country risk, economic-statistical analysis and synthesis using capital value estimation methods, and statistical grouping methods were widely used. The following formula was used to determine the capital risk premium.

Analysis and results

When determining the capital value of companies in the conditions of a pandemic, first of all, it is necessary to take into account the premium for capital risk, the level of risk-free assets, and the premium for country risk. Also, it is appropriate to assess the capital value, taking into account the level of credit spread. Most researchers and analysts use the country risk level and credit default risks of the company's equity valuation to determine the value of equity. During the crisis of SOVID-19, an increase in debt capital was observed in most countries. As a result, a change in the capital valuation method was required.

The spread of COVID-19 infection is affecting the financial market of our country. If we analyze the stock market index in Uzbekistan, the fact that the period of the spread of COVID-19 infection in our country has a strong fluctuation is reflected in the following 1-figure.



Looking at the data in Figure 1, the market index of "Tashkent" RFB shows a sharp fluctuation in the last two months. At the beginning of March this year, on March 2, the market index was 612.52 points, and by March 25, it was 598.56 points. In particular, the market index shows that it has fallen by 4% in this period. In conclusion, it can be said that investors in the stock market of our country have lost 4 percent of income. If we analyze the stock market index of developed countries, in March of this year, the NASDAQ stock market index in the US financial market fell by 23.05%, the S&P 500 index by 26.14%, the Dow Jones index by 29.27%, and the NYSE index by 31.23%. [6]. The main reason for this was that the World Health Organization declared SOVID-19 a pandemic at the beginning of March. On March 15 of this year, as a result of the strict isolation of our country due to the arrival of the coronavirus infection, the production, construction and service industries stopped. Therefore, it affected the systematic development of the economy in our country. This, in turn, affected the market index of "Tashkent" RFB. The factor that causes the change of the market index of "Tashkent" RFB is that the shares of companies and banks with large capitalization in the market fell sharply (Table 1).

Table 1. Analysis of the market value of the shares of the joint-stock company in RFB "Tashkent" (03.03.2020-27.04.2020)

Indicators	Market value of 1 share		The change is in percent +/-
"Xamkorbank" AT	39	31	-20
"Kvars"AJ	2920	2430	-20
"O’zbekiston metallurgiya kombinati" AJ	29000	26900	-7,8
"Quvasoysement" AJ	450000	398000	-13,1
"Qo’qon mexanika zavodi" AJ	1200	1000	-16,7
"Qizilqumsement"AJ	1605	1480	-7,8

If we look at the analysis, the market value of 1 share of joint-stock commercial bank "Khamkorbank" in two months increased from 39 soums to 31 soums, namely up to 20%, the market value of shares of "Kvarts" joint-stock company increased from 2920 soums to 2430 soums, i.e. 20%, "Uzbekistan Metallurgiya Kombinati" JSC 29000 from 26,900 soums to 26,900 soums, or 7.8%, the market value of the shares of "Kuvasoytsement" JSC decreased by 13.1%, i.e. from 450,000 to 380,000 soums, while the share of "Kokon Mechanics Plant" JSC fell from 1,200 to 1,000 soums, namely 16.7% we can see that the market value of "Kyzilkumtsement" JSC decreased from 1,605 to 1,480 soums. It even indicates that the shares of "Kyzilkumtsement" JSC were sold at a value lower than the nominal value has an impact on the financial market.Also, large capitalization companies and banks are causing the market value of their shares to fall. One of the main reasons for this is the strict isolation carried out in our country, the suspension of the activities of joint-stock companies, especially the suspension of construction activities, which affected the financial activities of enterprises. For this reason, investors have reduced themselves to direct their funds to the financial market.

Conclusions and suggestions

Based on the results of the above research, the spread of the coronavirus infection (SOVID-19) will have an impact on the country's economy, capital market and capital value of companies. In particular, due to irregular trading in world capital markets, the capital value of companies has increased. Therefore, as a result of the increase in the market value of shares of companies and underperformance of enterprises, it leads to a decrease in the volume of dividends, an increase in the risk in the capital and an increase in the credit default risks of the countries. Our conclusions and suggestions for mitigating the effects of these factors are as follows.

First of all, it is necessary to take into account the premium indicator for capital risk, which is the most important factor in assessing the capital value of companies in the context of a pandemic. The reason is that the spread of SOVID-19 has affected assets in the capital market and increased risk. Therefore, if this indicator is not taken into account when assessing the capital value of companies, it will lead to a decrease in the capital value.

Secondly, when evaluating the capital value of companies, it is necessary to evaluate taking into account the level of risk-free assets. During the pandemic, a sharp increase in the interest rate of the country's bonds, as a result of a sharp fluctuation in the credit default spor spreads, affects the increase in the value of capital. Therefore, in determining the capital value, it is necessary to assess the risk level of the country, the adjustment of credit spreads and changes in the level of risk-free assets.

Thirdly, as a result of the suspension of the activities of the enterprises in our country during the strict isolation, the financial indicators of these enterprises fell, which led to a decrease in the market value of their shares. Therefore, until the financial indicators of these enterprises return to their previous state, it is appropriate to give credit holidays and tax benefits.

Fourthly, during the coronavirus pandemic, large enterprises will be shut down, resulting in a decrease in their net profit from production. This, in turn, will reduce the amount of dividends paid to shareholders from the net profit of these enterprises. Therefore, it is appropriate to grant a dividend tax holiday to both the dividend payer and the dividend recipient for this year.

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