

Risk Management and Insurance

FUNDACIÓN MAPFRE

120

YEAR XXXI

SEPTEMBER-DECEMBER 2014



Diego Domínguez

«We try to make efficient, stable and evolutionary insurance programs»

Corporate Insurance Manager at Prosegur



Usage-based Insurance

A new concept of insurance product

MANUELA ALCAÑIZ ZANÓN, MERCEDES AYUSO GUTIÉRREZ, ANA M. PÉREZ-MARÍN



The microinsurance market in Spain

Possibilities for its implementation

MARÍA PÉREZ MARTÍN



Reflections on Risk Management

The road to a competent Risk Management system

FRANÇOIS SETTEMBRINO

The end of a stage

Thirty-one years ago FUNDACIÓN MAPFRE decided to create a publication that reflected its initiatives and showed its vision of Risk Management in a simple and informative manner. In its 120 issues, the magazine has told us about Risk Management in the Latin American market.

The magazine *Gerencia de Riesgos y Seguros* starts a new and renewed phase at the end of 2014. You have just been sent the last printed issue of this magazine. Henceforth, new communication formats will be used in line with the unstoppable, irreversible consolidation of digital means of communication, which are environmentally friendly. MAPFRE GLOBAL RISKS will take over from now on.

For 31 years we have worked hard to create and disseminate information related to insurance and Risk Management among professionals and the scientific community. We are truly grateful to those who have made this magazine possible, and wish the best of luck to the new team.

Issue 120 includes an interesting interview with Diego Domínguez, Corporate Insurance Manager at Prosegur, which is a company with risk control in its DNA. Among other things, Mr. Domínguez explains why, in order to be able to face new risks, it is important to be at least two steps ahead.

The first study is written by a group of researchers from the Riskcenter at the University of Barcelona; it describes the link between usage and the automobile claims ratio, and how usage-based insurance has become a basic benchmark for new insurance products.

The second study deals with microinsurance in Spain, its distribution, risk coverage and business opportunities; also the possibility of breaking the cycle of poverty and overcoming the vulnerability experienced by some social groups in difficult situations.

The third study is an interesting reflection on some of the basic principles that help us to identify a competent risk manager. The Risk Management certification process has been rolled out recently.

This issue ends with the usual sections on books and AGERS, IGREA and FERMA news. As always, we hope that you will like it.

We would like to send a heartfelt thank you to all of our readers. It has been a privilege to address you in the 120 issues of this magazine. We would also like to send a special thank you to our circa 5,000 subscribers from more than 30 countries for their loyalty over the last 31 years.

Before all of you, we commit to persevering with our efforts to spread knowledge on Risk Management, and to keeping you informed of our initiatives.

We thank you for your company, affinity and, most of all, your loyalty. We hope that you keep feeling an essential part of this magazine, and we trust that your collaboration will remain unchanged.

We look forward to the future magazine! |

Risk

Management
and Insurance

FUNDACIÓN MAPFRE
Paseo de Recoletos, 23. 28004 Madrid (España)
Tel.: +34 91 581 12 40.
www.gerenciaderiesgosysegueros.com

PRESIDENT: Mercedes Sanz Septién

DIRECTOR: José Luis Ibáñez Götzens

EDITOR-IN-CHIEF: Ana Sojo Gil

COORDINATION: María Rodrigo López

EDITORIAL BOARD: Irene Albarrán Lozano, Alfredo Arán Iglesia, Francisco Arenas Ros, Montserrat Guillén Estany, César López López, Juan Carlos López Porcel, Jorge Luzzi, Francisco Martínez García, Eduardo Pavelek Zamora, M^a Teresa Piserra de Castro, César Quevedo Seises, Daniel San Millán del Río, François Settembrino.

EDITORIAL PRODUCTION & GRAPHIC DESIGN: Comark XXI. Consultores de Comunicación y Marketing del Siglo XXI S.L.

PRINT: CGA

ANNUAL SUBSCRIPTION: SPAIN AND PORTUGAL: 40 EUROS. REST OF THE WORLD: 70 EUROS (INCLUDING POSTAGE).

LEGAL DEPOSIT: M. 9.903-1983

ISSN: 0213-4314

Gerencia de Riesgos y Seguros will not be held liable for any article or paper signed by its authors; the publishing of said articles and papers does not imply our conformity or identification with the contents thereof. The total or partial reproduction of the texts and illustrations of this review is forbidden without the previous consent of the editor.



In the opinion of...	6
Diego Domínguez, Corporate Insurance Manager at Prosegur «We try to make efficient, stable and evolutionary insurance programs»	
Surveys	
Usage-based Insurance: a new concept of insurance product MANUELA ALCAÑIZ ZANÓN, MERCEDES AYUSO GUTIÉRREZ, ANA M. PÉREZ-MARÍN	14
The microinsurance market in Spain: possibilities for its implementation MARÍA PÉREZ MARTÍN	24
Reflections on Risk Management FRANÇOIS SETTEMBRINO	34
News	42
AGERS activities in the last quarter of 2014. IGREA conferences on Insurance Market in Latin America and Market Trends. FERMA: Coverage of the largest and exceptional risks still needs an exemption from EU competition rules. FERMA celebrates 40 years.	
2014 Agenda	49
Books	50

in the opinion of...

«We try to make insurance programs as efficient as possible, always with a focus on future stability and consolidation in every country»

Prosegur's activity is directly linked to risk, so that, according to Diego Domínguez, «if we didn't have a Risk Management system within the company, we could hardly sell these services.» His challenge is to respond to the changing environment. «Prosegur is growing very rapidly, and this implies that insurance programs are developed and evolve based on the needs of the business and the objectives of the company,» he says.

Diego Domínguez

CORPORATE INSURANCE MANAGER AT PROSEGUR

Text: ALICIA OLIVAS Photos: ALBERTO CARRASCO



Prosegur is one of the main multinational companies in the private security sector, with almost 40 years of experience. In your opinion, how has Risk Management contributed to what the company is today?

You have to understand Prosegur well, given that its activity is linked to risk. We have three business lines: Surveillance, Securities Logistics and Cash Management, and Alarm Technology. These three activities are directly linked to risk, so that if we didn't have a Risk Management system within the company, we could hardly sell these services in a correct way.

This relationship with risk implies that clients confer responsibilities upon us, and this is a guarantee that we must have

within the company, so that our programs always support or guarantee these responsibilities.

What areas and divisions of Prosegur are involved in «managing» risks?

The company's organizational chart includes the Security and Risk Area, which is, in turn, divided into two areas: the Security and Intervention Area, whose basic purpose is to identify, control, and monitor operational risks, and the Insurance Management Area, where, with direct support from the former, we decide what the best strategy for transferring the risk will be, whether to the market or other alternative transfer means: retentions, deductibles, captive entity or self-insurance.

**«THIS COMPANY
IS SO PROFOUNDLY
LINKED TO RISK IN
ITS ACTIVITY THAT
THE ENTIRE
ORGANIZATION
MUST BE AWARE
OF IT»**



The Security and Risk Area is corporate, i.e. it establishes the policies and procedures at a global level, for identification, control, and monitoring and for the transfer of risk, so that these rules and procedures are implemented equally in every country.

Does this area therefore have staff in every one of the countries where the company operates?

Yes, that's right. The Security and Risk Area is composed of over 80 people in all; some of them work in the countries where we operate and some of them in the Main Office, and they always report to the corporate headquarters, irrespective of their physical location. Prosegur operates in 17 countries and in each there is a structure that is equivalent to that which exists at the corporate office.

RISK CULTURE

Are you managing to create a true consciousness of risk in the organization's daily activities?

Absolutely. This company is so profoundly linked to risk through its activity that the entire organization must be aware of it, from the Commercial Department, which is what the client sees, the first contact, and also the main risk selecting entity, helping us to identify risk in Senior Management. Everyone needs to be sensitized to the fact that we are a company linked to risk; therefore, this needs to be addressed and it is a message being taken on board in the company culture.

«ONE MUST BE ONE STEP AHEAD OF REQUIREMENTS AND ENSURE THAT CORPORATE PROGRAMS AND POLICIES ESTABLISHED ARE ADEQUATE»

To offer security services implies that the client transfers its risks to Prosegur. How did you meet the challenge?

This is one of the main differences between us and other companies. First, we have to guarantee our own tangible assets to our personnel (150,000 employees) but also the responsibilities that clients transfer to us.

The only way to do so is to have good Risk Management, with procedures and established standards established at the corporate level and implemented locally. Also, it is important to be clear on the risk transfer, always keeping the company's objective in mind.

Prosegur operates in 17 countries on four continents. How does the international dimension of the company affect Risk Management?

Operating in seventeen countries, on four continents, means different cultures, companies with different cultures. There are countries where Prosegur was already a well-known company and others where we started from scratch and had to bring our culture with us. This has an impact on our daily activities. Little by little, these policies and procedures are implemented so that all the countries increasingly feel «Prosegur» and we're all singing from the same hymn sheet.

What are the pillars of the Prosegur strategy for the coming years and what will the approach be from the perspective of Risk Management?

The plan over coming years continues to be very similar to that of previous years: to continue to grow as a company and

continue to develop our traditional Transport or Securities Logistics and Cash Management, Surveillance and Technology and Alarms products, while also planning the development of new services such as in the area of cybersecurity, new cash management solutions, etc.

This plan also involves a challenge: we must be one step ahead of requirements and ensure that corporate programs and policies established are adequate and can adapt to these new requirements.

RISKS

Who is in charge of identifying, controlling and monitoring the company's risks in Spain and the countries where you operate?

The Security and Risk Area's main remit is to identify, control and monitor the company's operational risks. In turn, once this evaluation is conducted, it establishes the standards and policies so that Risk Management may be applied in a consistent manner in all countries.

The Insurance Area undertakes the analysis, identification and monitoring involved with the transfer and this brings us to the Risk Management concept.

Could you tell us about your Risks Map?

Prosegur has a Risks Map that it updates yearly and that includes all of the business areas of the company (Securities Logistics, Surveillance, Technology and Alarms) as well as support areas. The evaluation is undertaken at both corporate and country level. Its update and results provide the internal Auditing Department

«I WOULDN'T VENTURE TO SAY THAT ONE LINE OF BUSINESS IS MORE EXPOSED THAN ANOTHER, BECAUSE THE TREATMENT OF RISK MUST BE THE SAME»

with a key tool with which to undertake their work.

This permits the identification and evaluation of risks that are key for Prosegur's business, the knowledge of assumed risks that must be monitored, and the definition of controls that mitigate impacts linked to the materialization of risks for the creation of the annual internal audit plan.

Also, within the annual update process for the Risks Map, those that are critical are identified and prioritized and their management is evaluated on a regular basis by the Corporate Risks Committee.

What Prosegur business areas are exposed to the greatest number of threats?

As an Insurance Area and with responsibility for the transfer of risks, threats are present in all three areas and I wouldn't venture to say that one line of business is more exposed than another, because the treatment of risk must be the same. They are three activities whose risks, if they are not correctly transferred, may impact the balance sheet; therefore, they must be treated with equal importance.

It is true that there are two activities in particular, Surveillance and Funds Transport, which, due to the fact that they represent a larger share of business than the rest, clearly generate greater risk frequency. Therefore, there is a greater impact of these two than in Technology, although it is true that the threat is present in this line of business too and the risk is constant.

In summary, which risks concern you the most?

We are concerned with operational risk, and this is the type of risk that we

focus on as an Insurance Area. Therefore, I would say that this is the type of risk that most worries us. First, because it is an area where we can have an impact and, second, because due to the characteristics of this company, if clients transfer their risks to us, this is where we have to focus in the end.

«THE TRANSFER HELPS US TO MINIMIZE IMPACTS ON THE BALANCE SHEET. IT IS THEREFORE OF VITAL IMPORTANCE»

TRANSFER AND RETENTION OF RISKS

What is Prosegur's policy on transferring and retaining risks? What role do you assign to insurance?

Insurance plays a fundamental role. The transfer helps us to minimize impacts on the balance sheet. It is therefore of vital importance. We have a policy of 100 percent coverage and of assuming the least risk possible. We apply a balanced and efficient retention strategy, having determined the deductible levels that we can assume without jeopardizing the goals of the company.

We also study different risk transfer alternatives instead of transferring to the market - transfers to self-insurance funds for instance, such as what we have in Australia, or alternatives by way of the captive entity.

What are the main characteristics of your insurance programs?

The impact risks are covered through the corporate insurance programs; the idea of which is that all countries be included under the same coverage.

We try to make programs as efficient as possible, always focusing on future stability and consolidation in every country. Another characteristic is capacity for growth, i.e. insurance programs should not be static but should progress, and must be able to assume the future needs of the company.

Are you encountering difficulties in the insurance market for some risks?

Which ones?

I wouldn't say difficulties, but we are starting to see that, with the changing trends relating to risks, the future of insurance companies could be to become



open to multi-line underwriting. I am referring to being able to cover several lines of insurance with a single policy. This is a subject that is rather stalled in the current underwriting of the market. There are few companies able to offer an «umbrella» product, offering coverage for Third-Party Liability with Damages or other products: Maritime, Transport, etc.

The reality is that at Prosegur risks are changing and a risk can be linked to several lines in an insurance company. Therefore, the best option would often be a multi-line policy but this becomes complicated.

What does a risk manager look for in an insurer?

First, the look for a company that is able to understand the client's needs, in other words, that it meets with the insured party and understand its projects and needs.

Then, the underwriting capacity must have the farsightedness to understand that underwriting as it is now may be limited or more complex, offering it separately instead of in product «packages».

Third, I would look for an insurer that is an experienced company in which the underwriters and processors know what they are doing and talking about. Finally, solvency and international presence are also two extremely important aspects.

SECURITY AND RISK MANAGEMENT

What role does technology play in the future of security?

An extremely important role. The development of the product is linked to new technologies. The traditional product

«THE MAIN IMPACT RISKS ARE COVERED THROUGH THE CORPORATE INSURANCE PROGRAMS»

exists, which is what we have now, but it is clear that it is necessary to develop new products, and without technology these don't make sense.

Prosegur is now including a new line of business in its strategy, cybersecurity, which is 100 percent technology. We conduct analyses for companies, their security systems, their computer systems, their weaknesses, etc. We have focused on this area and we believe that technology is the future.



Do you believe that at Prosegur you are also innovators when it comes to managing risks?

I would say that we are pioneers in the sector because we do not see a Risk Management area such as our own in other security companies. In addition, this area has an excellent reputation in the insurance market. I am not saying that we are or are not innovators when it comes to managing risks but I can confirm that we believe this aspect to be of utmost importance.

**«RISK MANAGERS
MUST CHANGE
THEIR WAY OF
DOING THINGS
BECAUSE WE ARE IN
A CHANGING
ENVIRONMENT»**

Looking at the future, what trends do you observe in Risk Management and the role of managers?

I would highlight two points. On the one hand, the development of risks is forcing us to become increasingly creative. On the other, risk managers must change their way of doing things because we are in a changing environment.

Traditional risks are already clear and we have identified them, but new risks are appearing on a daily basis, which forces us to pay attention and constantly seek new solutions. |

«WE NEED TO CONFRONT FUTURE NEEDS AND REMAIN TWO STEPS AHEAD»

Having earned a Bachelor's Degree in Business Administration in 2002, Diego Domínguez joined MAPFRE Industrial, where he remained for five years. Then, following a brief stint in the International area at Willis, he joined Prosegur in 2007 in the Insurance Management Department, which he has been the manager of since 2013.

The main function of the area he manages is to «develop the insurance strategy of the group. In other words, in our Department, once the risks have been identified, we decide on the best way to transfer them either to the market or to search for other transfer alternatives, always in keeping with the objectives of the company,» Domínguez explains.

To carry out these tasks successfully, in his opinion, the key factor is to have a good team. «Right now the Insurance Department includes about 20 people, who are all insurance specialists.» Another highly-important factor is «to have the support of the company and senior management for our strategy.»

To date, one of his main achievements at Prosegur has been «the development and consolidation of the insurance programs we have.» The security business finds itself in «a dramatically-changing environment, it is growing very rapidly, and this implies that insurance programs are developed and evolve based on the needs of the business and the objectives of the company. I would say that success resides in these programs being capable of adopting these new perspectives, and we are considering consolidation in all of the countries where we operate.»

This changing environment in the area of Risk Management also constitutes a great challenge for him. «We need to confront future needs and remain two steps ahead so that corporate programs and insurance policies are always in keeping with necessary coverage, and so that we can offer a solution to the business while reducing all impacts on the balance sheet to a minimum,» he concludes.

Usage-based INSURANCE



El seguro del automóvil Pay-As-You-Drive (PAYD), comercializado en varios países, se ha convertido en la referencia básica de un nuevo producto asegurador: el seguro basado en el uso. Este trabajo constata, a través de una revisión bibliográfica y un estudio empírico, la relación entre el uso y la siniestralidad, y reflexiona sobre el diseño de productos basados en el uso más allá del seguro del automóvil, dentro del ramo de seguros generales.

MANUELA ALCAÑIZ ZANÓN
MERCEDES AYUSO GUTIÉRREZ
ANA M. PÉREZ-MARÍN

RISKCENTER
UNIVERSITY OF BARCELONA

Pay-As-You-Drive (PAYD) automobile insurance is a new concept marketed in several countries. It is also known as Usage-Based Insurance, since the premium is determined depending on the vehicle's mileage, in addition to the traditional risk categories used in premium rating. Premium calculation also takes into account other variables that describe the policyholder's driving pattern, such as speeding, type of road or time of day he or she most frequently drives.

It is thus possible to offer each driver a more tailored automobile insurance. In short, people who use their vehicle more pay a higher premium

because their exposure to the risk of an accident is higher. Undoubtedly, designing this type of product is a complex process, and there is little relevant literature and very little statistical information.

Consequently, this paper has three main aims. Firstly, we carry out a wide review of literature about this topic; secondly, we consider how to extend the concept of usage-based insurance to insurance products other than automobile insurance; thirdly, our empirical study shows how usage-associated factors are important to explain accidents rates among PAYD policyholders.

This paper is divided as follows: section 1 contains a description of driving behavior, and its connection with a higher accident risk. In section 2 we describe how PAYD premium rating systems work. In section 3 we consider how to transfer this new insurance concept to products other than automobile insurance. Section 4 contains the results of the empirical application, and the last section lists the conclusions of this study.

1. DRIVING BEHAVIOR AND ACCIDENT RISK

Several authors, including Rice *et al.* (2003), Jun *et al.* (2007), Laurie (2011), Litman (2005; 2011) and Williams *et al.* (2012) show how usage-associated factors have an impact on accident rates. Specifically, it becomes clear that mileage is directly connected with exposure to risk and probability of an accident. Also, authors such as Litman (2005) and Langford *et al.* (2008) state that this is not a proportional relationship: drivers who use their vehicle more often tend to have fewer accidents by

unit of distance than drivers who use it less often.

In terms of speed, its link with accident severity is clear (WHO, 2004; Jun *et al.* 2007, 2011). Specifically, Elvik *et al.* (2004) have concluded that there is a strong statistical link between speed and road accidents: if average traffic speed is reduced by 10 per cent, the number of fatalities decreases by 37.8 per cent (based on data from Sweden and Norway).

Similarly, it is shown that the most frequently-used road type is linked to the risk of being in an accident. Several studies have identified urban roads as the most dangerous. For example, Laurie (2011)



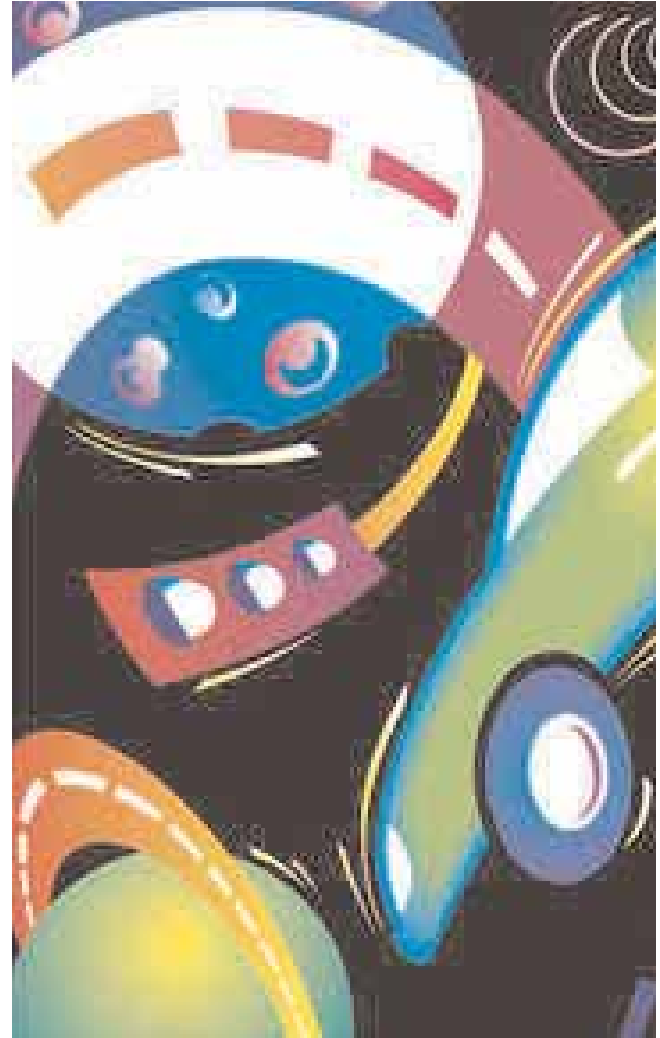
determined that the accident rate in Great Britain is 8.26 times higher on urban roads than on highways.

Additionally, Akerstedt *et al.* (2001) researched the probability of an accident occurring depending on the time of day (based on data from Sweden). For accidents with no excess blood alcohol content, the biggest risk is at around 4am – you are 5.7 times more likely to be injured in an accident and 11.4 more times likely to die. Accident risk is also influenced by the days when drivers most frequently use their vehicles. For example, there is higher danger among young drivers on weekend nights; all the more so if they drive a powerful vehicle (as shown by Doherty *et al.* 1998 and Williams *et al.* 2012).

Accident rates are also linked to the reason for using a vehicle. Specifically, Elias *et al.* (2010) studied the type of daily activity and the travel patterns of drivers (based on data from Israel), and concluded that people who use their vehicles to go to work (even if they do other tasks along the way) are less likely to be in an accident than people who use their vehicle for activities other than work or school/university. Therefore, it is demonstrated that there is higher accident risk on travel without a specific purpose.

Driving patterns are also described by the number of sudden braking or slowing down maneuvers. According to Jun *et al.* (2007), this is another underlying factor in accident rates. This is especially relevant during morning travel on any road, and during nighttime travel on local roads. In these cases, there is not usually traffic congestion, which may mean that the safety distance is not complied with, or the driver is distracted due to cell phone use, etc. (according to Farmer *et al.*, 2010).

Furthermore, it has been shown that PAYD policy underwriting results in changes in the policyholders' driving habits, so as to reduce their exposure to risk and, consequently, benefit from a lower premium (Bolderdijk *et al.*, 2011). Additionally, insurance becomes more affordable



thanks to this premium rating system, and this helps to reduce the number of uninsured vehicles on the road. But the positive effects of PAYD policies go beyond this specific issue (Peña, 2007): by encouraging less vehicle usage, it is possible to reduce mileage, accident rates, traffic congestion, public expenditure on road maintenance, and even contamination issues (Parry, 2004 and 2005).

2. PREMIUM RATING SYSTEMS FOR PAYD INSURANCE

Litman (2011) divided premium rating systems for PAYD policies into three types. The first type, Mileage Rate Factor (MRF) uses the insured party's

annual mileage as another premium rating variable, and offers discounts to policyholders who drive less than a given number of miles per year. However, since the annual mileage is estimated by the policyholder, this value may be underestimated.

The second type of systems is Per-Mile Premium (PMP): policyholders are allocated a rate by unit of distance driven, based on traditional actuarial variables for automobile insurance premium rating. The main disadvantage of this type of system has to do with how to measure and control the distance driven by each vehicle (Guensler *et al.*, 2003). In most cases, this is measured by means of the odometer (which could lead to user fraud if tampered with).

Finally, current technological developments make it possible to objectively control vehicle usage and driving habits. And so we talk about the third type of systems: based on GPS, it offers the option of setting a rate by mile driven, also taking into account the type of road, driving time, speeding percentage by type of road, and even sudden slowing down maneuvers. This is the most commonly used system; it is provided as an option subject to whether the policyholder agrees with the installation of a GPS system.

3. USAGE-BASED INSURANCE BEYOND PAYD INSURANCE

After reviewing existing literature, it becomes clear that PAYD insurance is the basic application of usage-based insurance, without consideration for possible uses in other insurance products. This is the second objective of this paper. In this section, we

consider how to design usage-based products in general insurance.

In this context, the first instance of usage-based factors in general insurance (other than PAYD) is home insurance. For this type of insurance, a distinction is made between usual address and second home while setting premiums, a clear example of usage-associated factors.

And this can be applied to other insurance products. Specifically, in occupational accident insurance there are factors related to the job that can be considered while setting the premium. Consequently, incentives to reduce workplace accident rates¹ may be reflected on the premium rating of any type of occupational accident insurance (including insurance taken out by self-employed individuals). This is the *bonus-malus* in workplace accident insurance (FUNDACIÓN MAPFRE, 2010).

For occupational accident insurance, there is a series of traditional factors linked to the following: professional activity divided into major groups (agriculture, construction, etc.), characteristics of work done in the context of said profession (e.g. in the case of construction, tiler for work under 5 meters, or in the case of agriculture, farmer who drives machines), and the person's age. We could also add factors directly connected with the way work is done, which can have a direct impact on the accidents reported.

¹ Spanish Royal Decree 404/2010, dated March 31, regulating the creation of a reduction system for work-related quotations for companies with a particularly important role in reducing and preventing workplace accidents.



AFTER REVIEWING EXISTING LITERATURE, IT BECOMES CLEAR THAT PAYD INSURANCE IS THE BASIC APPLICATION OF USAGE-BASED INSURANCE, WITHOUT CONSIDERATION FOR POSSIBLE USES IN OTHER INSURANCE PRODUCTS

Knowing individual work habits and behaviors may be important to calculate fair premiums for occupational accident insurance. There are behavioral factors directly connected with risk but they are often difficult to measure. Risk prevention measures can place significant focus on accident risk. Accident insurance premium rating should include validation systems for these measures, which are often disregarded.

The question is: how can an insurance company analyze exposure to risk in occupational accident insurance? While policyholders agree to installing a GPS system for PAYD insurance, occupational accident policyholders may agree to checks on their work activities without there having to be an accident. In other words, these are preventive checks. On taking out their occupational accident insurance, policyholders could agree to have the insurance company randomly check compliance with certain workplace safety rules while their policy is valid. Consent to voluntary auditing (no legal obligation) is an option allowed for in Spanish RD 404/2010. Exposure to the risk of having a workplace accident will be reduced by complying with any or several of the technical requirements listed in the above-mentioned Royal Decree: for instance, increase in own preventive resources, implementation of road safety plans related to professional activities, reduction in the number of workers exposed to professional activities, and close monitoring of workplace accident rates (based on the number of workplace accident reports and accident severity). Finally, in relation to coverage of *en route* accident risk, usage-based automobile insurance clearly makes sense.

4. EMPIRICAL ANALYSIS

In the opposite page, we describe the results of an empirical analysis of a sample of 25,014 young insured parties who took out a PAYD policy with a Spanish insurance company, effective throughout 2011. 17.6 per cent of policies were linked to an accident, while 82.4 per cent were linked to no accident.

We show the results of a descriptive analysis of both traditional premium rating variables, and factors associated with vehicle usage. For each case, we distinguish between drivers with and without accidents.



FOR OCCUPATIONAL ACCIDENT INSURANCE, THERE IS A SERIES OF TRADITIONAL FACTORS LINKED TO PROFESSIONAL ACTIVITY, CHARACTERISTICS OF WORK DONE AND THE PERSON'S AGE. WE COULD ALSO ADD FACTORS DIRECTLY CONNECTED WITH THE WAY WORK IS DONE, WHICH CAN HAVE A DIRECT IMPACT ON THE ACCIDENT REPORTED.

Table 1. Average values for drivers with and without accidents

Variable	Accidents		No accidents	
	Mean	(Est. dev.)	Mean	(Est. dev.)
Driver's age (years)	27.18	(3.10)	27.65	(3.09)
Years driving license	6.73	(2.94)	7.27	(3.07)
Vehicle's age (years)	8.69	(4.11)	8.76	(4.19)
Vehicle's power (hp)	98.36	(27.46)	96.98	(27.83)

■ Descriptive analysis

In terms of gender, the percentage of men is slightly higher in the group of policyholders involved in accidents (50.32 per cent) vs. groups not involved in accidents (48.61 per cent). Additionally, the number of drivers who park their vehicle in a garage is slightly higher among drivers involved in accidents (78.17 per cent) vs. drivers with no accident (77.21 per cent).

Table 1 shows average results of the applicable numerical variables. Specifically, we can see that drivers involved in accidents are on average slightly younger and more inexperienced than drivers who had no accident. Furthermore, the vehicle's age is on average almost the same both for drivers who were involved in accidents, and drivers who had no accident. Finally, average vehicle power is higher among policyholders involved in accidents vs. insured with no accident.

Additionally, average annual mileage is higher for drivers involved in accidents (7,962.36 km) vs. drivers with no accidents (6,987.86 km). Similarly, average nighttime mileage is also higher for policyholders involved in accidents (609.94 km) than for drivers with no accidents (513.41 km).

Figure 1 shows the driving profile of drivers with and without accidents. Average driving on urban roads is higher among drivers involved in accidents vs. drivers with no accidents (27.56 per cent vs. 25.51 per cent). We can also see how, on average, drivers involved in accidents exceed speed limits to a greater extent than drivers with no

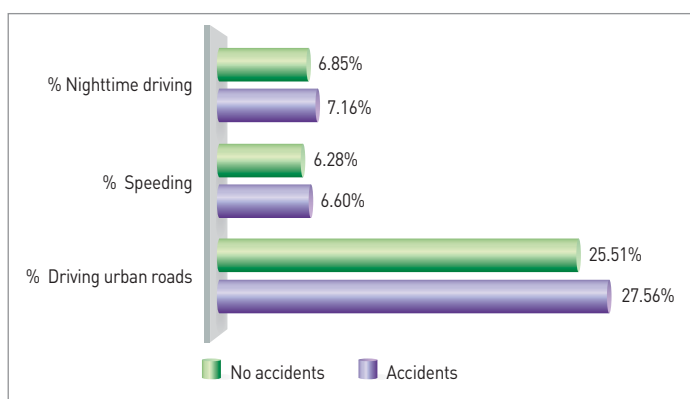
accidents (6.60 per cent vs. 6.28 per cent). Lastly, on average nighttime driving (nighttime km over total km driven) is higher among drivers involved in accidents (7.16 per cent) vs. drivers with no accidents (6.85 per cent).

■ Modeling results

We have adjusted a logistic regression model to predict the probability of an accident based on traditional variables used for premium rating, and on new factors linked to vehicle usage. Table 2 shows the results of the model's estimate. Below we analyze the effect of each variable on the probability of an accident.

We can see how the more experienced the driver, the lower the probability of an accident. Also, the coefficients associated to the applicable age groups are not significant; this is likely due to the high correlation between the driver's age and the

Figure 1. Driving profile for drivers with and without accidents



number of years they have had their driving license. In terms of vehicle power, our results point to an increase in the probability of an accident if there is an increase in power. Additionally, neither gender nor parking location nor the vehicle's age have a significant impact on the probability of an accident.

Regarding the variables associated with vehicle usage, we can see that the higher the total mileage, the higher the probability of an accident. Similarly, more frequent use of urban roads is significantly linked to higher probability of an accident.

In terms of the time of driving, the probability of an accident for people driving between 11 per

cent and 20 per cent of km during the night is lower than the probability of an accident for people driving less at night. Similarly, driving more than 20 per cent of km at night is not significantly linked to a higher accident rate. This is possibly due to a higher accident rate among people who do not drive often at night, only on specific occasions.

Finally, regarding speed, we can see that policyholders who exceed speed limits by up to 2 per cent are less likely to have an accident. When speeding is over this limit, there are no significant differences in accident rates as compared to the benchmark category (speeding higher than 11 per cent).

Table 2. Estimated results of the logistic regression model

	Coeff.	S.E.	p-value	Odds ratio
Constant	-2.487	0.128	0.000 ^a	0.083
Age 25-28	-0.037	0.047	0.436	0.964
Age ≥ 29	-0.034	0.059	0.563	0.967
Male	-0.035	0.036	0.329	0.966
Years insured driver has had driving license	-0.060	0.008	0.000 ^a	0.941
Insured vehicle's age	0.005	0.004	0.205	1.005
Insured vehicle's power	0.003	0.001	0.000 ^a	1.003
Parking: garage	0.031	0.041	0.451	1.032
Number of km driven	7.8e ⁻⁵	5.7e ⁻⁶	0.000 ^a	1.0001
Number of km driven at night in year	5.5e ⁻⁵	4.4e ⁻⁵	0.212	1.0001
Nighttime km: 11%-20% of total	-0.115	0.057	0.042 ^b	0.891
Nighttime km: 21%-30% of total	-0.189	0.123	0.123	0.828
Nighttime km: more than 30% of total	0.088	0.227	0.699	1.092
Speeding percentage: 0%-2%	-0.150	0.056	0.007 ^a	0.861
Speeding percentage: 3%-5%	-0.004	0.054	0.943	0.996
Speeding percentage: 6%-11%	0.049	0.054	0.368	1.050
Driving percentage on urban roads	0.020	0,001	0.000 ^a	1.020

Benchmark categories: age (≤ 24 years old); gender (female); parking (road); percentage of nighttime km of total (0-10%); speeding percentage over permissible limit (≥ 12%). Chi-Squared: 608.932 (p-value=0.000); -2log-likelihood: 22677.913; degrees of freedom: 16.

^a a significance at 1%; ^b b significance at 5%.



CONCLUSIONS

To conclude, it can be said that PAYD automobile insurance represents a change toward a new concept of insurance product: usage-based insurance. Based on an analysis of available literature and an empirical study, we can see that there is evidence of a link between usage and accident rates. In this paper we also expand the concept of usage-based insurance to policy types other than automobile insurance, e.g. home insurance (there is already a distinction between usual address and

second home) or even occupational accident insurance (knowledge about individual daily work habits may be taken into account when calculating premiums; also if *en route* accident coverage is included, usage-based automobile insurance would be applicable).

We believe that the concept of tailored insurance may consolidate in the next few years as a new premium rating trend, with usage-based insurance as the basic application. Papers such as this can be relevant to face the new challenges for the insurance sector and actuarial science. ■



THE CONCEPT OF TAILORED INSURANCE MAY CONSOLIDATE IN THE NEXT YEARS AS A NEW PREMIUM RATING TREND, WITH USAGE-BASED INSURANCE AS THE BASIC APPLICATION

REFERENCES

- Akersted, T., Kecklund, G., Hörte, L.G. (2001): *Night Driving, Season, and the Risk of Highway Accidents*. *Sleep*, 24, 4.
- Bolderdijk, J.W., Knockaert, J. Steg, E. M., Verhoef, E. T. (2011): *Effects of Pay-As-You-Drive vehicle insurance on young drivers' speed choice: results of a Dutch field experiment*. *Accident Analysis and Prevention*, 43, 1181-1186.
- Doherty, S.T., Andrey, J.C., MacGregor, C. (1998): *The situational risks of young drivers: The influence of passengers, time of day and day of week on accident rates*. *Accident Analysis and Prevention*, 30, 1, 45-52.
- Elias, W., Toledo, T., Shiftan, Y. (2010): *The effect of daily-activity patterns on crash involvement*. *Accident Analysis and Prevention*. 42, 6, 1682-1688.
- Elvik, R., Christensen, P., Amundsen, A. (2004): *Speed and road accidents. An evaluation of the Power Model*. TØI report 740/2004. Institute of Transport Economics TOI, Oslo.
- Farmer, C.M., Braitman, K.A., Lund, A.K. (2010): *Cell Phone Use While Driving and Attributable Crash Risk*. *Traffic Injury Prevention*, 11, 5, 466-470.
- FUNDACIÓN MAPFRE (2010): *Incentivos por reducción de la siniestralidad en accidentes de trabajo. Bonus-Malus en el seguro de accidentes de trabajo*. Gerencia de Riesgos y Seguros, 107.
- Guensler, R., Amekudzi, A., Williams, J., Mergelsberg, S., Ogle, J. (2003): *Current State Regulatory Support for Pay-as-You-Drive Automobile Insurance Options*. *Journal of Insurance Regulation, National Association of Insurance Commissioners*, 21, 3, Spring 2003.
- Jun, J., Guensler, R., Ogle, J. (2011): *Differences in observed speed patterns between crash-involved and crash-not-involved drivers: Application of in-vehicle monitoring technology*. *Transportation Research Part C*, 19, 569-578.
- Jun, J., Ogle, J., Guensler, R. (2007): *Relationships between Crash Involvement and Temporal-Spatial Driving Behavior Activity Patterns: Use of Data for Vehicles with Global Positioning Systems*. *Transportation Research Record*, 2019, 246-255.
- Langford, J., Koppel, S., McCarthy, D., Srinivasan, S. (2008): *In defence of the 'low-mileage bias'*. *Accident Analysis and Prevention*, 40, 1996-1999.
- Laurie, A. (2011): *Telematics: the new auto insurance*. In: *Emphasis*. - New York: Towers Watson. Issue 1, 20-25.
- Litman, T. (2005): *Pay-As-You-Drive Pricing and Insurance Regulatory Objectives*. *Journal of Insurance Regulation, National Association of Insurance Commissioners*, 23, 3, Spring 2005.
- Litman, T. (2011): *Pay-As-You-Drive Insurance: Recommendations for Implementation*. Victoria Transport Policy Institute.
- World Health Organization (2004): *World Report on Road Traffic Injury Prevention*. Washington, D.C.: OPS.
- Parry, I.W.H. (2004): *Comparing alternative policies to reduce traffic accidents*. *Journal of Urban Economics*, 56, 346-368.
- Parry, I.W.H. (2005): *Is Pay As You Drive insurance a better way to reduce gasoline than gasoline taxes?* *American Economic Review*, 95, 2, 288-293.
- Peña, L. (2007): *Nuevos modelos de gestión de seguros: MAPFRE y su proyecto Generación Y*, *Carreteras*, 54, 156/Nov-Dec.
- Spanish Royal Decree 404/2010, dated March 31, regulating the creation of a reduction system for work-related quotations for companies with a particularly important role in reducing and preventing workplace accidents, Spanish Ministry of Labor and Immigration, Official State Gazette, April 1, 2010.
- Rice, T.M., Peek-Asa, C., Kraus, J.F. (2003): *Nighttime driving, passenger transport, and injury crash rates of young drivers*. *Injury Prevention*, 9, 3, 245-250.
- Williams, A.F., West, B.A., Shults, R.A. (2012): *Fatal crashes of 16- to 17-year-old drivers involving alcohol, nighttime driving, and passengers*. *Traffic Injury Prevention*, 13, 1, 1-6.

Microinsurance in Spain: *The race starts now!*

La nueva configuración de la sociedad en España como consecuencia de la crisis propicia la introducción de productos innovadores como los microseguros, que ya funcionan en los países en vías de desarrollo. En este trabajo se analizan las posibilidades de este nuevo mercado y las características que deben reunir los microseguros para su implantación en nuestro país, así como algunos ejemplos ya existentes.

MARÍA PÉREZ MARTÍN
ACTUARY
AVALON NETWORKING

Einstein said that crises are a blessing for both people and countries as they bring progress. In fact, that is either the case, or we need to make it that way. There is no other alternative.

This crisis has made it clear that we need to reinvent ourselves, look for sustainable products, and acknowledge that it is vital to have a majority of middle class individuals; otherwise, there is no market. And without a market, the system as it stands is unsustainable.

Currently, the base of the population pyramid is growing in size, as people move from the middle class to low-income classes.

Therefore, it is essential that stakeholders (public and private institutions) consider measures for innovating with products. These products must ensure the (current or future) wellbeing of the middle class. They must also help to increase the number of people in this class by offering savings and insurance options that allow low-income individuals to increase their purchasing power, without being subject to risks that send them to the poverty threshold, or push them further away from the middle class.



ILLUSTRATION STOCK

For people between the poverty threshold and lower classes, there is a new set of financial products called micro: microinsurance and microcredit or, more generally, microfinance.

Microinsurance specifically (hereinafter MI) has been applied in developing

countries for some decades now. The aim is to break the cycle of poverty, to make low-income people less vulnerable, and to be a driver for these people to entrance and control their own assets and revenue. They are no longer solely (or not solely) dependent on aid and grants; they can rely

RECENTLY, THESE TYPE OF PRODUCTS HAVE BEEN FREQUENTLY MENTIONED AS A PREVENTIVE MEASURE IN CASE OF PERSONAL ADVERSITIES AFTER NATURAL DISASTERS SUCH AS TYPHOON HAIYAN OR EVENTS LINKED WITH CLIMATE CHANGE

on instruments that allow them to shape their own finances, rather than rely on donations, loans, and government or NGO aid, which can occasionally lead them to fall prey to usury.

As an example we would like to mention the four cases described by Carlos Ruano Espí in his thesis *Invitación al microseguro (Invitation to Microinsurance)*^[1]: La Equidad in Colombia and AIG in Uganda (life microinsurance), three health insurance cases in India, two cases of corporate multi-peril microinsurance in France, and two cases of parametric agricultural microinsurance. These examples include several life and non-life insurance business lines.

Because they are next door to us, we will look at the cases in France in more detail. As described in this thesis, there was a collaboration agreement between two insurance companies and a charity association focused at microcredit. The agreement was to provide multi-peril insurance to individuals starting their business from home, and multi-peril insurance to individuals who chose a site for their new business. The offer comprised insurance for less than one euro/day with the added value necessary for these products, and a support service for the first three years, at the end of which traditional insurance was suggested. But this initiative by AXA, MACIF and ADIE is not unique. Entrepreneurs de la Cité offers similar products. In both cases, a key factor is to provide support and guidance to start the business, and to help the new businesses to adopt a good marketing strategy.

Recently, these types of products have been frequently mentioned as a preventive

measure in case of personal adversities after natural disasters such as Typhoon Haiyan or events linked with climate change.

On November 16, 2013 Francisco Javier Garaoya wrote a new post on his blog *El microseguro inclusivo* of Red Cumes (FUNDACIÓN MAPFRE). On this occasion, he talked about climate change and microinsurance, and how the latter mitigated the disastrous consequences of drought in Ethiopia by means of parametric agricultural microinsurance: «An example of success is the program implemented last year to alleviate the effects of drought in Ethiopia. When satellites recorded drought conditions, more than 12,000 farmers received a total of \$322,772 via the R4 Rural Resilience Initiative, an index-based agricultural microinsurance program



adapted to climatic specificities of developing countries.»^[2]

So, we have the chance to innovate with new products (to reach a wider audience), and to develop these products in compliance with corporate social responsibility and social marketing policies.

And do not forget that this involves not only providing insurance to low-income individuals but also helping them move to the middle class threshold (thus expanding the traditional market) by mitigating the damage and effects of certain events on their savings, and the need to reduce current or future savings due to loans (both from the market and family and friends).

Consequently, we are talking about reverting current social trends. This is the premise of the microinsurance products mentioned above, which we can already find in France.

This is a huge market for insurance products, where the force of numbers is applied naturally and where earnings can be expected. But these are not short-term earnings. Due to this market's peculiarities, we should expect losses in the first few years. Implementation will be slow as there is a long way to go; we need to research the market thoroughly, and determine for which needs people are willing to pay a micropremium. We need to generate demand. And while we create a market, we are taking risks linked to little distribution, high probability of adverse selection and fraud. However and unlike traditional insurance, we cannot apply premium loading as that type of product would not appeal to our target market. A priori, these initial effects can be corrected, alleviated or turned into investment by:

- Bearing initial losses via Corporate Social Responsibility: What better investment could there be for CSR policies of insurance companies than to create low-cost products for low-income families?

- Beginning with the creation of group microinsurance with compulsory underwriting «This mechanism limits the scope for adverse selection and allows more relaxed underwriting»^[3].

- Creating alliances with public institutions or non-governmental organizations, such as between DKW and Fundación Tierra Nueva to provide health microinsurance to people in southern Quito (Ecuador).

And we cannot forget reinsurance, coinsurance and other methods of risk division.

The first companies to stimulate these markets will take the greatest technical or underwriting risks, and will face the biggest product introduction expenditures; however, they will become the leaders of this major potential market.

Consequently, there is a two-fold perspective of microinsurance: financial driver and financial opportunity. In the words of Craig Churchill^[4]: «Regardless of whether one is looking at microinsurance from a social-protection or a market-based approach, the body of the insurance scheme, its basic operations, will be largely the same».

When we plan these types of products for Spain (a non-developing country), we need to not only analyze the product in detail as per its current definition and operation in other countries, but also to

**IMPLEMENTATION
OF MICRO-
INSURANCE WILL
BE SLOW AS
THERE IS A LONG
WAY TO GO; WE
NEED TO
RESEARCH THE
MARKET
THOROUGHLY,
AND DETERMINE
FOR WHICH
NEEDS PEOPLE
ARE WILLING TO
PAY A
MICROPREMIUM**

WE CAN LOOK INTO BONUS-MALUS SYSTEMS, INCOME PARTICIPATION SYSTEMS, REWARDS FOR NO CLAIMS, AND ADDITIONAL SERVICES THAT ADD VALUE TO INSURANCE SO THAT CLIENTS RECEIVE DEPENDING ON WHAT THEY PAY, RATHER THAN IN THE EVENT OF AN UNEXPECTED SITUATION

adjust some aspects to adapt it to our current system, situation and culture.

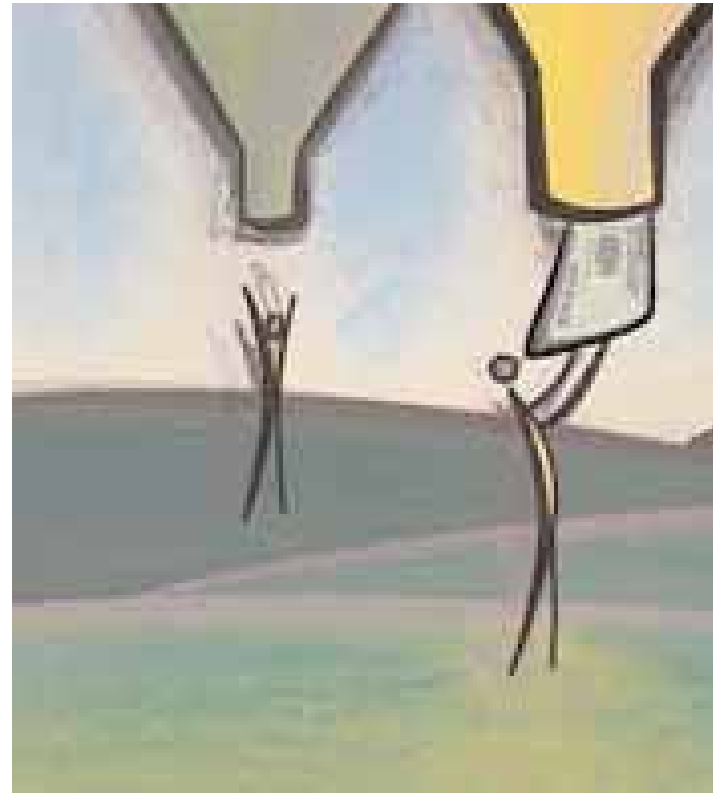
This article is not aiming to describe the different approaches to expressing the concept of poverty in numbers. There are various definitions and classifications of poverty, depending on whether we talk about relative or absolute terms, currencies or percentages. Based on the definition contained in almost all literature about microinsurance, i.e. the World Bank's definition, poor people live on less than \$730 per year. This measurement cannot be applied to poverty in Spain. Here the poverty threshold is measured pursuant to recommended Eurostat criteria, and using the statistical Median (not sensitive to extremes). This measurement is 60 percent. This is a relative measurement based on income distribution in the previous year; it is not fixed (it varies depending on the median, and the median varies depending on income distribution).

According to interim 2013 data from the Spanish Survey of Living Conditions (ECV)^[6], by the National Statistics Institute (INE), the poverty threshold for single-person households is 7,040 euros/year (about ten times the WB definition).

This survey also concludes that «40.9 percent of homes are not prepared to face unexpected expenses», which represents an increase on previous years.

It is also mentioned that «16.9 percent of households say that they struggle to make ends meet».

This information alone leads to a wealth of questions and answers about business and social development. We should research what type of unexpected expenses these families are faced with: What is their total value? What measures are taken to



prevent this situation? How it is handled? By tapping into savings? By taking out new debt and incurring new obligations on this loss, with no future growth or benefit?

As for the difficulty in making ends meet: could this result in delays in premium payments, terminations, cancellations? What premiums can be offered which do not put a strain on families? How can we offer payment systems to prevent non-payments?

For instance, we could consider very low monthly premiums. Maybe even premiums in installments by dividing the risk rather than the premium.

And there is also the big question, the big concern for all insurance companies: moral risk, fraud, insurance misuse. What measures can be taken to prevent misuse? We can look into *bonus-malus* systems, income participation systems, rewards for no claims, and additional services that add value



to insurance so that clients receive depending on what they pay, rather than in the event of an unexpected situation.

Given all these aspects, would this potential market take out insurance? Would they be willing to pay a premium, however small, to insure an uncertain event? How far does the insurance culture go in Spain? Undoubtedly, financial and insurance culture in Spain is a lot more widespread and has penetrated deeper into the market than in any other country where microinsurance is being developed (excluding minor examples in countries such as France, as seen above). Insurance is a concept known by everyone, even if this is restricted to compulsory automobile insurance.

Additionally, unlike developing countries where microinsurance is being used and implemented, in Spain we find no problems linked to the distribution channel.

There are no issues, from online contracting to distribution to the wider public to underwriting via local agents and brokers (and many rural brokers). However, this does not mean that we should not look for new distribution channels, and innovate to reach everyone.

To this end, we should consider the possibility of microinsurance regulation allowing for a wider range of insurance brokerage means, in addition to brokers and agents. As we will see at the end of this article, one of this product's characteristics is its simplicity. Simplicity associated with management which does not necessarily comply with the standards of traditional insurance. Consequently, being a broker would not be a requirement to market these products. They could be provided by local businessmen or distributed by commission agents.

Additionally, there are also certain insurance contract issues, such as suspending coverage in case of non-payment. These are sensitive people; we must act with caution and manage recoveries in a friendly, accessible and flexible fashion. Pending premiums should be deducted from indemnity in case of claims, or premium payments should be facilitated.

All people involved in this new concept agree that microinsurance contracts must be: simple, clear, with not many or no exclusions. Or as per the definition of Michael J. McCord, these products must be S.U.A.V.E (Simple, Understood, Accessible, Valuable, Efficient)^[6].

And how do we handle this? It may not be easy to believe it, but writing simple and clear insurance contracts with not many legal details is a major challenge. Therefore, coverage must be correctly defined and

ALL PEOPLE INVOLVED IN THIS NEW CONCEPT AGREE THAT THE MICROINSURANCE CONTRACTS MUST BE SIMPLE, CLEAR, WITH NO MANY OR NO EXCLUSIONS. THESE PRODUCTS MUST BE S.U.A.V.E. (SIMPLE, UNDERSTOOD, ACCESIBLE, VALUABLE, EFFICIENT)

THIS IS A FULL PRODUCT MEETING THE EXACT NEEDS OF LOW-INCOME INDIVIDUALS; NATURALLY, THE CAUSES OF RISK AND COVERAGE NEEDS WILL BE DIFFERENT FROM THE TRADITIONAL MARKET

established in its own definition, without having to refer to the exclusions and «small print». Instead of All Risk contracts with several pages of exclusions, we must consider summary contracts listing individual coverage together with its specific definition and scope.

The issue of sensitivity also applies to claim management and, consequently, damage appraisal. These groups cannot wait during lengthy claim management periods. They try to protect themselves from their vulnerability by paying premiums during an undetermined period of time until the insured situation occurs; in case of a claim, they cannot use other resources, and each day without help brings a further decrease in their income. For this reason, we must not think in terms of traditional claim processing, request for documentation, strict deadlines, etc. We have to see beyond this, we need to act quickly with minimum or no documentation, and with help and guidance to gain access to any indispensable documents.

Appraisal work is also reinvented: appraisers and repairers may, and should, potentially advise and help in documentation management, in a direct and proactive manner. Similarly, we need to find ways of repairing damage, mitigating and educating in incident prevention, by conducting proactive risk checks to forestall future events.

Indemnity must also be redesigned. First, because it becomes a means of providing advice, help, prevention and education to policyholders. Companies get closer to clients and offer their assistance. Additionally, we must invent other means of indemnity to truly compensate policyholders and restore them to their

status before the claim, with no proportional rules (applied due to an underwriting error); we must also use the concept of depreciation with extreme caution. Economic indemnity often does not allow policyholders to acquire goods with the same level of usefulness as the affected good. Sometimes this is due to a lack of search opportunities. This new concept must comprise repairs over economic indemnity. Repairs until the affected good is restored to its level of usefulness.

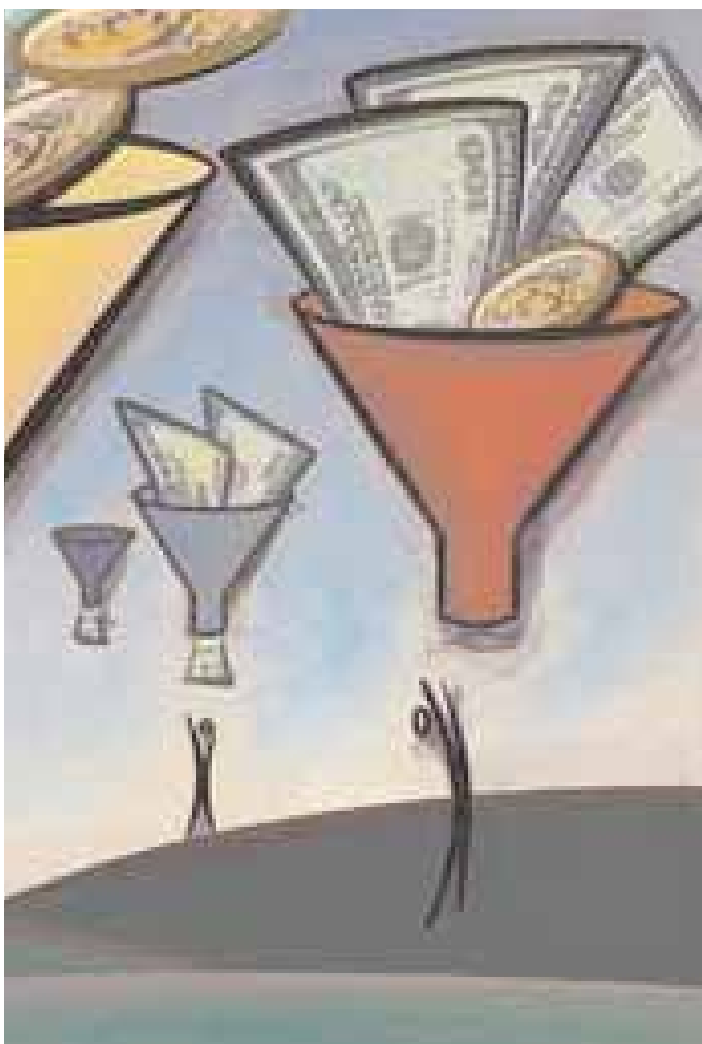
Another way of indemnifying by restoring the level of usefulness involves managing the acquisition in the second-hand market of goods with similar characteristics and age. Claim management must be completely reinvented.

Readers who did not know these products before reading this article must now have inferred that this insurance product is not about reducing traditional insurance coverage but rather about adjusting it to a new low-income client profile with different risk situations. The insured sum will be lower and so will the premium. But this is not about reducing coverage or the insured sum.

This is a full product meeting the exact needs of low-income individuals; naturally, the causes of risk and coverage needs will be different from the traditional market. A common error is to liken this type of insurance to low-cost insurance, or to think that this type of product can only include life or group risk insurance.

Given the characteristics of this new market, the product must be adapted both in terms of costs and risk analysis and concept, composition, definition, contracting, management and handling.

The market has already implemented



some microinsurance products that could work, although we obviously need to conduct appropriate market research and study the needs of low-income individuals. Nevertheless, we can gather some information from aggregate economic data, and assess microinsurance based on general figures such as unemployment.

Unemployment insurance is not a new product. Given the temp work, irregular and unstable employment market, we cannot offer lower premiums so that this market can access this type of insurance. However, if we consider low-income individuals with a more or less secure job

(indefinite term contracts and contracts for works and services, people who demonstrate work continuity over several years even if in different positions, etc.), we can define shortage periods. Also, for instance, we can design a product that covers long-term unemployment rather than unemployment in itself: compensation is provided in case of employment for longer than two years, or at the end of the contributory benefit and after no less than six months, etc. This solution would be a small temporary sum, for example, of a previously-agreed total (e.g. 300 euros) to complement potential government benefits (the well-known 400 euros) for a previously-agreed period. One of the advantages of this type of microinsurance would be a quick first payment, as compared to a long waiting period for government benefits. The policyholder's vulnerability would thus be reduced, as intended with MI.

This product should include a guidance service and assistance in looking for work from the very start of unemployment. This would often prevent the end of the contributory benefit (and beginning of insured income collection), and provide added value seen and received by the clients.

Unemployment affecting several household members is another issue that can be addressed by means of microinsurance. It would be feasible to design a product offering temporary income for a previously-agreed total if several household members were unemployed (both parents living with minors, two members of a family with three working adults, etc.). This product should also include a guidance service as per the example above, with the possibility of combining both products.

**THE MARKET HAS
ALREADY
IMPLEMENTED
SOME
MICROINSURANCE
PRODUCTS THAT
COULD WORK,
ALTHOUGH WE
OBVIOUSLY NEED
TO PERFORM
APPROPRIATE
MARKET
RESERACH AND
STUDY THE NEEDS
OF LOW-INCOME
INDIVIDUALS**

WHILE DESIGNING MICROINSURANCE, IT IS VERY IMPORTANT TO PROVIDE ADDED VALUE TO THE PRODUCT. CLIENTS WILL BE AWARE OF THIS WHEN THEY NEED TO MAKE A PAYMENT OR WHEN AN INCIDENT OCCURS

While designing microinsurance, it is very important to provide added value to the product. Clients will be aware of this when they need to make a payment or when an incident occurs, and will also receive some kind of service from the company, for added value.

After major disasters there are many people with no property insurance covering this risk, via the Spanish Consortium for compensation of risk and insurance (*Consortio de Compensación de Seguros*). They may not want to make a high annual payment for typical damage caused by water or theft or for esthetic damages, etc., as covered by a SME or home multi-peril policy. But the same people would have paid a lower premium for a Consortium-covered risk, and even for certain major risks not covered by the Consortium. High-risk insurance is high microinsurance. And big

insurance companies are already looking into this by means of research: Munich Re and Swiss Re (through an *ad hoc* foundation, the former cooperates with the ILO in work groups to research MI).

In terms of group insurance products and so as to mitigate the effect of adverse selection, we can conceive group insurance for single-parent families: an assistance service for the children and home in case of serious illness, hospital admission, etc. with an aim of avoiding that children suffer even more in these difficult situations.

We should also consider self-employed groups, house services (in-house staff, hourly work), etc.

Eviction insurance covering a rental service between three to six months if the family is evicted due to non-payment. This coverage can be marketed by a banking institution to their mortgage holders, in



collaboration with an independent insurance company and legal consulting and mediation services.

In Life, there is a major microinsurance niche covering differences in the purchasing power of people who are starting to receive contributory or non-contributory pensions, based on their last salary.

There are already some examples of these products in the Spanish market. ARAG offers damage defense and claim microinsurance, and Adeslas Segur Caixa provides dental assistance microinsurance. However, they should be studied in detail to confirm that they are examples of microinsurance rather than low-cost insurance. In the first case, we were not able to obtain more information about this product, either online or by any other means, to identify «microinsurance» characteristics. In the second case, the company's website offers a cheap dental product with a range of «traditional» general conditions, which do not seem to be a good example of a simple product. However, the product is not offered as microinsurance, even if this was the designation for which it won the 2012 award for innovation in insurance, from the association ICEA.

In any case, examples will follow from studying the population and its needs and requirements. This type of insurance should always provide added value to ensure a close relationship between companies and policyholders while the contract is in effect. The race has already started. ■

REFERENCES

- [1] Ruano Espí, Carlos: «*Invitación al microseguro*». Final thesis for Master's in Management of Insurance and Finance Companies and Post-graduate Courses at the University of Barcelona. Unpublished. Lent by the author.
- [2] Garayoa Arruti, Francisco J.: *El cambio climático y la protección de los microseguros*. [Web] <http://elmicroseguroinclusivo.redcumes.com/2013/11/16/cambio-climatico-y-proteccion-microseguros/> [access on January 20, 2014].
- [3] Wipf, Jonh; Liber, Dominic; Churchill, Craig: «*Product design and insurance risk management*». Chapter 3: «Protecting the poor: A microinsurance compendium». Vol. I. Published by the International Labor Organization. Spanish edition by Plaza y Valdés Editores. Madrid 2009. 165-166.
- [4] Churchill, Craig: *What is insurance for the poor?* Chapter 1. «Protecting the poor: A microinsurance compendium». Vol. I. Published by the International Labor Organization. Spanish edition by Plaza y Valdés Editores. Madrid 2009. 16-17.
- [5] INE press releases, November 20, 2013. <http://www.ine.es/prensa/prensa.htm> [20/11/2013].
- [6] McCord, Michael J.: *SUAVE checklist for microinsurance products: Enhancing the potential for success*. Appleton: The MicroInsurance Centre, LLC, January 2012.

Risk Management

The key ... and three thought-provoking strands

Now that a Risk Manager certification process is underway, it is a good time to cast a look back at the basic principles underlying any ongoing Risk Management system. Into the mix we'll also throw some seedbed thoughts about how best to set up a systematic risk treatment process. Risk Management is a vital remit within any organisation but like any other important mission it calls for proper recce of the terrain beforehand. The sole aim of this article is to fuel this evolving, forward-looking view.



François SETTEMBRINO
RISK MANAGEMENT
FERMA

It was over a half a century ago that the inventors of Risk Management set out to build up the system. Starting from scratch, they needed to call on all their courage to strike off down an unbeaten path. The hardest hurdle was to eschew the knee-jerk habit of considering only insured or insurable risks as their raw

material. The future has proven them quite right here, since the «new risks» perceived over time are not all insured or even completely insurable.

Let's concentrate first on those principles that, in the eyes of these trailblazers, were the sine qua non of any enforceable Risk Management system;

- Top management has to be involved across the board in the whole implementation process. It is up to them to kick things off; it is up to them to allocate enough resources and it is also up to them to keep the whole thing moving in the right direction thereafter: such a vital process cannot be left to its own devices; it needs to be stoked up permanently to keep it going.

- According to the size of the undertaking concerned, its type of organisation, geographical location, its objectives and operating procedures, Risk Management will be more or less centralised.

- For the sake of simplicity, current literature on this subject continues to speak of the Risk Manager. In fact it might be better to speak of the Risk Management entity because no one can deal with this task single-handedly in a large organisation. This caveat made, we can continue to use the term «Risk Manager» for ease of comprehension.

- Risk managers need to be slotted into the structure; the pioneers soon cottoned onto the fact that fitting them into one of the undertaking's component departments, the financial department for instance, would rob them of all freedom of action.



ILLUSTRATION STOCK

They therefore stood in need of a «staff» function as the only way of ensuring independent reporting to top management. What is still astonishing even today is that they generally obtained this position ... back then. Today, however, few companies still take this into consideration. What raises the hackles of too many executives is the thought that anyone within their organisation should have the right to come up with criticisms and give out warnings. This runs counter to the complacent navel gazing that has all too often taken hold within the highest spheres.

■ They therefore needed to be invested with a certain authority to break through this inertia and be able to work properly; our pioneers had to win the right to cull company-wide information and obtain answers to their questions. Right from the word go it was a given that many of the problems to be dealt with would take in different disciplines, and the best way of tackling them was by way of multidisciplinary groups under the eye of the Risk Manager. In both cases, whatever might be the outcome of their enquiries and discussions, they would be subject to top management or the board, which then takes the pertinent decisions and imposes the complementary duties. It is undoubtedly they who should take the big decisions, since, as far as Risk Management is concerned, it is the managers who manage and it is they who are held liable for these decisions.

■ One of the roles devolved on the Risk Manager, or on the Risk Management entity, was internal education and

WHAT RAISES THE HACKLES OF TOO MANY EXECUTIVES IS THE THOUGHT THAT ANYONE WITHIN THEIR ORGANISATION SHOULD HAVE THE RIGHT TO COME UP WITH CRITICISM AND GIVE OUT WARNINGS

awareness-raising on this matter. When this duty was exercised *vis-à-vis* top management it was usually trouble-free. As already pointed out, it is they who have kicked off the whole process and they are perfectly aware per se of its importance. People on the ground, being closer to the real problems, were quite naturally hungry for information and training and were therefore very interested in the matter. The most recalcitrant were usually middle-management, caught between the devil of their objectives and the blue sea of the best possible yield. It was therefore this group that had to be most closely monitored, with additional newsletters and seminars. Permanently developing electronic resources have also been a great help in this matter. As a knock-on effect of all this, it is now incumbent on the Risk Manager and his/her team to engage in continual top-up training to keep up with the pace of events.

Take away any of the abovementioned factors and a true Risk Management becomes practically impossible; this is in fact what has happened. When the trailblazers left the field they were seldom replaced by viable successors. Management and managers began to turn their interest only to the market value of their organisations; mergers and takeovers became investors' *cynosures*, and risks gradually slipped out of the picture, with financial manoeuvres now hogging the attention. Risks were still there; managers increasingly turned a deaf ear and a blind eye to them but risks nonetheless were continually brought back to the urgent attention of one and all. From Enron to Fukushima, taking in the subprime crisis



along the way, the list of disasters is harrowingly long and striking.

There is now an urgent need to turn the clock back to the good practices of those early days. Today's certification endeavours are a step in the right direction. At the same time managers now need to be re-educated because without them onboard all will be in vain. There is still plenty of work ahead of us!

All organisations are «one» and hence unique. It is for this very reason that there has never been and will never be a one-size-fits-all Risk Management model. On the basis of the abovementioned principles, which sketch out between them a well-structured «keynote», each organisation then needs to adapt them to its profile, its procedures, financial, political and geographical constraints and its own particular culture. This is a labour of Sisyphus, calling for continual rethinks; it is

**THERE HAS NEVER
BEEN AND WILL
NEVER BE A ONE-
SIZE-FITS-ALL RISK
MANAGEMENT
MODEL**

for this very reason that Risk Management is such a thrilling job. It would be equally useful to review the education possibilities and availabilities to avoid spreading things too thin.

Now let's look at three thought-provoking strands to give us a better grasp of the matter in hand. Each one of these strands would rightfully call for an in-depth analysis by specialists in each case. The outline sketch to follow does not pretend to be at all exhaustive but rather kindle the necessary interest for this all-out research effort in the future.

● To start with, let's look at what has come to be dubbed Cyber Risk. Attacks are continually being launched against all comers. It is not only companies and other organisation that have been targeted; no one is immune from this threat. Humble individuals like ourselves are besieged by just as much attention as the major firms, whether to track our buying habits, spy on our intimate relations or plumb our financial capacities, our banking relations and almost anything else. All this is met with almost complete indifference; nearly everyone is aware of the dangers of the social networks but nearly everyone is almost equally *blasé* about them, even while new risks are being brewed that will only be discovered too late. Not to speak of companies and even governments, since almost every day we discover that one of them has proved incapable of setting up sufficient or efficient safeguards. The skill of the wrongdoers is always to remain one step ahead of their victims; so far do they push their advantage that they secretly set up a permanent presence inside the systems they have penetrated, allowing

them to keep track of everything going on therein and then choose their moment or target for a surprise attack. Should we then drop our guard and throw in the towel? Surely not; on the contrary, defences and safeguards need to be kept under permanent scrutiny; the quicker any intrusion is discovered, the faster the response. User education is crucial, making sure they never get weary and forget the security rules that slow down their work. It is no longer purely an IT question. The wider takeup of teleworking and the proliferation of smartcards are blurring the distinction between work and social networks; inroads can now be made where least expected and supposedly confidential documents are sometimes so little secret that reaching them is only too easy. Here we find a typical Risk Management picture, where the problem needs to be tackled in depth and in common, with top management deciding on the strategy to be adopted and the actions to be taken. Everyone knows about the existence of «backdoors» which have been surreptitiously left in the operating system of any computer, allowing anyone with the necessary keys to bypass all authentication systems and infiltrate the ostensibly secure computer. Google, Outlook and co are no exceptions to this rule. Worse still is the anonymous sharing system Darknet. This allows communication to be set up unbeknown to any surveillance, spying or communication-intercepting system. It has been welcomed with open arms by internauts who have been gagged, persecuted or simply coerced by certain dictatorial powers; this is their only way of making their fate more widely known and communicating freely. But the same system



is also a boon for *mafioso* networks, allowing them to carry out their activities with total impunity. To date Darknet has remained impenetrable and the encryption used has withstood all efforts to break it. The tragedy lying behind this brain-teaser is that it will soon render obsolete part of the famous, staggeringly technical spying activities that have only just hit the news, hogging international headlines recently. The poacher poached ... But for our purposes here, risks have thus become uncontrollable because we no longer know how to find out who is fuelling darknet nor what it might filch unbeknown to one and all: manufacturing secrets, inventories of all sorts, clients, suppliers, strategic products. If there is any way of stopping this now it is not yet known and will call for some sharp thinking. But who will take this on? That is the question...



**RISK MANAGEMENT
ACROSS THE POND
HAS TIMIDLY
REINSERTED A
CONCERN FOR
STAKEHOLDERS
BACK INTO THE
PROCESS**

● The second strand we are going to look at concerns human capital and the «persons » making it up; this human capital is all too often mistreated or underestimated. It is also curious that their fate has been entrusted to «human resource» specialists. This nomenclature is all too similar to other company resources like raw materials, energy, subcontracting, etc... Likewise, if any human resource should become too expensive or complicated or unwieldy it is simply replaced. It is for this reason that personnel is treated like coal; if it is too expensive it is replaced or switched to another site with no consideration whatsoever for any concomitant human problems. Witness the stockmarkets, which have always reacted favourably and completely ruthlessly to any restructuring or relocation/offshoring project. At such a moment the human

resources boss is no longer the link between management and personnel; he or she is merely the enforcer of higher wills and is bound to make sure this costs as little as possible, with social plans that are tantamount to burials. Why bother about the personnel and protect them under current legislation if all these much more burdensome constraints can be sidestepped by subcontracting or offshoring?

Risk Management across the Pond has timidly reinserted a concern for stakeholders back into the process. These stakeholders are mainly made up by personnel but also trade unions, clientele, partners, suppliers, joint contractors and subcontractors, investors, creditors, without forgetting the taxation authority, or the environment. Among the many who have not been cited figure the competitors. Taken together, or even singly, these stakeholders belong to different classes of vulnerability, such as personal expectations, loss of information, loss of resources, property damage, etc. all of which are worthy of permanent attention. The means of response are legion; one soon sees that this second strand weaves through the firm's whole fabric and also restores to management the position of responsibility it should never have relinquished. As an immediate consequence Risk Management has relearned the difference between the principles of precaution and prevention. Prevention can be exercised only against risks with a measureable probability whilst precaution can be applied only when neither the scope nor probability can be calculated. Any Risk Manager should permanently navigate from one to the other, resorting perforce to resilience whenever things jam up... It is also quite

striking that Belgian welfare legislation has resolutely pushed back the envelope from accidents at work to take in too questions of organisation, relations, harassment and even strayed into the psychosocial domain. It is even more striking that the responsible director can report only to the head of the company with no intermediary and that within his or her duty he or she can be subject to no other. Dealing with a company's human capital in this way is a legal and obligatory demonstration of how Risk Management should work, with direct access to the head of the company.

● The third strand we are going to look at is a real hornet's nest. It concerns the whole concept of «reputation », the visible face of the brand image. All the manuals agree: this value is irreplaceable and is worthy of the maximum defence and protection. But it is so fragile that a simple rumour can bring it crashing down, and building it back up again is always a difficult and sometimes an impossible mission. The doubt always lingers on in people's minds thereafter on the principle «there's no smoke without fire ... ». If there is one problem where managers remain jointly and severally the most important stakeholder, it is certainly here. It is therefore a *sine qua non* of good governance, and this in turn brings out its key role in Risk Management. A glance back at the recent Perrier case gives us a salutary example of how things can go wrong. The benzene contamination of its bottled water had been well managed, with an expensive recall of a huge number of bottles, but it was the shilly-shallying of the directors that did most damage. The brand image, and *ipso facto* its value,

DEALING WITH A COMPANY'S HUMAN CAPITAL IN THIS WAY IS A LEGAL AND OBLIGATORY DEMONSTRATION OF HOW RISK MANAGEMENT SHOULD WORK, WITH DIRECT ACCESS TO THE HEAD OF THE COMPANY

plummeted and the company was snapped up at a bargain price by another group.

What makes the management of this risk practically impossible at the present time is the fact that it is the managers themselves who muddle the message. In 1976 Emmanuel Todd made the following analysis of the Eastern Bloc: «...a technology-driven society where technology is not used for the good and safety of its citizens cannot last ...». Now this is exactly what is happening today, under the bogus banner of globalisation; this serves as *carte blanche* and pretext for doing anything, conditions of slavery generated by offshoring operations, the swamping of all products, especially agrofood products, with additives and



other substances whose danger to health is underestimated or simply denied, declining biodiversity, rampant greenhouse effect ... Specific examples are not lacking but are only just beginning to emerge thanks to a courageous few who have refused to be gagged. The best known, by name, are fish farming, adulteration of the food chain by the introduction of false products such as analogue cheese, the horse-meat scandal, food additives used before being proved innocuous, fuelled by the general habits of unhealthy eating, etc. The big industrial groups behind these outrages truly fear nothing. So powerful are they that they instrument their own impunity. The means at their disposal go by the names of lobbies, unscrupulous as long as big bucks

**WHAT MAKES THE
MANAGEMENT OF
THIS RISK
PRACTICALLY
IMPOSSIBLE AT THE
PRESENT TIME IS
THE FACT THAT IT IS
THE MANAGERS
THEMSELVES WHO
MUDDLE THE
MESSAGE**

are in sight, self-seeking scientists, ubiquitous lies to brew up specious opinions that mutually cancel each other out. Health authorities are flooded with such contradictory theories that their watchdog role goes out of the window. How can you expect any Risk Management principles to be enforced in such a context? If industrial ethics does not get back to where it should be, i.e., honest and upright, how can we expect them to correct the hugely-profitable risks that they themselves have generated and only come to light too late?

Let's leave the final word to Stéphane Foucart, for he expresses well the growing disarray of those who believe in Risk Management... « ... accumulated knowledge is cast into doubt, contested by mock scientific methods or manipulated by the industries who find it cobbles them ... The scientific project is to understand the world; conversely the technical project is to make profit from it ... »¹. But once science plays second fiddle to technology the game rules change and the very idea of precaution disappears forthwith. There is no longer any possibility of bringing a scientific diagnosis into any industrial activity; industry makes sure that any grain of truth gets lost in a mist of pseudoscience producing only uncertainty and ignorance. Whether Risk Management can rise to this challenge only the future will tell. |



¹ La Fabrique du Mensonge. Comment les industriels manipulent la science et nous mettent en danger. Stéphane Foucart, edited by Denoël Impacts, 2013, pages 17 and 18.

Activities in the last quarter of 2014

Workshops, courses, seminars and forums on Risk Management completed the annual training and dissemination offer of AGERS

During the last quarter of 2014, AGERS has carried out the following activities:

Compliance Classroom

On September 10 at the CEIM offices, a first edition was held for risk managers and a second edition for all members.

The most significant changes in the amendments of the 2010 Criminal Code were analyzed. However, these amendments are insufficient to dissuade or block the avalanche of behaviors that entail economic crime at the heart of organizations. Because of this, the legislator has proposed

another amendment guided by the need for implementing preventive measures in organizations against fraud, corruption and economic offences that will be published in the *BOE* (Official State Gazette) in upcoming months.

Biomedicine-Ebola Forum: medical risk management and corporate security

Forum held at the CEIM offices on Ebola and the risks faced by insurers and companies.

The goal of this second forum, organized by the Association's

Biomedicine Work Group, is to disseminate, through presentations by renowned experts from the fields of academia and the private sector, the reality which companies face as well as expand on legal aspects related with this outbreak.



AGERS, 30 years of risk management in Spain

Organized by Commercial Risk Europe Risk Frontiers in collaboration with AGERS at the Miguel Ángel Hotel in Madrid, a seminar took place on October 15 in which representatives of the Association and other invited speakers spoke of the development of education on risks.



Claim management course. The vision of its different protagonists

Directed by Aránzazu Arana, Head of Claims Western Europe & Latin America, XL Insurance, AGERS gave this course on October 29 and 30, to analyze the development of incident claims from the perspective of the different actors involved in their processing.

Development of transport insurance. Changes in legislation: challenges and opportunities

In a format combining traditional training with debates between experts and participation by attendees, on November 4 and 5 Lourdes Aguanell, Consultant Eurapco Marine Account Manager, ran this course given by professionals from the fields of insurance, insurance brokers, risk

managers, lawyers, consultants, appraisers and detectives.

20th AGERS Conference. Risks and Insurance 2015

In this traditional conference celebrated on November 20, speaker panels of industry experts presented the perspectives of risks and insurance for the upcoming year.

During the conference, some hot issues to date, like personal insurance for non-residents, were addressed, and the results of the survey carried out by the *Federación Europea de las Asociaciones de Gestión de Riesgos (FERMA), 2014 Risk Management Comparative Evaluation Survey*, were presented.

The conference was inaugurated by María Ximena Lombana Villalba, Minister Plenipotentiary of the Embassy of Colombia in Spain, debating current issues like the qualification of Risk Management Systems and the changes in ratings of Spanish insurance companies.

As is already usual practice in these acts, a session exclusively for risk managers was also organized.

Course on credit and other financial risks

AGERS completes its 2014 training offer with this course. Run by Manuel Arroyo, Credit Director at Willis Iberia.

Forum on Biomedicine–Big Data in personal insurance

As part of the programming of the AGERS Biomedicine Work Group, this Forum was held on December 4 and with the collaboration of Red CUMES (FUNDACIÓN MAPFRE). The speakers presented the visions of health insurance companies, consultants, technological companies, reinsurers and the *Consortio de Compensación de Seguros*.

Distinction for 25 years of involvement in risk and insurance management

On December 15 Madrid, AGERS celebrated its Distinction ceremony for involvement in Risk Management. On this occasion, the distinction is given to current members who have collaborated with the Association for over 25 years in disseminating risk management: El Corte Inglés, Enagas, Arcelormittal (Ensidesa), Laboratorios Esteve, Renfe, Michelin, Basf and Glaxo Smithkline. |



The Insurance Market in Latin America

Corporate risk managers discuss in an internal meeting organised by IGREA the current situation of the sector in the region

On September 24, and continuing with round tables being held at IGREA headquarters, an internal meeting for members was held at OHL offices in Madrid, entitled *The Insurance Market in Latin America*.

After a few brief presentations by the host Manuel Garrote, OHL Risk Area Manager, and by the Chairman of IGREA, Daniel San Millán, a debate ensued where the different opinions of those present were expressed. Risk managers of large companies in Spain spoke of the various problems that arise when implementing their programs that are designed and agreed to in Spain with global insurance companies and brokers.

For a smoother execution of the meeting, the region was divided into countries, which facilitated different diagnoses by participants.

In general, with rare exceptions, the conclusions coincided in that difficulties continue to exist at all



levels - operational, market, insurance companies, brokers and appraisers.

Specific technical aspects were also addressed, like the payment of premiums to captive entities and the current regulatory difficulties, in Brazil and Argentina, amongst others.

Likewise, specific experiences were presented as regards the problem of corporate third-party liability in Mexico and Argentina.

The dialog on different actions of global insurer groups, on international brokers rendering services in the region and on organizations of appraisers for major incidents were extremely interesting.

Highly revealing conclusions were reached, closing with the recommendation of analyzing the cases posed with local professionals that are intimately familiar with the difficulties mentioned and have ample experience with these issues. |

Market Trends Conference

With more than 150 individuals in attendance, representatives of the country's leading large companies, IGREA celebrated its traditional Market Trends Conference on November 4

The conference presentation was made by its Chairman, Daniel San Millán, who anticipated that it was going to be a debate structured into four panels:

- Position of the American market as regards Public-Private Partnerships (PPP)
- Present and future of captive companies
- Problems with incidents having several insurers or in layers
- Alternative capacities to the traditional reinsurance market

The **first panel**, moderated by Manuel Garrote, counted with the participation of Wilson Ortiz, Ernest Tauré and Aurelio Gonzalez. Issues concerning the differences between American and European markets as regards PPP were addressed. In this respect, many differences were detected:

-In the USA, legislation differs across States, and therefore nonstandard wording is used in legislation. As a result, it is fundamental to study the legislation of the State in which operations are to be carried out.

-The most important policies of the PPP insurance are the RC and, especially, Workers Compensation, contrary to Europe where the most important insurance is TRC.

-In casualty, expenses for defence exceed those for claims fivefold.

-The appraiser acts more like a claim manager than as a judge in being surrounded by experts that draft a report for him and then he transfers the report to be presented.

-State-specific licensing requirements for acting as an appraiser.

-The figure of the appraiser for one party does not have good press, and mechanisms contemplated in the policy, like mediation, are preferred.

-State governments accept the assumption of non-insurable risks and even participate in the cost of the incident. Therefore, it is necessary to evaluate all risks and analyze which are insurable and which are not, and negotiate the conditions for the risks assumed by each party.

-In the long-term, the intention is to have standards that are transferable to all States.

-The problem with risks in the USA is that installations are highly obsolete in terms of infrastructure, supply or sewage systems. About 40% of the PPP are for highways.

-Data is not available on the costs of operation insurance which will follow construction insurance.

-The sensation of the general public in the USA is that part of State property is lost, but the problem is that States have no funds.

The **second panel**, moderated by Daniel San Millán, counted with the participation of George Michelena and Alfredo Arán. Some of the issues commented on related to:

-The most attractive aspects of captive companies. Though initially the most important was tax-related, to date these are considered a fundamental tool for risk management.

-The current situation of captive companies and how they are

affected by soft markets. In this regard, speakers said that it is precisely during soft market conditions when one must take advantage to capitalize the captive companies so that they may face up to hard markets.

- Captive companies are a tool that allows for retention of frequent claims and those risks for which market capacity is limited, such as cyber risk.
- Furthermore, it grants access to the reinsurance market.
- It offers more transparency during brokerage.

The **third panel**, moderated by Augusto Pérez Arbizu, counted with the intervention of Erlantz Urbietta, Juan Manuel Negro and Paulino Fajardo.

The moderator requested of the panelists their opinion regarding incidents affecting several insurers and in layered policies with panels of different insurers.

Erlantz highlighted the importance of a unified wording, or if there are several that they all be the same in regards to definitions, follow form clauses that regulate and detail the liability limits, including specifications for action in cases of insolvency of any insurer.

The structure in layers optimizes capacities, improves costs but

complicates negotiation with all insurers of each layer as sometimes they do not share the same interests. The positions of leader and follower must be clear.

For Juan Manuel Negro, the transparency of information, coordination of layers and across insurers are key, and one must be proactive to formalize agreements. In addition, he considers the option of signing protocols for action at the start of the coverage necessary.

Paulino Fajardo commented that, primarily in the energy and construction sectors, there is a problem of excessive atomization of the risks, resulting in different cultures. In addition, problems occur during renewals with so many reinsurers involved, when some do not fully agree with the spirit of the policy and have their own idea that may be misaligned with that of others. In light of a claim, it is important to establish a Committee which brings together several reinsurers for sharing the same information.

Carlos Wong-Fupuy participated in the **fourth panel**, and began his speech by referring to the assignment of ratings to reinsurers by his company A.M.Best. In this respect he commented that though it had been stable until a few months ago, it had now become negative as a result of:

- Higher retention in primary programs
- Low performance of investment
- Excess of voluntary reserves
- Deterioration of pricing disciplines
- Slight losses in catastrophe hazards
- Convergence of capital: concurrence of reinsurance and alternative capital

As to alternative capital, Carlos referred to:

- Catastrophe debenture: for compensation, pure parametric, for industrial losses and modelled losses.
- Reinsurance with collateral, a structure similar to the traditional reinsurance but requiring letters of credit.
- Sidecars: provide proportional coverage (quota share) in catastrophic risks.
- Hedge funds Reinsurance: entity in which the fund acts as an instrument to attract investors for the reinsurance company and charges a commission. There are two options: new entity or an existing company.

The impact of alternative capital has represented, up to 2013, 15% of the premium volume. Pension funds and private capital back hedge funds. |



Coverage of the largest and exceptional risks still needs an exemption from EU competition rules, says FERMA

The Federation calls for renewal of the IBER for (re)insurance pools

In a response submitted to the European Commission on Tuesday 4 November, the Federation of European Risk Management Associations (FERMA) has called for renewal of the Insurance Block Exemption Regulation (IBER) for (re)insurance pools.

The Commission launched a consultation in August to begin its assessment whether the claimed benefits for the insurance market and customers of insurance pooling still justify the special treatment they receive from EU competition authorities. The Commission must provide a report to member states before 31 March 2016 with the objective of deciding on its renewal in 2017.

Julia Graham, President of FERMA, states: «We represent consumers and users of these (re)insurance pools. Non-renewal of the block exemption would change radically the coverage of certain type of risks, but not widen choice for commercial insurance buyers. We believe there is still ground for an exemption from EU competition rules for the IBER.»

«If these rules are being challenged and such pools could fall within the scope of EU competition laws, then it is our priority to ensure that policymakers are well aware of the unintended consequences of a non-renewal decision on the scope of coverage and the level of prices for our largest and most exceptional risks,» says Julia.

FERMA has told the European Commission that the current IBER

provides a legal certainty of exemption from EU competition rules for every (re)insurance pool in the European Union, and this benefits all stakeholders: providers of insurance capacity and users.

Without the exemption, such pools would come under the EU general guidelines on horizontal cooperation agreements which allow wide discretion to national competition authorities.

FERMA believes this change would result in the use of expensive legal services to assess the compliance of such arrangements in multiple jurisdictions diverting investment from core, value generating activities. ■



FERMA celebrates 40 years

Celebration with a gala dinner in Brussels

The Federation of European Risk Management Associations (FERMA) used the occasion of its Seminar on 20-21 October 2014 to celebrate its 40th anniversary with the publication of an anniversary brochure and a gala dinner. The Seminar took place at the Square venue in central Brussels, where FERMA announced the results of the *2014 FERMA Risk Management Benchmarking Survey*.

The anniversary brochure, *40 Years of Risk Management in Europe*, tells the history of FERMA through its presidents. A second section, *Looking Around*, describes FERMA's current projects, such as the professional certification of risk managers and events, especially seminars and forums. Finally, the brochure looks forward to FERMA's plans for the future.

FERMA President Julia Graham said: «FERMA is proud to have played a leading role over the last 40 years in the development and recognition of risk management as a profession. FERMA's strategic objectives are to be a significant stakeholder in the decision-making process at the European level on risk management, and insurance and risk financing

issues, and to coordinate, promote and support the development and use of risk management, insurance and risk financing in Europe. It is through the delivery of these objectives that we provide value to our members and the risk community as a whole.»

FERMA began in 1974 as an organisation to represent the commercial insurance buying community with the European Commission and the insurance market. Six countries then had associations of insurance buyers, captive brokers or risk managers: Belgium, France, Italy, Germany, Netherlands and the UK. They created the Association of European Industrial Insureds or AEAI, which was based in Brussels so it could be close to the Commission.

The next major step was the creation of a European risk management conference, held jointly with the US Risk and Insurance Management Society. Starting in 1981, it took place every other year in Monte Carlo until 1999. By then, the number of members had grown to nine with Denmark, Spain and Switzerland joining the original six. AEAI was ready to stand on its own feet. It became FERMA and held its

first FERMA Risk Management Forum with great success in Berlin in 1999.

Since then FERMA membership has risen to 22 national associations in 20 European countries with the addition of risk management associations in Czech Republic, Finland, Luxembourg, Norway, Malta, Poland, Portugal, Russia, Slovenia, Sweden and Turkey. Spain and Germany have two associations each. These associations represent more than 4,300 individual risk and insurance managers. More recently, FERMA has begun admitting international individual and corporate members with an interest in European risk management but who are not eligible to join a national association member.

The brochure was distributed at the 40th anniversary gala dinner which took place at the famous Bozar, the Belgians' fond name for their Palais des Beaux Arts. (www.bozar.be). The building is an art deco masterpiece by Victor Horta (1861-1947), which has been intensively renovated and restored to create what is probably the most prestigious venue for the arts in Belgium. The dinner was free for risk managers. **I**

2015 AGENDA

CONFERENCES AND SEMINARS

EVENT	DATE	VENUE	ORGANISER
XXIII Rencontres	4-6 February	Cannes (France)	AMRAE
41 st Annual Conference	8-11 February	Anaheim, CA (USA)	PARMA
Semana del Seguro	17-19 February	Madrid (Spain)	INESE
3 rd World Conference on Disaster Risk Reduction	14-18 March	Sendai (Japan)	UN
Enterprise Risk Management Forum	24-25 March	Charlotte, NC (USA)	RMA
Annual Conference 2015	26-29 April	New Orleans, LA (USA)	RIMS
International Conference on Risk Analysis	26-29 May	Barcelona (Spain)	ICRA6
Annual Conference 2015	7-10 June	Houston, TX (USA)	PRIMA
Annual Conference 2015	15-17 June	Liverpool (UK)	AIRMIC
World Congress on Risk	19-23 July	Singapore (Singapore)	SRA
Symposium 2015	9-11 September	Munich (Germany)	DVS
Forum 2015	4-7 October	Venice (Italy)	FERMA
Forum 2015	3-4 November	Stockholm (Sweden)	SIRM

**THIRD-PARTY LIABILITY
INSURANCE FOR DIRECTORS,
BOARD MEMBERS AND
EXECUTIVES: MARSH
DIRECTORS & OFFICERS STUDY
7, 2014**

CUATRECASAS, GONÇALVES
PEREIRA

2014 SERVICIO DE ESTUDIOS
MARSH ESPAÑA

PUBLISHER: MARSH

According to the present study, approximately half of Spanish companies are unaware of the existence of liability policy for Directors, Board Members, and Executives (Directors & Officers, or D&O). Although the recognition level has improved by 5 percentage points compared to last year, 74 percent of companies still do not take out this type of insurance policy.

In spite of this, third-party liability insurance for Directors, Board Members and Executives (D&O) is increasingly being adopted in the Spanish business sector, with a 34 percent increase in companies taking up the service in 2013. Consequently, last year Spanish companies invested over 154 million euros (6 percent more)



in protecting their board members and executives.

The services sector continues to lead in the purchasing of this insurance (44 percent), closely followed by the industrial sector (43 percent). By regional community, the most insured executives are those in Madrid, Catalonia, Andalusia, Valencia, and the Basque Country.

The Spanish insurance market has shown that its capacity is more than sufficient to assume the insured risks, offering a general capacity in 2013 of 515 million euros (10 million more than the previous year). ■



MANAGING RISK AND OPPORTUNITY: THE GOVERNANCE OF STRATEGIC RISK-TAKING

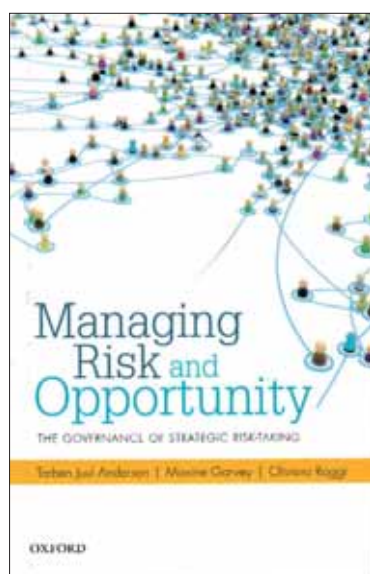
TORBEN JUUL ANDERSEN,
MAXINE GARVEY AND OLIVIERO
ROGGI

HARDBACK, 2014

ISBN: 978-0-19-968785-5

The book extensively covers the need to apply good practices in the area of corporate governance and Risk Management. The major financial scandals have stemmed from the absence of said practices.

It also deals with current topics such as the need for



leadership in the role of the risk manager, but without employing excessively technical language.

The challenges imposed upon us by the reality of an increasingly complex and unpredictable changing world require a new focus in terms of risk avoidance as well as the exploitation of the growth potential afforded by a dynamic environment.

The text is structured in a simple and practical manner, proposing easily applicable ideas. It is of interest for postgraduate students of economics, finance, and business administration: risk managers, corporate executives, company directors, etc. |



GOOD PRACTICES GUIDE IN ASSETS MANAGEMENT

JOSÉ MANUEL GARCÍA DIEGO
PUBLISHER: AENOR

ISBN: 978-84-8143-841-3

Assets security aims to implement preventive care and protection of the assets of a company. The book proposes a model for the introduction of a management system for the security of assets, aligned with quality management, fully integrated with other standards



and based on practical compliance to UNE-ISO 31000:2010 Standard on Risk Management. Principles and guidelines.

Aimed at any company in any sector, irrespective of the organizational model it has implemented, whether functional or process-based management.

It provides implementation controls and advice to SMEs that will make it possible to raise security levels in their organizations, even for those who do not possess the specialization and skills of security managers. |

FUNDACIÓN MAPFRE

Insurance and Social Protection Area

THE RISK OF LONGEVITY AND ITS PRACTICAL APPLICATION TO SOLVENCY II

7TH INTERNATIONAL JULIO CASTELO MATRÁN INSURANCE AWARD

JOSÉ MIGUEL RODRÍGUEZ-PARDO DEL CASTILLO (COORD.) / IRENE ALBARRÁN LOZANO / FERNANDO ARIZA RODRÍGUEZ / VÍCTOR MANUEL CÓBRECES JUÁREZ / MARÍA LUZ DURBÁN REGUERA
FUNDACIÓN MAPFRE, 2014
ISBN: 978-84-9844-500-8
PRICE: 35 EUROS

This study focuses on an issue of great interest for both society and the sector concerning longevity and the risk it entails for the market, and provides a series of advanced actuarial techniques for managing this risk.

An analysis is made of the «common interest» of researchers for studying ways for measuring longevity and its practical application within the framework of Solvency II. It also highlights the urgent need for «properly modeling survival» and for finding an «adequate response to the

challenge posed by the aging of the population» in the private insurance industry, offering products that insure longevity.

In conclusion, the purpose of this research study is the practical application to the business of longevity in the Spanish market of a comprehensive series of actuarial and risk management techniques regarded as the most advanced, and which allow for different levers for optimizing the business and the capital assigned to survival risk to be used, as well as sustainable competitive advantages for a business which is at times questioned as regards its profitability, given the uncertainty involved.

The Julio Castelo Matrán International Insurance Award was



established in 2001 to acknowledge the retirement of the then Chairman and CEO of SISTEMA MAPFRE and MAPFRE MUTUALIDAD, with the goal of awarding, biennially, unpublished scientific works related with Insurance. The Award comprises 35,000 euros and a diploma. |

THE CROSS-BORDER COMPONENT OF INSURANCE COMPANY RELATIONSHIPS

LÁZARO CUESTA BARBERÁ
FUNDACIÓN MAPFRE, 2014
ISBN: 978-84-9844-475-9
PRICE: 20 EUROS

The phenomenon of economic globalization, in general, and that of financial markets, in particular, results in the field of insurance also increasingly establishing relationships that extend beyond the borders of national insurance markets. The

search for business opportunities abroad by insurance companies, which find a road for growth in internationalization, is a determining factor in this regard. On the demand side, it is worth mentioning that more physical and legal persons have economic interests subject to being covered abroad, outside of their country of origin.

Compared with those cases in which all elements of the insurer relationship are located within the same State, we now face other situations in which the relationships derived from the insurance contract are established beyond the borders of a given country; in these cases, we speak of the existence of a cross-border component in the insurance relationship. The existence of this cross-border component poses many questions of a legal nature, representing a challenge for regulatory frameworks from the perspective of the insurance companies themselves as well as from that of the policy holder or insured party.

Research on the cross-border component of insurance relationships pretends to approach this challenge, in an attempt to clarify the rules established for



each case and to identify, when possible, gaps in legislation.

To this end, first the criteria established by legislation in effect for determining the place of the risk or the place of the liability, prerequisites for defining the existence of an insurance relationship with a cross-border component, is analyzed.

Likewise, the routes through which insurance companies carry out their activity in other countries, the criteria for identifying the law applicable to insurance contracts and the mechanisms and guarantees set forth by the legislation of each country as well as the main standards and systems of international application for a correct inter-state coordination that avoids leaving customers of cross-border insurance without protection, are evaluated.

Finally, the role assumed by each national supervisor of the States affected by this cross-border activity, and the mechanisms for coordinating the proper execution of supervisory duties and powers of each control body, are assessed. |



THE SOCIAL PERCEPTION OF INSURANCE IN SPAIN 2014

TECHNICAL EXTENSION OF THE STUDY COMPLETED BY ICEA FUNDACIÓN MAPFRE, 2014
ISBN: 978-84-9844-489-6

This study is the continuation of that published in 2012 and is part of a series of works that will serve to periodically analyze the development of public opinion and insurance culture. It corresponds to the new goal proposed by the Insurance and Retirement Planning Area at FUNDACIÓN MAPFRE for contributing toward improving the insurance culture amongst citizens and the social perception of insurance.

In this second edition, aside from presenting the profile and attitude of citizens as regards risk



and insurance as a product and service, the analysis extends to include the younger segment of the population (persons aged 18-24) to know the value they assign to insurance and their image of the sector.

Another two, well-differentiated goals have also been included: firstly, finding out the attitude and level of foresight of the population as regards retirement and, secondly, analyzing the importance given by the public to learning about insurance in the classroom and the level of training of young people. |

THE SPANISH INSURANCE MARKET IN 2013

FUNDACIÓN MAPFRE,
SEPTEMBER 2014
ISBN: 978-84-9844-490-2

The Spanish economy closed 2013 with a 1.2% contraction in GDP, though a timid recovery emerged in the second half. These initial signs of economic recovery were reflected in the performance of the Spanish insurance industry as the decline from the previous year was less prominent and a premium volume of 55,773 billion euros was earned. This represented a drop of 2.8%, which was less than the 5.2% downturn in 2012.

The premium volume of Life insurance amounted to 25,505 billion euros, 3.0% lower than in 2012. For a second consecutive year, in 2013 pension plans grew in terms of managed assets, increasing 6.8% compared with the previous year.

As regards Non-Life insurance, the premium volume dropped by 2.7% in 2013 compared with the previous year. As in previous years, these insurance types still endure the unfavorable effects of the economic crisis and intense competition existing in some lines.

Meanwhile, Health insurance increased its premium volume by 1.7% to 6,902 billion euros, following growth in its most important type of insurance: Healthcare Assistance. However, the rest of the types decreased.

The good performance of multi-peril insurance in recent years has come to an end. Home and Communities grew, albeit less than in 2012, while Industries and Trade shrunk again, highly affected by the repercussion of the crisis on the Spanish business sector.

Lastly, Funeral insurance, firmly entrenched in Spain with over 20 million insured, continues its growth of recent years.

Regarding insurance penetration in the economy, the insurance industry continues displaying robustness, significantly contributing to national GDP. |

