



GLOBAL RISK MEETING

ACTUARIAL PROFESSION AND RISK MANAGEMENT

21 September 2016

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1. Phillip Shier, Actuarial Association of Europe (AAE).
2. Rubén Espada, Prepersa, GRUPO CATALANA OCCIDENTE.
3. Sonia Calzada, ZURICH.
4. Sara Sánchez, ALLIANZ.
5. Josep Puy, DATA RISC.
6. Kevin Costello, WILLIS TOWERS WATSON.
7. Sara Muñoz, MARSH.
8. Víctor Luis, VIDACAIXA.
9. Iñigo Liberal, BBVA SEGUROS.
10. Felipe Gómez, WILLIS TOWERS WATSON.
11. Ron Hersmis, CERA GLOBAL ASSOCIATION.

Actuarial Association of Europe



The Actuarial Association of Europe (AAE) was established in 1978, originally as the Groupe Consultatif Actuariel Européen, to represent actuarial associations in Europe.

Its purpose is to provide advice and opinions to the various organisations of the European Union – the Commission, the Council of Ministers, the European Parliament, EIOPA and their various committees – on actuarial issues in European legislation.

The AAE currently has 36 member associations in 35 European countries, representing over 21,500 actuaries.

Advice and comments provided by the AAE on behalf of the European actuarial profession are totally independent of industry interests.



Philip Shier

AAE : who we are



Kristoffer Bork
vice Chair

Philip Shier
Chair

Michael Renz
past Chair

Standards, Freedoms and Professionalism Committee

David Martin

Insurance Committee

Esko Kivisaari

Pensions Committee

Falco Valkenburg

Investment and Financial Risk Committee

Christoph Krischanitz

Education Committee

Mark Stocker

Karel Goossens
Honorary Treasurer

www.actuary.eu

Ad Kok
Chief Executive

The vision of the AAE is for the actuarial profession in Europe to be, and to be recognised as being, the leading quantitative professional business advisers in financial services, in risk management and in the financing of social protection, contributing to the well-being of society, with European institutions recognising the valuable role that the AAE plays as a leading adviser on actuarial issues.

Mission Statement



- To enhance the role of the AAE, on behalf of the actuarial profession in Europe, as an objective, independent, professional, leading adviser, contributor and spokesperson to European institutions and stakeholders on all matters of actuarial relevance, widely recognised and respected in this role, in pursuit of the public interest.
- To create added value for the actuarial profession in Europe and to provide support by sharing, encouraging, facilitating and resourcing in order to
 - enhance the quality of actuarial work to the benefit of the public and the users of actuarial advice
 - promote professionalism
 - develop model standards and to encourage member associations to adopt
 - encourage advancement of actuarial education, research, science and practice
 - promote the role of the actuarial profession in protecting the consumer
 - promote a wide ranging role for actuaries as business advisers and influencers as well as technical experts
 - provide opportunities for networking and encourage sharing of best practice across Europe
 - respect the principle of subsidiarity

Strategic objectives



- 1. Establish/maintain/strengthen relationships with key European institutions**
- 2. External communication - raise the profile and reputation of actuaries**
- 3. Support and add value to member associations**
- 4. Education and research**
- 5. Promote development and recognition of actuarial profession**

Stakeholder contacts



- Insurance and Reinsurance Stakeholder Group
- Occupational Pensions Stakeholder Group
- 30 members in each, representing various interests and EU Member States
- AAE puts forward names for inclusion in “representatives of professional associations category” in each Group
- Current Groups (started 2016)
 - IRSG
 - Annette Olesen (Denmark)
 - Tony O’Riordan (Ireland)
 - OPSG
 - Falco Valkenburg (Netherlands)
 - Paul Kelly (UK)

AAE: members are fit and proper



- The members of the actuarial professional organisations are fit
 - Education – syllabus
 - Continuing Professional Development
 - European Standards of Actuarial Practice (ESAPs)
 - ESAPs are model standards to be adopted by standard setters
 - ESAP1 : General Actuarial Practice (adopted 3 October 2014)
 - ESAP2 : Actuarial Function under Directive 2009/138/EC (adopted 31 January 2016)
 - ESAP3 : Actuarial practice in relation to the ORSA process under Solvency II (Exposure Draft)
 - Some other ESAPs in the pipeline including “Independent review by actuaries in the context of Solvency II”
 - International Standards of Actuarial Practice also apply
- The members of the actuarial professional organisations are proper
 - Ethical Code of Conduct

- Actuarial Standards
 - ESAP 3 (preparing an ORSA)
 - Contribution of Actuarial Function to Risk Management System (under discussion)
 - Independent review by actuary of another actuary's work (under discussion)
- Code of Conduct
 - Consultation Exposure draft for a revised Code of Conduct (under discussion)
- Roles of Actuaries / Actuarial Function
 - Survey of actuarial roles under Solvency II
- Accreditation of member associations
 - In progress: Accreditation arrangements with the IAA to avoid duplication of effort
- Strategic Review – report of Task Force
 - Strategic Objectives
 - Governance

- European Agenda
 - European Commission work plan to deliver jobs, growth and investment
 - Economic and Monetary Union
 - Recovery and resolution in insurance
 - Internal Market Strategy for Europe in relation to regulated professions
 - Big data and consumer segmentation
 - EIOPA work program
- Solvency II review
- Low interest environment
- Insurance stress tests
- Insurance Block Exemption Regulation

- Review of IORP Directive
- EIOPA's further work on Solvency for Pensions
- Consultation on a Pan European Pensions
- Social Security Sub-Committee (SSSC)
 - Tracking services
 - Sustainability and Adequacy of Pensions
 - Task Force on Adequacy of Pensions
 - Task Force on Mortality Tables and Expectations of Life

- Contacts with ECB, EBA
- Systemic Risk and a role for a systemic risk actuary
- Market Consistency web portal
- Risk management Qualification
- Definition of a Risk Manager
- Financial Stability
- Review Terms of Reference

- Assessment procedure
- Core syllabus
- CPD strategy
- ECA2016

- Regular business of Assembly
 - Reports from Chair, Chief Executive and Committee Chairs
 - Financial Statements/Budgets
 - Election of new Officers
- Presentation by IAA
- Discussion of Strategy Review Task Force report
- Hand over to incoming Chair

Presidents' Meeting



- Third Annual Meeting held in Brussels on 1 September 2016
- Attended by 19 Presidents or their nominated delegates
- Very useful discussion on strategic review
- Also opportunities for informal networking

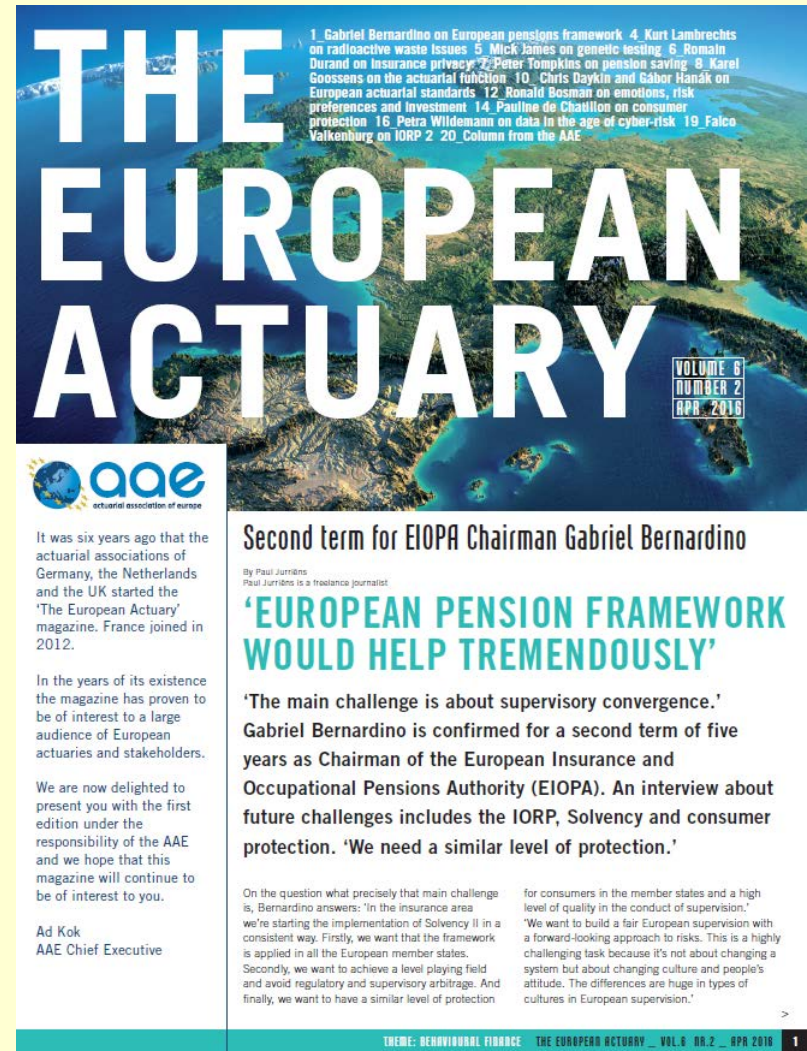
- On the independent review of Solvency II Reports
- Key issues for setting up national tracking services in six EU countries
- Survey of Decumulation Regimes
- Clarity before Solvency
- Revision IORP Directive
- IBER
- The Ageing Report of the EU



The European Actuary

- Started by France, Germany, the Netherlands and UK
- From 2016 under the AAE flag
- Editorial Board
- 2-4 issues per annum
- Electronic copy

<http://www.the-european-actuary.org>



THE EUROPEAN ACTUARY

VOLUME 6
NUMBER 2
APR 2018

1. Gabriel Bernardino on European pensions framework 4. Kurt Lambrechts on radioactive waste issues 5. Mick James on genetic testing 6. Romain Durand on insurance privacy 7. Peter Tompkins on pension saving 8. Karel Goossens on the actuarial function 10. Chris Daykin and Gábor Hanák on European actuarial standards 12. Ronald Bosman on emotions, risk preferences and investment 14. Pauline de Chailion on consumer protection 16. Petra Wildemann on data in the age of cyber-risk 19. Falco Valkenburg on IORP 20. Column from the AAE

Second term for EIOPA Chairman Gabriel Bernardino

By Paul Jurnéns
Paul Jurnéns is a freelance journalist.

'EUROPEAN PENSION FRAMEWORK WOULD HELP TREMENDOUSLY'

'The main challenge is about supervisory convergence.'
Gabriel Bernardino is confirmed for a second term of five years as Chairman of the European Insurance and Occupational Pensions Authority (EIOPA). An interview about future challenges includes the IORP, Solvency and consumer protection. **'We need a similar level of protection.'**

On the question what precisely that main challenge is, Bernardino answers: 'In the insurance area we're starting the implementation of Solvency II in a consistent way. Firstly, we want that the framework is applied in all the European member states. Secondly, we want to achieve a level playing field and avoid regulatory and supervisory arbitrage. And finally, we want to have a similar level of protection for consumers in the member states and a high level of quality in the conduct of supervision.'

THEME: BEHAVIOURAL FINANCE THE EUROPEAN ACTUARY VOL. 6 NO. 2 APR 2018



BRUSSELS
APRIL 21/22
2016

THE ACTUARIAL PROFESSION SPREADING ITS WINGS

NEW CHALLENGES, NEW OPPORTUNITIES



eca 2nd european congress of actuaries



AAE
Actuarial House
1, Place du Samedi
Brussels
Belgium

www.actuary.eu

Thank you!

Fire Risk Assessment

Factories & Warehouses

Barcelona, 21st September 2016
Rubén Espada Herranz





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- 02 Regulations
- 03 Fire Risk Assessment
 - 3.1 Identifying fire hazards
 - 3.2 Fire prevention measures
 - 3.3 Fire protection measures
 - 3.3.1 Passive fire protection
 - 3.3.2 Active fire protection
- 04 Fire prevention plan

Introduction

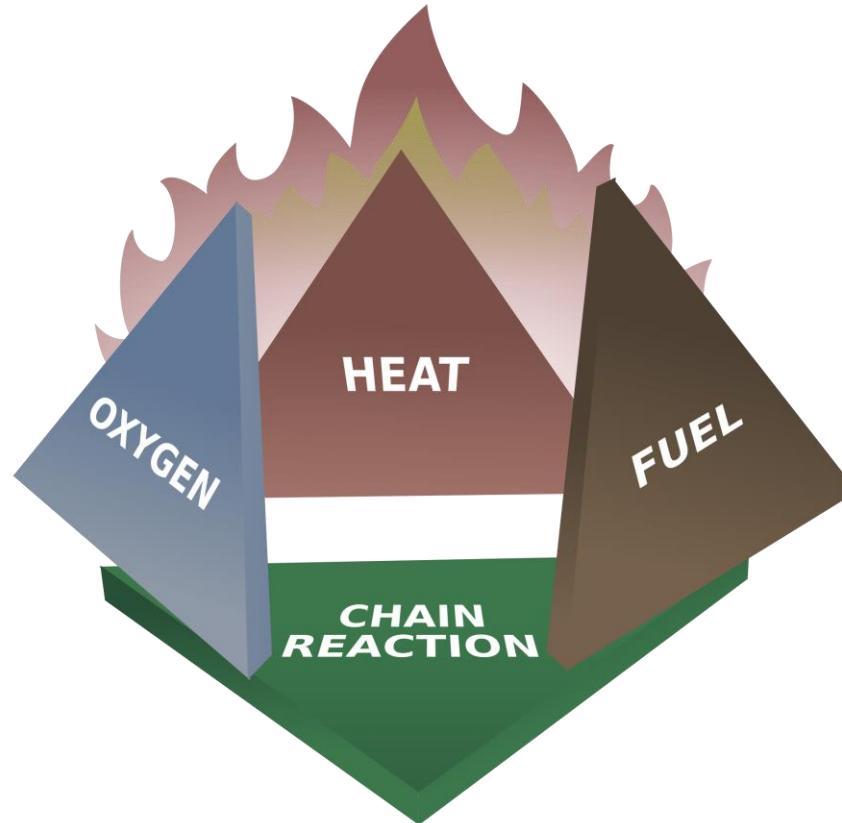


Definition of Fire

“Combustion and scorching **with flame** capable of spreading to an object or objects that **were not meant to be burned** in the place and at the time in which this occurs”.



Fire Tetrahedron



To stop a combustion reaction, one of the four elements of the tetrahedron has to be removed.

Regulations



Fire Safety Regulations in Spain

- **RIPCI (RD. 1942/93 y OM 16/4/98)**
Fire Safety Regulations
- **RSCIEI (RD 2267/04)**
Fire Safety Regulations in Industrial Establishments
- **CTE (RD/314/2006)**
Technical Building Code
- **REGIONAL REGULATIONS AND LOCAL ACTS**
- **INSTALLATION STANDARDS**
UNE: Mandatory
T.R. CEPREVEN, NFPA, FM,...: Not mandatory

Fire Risk Assessment



Fire Risk

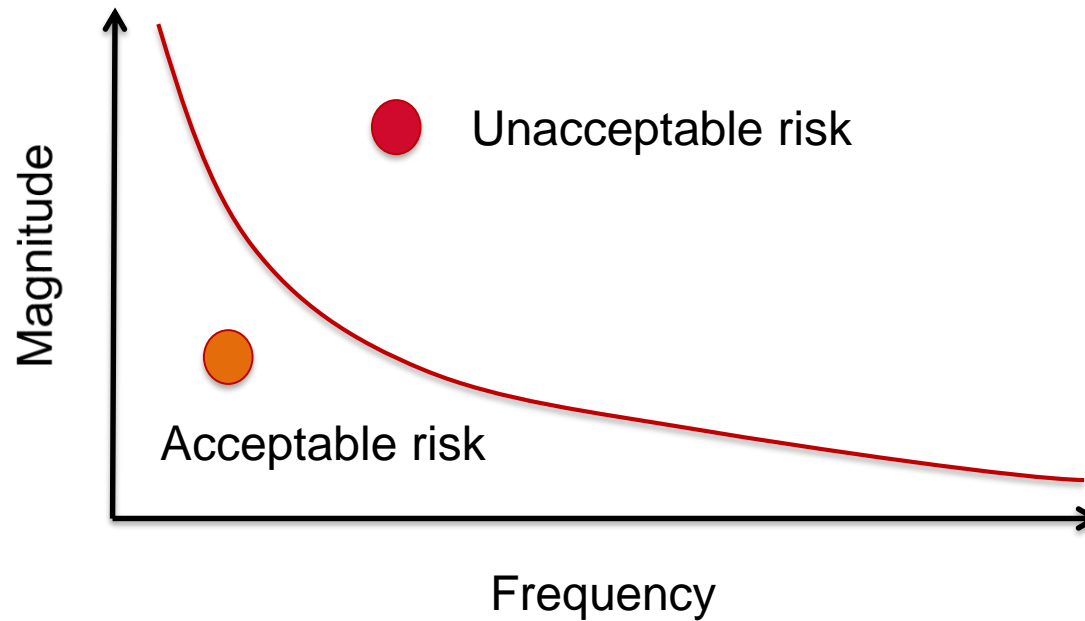
Fire Risk

=

Expected Frequency

X

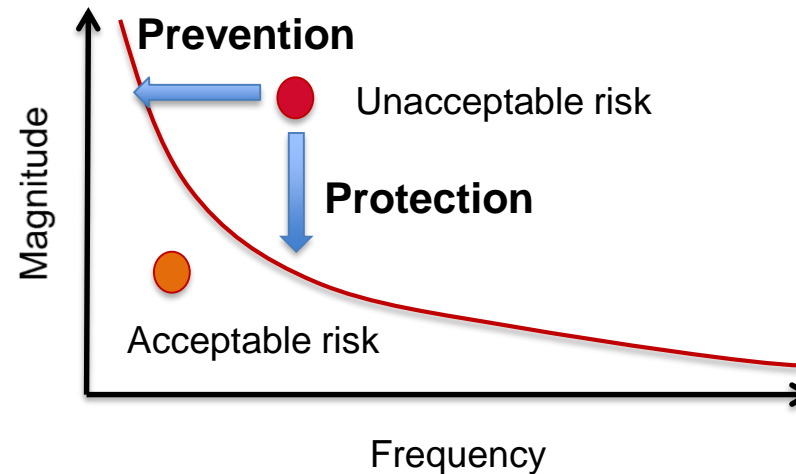
Magnitude of
Consequences



Objective

The objective of a **Fire Risk Assessment** is to transform an *unacceptable risk* into an *acceptable risk*.

- Identifying fire hazards and people at risk and removing or reducing the risk of those hazards.
- Determining what fire safety measures and managing policies are necessary, in order to reduce the probability of a fire starting, ensure that all occupants are alerted and can leave in case of fire and limit the effects if a fire occurs.



Identifying Fire Hazards

Most common fire hazards

- Construction: Build surface area, structure, walls, ceiling, stair corridors, fire sectioning.
- Industrial process: Kind of process (physical, chemical), workflow, machinery.
 - Flame or sparks from a work process such as welding, cutting or grinding.
 - Sources of frictional heat.
 - Electrostatic discharges.
 - Ovens, kilns, boilers, heaters, compressors, etc.
 - Battery charging area
- Poor electrical installation: overloads, heating from bunched cables, damaged cables.
- Goods and materials: Physical and chemical properties, storage, occupancy, quantity, flammability. Combustible materials near heat focus.
- Deficient housekeeping.
- Lack of personal training and Emergency Plan.



Identifying Fire Hazards



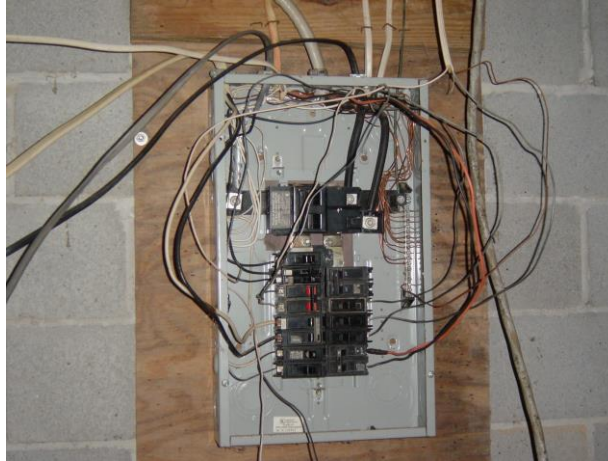
Metallic structure without protection. Asbestos cement roof covered with polyurethane. Storage without order, arriving next to the roof

Identifying Fire Hazards



Sandwich panel with combustible insulation (PUR)

Identifying Fire Hazards



Poor electrical installation



Short circuit with cable fusion

Identifying Fire Hazards



Forklift battery chargers on combustibile sandwich panel

Identifying Fire Hazards



Storage deficiencies. Combustible materials near heat focus (overhead light)

Identifying Fire Hazards



Machinery – A loom after a fire loss. The loom engine was the fire origin

Fire prevention measures

- Self-inspections: Regular visual inspections made by the company staff. All deficiencies detected must be solved as soon as possible.
- Cutting and welding permits: These activities are ones of the most common causes of fires in warehouses and refrigeration plants.
- Battery charge: It must be done in ventilated spaces free of combustible materials (min 2 m).
- Housekeeping: Keep clean all installations, respect storage height and aisles, proper waste management.
- Maintenance: Fire protection systems, electrical installations, machinery, buildings, etc. It is very useful to do regularly thermography in order to detect hot spots.
- Emergency Plan: Organize and instruct Intervention Teams. Make regular practices and fire drills.

Fire protection measures

- **Passive Fire Protection (PFP):** Is a form of fire safety provision that remains inert during normal conditions but becomes active in a fire situation. The most common are the materials designed to avoid a quick fire spread and to increase the stability of a constructive element when is affected by fire.
- **Active Fire Protection (AFP):** Items or systems that require a certain amount of motion and response in order to work. The most common are extinguishers.

Active and Passive Fire Protections must be inspected and tested regularly by the own factory staff. As well, a Maintenance Contract with an accredited company is necessary in order to guarantee a right response in case of fire.

Passive Fire Protections (PFP)

- Enclosures, walls and ceilings: Concrete or sandwich panel with non combustible insulation (mineral wool).
- Concrete structure or steel structure with vermiculite or perlite mortar.
- Fire doors: They must be closed in case of fire. They can be connected with the fire alarm to control its closure.
- Evacuation routes and signals
- Fire clearances between buildings or combustible materials.

The objective is to confine the fire and smoke inside the fire sector and guarantee the structure stability during the building evacuation and the firefighters intervention.

Passive Fire Protections (PFP)



Wedged open fire doors

Electromagnet



Self-closing fire door

Active Fire Protections (AFP)

- **Extinguishers:** Water, foam, CO₂, ABC dry powder
- **Hose reels:** 25 mm or 45 mm hose diameter
- **Fire hydrants:** Dry and wet column
- **Sprinklers**
- **Fire water system:** Electrical and diesel pumps, water tank and conduits. It supplies water to the other fire protection systems in a certain pressure and flow conditions.
- **Fire detection and warning system:** Control panel, detectors, call points, sounders. It is important that the fire alarm is connected to an alarm monitoring company.
- **Heat and smoke vents:** Automatic opening windows and skylights.
- **Automatic fire curtain systems**
- **Automatic fire extinction installations:** CO₂, foam, nebulized water, water spray.

Active Fire Protections (AFP)



Extinguisher out of place without maintenance



Lack of extinguisher



Extinguisher blocked by waste

Active Fire Protections (AFP)

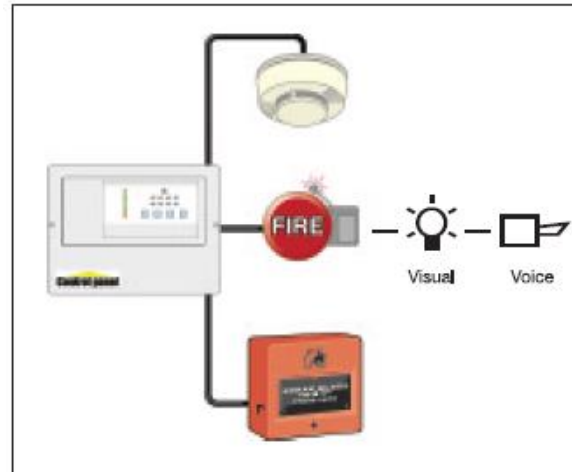


Hose reel without hose



Hose reel blocked by goods

Active Fire Protections (AFP)



Fire detection & warning system

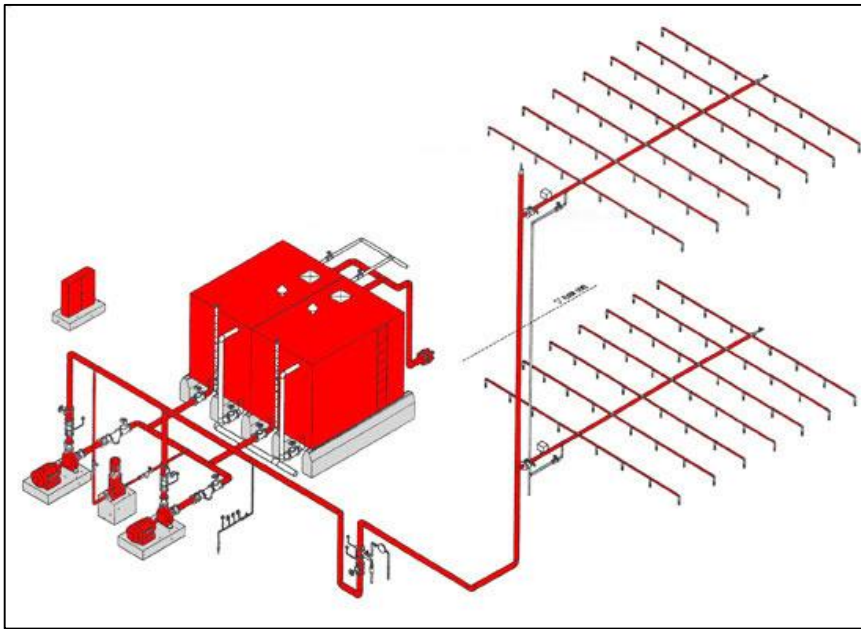


Control panel with errors

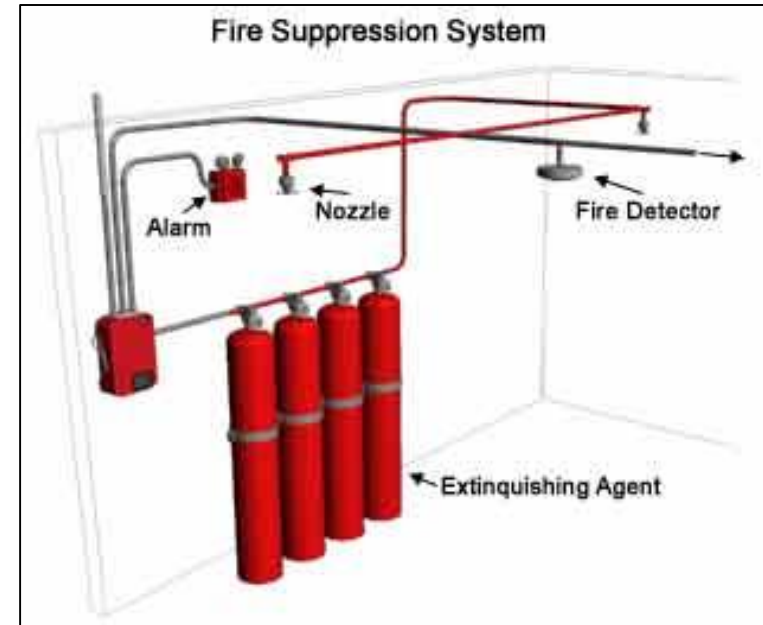


Damaged call point

Active Fire Protections (AFP)

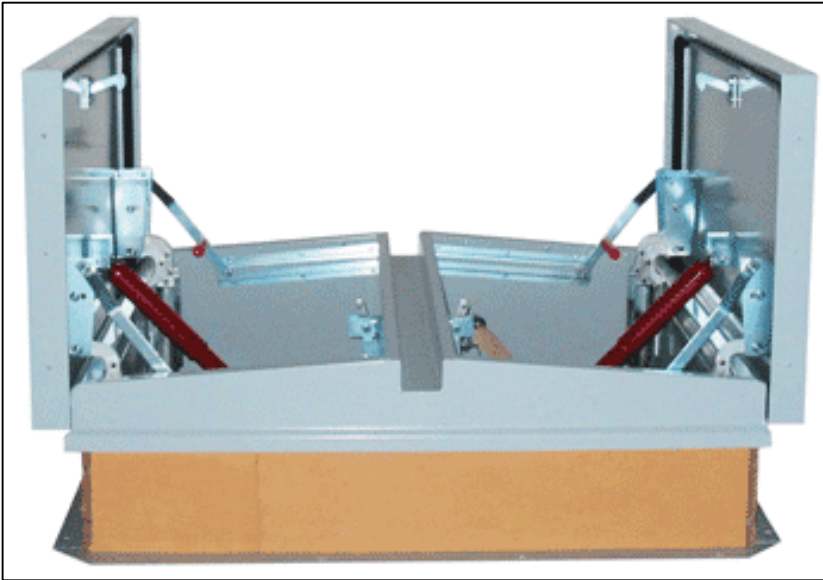


Automatic sprinkler system with fire water system



Automatic fire extinction installation

Active Fire Protections (AFP)



Heat & smoke vent



Automatic fire curtain

Fire Prevention Plan



PML & EML

PML (Probable Maximum Loss, %): Maximum result in terms of damage that occurs as a materialization of an accidental event in the worst possible scenario, that is, when all control and prevention systems do not work.

EML (Estimated Maximum Loss, %): Loss that can occur under ordinary operating conditions, use and protection against damage of the building, without taking into account extraordinary circumstances which could essentially change risk.

With the execution of necessary recommendations about fire prevention and protection, the percentages of PML and EML will decrease.

Fire prevention plan

- **Prevention measures for immediate implementation:** Related with improvements that can be done in short-term and will reduce considerably the risk of fire. E.g. extinguishers, hose reels, housekeeping, waste removal, battery chargers, etc.
- **Prevention necessary measures:** Changes to be done in medium-term and are also necessary for the fire security of the company. E.g. Emergency Plan and personal training, fire water system, fire alarm, sprinklers, construction changes, electrical installation.
- **Appropriate prevention measures:** Extra investments that will reduce the hazards and risk of fire.
- **General observations:** Other aspects not related with fire risk but interesting for the company management.

Thank you



EL RIESGO REPUTACIONAL: LA REPUTACIÓN TE MARCA

Sonia Calzada
Directora de Siniestros
Zurich Insurance PLC

Septiembre 2016



RIESGO REPUTACIONAL

Presión Externa sobre el entorno empresarial actual

1

Mira constantemente a las empresas

2

Uso de las nuevas tecnologías: Rapidez de información.

3

Grupos de interés organizados.

4

Se requiere transparencia, ética, responsabilidad social, honradez.

5

La marca es sensible

6

Crecimiento de los riesgos sobre las empresas

La pérdida de la reputación es un riesgo crítico para las empresas y también una oportunidad:



1. Ocupa un lugar prioritario en la organización.
2. 70% del valor de la empresa lo proporcionan los activos intangibles.
3. Es una amenaza importante, pero su gestión adecuada proporciona un gran valor a la empresa.
4. Requiere mayor implicación del consejo de administración ya que:
 1. Es difícil de gestionar
 2. Difícil de cuantificar
 3. Difícil de monitorizar
 4. No está regulado



Riesgo Reputacional: Que es? Y que provoca?

Es la posibilidad de tener pérdidas por una menor confianza en la integridad de la empresa que surge cuando el buen nombre de la empresa es afectada

Es la posibilidad de pérdida en que incurre una empresa por desprestigio, mala imagen, publicidad negativa, respecto a ella o sus prácticas que causa pérdida de clientes, menos ingresos o procesos

- **Perdida Clientes**
- **Perdida de empleados**
- **Perdida de patrocinadores**
- **Perdidas economicas**
- **Perdida de negocio, actual y futuro**
- **Deterioro de la marca**
- **Menor valor de la empresa**

- **Fraude con clientes**
- **Revelación de información de clientes**
- **Practicas corporativas**
- **Infidelidad de empleados**
- **Contaminación**
- **Financieros**

ASEGURABLE

Como identificar una crisis reputacional!

Plan de accion:



1. Definir bien el riesgo reputacional y las expectativas de los grupos de interés-
2. Desarrollar estrategias, tanto proactivas como reactivas, de gestión de riesgos.
3. Claros roles y responsabilidades
4. Seguimiento y monitorizacion
5. Asegurar las posibles perdidas
6. Seguir de cerca los cambios de tendencia en el mercado.

Como podemos ayudar:



- Coberturas a medida para dar cabida a las perdidas derivadas de este riesgo.
 - Normalmente, se incluyen en pólizas que gastrantizan otros riesgos (infidelidad de empleados, de D&O o medioambientales)
-
- Caso real:
 - Incendio de una gran empresa, en donde no podian atender pedidos, ni aceptar nuevos clientes..
 - Imagen perjudicada, su valor de mercado empezo a caer, inmerso en requerimientos..
 - El cliente activo la garantía para la gestión de la crisis y contó con profesionales expertos en estas situaciones, se desarrolló un plan de acción,
 - Comunicacion externa y tambien hacia los empleados.
 - Apoyo economico
 - Estas polizas ofrecen solvencia financiera y tranquilidad

CUESTION DE CONFIANZA!



CONFIANZA





Se tarda 20 años para construir una reputación y cinco minutos para arruinarla. Si piensas acerca de esto, harás las cosas de diferente manera.

-Warren Buffett

www.frasesgo.com

Riesgos Industriales

Allianz Seguros
Área de Empresas y Reaseguro 2016

Allianz 

Índice

Riesgos
Industriales

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4	Situación Actual	6

Objetivos

El análisis de los Riesgos Industriales es una metodología sistemática para el examen completo de los **riesgos asociados a una actividad industrial**

Se estima el nivel de **peligro potencial** de esta actividad **para las personas, el Medio Ambiente y los bienes materiales**, cuantificando así la magnitud del daño y la probabilidad de ocurrencia de un siniestro

La seguridad industrial tiene como objetivo prioritario **la identificación y el control de sucesos no deseados, centrándose en el funcionamiento seguro de las instalaciones**, englobado dentro del concepto “safety”



2 Riesgos Industriales

Allianz Empresas

Riesgos Industriales. Problemas por...

- Falta de mantenimiento y seguridad
- No inversión
- Sustitución de personal formado por otros inexpertos
- Falta de planificación



3 Interrupción del Negocio por Siniestro

Allianz Empresas

Interrupción del Negocio

- Subcontratación de procesos
- Falta de suministros
- Concentración de proveedores
- Dependencia de clientes



Actualidad

- Incertidumbre
- Voracidad
- Mercado inestable



Gracias por tu atención.

 [Volver al índice](#)

Allianz 



THE HUMAN FACTOR IN INFORMATION SYSTEMS

Internal Security

IS responsibility, is to protect the company from inside attacks and issues.

80% of company's security problems have internal origin.

Common causes are:

- Lack of staff training

- Insufficient corporate regulation

- Unproductive use of the Network

- Disgruntled employees

- Crossover Interests

- “Characteristic” employees:

 - “The family man”, “The IT Cowboy”,

 - The addict”

We have an employee issue ... now what?

It is very common that IT Crowd knows unofficially who is the responsible of an attack / issue but they cannot use this information, because they have achieved it doubtfully or it have a “boomerang effect” than can be returned against the Company.

It is better to remove the temptations before they become realities

The non-productive use of the network is the most widespread problem, which increases the risk of receiving viruses, spyware and other malicious code. A right URL policy, solves most cases.

...And remember: more security= more spending and more employees with bad feelings

Conclusion

Technology (firewall, antivirus, IDS, etc.) is necessary but insufficient.

Own staff is essential to the smooth running of information systems security.

Ultimately, the company has to rely on his IT crowd



Cyber Risk

BIG DATA ERA

Data is not only becoming more available but also more understandable.

Information is power. So a lot of information is a lot of power.

Big data offers the opportunity to measure what previously was unmeasurable.

While there is no doubt that the big data revolution has created substantial benefits to businesses and consumers, there are some risks that go along with using big data.



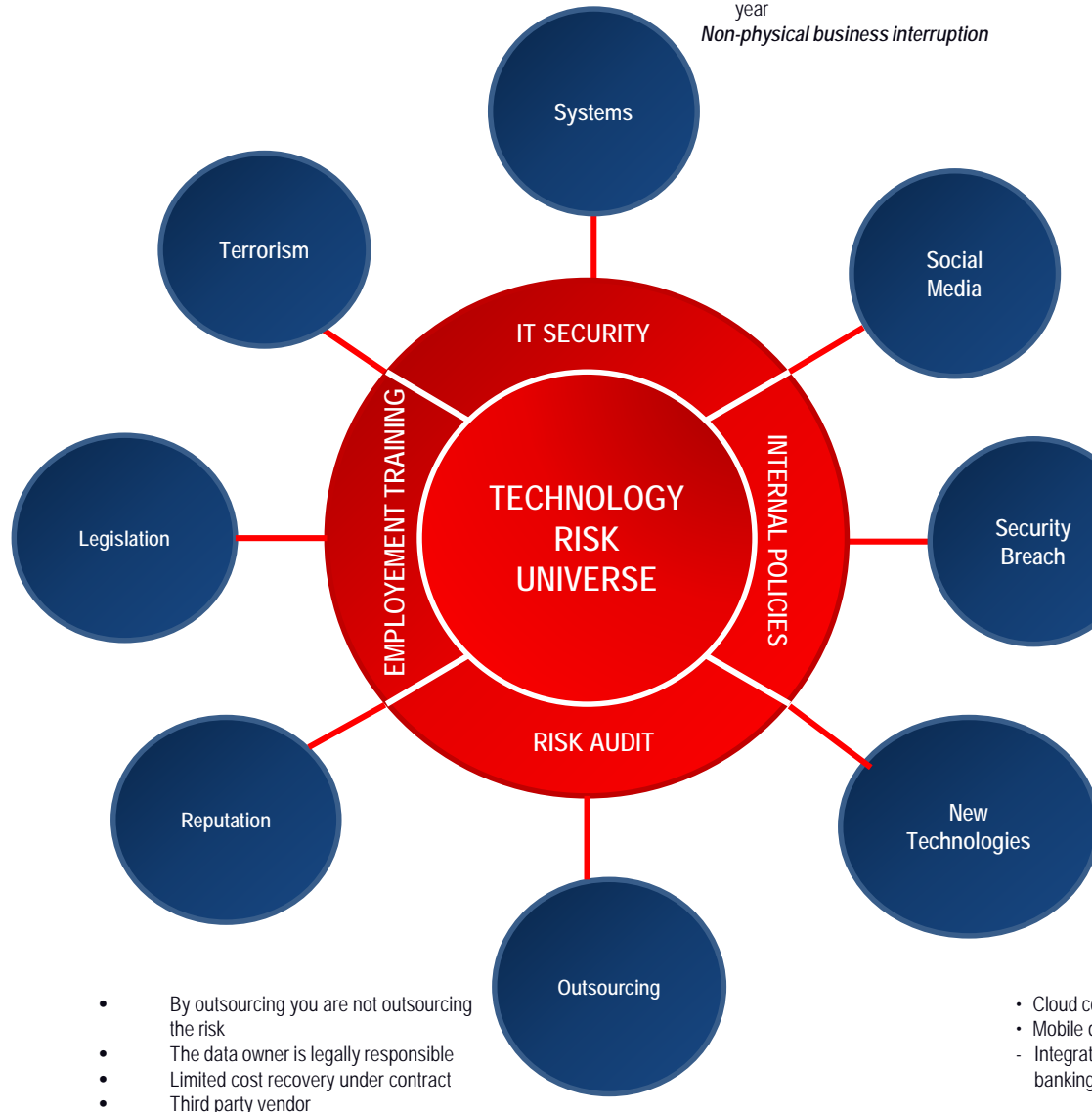
- Increase in Hacktivism
- All forms of life are going online including protesting.

Cyber Terrorism and Cyber Extortion Exposures

Online protesting
Denial of service attacks

- Information Commissioners Office (ICO)
 - European Commission
- Privacy Investigation and fines**
EU data protection directive – currently under review
USA – 46 states have privacy laws with notification requirements following a privacy breach
LatAm – Mexico has privacy laws with notification requirements following a breach, other countries are currently reviewing their Data Protection laws

- Technology failure and security breaches can lead to a loss of reputation
- Ultimately loss in revenue



- Failure of key networks can lead to significant financial loss
- Failures can be due Cyber-attack, software failure or human error
- Significant increase in malware year on year

Non-physical business interruption

- The use of social media has significantly increased in online defamation and copyright risks

Multimedia liability cover

Facebook, Twitter, YouTube, Flickr
Online advertising

- Increase in data breaches around the globe
- The most common cause of data breaches is hacking

Privacy liability and data breach costs
Employee data

- Customer data
 - Payment data
 - Online profiles
 - Mobile

- By outsourcing you are not outsourcing the risk
- The data owner is legally responsible
- Limited cost recovery under contract
- Third party vendor

- Cloud computing
- Mobile devices
- Integration of legacy systems and online banking

Privacy and Security Liability

Third Party Privacy liability.

Employee Privacy Liability.

Security Liability.

Privacy Regulation Defence, Awards and Fines

Privacy Regulatory Defence.

Privacy Regulatory Penalties, where insurable by law

Crisis Management and Reputational Expenses

Customer Care and Reputational Expenses: Costs to notify victims of privacy breaches and provide them with identity theft assistance, costs for PR related services to protect a brand related to a claim.

Multi-Media Liability

Multi-Media Indemnity: Damages and defence expenses as a result of a wrongful act in the course of publishing content in electronic or print media.

First Party Network Loss

Damage to Digital Assets.

Non-Physical Business Interruption and Extra Expense.

Cyber Extortion Threat.



Cyber Risk: Risk Transfer as a complementary measure of Management and Mitigation of Risk



Financial Risk & Specialties Division

Barcelona

Section 1

INTRODUCTION



Introduction

European 2015 Cyber Risk Survey Report



- The **45% firms consider** Cyber risk in their **Top10 risks**.
- Only **20%** really know their real **exposure to Cyber Risk**.
- **43% of firms haven't identified** 1 or more scenarios of Cyber.
- **68% haven't valued** the financial impact of a Cyber attack.
- Only **25%** of the firms have a **Response Plan for Cyber attacks**.
- **77%** of these entities **haven't studied their suppliers**.
- **33%** of the firms are in **the process of quoting** the transfer of Cyber risk.
- **57%** of the entities **don't have enough knowledge** on how to transfer Cyber risk.

Introduction

Relevant News Articles



Estimado cliente:

Se ha detectado una campaña fraudulenta simulando avisos de factura de Endesa que invitan a descargarse la factura. Una vez abierto el mail, si haces "clic", enlazas a una página con código malicioso ("virus") que bloquea los archivos personales de los usuarios de ordenadores.

Desde Endesa te recomendamos no hacer clic en los enlaces de ningún eMail de factura que no cumpla que el remitente sea "Endesa Online" gestiononline@endesaonline.com.

Estamos realizando las acciones pertinentes contra estos ataques informáticos.
Te mantendremos informado de cualquier cambio relevante sobre este asunto.

Gracias por confiar en nosotros.

Equipo de Atención al Cliente.

www.endesaclientes.com

BIZKAIA
BIZKAIA | MARGEN IZQUIERDA | MARGEN DERECHA | DURANGUESADO | COSTA | NERVIÓN IBAIZABAL | GIPUZKOA | LA RIOJA | MIRANDA

PUBLICIDAD

Empresas vizcaínas pierden una media de 60.000 euros por cada ciberataque

La suplantación de identidad y el envío de virus informáticos fueron los delitos más habituales el pasado año, según la Ertzaintza

RANDA MEDINA

Me gusta 11
31 marzo 2016
17:20

El gesto de abrir el email ya casi forma parte del ADN humano. Pero en el universo digital cualquiera es presa fácil

Perder el control informático conlleva graves daños o incluso el cese del negocio. / Pedro Urresti

ABC España
SIGUENOS EN: f t s p i

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aboliada
Publicidad

Última Hora La Fiscalía exculpa a Messi y concluye que el fraude se cometió «por decisión» del padre

España

España, tercer país del mundo que más ciberataques recibe, tras EE.UU. y Reino Unido

» Margallo afirma que el año pasado hubo en nuestro país más de 70.000 agresiones cibernéticas

Comparte: f t s p i Compartido 2 veces

NOTICIAS RELACIONADAS

- > «Los ataques ciberterroristas aumentan y cada vez son más especializados»
- > Si estudias en estas universidades tendrás más posibilidades de encontrar un trabajo
- > Interior prepara el cambio de normativa del nivel de alertas terroristas
- > La ley de Seguridad Nacional no suspenderá derechos ni libertades

Publicidad

TEMAS RELACIONADOS

SEGURIDAD NACIONAL

JOSÉ MANUEL GARCÍA MARGALLO

José Manuel García-Margallo, ministro de Exteriores - Efe

Evolution of the Spanish environment



Cyber Risk

**Directiva
95/46/CE**

**Ley Orgánica
de Protección
de Datos
(LOPD 15/1999)
Real Decreto
1720/2007**

**Insurance
Sector in
Spain began
with Data
Protection
policies**

**Reform of the
Ley de
Sociedades de
Capital
(Ley 31/2014)**

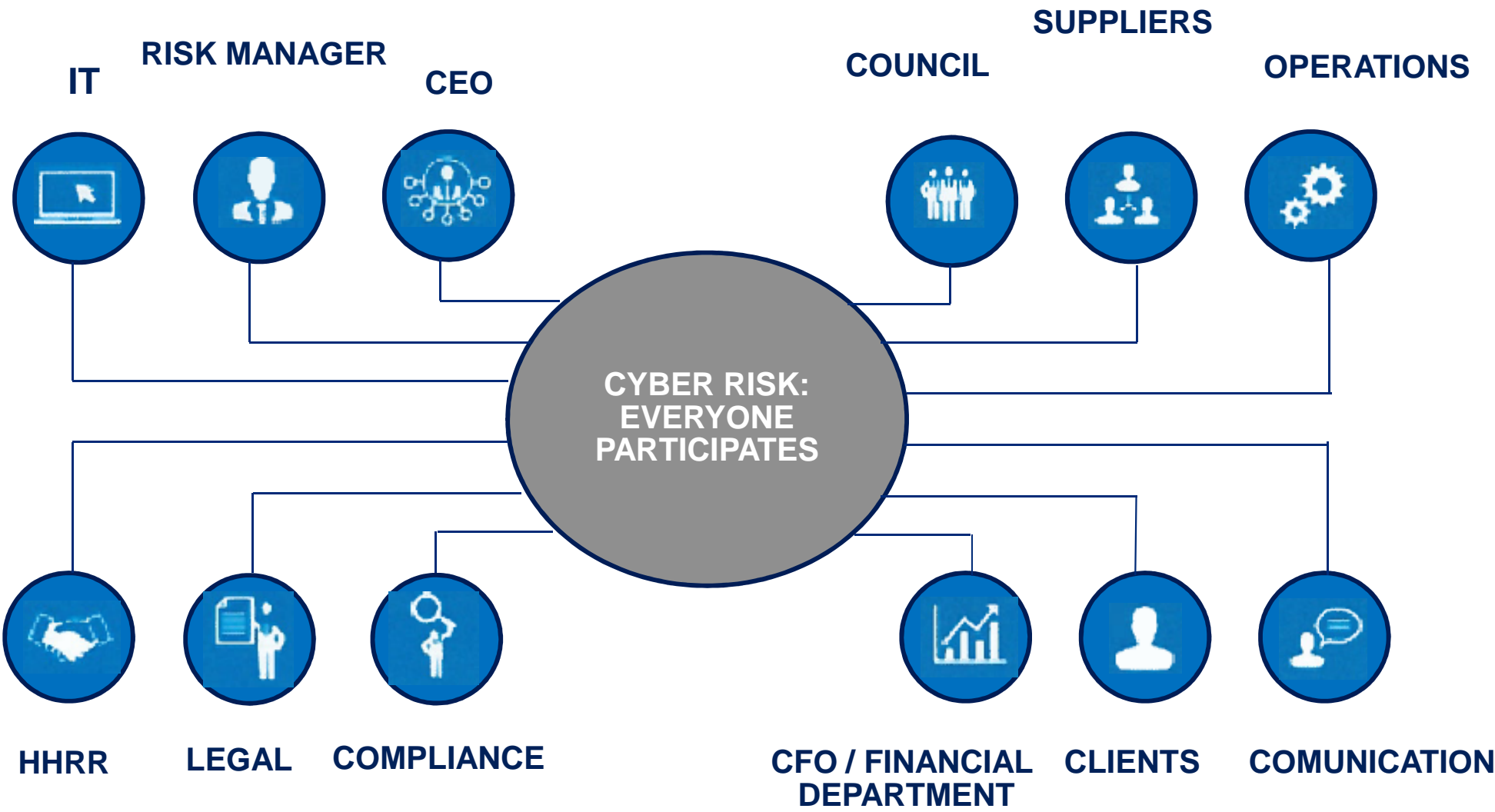
**Reform of
the
European
Regulation
of Data
Protection**

Section 2

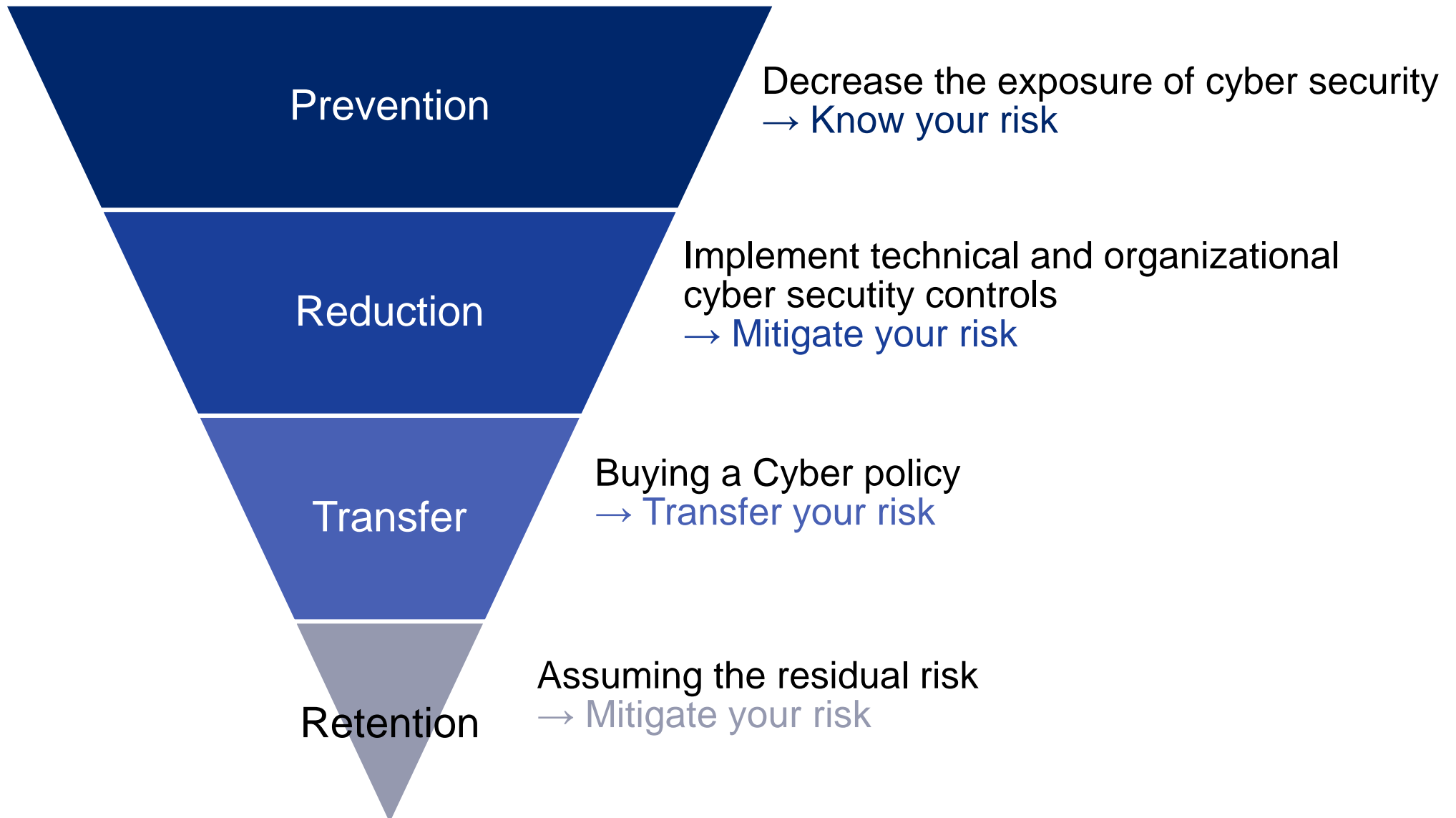
CYBER RISK INSURANCE.



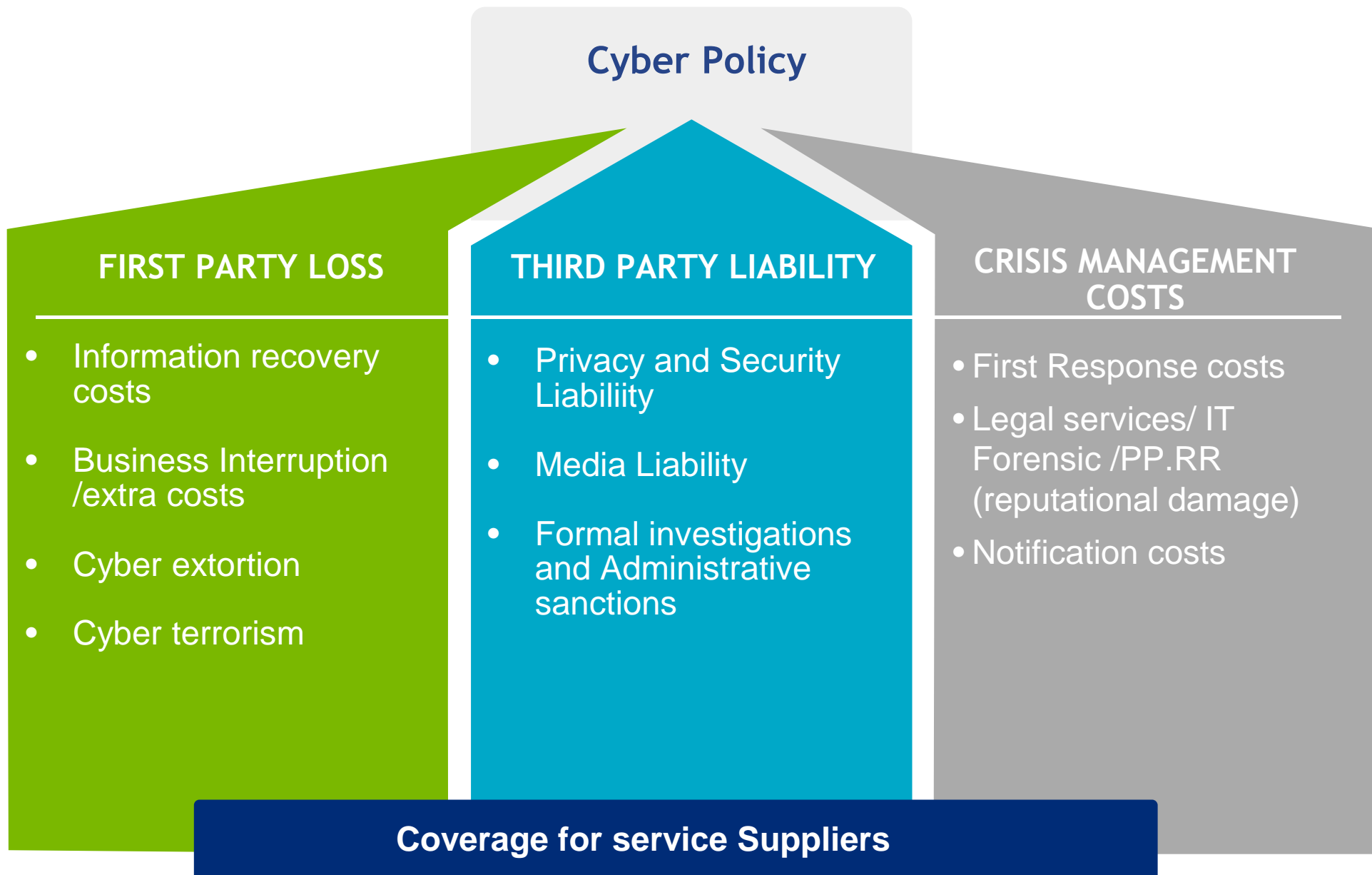
Identification of Stakeholders



¿What are my opportunities for risk management?



Main coverages in a Cyber policy



Cyber Risk Insurance Market

1. Market Situation

- Consolidated market in EEUU/Europe has an emerging market.
- Spain: Mainly 10 Insurers offer capacity for this type of products.
- Increase in the Insurers creation of this line in Spain, and therefore with the corresponding adjustment in pricing.

2. Capacity

- Global Capacity between 200-500 million USD.

3. Main Coverages

- Common framework of coverages and endorsements.
- We recommend a previous consultancy work in order to know your cyber risk and to evaluate which kind of coverages are needed. This allows to have a “ad hoc” cyber policy offered by the market.



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FUTURO

Jornada GLOBAL RISK MEETING
21 de septiembre de 2016
Col·legi d'Actuaris de Catalunya
Financial risks

- 1. Main financial risks of an insurer**
- 2. Strategies to manage these risks**
- 3. What is the approach of VidaCaixa?**

1. Main financial risks of an insurer

Context

- Not all insurers are equal: different businesses means different risks
- Transformational moment for the sector:
 - Low yield environment
 - Introduction of Solvency II

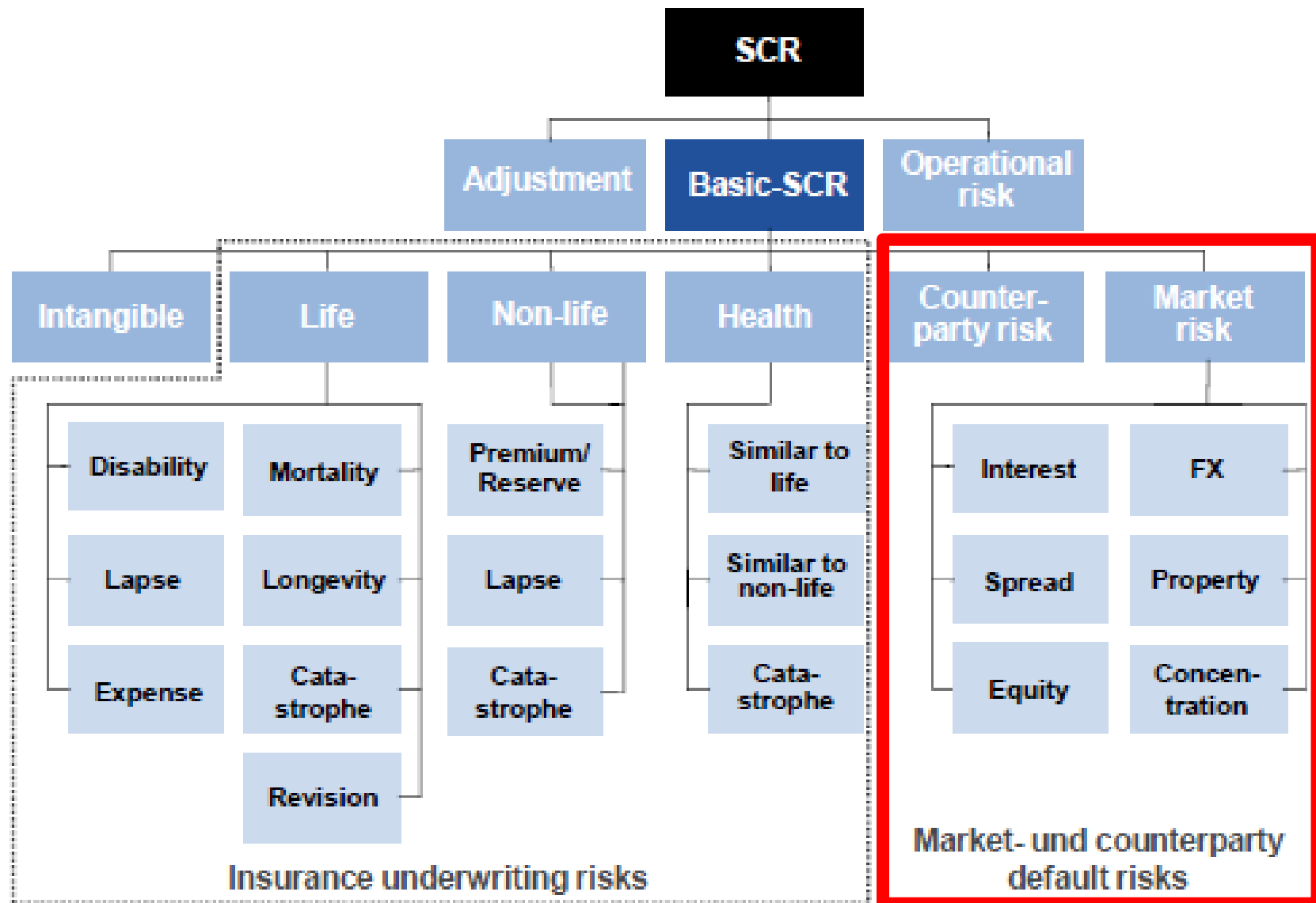
Market Risk

- Spread risk: bond spread increases
- Interest rate risk: duration & convexity mismatching
- Equity risk: equity market fall
- FX: basis risk between asset & liabilities
- Property: real estate price fall
- Concentration: exposure to individual names

Counterparty Risk

- Likelihood of default on obligations. OTC derivatives & SPVs

1. Main financial risks of an insurer



2. Strategies to manage this risks

Investment Process

1. ALM Analysis: Duration, Cash flows profile, Optionality, ...
2. Strategic Asset Allocation: Fixed income %, Equity %, Alternatives %, ... Long term horizon
3. Tactical Asset Allocation: Over / Underweight asset classes depending on the market view. Short / Medium term
4. Asset Picking
5. Risk and Performance Monitoring

Hedge Strategies

- Hedging with derivatives
- Example:
 - Interest rate: traditional approach vs. derivatives (swaps, swaptions)
 - Spread: traditional approach vs. derivatives (CDS)

3. Approach of VidaCaixa

Governance

- Organization aligned
- Different areas & roles taking care of investments.

Strategic Focus

- Pensions and life insurances
- Fixed income management, credit & derivatives management
- Active management
- Optimal economic portfolios and then Solvency II constraint

Alternatives

- Alternative assets. Benefits of the asset class: attractive risk-adjusted return & low correlation to the market

Tactics and Illiquidity

- Timing increasingly important
- Opportunities in illiquid assets

1 UNITED STATES (US)

1

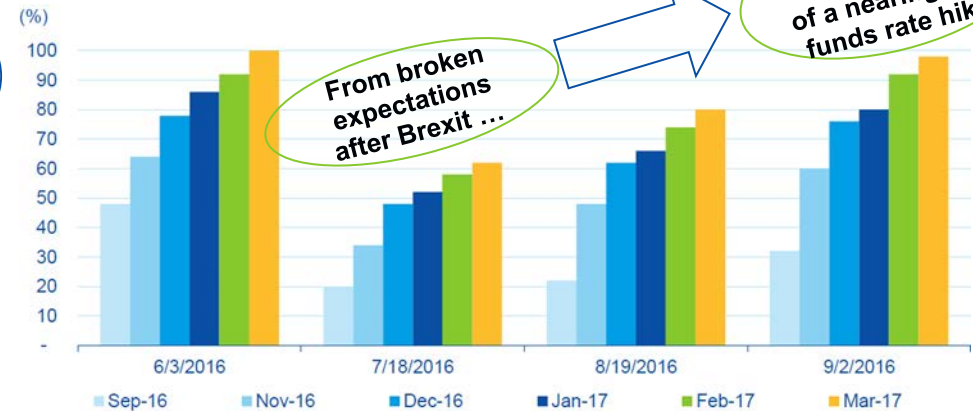


... “The case for a rate hike has strengthened”,

“our decisions always depend on incoming data”

2

The implied probability of an interest rate hike in the coming months has further increased (second 25pb hike)



Source: : BBVA Research «US Interest Rates Charbook Aug/16»

2. In the US, the FED it seems that the macroeconomic indicators support an increase on the interest rates , however, there are still some uncertainties that remain over the US and the Global economy that make the FED reluctant to increase “too soon” the interest rates.

The Fed raised rates nine months ago for the first time, but it has been on hold ever since as the nation’s economy has been concerned by fears of a slowdown in China, Britain’s decision to leave the European Union and a temporary reduce in hiring at home.

However, the implied probability of an interest rate hike in the coming months has further increased (second 25pb hike) and investors are anxiously awaiting its next move, and many say that they believe the central bank will increase in December if it delays once again at its meeting later this month.

The Federal Open Market Committee (FOMC), a committee within the Federal Reserve System (the Fed), is charged under the United States law with overseeing the nation's open market operations.

1 UNITED STATES (US)

3**“Mixed Feelings”****+ Positive**

- Employment Rate (<5%)
- GDP Forecast >3% Q3
- Private Consumption

- Negative

- Private Investment
- Doubts about long-term growth and inflation

3. But what are exactly the economic fundamentals that support (or not) an increase?

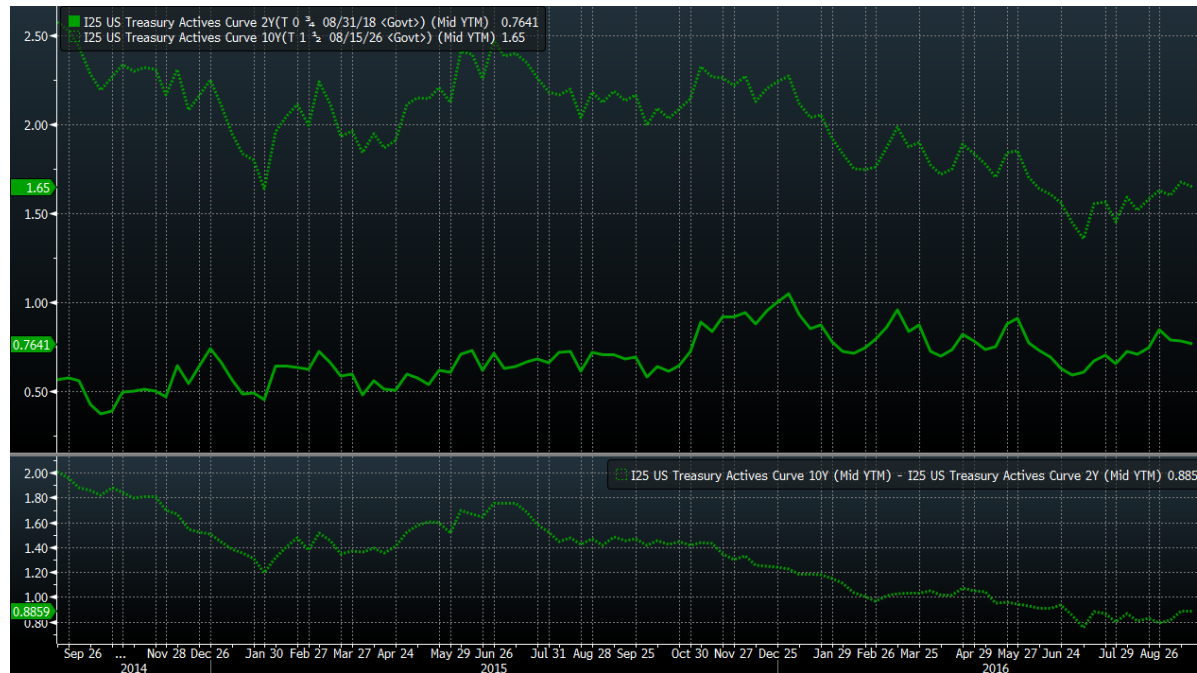
- On the positive side we have the unemployment rate (below 5%), the GDP forecast of over 3% for the third quarter and the private consumption that remains strong.
- On the negative side we have signs of weaken of the private investment and some doubts over the long-term growth an inflation rate, that has been running below the Fed's target of 2 percent for several years.

As we said before, an increase on the interest rate seems inevitable if not in 2016, in 2017, but how far will go this change in policy is still to be defined.

1 UNITED STATES (US)

4

And how is the fixed income market reacting to this situation??



Source: Bloomberg

- The doubts over the long term growth and inflation are “flattening” the yield curves.
- Curva plana. El 2 años es el que mas se ve afectado por las políticas de la FED pero el 10 años también es sensible y se está haciendo más sensible.

2 GREAT BRITAIN

5



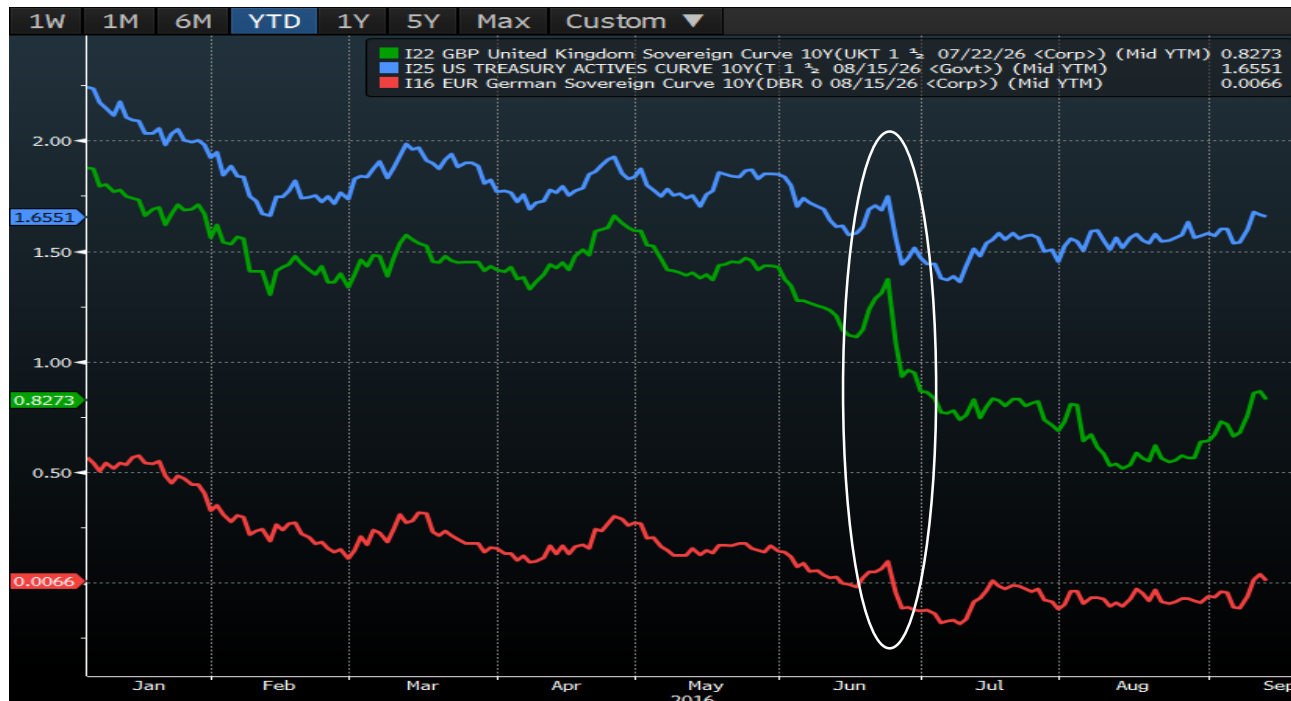
“Brexit means Brexit”

**... and there will be no attempt to
remain inside EU**

2 GREAT BRITAIN

6

The financial markets reacted violently to the UK's decision to leave the EU, but on an orderly fashion...



Source: Bloomberg

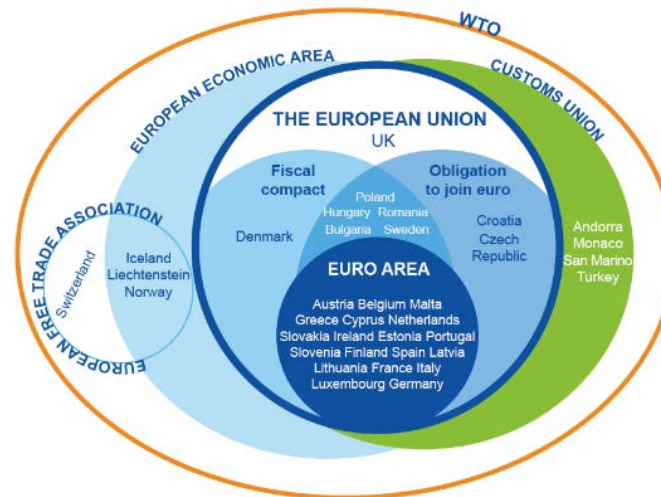
- The financial markets reacted violently to the UK's decision to leave the EU, but on an orderly fashion.
- Peripheral debt yields were contained, although we must bear in mind that the coordinated effort between central Banks (BCE, BoE, FED...) avoided a global collapse.
- The BoE also acted fast cutting rates to 0,25%, the activation of Asset purchase program (including corporate Bonds) and additional support to UK Banks (in terms of liquidity, capital requirements...). The government bonds are acting as “safe haven” for institutional investors, which is a positive signal for the UK economy.

2 GREAT BRITAIN

7

However, there is some confusion from a political perspective

Current EU membership groupings



Source: BBVA Research

- On the political front, however, we have seen more confusion with the two main political parties in the UK and the negotiation strategy with Europe.
- On the one hand, a clear majority of the British electorate voted for Britain to leave the EU so the Prime Minister has no choice but to follow through on the result. On the other, leave supporters did not vote for a specific version of Brexit.
- So a long negotiation process is coming with a strong position on EU clearly defining that the UK has to formally request the exit and no “Cherry Picking” will be allowed.
- Many of those who would like to see the UK leave the EU say Norway is the model to emulate. But what is this model? Under this model, Britain would have access to the single market but it would have no vote over EU rules. In return for that access, Norway is obliged to implement all the EU’s laws relating to the internal market. As a result, Norway has had to implement about three-quarters of all EU legislation.

2 GREAT BRITAIN

8

And uncertainty over the Economic situation in the lo

Gains

- No European Union Contributions
- Freedom to new trade deals
- Freedom to Self Regulate

Losses

- Tariffs on trade with EU
- Damage to the City
- No access to the single market

Which will depend on the final agreement with the EU

Impacto sobre el crecimiento en 2017 (%)



Source: BBVA Research

- The Brexit will have both positive and negative effects that will also depend on the final kind of agreement that UK can arrange with the EU.
- From the positive side the UK won't have to contribute to the EU, it will have freedom to trade new deals, can change to a skills only migration model and it will be free to self regulate itself.
- From the negative side tariffs are expected on trade with the EU, the City will be damaged and no direct access to the single market is expected.
- The terms of departure and whether or not the United Kingdom negotiates an agreement with the European Union governing the future relationship will determine the magnitude and direction of the impacts of Brexit. Currently the United Kingdom is part of the single market, with free movement of goods, services, people and capital within the European Union's border. It is likely that Brexit would change this.

3 EU

9

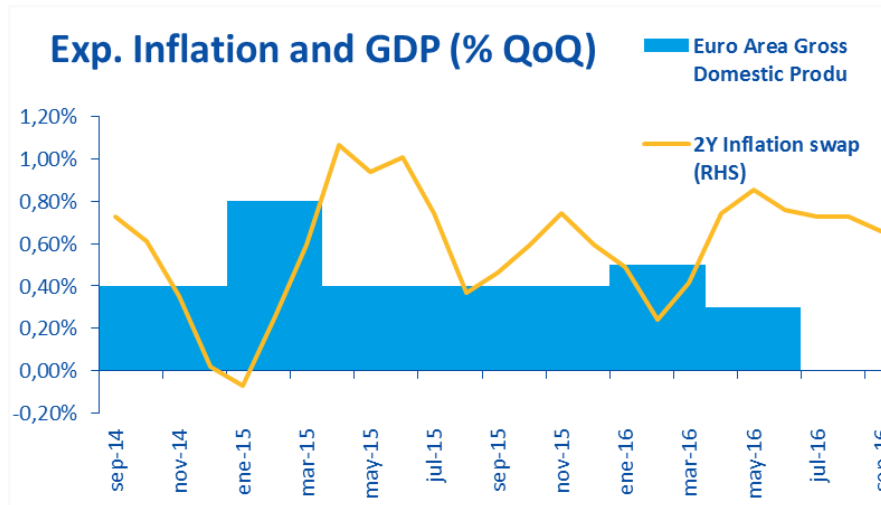


“Within our mandate, the ECB is ready to do whatever it takes to preserve the euro. Believe it, it will be enough” Mario Draghi

3 EU

9

Lots of measures but the macroeconomic indicators are still weak...



Source: Bloomberg

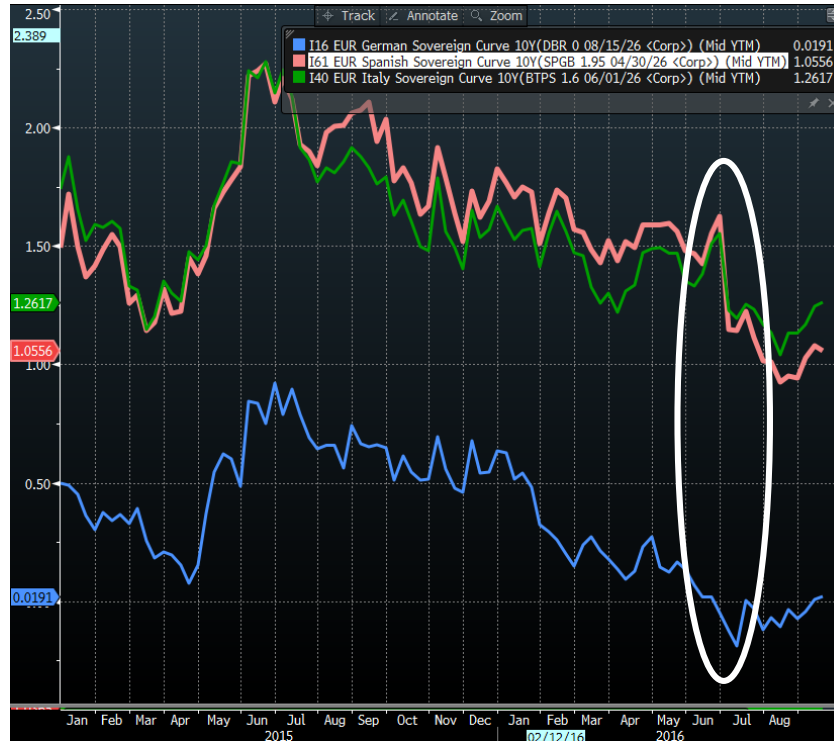
- Europe's central bank began buying government bonds in March 2015 — six years after the U.S. embarked on QE — as the region's fragile recovery lagged the rest of the world.
- Yet inflation still remained far below target, so the planned length of the program was extended in December.
- In March 2016, Draghi announced that monthly bond buying would be increased by a third and the ECB began purchasing corporate debt in June
- The macroeconomic indicators are still weak
- Sin embargo, el ECB no ha modificado las condiciones en su última reunión.

+ Brexit's effect through confidence indicators
+ Unresolved problems in the Banking sector, Greece, refugee crisis...

3 EU

how are the Markets reacting? Government Bonds

11



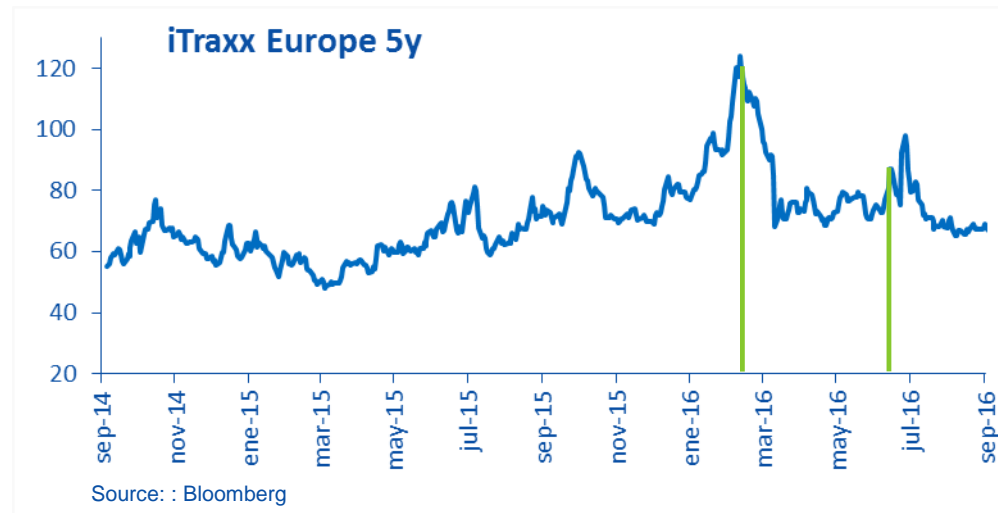
Source: Bloomberg

- Las medidas adicionales de compras de bonos han reducido todavía más la yield de los bonos Europeos, con especial importancia de los tipos negativos en el bono a 10 años del bono alemán.
- Esto se ha producido además con una baja volatilidad.

3 EU

11

how are the Markets reacting? Corporate Bonds



- Since the announcement of CSPP in 10 March, leading companies likely to issue eligible have begun to issue a significant amount of debt.
- The search for yield strategies have led to a fall in the euro denominated corporate debt yields, both in investment grade and high yield bonds.
- There was a general improvement in performance in all sectors .
- The amount of senior corporate debt on negative interest rates has increased. This has increased the amount of long-term issuances on the primary market to 7-10y
- The European Markit iTraxx indices trade 3, 5, 7 and 10-year maturities, and a new series is determined on the basis of liquidity every six months. The benchmark Markit iTraxx Europe index comprises 125 equally-weighted European names.

El presente • Además, preferimos los cortos plazos (y sacrificar rating hasta BBs) a duraciones largas a la vista de: (1) el posible steepening de las curvas, sobre todo los BBBs cíclicos, a la vista del posible menor interés del BCE por los l/p, (2) el comportamiento del CSPP en algunos de los pocos ejemplos de primario (creemos que hubo mucho más interés en el tramo corto del €1,5mm de ASML (Baa1/BBB+) de la pasada semana que el tramo largo), (3) la

3 EU

12

And what is expected from ECB in the near future?

- Brexit could make that the ECB reviews slightly downwards both the growth and the inflation forecasts.
- Highly likely: expanding the asset purchase programme (APP) for 3-6 months and the fine tuning of its parameters.
- Unlikely for now: cut in deposit rate.

ECB Forecast	2016	2017	2018
Real GDP (YoY%)	1,6%	1,7%	1,7%
CPI (YoY%)	0,2%	1,3%	1,6%

Source: : ECB

- the ECB is likely to correct slightly downwards its growth prospects for 2016 and 2017 from June estimate of 1.6% and 1.7%, respectively.
- not expected changes in forecast inflation from current estimates for 0.2% YoY in 2016; though given the negative effects from Brexit on confidence indicators a negative bias is possible from +1.3% YoY in 2017
- Highly likely: in this context (very low inflation and moderate GBP grow) expanding the asset purchase programme (APP) for 3-6 months and the fine tuning of its parameters (lack of volume of debt eligible in some countries)
- Unlikely for now: cut in depo rate

Key Takeaways

- “Loose” monetary policies around the Globe
- Decrease in yields and an increase in the price of most fixed income assets.
- Key aspect is for how long will these measures continue

- Due to weak growth and inflation, most developed countries have opted to “loose” monetary policy.
- These measures have created a decrease in the interest rates and an “driven” increase in the price of most fixed income assets.
- The duration of the aforementioned polities is still unknown as the Governments are reluctant to take them out until the economies show clear signs of recovery. Also each economy is at a different pace (US, Europe, GB, Japan, China...)
- The Fixed Income financial markets will react to any movement on the monetary policy.



Impact of low interest rates on life insurance companies

Global Risk Meeting – Actuarial Association of Europe
A presentation by Felipe Gómez, Director Willis Towers Watson

21 September 2016

Contents

Felipe Gómez
Director, Life Leader Risk Consulting and Software Iberia

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E felipe.gomez@willistowerswatson.com

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Consequences	3
Possible solutions	9
Potential opportunities	13

Consequences

How a low interest rate environment affects insurance companies

Area of balance sheet	Impact of low interest rates
Assets	<ul style="list-style-type: none"> • Asset price increase • Lower reinvestment yields
Liabilities	<ul style="list-style-type: none"> • Pressure on long term profitability of in force business • Pressure on new products to keep them attractive to clients
Own funds	<ul style="list-style-type: none"> • Potentially high impact on economic balance sheet (depending on actual situation) • External debt costs can decrease

Impact on balance sheet and earnings will be dependent upon several factors

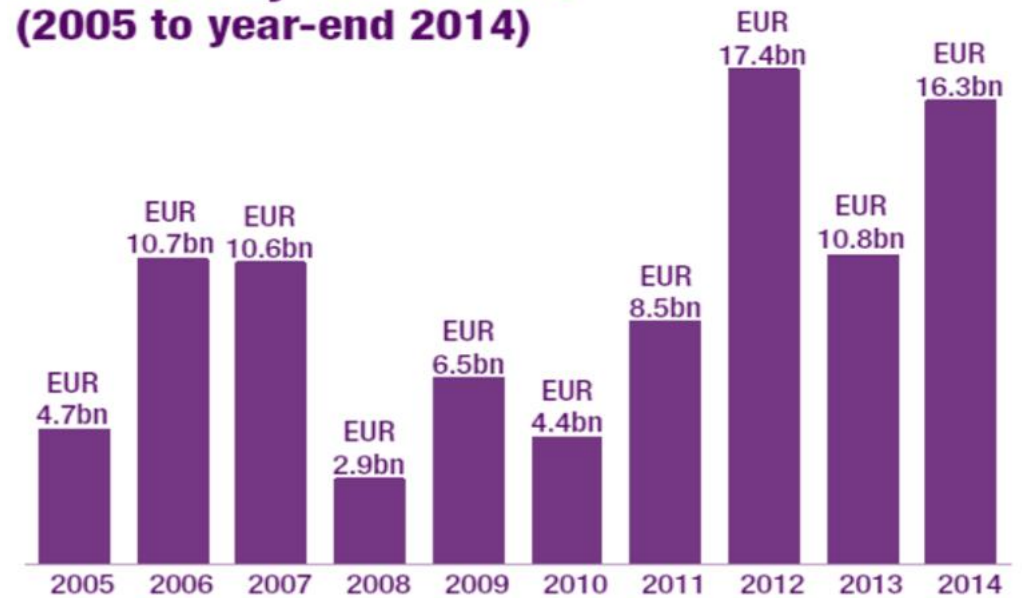
Factor	Impact of low interest rates
Business mix	The higher the proportion of guaranteed products or long-term interest rate sensitive products, the higher the risk
Average guaranteed rate	The higher the guaranteed rate, the higher the risk
Ability to lower credit rate	The lower the spread between investment returns and the guaranteed rate, the higher the risk
Duration gap	The higher the duration gap (duration of liabilities minus duration of assets), the higher the risk

Source: Moody's investors service

First the positive impact

Refinancing debt on the capital markets

Europe – Non-Life and Life – Debt Issuance – Total Debt by Year of Issue (2005 to year-end 2014)

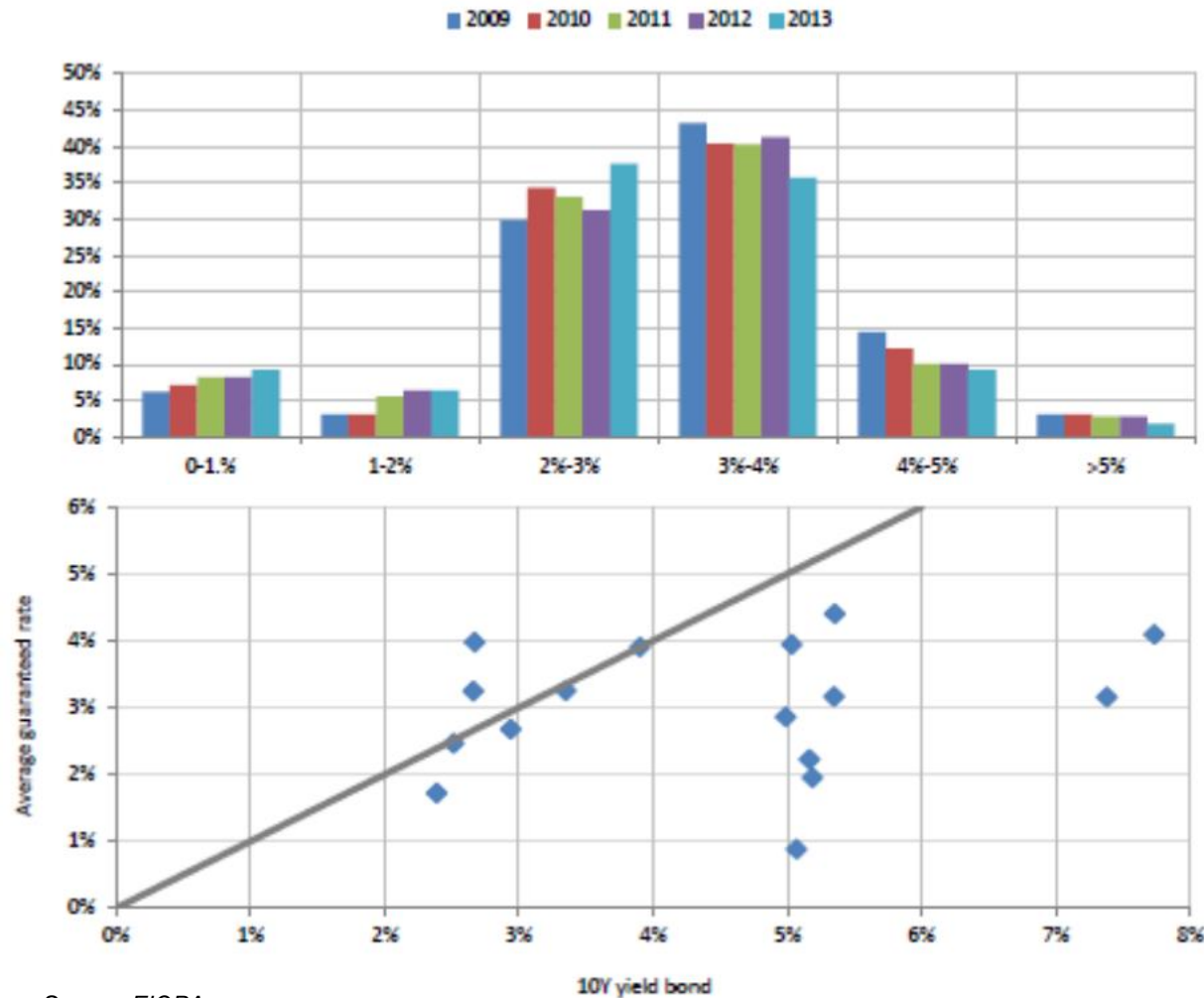


Source: Best's Statement File – Global, A.M. Best data & research

“In October 2014, RSA Group completed a GBP 400 million subordinated bond issue with a coupon of 5.1%. The following month, the insurer announced the redemption of its outstanding GBP 450 million issue, which had a coupon of 8.5%. In its 2014 3rd quarter interim management statement, RSA estimated that the combination of these two actions would result in an annual interest cost saving of GBP 18 million from 2015.”

“Insurance sector debt issuances are commonly several times oversubscribed, indicating a strong demand from investors for insurer debt – this despite the general understanding that insurance market conditions are soft, growth levels will be modest at best, and returns are under pressure. The offsetting factor is the clear lack of better investment opportunities in other industries and in other asset classes.”

Situation in Europe

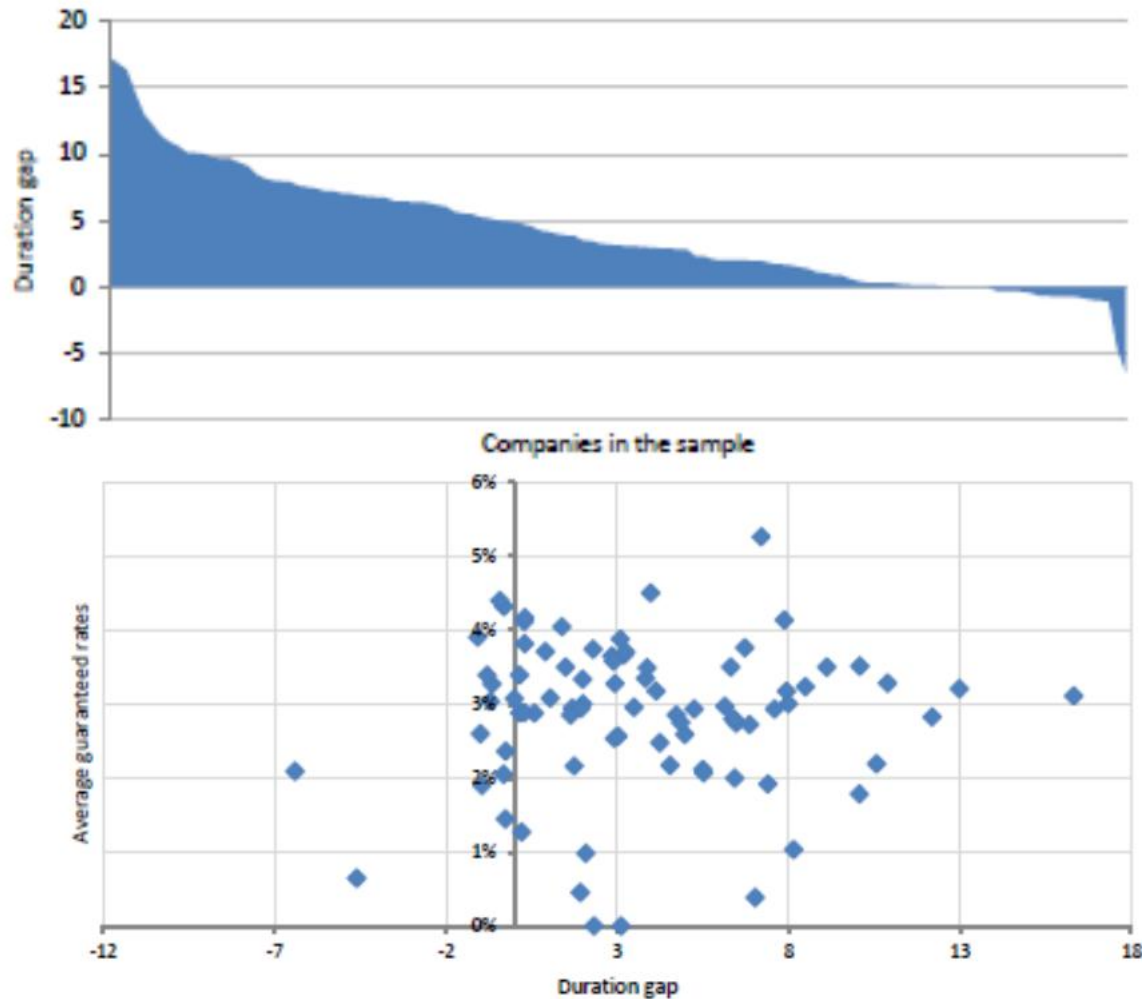


Source: EIOPA

- Bulk of the business between 2% and 4%
- Average guarantees declining but takes time
- 0% guarantee products growing but not rapidly

- In almost 40% of the countries (period 2009-2013) the average guarantee was very close or higher than the average yield on 10 YR govt bond
- Could be manageable for short periods of time but not sustainable

Situation in Europe



Source: EIOPA

- Duration liabilities typically larger than duration assets
- Duration gap is the norm, not the exception
- Negative duration gap exists but exceptional (essentially leading to liquidity risk)

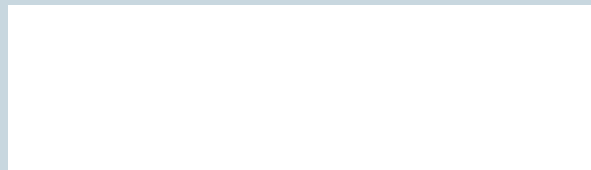
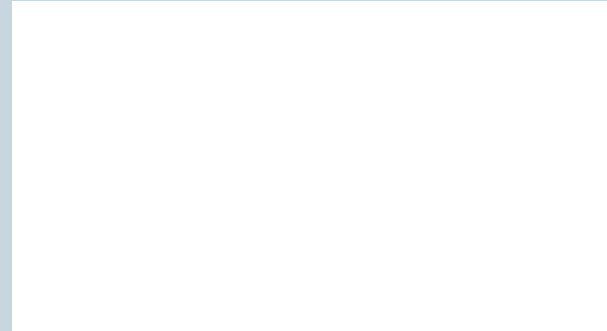
- Duration mismatch seems to be uncorrelated with the level of the guarantee
- Which suggests that even today new business is being written with substantial duration mismatches (albeit lower than previously)

Situation in certain specific countries

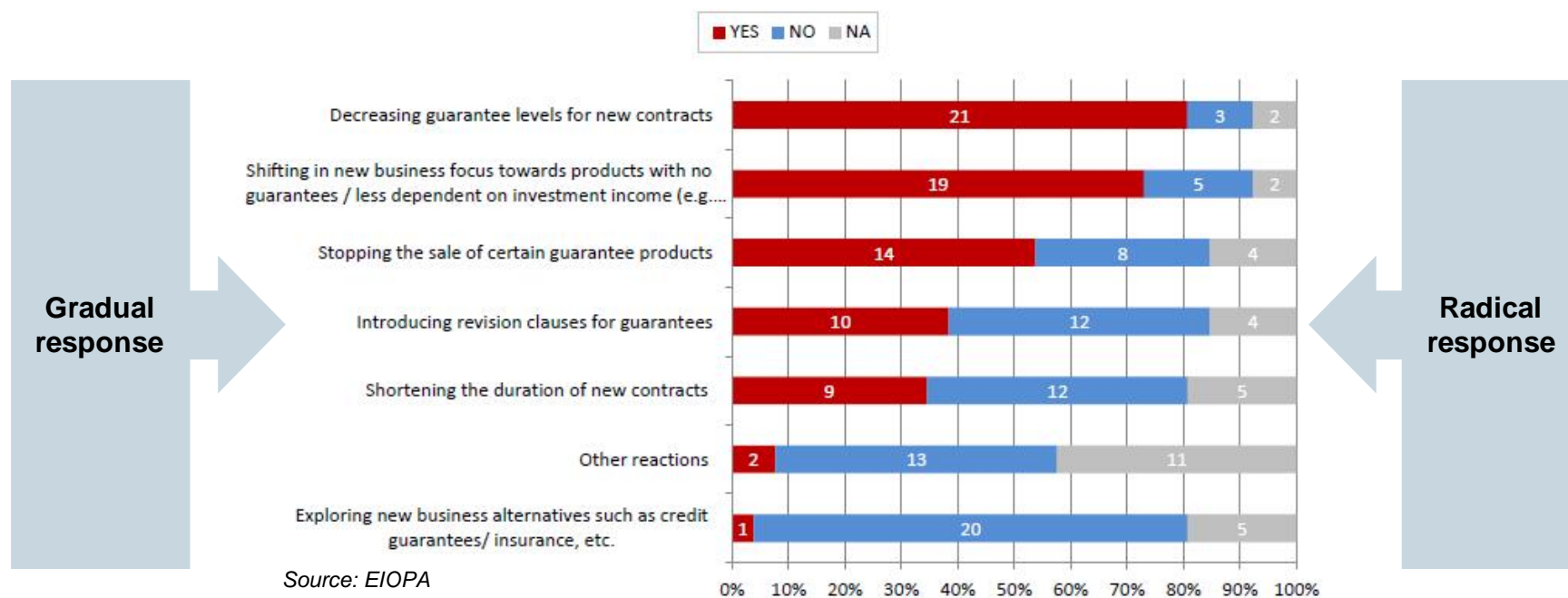
Country	Business Mix (% of guarantee business)	Average Guarantee	Ability to lower credited rate	Duration Gap	Guarantee on new business	Risk (Moody's) (profitability)	Risk (S&P's) (industry / product / profitability)
Germany	> 80%	3% – 3.5%	Low to medium	> 10 years	1.25%	Very high	Mod/Neg/Neg
Netherlands	60% – 80%	3.5% – 4%	Low	5 – 8 years	Na	Very high	Mod/Neg/Neu
Switzerland	> 80%	1.5% – 3%	Low	0 – 2 years	1.25%	High	Na
France	> 80%	0% – 1%	Medium to high	2 – 5 years	0%	Moderate	Int/Neu/Neu
Italy	60% – 80%	1.5% – 3%	Medium	0 – 2 years	<=1%	Moderate	Int/Neu/Neu
Belgium	> 80%	+/- 3%	Medium	2 – 3 years	0% – 1.50%	High	Int/Neu/Neg
UK	20% – 40%	0% – 1%	High	< 0 years	Na	Very low	Int/Neu/Neu
Spain	> 80%	3% – 4%	Low	0 – 2 years	<=1%	Low	Int/Neu/Neu

Source: Moody's, Standard & Poor's, EIOPA, Willis Towers Watson

Possible solutions



Different types of responses to this environment are possible



- Assumes that customers are only (or mainly) interested in long term guarantees
- Assumes that low interest rates are temporary
- So companies look for gradual changes to existing products
- Focus on optimization elsewhere like reducing expenses (distribution, administration, ...)

Mainly Continental European countries

- Assumes that customers can be convinced with a different value proposition other than long term guarantees
- Focus on solutions that also work under a long term low interest rate environment
- Shift from traditional products to unit linked products and protection business
- Investigate potential broadening out of activities through investment management

Mainly UK and Anglosaxon countries

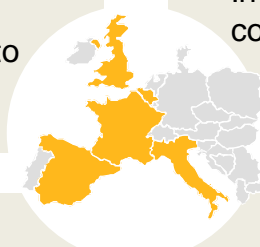
Some interesting observations in some countries

Euro Croissance in France

- Multi-support product, split between guarantee part and unit linked part
- With x year guarantee over x years which is further split into guarantee fund / diversification fund
- At surrender value market value is paid
- Strong push by the supervisor (even looking into changing the legislation for this)

Guarantee / bonus at the end

- In Italy guarantees are given at event (i.e. at maturity, surrender, death, ...) and not yearly. This leads to more ALM freedom, higher potential returns for the client and lower risk for the company
- In the UK typically a terminal bonus is given compared to a low or no annual bonus



Spanish flexible guarantees

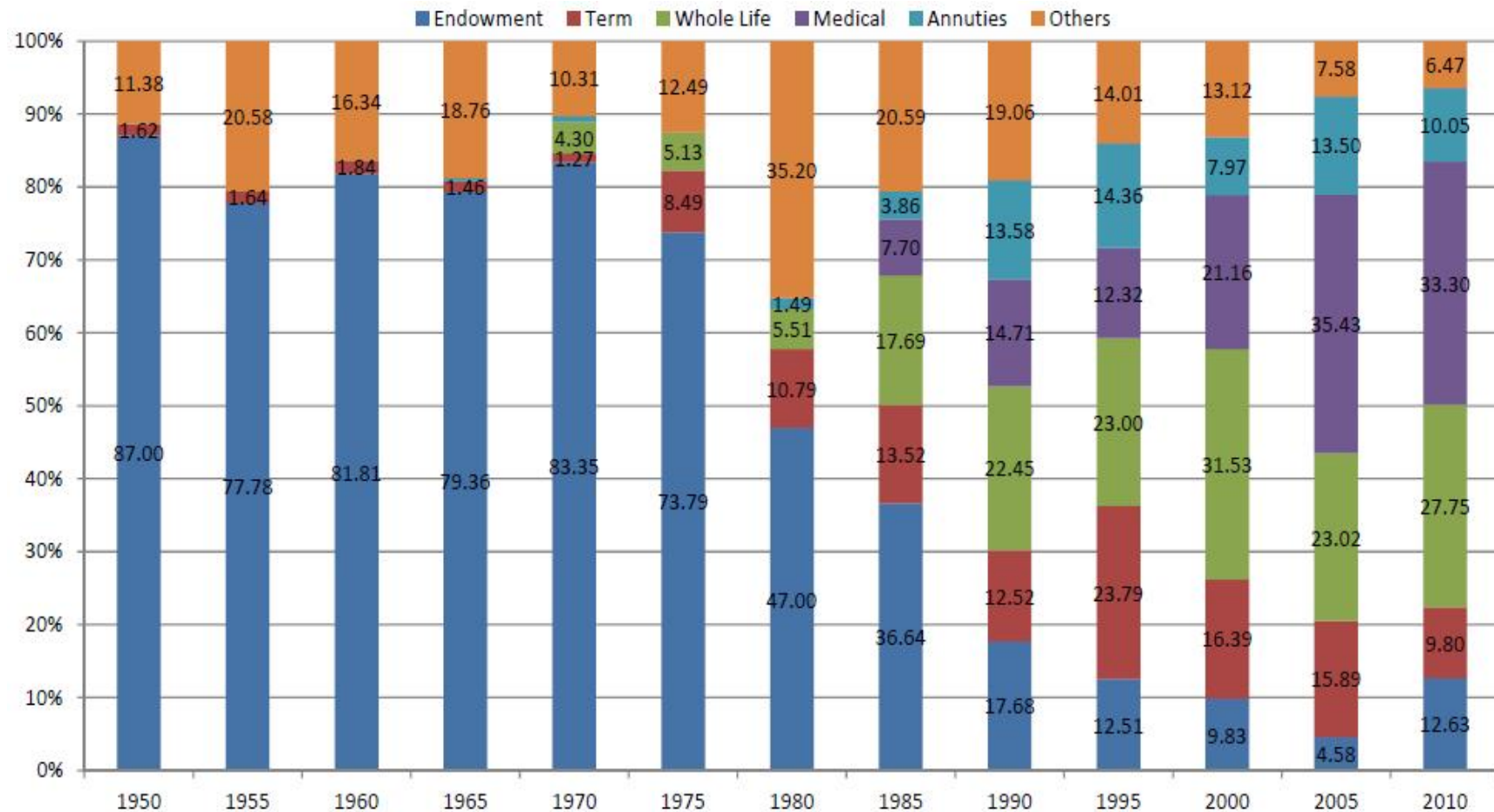
- Universal life products with very low guarantees (0% - 0.25%)
- But quarterly “resetting” of the guarantee for the next quarter (advance profit sharing)
- Some examples exist in Belgium as well

Lifecycle UL UK

- Wide range of unit linked funds on offer
- Provide client “lifecycle” support
- Focus on increased efficiency through digitalization
- Set up own asset managers
- Highly competitive market and hence large pressure on margins though

There are some interesting ideas / concepts out there in the European market.

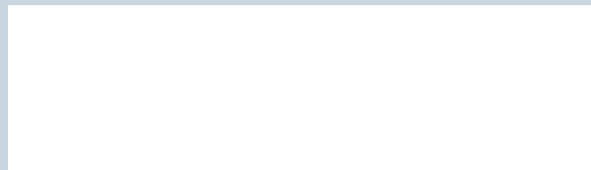
How products have changed in Japan – food for thought



Source: The life insurance association of Japan

Although linked to the low interest rate environment, other drivers like ageing population and the need for solutions play an important role here as well

Potential opportunities



Potential opportunities for Spanish companies

More into actuarial returns

LIR + challenges of the Spanish Social Security System due to ageing of the Spanish population creates the context to provide products more leveraged into actuarial returns. e.g: move from “financial” annuities to actuarial annuities.

Introduce flexible guarantees

- Think about introducing a guarantee / bonus at end date
- Regular resetting of guarantees.
- Adapt guarantee to needs of the customer (which can change over time)
- Intense ALM to provide a guarantee at the maturity date with daily (weekly) rebalance of assets to take advantage of evolution of interest rates – ICPPI

More asset management

Provide unit linked funds but differentiate from other providers through:

- Additional covers like death/disability – variable annuities
- Lifecycle funds and support
- Active engagement to the client at clearly defined times in the client’s lifetime

Protection business

- Increase awareness in the market (create growth)
- Perform better pricing (use of GLM or other methods) to offer better price to customers yet maintain required profitability
- Consider client retention and their value as a whole
- Create innovative products (new covers e.g. long term care)

Opportunity for companies specialized in managing guaranteed portfolios

Questions

WillisTowersWatson 

CERA Global Association (CGA)

*Dedicated to promoting and administering the
CERA qualification worldwide*

CERA

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CERA Global Association

- Creating a global credential
 - Standardisation of 'Enterprise Risk Management (ERM) toolkit'
 - Standardisation of education
 - Rapid spread of ERM skills for actuaries
 - International mobility
 - International recognition
 - Globalisation of the risk profession

CERA Global Association

- Education is often the beginning of important developments
 - Because of developments in the insurance and pensions industry, it is essential that actuaries continue to adapt constantly in order to 'compete' with other specialists who can contribute in this domain
 - Thus the CERA credential was introduced, intended as additional training for qualified actuaries to expand upon their knowledge
 - An important condition of obtaining the CERA designation is that the holder is a member of a professional organisation, which itself is a member of the IAA
 - This ensures that these risk management actuaries have the same professional education

- The CERA qualification has the most rigorous and advanced curriculum underpinned by actuarial science, with an emphasis on ERM and professionalism
- Consistent with modern, effective methodologies
- Applies both qualitative and quantitative insight to ERM
- Instills the highest professional standards, with an impeccable code of ethics and unparalleled educational requirements
- Best equips risk management professionals to empower better business decisions

CGA structure



Ron Hersmis, CGA Chair

Board of Directors

Treaty Board

Review Panel

CERA Administrator

Marketing sub-committee

Other committees: IP and
Experienced practitioner

Routes to CERA and Quality Assurance

- Each Award Signatory must offer an accredited route to the CERA designation for its members.
- The main pathways are:
 - The IFoA's ST9 ERM exam plus a seminar
 - The EAA's modular route
 - The SOA's route
- The Review Panel conducts reviews on an annual and triennial basis to ensure consistent and rigorous coverage of the CERA syllabus.
- It is this work which ensures the qualification's recognition on a global scale.

Cyber, Industry and Financial risks

- “E” in CERA stands for enterprise
- Not limited to financial industry
- Not only focusing on recognition and quantification of risks, but also on mitigation and evaluation of risks
- Taking in account all sorts of risks: including operational risks and risks like cyber risk

CERA and other risk management designations

- Members of a professional body:
 - professional standards,
 - code of conduct,
 - disciplinary proceedings
- International education standards – should be able to fit in wherever
- The CERA syllabus covers all types of risk and as such we're seeing CERA holders working in non-traditional areas (construction industry or the US Dept of Defence)
- Qualitative and quantitative approaches to risk management/mitigation

CERA Success

- Since its foundation in 2009, the CERA Global Association now has 21 actuarial associations as members
- There are now 3384 actuaries worldwide that carry the CERA designation
- We have seen tremendous growth in numbers and interest over the past few years and hope to maintain this momentum
- Our long term goal is to increase the number of CERA holders to 10% of the global actuarial population, approximately 6,000 actuaries – will you be one of them?

CERA Global Association

For more information on the curriculum
and paths to CERA visit the CERA
global website



www.ceraglobal.org