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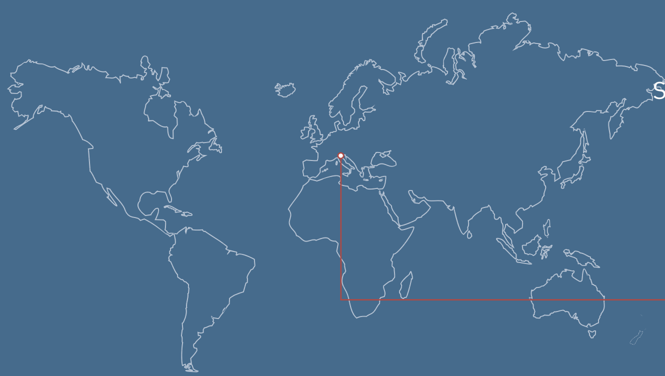

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summary

editorial

The essence of the insurance and reinsurance industry is spreading the risk and setting accurate rates, being natural disasters a fundamental threat to its ongoing existence. Therefore, the impact of climate change must be also factored into any analysis, although John McAneney and Ryan Crompton from the Australian research centre Risk Frontiers hold that the degree of vulnerability and exposure to risk go further towards explaining the increase in the cost of insuring climate-related events seen over the last decades. Their views must be added to the controversy that has been raging for years.

Wheat, vines and olive trees form a distinctive trilogy of landscape in the countries that fringe the Mediterranean Sea. They embody a culture and traditions that draw friends and families together to enjoy a good, long, convivial meal. Spain, the world's foremost olive-producing country, has modernised its industry to produce a range of top quality oils that are widely appreciated and consumed. Alicia Langreo and Isabel Benito review the olive oil industry's associated market, the risks involved in olive trees growing and the insurance options that are available in Spain.

The crisis that began in 2008 will be examined in history and economics treatises. Their findings will allow us to draw lessons that are not obviously apparent in our everyday lives. **trébol** interviews the Secretary of State for Trade, Jaime García-Legaz, who points out the clearly positive aspects of Spain's latest trade balance figures. In his role as President of ICEX Spain Exports and Investments, he also reveals the recipe for success in the internationalisation of Spanish businesses and describes the services through which ICEX is contributing to solve the major challenge of economic recovery.

The evolution in the range of products offered by MAPFRE ASISTENCIA is a metaphor for the notion of globalisation, as Nikos Antimissaris, Managing Director, passionately reveals. In 1990 the firm introduced Roadside Assistance services as an added value to their Motor insurance policies. This was followed by diversification towards niche markets related to Extended Warranties, which are marketed through the myriad channels that are available in the 21st century. The company, which originated in Spain, is now present in forty five countries, although it caters to more than eighty markets. Today, MAPFRE ASISTENCIA's capacity for innovation makes it a key player within MAPFRE Group's business model.

What is driving the rising cost of natural disasters?

Prof. John McAneney
Managing Director
Dr. Ryan Crompton
Chief Research Officer
Risk Frontiers
Macquarie University
Australia

Semi-submerged roller-coaster at Pier Casino (Seaside Heights, New Jersey) after Sandy hurricane in October 2012. USA

It is a widely held view that climate change arising from human activity is increasing the cost of natural disasters. This perception is false. While it is undeniable that the economic cost of natural disasters is rising rapidly, it is doing so because of growing concentrations of population and wealth in disaster-prone regions. So far studies of long-term insurance or economic disaster loss histories caused by extreme weather -tropical cyclones, floods, bushfires (wildfires) and storms- have been unable to identify a contribution from human-induced climate change. This is true for many different natural perils and across jurisdictions.

Given the inter-annual variance of natural disaster losses, identifying a climate change contribution with statistical confidence faces a formidable signal-to-noise problem. At least in respect to US tropical cyclone losses and based on current climate change projections, the *emergence timescale* has been shown to be of the order of many decades to centuries.


Flood in Bangkok. October 2011. Thailand

(The emergence timescale is the time taken for a climate change contribution to the losses to emerge with high statistical confidence). This being the case and in the absence of scientific clarity, decisions relating to climate change will have to be made in a climate of uncertainty and ignorance.

The uncertainty about actual outcomes of a warmer climate in terms of extreme weather and property damage strengthens the case for increased investment in disaster risk reduction for its own right, and as part of climate change adaptation policies. Risk-informed land use planning practices, hazard resilient building codes and defence measures such as flood levees hold the key but their implementation will require unpopular political decisions. Without such efforts the cost of natural disasters will continue to rise. Insurers have the benefit of being able to update their views of risk every 1-2 years, and so climate change should not be a main concern for the industry as long as underwriters understand company exposures, and price risks accordingly. Over time, good underwriting practice can send a strong message to government and homeowners to encourage risk-reducing behaviours.

Introduction

The increase in natural disaster losses has led to concerns that anthropogenic climate change is contributing to this trend. (By anthropogenic climate change we mean changes in climate arising from human activity.) Many peer-reviewed studies have examined this issue and our paper summarises these as well as more recent efforts to estimate the timescale at which an anthropogenic climate change signal might be detectable in US hurricane loss data. Perils of concern here are those likely to cause damage to property assets, in particular tropical cyclones, storms including hailstorms, floods and bush (wild) fires. US hurricanes warrant special attention because of:

1. their impact on the global insurance market through the supply of and demand for reinsurance;

2. the availability of long-term normalised economic loss history from landfalling hurricanes; and

3. high quality modelling of the impact of anthropogenic warming on basin-wide hurricane activity.

We conclude with some brief observations about how to address the challenge of the rising toll of natural disasters and the vulnerability of insurers to climate change.

Loss normalisation studies

Loss normalisation

Before *apples-with-apples* comparisons can be made between the impacts of past and more recent natural hazard loss events, changes in various societal factors known to influence the magnitude of losses must first be accounted for. Climate-related influences stem from changes in the frequency and/or intensity of natural perils whereas socio-economic factors comprise changes in the vulnerability and exposure to the natural hazard. Adjustment for the latter (non-climate-related) factors has become known as *loss normalisation* (Pielke and Landsea 1998); it attempts to answer the question: what would be the losses if historic events were to recur under current societal conditions? We begin by examining some Australian studies.

Forest fire in Castrocontrigo (León) in August 2012. Spain

Australian studies

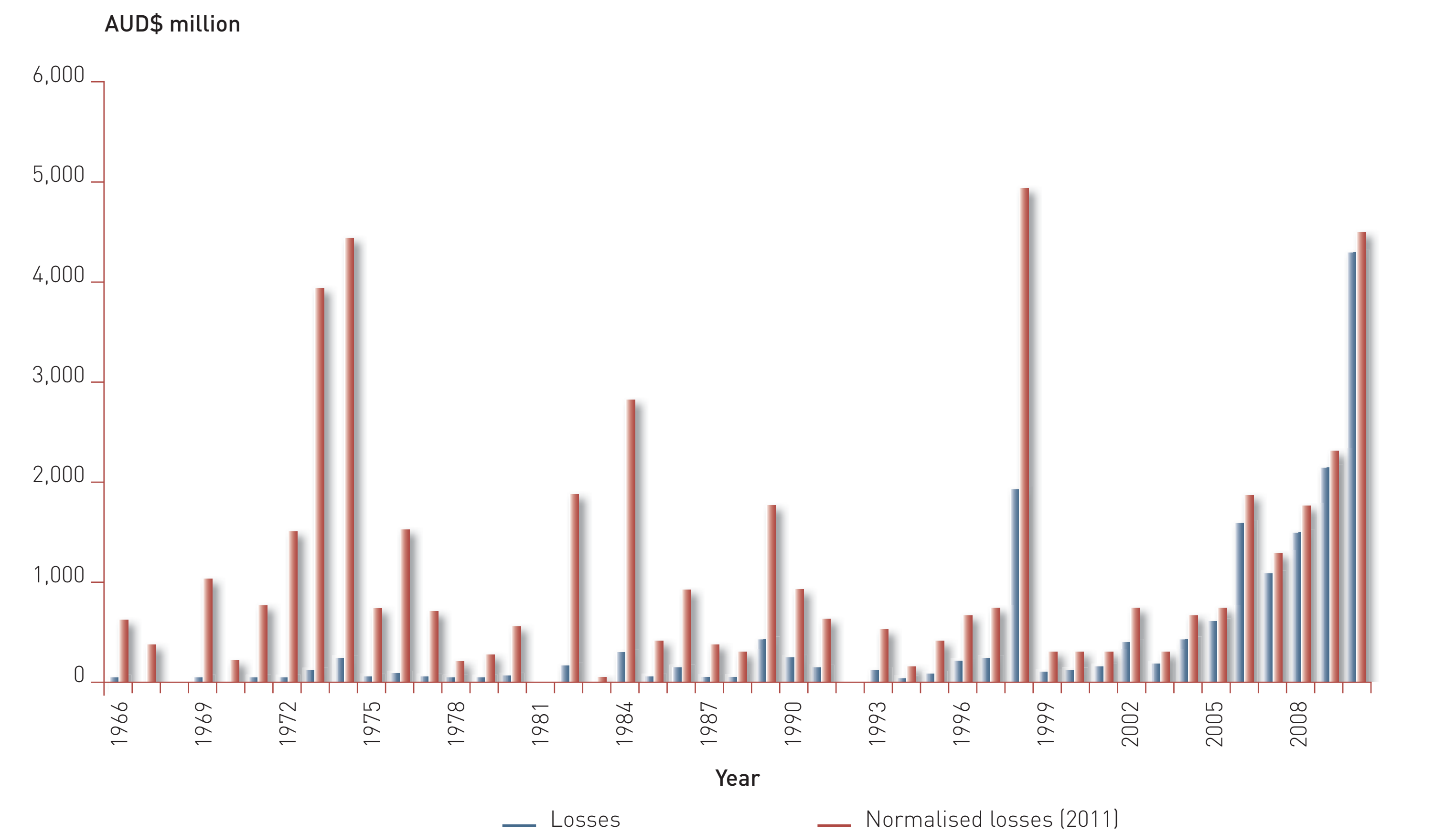
Crompton and McAneney (2008) normalised Australian weather-related insured losses over the period 1967-2006 to 2006 values. Loss data obtained from the Insurance Council of Australia (ICA)[1] were adjusted for changes in dwelling numbers and nominal dwelling values (excluding land value) since the time of the original event. In a marked departure from previous normalisation studies, the authors also applied an additional adjustment for tropical cyclone losses to account for improvements in construction standards mandated for new construction in tropical cyclone-prone parts of the country (Mason et al. 2013). The success of improved building standards in reducing losses has been demonstrated repeatedly in more recent events.

Figure 1 shows the annual aggregate losses and the annual aggregate normalised losses (2011/12 values) for weather-related events in the ICA Disaster List. These figures are updated from those of Crompton and McAneney (2008) using a more refined methodology described in Crompton (2011). Importantly, no trend is evident in the normalised losses (Figure 1 red), implying that socio-economic factors are sufficient to explain the increase in the cost of insurance sector losses (Figure 1 blue). In other words, it is not possible to detect an anthropogenic climate change signal once losses are normalised. We note that despite record high 2012/13 summer air temperatures across Australia, industry losses for the most recent financial year -1 July 2012 to 30 June 2013- are very close to the long-term average normalised loss of AUD 1.1 billion.

Many readers might imagine bushfire losses to be more sensitive to increasing air temperatures than some other perils. However, at least in Australia, it is still not possible to detect an anthropogenic signal in normalised loss data. Following the large loss of life and building damage incurred in the 2009 bushfires in Victoria, Australia, Crompton et al. (2010) examined the history of fatalities and building damage since 1925. Figure 2 shows the actual and normalised building damage expressed in numbers of residential homes destroyed. Once the building damage is adjusted for increases in dwelling numbers, no residual trend was found that might be attributed to anthropogenic climate change, or other factors for that matter.

[1] http://www.insurancecouncil.com.au/

Figure 1: (Blue) annual aggregate insured losses (AUD million) for weather-related events in the ICA Disaster List for years beginning 1 July; (red) as in (blue) but with losses normalised to 2011/12 values
Source: Crompton (2011).



Global studies

Bouwer (2011) provides a comprehensive review of loss normalisation studies. Key conclusions to emerge from the 21 weather-related disaster loss studies examined, including the Australian studies discussed above, are that while economic losses have increased around the globe, no trends in losses adjusted for changes in population, wealth and inflation (or proxies for these factors) can be attributed to anthropogenic climate change.

Studies published since Bouwer's review provide yet further support for his findings. For example, Neumayer and Barthel (2011) at the London School of Economics found substantial increases in economic losses from natural disasters during 1980-2009 but no significant upward trends once these losses were normalised. Importantly, and echoing many other studies, Barthel and Neumayer (2012) conclude:

> ***Climate change neither is nor should be the main concern for the insurance industry. Accumulation of wealth in disaster prone areas is and will always remain by far the most important driver of future economic disaster damage.***

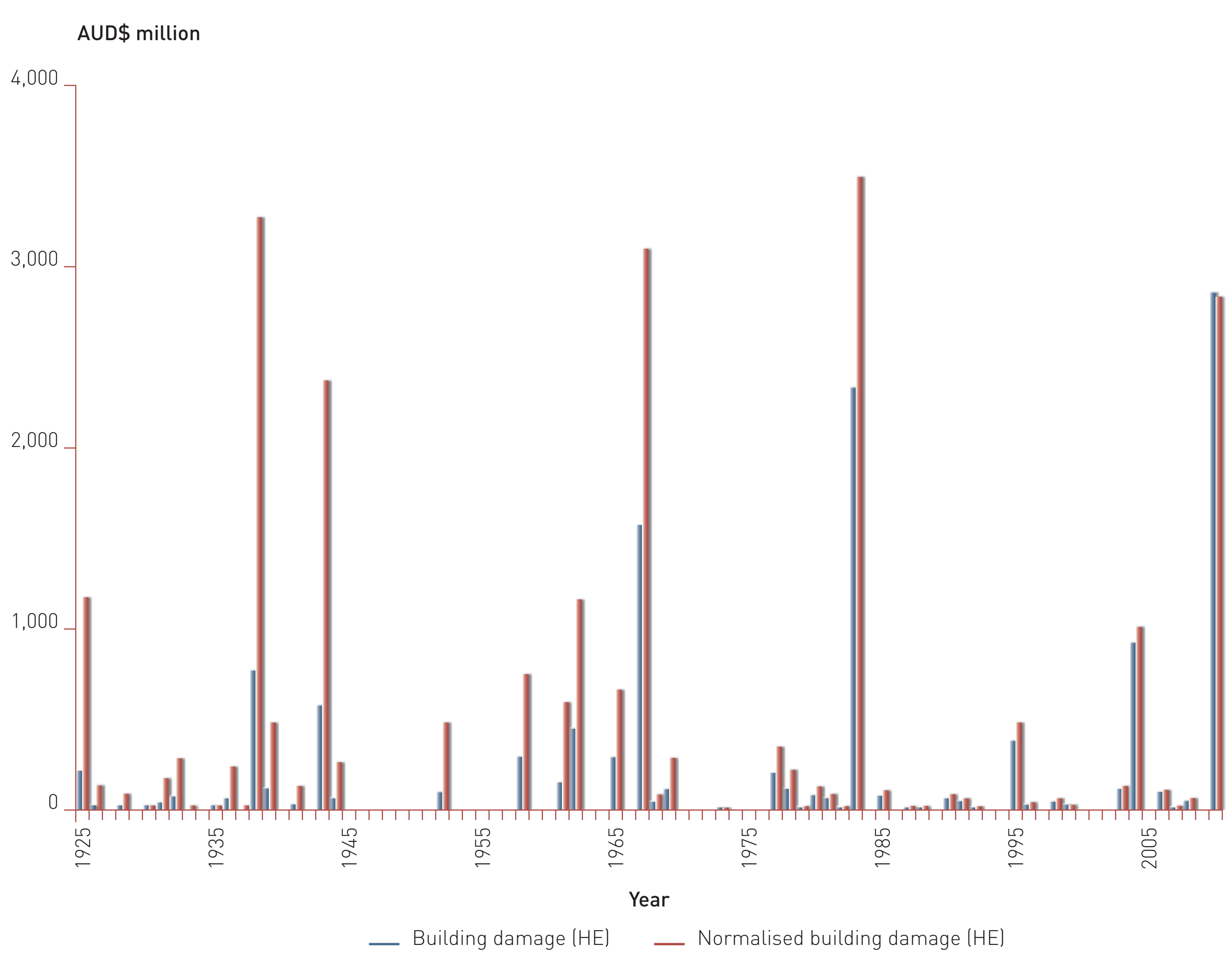
Adjustment for vulnerability and exposure to natural hazards has become known as loss normalisation (Pielke and Landsea 1998); it attempts to answer the question: what would be the losses if historic events were to recur under current societal conditions?

Other recent analyses to report no anthropogenic climate change influence on normalised losses include: Zhang et al. (2011) -tropical cyclone economic losses in China; Barredo et al. (2012)- insured losses from floods in Spain, and Simmons et al. (2012) – US tornado economic damage.

In line with the peer-reviewed literature, the Special Report of the Intergovernmental Panel on Climate Change (IPCC) 'Managing the Risks of Extreme Events and Disasters to Advance Climate Change Adaptation' (SREX) (IPCC 2012) supports the findings previously discussed:

> ***Increasing exposure of people and economic assets has been the major cause of long-term increases in economic losses from weather- and climate-related disasters (high confidence) (IPCC 2012).***

Figure 2: (blue) annual aggregate building damage expressed as the number of House Equivalents (HE) destroyed due to bushfire events in Australia for year beginning 1 July; (red) as in (blue) but with HE normalised to 2008/09 values (source: Crompton et al. (2010)). The time series begins in 1925, the first year in the 20th century to experience large numbers of building destruction due to bushfires. HE refers to all building damage but in this case can be interpreted as numbers of residential dwellings. There were also large fire losses in the 19th century but the numbers of homes destroyed cannot be verified.
Source: Crompton et al., 2010.



Thus while a role for anthropogenic climate change cannot be categorically ruled out, research to date is yet to detect or attribute an anthropogenic influence on disaster losses, despite widespread assertions to the contrary. The anthropogenic signal in Climate Change, if it exists, is dwarfed by the overwhelming contribution of more assets being built in harm's way and the large year-to-year variation in impacts.

Other relevant studies

Although not normalisation studies per se, research by Di Baldassarre et al. (2010), van der Vink et al. (1998), Weinkle et al. (2012) and Chen et al. (2009) all point to societal factors being the driving forces behind rising disaster losses. For example, Di Baldassarre et al. (2010) found that:

> ***… the intensive and unplanned urbanization in Africa and the related increase of people living in floodplains has led to an increase in the potential adverse consequences of floods and, in particular, … the loss of human lives … It can be seen that most of the recent deadly floods have happened where the population has increased more.***

Much earlier van der Vink et al. (1998) had concluded that the US was becoming more vulnerable to natural disasters because more property was being placed in harm's way:

> ***In many ways the trends [in losses] seem paradoxical. After all, most natural disasters occur in areas of known high risk such as barrier islands, flood plains, and fault lines. Over time, one would expect that the costs of natural disasters would create economic pressures to encourage responsible land use in such areas. And while there will always be great political pressure to provide economic relief after a disaster, there has been little political interest in requiring pre-disaster mitigation.***

These perceptive observations certainly ring true in the Australian context.

The anthropogenic signal in Climate Change, if it exists, is dwarfed by the overwhelming contribution of more assets being built in harm's way and the large year-to-year variation in impacts

Timescale at which an anthropogenic climate change signal might be observed in US tropical cyclone loss data

Despite no anthropogenic climate change influence having yet been detected in normalised weather-related disaster losses, we would be naïve to imagine that this will not happen at some point in the future. This being the case, Crompton et al. (2011) asked the following question in respect to US hurricanes: if changes in storm characteristics occur as projected, then on what timescale might we expect to detect the effects of those changes

Detail from the Buckland Gap forest near Beechworth (Victoria) after the forest fire in February 2009. Australia

Flood in Brooklyn (New York) after Sandy hurricane in October 2012. USA

Emanuel (2011) and Crompton (2011) results also argue very strongly against using abnormally large losses from individual Atlantic hurricanes or seasons as evidence of anthropogenic climate change

in economic loss data with some scientific certainty, say with 95% confidence?

The point of departure for Crompton et al. (2011) was projections of future Atlantic basin hurricane activity from the NOAA Geophysical Fluid Dynamics Laboratory (Bender et al. 2010). Combining these with the Pielke et al. (2008) normalised loss data, a bootstrapping analysis showed anthropogenic signals to emerge at time scales of between 120 and 550 years. This range of outcomes derives from using different Global Climate Models to set the boundary conditions for the downscaling. It took 260 years for an 18-model ensemble-based signal to emerge.

Emanuel (2011) implemented an alternative methodology to Crompton et al. (2011). He looked at four different models, three of which showed increasing losses and one a small decrease. Of the three models that showed increasing losses, time until detection was estimated to be 40, 113 and 170 years. These emergence timescales are shorter than those determined by Crompton et al. (2011), but regardless of these differences, both studies agree that the time to detection will be a very long time, perhaps centuries. Their results also argue very strongly against using abnormally large losses from individual Atlantic hurricanes or seasons as evidence of anthropogenic climate change.

The disaster mitigation challenge

Recent catastrophes have highlighted many challenges, including how best to organise systems to pay for the damage caused by natural disasters. Insurance (public and private) plays a critical role in providing funds for economic recovery after a catastrophe. But insurance is a means of transferring risks from individuals to companies (insurers) with a broader diversification capacity: simply purchasing insurance will not reduce risk.

When we look to ways to address the increasing trend in losses it is impossible to overlook the decisive role that poor land use planning has played in recent disasters. We give just two examples from Australia: the loss of life and buildings in the 2009 Victorian bushfires, and the 2011 Brisbane floods. In the first case, work undertaken by Risk Frontiers for the Royal Commission (Chen and McAneney 2010; Crompton et al. 2010) showed a large proportion of buildings destroyed either lay within bushland, or at very small distances from it. In fact, 25% of destroyed homes were situated within 1 m of the bush and so were effectively part of the fuel load. The destruction was not surprising and points to a marked failure of land-use planning in what is often referred to as "the most bushfire-prone part of the planet".

Similar observations can be made about the 2011 Brisbane floods. This event, which combined with other associated flooding in the state of Queensland during the summer of 2010/11, heavily impacted the national economy. The estimated economic loss was some AUD$6 billion. The losses led to the introduction of a flood levy, a temporary reconstruction tax. The Brisbane flooding had a footprint very similar to that of the 1974 floods (Figure 3), and no doubt that of much bigger floods recorded in the 1800's. However the area is now much more heavily developed than was the case in

Figure 3: The red outline shows the extent of flooding in the 1974 event while the area in white is our best-representation of the footprint of the 2011 flood.
Source: Van den Honert and McAneney (2011).

1974 with the Brisbane City Council approving 1,811 additional development applications just since 2005 (K. Doss, City Planning & Economic Development, pers. com.).

Disaster mitigation measures can offset some of the upward pressure demographic and economic drivers exert on natural disaster losses. In a study for the Australian Building Codes Board, McAneney et al. (2007) estimated that the introduction of building code regulations requiring houses to be structurally designed to resist wind loads had reduced average annual property losses from tropical cyclones in Australia by some two-thirds. Their estimate was based on a comparison of likely losses assuming that either

1. the building code regulations had never been implemented, i.e. we were still building residential homes as we were prior to the mid-1970's, or

2. the regulations had they always been in place.

Without regulation, the challenge lies in encouraging residents in hazard-prone areas to invest in mitigation measures. It is a common observation that despite the reductions in risk that could be achieved, many homeowners, private businesses, and public-sector organisations fail to voluntarily adopt cost-effective loss-reduction measures. This theme was echoed in surveys of victims of the 2011 Queensland and Victorian floods: many of these indicated a preference to use money from state and federal disaster relief or insurance to build back in the same manner as before the floods and with no thought of reducing future risk (Bird et al. 2012).


Aerial view of a residential district located on the outskirts of Milton during Brisbane flood in January 2011. Australia

Ideally the insurance sector can play an important role in providing incentives for loss mitigation by sending price signals reflecting risk. However regulatory efforts to limit premium increases in high risk areas, as has occurred in some parts of the US, can diminish the insurance system's ability to perform this function (McAneney et al. 2013).

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Conclusions

Studies of the economic impacts arising from natural disasters in many parts of the globe have concluded that the main drivers of the increasing costs are demonstrably socio-economic factors. Contrary to popular opinion, no peer-reviewed study has yet been able to detect an anthropogenic climate change influence on the losses. While this does not rule out an anthropogenic influence, it does suggest that its influence, if any, is currently negligible in the face of large societal changes and the year-to-year variation in the impacts. And in the particular case of US tropical cyclone losses, it will be a very long time before its influence becomes detectable, perhaps even centuries. As far as disaster losses are concerned, this does not imply that the likely effects of anthropogenic climate change should be ignored, rather that decisions made in respect to adaptation will of necessity need to take place in an environment of considerable uncertainty and ignorance. But returning to the central point of this paper, blaming climate change for large natural disaster losses is to overlook the primary causes of these losses, in particular, poor land-use planning practices.

So what can we do? While it is difficult to influence the likelihood of extreme weather events, i.e. the hazard, we have control over where and how we build. The success of regulated improvements to residential construction in cyclone-prone parts of Australia shows what can be achieved with political will. And any actions that help society adapt to the current climate variability will alleviate the impact under any future climate.

While it is difficult to influence the likelihood of extreme weather events, i.e. the hazard, we have control over where and how we build

In conclusion, it is unlikely that insurers will be materially threatened by anthropogenic climate change. However insurers can play an important role by pricing risks accordingly thereby sending clear price signals to homeowners and governments to encourage risk-reducing behaviours.

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Olive oil: Mediterranean gold

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Olive growing has its origins in the Middle East over five thousand years ago. From there it spread across the entire Mediterranean and becoming essential in the region's landscape and culture. Its dwellers have used olives as a source of nourishment, but also to make beauty products, fuel for lamps and lubricants, among other applications. Though olive trees are typically a rain-fed crop, irrigated cultivation is on the increase both in traditional and in new growing regions. Spain is the world's largest olive growing country, taking into account global olive grove surface area, oil production and regarding consumption, it is the second country after Italy.

Etching engraved by Jules Gaildrau and published at L'Illustration Diario Universel. Paris. 1857

International context

According to FAOSTAT[1], olive plantations covered some 9.6 million hectares in 2011, 98.4% of them in the Mediterranean region (see Figure 1). Over the last five seasons, the global average annual production of olive oil stood at almost 3 million tonnes according to the IOC[2], a 6% increase on the previous five-year period. A 75% share of this aggregate volume is consumed in Mediterranean countries. Italy and Spain top of the list with respectively 24% and 19% of global consumption. Outside of this region, the US is a significant consumer with 9% of the total. Consumption is performing well, registering a 7% increase over the past five years, a figure that in traditionally non-consuming countries rises above 35%.

The Mediterranean region has a thriving trade in olive oil, accounting for more than 50% of world imports and 97% of exports. The top destination of Spanish, Greek and Tunisian exports (see Figure 2) is Italy, the world's leading olive oil importer, which in turn exports a large proportion of this intake. Italy is increasing its direct imports from source countries.

[1] FAOSTAT: http://faostat.fao.org. Statistics Division of the Food and Agriculture Organization of the United Nations.

[2] IOC: http://www.internationaloliveoil.org International Olive Oil Council.

Figure 1: Olive-growing surface area, annual production and consumption of olive oil in the five-year period 2006/07–2011/12.
Source: In-house compilation based on FAOSTAT and IOC data (average annual data for the five-year period 2006/07 to 2011/12).

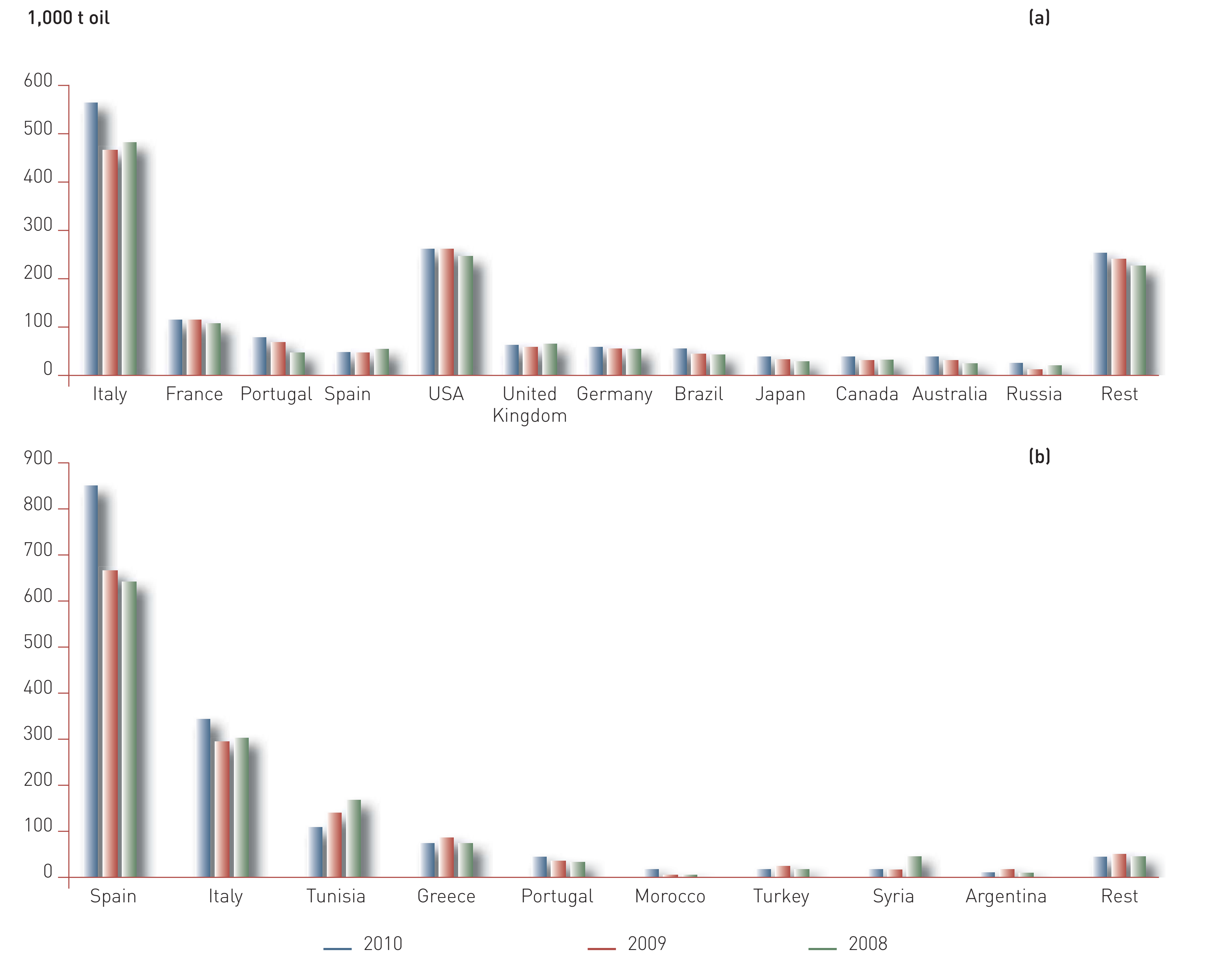
Region	Surface area		Oil production 2006/2007 to 2011/2012		Consumption 2006/2007 to 2011/2012	
	2011 ha	%/Total	1,000 t	%/Total	1,000 t	%/Total
Non-EU Mediterranean countries	**4,784,097**	**49.7%**	**703**	**24.0%**	**495.0**	**16.9%**
Tunisia	1,779,950	18.5%	157	5.3%	36.0	1.2%
Turkey	798,493	8.3%	144	4.9%	110.7	3.8%
Syria	684,490	7.1%	152	5.2%	114.4	3.9%
Morocco	597,513	6.2%	106	3.6%	80.0	2.7%
Other	923,651	9.6%	145	4.9%	153.9	5.3%
EU Mediterranean countries	**4,697,084**	**48.8%**	**2,161**	**73.6%**	**1,687.0**	**57.6%**
Spain	2,330,400	24.2%	1,297	44.2%	549.1	18.8%
Italy	1,144,420	11.9%	477	16.2%	700.9	24.0%
Greece	850,000	8.8%	320	10.9%	238.5	8.2%
Other EU countries	372,264	3.9%	67	2.3%	198.5	6.8%
Total Mediterranean region	**9,481,181**	**98.4%**	**2,864**	**97.6%**	**2,182.0**	**74.6%**
Non-Mediterranean	**153,395**	**1.6%**	**70**	**2.4%**	**744.3**	**25.4%**
Argentina	62,498	0.6%	22	0.8%	5.3	0.2%
Australia	30,407	0.3%	15	0.5%	42.0	1.4%
USA	16,794	0.2%	3	0.1%	262.8	9.0%
Chile	15,091	0.2%	12	0.4%	7.8	0.3%
Other	28,605	0.3%	18	0.6%	426	14.6%
Total world	**9,634,576**	**100.0%**	**2,934**	**100.0%**	**2,926.3**	**100.0%**

Olive oil production in Spain

Spain is the world's largest olive growing country, with 24% of the global olive grove surface area and 44% of total oil production. In terms of quality, Spanish oils rank among the best in the world chiefly thanks to the country's varietal and biological diversity, its rearing and harvest technologies, and the production technologies applied in the oil industry. Almost 400,000 olive farms for oil production generate some 32 million work days a year (slightly more than half of these during the harvest season). Together they cover approximately 2.5 million hectares[3], 72% of which are dry-farmed. Irrigated olive farming, mostly dominated by localised techniques, has increased by 50% over the past ten years, contributing to the overall expansion of the olive-growing area, which has seen a 6% growth between 2004 and 2012 despite the contraction of dry-farmed areas.

[3] According to the MAGRAMA's Crop Yield and Surface Survey (ESYRCE), a total of 2,506,830 ha were planted with olives for oil production or for oil-and-table production in 2012, 694,830 ha of which were irrigated.

Figura 2: (a) Leading olive oil importers.
(b) Leading olive oil exporters.
Source: In-house compilation based on FAOSTAT data.



Although olive plantations are found in 13 of Spain's autonomous regions, Andalusia accounts for 72% of the entire growing surface area and approximately 80% of oil production (see Figure 3).

Approximately 25% of Spain's olive-growing surface area is covered by one of the 25 protected designations of origin (PDO) established for virgin olive oil in the country[4]. However, PDOs have a weak market presence, with sales of PDO oil amounting to a mere 30,000 tonnes.

According to the Olive Oil Agency (AAO)[5], a record 1.6 million tonnes of olive oil were produced in Spain in the 2011/2012 season. This growth in production has been attended by an increase in domestic consumption and, most importantly, by the good performance of exports, which reached 874,700 tonnes in the last season (see Figure 4). More than 75% of exports go to EU countries, particularly to Italy (which buys some 50% of all Spanish oil exports), followed by Portugal and France (each taking 10%).

[4] In addition to the existing 25 PDOs, a further five are in the process of registration with the EU register.

[5] AAO: Olive Oil Agency of the MAGRAMA.

Figure 3: Distribution of olive-growing surface areas in Spain.
Source: Ministry for Agriculture, Food and the Environment (MAGRAMA).

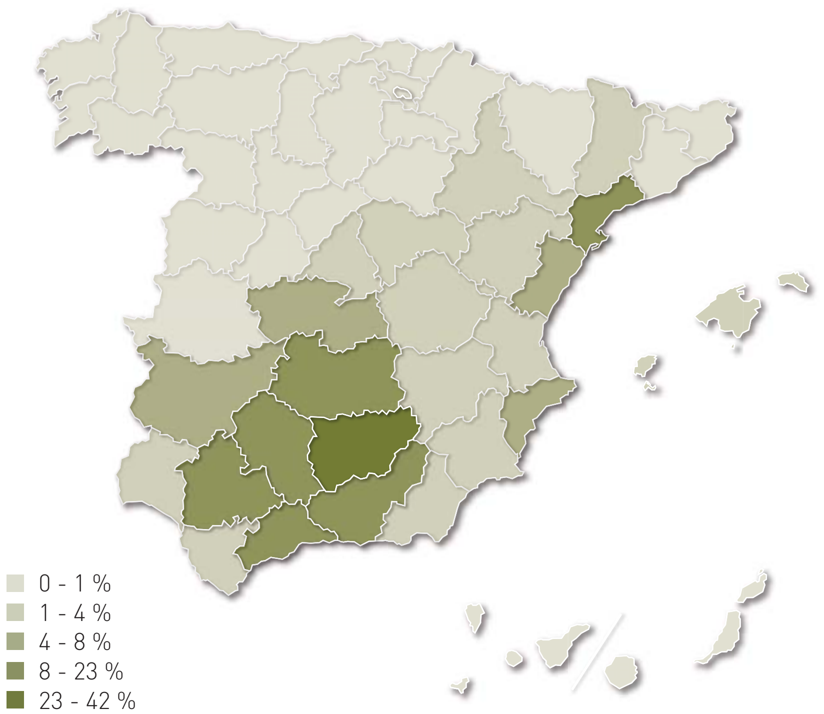


Figure 4: Spanish olive oil production, consumption and exports.
All figures in thousands of tonnes.
Source: Spanish Olive Oil Agency.

Season	Production	Domestic consumption (apparent)	Exports
2008/2009	1,030.0	533.6	675.3
2009/2010	1,401.5	533.4	780.1
2010/2011	1,391.9	553.6	828.4
2011/2012	1,615.0	569.6	874.7

Spanish oils and olives

More than 100 different varieties of olives are grown in Spain. While many of these are indigenous, six to eight varieties predominate in one or more regions and take up the bulk of the growing area. The most significant varieties are the following:

- ***Arbequina***: traditionally a Catalan variety, it is also grown in Andalusia, Aragon and Castile-La Mancha.
- ***Cornicabra***: grown in Toledo, Ciudad Real and Madrid.
- ***Empeltre***: produced mainly in Lower Aragon but also in the Balearic Islands, Castellon, Tarragona and Navarre.
- ***Hojiblanca***: grown in Malaga and Cordoba, and to a lesser extent in Seville and Granada.
- ***Picual***: the most widely grown variety, it dominates in Jaen and takes up a large proportion of growing areas in Cordoba and Granada.
- ***Blanqueta***: characteristically grown in Alicante, southern Valencia and Murcia.


Cazorla castle (Jaen) with olive grove at the background

- ***Verdial de* Badajoz**: mainly grown in Badajoz and Caceres.

Olive oils for direct human consumption are divided into several categories, defined firstly by the system used to obtain the oil, and secondly by their chemical (acidity and other parameters) and organoleptic characteristics (look, feel, smell and taste).

- **Virgin olive oil**: obtained directly from the olive using only mechanical means and/or other physical processes. There are two categories of virgin olive oil for direct human consumption:
- **Extra virgin olive oil**: the highest quality oil. All the health and nutritional properties of this edible fat are kept unadulterated. Maximum free acidity is 0.8 g per 100 g of oleic acid.
- **Virgin olive oil**: the second-highest quality oil. There are slight alterations of its chemical and/or organoleptic parameters, which prevent classifying this oil as extra virgin. Maximum free acidity is 2 g per 100 g of oleic acid.
- **Olive oil**[6]: obtained by blending refined olive oil and virgin or extra virgin olive oil. Maximum free acidity is 1 g per 100 g of oleic acid.
- **Olive-pomace oil**[7]: obtained by blending refined olive-pomace oil and virgin or extra virgin olive oil. Maximum free acidity is 1 g per 100 g of oleic acid.

The Spanish olive industry

A number of different players take part in the production and distribution of olive oil, each with its own distinctive role:

- **Oil mills**. This is where the first industrial processing is carried out to obtain virgin, lampante and pomace oils. These go direct

[6] Obtained by refining virgin olive oil. Maximum free acidity is 0.3 g per 100 g of oleic acid. These oils are devoid of taste and odour.

[7] **Olive pomace** is a fatty by-product (skin residue, stones) obtained in the virgin oil production process. The oil contained in the pomace is extracted in dedicated extraction plants using solvent treatment or physical means.


Olive grove landscape in Mora de Toledo. Spain


Granite mill for grinding olive when manufacturing olive oil

to packaging at the same or a different company if the end product is virgin or extra virgin olive oil. According to the AAO, there are currently 1,750 mills in operation, spread across 13 autonomous regions. Andalusia has the largest number, followed by Castile-La Mancha. While mills vary widely in size, small facilities producing less than 100 tonnes of oil each season prevail. Nonetheless, more than one third of all Spanish oil is turned out from mills producing between 1,000 and 2,500 tonnes, even though they only make up 11% of all facilities. Over 55% of mills are cooperatives, which account for almost 70% of the total oil production.

- **Packing plants**. There are 1,556 oil packing plants, the vast majority with very small turnovers. Many of them are affiliated to oil mills and package virgin oil only. The 15 largest undertakings, which collectively own 21 plants, account for approximately 70% of the total packed oil output. Most of these are affiliated to refining plants and handle all three types of olive oil, as well as other oils. This group also includes some large-scale packing plants belonging to second-tier[8] cooperatives or even to retailers.

- **Refineries and pomace extraction plants**. This is where oil is refined to correct its deficiencies (high acidity, deficient smell, taste, even colour) and improve its organoleptic characteristics. Crude olive-pomace oils are also refined to render them fit for human consumption, as well as seed oils. There are 23 refining plants, most of them handling large turnovers.

- **Olive-pomace extraction plants**. Crude olive-pomace oil is extracted from the fatty pomace obtained in oil mills. There are currently some 60 extraction undertakings, most of them small family businesses.

According to the AAO, 710,000 tonnes of oil were packed in the 2010/2011 season. The yield available for packing that season was 1,244,000 tonnes, which means that between 50% and 60% of that total was packed.

All the oil sold on the domestic market was packed in Spain, as well as 30% to 35% of oil exports.

In the domestic market, large-scale retailers are the chief channel for the sale of olive oil to private consumers: 88% of total olive oil, 95% of organic olive oil, 88% of virgin olive oil, 86% of extra virgin olive oil, 88% of olive oil and 88% of olive-pomace oil. The restaurant industry also takes up a share of the total, and another goes direct to the food industry. This pattern also prevails in other countries, such as EU consumer states, the US, Canada and Japan, which reveals the strong leverage of the retail sector over the entire production chain.

Currently, many producers export their oils directly, although 15 to 20 companies jointly account for more than 80% of all exports. Exporters include oil refiners, packers, mills and wholesalers. Direct exports by first- and, particularly, second-tier cooperatives have soared since the 1990s, thus boosting their role in the production chain.

UE funds for industry modernisation were instrumental in bringing oil mill industrial processes up to date. This resulted in better quality virgin oils, with the ensuing rise in consumption of this range

[8] Under the Spanish Law on Cooperatives, **second-tier cooperatives** are legal entities incorporated by a minimum of two cooperatives. Other public or private entities and individual entrepreneurs can also hold an interest in them up to a maximum of 45% of all partners.

A number of reasons have been suggested to explain the low penetration of this kind of insurance, including olive trees' lower exposure to weather-related risks compared with other trees such as fruit trees, and their alternate bearing nature, which means growers are accustomed to having low-yield years

The Spanish olive oil industry

Whereas only a few years ago alternate bearing and weather conditions crucially affected crop yields and, consequently, prices, the expansion of irrigation has curbed their effect

Spanish oil industries have grown as a result of the increasing prominence of large retailers in oil sales and the need to boost production volumes in order to gain negotiating leverage. Greater efficiency in foreign markets has also contributed to this expansion. Growth has led to consolidation in the industry, which is fundamentally made up of family businesses and cooperatives. Among the latter, consolidation has mainly come about through the creation and development of second-tier cooperatives, which subsequently become companies with other industry groups. Second-tier cooperatives began proliferating around the 1990s, when they first became direct exporters. It was also at that time that virgin olive oil sales took off at large retailers, leading them to enter into deals directly with oil mills or their second-tier cooperatives in addition to the traditional packing industry, thus giving consumers direct access to cooperative-produced oils.

UE funds for industry modernisation were instrumental in bringing oil mill industrial processes up to date. This resulted in better quality virgin oils, with the ensuing rise in consumption of this range.

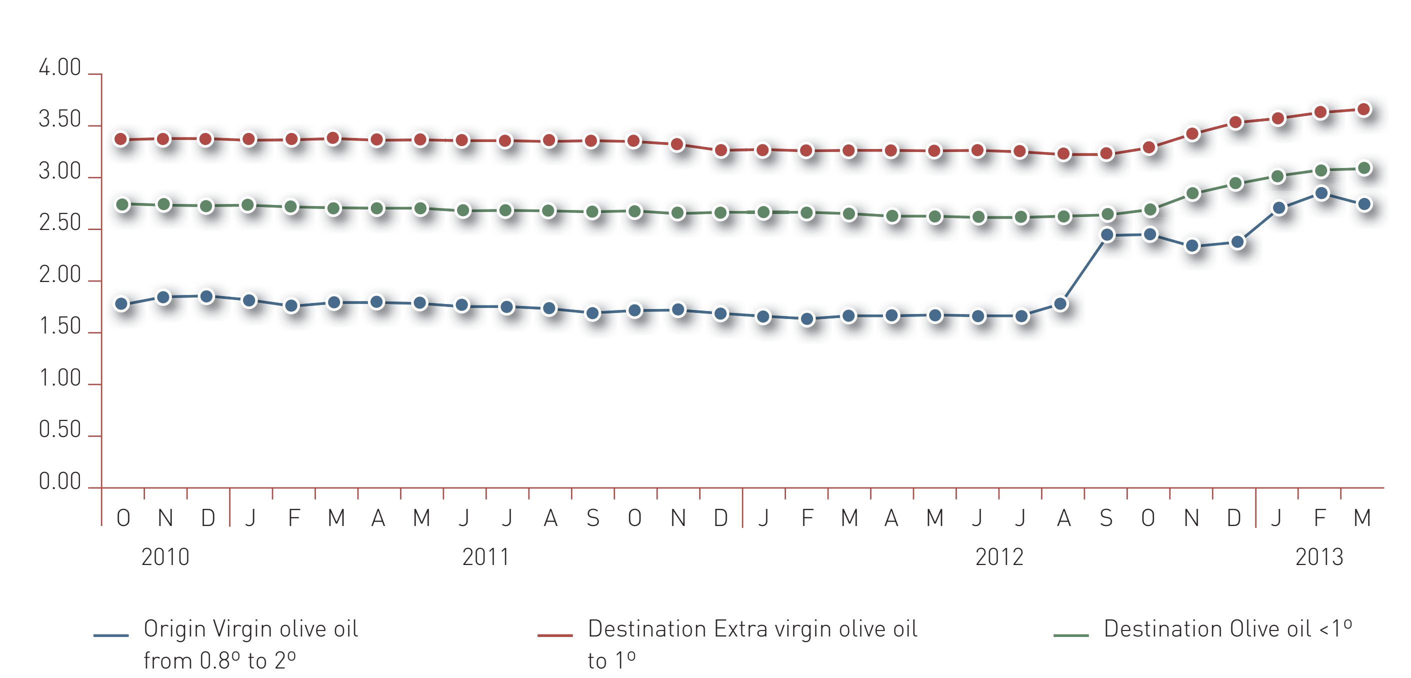
The leading Spanish companies own industrial interests in non-European Mediterranean countries. This provides them with a suitable location from which to export to other consuming countries and contributes to make the Mediterranean an increasingly interrelated oil producing region. Large export businesses also have sales networks in destination countries.

Large-scale retailers' olive oil policies focus on the following areas: sales concentration, which follows from business consolidation in the industry and the decision to centralise procurement at the global level; inclusion of the virgin oil range among the products they offer, a move initially taken only by quality-brand-image producers that subsequently became mainstream; the decision to develop their own brand across the range of oils, which has on the one hand enabled them to purchase virgin oils directly from large packing cooperatives, and on the other hand led to the devaluation of traditionally well-known industrial brands while also putting pressure on prices, an effect that has increased dramatically with the economic crisis, even if it was already being felt before its onset.

The players in the production chain have reacted by consolidating to improve their negotiating leverage, expanding their range to take in all categories of oil, and seizing direct access to exports to derive greater value from this trade channel. They have also been compelled to adjust their costs.

The economic crisis that began in 2007 has impinged on the oil production chain for a number of reasons: the fall in consumption of higher-priced products; large retailers' pressure on prices, which affects the entire chain; the growth of large retailers' own brands, which weakens the negotiating leverage of popular brands; the growth of discount outlets, restricting access to the end market for some higher-value products; lending restrictions, which bear on stock maintenance; and the rising cost of petroleum oil. All these factors have reinforced the trends that were already taking shape in terms of business consolidation and the increasing weight of large retailers in price formation.

Figure 5: Development of olive oil prices at origin and destination.
Source: MAGRAMA and State Secretariat for Trade.



Risk in the olive oil industry

Pathogens and weather-or climate- related disasters are, along with the olive tree's alternate bearing nature[9], the factors most strongly affecting the stability of olive crops.

Unless they are efficiently controlled, pests and diseases can bring substantial financial loss to olive-growing undertakings as they reduce yields and sometimes affect oil quality. In Spain, the two most significant pests are the olive fly (*Bactrocera oleae*), which affects olive yields and oil quality, and the olive moth (*Prays oleae*). The most notable diseases are the olive leaf blotch and, to a lesser extent, olive anthrachnose -also known in Spain as soapy fruit or leprosy- and verticillium wilt, which chiefly affects young plantations. Although chemical control is the most widely used defence system in Spanish farms, integrated control[10] has grown significantly in recent years.

Climate and weather conditions are potential direct causes of crop losses and often favour the development of diseases and attacks by certain types of pests. Occasionally, they also damage the trees themselves. Among the climatic conditions that generate the heaviest losses in Spain, drought is foremost, followed by hail, torrential rain and frost. The Spanish agricultural insurance system (*Agroseguro*) offers olive growers an increasing-cover programme that protects farms against weather-related risks including hail, torrential rain, drought and gale-force winds, as well as non-weather-related risks such as wildlife and fire. This programme covers not only production losses but also damage to plantations and irrigation systems where these are used. Growers can choose between three schemes, each providing different cover levels, on the basis of the needs and nature of their farms. The prevalence of the increasing cover programme is currently limited, with only 7% of the growing area and 10% of the olive production being covered.

A number of reasons have been suggested to explain the low penetration of this kind of insurance, including olive trees' lower exposure to weather-related risks compared with other trees such as fruit trees, and their alternate bearing nature, which means growers are accustomed to having low-yield years.

[9] **Alternate bearing** is a characteristic of olive trees whereby yields are high one year and low the next. Certain techniques can be used to mitigate its effects, including pruning, irrigation and crop thinning.

[10] Directive 91/414/EEC defines integrated control as "the rational application of a combination of biological, biotechnological, chemical, cultural or plant-breeding measures whereby the use of chemical plant protection products is limited to the strict minimum necessary to maintain the pest population at levels below those causing economically unacceptable damage or loss".

Market prices represent a further key risk to profitability in the olive oil industry. Oil prices at the place of origin chiefly reflect fluctuations in consumption, exports, stocks, production in the current season and prospects for the next. Whereas only a few years ago alternate bearing and weather conditions crucially affected crop yields and consequently, prices, the expansion of irrigation has curbed their effect.

Bulk produce trade is highly dynamic, particularly among Mediterranean countries. Hence, where whole olives are concerned, the aggregate production for the region must be considered. The global olive oil market is a small one, particularly compared with other oils and oilseeds such as soy or rape. Accordingly, financial movements in commodity markets have a weaker impact than on other products.

Price variations at destination are not as wide as at the place of origin, similarly to any other product. This indicates that part of the fluctuation is absorbed throughout the value chain (see Figure 5).

Future prospects

For now, the increase in consumption is absorbing the expanding olive-growing surface area and production. This long-standing trend does not seem about to change, unless an enduring economic crisis causes consumption to drop significantly in Europe.

Production is expected to continue rising, driven firstly by the expansion of growing surface areas in non-EU countries and secondly by the increasing use of irrigation in EU Mediterranean countries. The Mediterranean region and particularly EU countries may lose weight, although they will continue to be in a position of hegemony, bolstered by the power of their companies.

It also seems likely that business consolidation will continue throughout the chain, at least across the Mediterranean region, and that large-scale retailers will continue to be the hegemonic player in price formation.

Support to local markets and reduced-scope marketing mechanisms may help to drive sales at this level, an important objective in olive producing regions. Online sales are also expected to climb. On the other hand, economic difficulties may drive consumption down in the restaurant industry, a buyer that players in the olive sector rely on as an alternative to large retailers.

interview with

Jaime García-Legaz

Secretary of State for Trade
Ministry of Finance and Competitiveness
President of ICEX Spain Exports and Investments
Madrid - Spain

Jaime García-Legaz Ponce was born in Murcia in 1968. He graduated in Economics and Business Management from CUNEF, the Financial Studies University College operating under Madrid's Complutense University, and became a Commercial Expert and State Economist in February 1994. On 23 December 2011 his appointment as Secretary of State for Trade was confirmed by Royal Decree 1879/2011. He is married and has one daughter.

Prior to that, the current President of ICEX was an economist in the Bank of Spain's Research Department, Deputy Director General for Public Debt in the Treasury Department of the Ministry of Economy and Finance, Economic Advisor to the Spanish Prime Minister and to the Finance Secretary of Madrid's Autonomous Regional Government, Manager of the Office of the Secretary of State for Telecommunications, Director General for Education and Welfare in the Prime Minister's Office, Director General for Statistics in the Autonomous Regional Government of Madrid and Head of Finance and Public Policy at the FAES Foundation think-tank. He is additionally a member of the Board of Trustees at FAES, where he was Secretary General from June 2007 to January 2012.

He has also acted as an advisor for the World Bank, the European Commission and the OECD. Between March 2008 and January 2012 he was a Member of Parliament for Murcia and Secretary of the Economy and Finance Committee of the Spanish Congress.

His professional career is rounded off by vast experience in the academic world. He has been a lecturer in Economic Policy at Madrid's Complutense University and in International Economy at Madrid's Autónoma University. He has taught at the School of Public Finance which is part of the CECO (the Ministry of Economy and Finance's Trade and Economics Study Centre), and at the European University of Madrid.

García-Legaz has published some twenty articles in scientific journals in Spain and the United States. He held professorships in the Master's Degree course at Public Management at the CEU-San Pablo University and the Master's Degree course in Finance at CUNEF. He also lectured on the Executive MBA at the Comillas Catholic University-ICADE and the Master's Degree in International Economy at the European University of Madrid, and he coordinated the Chair of Political Ethics and Humanities at the San Antonio University of Murcia.

"The external sector is proving to be a lifeline for the Spanish economy"

"In these times of crisis, it is the external sector that is driving the Spanish economy and will continue to do so in the years to come". The President of ICEX says that the export base is growing geographically and in terms of businesses and industries, which means that Spain has a robust, balanced export model.

What is the mission of ICEX Spain Export and Investment?
It is to help speeding up the expansion of the Spanish export base. Spain has performed reasonably well in recent years as far as exports are concerned, but there is still one area where we need to improve: the internationalisation of our small and small-to-medium-sized businesses. Spain's large corporations have been active internationally for the past twenty-five to thirty years.

Company size is not an issue when it comes to taking on an international dimension, or is it?
Size is important. It is not true that a company's size does not matter or that anybody can take the leap into the international arena. When it comes to entering other markets, a large company has much more leverage and financial clout than a small one. And that is where government bodies have a role to play in helping companies that need a final push to make that overseas leap. That has a lot to

The mission of ICEX Spain Export and Investments is to help speed up the expansion of the Spanish export base

Barcelona Port. Spain

do with size and although it may make more sense to help small-businesses, that does not mean every one of them. Companies need to be screened to focus on those that have the capacity to succeed when they take that leap into the international market.

New customised services

What services does ICEX provide SMEs so that they can take this leap?

Quite a few. The first and perhaps the most innovative is a programme that provides financial support to help such companies develop an international dimension. This is a new service by which ICEX contributes with EUR 12,000 and the company is required to add 12,000 more to ensure it is more fully committed to the project.

This programme firstly makes it possible to analyse the company's capacity to enter the international market; secondly, it identifies the markets that offer prospects for success, and thirdly -and this marks an important difference from what we have been doing up to now- we help the company not only to get out there, we also help them to become established.

We have taken this step because when we studied the internationalisation figures for the last ten years we realised that only four out of every hundred companies that we had supported had actually managed to survive; and the reason was that although we had helped them to get out there, once there, no more aid was coming. So we decided to back fewer companies, but in a more coherent way, so that those that enter the international arena are much better prepared to succeed and become established in the medium term. This is our most important challenge.

Then of course our training programmes continue and we provide 250 scholarships each year for students who go on to work for exporters' international departments and associations.

Finally, we have a third focus area: information. Here too we have been introducing a number of changes. Up to now the service we offered was more or less the same for everybody. But clearly every company has its own needs, so we have set up a specialised services programme to provide information that is relevant to each specific company. It is working really well, with an annual growth rate of 40%.

What resources does ICEX have in order to provide these services?

ICEX has undergone considerable budget cuts these past few years. In 2007 we had a budget of about EUR 210 million and now it is EUR 80

Our training programmes continue and we provide 250 scholarships each year for students who go on to work for exporters' international departments and associations

Foreign Trade. January-June 2013. Breakdown by Economic Sector.
Source: Foreign Trade Monthly Report. June 2013. Ministry of Finance and Competitiveness.

Sector	Exports			Imports		
	€ Million	%/Total	var. 13/12	€ Million	%/Total	var. 13/12
Food	17,868.6	15.1	6.7	13,607.9	10.9	1.1
Energy products	8,190.0	6.9	10.7	29,232.8	23.5	-6.1
Raw material	3,184.7	2.7	4.3	5,031.0	4.0	-2.0
Non-chemical semi-finished products	12,768.8	10.8	-3.2	8,743.4	7.0	-5.1
Chemical products	16,975.5	14.3	6.8	19,229.0	15.4	-0.9
Capital goods	25,126.7	21.2	18.7	20,655.4	16.6	-5.3
Motor	14,194.0	14.5	5.9	12,901.5	10.4	0.9
Durable consumer good	1,759.7	1.5	2.2	2,703.8	2.2	-5.3
Consumer goods manufacturers	9,997.4	8.4	11.9	11,883.9	9.5	2.0
Other goods	5,656.9	4.8	0.4	558.1	0.4	-52.0
Total	**118,722.2**	**100.0**	**8.0**	**124,546.6**	**100.0**	**-3.2**

Foreign Trade. January-June 2013. Breakdown by Geographical Area.
Source: Foreign Trade Monthly Report. June 2013. Ministry of Finance and Competitiveness.

Geographical area	Exports			Imports		
	€ Million	%/Total	var. 13/12	€ Million	%/Total	var. 13/12
Europe	82,429.1	69.4	4.5	72,860.3	58.5	-1.6
America	12,529.3	10.6	6.2	14,784.5	11.9	-12.4
Asia	10,751.2	9.1	18.1	21,617.5	17.4	-7.4
Africa	8,247.1	7.1	17.8	14,920.4	12.0	7.6
Oceania	1,258.1	1.1	36.3	343.2	0.3	-28.4
Global total	118,722.2	100.0	8.0	124,546.6	100.0	-3.2

Export credit insurance: towards a new model

"Export credit insurance is crucial for boosting Spanish exports; in fact, without it, Spanish exports would never have been able to perform so well", says García-Legaz.

The president of ICEX confirms that "we are witnessing a change of model in credit insurance. This kind of insurance," he adds, "was developed in Spain by CESCE, a state company with some private capital but mainly publicly-owned, and the time has come to change the system." And he goes on to explain the reasons: "State companies are limited in what they can do, they have limitations in terms of staff and management, or their flexibility is much lower. When a state company has to compete with private companies in the international arena with such limitations, the difficulties are myriad."

This is why, says García-Legaz, "we are in a process of transformation in which our aim is to have a private company manage this insurance via a contract or a management agreement which would be awarded through a government tender. In this way the private company that is best able to manage this service will be given the responsibility of doing so. It is a good model, but there is room for improvement and in the next few months we will see a change towards a more productive model."

million, which is 60% less than five years ago. We have to make the best possible use of these funds so every euro is used as efficiently as possible. Grants used to take up a large part of the budget but that is all changing now. We are moving towards customised programmes which involve performance assessment. Whatever works, we make it work better, and whatever does not work, we drop it.

How many SMEs is ICEX currently helping?
That depends on the service we provide. Some companies go to trade fairs, some go on trade missions and others receive either general or specialised information. The figure is in the region of 30,000 companies each year.

The driving force of the economy

Is the internationalisation of our businesses going to be vital to the recovery of the Spanish economy?
It already is. Last year the external sector added 2.5 percentage points to GDP growth. This means that although the economy fell by 1.4%, had it not been for the external sector it would have fallen by 3.9%. This year, the external sector will contribute between 2% and 2.7%. In these times of crisis, the external sector is proving to be a lifeline for the Spanish economy and is even creating employment.

Spanish exports have undergone the largest growth among the eurozone countries since the start of the crisis. What are your views on this?
This was great news for so many of us. Nobody thought that Spain would be able to give Europe and the rest of the world such a positive surprise with these figures, but there they are. Exports are growing in our country by more than 7%, while they are falling in Germany, France, the United Kingdom and Italy. This growth is good news because it means that Spain can regain the competitive edge it had lost and above all, that it is making an effort to open up markets, which has been a surprise for many people. Exports to Africa are growing by more than 30%, to North America by almost 20%, to South America by 14%, to Asia by more than 15% and so forth. Europe may not be on top form, as we all know, but Spanish exports are performing very well indeed.

Where are Spanish companies heading to? Is Latin America still their leading destination?
Latin America is a market that is still growing. It offers new opportunities thanks to the new free trade agreements, which enable barriers to be removed – access without tariffs. Peru is an example. The agreement signed with that country has just come into effect. Colombia is another example. South America is a market that Spanish companies feel very much at home in. Exports are growing by between 10% and even 30%, as in Brazil for instance.
But the good thing is that this is not the only market. Many Spanish companies are focusing on other markets: the US, Canada, Asia, which is a high-growth market. But Africa is where Spanish companies are currently most successful. It is a still unexplored market, very close to hand, and Spanish companies handle it quite skilfully. Their economies are growing by between 8% and 15% every year. Another major region is the Middle East, where Spanish exports are performing outstandingly; we are talking of about 150% or 200% growth in some countries there. Clearly this is another area that we need to look after.

Nobody thought that Spain would be able to give Europe and the rest of the world such a positive surprise with these figures, but there they are. Exports are growing in our country by more than 7%, while they are falling in Germany, France, the United Kingdom and Italy

Exports, a new record

In the first six months of the year exports totalled EUR 118.7 billion, a year-on-year increase of 8%. This figure had not been seen since 1971 in one single half-year and in absolute terms. Imports, on the other hand, dropped by 3.2% to EUR 124.5 billion year on year. Consequently, the trade deficit in the first half of 2013 fell by 68.8% to EUR 5.8 billion, practically a third of what it was in the same period of 2012 (EUR 18.6 billion).

The figures for the first six months of the year reveal that businesses are searching for new destinations for their exports. Most growth has been seen in countries outside the EU with an increase of 13.8% year on year. Particularly significant increases were registered in exports to Asia (18% growth); Africa (17.8%); the US (5.4%); Latin America (9.4%); and Oceania (36.3%).

Another particularly positive aspect is the increase in sales to countries with strong growth potentials, including South Africa (+64.2%), Algeria (+31%), Brazil (+40.4%), China (+13.4%), Morocco (+10.2%), and also the US (+5.4%).

Exports to more traditional destinations also made gains during the first half of the year: 4.7% growth in sales to the EU as a whole and 3.1% in the eurozone. With these figures, these regions reduced their share of the total to 62.2% and 48.6% respectively.

Most active industries

Capital goods topped the list of exporting industries in the first half of 2013 with 21.2% of the total, thus increasing its share, and a year-on-year growth of 18.7%. It is followed by the food industry (15.1% of the total with an increase of 6.7%) and car manufacturing (14.5% of the total with an increase of 5.9%).

Also of note is the dynamic performance of Spanish exports that involve added value and highly sophisticated technology such as aircraft (124.2% growth), specific industrial machinery (an advance of 48.3%), pharmaceuticals (an increase of 17.6%), engines (an increase of 12.5%), and precision apparatus (an increase of 9%).

There are a number of "star" export industries: capital goods, the automotive industry, the chemical industry, and food and agriculture. So our export base is growing geographically and in terms of businesses and industries, which means that Spain has a robust, balanced export model

Which industries have been most active in the overseas markets?
There are a number of "star" industries. The first one would be capital goods, which means sophisticated and high-tech machinery. This is an area where Spain is very strong. The second is the automobile industry, where Spain has once again become a major exporter. We are seeing 100% annual growth in our exports to the US, with similar figures for Turkey.
The chemical industry stands out too, with double-digit growth. We are exporting pharmaceuticals at very high growth rates. Food and agriculture is seeing 15% growth, not only in fruit and vegetables - there is also a food and agriculture industry with a really quite strong focus on R&D. So our export base is growing geographically and in terms of businesses and industries, which means that Spain has a robust, balanced export model.

Overcoming difficulties

Apart from financial aspects, are there any other hindrances for Spanish companies seeking to enter the international market?
Yes, language skills for instance. Spain has serious shortcomings in the area of foreign languages and that limits our export capabilities. Another factor is that Spain is not as well connected by air as other countries in Europe. This requires additional effort when it comes to exports. Lastly, the image people have of Spain is not at its best at the moment, and this does not help exports either.

What basic steps would any business have to take as part of its internationalisation strategy?
First of all, the willingness to be an international company and to be convinced that doing business overseas is important and good for the company. Next, you need a competitive product. And the third factor is an organisational structure that is consistent with an international outlook. In other words, going international is not simply about setting up an international department and that's it. Taking this step necessarily involves making far-reaching structural changes within the company.

Can that turn out to be quite complicated?
Indeed it can and not every company is prepared to take on the task. Some companies, even though they have the capacity to go international, do not even entertain the idea because it is not one of their owners' priorities. But this has been changing. Companies are becoming increasingly aware that this is not a matter of "do I fancy doing this". Rather, it is a question of "either I get out there, or I have no future".

Willingness to stay

Are more companies determined to remain in the overseas market, or will they return when things get better in the domestic market?
This current crisis is different. Previous crises were shorter and although domestic market fell rapidly, it used to recover immediately. That is why I believe the "exports are fine for now but I will ditch them ASAP" attitude makes no sense right now.
Spanish companies are changing their mentality. We have had six years of crisis now and many companies are aware that exporting

is not just something you do when there is a crisis in the domestic market. It is something you have to do on an ongoing basis.
The profile of our senior managers is changing too. More and more people who are becoming active in the international arena understand that it does not make much sense to leap into the overseas market and then head back home again. This crisis has many negative aspects, but also some positive ones, such as the change in the way many companies approach their businesses. Which is why in percentage terms, a good deal fewer companies will decide to dismantle their international operations when the crisis comes to an end.

Is the small and medium-sized industry repatriating any productive capacity to Spain, or is it staying overseas?
Some industries are repatriating a certain amount of productive capacity -call centres for instance- but the rest of them are not. Besides, internationalisation policies and policies designed to expand businesses' productive capacity overseas are compatible with those aiming to attract foreign capital to Spain.

What role does ICEX play in attracting foreign investment to Spain?
ICEX has taken over the state company "Invest in Spain", which is now one of our divisions. This integration makes good sense because certain aspects of internationalisation are closely linked to attracting overseas investment. This is very obvious in the car manufacturing industry but there are other examples.
This division is instrumental in implementing our highly proactive policy for capturing investment. On the one hand, we play a crucial role working horizontally to show that Spain is an attractive country for foreign investment, focusing on competitiveness indexes and so on. Basically, we do our best to ensure that Spain is seen in the best possible light in all the rankings. Then there are two departments exclusively dedicated to ensuring that specific projects come to Spain. And some of them do. They may not cause a great stir, but they are coming.

What volume of investment has ICEX been able to capture?
That figure is hard to pin down. ICEX has been involved in a significant amount of the investment that comes to Spain, but I would not go so far as to say that it has been thanks to ICEX. Foreign investment in Spain has recovered considerably. Last year we captured more than 20 billion euros in investment, which is much more than what Germany, France, Italy and the United Kingdom achieved.

We have had six years of crisis now and many companies are aware that exporting is not just something you do when there is a crisis in the domestic market. It is something you have to do on an ongoing basis

ICEX, the one-stop shop

At the end of 2011 ICEX became a state enterprise, with new governing bodies and new accounting and management procedures. But as far as its President is concerned, that is not the most relevant issue: "The most significant development is that ICEX is becoming the one-stop shop for internationalisation".

ICEX Spain Export and Investments, the company's new name, has assumed the Invest in Spain roles - the State company responsible for attracting investment to Spain. Proceedings are also under way to take over part of another body, *Expansión Exterior* and CECO in its entirety, a foundation dedicated to foreign trade training activities, both of which operate under the Office of the Secretary of State for Trade.

ICEX will therefore perform the duties of the bodies it is absorbing: promoting exports and investment by Spanish companies overseas, training professionals in foreign trade, and attracting and promoting foreign investment in Spain.

The "one-stop shop" will be open throughout Spain with branches in every province, and it will also include organisations that are active in other areas, such as COFIDES, a public-private company dedicated to international venture capital; CESCE, involved in export credit Insurance; the state lending institute ICO, and so on. This is very significant as it provides businesses with a single point of contact where they can obtain all the information and advice they need on internationalisation services, irrespective of who actually provides them.

interview with

Nikos Antimissaris

Managing Director MAPFRE ASISTENCIA
Madrid – Spain

MAPFRE ASISTENCIA's Contact center in China

Greek by birth, Nikos Antimissaris studied Business Administration at Liege University in Belgium. His relationship with Spain began in the last year of his degree programme, between 1992 and 1993, which he spent at the University of Valladolid as an Erasmus student. He completed his formal training with an MBA from IE Business School in Madrid. In addition to Greek, he is fluent in English, French and Spanish.

His professional career started in 1994 in his country of origin at MAPFRE ASISTENCIA, where he was general manager of the Greece business unit. In 2001 he was transferred to central services in Madrid to helm business in the Europe and Middle East region. In 2004 he was promoted to deputy director general of the company and in 2006 he was appointed managing director of MAPFRE ASISTENCIA.

"MAPFRE ASISTENCIA offers its partners in the insurance industry a comprehensive solution that includes not only risk underwriting (through reinsurance) but also the entire operational infrastructure for claim processing and service provision."

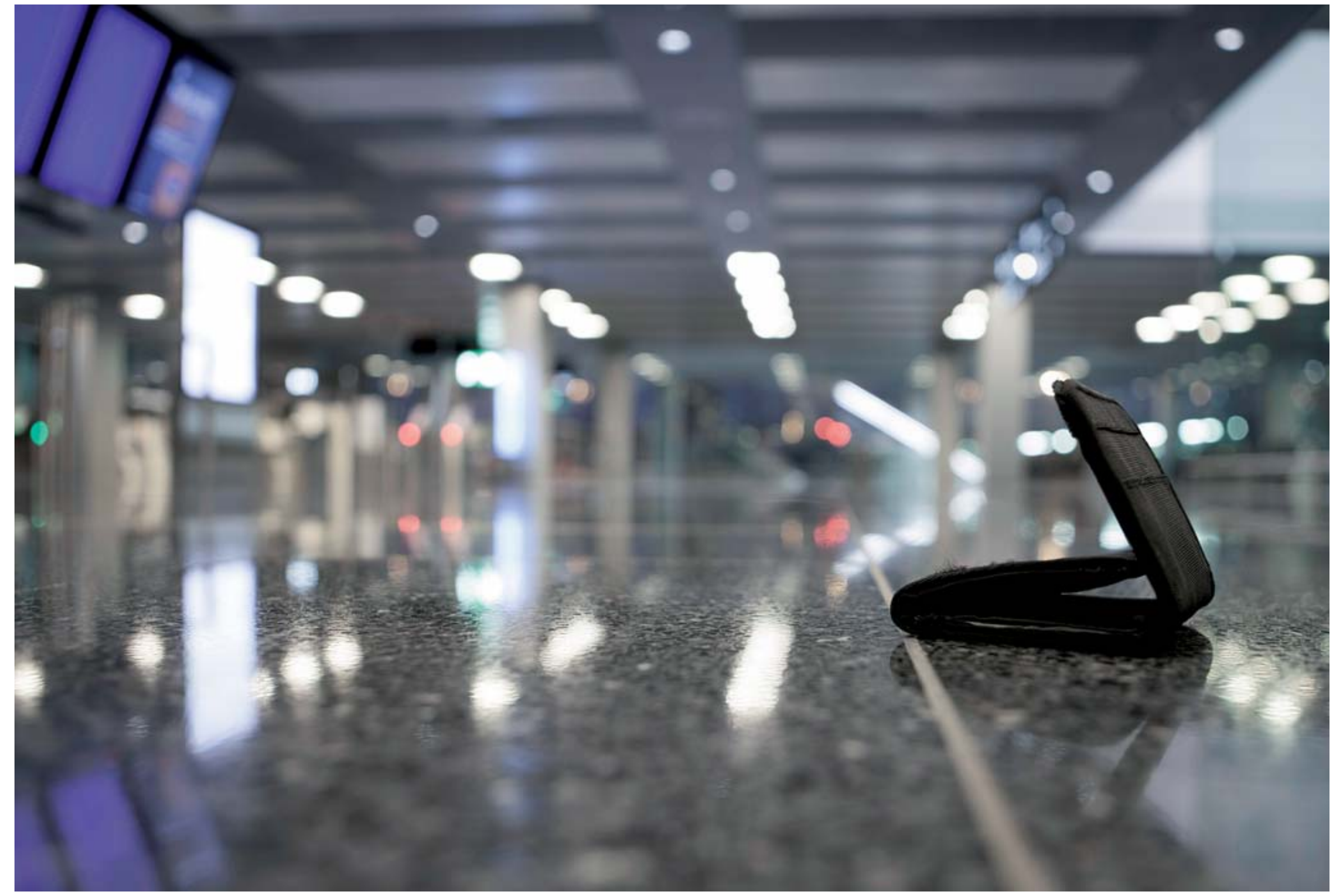
Nikos Antimissaris always uses the plural "we" and "us" because he feels that MAPFRE ASISTENCIA's 1.1 billion euro revenues in 2013 are an achievement that must be credited to its entire workforce of 6,000 employees across 45 different countries. The company faces the globalised future with innovation and new technologies as instrumental allies in offering its partners and customers in the assistance business outstanding value and the best solution for each individual case.

"Your life. Our world." This is the slogan MAPFRE ASISTENCIA has chosen to vocalise its commitment to service. The company was created in 1990. How has its business approach evolved since then?

Actually, the notion of "Assistance" first came into being at MAPFRE in 1986 when an Assistance department was created at MAPFRE MUTUALIDAD, which was the group affiliate specialising in Motor insurance at the time. Initially, its purpose was to cater for MAPFRE's internal needs. At that time, MAPFRE was already the largest Motor insurer in Spain and the first to include Roadside Assistance cover as an added-value service in all policies in this branch.

In 1990, the MAPFRE group decided to make Assistance an international business in itself, with its own structure and a dedicated management team. It was then that MAPFRE ASISTENCIA Compañía Internacional de Seguros y Reaseguros S.A. was established in Spain as a single-product company focusing on Travel Assistance, which encompassed Roadside Assistance and Medical Assistance. The operation in Portugal was quickly set up, as well as subsidiaries in several Latin American countries.
At the same time, following its clear commitment to service and spirit of innovation, MAPFRE ASISTENCIA embarked on a process of rapid diversification, introducing new products and services. Thanks to all this, we

Medical center in Dominican Republic



InsureandGo

An acquisition of high strategic significance for MAPFRE ASISTENCIA. InsureandGo is the leading online supplier of travel insurance in the UK, the world's largest market for this class of cover. It sells some 2.5 million travel insurance policies a year on its website.

Thanks to this acquisition, carried out in 2010, MAPFRE ASISTENCIA gained profound insight into online insurance distribution, which we now make available to our partners across the world. Since taking over InsureandGo, we have set in motion a number of other online operations that already sell a variety of insurance categories in more than ten countries.

http://www.insureandgo.com/

When a policyholder asks for a specific service, we may just see it as our daily job, but to them it may be a cause of stress and anxiety. The best way to respond is to put ourselves in their shoes at difficult times

now have a company we might call multi-product and multi-service, which is physically present in all five continents. Our day-to-day business consists in providing solutions for a wide range of customer needs. We are fully aware that when a policyholder asks for a specific service, to us it may be no more than part of our everyday work, but to them it may be a cause of stress and anxiety. The best way to respond is to put ourselves in their shoes at difficult times. Which explains our slogan, "Your Life. Our World".

At the end of 2012, MAPFRE ASISTENCIA was already the fourth largest Assistance insurance company by total revenues. Are there any other key figures that define the company?

We expect revenues for 2013 to be in the order of EUR 1.1 billion, up by more than 25% on the previous year. If this is achieved, we will climb to third position in the world ranking, as our direct competitors have clearly slower growth rates. In addition to this, we have generated outstanding returns, with ROE in excess of 15% and a combined ratio of 93.8%.

We have offices in 45 countries and operations in more than 80 markets, all with a workforce of about 6,000.

Taking a business model international -or rather, global- requires not only language skills but also a deep understanding of each target country, its society and peculiarities, in order to adapt successfully. Could you outline the strategy you use to launch operations in new countries?

In the first decade of MAPFRE ASISTENCIA's development, international expansion followed a strict policy of organic growth, creating start-ups mainly in less developed markets and often establishing joint ventures with local insurance companies. Starting in the year 2000, we have been combining organic growth with some acquisitions, primarily in Europe and North America. Currently, we are still exploring new markets and we are open to whatever possibilities and opportunities may emerge.

Assistance is a very broad field. Could you explain which areas you cover?

Assistance, broadly speaking, is still the company's core business. However, over the last few years, following a clear policy of diversification, MAPFRE ASISTENCIA has also been pursuing a second line of business, which we internally call "Special Risks". This includes some niche insurance products, such as Warranties, Warranty Extensions for all kinds of equipment, Mechanical Breakdown insurance, GAP insurance, Payment Protection insurance and Income Protection insurance for accidents, sickness and unemployment, credit card and affinity card insurance and a host of other options.
In terms of marketing, Assistance products and services are sold under the brand MAPFRE ASSISTANCE, whereas Special Risks products and services are sold under the brand MAPFRE WARRANTY.
We currently work with more than 1,600 corporate partners across the world. Approximately half of them are insurance firms, and they are generally the leading players in each of the markets where we operate. Our partners have access to a wide range of products and services which they can offer to their personal insurance customers, i.e. Motor, Home, Medical and Life insurance. In addition to this, we also look to broaden the scope of our partnership by offering products specifically designed for other sectors, such as the automotive industry, the financial industry (retail banks and consumer lenders), the tourist industry, large retailers, utilities and so on.

If insurance companies currently make up the bulk of your customers, what added value can MAPFRE ASISTENCIA offer them?

MAPFRE ASISTENCIA offers its partners in the insurance business a comprehensive solution that includes not only risk underwriting (through reinsurance) but also the entire operational infrastructure for claim processing and service provision. Our overriding aim is to help our partners by finding ways in which they can benefit. These include direct benefits, derived from new sources of income or cost reduction (through claim processing support services, fraud reduction, etc.), and/or indirect benefits which result from enhanced customer loyalty and differentiation, for instance.
Our partners therefore receive the multiple advantages of selling our products and drawing

MAPFRE ASISTENCIA offers its partners in the insurance business a comprehensive solution that includes not only risk underwriting (through reinsurance) but also the entire operational infrastructure for claim processing and service provision

"Think globally, act locally"

Like most large multinational companies, MAPFRE ASISTENCIA has a pyramid organisational structure, with central services, six regional divisions and 45 business units.

In addition to the usual functions of a holding company, the chief role of the company's **Central Services** is to set its core strategy and ensure it is properly implemented. Central services also establish policies and procedures, create and develop technologies, design new products and services, provide training, disseminate knowledge and lead major corporate projects such as strategic partnerships and acquisitions. Central services are not directly involved in running the day-to-day business of the company - they focus on the medium and long term.

Regional Divisions constitute the link between central services and business units. Their main task is to oversee operations and ensure business units have the support they need. They are an extension of central services at the regional and local level, and at the same time they liaise business units with central services, which allows the latter to understand the needs of the former and to detect business opportunities. Regional divisions have a high degree of autonomy and they are directly accountable for the financial performance of their respective regions. The six regional divisions are: a) North Europe, b) South Europe, Middle East and Africa, c) UK, d) Latin America, e) North America, and f) Asia-Pacific.

Lastly, the company's 45 **Business Units** are responsible for business development in the different markets and day-to-day operational management. They also provide insurance services to policyholders.

This structure has enabled the company to provide the necessary support to medium- and long-term projects without losing its grip on everyday business. It has also made the organisation sufficiently flexible to act quickly and gain the local insight needed to grow in widely different markets.

At MAPFRE ASISTENCIA we have fully internalised the idea of *"think globally, act locally"*.

Basically, we support insurance companies by offering them new ways to obtain substantial competitive advantages

on MAPFRE ASISTENCIA's international expertise without having to take any risks or make any investment in the necessary infrastructure. Basically, we support insurance companies by offering them new ways to obtain substantial competitive advantages.

What specific products and services are these?
We have two kinds of products: a) products offered to customers as a way to add value to traditional products, for instance Roadside Assistance as an additional cover to Motor insurance, Home Assistance insurance as part of Home insurance or International, Medical Assistance as part of Health insurance; and b) stand-alone products, such as Travel insurance, Loan Payment Protection insurance, Extended Warranty insurance for new motor vehicles, Mechanical Breakdown insurance for second-hand vehicles and Credit Card Protection insurance.
The most innovative products recently introduced include Mechanical Breakdown insurance as an added value to Car insurance, Smartphone and tablet insurance, and Cycling Assistance.

From the way you have described it, you build a relationship with your customers until they become partners. By then you are thoroughly familiar with each other's business models. Does MAPFRE ASISTENCIA receive feedback from its customers in the form of requests to change certain products or even to provide customised services?
Every time MAPFRE ASISTENCIA begins operations in a new market, it provides its know-how and the experience it has gained over 25 years in a wide range of countries in all five continents. This is no doubt a high-value intangible asset, which we make available to our partners. But we are also conscious that every market has its own peculiarities, which is why we always try to be flexible enough to offer a fitting solution. One skill we have developed over the years is the ability to listen to our customers, and it has been the key to our success in widely different countries in terms of culture, size, level of development and consumer behaviour.

Business travel and tourism are now much more common than they were 20 years ago. How does MAPFRE ASISTENCIA help to mitigate the problems inherent to travel, which can sometimes be very serious and involve severe emotional strain?
Our products and services for travellers aim to help them at times of difficulty whichever the means of transport they use, their place of destination or the reason for travelling. Some cases are relatively simple, like airlines lost luggage, cars starting failure due to battery problems or a doctor visiting a sick traveller in a hotel. But there are some seriously complex cases particularly after accidents, where a policyholder has to be hospitalised or transferred in an air ambulance. Sometimes we have to deal with very distressing situations, like having to repatriate a dead body after an accident or an illness suffered during travel.
It is true that the way people travel has

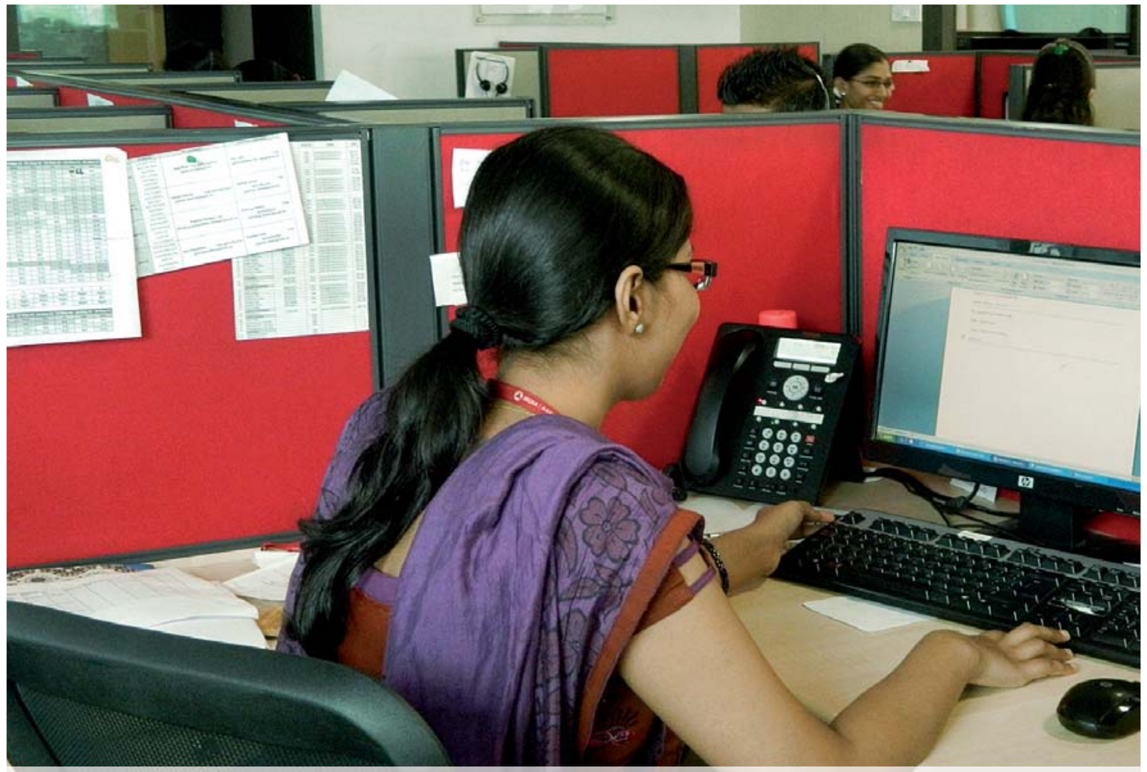
Generally speaking, banks and other lenders, which used to be our customers, have become key distributors for our insurance products

changed, particularly since low-cost airlines first appeared. This has required us to adapt our products and find new channels for distribution. But the problems travellers face have not changed that much - they are the same as ten or twenty years ago.

The financial industry has become a major ally for insurance companies. What schemes have you come up with to market your products and which of them have proved most successful?
Twenty years ago, our products for the financial industry were only Travel Assistance insurance for credit card holders. Today it is an entirely different story. We have a full array of products and services specifically designed to enhance the range banks themselves offer: Roadside Assistance and Mechanical Warranty as part of vehicle purchase loans, Home Assistance to supplement mortgage loans, extended warranties for home appliances marketed together with consumer loans, for example.
Generally speaking, banks and other lenders, which used to be our customers, have become key distributors for our insurance products.

With operations active 24/7 on a global scale, MAPFRE ASISTENCIA relies on the most robust state-of-the-art technology to manage its information and communications. How are these technologies structured?
All the software we use has been developed in-house to fit our specific needs. In terms of infrastructure, all our operations have remote backup from two data processing centres in Madrid and Miami, which in turn give each other backup to ensure continuity of operations in the event of any contingency. Our contact centres operate 24/7 using cutting-edge technology that enables them to back one another up during activity peaks and situations of *force majeure*.

It certainly seems like the initial plan is close to its crowning, but where will MAPFRE ASISTENCIA be heading towards in the next ten years?
It is hard to tell what may happen in ten years' time in such a fast-changing world. However, I trust that MAPFRE ASISTENCIA will have by then exceeded the EUR 2 billion revenue mark, will continue to offer outstanding returns to shareholders and will have succeeded in combining growth with the right measure of diversification between its two businesses. It will also have attained a good regional balance, with a much stronger presence in North America and Asia than is currently the case.



MAPFRE ASISTENCIA's Contact center in India

agenda

COURSE ORGANISED BY FUNDACIÓN MAPFRE

Course	Method	Date
Reinsurance	E-learning	TBA

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