

## LIMITATION ON AND PROTECTION AGAINST GLOBAL RISK BY DIFFERENTIAL USING OF THE INSURANCE

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**Abstract:** *Contemporary society is constantly confronted with an extraordinary variety of risks: natural hazards, professional risks, and risks affecting the health, risks that damage the environment and have adverse effects on future generations etc., of whose action is permanent. To combat all kinds of events, that are random and generators of damages, known as risks, fiscal or legal persons can choose for one of the following options: avoiding or prevention of the risk; limiting the damages caused by the risks produced; creation of reserves in order to cover, on the expense of own resources of any damages; shift the risk to other entity/person as a form of manifestation of the relationship between risk and insurance.*

**Key words:** *global risk; damage; protection; environment; compensation*

### INTRODUCTION

A risk is a threat, a possibility to generate a damage causing event, characterized by the gravity of its consequences and the probability to take place. The extent of the risk is hard to be appreciated, as the same risk may cause different effects depending on the circumstances it occurs. There are different methods to characterize a risk, but their outcomes suffer largely of subjectivism. [4]

The same risk can be described, analysed, measured to different purposes and visions, depending on the observers' goals. The existence of all kind of risks, presupposes a limitation or protection against losses due to their occurrence. [1]

Whatever measures are taken, of avoidance or prevention, the occurrence of a risk always implies material and financial damages, which have to be covered by someone and this can happen only with the help of insurances. [2]

Anyone needs this kind of protection, called insurance, as a cover against dangers or accidents to which the population and economic operators are exposed. But this need of protection is differentiated according to the risk aversion of the exposed people, and to the perception of the risk exposure. [5]

Regardless of the development of science and technics, natural phenomena cannot be directed or avoided. The only thing man can do is to forecast the moment of occurrence of the disaster or its intensity.

However, the prognoses meant to warn people with regard to the occurrence and extension of these catastrophies are only to a little extent helpful, possibly to protect their lives. [6], [7]

### MATERIALS AND METHODS

This very study underlines the permanent global transition processes, as well as the international agreements on reducing carbon emissions, but also the unprecedented speed in technological development, as such transitions presume also risks and need a certain period of implementation, being long term investments and are based upon international cooperation.

The authors of this study applied as working methods : data collection, processing, analysis and drawing conclusions.

## RESEARCH RESULTS

At the end of January has taken place the annual meeting of the World Economic Forum, an event which brought together over 2,500 political and economic leaders of the whole world. They have been invited to debate on the most urgent global challenges for the year 2017. [12]

The participants have discussed items concerning both the climate changes or renewable energies and the challenges of globalization, the effects of BREXIT or the policies of the new U.S. President.

The World Economic Forum 2017 or, briefly Davos 2017, coincided with the publication of the 12<sup>th</sup> edition of the „Global Risks Report” – perhaps the most expected document issued during the event – has presented a top of the main risks, which threaten the companies and people on international level. [12]

„Global Risks Report 2017” has identified a series of increasing global risks in 2017, on the basis of an annual survey addressed to 750 experts – who have evaluated for a period of 10 years 30 global risks, respectively 13 global tendencies, which could amplify the risks, both concerning the impact and the probability to occur during the following decade.

„Global Risks Report” has paid a special attention to the reality in the majority of the developed countries of the world, where the deepening of the ”gap” between generations or the cultural differences may amplify the global risks associated to a slower economic recovery or to an acceleration of the technological changes.

These kind of tensions have been built up in time, but in the last decade the social, economic and political fragility have accentuated. [8]

The events occurred in 2016 should form into an incentive in what we would call an awakening to reality and urge for a reassessment of the readiness to confront a landscape with risks in an increasing evolution.

Regarding the risk hierarchy, presented in the reports of the studies performed, the top 10 of risks in terms of probability contains elements of all five great categories analysed (environmental, geopolitical, societal, economic and technological threats), while considering the impact of the risks in Top 10 there is only one of the five categories missing, and namely that referring to the technological threats.

### **The Main Global Risks on Categories**

#### **1. Economic Risks and the „Trilemma of Globalization”**

In consequence of the data analysis, appears the danger determined by the increasing incomes in several places of the world, but also the economic discrepancies between the states, this being a risk, which may shape economically the evolution world wide the following decade.

Likewise, it underlines the fact, that economic mechanisms once considered to be reliable and which were fundamental to a healthy economic activity have proved in time that they have to be reassessed.

As a conclusion, **it is very hard to predict** the way to solid economic growth rates. **An extended period of** rates of interests at their historical minimum world wide is perhaps one of the key reasons that have heightened the anxiety regarding the future economic development.

Dani RODRIK, economist at Harvard, has advanced an hypothesis entitled the „Trilemma of globalization”, which suggests the fact that democracy, national sovereignty and economic integration on world level can not be compatible simultaneously, but only two by two, the recent political events, which have taken place in Europe and the USA and

which suggest that democracy and national sovereignty should be the main global priorities, even before economic concerns.

## 2. Societal Risks and the Danger of Populism

The British' decision to exit the European Union and the election of Donald Trump as president of the USA are clear signs of the rise of populism, being at the moment major geopolitical risks. In an unusual matter, the phenomenon of ageing population has decisively contributed to the election results, the „experienced electors” being in both cases mentioned as the moving force in the election.

Because of the continuously ageing population – it is less probable the young people to become the leading force in the elections – thus, there will be less chances „to change the balance”.

## 3. Technology and „the Fourth Industrial Revolution”

The speed technology has developed proves it to be one of the solid explanations for the decline of some industrial branches, as well as for the deterioration of the perspectives of labor force.

The technological development is one of the main problems that have hastened certain problems of geopolitical stability, of the security of working places and even had led to the deterioration of interhuman relations.

The so-called „fourth industrial revolution” has created an unprecedented quantity of new global risks, respectively has exacerbated the existing ones – both artificial intelligence and robotics proved to represent the greatest threats for the next decade.

Artificial intelligence will allow us to approach more efficiently the greatest problems of our time, as climate changes and the increase of the world population. At the same time, the dramatic increase of the dependance on technology will maximize some already existing risks, the development of attenuation measures being more than necessary.

## 4. Geopolitics and the Need of Cooperation

Under the „chapter” geopolitics there are pointed out the tensions of the last years, which made disappear on global level all relationships and assumed engagements in 2016.

**Table 1.**

**Top 10 Risks according to their PROBABILITY**

1.	Extreme weather events
2.	Involuntary migration on large scale
3.	Natural disasters
4.	Terrorist attacks
5.	Fraud and data theft
6.	Cyber-attacks
7.	Illegal commerce
8.	Human caused natural disasters
9.	Interstate conflicts
10.	Failure of the national government

Source: World Economic Forum Global Risks Perception Survey [10]

At Davos 2017 have also been scheduled some premieres, among which the presence of the Chinese leader Xi Jinping, thus becoming the first resident of China who addressed the Forum.

He defended the phenomenon of globalization, arguing that the economic integration has contributed to the progress of humanity and has improved the life of millions of people.

Many of the issues troubling the world are not caused by economic globalization and he continued by comparing the world economy with a great ocean, from which getting out is very difficult.

**Table 2.**

**Top 10 Risks according to their IMPACT**

1.	Weapons of mass destruction
2.	Extreme weather events
3.	Water crisis
4.	Natural disasters
5.	Failure in adapting to climatic changes
6.	Involuntary migration
7.	Food crisis
8.	Terrorist attacks
9.	Interstate conflicts
10.	Unemployment and Under-employment

**Superscription:**

environment;
  social;
  geopolitics;
  technology;
  ecomic

Source: World Economic Forum Global Risks Perception Survey[10]

**5. The Environment – „The Star” of the Risks in 2017, too**

Concerning the risk of the environment, the environment has dominated at least the last seven editions the report released by the Forum from Davos. This year’s edition makes no exception from this rule, as the issue is more actual than ever.

In the report are mentioned extreme weather events, climatic changes and the water crisis in certain regions and it reminds the fact, that these risks have been constantly present among the top risks of the last decade.

The experts insist upon actions to limitate such risks. At the same time it signalized a dangerous reality, the year 2016 being one of the most difficult years in history. Up to 2100 the problem of the pollutant emissions must be solved, in order to avoid very dangerous climatic changes.

Unfortunately, the actual global political climate represents a serious drawback in the retaking of debates on this very important issue. [3]

**6. ALLIANZ - Disruption of Activity – the Main „Concern” of Managers**

It is to be expected, against the uncertainty – both on political, judicial or legislative level, that 2017 will be also a difficult year for companies world wide. [11]

At the same time, the impact of the new technologies or the cybernetic incidents represent a growing preoccupation, while the natural distasters in 2017 remain one of the main elements having a destabilisation potential. At the same time, as in the year before, too, „the greatest threat” is given by the losses, suffered as a result of activity disruption.

**Table 3.****Top 10 risks which threaten the companies in 2017, on global level**

<b>1.</b>	<b>Disruption of activity</b>	37% (vs. position 1, 38% in 2016)
<b>2.</b>	<b>Market evolution</b>	31% (vs. position 2, 34% in 2016)
<b>3.</b>	<b>Cyber-risks</b>	30% (vs. position 3, 28% in 2016)
<b>4.</b>	<b>Natural distasters</b>	24% (vs. position 4, 24% in 2016)
<b>5.</b>	<b>Legislative changes</b>	24% (vs. position 5, 24% in 2016)
<b>6.</b>	<b>Macroeconomic evolutions</b>	22% (vs. position 6, 22% in 2016)
<b>7.</b>	<b>Fire and explosions</b>	16% (vs. position 8, 16% in 2016)
<b>8.</b>	<b>Political risks</b>	14% (vs. position 9, 11% in 2016)
<b>9.</b>	<b>Loss in reputation and of the brand value</b>	13% (vs. position 7, 18% in 2016)
<b>10.</b>	<b>New technologies</b>	12% (vs. position 11, 10% in 2016)

Source : ALLIANZ Global Corporate and Specialty[11]

In Tabel 3, pointed out the most important risks, which represent a threat for companies in 2017 on global level, but also the position these risks occupied the year before.

**Table 4.****Top 3 Risks on countries**

<b>Country</b>	<b>Risks</b>
<b>Canada</b>	- Disruption of activity - Market evolution - Quality deficiencies, product withdrawal
<b>France</b>	- Disruption of activity - Cyber-risks - Political risks
<b>Great Britain</b>	- Cyber-risks - Macroeconomic evolutions - BREXIT
<b>Spain</b>	- Disruption of activity - Cyber-risks - Quality deficiencies, product withdrawal
<b>Germany</b>	- Cyber-risks - Political risks - New technologies
<b>United States of America</b>	- Disruption of activity - Cyber-risks - Legislative changes
<b>Italy</b>	- Disruption of activity - Market evolution - Natural distasters
<b>Nigeria</b>	- Macroeconomic evolutions - Market evolution - Theft, fraud and corruption
<b>South Africa</b>	- Cyber-risks - Macroeconomic evolutions - Qualified labor force
<b>Australia</b>	- Disruption of activity - Cyber-risks - New technologies
<b>China</b>	- Market evolution - Natural disasters - Fire and explosions
<b>Japan</b>	- Natural disasters - Disruption of activity - Quality deficiencies, product withdrawal
<b>Singapore</b>	- Disruption of activity - Loss in reputation and of the brand value - Cyber-risks

Source : ALLIANZ Global Corporate and Specialty[11]

Tabel 4 points out the first three most important risks, which represent the greatest threats for 13 countries.

### **7. GENERALI - 2017 will not be an easy year**

The year 2017 will resemble very much the year 2016; the insurance industry will continue to confront a financial milieu dominated by low interests rates, and regarding the part of regulation, this will continue to represent a challenge for at least half of the European insurers.

In defiance of these challenges, GENERALI considers that, in this regard of the business milieu, Europe remains an attractive destination, underlining the potential of Central and Eastern Europe, the region the Italian insurer has an important presence.

2017 will not be an easy year the market still being volatile on global level, the situation will improve, but money will not be made easily. [9]

### **8. SWISS Re – Insurances will concur to a sustainable future**

We live „moving” times, everything happens quickly, almost all services are interconnected, benefitting of the development of the innovative technology.

We witness important transformations, both on demographic and political level, which will have important global consequences, upon long-term future – socially and economically.

Many of the main topics on the agenda from Davos have been reflected in fact even in the 17 goals of sustainable development of the UNO (among which, the first five goals are: to end poverty, end hunger, ensure health, education and to achieve gender equality), to which Swiss Re has adhered and which substantiate our business model.

SWISS Re is backing up as of the insurance/ reinsurance market, the development of partnerships with governments, corporations and NGOs, some of them permitting a much quicker payment of indemnities.

Such a partnership is able to help an economy struck by a natural disaster or a pandemia, to react much quicker and to limit the economic losses on long term.

The representatives of the society draw attention to the need of investments in the infrastructure, which could be a catalyser for many communities, as a challenge for other investors, but also open new paths for the development of a healthy economy, which can much better handle crisis situations. [4]

A catastrophe can impact upon the destiny of a community, when caught in a difficult situation.

Both the public and the private sector, including the insurance/ reinsurance industry have to take tangible and daring steps, to built more flexible economies, prepared for tomorrow.

The lack of protection through insurance at community level may affect decisively over many years its evolution.

To this effect, the reinsurer recollects the tragic situation from Italy last year, when the earthquakes in the centre of the country devastated small towns like Amatrice, Accumoli and Perscara del Tronto, where over 300 people lost their lives; in Italy whth only 1 % of the residential buildings insured, many families are still living in shelters.

For comparison, Japan, affected by a major earthquake, followed by several tsunami in 2011 is situated right on the opposite.

In the case of Japan the state was much better prepared to limit the damages in such an event, having a clever infrastructure, in which was invested along many years. [10]

Society points out the acute need to eliminate such gaps regarding the infrastructure and the protection by insurance/ reinsurance, especially with emergent markets.

As the World Bank pointed out, too, the lack of infrastructure implies larger costs, both from the economic and the social point of view.

Over 1.3 billions of people – almost 20 % of the world population – do not have access to electricity; 768 billions of people do not have access to drinking water and 2.5 billions of people don't have access to sanitary installations.

## CONCLUSIONS

- Recent events, of all kind – political, social, economic, natural, technological seem to shape a single answer: uncertainty.

- But one thing is certain, the mix presented above requires new types of products, intelligent personalized insurance solutions und much more relevant for the needs of the society on global level, at least from the insurer's/ reinsurer's point of view.

- Conclusively, disruption of activity is the „top risk” for three of the four analysed regions: America (43%), Pacific Asia (42%) and Europe (35%), while as in the region of Africa and the Middle East the risk hierarchy is dominated by the market evolution (39%) macroeconomic evolutions (37%).

- The environmental risk is a central issue for all analyzed situations, in spite of a great number of other threats identified for this year.

- For instance the inequality of incomes, the main risk identified for 2014, reflects itself this year in the profound social instability, high unemployment rates and negative consequences of the technological progress.

- The geopolitical risks, more precisely the interstate conflicts with regional consequences have been identified as the most probable risk of 2016 and will be present in 2017, too.

- The geopolitical instability hightens the exposure of the companies to problems like calling-off projects, revocation of licences, production downtime, destruction of goods and limitation of the flow of the financial funds abroad.

- On the other hand, political conflicts transform issues concerning climatic changes in a problem even harder to solve, as these conflicts lead to restrain the potential of political cooperation, to redirect resources and divert the attention from prevention and reducing the effects of climatic changes.

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