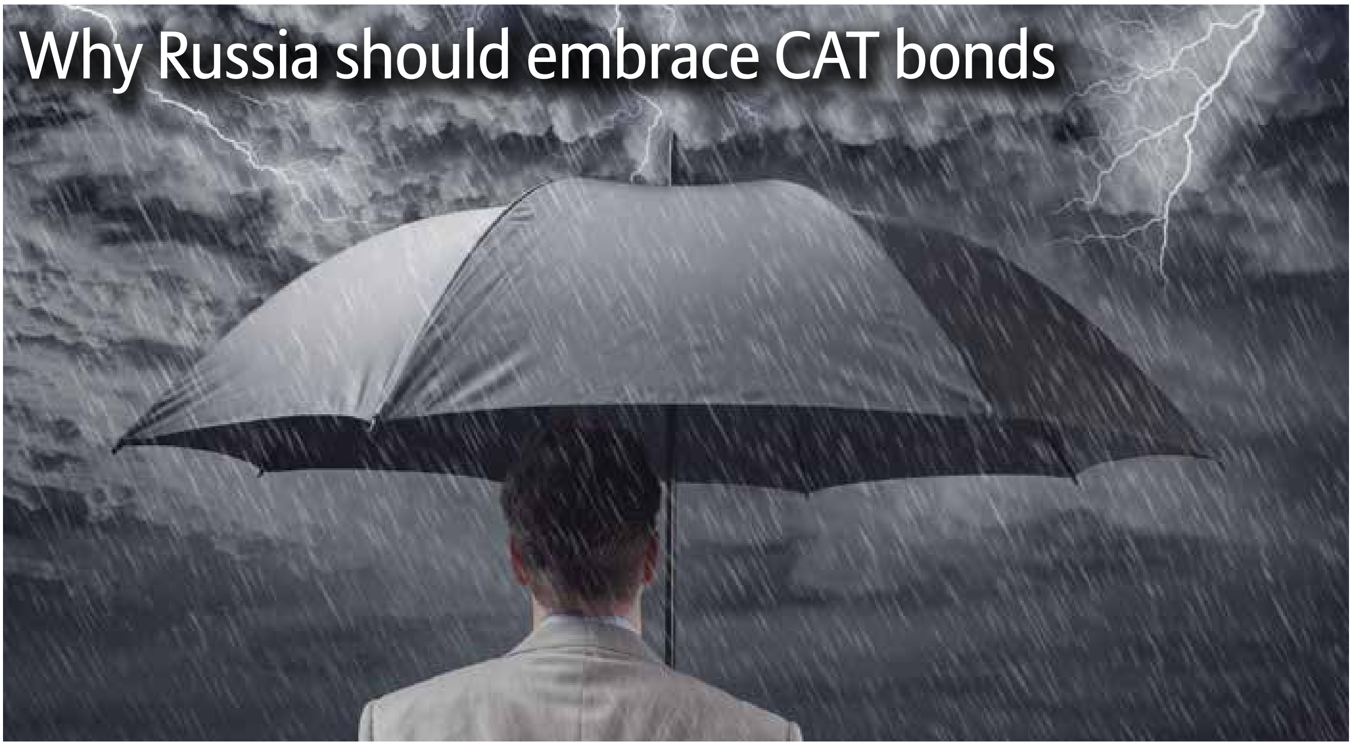
Why Russia should embrace CAT bonds



As the size of its economy grows, Russia is increasingly vulnerable to the devastating effects of a big catastrophe hitting the country. To manage these growing risks, the country's governments and insurers should consider the many advantages of using insurance-linked securities, say **Messrs Kirill Savrassov** of **Phoenix CRetro**, **Clive O'Connell** of **McCarthy Denning**, and **Rom Aviv** of **IBI ILS Partners**.

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The three of us were in Moscow at the end of May 2017 and, early one afternoon, while being driven back into the city from a meeting on the outskirts of the city we, together with the entire population of the region, were hit by a short sudden and furious storm, which killed 16 people and caused considerable damage. Local media and international weather sites reported that it was the deadliest storm to hit Moscow in 100 years of meteorological monitoring and probably the most ferocious storm in that period.

Such a sudden and fatal storm served as a reminder that, as the largest country in the world, Russia is inescapably susceptible to natural disasters. While Russian natural catastrophes may not be as well-known as North Atlantic hurricanes or Japanese earthquakes, they are real and they cause physical and economic loss on a regular basis.

Although the Moscow storm was a rare event, flooding and wild fires as well as Pacific typhoons in the far east of the country are more common. Furthermore, with a developing agricultural sector sudden peak climate events such as hail or unusual frost can cause significant economic loss.

As Russia's economy grows, the need for protection against such disasters becomes more urgent and important. That urgent need corresponds with a unique opportunity and Russia is perfectly positioned to take advantage of a whole spectrum of solutions which have been developed over the decades in the West and now represent proved matured instruments which are available through a sophisticated market.

Lessons from Sandy

An obvious solution is insurance. One only has to look at the impact that insurance protection had in the aftermath of Superstorm Sandy, which hit the north east of the US in 2012, to see the benefits that insurance can bring. At the time of Sandy, the region was still suffering from the economic consequences of the market collapses of 2008. The arrival of insurance payouts aided reconstruction, not only of the storm-damaged property and infrastructure, but the economy itself.

Sandy does also, however, highlight a problem which very much exists in Russia. In the northeastern US, possibly the most economically advanced area of the globe, only 50 percent of the economic loss associated with the storm was protected by insurance. In Russia, insurance penetration is a mere fraction of that, at 1.3 or 1.4 per cent.

Accordingly, insurance would still leave a considerable economic shortfall. The cost of infrastructure repairs would, as they did after Sandy, fall on the state. The cost of rehousing uninsured or underinsured populations devastated by a catastrophe must also be funded by the government, as must the cost of reconstructing industry.

In turn, this would impose a significant burden on taxpayers or government resources and that burden would all occur in one fiscal year.

Insurance does not assist the state in these circumstances. Insurance requires that the party purchasing it must have an insurable interest. While the state might have ownership of some infrastructure and a legal or constitutional obligation to assist some reconstruction, this would be a severely limiting factor. In addition, insurance claims are paid only after proof of loss, a process that can lead to delay when, after a disaster, funds are often immediately required.

Enter the CAT bond

An instrument which can be effectively used to mitigate all such issues and allow a comprehensive solution at the macro level is the catastrophe (CAT) bond, part of the insurance-linked securities (ILS) market. CAT bonds provide a mechanism that avoids these problems and are a solution that enables the government to receive funds swiftly once a disaster has struck and the parametric trigger has been activated.

There are two perspectives to be mentioned. One is CAT bonds as an indemnifying mechanism for the economy; the other is as an established uncorrelated asset class for investors who are already actively working with such a market—or those who can be interested on the basis of previous positive Russian capital market experience.

A CAT bond with a parametric trigger does not require insurable interest or proof of loss. Funds are held and immediately available provided certain weather-linked parameters exceed the respective threshold.

Such a method of risk transfer is supported around the world by governments and relevant authorities such as the New York Metropolitan Transportation Authority, US National Flood Insurance Program, Florida Hurricane Catastrophe Fund, Texas Windstorm Insurance Association, California Earthquake Authority, Caribbean Catastrophe Risk Insurance Facility, Mexican government, China Re, Turkish Catastrophe Pool, Japanese National Mutual Insurance Federation of Agricultural Cooperatives, African Risk Capacity, etc, and also by the World Bank as it allows an effective solution for entire economies in case of large disasters. This is doubly important for developing countries with low general insurance market penetration. Covered perils range from hurricanes and earthquakes to pandemics and multi-cat exposures.

A properly structured ILS solution could give the Russian government the ability to obtain immediate access to money with which to attend to urgent disaster relief as well as providing funds which can be used to restart the economy of an affected region after devastation, and resources to take preventive actions for the future to eliminate or reduce the possibility of further catastrophes. It would also allow the government to make its regions resilient to catastrophe and strengthen economic growth.

Advantages of CAT bonds

Additional positives for the potential of Russian CAT bonds include the length and quality of data relating to disasters and meteorology, good reputation and experience in general international eurobonds issuance, natural interest in Russia capital market investments by many institutional players and Russian interest in the new innovative effective products according to economic developments plans.

A further angle is the investors' perspective that tends particularly to embrace ILS featuring a parametric trigger. Transparency, lack of moral hazard and the objectivity of such a mechanism constitute a compelling package of benefits in an investment universe where most transactions are structured with an indemnity trigger (about 65% of CAT bonds follow an indemnity trigger). Furthermore, unlike indemnity triggers where it can take years to reveal the ultimate loss, parametric transactions provide a swift determination of loss, which is of benefit to both issuers and investors.

Second, a Russian CAT bond has the potential to enhance investor funds' diversification profile. The CAT bond space primarily covers hurricane risks with a geographical focus on the East Coast of the US. As investors seek to diversify their portfolios, each 'non-peak' issuance with no, to little, correlation to the rest of the ILS universe has the potential significantly to improve the diversification profile of a portfolio. Analytically, this would contribute to better risk-adjusted returns and improved tail risk metrics.

With regard to both modelling and pricing, it is worth noting that parametric transactions typically benefit from decreased model uncertainty and hence increased pricing accuracy.

Boosting resilience

Governments that sponsor CAT bonds are doing so in order to support the stability and resilience of their financial system and standard of living of their citizens. Finally, the question of socially responsible investing has become increasingly important to institutional investors such as pension funds and endowments. Specifically, investors examine ethical considerations as well as the correspondence between particular transactions and their impact on society.

Almost by definition, governments that sponsor CAT bonds are doing so in order to support the stability and resilience of their financial system and standard of living of their citizens. That, in turn, is likely to be appreciated by investors who prioritise responsible investing.

A good example of this is Hurricane Patricia. The government of Mexico had sponsored the issuance of two cat bonds to protect its economy from earthquakes and hurricanes (in 2009, and following its maturity, a new issuance in 2012).

Hurricane Patricia in October 2015 was the most severe storm ever observed in the Pacific Ocean. The central pressure of the storm fell below a predefined threshold, as defined in the prospectus of the respective cat bond, and the government of Mexico was paid $50 million, a considerable amount of money to assist the government in its reconstruction efforts.

Russia needs a solution to the losses caused by natural catastrophes. CAT bonds present a very workable solution to this issue as well as offering investors, within and outside Russia, with a useful and diverse investment opportunity.

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