

Sustainability Risk in Insurance Companies – Regulatory Developments and Scenario Approaches

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Agenda

1. Introduction

- Insurance
- Insurance industry in Germany

2. Regulatory developments

- Global level
- EU level
- National level

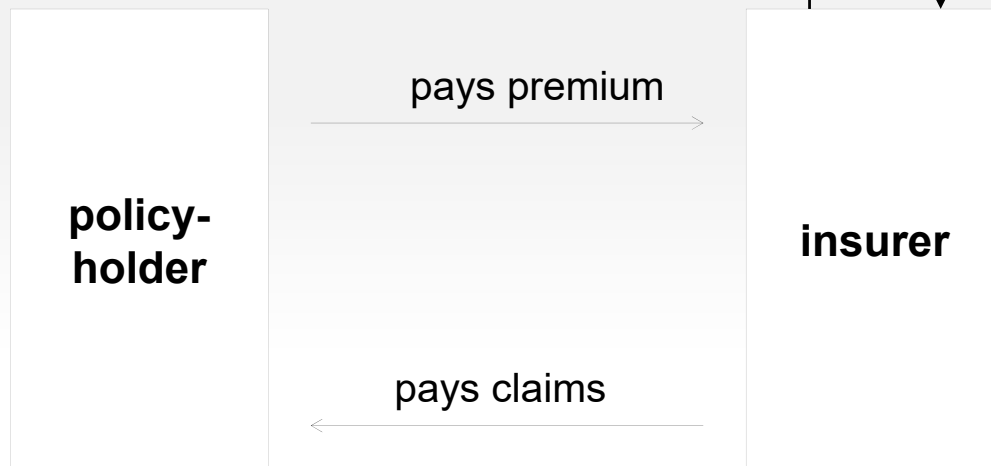
3. Scenario approaches

- At micro level
- At macro level (stress-testing)

4. Conclusions and outlook

1. Introduction

Insurance



Source: Kraft/Tillmann (2017), p. 419.

1. Introduction

German insurance industry (31.12.2018)

- **Policies: 438 Mio.**
- **People working in the insurance industry: about 0.5 Mio.**
- **Premiums: 202.4 Bn €**
 - Non-life: 70.7 Bn €, Health: 39.8 Bn €, Life: 92 Bn €
- **Claims paid: 160 Bn €***
 - Non-life: 52 Bn €, Health: 29 Bn €, Life: 79 Bn €
 - for storms, hail and heavy precipitation/rain: 3.1 Bn €
- **Investments of German insurance companies: 1.7 Tn €**
 - Insurers finance renewable energy: 5.8 Bn € investments

* + 18 Bn € increase of reserves in life and +8 Bn € increase of reserves in health

Source: GDV, 2019.

2. Regulatory developments

Global level – United Nations (UN)

- **Paris Climate Agreement 2015 (UN, 2015a)**
 - includes – besides the 2°C goal – the commitment to align financial flows with a pathway towards low-carbon and climate-resilient development (“sustainable finance”)
- **UN Goals: 2030 agenda for sustainable development (UN, 2015b)**
 - 17 goals



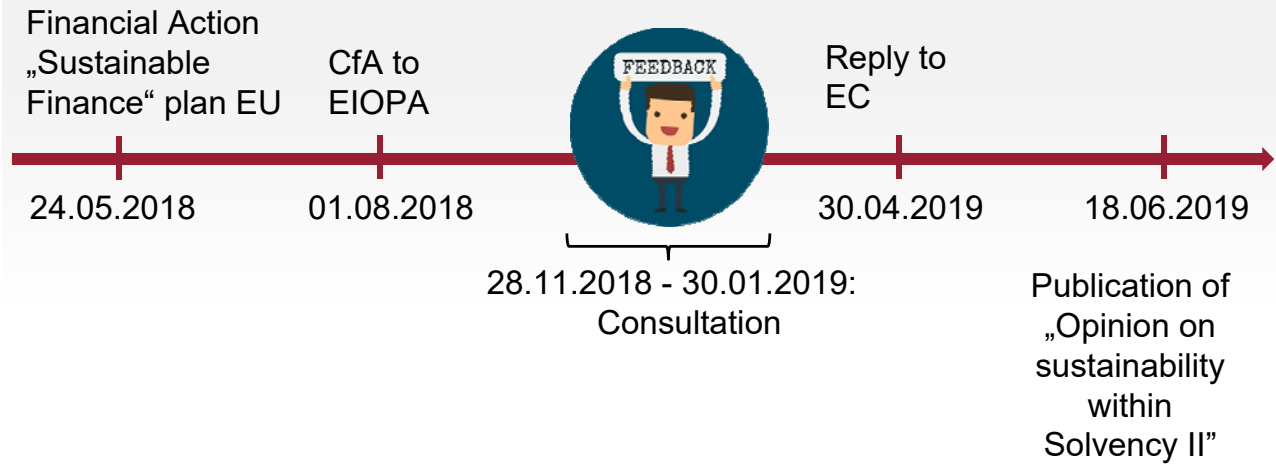
2. Regulatory developments

European Commission

- **December 2016: Establishment of High-level Expert Group (HLEG) on sustainable finance**
 - 20 senior experts from civil society, the finance sector, academia and observers from European and international institutions
 - July 2017: interim report
 - January 2018: final report
- **March 2018: action plan on sustainable finance**
- **May 2018: legislative package**
 - proposal for a regulation on the establishment of a framework to facilitate sustainable investment. (“taxonomy”)
 - proposal for a regulation on disclosures relating to sustainable investments and sustainability risks and amending Directive (EU)2016/2341 (“ESG factors”)
 - proposal for a regulation amending the benchmark regulation

2. Regulatory developments

EU level - EIOPA



2. Regulatory developments

EU level - EIOPA ESG criteria

Ecological	Social	Governance
<ul style="list-style-type: none"> contributing to an environmental objective, including an environmentally sustainable investment 	<ul style="list-style-type: none"> contributing to a social objective investments contributing to combating inequalities investments promoting social cohesion, social inclusion and industrial relations investing in human capital investments in economically or socially disadvantaged communities 	<ul style="list-style-type: none"> based on the principles of good corporate governance

Source: EIOPA, 2019, p. 5.

2. National level

German supervisory authority (BaFin)

- Bundesanstalt für Finanzdienstleistungsaufsicht (BaFin) published draft guidelines („Merkblatt“) on 'sustainability risks'
- Consultation period: September 24, 2019 – November 3, 2019
- dealing with sustainability risks on an individual basis and the supervisory review and evaluation process
- deals with strategies, responsible corporate management and business organizations
- requirements for risk management for credit institutions, insurance companies and capital management companies

2. National level

BaFin

- **Topics:**
 - General risks
 - Strategies of supervised companies
 - Tone at the top
 - Governance
 - Risk management
 - Outsourcing
 - Stress tests including scenario analysis
 - Guidelines and standards
 - Ratings



Assessment of business and risk strategy in respect of sustainability risks is expected by German insurance companies -> measures needed

2. Insurance companies with sustainability strategies

Selected companies

Source: own research.

Company	Coal investments	Insuring coal-fired power plants or mines
Allianz, DE	Stopped between 2015-2018	Stopping in 2040
Munich RE, DE	Stopped in 2018	Year of stopping unknown but planned
Hannover RE, DE	Stopping in 2019	Year of stopping unknown but planned
Axa, FR	Year of stopping unknown but planned	-
Generali, IT	Year of stopping unknown but planned	-
Achmea, NL	Stopping in 2019	-
Versicherungskammer Bayern, DE	Introduction in 2019	-

2. Exclusion criteria for insurers' investments (examples)

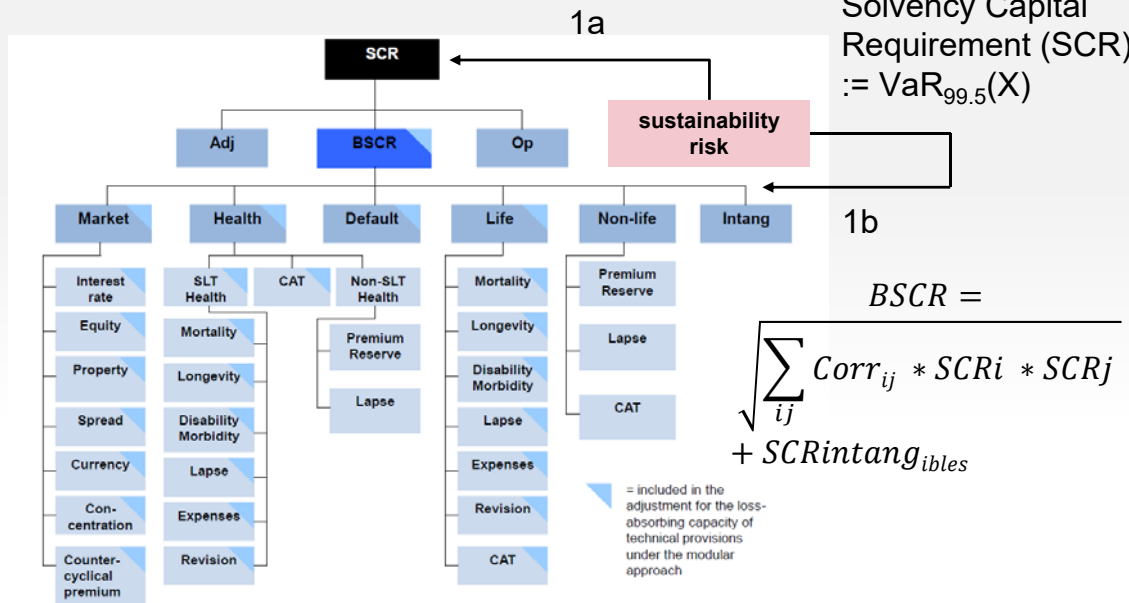
Subject	Criteria	Exclusions
landmines	anti-personnel landmines, manufacturer of weapon systems	Any infringement
labour rights	child labour flag	Red Flag
gambling	Maximum percentage of turnover	> 10%.
weapons	Nuclear Systems	all
entertainment for adults	Maximum percentage of revenue	> 5%.
tobacco use	Maximum percentage of turnover	> 10%.
thermal coal	Maximum percentage of turnover	> 30%.
CO ₂ emissions	Scope 1+2 Intensity (t/USD million sales)	Companies in worst quarter of sub-sector and worse than sub-sector average and sub-sector average worse than MSCI World average. ("best-in-class approach")
...

3.1 Scenario approaches

Stand formula approach: separate risk category

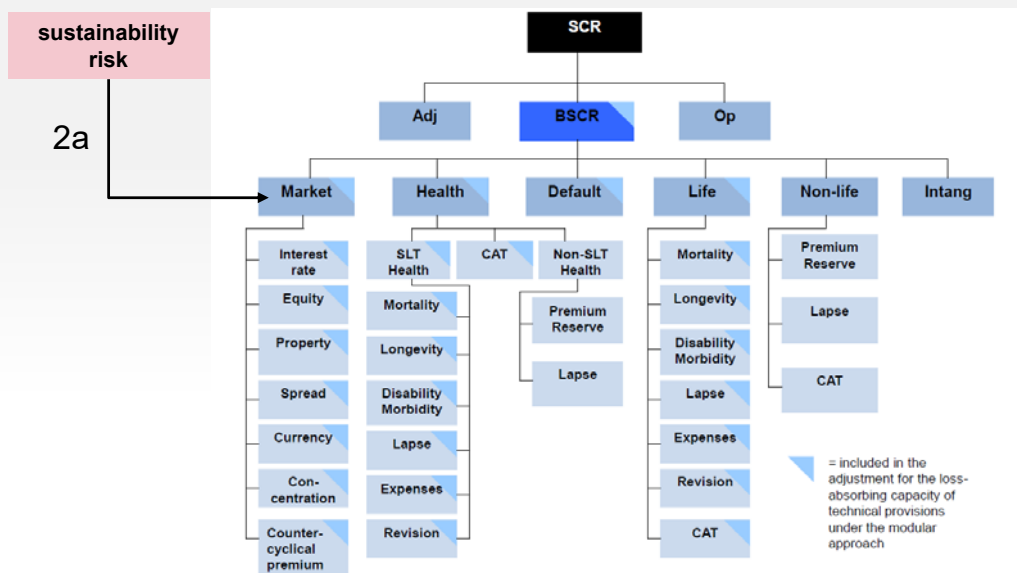
Solvency II:
200-year-event

Solvency Capital Requirement (SCR)
:= $VaR_{99.5}(X)$



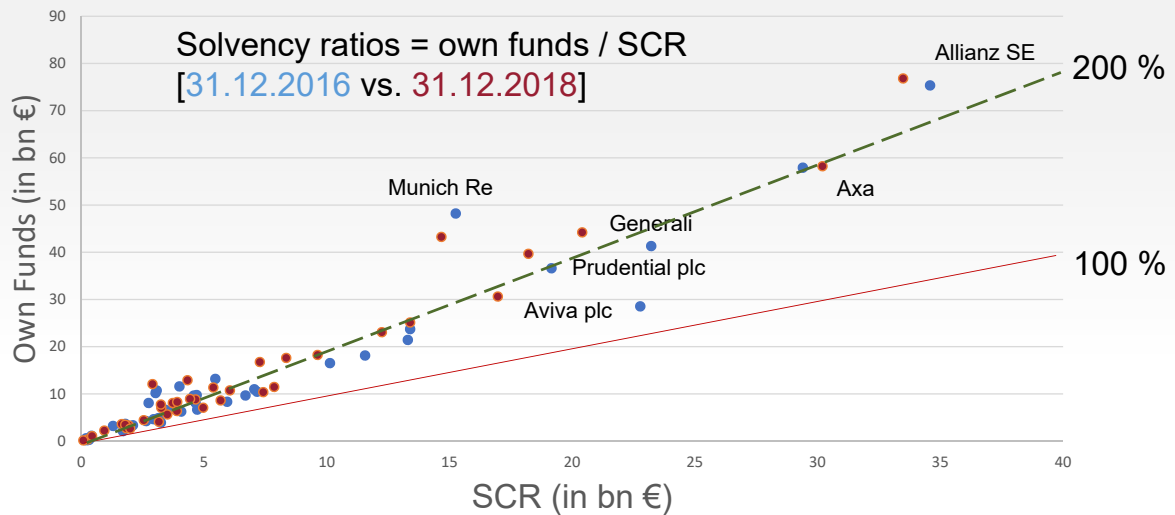
3.2 Scenario approaches

Stand formula approach – integration in risk moduls



3.5 Scenario approaches

Macro-Stress Testing



Source: groups' annual reports, own research

5. Summary and outlook

- **Insurance is not „unsustainable“, however it can contribute to mitigate sustainability risk**
- **Insurers are affected by sustainability risk and should assess their investments if they meet ESG criteria**
 - Need of a governance framework
 - E. g. definition of exclusions
- **Insurance can voluntarily define „exit“ strategies, but supervisory developments (like BaFin guideline) could trigger earlier / obligatory action plans**
- **Measuring sustainability risks is not easy: 200-year-event and how to integrate it into the other risks -> scenario approaches at micro and stress testing at macro level**
- **Much more standardisation (“ESG is not ESG”) and data needed to measure effects reliable (e. g. climate reporting)**

Literature

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