



AIRMIC 2018

Enterprise Risk Management: (How) Does It Create Value?

Liverpool, 12 June 2018

Steven Schmidt, Dirk Schaefer, Wolfgang Boffo

Corporate Insurance Partner



Munich RE 

Our survey

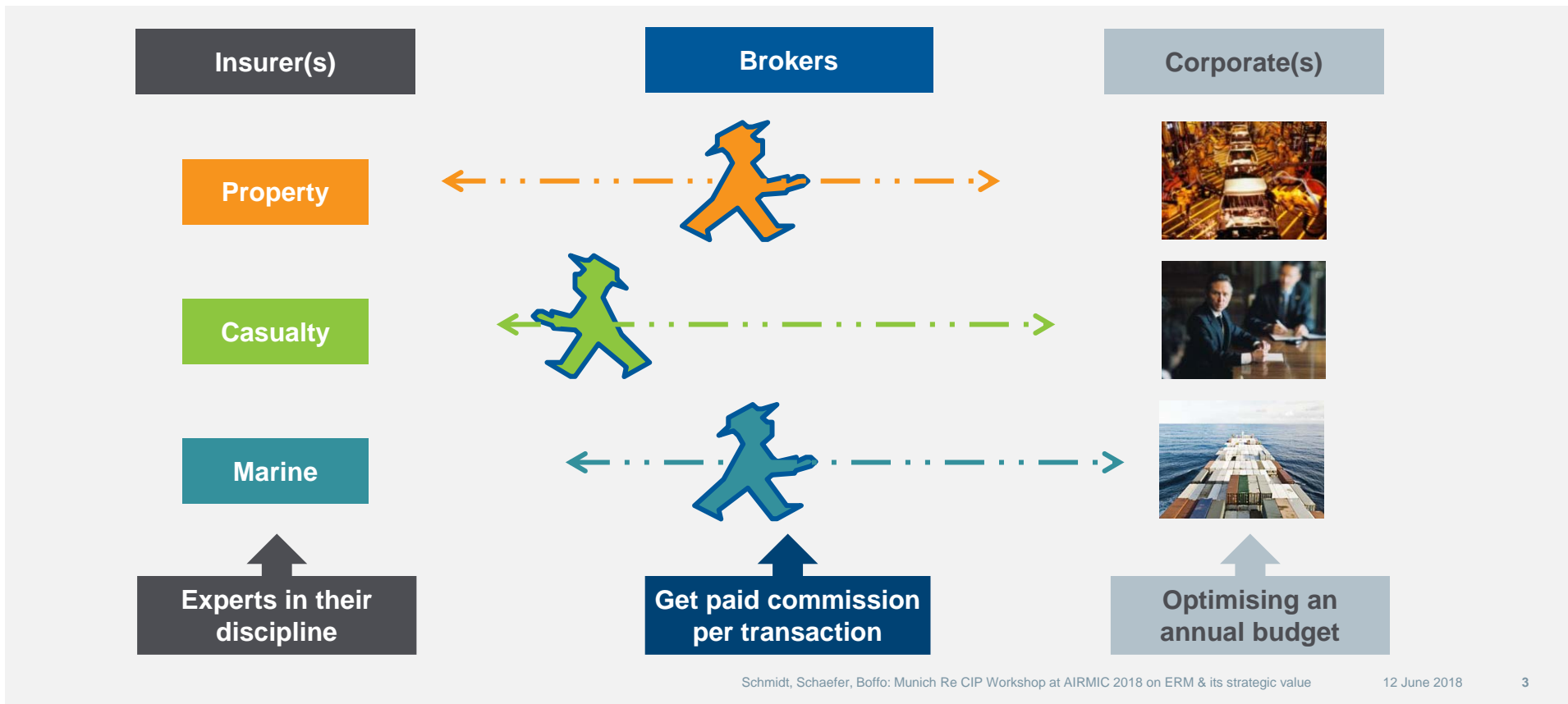
Thank you very much for your support, quite some participation

16 people have participated which allows us the opportunity to draw some conclusions:

- In half of the companies, Risk Management is split into Insurance Risk management and Enterprise Risk management
- A minority of the companies perform only ERM required to obtain audit approval
- In only 25% of the companies, ERM is seen as a “necessary evil”
- Half of the respondents indicated that Risk Management is not just qualitative, but also has significant quantitative tasks
- Most respondents say that their RM is proactive
- According to half of the respondents, RM is coordinated with Finance and Strategic planning
- Top Management is frequently involved in Risk Managements processes, for which most companies have an established process
- Most companies’ Risk Management is not only concentrating on “minimizing the downside,” but are also involved in “realizing the upside”

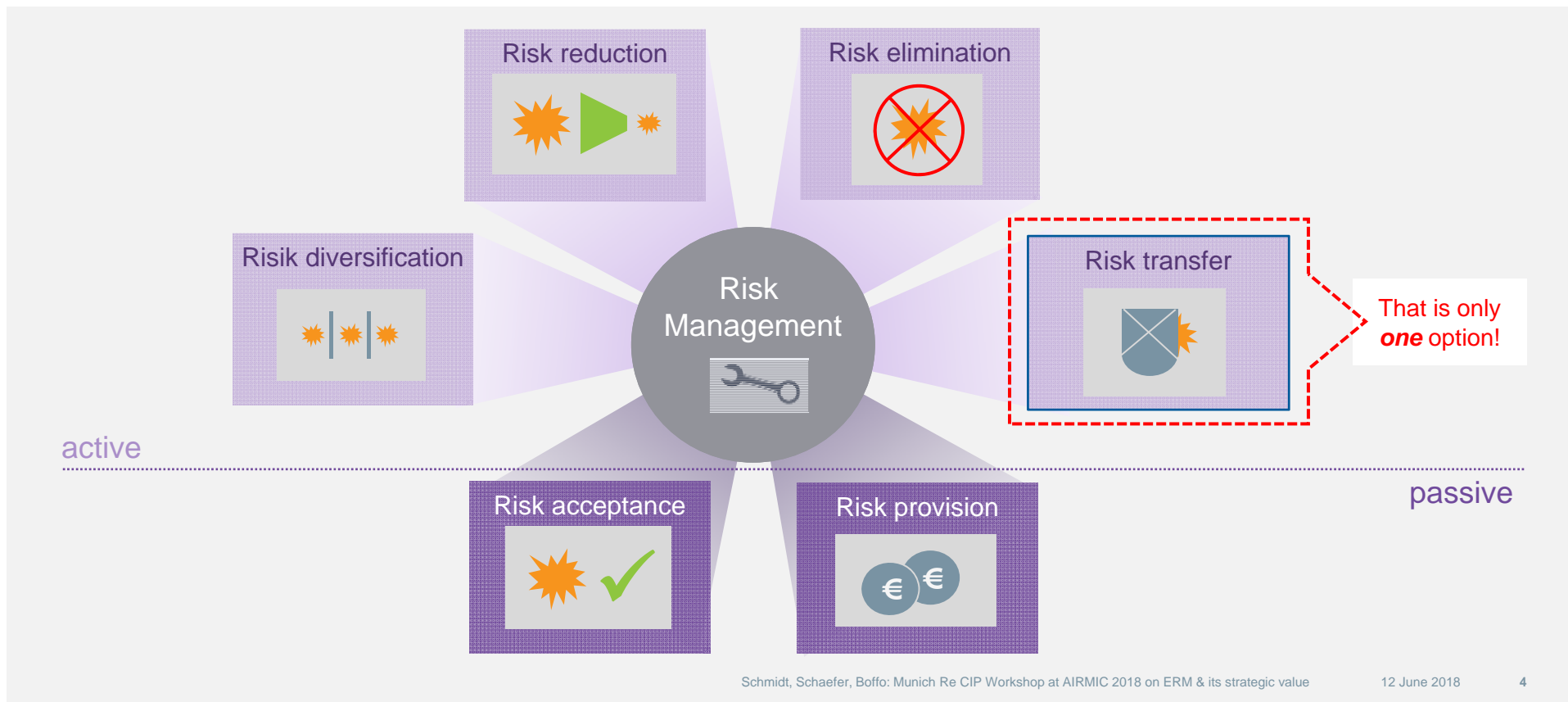
Corporate insurance market

This is how and now – but not the future!



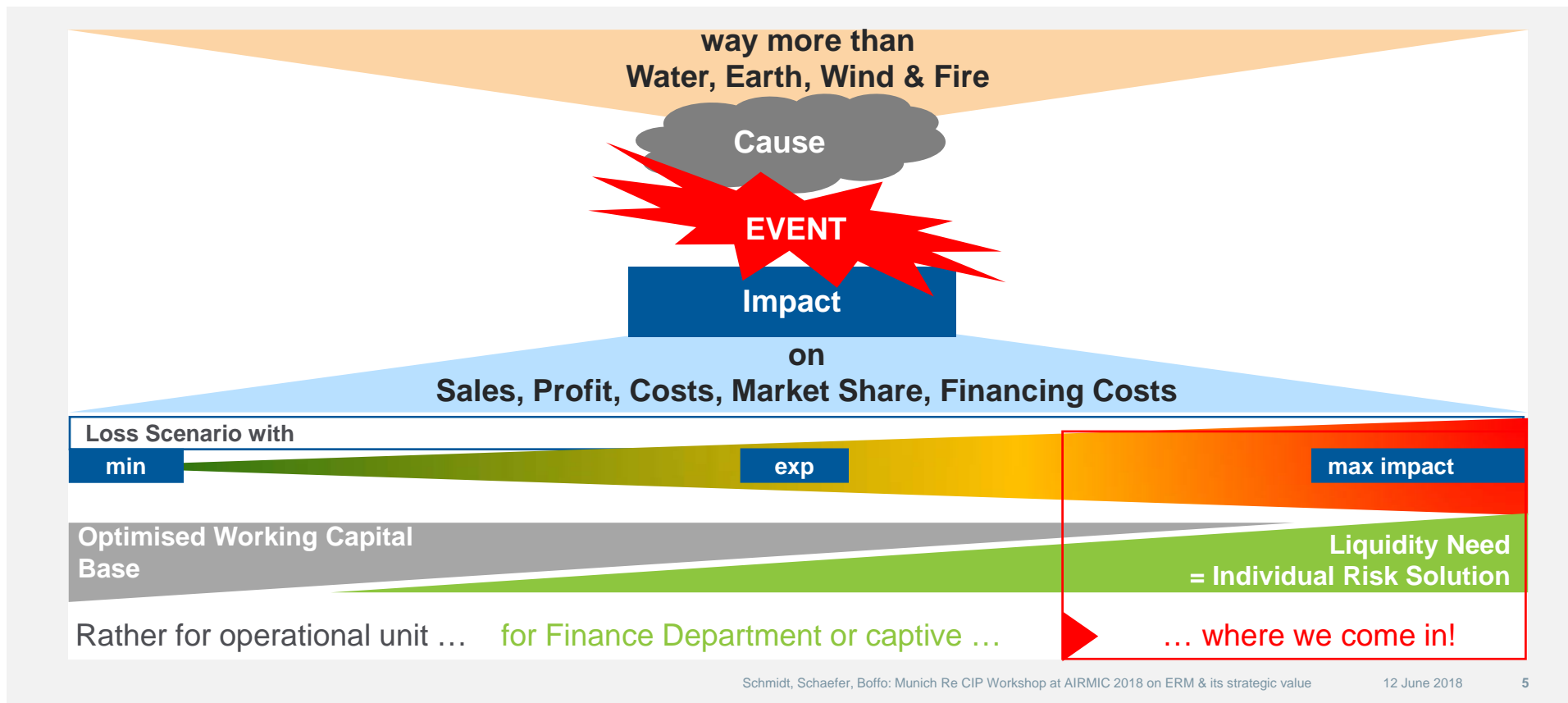
Risk Management can be executed actively and passively

Obviously, it is not only about insurance, but conscious decision making



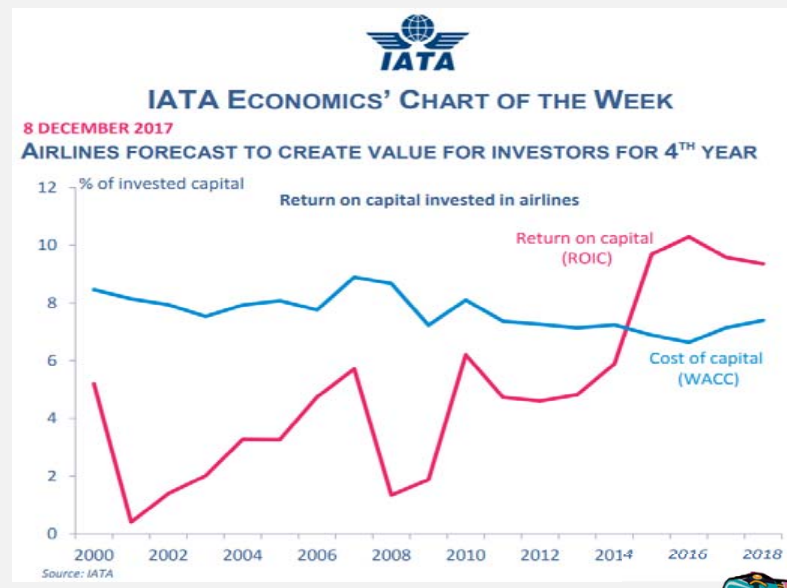
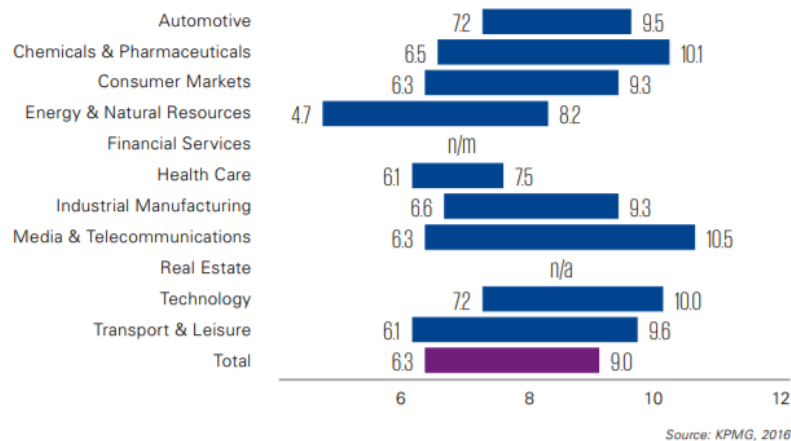
Appropriate new risk solutions demand a holistic view

Quick access to liquidity is crucial in a severe risk event beyond control



Knowing your risks and your Risk Bearing Ability leads into ...
 ... capital reserving that doesn't come for free, but at a price!

WACC (after corporate taxes) per CGU by industry
 (in percent)



- These Capital Cost number are per cent, not per mille.
- In a finance department as well as to the outside finance world, this is common knowledge.
- Any capital releasing action below such (internal) cost of capital per se is economically worthwhile.




Risk Management

It adds most value when it supports (top) management decision making

Transparency over risks is a **necessary**, but not sufficient precondition, for economic value added through risk management.

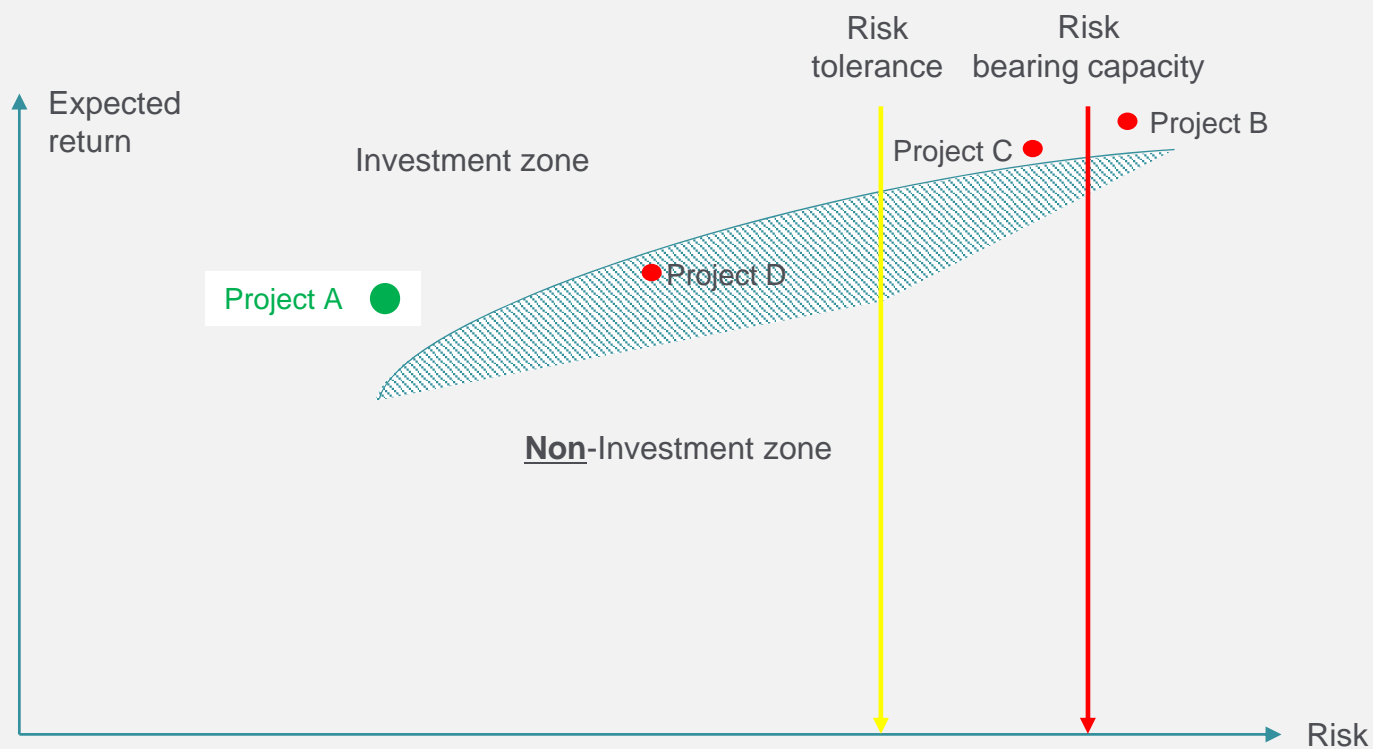
It is **problematic** if risk management, most notably risk analysis and risk monitoring, only observe the current risk situation of the company, **without** also analysing its **future risks**.



We think that **significant value added** can only be created if companies use risk analysis to evaluate which actions actually lead to an improvement of the ratio of expected returns and the risk exposure of a certain company.

What projects to pick and to invest in?

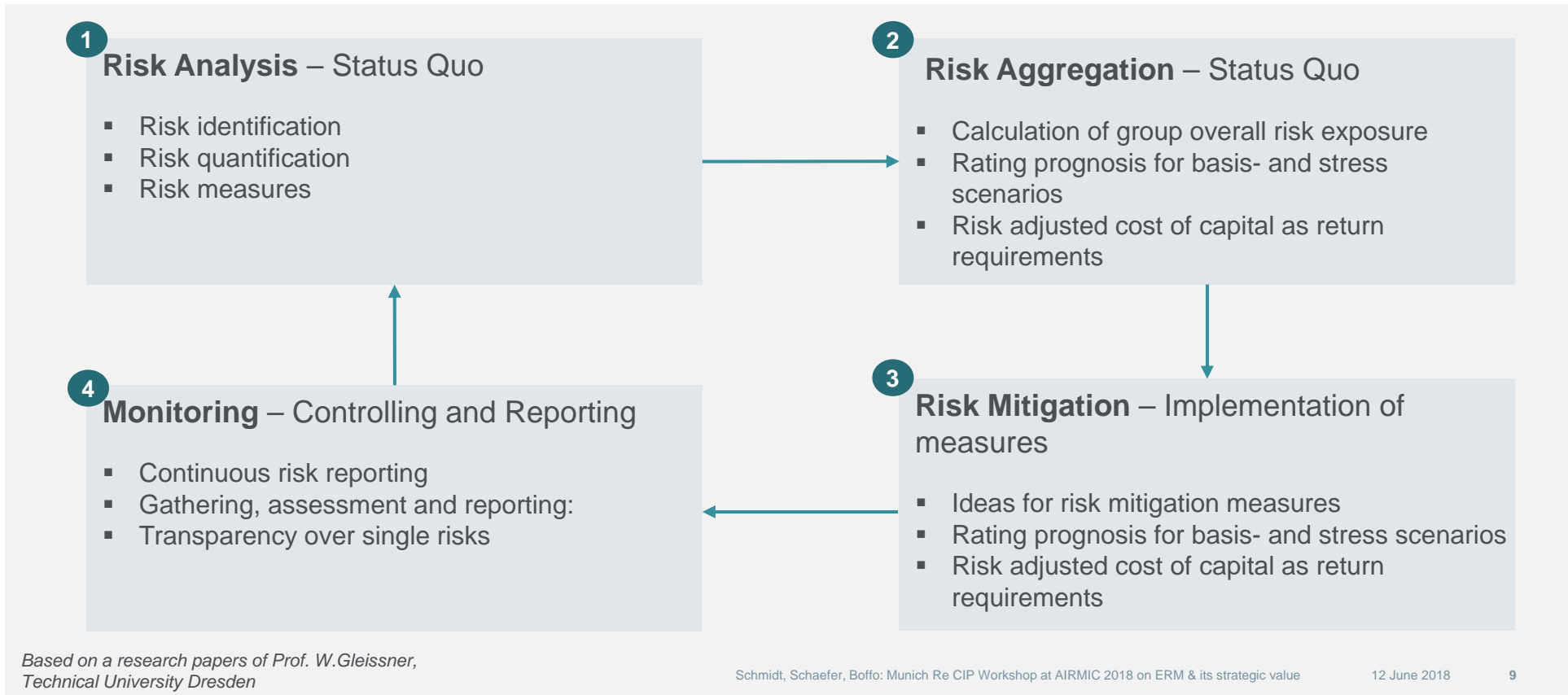
A framework for a decision support orientated risk management



Based on a research papers of Prof. W.Gleissner, Technical University Dresden

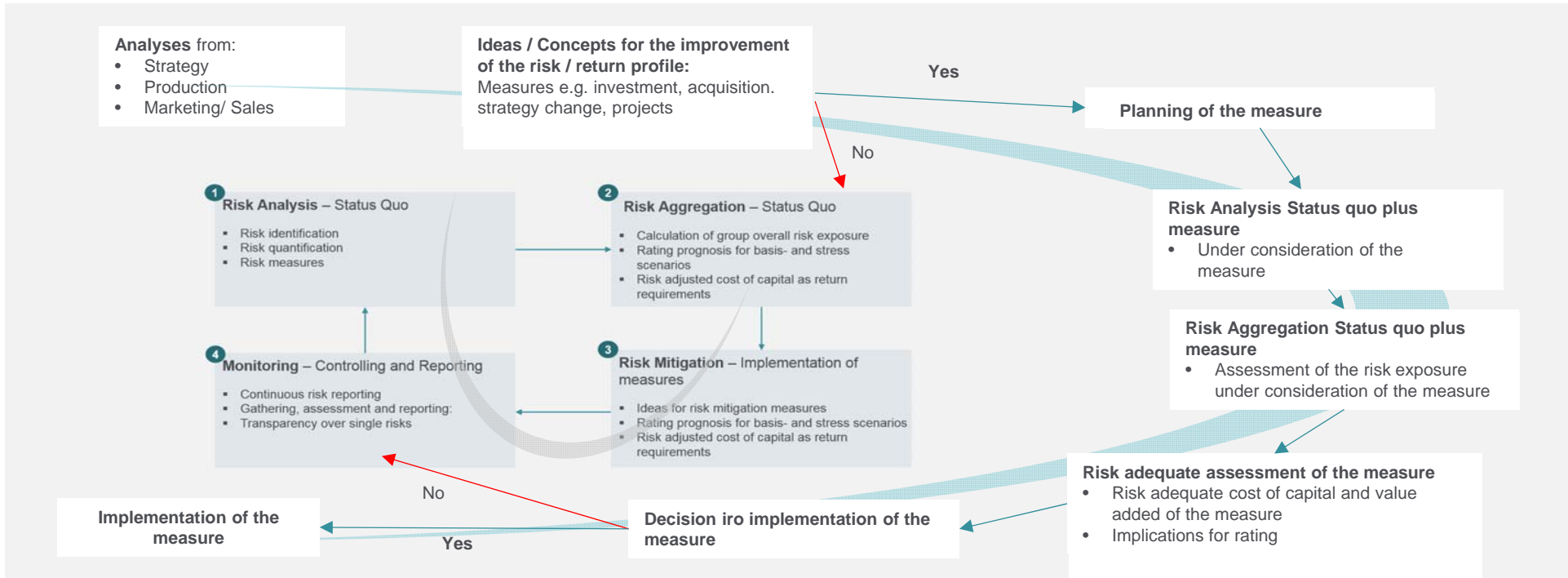
Elements of a traditional risk management cycle

It concentrates on the status-quo and hardly reflects on the future



What is forward looking?

A decision support risk analysis approach is



Based on a research papers of Prof. W.Gleissner, Technical University Dresden

What is the problem?

Risk aversion due to a lack of decision support seems to be rather common

Research results from a CEB (2018) Global study:

- Senior Leadership has become more risk averse when funding projects
- Chief Risk Officers observe decisions that are inconsistent with the firms risk appetite

Three factors seem to have led to the current level of risk aversion

1

**Lingering effects of the
financial crisis**

2

**Rise of the Assurance
Functions**

3

**Growth “Anchors “ in
Finance and HR**

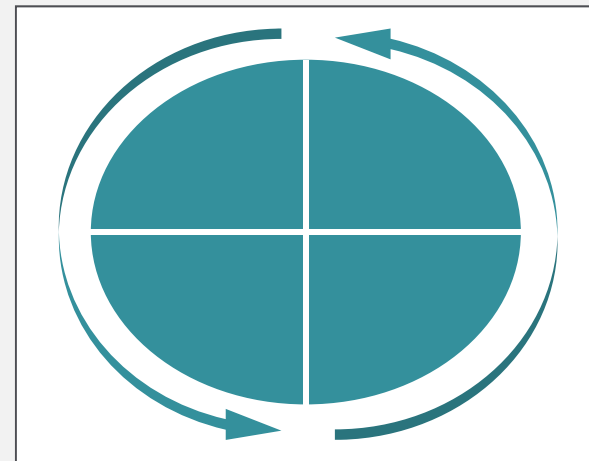
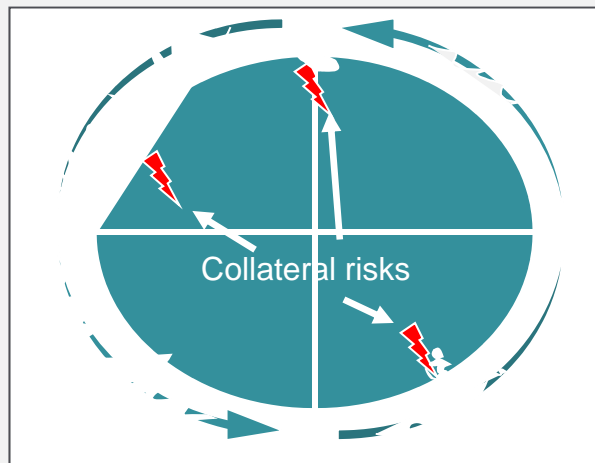
How can you overcome this risk aversion?

- Effective collaboration between Strategy Planning, Risk Management and Finance
- Define risk appetite in a proper context
- Set a dynamic not static, risk appetite
- Complementary risk transfer

What can help?

Targeted risk transfer can improve the business model of a company or its divisions

Search for all risks that significantly “unbalance” your business model



By transferring certain risks you can improve your business model!

Example Swiss Federal Railways

A classic: business interruption paid by insurance only if there is physical damage



NEW COVERAGE CONCEPT FOR RAIL TRAFFIC

When the trains stop running

In June 2012, a landslide hit the railway lines near Gurtellen in Switzerland. Although the property damage was limited, the business interruption caused Swiss Federal Railways (SBB) additional costs of just under 20 million francs. The entire financial loss was indemnified through SBB's property insurance only because of the property damage caused to the tracks.

The risk managers at SBB realised that, without the property damage, the rockslide would not have triggered an insurance payout, even though significant extra costs would have still arisen. Risks not involving property damage are highly diverse in nature, with IT and increasing digitalisation being the main sources of risk for so-called NDBI (non-damage business interruption) losses.

As the most important mobility service provider in Switzerland, SBB runs one of the densest and most heavily-used rail networks in the world. SBB can

of the cause. Within Corporate Insurance Partner, a "deal team" worked together with SBB to identify and evaluate possible loss scenarios, as well as their likelihood of occurrence and their financial impact. Following an international tender, Munich Re and two other risk carriers from the insurance industry were awarded the contract.

We are drawing on the experience gained from this project to develop comparable solutions for other railway companies and corporate clients.



OUR EXPERTS IN ASIA

Wolfgang Boffo
Head of Asia
Corporate Insurance Partner
Tel.: +65-6318 0463
wboffo@munichre.com

- Keep in mind: traditional property insurance only pays-out if there is 'physical damage'.
- Had the rock fallen into gorge directly, **NO** track damage, **NO** pay-out, **BUT** still 30 days of interruption.
- This bizarre, hard to understand circumstance did catch the CFO's attention!

Example EasyJet

Air-traffic business interruption: cancellation of (all) flights – all risks

- Airlines generally require a significant **liquidity buffer** to manage the impact of temporary shock events to revenues.
- This is usually done through a combination of cash reserves and a revolving credit facility.
- **However, holding large amounts of cash on the balance sheet is costly and unproductive.**

easyJet annual report 2017

Handelsblatt

MUNICH RE KOOPERIERT MIT EASYJET

Billigflieger sichert sich All-inclusive-Versicherung

Commercial Risk

Insurance & Risk Management News

Munich Re and easyJet develop groundbreaking cancellation cover

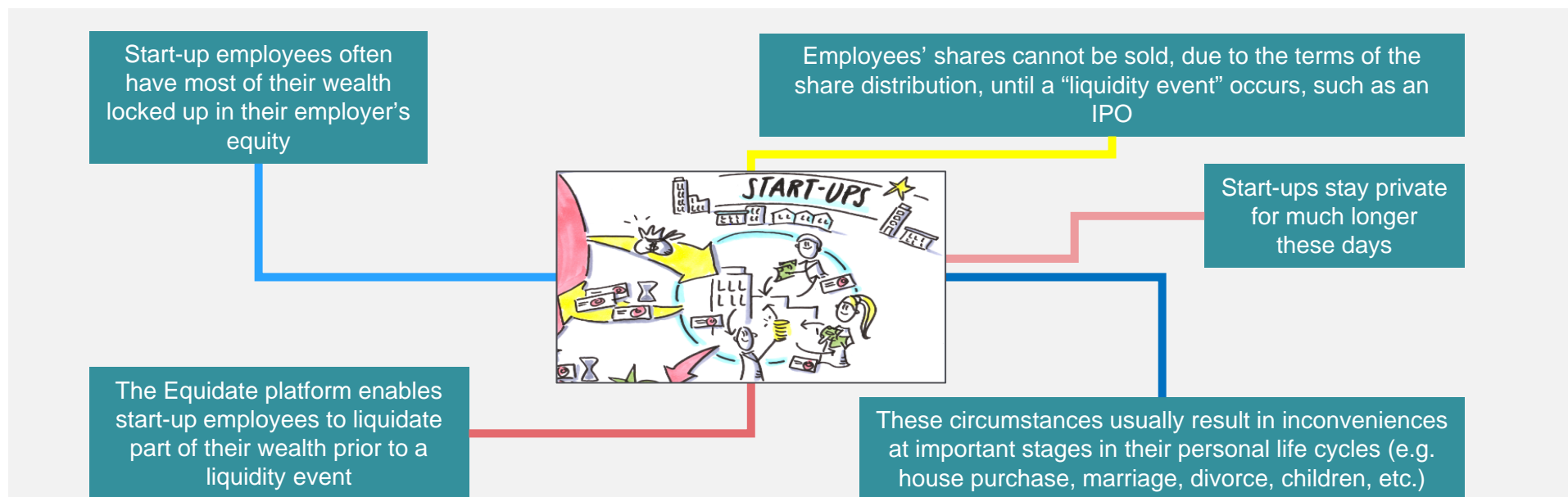


“easyJet holds business disruption insurance which provides some cover for some of these very significant shock events such as extreme weather, air traffic management issues and loss of access to key airports.”

- The cover allows to partially replace an airline’s liquidity cash reserve.
- Insurance is less expensive.
- Insurance even allows to save on financing costs and to free-up liquidity.

Example Equidate Inc.

Investors liked the business case, but, at first, were reluctant to invest



- Equidate's business model contained counterparty risks.
- Such counterparty risks were not in the investors' risk appetite.
- Once these collateral risks were taken out of the business model, i.e. transferred, they invested.

Example reterro

Our Substitute Performance Cover clearly improved their competitiveness



“We are very excited about the value that this partnership with Munich Re brings to our remediation clients. The substitute performance cover assures that remediation can be completed to agreed-upon standards at agreed-upon costs”
said Reterro CEO Tom Doyle.



- The cover supports reterro by paying additional costs for using the next best remediation method, if they fail to deliver on their promise.
- The partnership addresses financial uncertainty and restores the value of distressed properties, without exposing property owners to new or residual risks.

Example Fraugster

This, again, is about increasing competitiveness with a unique cover

INTELLIGENT INSURER Munich Re validates start-up Fraugster's AI-based platform

23-04-2018

Munich Re has tested and insured the fraud prevention solution of German and Israeli start-up Fraugster, which uses artificial intelligence (AI) technology to detect payment frauds and improve the security of online sales.

Max Laemmle, founder and CEO of Fraugster:

"With several million transactions passing through Fraugster's system each day, our AI technology ensures that the product offered is very secure. The cooperation with Munich Re will make a significant contribution to our new AI-based product reaching e-commerce markets around the globe."

- The cover enhances their artificial intelligence (AI)-driven algorithm that detects fraudulent online payments.
- The algorithm can separate a fraudulent online payment from an authentic payment within milliseconds.

Don't get trapped in existing processes, but started to show added value!



Steven Schmidt
Head of SER Business Development
Corporate Insurance Partner

Telephone: +49-89 3891 2667
Email: sschmidt@munichre.com
Web: www.munichre.com/cip



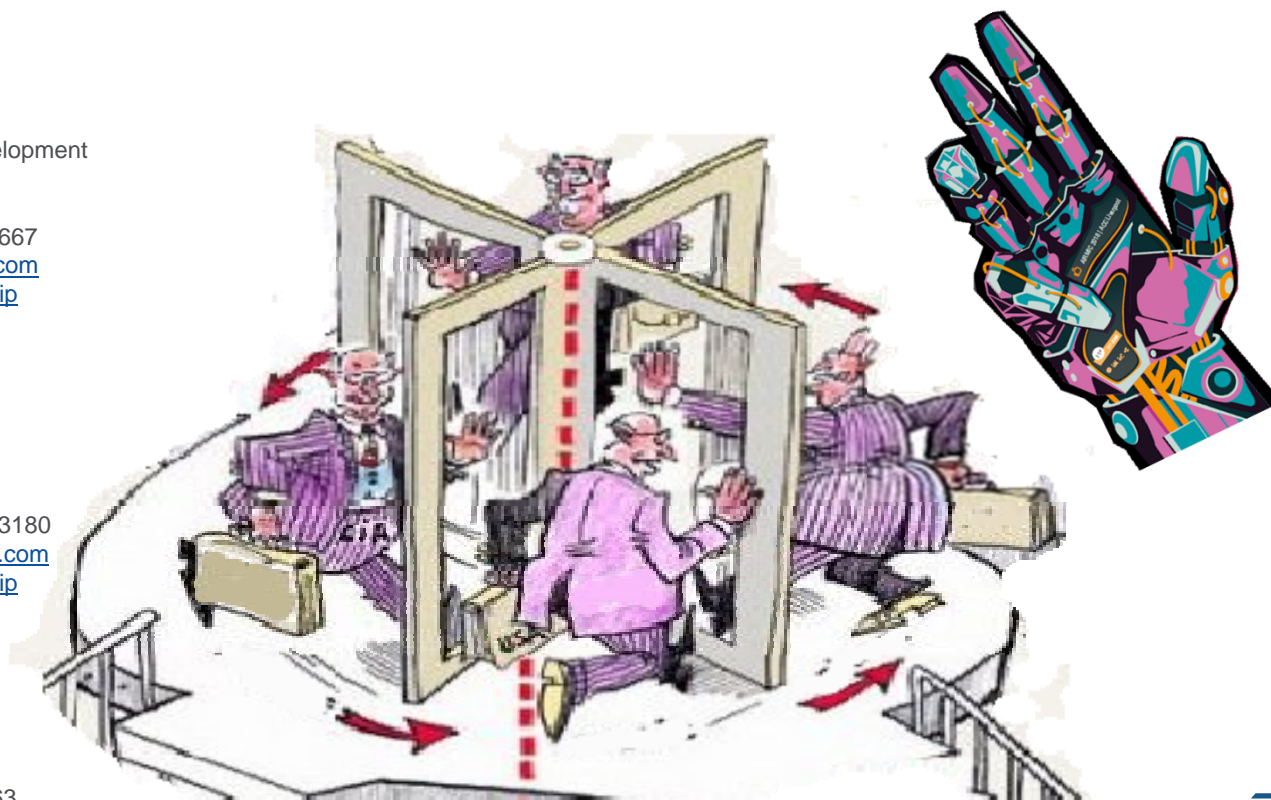
Dirk Schaefer
SER Senior Risk Analyst
Corporate Insurance Partner

Telephone: +49-89 3891 3180
Email: dschaefer@munichre.com
Web: www.munichre.com/cip



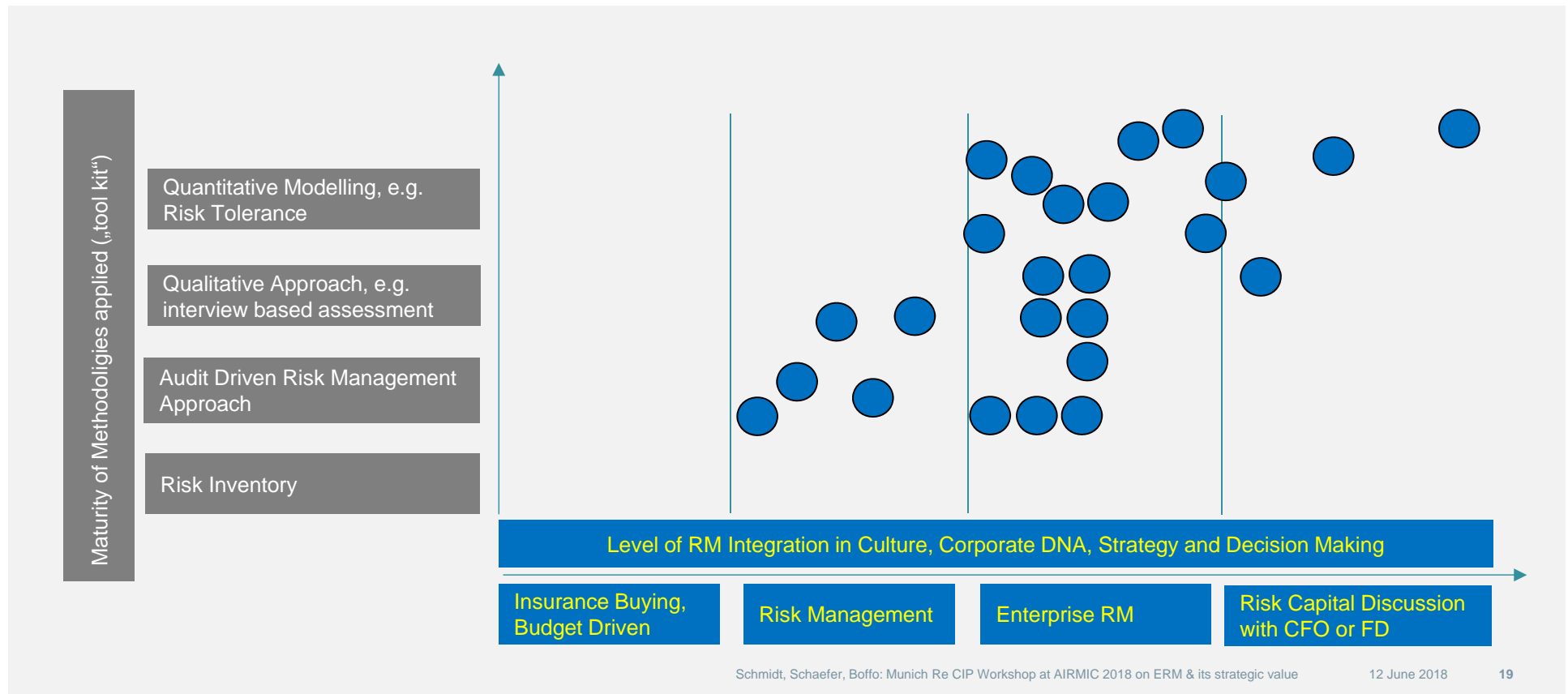
Wolfgang Boffo
Head of Asia
Corporate Insurance Partner

Telephone: +65-63180463
Email: wboffo@munichre.com
Web: www.munichre.com/cip



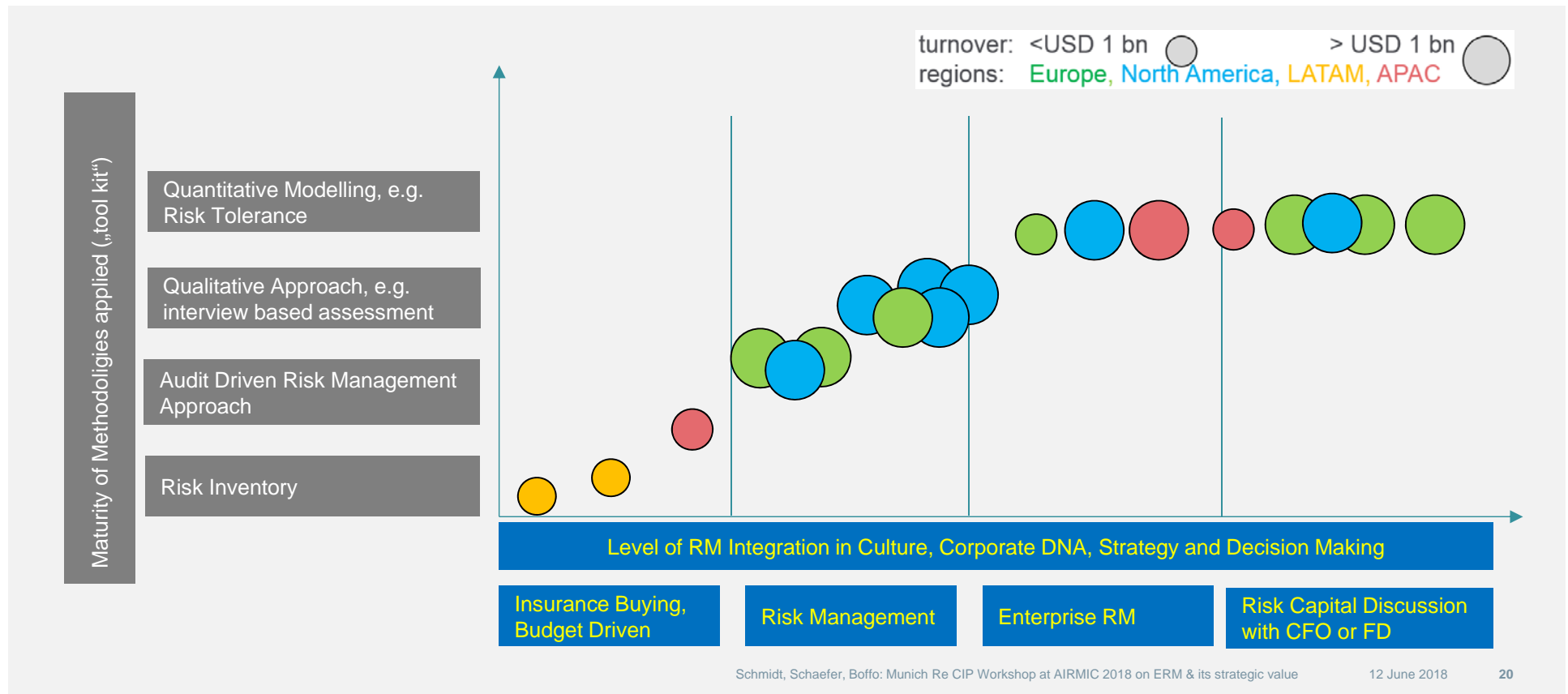
Appendix

Self assessment of workshop attendees re *their* risk management positioning



Appendix

Munich Re interview series 2017 with corporates on risk management positioning



Appendix

Pre-workshop survey on strategic importance of risk management (I/II)

Topic		Hypothesis – In my company ...	Yes / No
1	Functions of Risk Management	We have two clearly separated functions: An Insurance Risk Manager AND an Enterprise Risk Manager.	
2	Main Tasks in Risk Management:	a) Manage insurance related tasks.	
		b) Updating the Risk Repository.	
		c) Risk Reporting to Senior management and external stakeholders (e.g. investors).	
3	ERM is a rather audit driven task	Our ERM processes are mainly geared towards acceptance/sign-off in the context of the yearly corporate audit.	
4	Internal standing of Risk Management	Risk Management is rather seen as a necessary evil	
5	Character of ERM	All our Enterprise Risk Management tasks are rather qualitative than quantitative.	
6	Emerging Risks	Risk Management is proactively searching for new risks that put Corporate targets at risk.	

Appendix

Pre-workshop survey on strategic importance of risk management (II/II)

Topic		Hypothesis – In my company ...	Yes / No
7	Resilience requires a 360 degree view of risk in the Risk Management	Risk Management is actively involved in assessing opportunities and challenges from mega trends (e.g. shifts in world power, increasing protectionism, Brexit, Digitalization).	
8	Strategic Value of ERM	We have metrics to track the Return of Investment (RoI) of our ERM efforts; including Strategic Value and Costs and Benefits related to the RM framework.	
9	Integrated set-up	Our Risk Management, Controlling and Finance units are well coordinated.	
		Risk Management also provides input for Corporate Strategic Planning.	
10	Involvement of C-Suite / MD	a) Our Top Management is regularly involved and there is a process for this	
		b) Our Top Management is regularly involved but on an ad hoc basis	
		c) Our Top Management is only involved to a minimum degree	
11	Upside	Our risk management function is expected to protect primarily against downside but nor so much for realizing the upside.	