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ACRA Financial Stress Index: similarities and differences between the current situation and the crises of 2008–2009 and 2014–2015

An article by ACRA analysts Vasilisa Baranova and Dmitry Kulikov for Cbonds

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How is this global crisis different from the global financial crisis of 2007–2009?

The starts of the largest crises of the 21st century, both financial and economic, were preceded either by financial market problems (the global financial crisis), or other structural economic problems (the European debt crisis). In this regard, the 2020 crisis, which has been triggered by the COVID-19 pandemic, is unprecedented.

At the same time, the impact of the current situation on the global financial market is somewhat similar to what we observed in 2007–2009. During periods of crisis phenomena, investors generally prefer high-quality (“flight to quality”) and/or highly liquid (“flight to liquidity”) assets. Today, like during the global financial crisis, yields on sovereign bonds with high credit ratings are declining, demand for cash and hard currency is increasing, stock exchange indices are falling, and gold is appreciating. In addition, investors are discarding higher risk securities of developing economies in favor of lower risk securities of developed economies.

At this stage, the key difference between the current crisis and the global crisis of 2007–2009 is that huge gaps in payment chains in the real economy and the high volatility of prices for key commodities have not yet led to banking sector crises. An important difference is also the generally more sustainable financial standing of the global banking system due to a significant increase in capitalization and regulatory limitations that prevent banks from taking on big risks. Banks are currently not experiencing a liquidity crisis. It is worth mentioning that governments are actively supporting citizens and companies amid quarantine conditions and production shutdowns. For example, many central banks have eased the conditions for providing loans by weakening the procedure for calculating mandatory ratios and ‘flooded’ banks with liquidity. In ACRA’s opinion, these measures may help reduce possible pressure on the banking sector in the event that borrowers are unable to service their obligations due to a fall in demand for their goods and services and reduced wages.

Vasilisa Baranova
Senior Analyst, Sovereign Ratings and
Macroeconomic Analysis Group
+7 (495) 139-0480, ext. 136
vasilisa.baranova@acra-ratings.ru

Dmitry Kulikov
Associate Director, Sovereign Ratings
and Macroeconomic Analysis Group
+7 (495) 139-0480, ext. 122
dmitry.kulikov@acra-ratings.ru

Contacts for Media

Alexey Churilov
Manager, External Communications
+7 (495) 139-0480, ext. 169
media@acra-ratings.ru

Figure 1. Dynamics of financial stress indices¹ for Russia and the United States

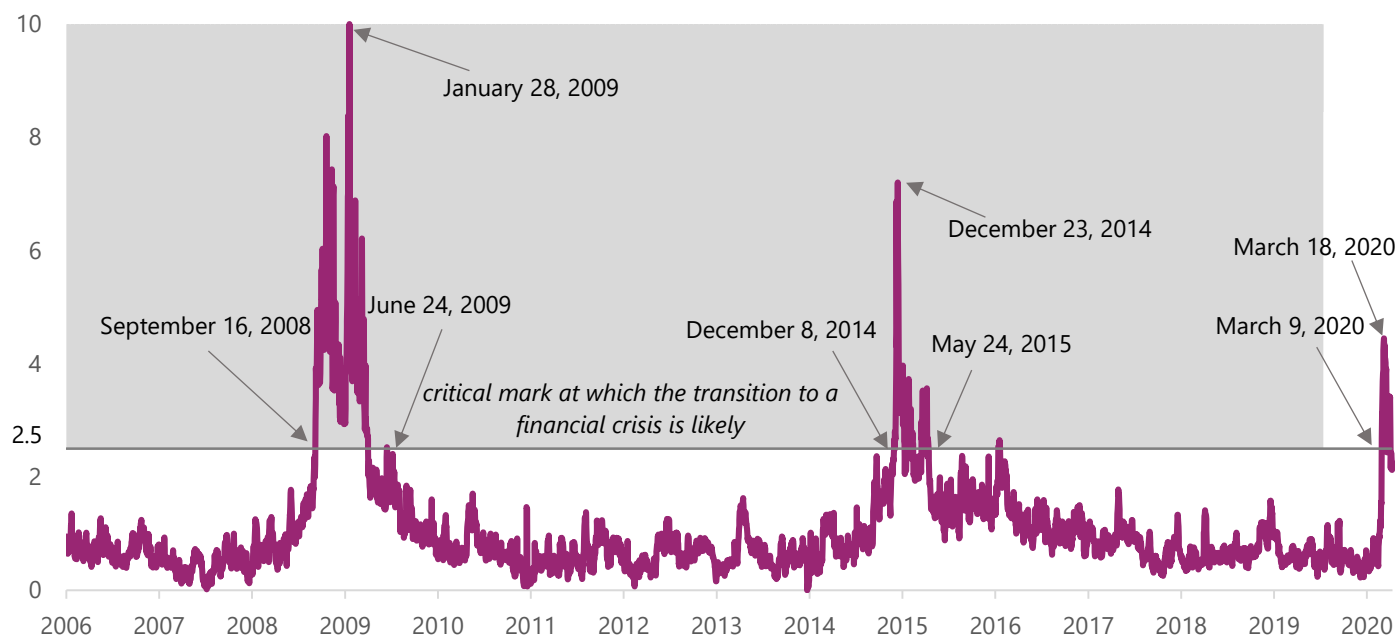
Sources: ACRA, St. Louis Fed

In this regard, the current situation in Russia is very similar to what is happening globally: economic activity is declining while financial market instability and commodity price volatility is contributing to an increasing level of financial stress. A similar situation is unfolding in many other countries, for example, the United States (*Fig. 1*). However, the level of financial stress in both countries is currently lower than the values recorded in 2008–2009, which is mainly due to the absence of banking crises.

ACRA calculates the ACRA FSI (Financial Stress Index) on a daily basis in order to assess how close the Russian financial system is to a crisis (*Fig. 2*). The index exceeded the critical mark of 2.5 points on March 9 this year. As a rule, this indicates the increased likelihood of the onset of a financial crisis (hereinafter, the moment of crossing this boundary [2.5 points] is regarded as the beginning of a financial crisis). In addition, in our experience, an increase in the index is often followed by problems in the real sector of the economy. On April 20, the ACRA FSI fell to slightly below 2.5 points. However, it is still too early to say that the situation has stabilized.

¹ The St. Louis Fed FSI is calculated weekly. To make the ACRA FSI index comparable, its values have been averaged over weeks. In addition, the values of both indices have been standardized from 0 to 10 points.

Figure 2. Dynamics of the financial stress index for Russia (ACRA FSI)



Source: ACRA

How is the financial stress index for Russia (ACRA FSI) calculated?

The ACRA FSI is calculated using economic indicators (inflation, exchange rate, oil prices, etc.) and financial indicators (corporate bond rates, money market rates, financial market indices, etc.). They are used to calculate 12 factors, the increase of which indicates an increase in the level of financial stress. The index is a weighted sum of these factors. Currently, the ACRA FSI is standardized so that its values range from 0 to 10 points. However, in the future they may exceed this range.

For further details, see the [Principles of Calculating the Financial Stress Index for the Russian Federation](#).

ACRA publishes the values of the index regularly on its website: <https://www.acra-ratings.com/research/index>.

Which of the crises exerted the most stress on the Russian financial system?

This question can be answered by comparing the peak values of the ACRA FSI. It can be said that currently, the situation is a lot less stressful than the crisis of 2008–2009 and also the crisis of 2014–2015, which was local, unlike the first two crises mentioned above, which are global (*Table 1*). The crisis of 2008–2009 was the deepest — during this period, the ACRA FSI reached its maximum value (10 points). It was also the longest, as the ACRA FSI exceeded the critical mark of 2.5 points for more than nine months following the start of the financial crisis in September 2008. The next crisis, according to the performance of the ACRA FSI, began in December 2014 and continued for four months. So far, the size of the current spike in the index is smaller than during the previous two crises. This is partially because the slowdown in economic activity has not yet had a considerable negative impact on the Russian banking sector.

Table 1. Comparison of the depth and length of the crises of 2008–2009 and 2014–2015 and the current situation using the ACRA FSI

Start*	End**	Number of crisis days***	Maximum index value***	Average index value***
September 16, 2008	June 24, 2009	281	10	3.7
December 8, 2014	April 24, 2015	137	7.2	2.9
March 9, 2020	?	42+	4.4	3.3

* First time the index crossed the critical mark of 2.5 points.

** Sustained return to below 2.5 points.

*** As of April 20.

Source: ACRA

The moment a liquidity deficit in the banking sector reaches its peak usually coincides with the crisis in the country's financial system entering the acute phase. There were 135 days between the start of the 2008–2009 crisis (when the ACRA FSI crossed the 2.5 point boundary) and the beginning of its acute phase, while in 2014, there were only 15 days between these two events. In this respect, financial stress developed a lot more rapidly in 2014–2015. The way the 2020 crisis is currently developing is more similar to the situation that unfolded in 2008–2009. Bank borrowers' main solvency problems may arise after the tough quarantine measures are lifted. The strengthening of major banks' financial indicators over the past few years and the experience garnered by the Bank of Russia in responding to banking sector crises when necessary may considerably improve the liquidity situation in the banking sector compared to previous crises. Nevertheless, we believe that the peak of financial stress may still be yet to come.

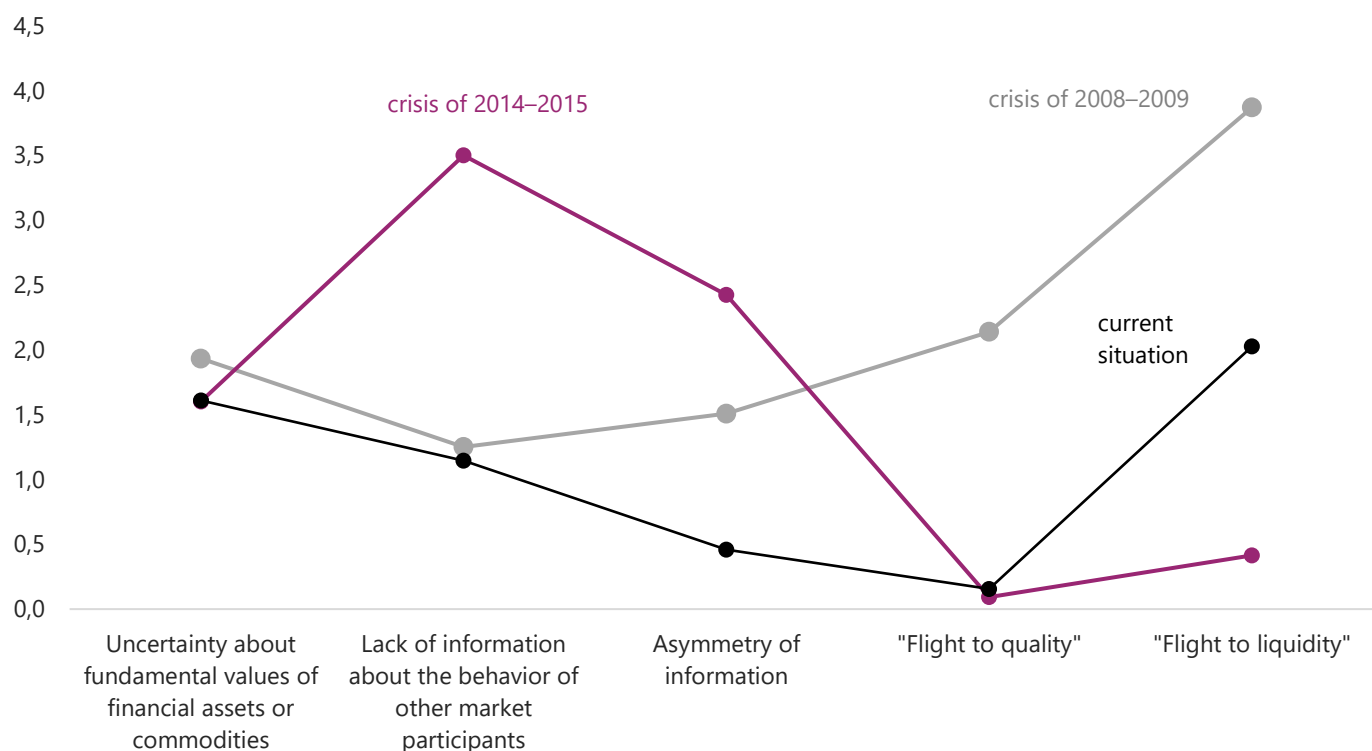
How similar is Russia's financial stress in 2020 to the financial stress at the start of the previous two crises?

ACRA uses the aforementioned 12 indicators to calculate five sub-indices, which track the following manifestations of financial stress:

- Uncertainty about fundamental values of financial assets or commodities;
- Lack of information about the behavior of other market participants;
- Asymmetry of information about asset quality (seller knows more) or borrowers quality (borrower is better informed);
- "Flight to quality": preference for investments that generate lower returns and carry less risk;
- "Flight to liquidity": preference for assets with higher liquidity.

Uncertainty about the fundamental values of financial assets or commodities is a general factor that is common to all periods of financial stress in Russia. At the same time, the effect of commodity price volatility, including oil, is most obvious. *Figure 3* shows that all periods of financial stress in Russia are roughly comparable in terms of the performance of this sub-index in the first 42 days after the critical boundary is crossed.

Figure 3. Manifestations of financial stress on average in the first 42 days after the ACRA FSI crosses the critical mark of 2.5 points*



* The graph shows the values of the ACRA FSI's five manifestations of crisis (sub-indices). The factors included in each of the sub-indices overlap in some cases. The critical mark (2.5 points) does not apply to the analysis of the sub-indices.

Source: ACRA

The most pronounced manifestation of financial stress in 2020 is the "flight to liquidity." In the Russian market, as around the world, the value of stocks of companies, corporate and sovereign bonds, as well as many other financial assets, has fallen relatively synchronously. At the same time, highly liquid assets have experienced the smallest drop or even growth, which allows parallels to be drawn between the onset of the current crisis and 2008.

However, the significantly smaller increase in the asymmetry of information about the quality of assets or borrowers distinguishes the current situation from previous crises. In particular, the spread between the interbank market rates and the Bank of Russia's liquidity provision rates, as well as the average variation of yield on stocks and bonds of financial institutions for the first 42 days of heightened stress, differ for the better compared to past crises.

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Analytical Credit Rating Agency (Joint-Stock Company), ACRA (JSC)

75, Sadovnicheskaya embankment, Moscow, Russia

www.acra-ratings.com

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