Financial Market in the Period of the Pandemic: Trends and Forecasts

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Abstract. The modern world at the end of 2019 faced an unprecedented shock-the coronavirus pandemic, which affected all spheres of society and the world economy. The global financial market, which has been significantly affected by the pandemic, is no exception. Many scientists and financiers around the world compare the current situation with the great depression and the consequences of World War II. The world is just beginning to calculate the real losses from the coronavirus epidemic. Most national economies forecast a severe recession in 2020, with global losses of about 3%. With a decrease in macroeconomic indicators, the stock market during the active phase of the pandemic shows growth. The specificity of stock markets is that they are not a mirror image of the state of the economy: index peaks usually occur just before the start of a recession, and index growth is usually an advance process that begins before economic growth begins. The article raises topical issues of COVID-19’s influence on global financial markets. The aim of this article is to review the dynamics of the main stock market indices, determine the reasons for the deterioration of economic development with the application of the world’s best management practices, and evaluate the measures of financial regulators for the growth of the financial market. The methodological tools of this research are General and particular research methods, methods and tools for graphical interpretation, comparative analysis, and related changes. The article gives a theoretical overview of the research of the problem, retrospective analysis of the impact of a pandemic on financial markets, examines the major stock market indices and forecasts for the global economy, the monetary actions of Central banks to stabilize the economic situation.

Keywords: Financial market · Pandemic · Global economy · Volatility · RGBi index · RTSi index · MICEX index · S&P500 index · Ruble exchange rate · Dollar exchange rate

JEL Classification: E44 · E69 · F37 · G10
1 Introduction

The financial market as a system of economic relations that deals with the accumulation and distribution of monetary assets in the world practice operates on the basis of two main models: continental (based on Bank financing) and Anglo-American (based on a set of institutional investors). The 21st century is a century of scientific and technological progress and digital technologies, expanding country borders and globalizing the economy [1], so the convergence of financial market models determines their rapid development.

As a result of gradual convergence and interpenetration, the world’s socio-economic and geopolitical processes are in a new phase of development. The shortcomings of the current financial system significantly affect the state of the world economy, which is characterized by the spread of global crisis trends [2].

The current global economic crisis is connected with the growing COVID-19 coronavirus pandemic, which presents a new historical challenge. This situation is not new for the world economy. Historically, there are several pandemics that affect the recession and the development of financial markets.

The first pandemic that caused significant damage to humanity was the Spanish flu pandemic (1918–1919), which caused damage both to society as a whole (the number of deaths according to official data was 29.5% of the world’s population) and to the world economy (a decrease in GDP by 6.6%). During this period, a large-scale recession began in developed countries, which was extinguished by the development of exchange trading in the United States. However, the massive investment of free money in stocks of large companies led to the «inflating» of the stock bubble, which burst in 1929, which marked the beginning of the great depression [3]. However, the main Dow Jones stock market index was not affected by this situation.

It is not possible to fully assess the impact of the swine flu pandemic (1976 and 2009–2010) on the financial market due to the global financial crisis of that time. As for the economy as a whole, it lost about 1.5% of GDP in that period. In modern world history, an outbreak of SARS (SARS epidemic) was recorded in China (Guangdong province) in 2002–2003. However, the spread of this virus on the planet did not lead to serious economic damage (according to the world Bank, the damage from SARS amounted to about 59 billion rubles). [3], and the financial market was affected by this epidemic sporadically (oil prices fell by 31%, and then went up again). In 2014, the next epidemic was recorded – the Ebola epidemic, which also affected the world economy (damage amounted to $ 32.5 billion), but did not affect the stability of stock markets and the dynamics of major indexes.

The COVID-2019 coronavirus pandemic (beginning December 2019) is the first epidemic in the world’s history that has caused significant damage not only to the economy, but also significantly affected financial markets. In February 2020, there was a collapse in the Chinese stock index SSE Composite index more than on 8%. At the same time, all Western stock markets rose and opened with a daily historical high. When the epidemic spread across countries (Italy, Spain, Germany, the United States) at the end of February 2020, the quotes of the leading indexes of almost all countries collapsed. Accordingly, we can say that the scale of the COVID-19 pandemic for the
first time in history has significantly affected not only the world economy, but also financial markets. Experts predict a drop in GDP by more than 10% [4].

The modern economy creates new challenges and threats. Scientists and economists around the world are trying to solve the problem of ensuring financial stability by creating an optimal set of financial market tools. Therefore, the study of trends in the development of financial markets, the influence of objective (unmanageable) factors on them, as well as the assessment of the activities of state institutions is important and necessary at the present stage of economic development.

2 Materials and Methods

The methodological basis of the study was a set of General scientific approaches and methods, in particular, when writing the article, obtaining results and formulating conclusions, methods of comparison, analysis, comparison and classification were used. The research provisions are also reasoned using a systematic approach and private scientific methods. In the process of work, we used tools of graphical interpretation, comparative analysis, and the method of accompanying changes [5]. The study of the main indexes was based on the graphical method of technical analysis, comparison and deduction. The study of volatility indicators was conducted using the statistical method of volatility analysis. The identification of monetary policy measures is justified through the use of empirical and expert methods.

3 Theoretical Review

Considering the theoretical basis of the research, we note that for many years, domestic and foreign scientists have raised issues of adaptation of financial markets to new challenges and threats, analyzed structural and functional changes in the financial market as a whole and its individual segments. Global trends and financial crises have always had an impact on the financial market, which has been the subject of discussions among scientists. Such scientists as L. Grigoriev, M. Salikhov [6], M. F. Oztek, N. Ocal [7], K. A. Ilyina [8], B. S. Bernanke [9], and others have studied the emergence and development of financial crises. The result was a classic separation of financial crises into two rough types: occurs during the cyclic economic development and the tense international situation or the spread of the financial crisis in specific countries. At the same time, each of these types of financial crisis, although it poses a threat to the financial market, but their appearance and development can be corrected using the tools of state financial policy.

The COVID-2019 coronavirus pandemic is a new challenge for states as a whole and for financial markets. The severity of the problem is justified by the sudden unpredictable or poorly predictable appearance of a threat that cannot be attributed to any type of financial crisis. This circumstance contributed to a surge in the publication activity of scientists who studied the current situation in the financial markets and the direction of its development. So, L. M. Grigoriev, V. A. Pavlushina, E. E. Muzychenko [10] note that usually the initial stage of the crisis determines the variant of the
subsequent development of events, but the coronavirus pandemic is a unique starting phenomenon of the world recession that has begun. Each country simultaneously found itself in this situation, but the way out of it will be different for everyone, both in the time interval and in the consequences. In this regard, the research of Christoph Stückelberger [11] on global cooperation and governance is noteworthy, while he focuses on the balance between international cooperation and national independence of the country. G. V. Vorontsova and D. I. Karlov [12] note the long period of countries return to the pre-crisis state, and they see the prospects for the development of the global financial system and financial markets in increasing their stability and financial globalization in the new conditions after the pandemic.

Each country has its own characteristics of financial markets development, which are reflected in the research of such scientists as A. D. Komarov [13], N. A. Mashkina, O. V. Aseev, N. B. Chernykh [14], E. A. Barinov [15], D. S. Salaev [16], B. Zeliba, F. Rahal [17] and others. In their works, scientists analyze measures to prevent the consequences of the crisis that has begun, assess losses by segments of the financial market, and characterize the methods and tools used for regulation. Cockroaches [18] studies the behavior of the main stock indices of the US and the Russian MICEX index and finds that increased volatility indexes as a result of instability in the financial markets. I. G. Gorlovskaya [19], exploring the tools of financial market regulation, priority is given to instruments of deterrence and prevention as the most promising in the management of financial risk. D. Fielding, J. Rewilak [20] consider the impact of the level of volatility and financial instability on the probability of banking crises and, as a result, the stability of the functioning of a particular segment of the financial market. M. F. Oztek, N. Ocal [7] describe the nature of the correlation between commodity and stock markets.

Despite the available research by scientists, further analysis of trends in the development of financial markets in the context of the ongoing phased situation of countries emerging from the coronavirus pandemic and assessing the consequences for the economy as a whole is required. In addition, the contribution of implemented support measures at the national and international levels to the stabilization and development of the financial market is not sufficiently evaluated, which requires the development of new effective tools aimed at increasing the stability of the financial market in the new conditions.

4 Results

The COVID-2019 coronavirus pandemic is a sudden stressful situation that leads to the development of an adverse cumulative effect on various elements of the financial market and the financial security of the state. The rapid spread of COVID-19 infection around the world has affected the revision of global economic growth forecasts. Thus, according to forecasts of the International monetary Fund (IMF), the decline in global GDP in 2020 will be almost 5% and will be the deepest since the great depression. Moreover, the IMF updated its forecast in June compared to April 2020. And it is less optimistic, since the COVID-19 pandemic has had a more negative impact on
economic activity than previously thought. In 2021, global growth is projected at 5.4%. The same forecast indicates a possible decline in Russia’s GDP by 6.6% this year [21].

Recovery in countries past the peak is expected to be slower than previously predicted, with an emphasis on providing assistance through international cooperation. A striking example in this case is the situation in Italy – a country where the economic situation has deteriorated sharply as a result of the spread of the pandemic. Italy, which has a high level of public debt and unemployment, did not receive support from EU countries, and support was provided by countries that did not expect it – China and Cuba. Further gradual development of countries requires more stringent measures to limit the spread of coronavirus and support economic recovery. The international monetary Fund has developed a baseline and alternative scenarios that will be implemented in the event of a re-outbreak of the pandemic in 2021 and affect key measures to provide financial support to countries in need.

Following the impact on the real sector of the world economy, the global epidemic led to an increase in risks in financial markets, whose participants reacted to the introduction of restrictive measures by outflow of funds from funds that invest in securities, which, in turn, led to a sharp drop in stock and bond prices. For example, the S&P500 broad market index lost 35% of its value from February 19 to March 23, 2020 (Fig. 1).

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Similar dynamics were observed in the stock market in other countries. In particular, the situation in Russia was aggravated by high volatility in the global oil market. In April 2020, the price of Urals crude oil reached its lowest level – US $8.4 per barrel – which is more than 80% lower than at the end of 2019. Against this background, there was an «explosion» of volatility in the domestic stock market, which is clearly confirmed by the graph of the IMOEX index itself (the Mosbirzhy index) and the graph of its volatility (the lower area) (Fig. 2).

The chart shows that volatility increased sharply in March 2020 and surpassed the short-term April surge in 2018, when sanctions were imposed on RUSAL.

Due to fears of a further collapse of stock markets, global investors reduced their investments in Russian assets in order to reduce risks. This was accompanied by the withdrawal of capital at the end of February-March 2020 and the purchase of foreign
currency on the domestic market. In this regard, there was a sharp fall in the ruble exchange rate against the currencies of developed countries.

The loss of the ruble to the US dollar (March 2020) reached about 18% compared to 2019. However, it is noticeable that the fall was significantly less than in previous shock periods. This is also evidenced by the relatively low volatility of the exchange rate, compared to the peak of 2014. Here we can conclude that the elasticity of the ruble relative to the price of oil in recent years has decreased, it has become possible thanks to the introduction of a mechanism of «fiscal rules**, the essence of which is financed with funds from the national welfare Fund lost oil and gas revenues of the Federal budget, if any, are formed in the case of reduction of prices on oil below benchmark (42,4 USD. per barrel) [22].

In this regard, it is worth paying attention to another main index of the Russian stock market-RTSi, which is the Mosbirzhy index, but expressed in USD (Fig. 3).

**Fig. 2.** Dynamics of the IMOEX index (Moscow Exchange index) and the level of its volatility over the past five years in days (compiled by the authors)

**Fig. 3.** Dynamics of the RTSi index (the Moscow Exchange index in USD) and the level of its volatility in days (compiled by the authors)
The fall of The Russian stock market index-RTSi was 48% from the top of the beginning of 2020. In comparison with the ruble index (Fig. 2), this is an order of magnitude higher, since this index was influenced by the ruble exchange rate.

In addition to the decline in the main industry indices and the weakening of the ruble, the closing of positions by foreign funds on the Russian stock market affected the growth of bond yields. Figure 4 shows the dynamics of the Russian government bond index (RGBI). This index reflects the dynamics of changes in the market price for a basket of OFZs (Federal loan bonds) with a fixed coupon.

Here, you can also see a sharp increase in profitability and a surge in volatility (March 2020). However, when compared with the shock period of 2014, these fluctuations were insignificant and short-lived. This was made possible, in part due to the actions of the Russian Ministry of Finance, which suspended OFZ auctions.

As the epidemiological situation in the world and in Russia recovered and measures were taken to support the economy, foreign investors gradually began to return to the Russian financial market, and OFZ yields returned to the levels observed before the period of increased volatility. Thanks to the ultra-soft monetary policy of the world’s Central banks, the situation on the world financial markets has stabilized. «A soft» monetary policy supports lending and ensures stable dynamics of interest expenses in the banking sector. Regulatory easing and reduction of macro prudential allowances will allow banks to gradually cover losses and ensure the continuity of their operations» [23].

The current pandemic, the rapid spread of COVID-19 in the world has forced States to take large-scale measures to support the financial market and ensure a sufficient level of liquidity. Financial regulators of the world powers had to adapt their policies in the field of regulation and supervision. In particular, the following measures were taken:

– mitigating regulations (relief in respect of capital buffers, reducing counter-cyclical allowances, the establishment of preferential crediting);
– regulatory easing measures (waiving liability in case of violations, credit restructuring);
– easing of Supervisory requirements (cancellation of on-site inspections, extension of reporting deadlines, introduction of restrictions on short sales in the securities market);
– taking targeted measures to support the corporate sector (launching and expanding special refinancing programs, government support) [24]. According to the International monetary Fund, the volume of support measures in % of the country’s GDP is: Japan – 21.1%, the United States – 14.3%, the European Union – 4.3%, China – 2.5%. Russia is no exception. In particular, the Bank of Russia, in the context of the coronavirus pandemic and the sharp decline in oil prices, has taken additional measures to provide the banking system with liquidity. Along with a significant reduction in the key rate from 6% in March to 4.5% in June 2020, the Bank of Russia is implementing measures to support:
– lending to small and medium-sized businesses, allowing them to maintain access to Bank lending and avoid insolvency in the face of reduced income as a result of the pandemic. The essence of measures in this area is reduced to reducing interest rates on loans and debt restructuring;
– mortgage lending, in the form of reducing premiums to risk factors, reducing the amount of the initial payment, including a number of mortgage bonds in the Pawnshop list [25].

In addition, the Bank of Russia has reduced regulatory and Supervisory burdens on financial organizations, in particular, increasing the reporting deadlines, reducing the number of non-urgent requests, and postponing verification deadlines. Coordination of measures at the level of international forums and organizations – the Group of 20, the IMF, the financial stability Board, as well as standard-setting bodies (BCBS, the international organization of securities commissions, the international Association of insurance supervisors) is of great importance [24].

The impact of COVID-19 on the financial system of the Russian Federation is huge and is realized mainly through the deterioration of foreign economic conditions, primarily the fall in demand and oil prices. Multilateral cross-country cooperation is essential to reduce the depth of the COVID-19 shock and its damage to the global economy and financial system.

The future dynamics of trends in the financial markets of the world and Russia in particular depends on how the situation with the COVID-19 pandemic will develop. In the event of new waves of infection, the ongoing prolonged economic downturn will lead to large-scale negative consequences. States will have to continue to increase their budget expenditures and increase their debt burden – this will lead to increased risks in the area of public finances. In this regard, financial markets may experience a more significant surge in volatility, which will negatively affect the banking sector.
5 Conclusion

In modern history, economic crises and pandemics have occurred simultaneously many times, but usually the financial market has not been affected as much as the impact of COVID-19. As a rule, financial markets slightly decreased their activity, and epidemics affected only the economy as a whole. The influence of COVID-19 was an exception. At the beginning of the pandemic, there was a collapse of financial markets and a decline in indices, but since the financial market does not mirror the economic situation, there is already a stable growth in the midst of the pandemic. The financial market usually reacts in advance to an unstable situation. The COVID-19 pandemic had a significant negative impact on the financial system, following its impact on the real sector, which required urgent measures to support the financial market and ensure sufficient liquidity, as well as adaptation of the regulatory and Supervisory policies of the world’s financial regulators. Due to the easing of Supervisory requirements, regulatory instruments and the adoption of targeted support measures, a favorable trend has emerged in the development of many countries of the world and Russia.

By the summer of 2020, the situation in Russia had stabilized, which was facilitated by the Bank of Russia’s measures to ensure the liquidity of the banking system. The improvement of the epidemiological situation in the country contributed to the return of foreign investors to the Russian market. OFZ yields have stabilized and reflect the situation before the period of increased volatility. Stability in the oil market also helped improve the situation.

It is very difficult to predict the occurrence of sudden emergencies similar to the coronavirus pandemic and assess its consequences, so the financial market must have a high level of stability to ensure security. In order to reduce the impact of COVID-19 and the damage to the world economy, global cooperation of countries is required. The situation with the coronavirus pandemic is not over yet and the dynamics of trends in the financial markets of the world and Russia depend on its further development.

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