



INSURANCE BEYOND INSURANCE  
New challenges for market supervisors

**The Alternative Risk Transfer mechanisms**

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Ladies and Gentlemen,

I would like to thank the hosts for organising this seminar, which gives us the opportunity to dive into the frontiers of the insurance sector.

Innovation is the fundamental drive of the new *beyond insurance* business model. Innovation in itself is a factor in the development of finance and insurance: nowadays it takes different shapes, innovation in market demand (customer centricity), contractual innovation (new risk transfer contracts, smart contracts, etc.), digital innovation.

As for the digital transformation, the new solutions make use, by combining them, of a plurality of technological innovations. The mobile devices are at the same time points of contact and means for the digital identification of the customer: The use of cloud IT systems makes it possible to create new databases (big data) and manage large volumes of information and device transactions. The potential of machine learning, artificial intelligence and blockchain technology support the introduction of new products and processes.

The supervisory goal is to reap the benefits of this revolution by improving access to banking, financial and insurance services for businesses and consumers, ensuring the latter due protection and, more generally, full reliability in the functioning of the "digital" financial system.

### **The Alternative Risk Transfer mechanisms.**

After this brief introduction, I would like to focus this intervention on the Alternative Risk Transfer mechanisms and the challenges they pose to market supervisors.

The new Solvency II prudential regulation considers reinsurance as an integral part of the processes underlying risk management and the determination of the capital requirement, recognizing the effects of the transfer of risks to reinsurers. Re-insurance is *de facto* an alternative source of capital.

Alternative solutions for the transfer of risks or techniques other than insurance or reinsurance capable of covering the risk of losses have for some time been added to traditional insurance/reinsurance products. According to the estimates of specialised intermediaries, today these solutions, in terms of volume, account for around 15-20% of total reinsurance business, measured in terms of dedicated capital (Source: JLT Re).

The development of these products is due to the limited capabilities of the reinsurance market, especially in the most severe downturns, to offer traditional risk mitigation techniques in a market that is increasingly characterized by complex risks such as those arising from natural disasters (earthquakes, floods, etc.) or business interruption, also in light of the changes in weather conditions resulting from climate change.

In addition to that, the need for insurance undertakings to reduce the volatility of their solvency position based on Solvency II market consistent principles, has also prompted the search on the reinsurance market for products with a specific or primarily financial content, designed to mitigate both insurance and market risks.

The search for Alternative Risk Transfer (ART) methods remains nonetheless a concept that is not easy to define.

In general, we can say that there is an alternative risk management whenever we are confronted with instruments having at the same time an insurance and financial component, characterised by some specific elements:

- they are tailor made for specific needs of the risk taker;
- they offer multidimensional coverage: multiannual and/or multi-risk;
- they replace pure risk transfer with risk financing;
- they make it possible to underwrite risk by parties other than (re)insurers;
- they incorporate financial instruments such as derivatives.

ART transfers insurance risks to non-insurance firms, to investors (i.e. capital markets). In brief in the ART there is always an alternative counterpart or an alternative product.

There is an “alternative” counterpart in the risk self-retention (so-called self-insurance, as envisaged for instance in the case of Italian health facilities by the “Gelli Law” of 2017) or in the cases of transfer of risk to a reinsurance pool. Just think to the Italian case of the

Environment pool, set up in 1979 with the name Pollution Pool, after the environmental chemical industrial disaster in Seveso.

In Italy, mandatory insurance for health facilities (public and private hospitals) can be replaced or integrated by self-insurance retention through the establishment of an internal compensation fund.

Between 2010 and 2020, the number of insured public healthcare facilities dropped from 1,426 to 535 and the premiums to cover their risk correspondingly decreased from 520 million to 214 million euro. As for self-insurance retention, data are available from 2012; in 2019 public healthcare facilities allocated additional 421.1 million euro to the internal funds and the total fund value amounted to 2,147.9 million.

The utilization of self-insurance retention in medical liability risk poses a few challenges. Damaged patients are entitled to be indemnified in the same way under both systems. This legitimate expectation would require that self-insurance internal funds be computed and financed according to actuarial criteria as similar as possible to those applied by insurance companies. In addition, a sound risk governance and management framework should be in place. However, in Italy the regulation that should clarify both these aspects is still missing. Another difference between an insurer and a healthcare provider that retains the risk is that the activity of the former consists in pooling together many independent risks, whereas the latter deals with more homogeneous and potentially highly correlated risks stemming from its core business.

With regard to ART products, the best known are Insurance Linked Securities (ILSs).

Broadly speaking, ILSs are generally thought to have little or no correlation with the wider financial markets, as their value is linked to insurance risks (such as natural disasters, longevity risk and life insurance mortality) but in any case they increase interconnectedness between insurers and investors (via insurance securitisations).

These solutions have been developed especially in those economic cycles where traditional reinsurance premiums are very high or coverage is not available (for example after natural disasters such as the Katrina hurricane of 2005 or during periods of marked uncertainty such as after September 11).

One of the most important examples of ILSs are catastrophe bonds (CAT bonds), i.e. those bonds that pay coupons or reimburse all or part of the capital to investors unless certain specified natural disasters occur (called triggers).

These bonds are generally issued by Special Purpose Vehicles – SPVs, often based in a country with a favourable tax system, which underwrite a traditional reinsurance cover with an insurance company. This structure gives CAT bonds an important advantage when compared to traditional reinsurance, since they have a lower counterparty risk, given that the reinsured amount is generally available at the SPV (or in a trust account).

The Bermuda Islands are the largest market worldwide for CAT Bonds; however, the absence of an equivalence judgement of Bermuda's solvency regime for the treatment of SPVs<sup>1</sup> has recently given impetus to the European market, especially in Ireland.

When these instruments meet the conditions required under the SII framework (art. 209-211 of the Reg. EU 2015/35; qualitative criteria and effective transfer of risk), the treaties underwritten with SPVs are considered as risk-mitigation tools and, therefore, the ceding company may include them in the calculation of the capital requirements.

In the last few years, the market for CAT bonds has increased sharply in size and some large Italian groups too have used them.

Weather derivatives have a similar structure: they use capital market techniques to extend the insurability thresholds for losses resulting from meteorological events (for ex. in the agricultural sector), often with parametric triggers.

Other ILS products (however, with a narrower market) are longevity swaps and products relating to the securitisation of mortality peaks.

Finally, the notion of ART is often linked to that of *finite reinsurance*, where by “finite” is meant the underwriting of a limited insurance risk by the reinsurer. These are generally multi-year, tailor-made contracts for one or more lines of business, which combine protection against claims with financial returns. These reinsurance structures are often very complex.

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<sup>1</sup> On 26 November 2015 the European Commission acknowledged the equivalence, also with regard to reinsurance, of the regime adopted by the *Bermudian Monetary Authority* (BMA) with the *Solvency II* regime (*Commission Delegated Decision* (EU) 2016/309). However, captives and special purpose insurers were excluded from the scope of the equivalence.

## **The challenges for supervisors.**

In general, supervisors tend to focus their attention on the contractual terms of the treaty with a view to verifying the effective transfer of the insurance risk or the improper use of the treaty with the sole purpose of circumventing capital requirements.

It is also important that a treaty does not result in a significant level of basic risk or in the emergence of other risks, unless this possibility is taken into account in the calculation of the Solvency Capital Requirement. Attention is also given to possible regulatory arbitrage between different legal systems. To that end, we can recall the situation of reinsurers based in Bermuda, where the differences in the calculation of the BEL (there it is possible to use a risk-free curve different from that envisaged within the EU), may determine potential benefits in terms of SCR ratio.

From the point of view of supervisors, it is challenging to keep pace with these increasingly innovative and bespoke forms of reinsurance and adjust accordingly our competences and methodologies.

The technicality and the complex contractual arrangements of these products raise also a question of level playing field in the supervisory practices adopted in the various countries.

This issue has been brought to the attention of the EIOPA, which has recently (July 2021) published an *Opinion on the use of risk mitigation techniques*, aimed to ensure convergent supervision of reinsurance structures in all the member states, highlighting the key elements to be considered when examining risk mitigation techniques.

The opinion establishes that a full and accurate analysis of the reinsurance arrangements is the responsibility of the undertaking's actuarial function and that the ORSA process should give due consideration to risk interrelationships, their mitigation and capital endowment.

The *Opinion* also contains some recommendations inspired by "good practices", such as the recommendation on undertakings to start an early dialogue with supervisors especially when there are "complex" reinsurance structures or the need for NCAs to

coordinate and cooperate in the assessment of reinsurance structures that are relevant across multiple jurisdictions. On 28 July 2021, IVASS formally required Italian companies to comply with the guidelines contained in the opinion.

At any rate, what would now be desirable at European level is to bridge the gaps in the current prudential reporting on reinsurance structures in order to facilitate national and international supervision and collaboration.

Let me wrap-up my speech on ART. We are dealing with practices or securities with a very complex actuarial, legal and contractual structure. Often, these multiple sides are linked in unique, bespoke alternative risk transfer mechanisms. Managing and supervising them pose severe challenges at both insurance firm level and supervisory level. Information asymmetries are to be taken into account. From a macroprudential point of view, ART increases the exposure between sectors, hence enhancing interconnectedness and likelihood of common shocks.

It is difficult and probably not desirable to strictly regulate the ART matter. It is in the remit of the Supervisory Authorities to make their expectations clear but, at the same time, strong risk governance and management practices at insurance/reinsurance firm level are necessary.

Transferring and mutualising risks are of fundamental importance for the proper functioning of the insurance sector and more in general of the financial one. Nevertheless maintaining a sound capital base, consistent with the undertaking's actual profile, is of paramount importance in prudential frameworks similar to SII. It is in the constant interaction between these two dimensions that the supervisory action takes place.