



## SPECIAL REPORT/ EMERGING MARKETS

# ILS market can provide a solution to Russia's disaster planning

Russia needs a solution to the losses caused by natural disasters – cat bonds can meet that need

**E**arly in the afternoon of May 29, while being driven back to Moscow 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.

The storm killed 16 people and caused considerable damage. Local media and international weather sites reported it was the deadliest storm to hit Moscow in 100 years of meteorological monitoring and probably the most ferocious storm in that period.

That sudden and fatal storm served as a reminder that, as the largest country in the world, Russia is inescapably susceptible to natural disasters. While these natural catastrophes may not be as well known as north Atlantic hurricanes or Japanese earthquakes, they are real and cause physical and economic loss on a regular basis. Although the Moscow storm was in itself a rare event, flooding and wildfires, as well as Pacific typhoons in the far east of the country, are more common events. Furthermore, with a developing agricultural sector, some sudden peak climate events like 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 some decades in the West and now represent proven matured instruments that are available through a sophisticated market.

Of course, one obvious solution is insurance. One only has to look to the impact insurance protection had in the aftermath of Hurricane Sandy, which hit the north-east of the US in 2012, to see the benefits that solution can bring.

At the time of Sandy, the region was still suffering from the economic consequences of the market collapses of 2008. The ar-

rival of insurance claims money aided reconstruction, not only of storm-damaged property and infrastructure but of the economy itself.

Sandy does, however, also point to a problem that very much exists in Russia. In the north-eastern US, possibly the most economically advanced area of the globe, only 30% of the economic loss associated with the storm was protected by insurance. In Russia insurance penetration is a mere fraction of that (between 1.3% and 1.4%), which in fact is almost uncountable where the size of the damage comes to the federal or even regional level.

### Underinsurance

Accordingly, insurance would still leave a considerable economic shortfall. The cost of infrastructure repairs (as they did after Sandy) fall on the state. The need to rehouse uninsured or underinsured populations devastated by a catastrophe must also be funded by the government, as would the burden of reconstructing industry. In turn, this would impose a significant burden on taxpayers or government resources and that burden would all fall on one fiscal year.

Insurance does not assist the state in these circumstances. Insurance requires 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 only paid after proof of loss, a process that can lead to delay when, after a disaster, funds are often immediately required.

Catastrophe bonds provide a mechanism that avoids these problems and a solution that enables the government to receive funds swiftly once a disaster has struck and the parametric trigger activated. A cat bond with parametric trigger does not require insurable interest or proof of loss. Funds are held and immediately available



Asha, Russia: A Lada is driven through floods, which along with wildfires are a common event in the country

Art Konovalov/Shutterstock.com

provided certain weather-linked parameters exceed the respective threshold.

Such a type of risk transfer is keenly supported and developed not only by governments or relevant authorities (for example, the New York Metropolitan Transportation Authority, the Caribbean Catastrophe Risk Insurance Facility and African Risk Capacity) but 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 small general insurance market penetration. Covered perils range from hurricanes and earthquakes to pandemic and multi-cat exposures.

A duly structured insurance-linked securities (ILS) solution can 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 money to take preventative actions for the future to eliminate or reduce the possibility of further catastrophe. It will also allow the government to make its regions resilient to catastrophe and strengthen economic growth.

Other positives of Russian cat bonds include the length and qual-

ity of data relating to disasters and meteorology, good reputation and experience in general international Eurobonds issuance, a natural interest in Russia capital markets investments by many institutional players, and Russian interest in new, innovative products.

### Transparent trigger

A further angle is investors tend to embrace insurance-linked securities featuring a parametric trigger. Transparency, lack of moral hazard and the objectivity of such a mechanism offer a compelling package of benefits in an investment universe where most transactions are structured with an indemnity trigger (around 63% of catastrophe bonds use an indemnity trigger). Moreover, 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.

A Russian cat bond also has the potential to enhance investor funds' diversification profile. The catastrophe 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. It is also worth noting that parametric transactions typically benefit from decreased model uncertainty and hence increased pricing accuracy.

Finally, the question of socially responsible investing has become increasingly important to institutional investors such as pension funds. 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 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). Patricia in October 2015 was the most severe storm ever observed in the Pacific Ocean. The central pressure of Patricia had fallen below a pre-defined threshold, as defined in the prospectus of the respective cat bond, and the government of Mexico was paid \$30m, 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, both within and outside Russia, with a useful and diverse investment opportunity. ■

*Kirill Savrasov is chief executive of Phoenix Retro, Clive O'Connell is head of insurance and reinsurance at McCarthy Denning, and Rom Aviv is managing partner of IBI ILS Partners*