INVESTOR BRIEFING SPECIAL AND FINANCIAL RISKS (SFR)

London, 11 October 2012

Munich RE

Agenda

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General overview

The Special and Financial Risks Division focuses on particular business models and fosters innovation

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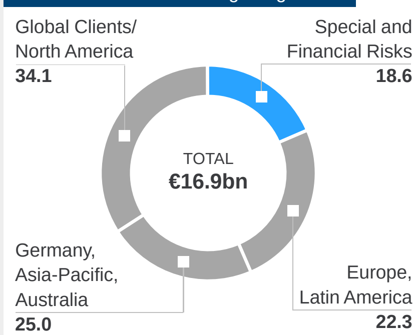
Non-life business – Strategic alignment[1] %



Special and Financial Risks (SFR)

1 Strategic rationale

- Direct business with large (corporate) risks
- Niche-specific strategies
- Innovative primary insurance products/systems
- Driven by monoline buying pattern of the client
- Worldwide relevance and responsibility

2 Synergies with asset management

- Investments in renewable energies/infrastructure
- Steering of credit risks across both sides of the balance sheet
- Risk trading unit: centre of competence for ILS[2]

Regional units

- Solutions/services for regional composite insurers in non-life
- Pooling of know-how in regional markets

Global clients

- Serving major international insurance groups/ Lloyd's syndicates
- Pooling of know-how for lines linked to composite insurers

[1] Gross written premiums as at 31.12.2011 based on annual report.
[2] Insurance-linked securities, e.g. catastrophe bonds.

1 Strategic rationale

Four business units within SFR providing widespread (re)insurance solutions for complex and innovative risks

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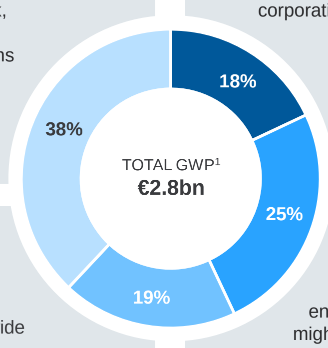
Agriculture

Wide range of coverage for crop, livestock, greenhouses and forestry plantations

Crop solutions based on public-private partnerships

Corporate Insurance Partner

Providing solutions to large internat. corporations in broker-driven industrial insurance market covering property, energy, engineering, casualty, and special enterprise risks



All aviation (re)insurance worldwide

All space insurance worldwide

Covering trade credit and surety risks as well as specific enterprise risks which might endanger events/ projects or financial stability of corporates (e.g. contingency, geothermal, weather)

Aviation/Space

Financial Risk

[1] As at 31.12.2011. Economic view. Difference to annual report figure (€3.1bn). Further details are explained in the backup.

1 Strategic rationale

Well-balanced business portfolio – Diversification across industries, regions and pricing cycles

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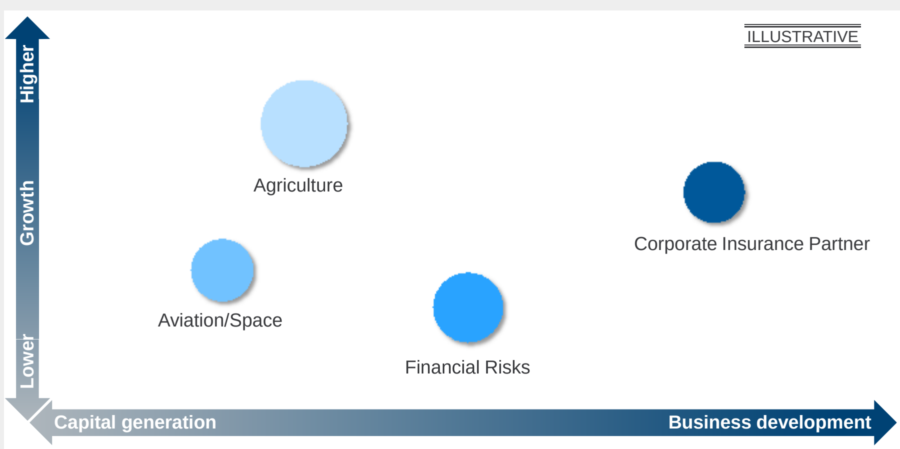

Portfolio of complementary profiles delivering attractive and stable results

Bubble size = Gross written premium as at 31.12.2011.

1 Strategic rationale

Risk Solutions embedded in all divisions including SFR – Total premium volume ~€3.6bn

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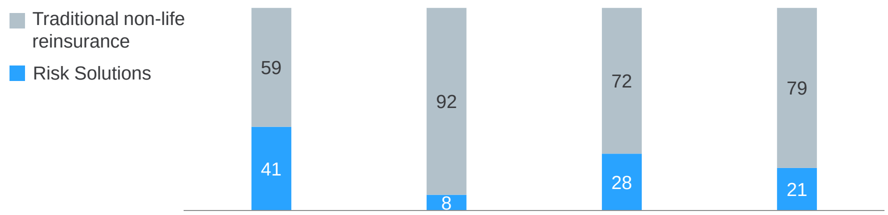
Risk Solutions – Premium breakdown within reinsurance segments[1]

%



Division	Global Clients/ North America	Europe, Latin America	Special and Financial Risks	**Total non-life**
Examples	HSB, AMIG, Lloyd Watkins	Bell & Clements	CIP, GAUM[2], part. Aviation/Space	

Rationale

- Different channel or value chain repartition to access risks
- Optimum risk proximity and excellence secured
- Efficient set-up – no separate legal entity
- Detaching Munich Re from the cycle in non-life business

[1] Based on gross written premium.
[2] Global Aerospace Underwriting Managers.

1 Strategic rationale

SFR product pipeline is one important driver of innovation for the whole reinsurance group

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Innovation within dedicated special units	Primary insurance growth	Maturity/standardisation
Examples **Special Enterprise Risks:** Photovoltaic performance, wind serial loss, concentrating solar power performance guarantee, cloud computing IT risk, intellectual property rights, pharma concepts, marine hire protection, etc.	**Examples** **Corporate Insurance Partner**: Reputation risk, non-physical damage business interruption **Financial Risks:** Exploration risk, weather, MalariaNoMore **Aviation/Space**: System coverage for Other-3-billion, protection for space investments	**Transfer to reinsurance units,** e.g. providing traditional capacity for photovoltaic risk covers

Insurance product life cycle

2 Synergies with asset management

Leveraging underwriting and investment expertise within prudent risk accumulation management

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Munich Re risk assessment

- Research of natural hazards and climate change impacts
- World's largest database of natural hazards
- Extensive underwriting expertise (esp. engineering)

Business opportunities

Growing demand for innovative risk transfer solutions enriched by asset management impulses	Examples ▪ Performance guarantees (wind, photovoltaic) ▪ Exploration risk (geothermal energy)

- Fits well into Munich Re's climate strategy
- Largely independent of business cycle
- Attractive growth market
- Innovative solutions for complex new risks

Possible business volume by 2015 – Mid three-digit €m range

Asset management

Significant expansion of renewable energy (RENT) and infrastructure investments making use of extensive underwriting expertise	Examples ▪ Photovoltaic ▪ Onshore wind energy ▪ Energy grid

- Long-term, predictable cashflow streams
- Largely independent of economic cycles
- Attractive yield in low-interest environment
- Providing portfolio diversification benefits

Targeted investment volume by 2015 – ~€2.5bn in RENT, ~€1.5bn in infrastructure

2 Synergies with asset management

Holistic steering of credit risks for assets and liabilities enhancing consistency and improving swift execution

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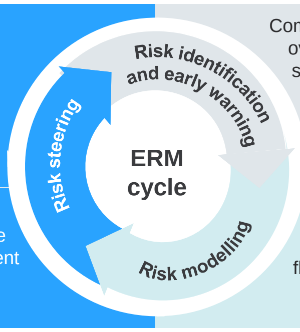
Munich Re's enterprise risk management (ERM)

Risk strategy
Clear limits define the framework for operational action

System consisting of triggers, limits and measures in con-junction with responsible management action



Comprehensive overview with special focus on main issues

Based on right balance between flexibility and stability

Risk governance & management culture as solid base

ERM and "Global Head of Credit"

Integrated Risk Management
Group-wide ERM for credit
Credit fully integrated into Group-wide ERM – Comprehensive limit, trigger and early-warning system
Risk modelling for credit (assets/liab)
- Consistent modelling of credit risk
- Consistent stress scenarios (and correlation assumptions)
- Top-down allocation of risk capital

SFR/Asset-Liability-Management
Business credit strategy
- Global responsibility for credit risk
- Definition of credit appetite for assets and liabilities within limits
- Top-down allocation of capacities according to profitability; swift shifting procedures in place
- Accumulation control on a common IT platform

General overview

Attractive and diversifying contribution to Munich Re's financials (1/2)

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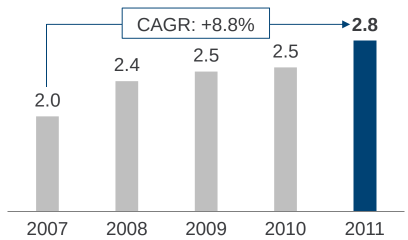
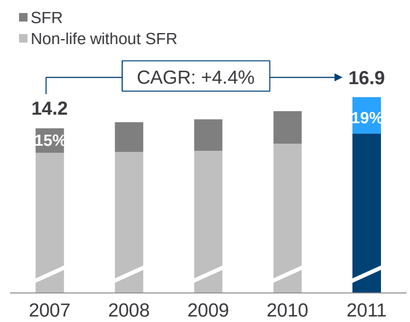
SFR and reinsurance non-life: Gross written premiums – Substantial growth[1] €bn





Globally diversified SFR portfolio with above-average growth

Increasing SFR premium contribution to total reinsurance non-life portfolio

All business areas based on core competencies of Munich Re non-life – synergies with Munich Re

[1] Left chart: Economic view, figures are shown after elimination of intra-Group business, see backup.
Right chart: Annual report. 2007 adjusted for agriculture business considered for the first time within SFR from 2008.

General overview

Attractive and diversifying contribution to Munich Re's financials (2/2)

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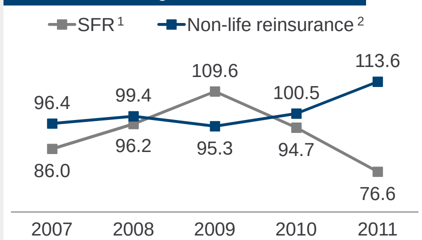
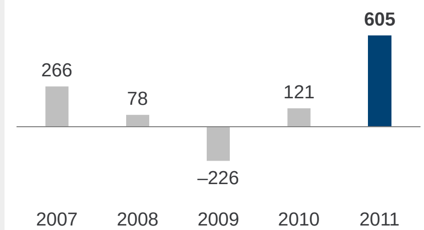
Combined ratio – Better than average %



- Combined ratio of SFR largely uncorrelated to reinsurance non-life business – less gearing to nat cat risks (2011) and higher exposure to credit risks (2009)
- All SFR business lines contributing positively to total profitability with pleasing average combined ratios in recent years
- Overall, lower capital intensity in comparison to traditional non-life business

Underwriting result[3] – Significant contribution €m



- 2010 and 2011 results burdened by industrial business (CIP) but more than compensated for by significant reserve releases in Financial Risks and Aviation/Space in 2011
- Financial Risks hit by financial crisis in 2009 but with satisfactory results across the cycle
- Excellent track record of Aviation/Space
- Very stable and growing performance of agricultural business until 2012 (US drought)

[1] Economic view, figures are shown after elimination of intra-Group business. [2] Annual report.
[3] Technical result without technical interest.

General overview

Strategic ambition – Continuous value generation in specialised business models and innovative strength

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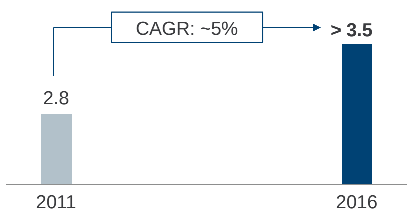
Strategic targets

Gross written premiums €bn



Combined ratio %

Expected growth mainly driven by agriculture, industrial business and innovation

Stable economic profitability despite slightly higher combined ratio

Key focus initiatives

- Strengthening of global footprint in specialised business models
- Fostering client centricity/unique selling proposition
- Further improvements of underwriting excellence
- Expanding innovative leadership through product developments

General overview

Key takeaways

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Strategic rationale

Bundling of global and specialised business models in SFR allows execution of specialised/niche strategies complementary to Munich Re's non-life business

Performance

Above-average profitability and growth

Capabilities

All business areas based on core competencies of Munich Re non-life – synergies with Munich Re

Organisation

No further separation from traditional non-life business and Risk Solutions (e.g. legal entity)

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General overview of SFR	Thomas Blunck
Corporate Insurance Partner	**August Pröbstl**
Financial Risks	Thomas Lallinger
Aviation/Space	Guido Funke
Agriculture	Karl Murr
Backup	

Corporate Insurance Partner – Providing tailor-made solutions for large corporate clients

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Target clients

Global 5,000 companies and leading players in their industries and large complex projects

Provided solutions

Insurance solutions for target clients or reinsurance covers for their captives worldwide

Deal flow

Demand	Distribution	Carriers (examples)	Solution
Industrial and non-industrial international corporate clients	Industrial insurance typically placed by brokers ~70% of CIP's portfolio generated by top four brokers[1]	**Munich Re** e.g. Great Lakes UK, AAIC[2], Peslic[3] **Third-party fronting company** e.g. local primary insurer **Captive**	**Munich Re** Corporate Insurance Partner (CIP)

[1] Marsh, AON, Willis and JLT. [2] American Alternative Insurance Corporation.
[3] Princeton Excess & Surplus Lines Insurance Company.

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Industrial insurance – Huge market segment offering opportunities for growth and innovation

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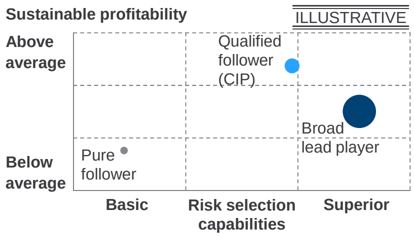
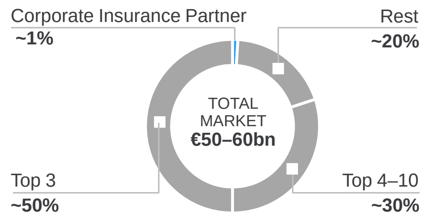
Strategic groups in industrial insurance[1]



- Established business models
  - Broad platform provider: Top 10 player
  - Qualified follower: Avg. market share >1%
  - Pure follower: Avg. market share ~1%
- Low barriers for new entrants with pure follower approach

Market shares of industrial insurers[2]



- High level of concentration: Top 10 global player with more than 80% market share
- Global market mainly distributed amongst European/London and US/Bermudan based carriers[3]
- CIP positioned as high net capacity player complementing Munich Re reinsurance units

CIP deliberately following qualified follower approach with modest market share – Lean set-up geared to generating sustainable profits above industry average

[1] Bubble size = premium potential. [2] No uniform segment definition; important industrial insurers include ACE, AGCS, AXA, Chartis, FM, Lloyd's, Swiss Re, Talanx, XL, Zurich. [3] Not considering local champions.

Corporate Insurance Partner

Lines of business – Solutions ranging from traditional products to individual risk solutions

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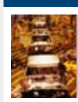
Line of business	Product examples		Client management
 General property	▪ Property damage ▪ Business interruption	▪ Machinery breakdown ▪ Nat cat covers	Client management team pursues cross-selling and up-selling potentials and provides access to Munich Re's entire range of know-how and solutions for corporate clients
 Casualty	▪ General liability ▪ Product liability ▪ D&O liability	▪ Professional indemnity ▪ Intellectual property rights	
 Energy	▪ Mining, oil and gas ▪ Property damage ▪ Business interruption	▪ Offshore in combination with onshore	
 Special Enterprise Risks	▪ Supply chain interruption ▪ Performance guarantees ▪ Reputational damage	▪ Non-physical damage business interruption ▪ Cyber risk covers	
 Engineering	▪ Operational power ▪ Construction all risks ▪ Erection all risks	▪ Builders' risks ▪ Advanced loss of profit/delay in start-up	

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Strong value proposition – Creating value with global industry-specific knowledge and innovative solutions

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CIP's unique selling proposition

Solidity
Ensuring stability through independent net capacity, financial credibility and execution power

Expertise
Adding value to clients' business proposition with industry- and risk-specific expertise

Imagination
Breaking new ground as business enabler in dialogue with our clients

Solutions
Delivering a comprehensive range of solutions, research capabilities and know-how with Munich Re inside

Opportunities

- New demand from corporations for innovative solutions will further develop from industry-specific trends …
- … while strong capacity allows for participation in harder markets in traditional lines business
- Alternative business sourcing (e.g. financial institutions); cooperations with MGAs and Munich Re's RENT investments

Challenges

- Ongoing lack of investment alternatives and excess capacity in (re)insurance markets could lead to softer markets in traditional lines
- Economic recession in key markets
- Bottom-line volatility from large losses – nat cat and man-made

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Global footprint provides full access to selected business

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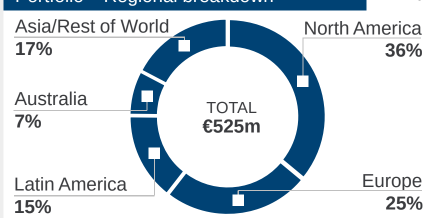
Network of about 235 experts worldwide

- Long-term strategy of team strengthening, including expansion of international footprint; local representative offices to broaden access to traditional business and new solutions
- Team enlargement in Munich/London/USA – New hubs/intra-Group cooperation models in Paris, Singapore, Brazil, Hong Kong, Tokyo, Canada and Australia

Portfolio – Regional breakdown[1]

%



- Global and flexible access to business supported by strong underwriting, loss-control engineering and claims expertise ("one voice to the market")
- Further growth opportunities in US property (moderate to balance peak nat cat exposure) and US liability (local experts since 2011)

Organisational set-up reflects deep understanding of the industries, markets and distribution channels (retail and wholesale)

[1] Gross written premium as at 31.12.2011.

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Key figures – Substantial top-line growth with volatile bottom-line contribution

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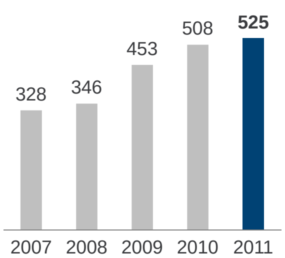
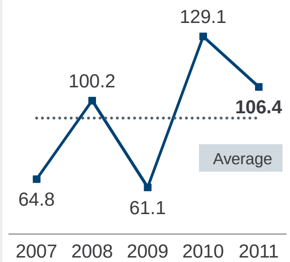
Gross written premium €m



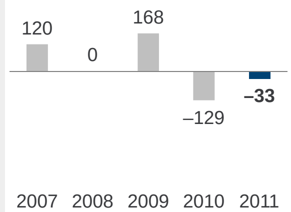
Top-line growth of ~60% over four years driven by capabilities to seize growth opportunities in a challenging market environment, e.g. engineering, oil and gas, US liability and green tech innovation

Combined ratio %



- High volatility of industrial insurance business as ultimate risk carrier
- Five-year average combined ratio of 92.3%
- Outlook: More balanced target portfolio to provide enhanced stability and profitability

Underwriting result €m



- Sound underlying performance over five years despite major losses
- Severe nat cats in 2010 (earthquake Chile, flood Australia) and 2011 (earthquake Japan, flood Thailand, US tornadoes)

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Proof-points in CIP portfolio development: Restructuring

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General property

- Loss drivers identified in 2011
  - Certain industries (e.g. food, steel)
  - Prior-year losses play a higher role than assumed
- Portfolio changes will be completed in 2012
- Basic loss ratios for underwriting years 2011/12 show positive trend
- Findings translated into further improvement regarding pricing, risk-based capital allocation and steering

- Property well on track regarding return to profitability
- Findings will improve quality of single risk underwriting within entire Munich Re

Energy – Mining

- Identification of specific loss drivers, e.g. business interruption risks
- Introduction of walk-away criteria regarding scope, structure and pricing of coverage
- Readiness to swiftly reduce top-line by 20%
- Supply/demand swings (e.g. BRIC)
- Volatility of commodity prices/"price spikes"
- Complexity in assessing bottleneck exposures and coping with industry developments

- Portfolio change completed by end of 2012
- Lower portfolio exposure from intransparent pricing mechanism of insureds

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Proof-points in CIP portfolio development: innovation and growth

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Innovation

Special Enterprise Risks
GreenTech – Insurance as business enabler

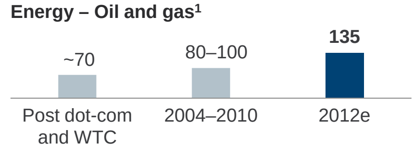
- New insurance solutions for original equipment manufacturers (OEM) to insure technology risks connected performance guarantees
- Bundling technology and credit risk at project level improves financing framework for banks and investors
- Munich Re's insurance cover provides quality seal supporting (new) market entries

- The value of new insurance solutions must be quantifiable to the customer and goes beyond pure risk transfer
- Know-how synergies at work with RENT and Hartford Steam Boiler

Growth

€m

Energy – Oil and gas[1]



Post dot-com and WTC	2004–2010	2012e
Building market reputation as expertise-driven carrier	Premiums fluctuating 10% up and down due to cycle	Since market reaction in April 2010, substantial increase

- Clients and brokers perceive our business appetite as transparent and consistent
- In-depth industry and market intelligence allows us to evaluate further business potential
- Strong market position helps to realise opportunities

[1] Gross written premium.

Corporate Insurance Partner

Lines of business – Further grow and diversify the portfolio of traditional and individual risk solutions

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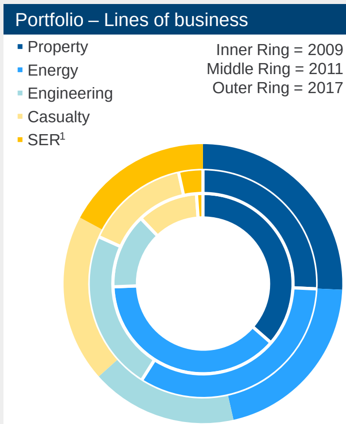
Portfolio – Lines of business

%



- Top-down portfolio steering towards target picture based on line-specific risk appetites, risk selection capabilities and underwriting strategies
- Improved diversification by line of business, geographies, short- and long-tail business as well as control of peak accumulation scenarios
- Continuous monitoring of market rate developments, competitive environment and performance of individual profit pools and loss drivers
- Innovation: Expanding the frontiers of insurability through SER product pipeline/innovative covers

Target portfolio 2017
Balanced lines of business contributing in a range of ~20% each

Driving profitable growth towards a more balanced target portfolio by seizing market opportunities in traditional lines while expanding innovative business

[1] Special Enterprise Risks.

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Outlook on lines of business – Gearing to higher growth and profitability potential

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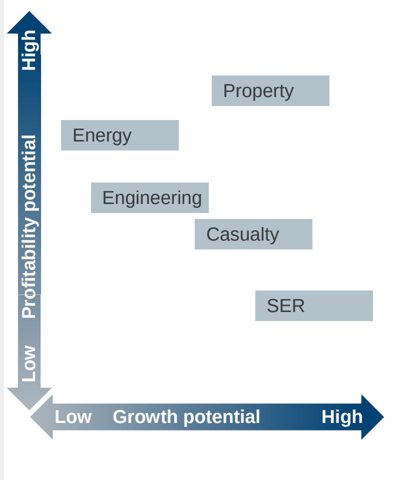
CIP – Business portfolio



Steering growth and profitability

General property	▪ International footprint and industrial expertise allow for scalable growth ▪ Re-aligned risk appetite with clear focus on target industries
Energy	▪ Further expand territorial spread in oil and gas ▪ Eliminate loss drivers involving large mining conglomerates
Casualty	▪ Seize growth opportunities in target markets (e.g. Energy liability) ▪ Discipline in managing systemic risks (e.g. Financial Institutions)
Engineer-ing	▪ Expand international footprint & focused strategic partnerships ▪ Strict discipline in managing nat cat and financial loss components
Special Enterprise Risks	▪ Innovative product pipeline creates niche markets ▪ Seize first-mover advantages detached from cycle effects

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Key takeaways

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Business portfolio – Improving profitability

Improving profitability, as loss drivers have been identified in traditional business and risk appetite has been redefined – completing consolidation phase to provide positive earnings contribution

Strategy – Expansion of innovative products

Portfolio shift from traditional to non-competitive innovative products will continue – innovative products generating growth, additional profit and enhanced portfolio diversification while reducing cycle dependency

Leverage Munich Re platform

Innovative solutions providing opportunities for the reinsurance operations to exploit such niches with ceding clients – Know-how synergies such as RENT, geo-scientific and industry-specific know-how perceived as differentiator by key clients and brokers

Ambition

Continue strong organic growth at a combined ratio of ~90%

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Financial Risks: Overview

Strong footprint in credit and surety reinsurance with growing importance of innovative solutions

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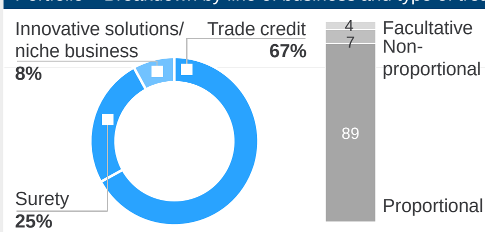
Portfolio – Breakdown by line of business and type of treaty %



- Portfolio dominated by traditional reinsurance in trade credit and surety
- Increasing importance of innovative solutions and niche business by exploiting various distribution channels
- Strong alignment of interest with clients through predominantly proportional business
- Limited impact of facultative transactions

Traditional reinsurance business

Trade credit – Covers non-payment of buyers of goods or services for commercial, political or other financial reasons

Surety – Guarantees the fulfilment of contractual or legal obligations

Innovative solutions and niche business

Contingency – Event cancellation, film realisation, prize indemnity, sport personal accident, K&R[1], etc.

Entrepreneurial – Geothermal and weather risks

Global credit – Direct cover for corporate credit risks

Enhancing portfolio diversification by safeguarding leading position in traditional business while developing innovative segments

[1] K&R = Kidnap & Ransom.

Financial Risks: Trade credit and surety business

Primary market has adapted rapidly to challenging economic environment

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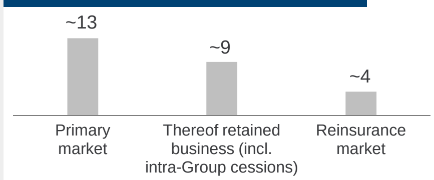
Market volume[1]

€bn



- Estimated total premium of global credit and surety market: ~€13bn
- Approx. 1/3 of this premium volume is accessible for the private reinsurance market
- Medium-term growth expectation: 5% p.a. – driven by expansion of global trading volumes and increased risk awareness of suppliers
- Sustainable demand for reinsurance expected as peak risks require high capacities

Current state of primary market

Trade credit

- Second year of exceptional performance with combined ratios of all major players <85%
- Pressure on primary premium rates (–5% in 2011) stabilising since H2 2011 as economic uncertainties have become more obvious again
- Due to strict risk management measures since 2008, portfolios are more robust and of better quality compared to pre-crisis years

Surety business

- Satisfactory and stable performance mostly unaffected by economic crisis
- Only isolated claims in few countries without expected impact on global market

Reinsurance to benefit from sound growth expectations of primary market and sustainable demand for reinsurance

[1] Figures are estimates based on data of ICISA (International Credit and Surety Association), PASA (PanAmerican Surety Association) and clients' information on market data (excl. business of ECA/Export Credit Agencies).

Financial Risks: Trade credit and surety business

Cyclicality in trade credit well manageable due to dynamic portfolio management ability

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Main characteristics of trade credit and surety business

	Trade credit	Surety business
Sensitivity to economic cycles	**Cyclical industry exhibiting** negative correlation between GDP development and number of corporate insolvencies with direct impact on claims frequency	**Lower dependency on economic cycles** as potential claims depend on multiple triggers[1] as well as anti-cyclical governmental infrastructure projects
Contract duration	**Short-term business** with credit periods usually less than 180 days; ability to dynamically manage limits and premium rates are strong tools to manage claims level	**Medium to long-term business** with tenors up to 7 years (average ~2–3 years) as surety bonds often cover all stages of construction or engineering projects by different bond types[2]
Success factors	Global scope, **quality of information on risk** (input for rating models) and a **high level of automatic underwriting** processes to handle the large number of single decisions	**Assessment of the technical capacity and financial resources** of the principal to adequately perform the contractual or legal obligations
Market	**Highly concentrated global market**: Three global leaders (Euler Hermes, Atradius and Coface) plus Sinosure have ~75-80% market share	Local markets due to specific legal and regulatory stipulations in most countries where **few, but highly specialised surety companies are competing with banks**

[1] Breach of obligations by the principal; unsuccessful litigation by the beneficiary due to insolvency of the principal; possible loss mitigation through fulfilment of the obligations by a substituting principal .
[2] E.g. bid bond, advance payment bond, performance bond and maintenance bonds.

Financial Risks: Trade credit and surety business

Munich Re the leading reinsurer for most of our clients

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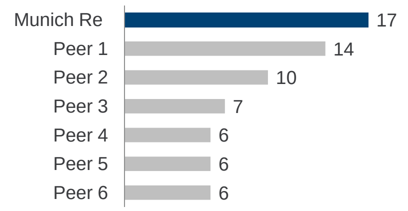
Market position and competition[1]

%



- Intensified competition following the entry of new players after strong market rebound since 2009
- Whereas established and new small- and medium-sized reinsurers act as pure capacity providers with focus on price…
- … only few larger reinsurers have recognised leadership ability

Client strategy

- Access to all attractive business through long-standing client relationships and close contacts with specialist brokers
- Reinsurance structures are mostly characterised by proportional treaties in connection with excess of loss coverage
- Munich Re is the leading reinsurer, having significant shares with most of the larger clients, to some extent reducing future growth potential
- Growth aspirations in Asia and Latin America driving moderate overall volume increase
- Munich Re as preferred partner for special transactions due to technical know-how and strong risk-taking capacity

Good state of the primary market has attracted ample capacity and intensified competition

[1] GWP estimate based on data of ICISA (International Credit and Surety Association) related to total reinsurance market volume of ~€4bn. Peer group: Allianz Re, Axis Re, Hannover Re, Partner Re, SCOR and Swiss Re.

Financial Risks: Trade credit and surety business

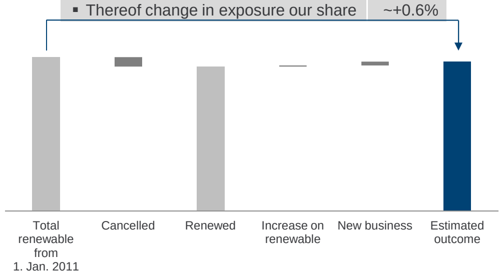
Portfolio continues to be above technical level despite price adjustments

Munich RE

Renewals 2012

	Total renewable from 1. Jan. 2011	Cancelled	Renewed	Increase on renewable	New business	Estimated outcome
%	100.0	–6.2	93.8	0.7	2.5	**96.9**
€m	574	–36	538	4	14	**556**

Change in premium	**-3.1%**
▪ Thereof price change	~-3.7%
▪ Thereof change in exposure our share	~+0.6%



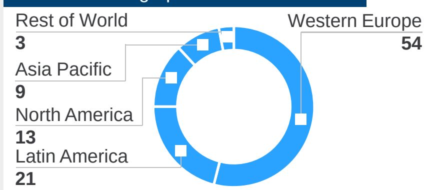
- Overall stable cessions to reinsurance market (2012, 2013)
- New business or higher shares with some clients could not fully compensate for lower cessions and share reductions of other clients
- Deliberate restriction on risk appetite for certain segments sets limitation on new/additional business
- Demanding clients after strong results narrowed the profit margin
- Portfolio continues to be above technical level despite assumption of higher loss ratios
- Munich Re's financial stability and strategic sustainability with increasing relevance for our clients

Economic environment requires cautious determination of risk appetite and selection of clients

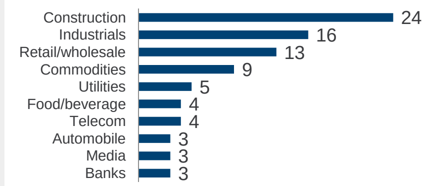
Good credit quality of portfolio with low gearing to financial sector within a global portfolio

Munich RE

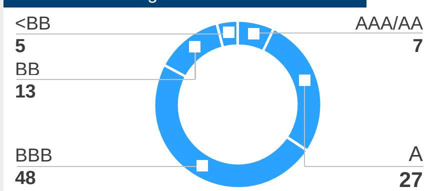
Portfolio – Geographical breakdown[1] %



Portfolio – Sector breakdown[1] %



Portfolio – Rating breakdown[1,2] %



- Overall portfolio split (based on PML): 60% trade credit, 40% surety business
- Construction mainly relates to surety – retail/wholesale to trade credit
- Limited exposure to weaker peripheral Southern European countries
- Portfolio reduction of ~15% compared with peak at outbreak of financial crisis

Composition of portfolio mainly driven by selection of cedants and determination of shares in treaty programme

[1] Total portfolio on basis of PML exposure. [2] Munich Re rating based on external ratings. In addition, cedants' ratings are used, increasing the rating coverage to slightly above 50%.

Conservative underwriting policy through deeply embedded risk management activities

Munich RE

Client selection

Preference for most professional clients in their market/product segments

Alignment of interest secured by predominantly proportional treaties

Focus on profitability of client relationships and terms/conditions over the cycle

Portfolio management

Identification of trends in markets & client portfolios

Clear breakdown of risk appetite for specific products, sectors and countries

Actuarial skills

Developing and independent pricing of reinsurance structures; technical risk-adequacy for the portfolio

Single risk underwriting

Largest limits (incl. facultative business) and non-standard transactions are being evaluated on a stand-alone basis

Accumulation control and continuous monitoring of largest and non-standard risks within defined limit framework

Enterprise risk management

Consistent worldwide approach through Group-wide definition of underwriting guidelines

Group-wide setting of limits and triggers for credit risks from assets and liabilities

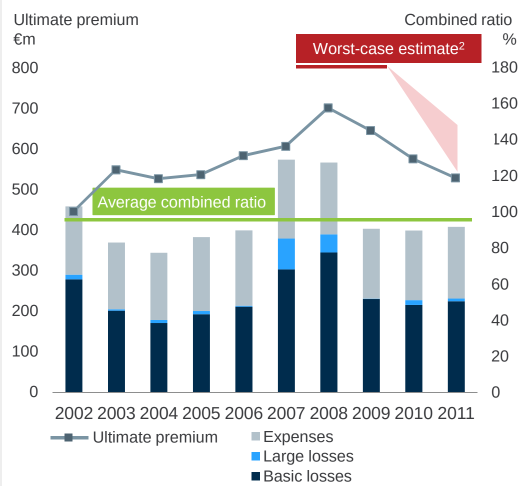
Deep knowledge of client's portfolio and selection of most professional clients are of utmost importance

Financial Risks: Trade credit and surety business

In worst-case scenario, rise of combined ratio expected to be less severe due to implementation of several measures

Munich RE

Combined ratio development 2002–2011[1]



Main measures primary market

- Active cancellation of limits and setting of risk-adequate limits
- Enforcement of significant increases in premium rates
- Implementation of stricter monitoring procedures

Main measures Munich Re

- Strict selection of professional primary insurance clients
- More restrictive risk appetite in selective sub-segments and markets
- Consistent implementation of adequate technical prices

[1] Underwriting year view. Traditional reinsurance business.
[2] Reference is made to analysts' conference 2009 on 3 March 2009 (slide 77).

Financial Risks: Innovative solutions / niche business

Contingency – Market leadership through strong know-how, established network and high capacity provision

Munich RE

Business overview

- Special covers, i.e. event cancellation, film/media, prize indemnity, sports personal accident, kidnap and ransom
- Highly specialised market with attractive market potential and moderate competition

Unique selling proposition

- Offering tailor-made solutions via various channels (reinsurance and direct approach)
- Market leadership through long-standing market presence and in-depth expertise
- Ability to provide the biggest capacities for major events

Underwriting approach

- Good actuarial pricing expertise in order to preserve profitability
- Long-term track record and great experience with an established internal and external network; expertise in claims handling
- Support from internal experts

Summer Olympics London 2012

- Largest sport event in the world requires big capacity – Munich Re the largest capacity provider (~€300m)
- Underwriting support from internal experts (nat cat, political risks and construction)

Attractive niche business with growth potential and moderate competition owing to required expertise

Financial Risks: Innovative solutions / niche business

Weather covers provide protection against the impact of unfavourable weather conditions

Munich RE

Business overview

- Majority of entrepreneurial activities are influenced by weather
- Limited penetration of insurance solutions indicates business potential
- Munich Re provides parametric protection against unfavourable weather conditions

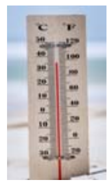
Unique selling proposition

- Well-known, high quality large-capacity provider with top financial stability
- Handling weather risks is part of Munich Re's core business
- Meteorological and actuarial expertise
- Ability to offer wide product range by leveraging internal know-how

Underwriting approach

- Strong actuarial pricing and meteorological/ hydrological expertise
- Minimising the client's basic risk predominantly requires tailor-made solutions
- Protection is based on objective and independent weather indices

Weather hedge based on temperature



- Hedge against a mild winter in London Heathrow
- Protected client: Energy utility
- Required capacity > GBP 20m
- Linear payout based on temperature index above a specified strike

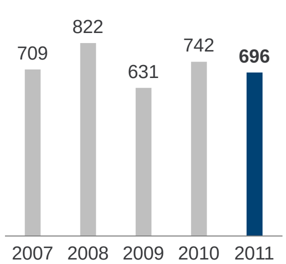
Relatively immature market with advanced products gives plenty of room for further growth – especially in the renewable energy sector

Financial Risks

Key figures – Satisfactory combined ratio in a period of high economic uncertainty

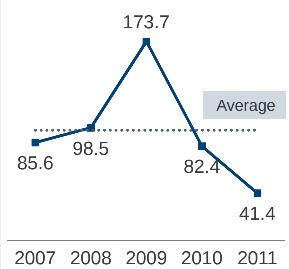
Munich RE

Gross written premium[1] €m



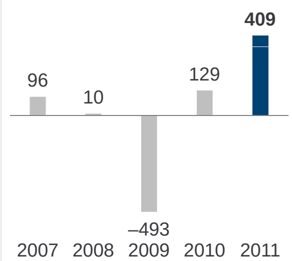
- 2009: Cancellation of treaties, reduced risk appetite in specific segments and discontinuation of activities
- 2010: Benefit from higher premium rates in primary market

Combined ratio %



- Satisfactory combined ratio (five-year average 96.3%)
- 2009: Impact of large claims, higher frequency of losses and prudent reserving
- 2010/11: Lower insolvencies and absence of large losses

Underwriting result €m



- Result reflects strong rebound of primary market after financial crisis
- 2010: More favourable reinsurance prices
- 2011: Substantial reserve releases

[1] Excluding innovative solutions / niche business.

Financial Risks

Key takeaways

Munich RE

Core business within Munich Re Group

Financial Risks has been very profitable over the cycle and provides significant diversification from other non-life activities

Trade credit and surety business

Keep leading position with large clients and exploit growth opportunities in Asia and Latin America while managing the business cycle

Innovative solutions / niche business

Leverage special expertise in innovative solutions and niche businesses in order to develop the business and exploit Munich Re's competitive advantage

Ambition

Maintaining conservative underwriting approach with strong emphasis on meeting profitability thresholds – Combined ratio ~93% over the cycle

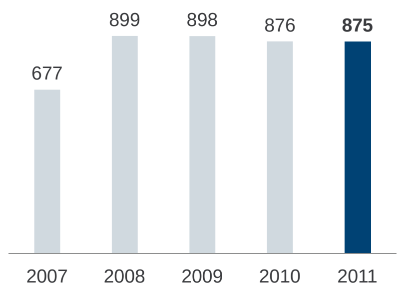
Munich RE

Aviation/Space

Space – Attractive (re)insurance niche market

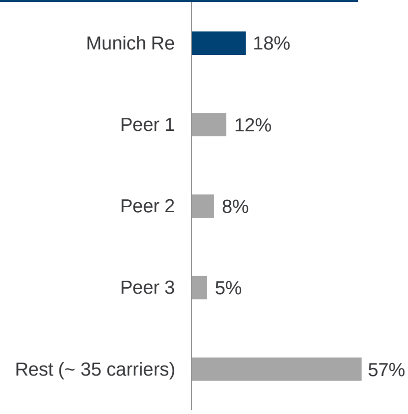
Munich RE

Space – Market development[1] US$m



Increasing demand for satellite applications while number of launches is limited

Space – Market share[2] %



Munich Re is the market leader in space insurance

Source: Munich Re estimate. [1]Gross written premiums, including commissions. [2] Based on net earned premiums.
Peers: AGCS, CV Starr, Swiss Re.

Aviation/Space

Space – Specialty market with a high demand for tailor-made solutions

Munich RE

Space

- Munich Re covers the underperformance of satellites due to unforeseen events
  - during the **launch** and commissioning phase
  - in the **in-orbit phase** of the satellite
- Satellites mainly used for **communication** purposes

Space insurance specifics

- **Increasing demand for satellite applications**
  Economic and demographic development as well as technological progress
- **Low degree of commoditisation**
  Space insurance covers are individually designed, every space risk is a "prototype"
- **Claims specifics**
  Loss mitigation measures rarely available and loss investigations complicated
- **High volatility**
  High severity (expected to rise due to dual launches) and limited number of launches
- **Differential terms** are the rule

Space insurance matches Munich Re's premium provider aspiration

Aviation/Space

Space – Munich Re providing tailor-made solutions for complex space risks

Munich RE

Drivers of our leadership position

- **Solution-oriented client service**
  Designing customised coverages for each individual satellite risk
- **Personal relationships and reliability**
  Strong, long-standing and close client relationships
- **Professional expertise**
  Combining a broad range of expertise from space and insurance industry
- **Solid financial strength**
  Financial strength enabling us to retain gross risks – no retrocession

Maintaining our leadership position

- Prepared to satisfy **increasing demand** for satellite applications
- New launch vehicles and new satellite technologies providing **new opportunities and exposures**
- Relevance of **financial security** is expected to grow
- **Client reach**: Deepening our relationships with strategic clients and expanding into new client segments (e.g. government missions)
- Developing and offering **new products** to anticipate future demand (e.g. loss-of-revenue product, government missions)

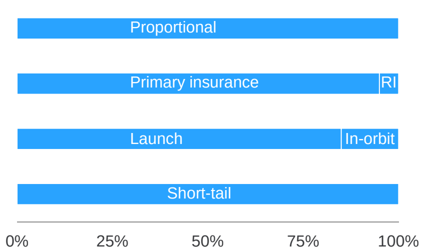
Munich Re meeting client demand by providing technical expertise, client-oriented solutions and a high level of reliability

Aviation/Space

Space – Portfolio focused on primary insurance and proportional short-tail business

Munich RE

Portfolio – Type of cover



- Munich Re moved up the value chain to offer primary insurance more than 15 years ago
- Current book is dominated by launch product (covering the launch phase plus the first year in orbit)

Risk management

Underwriting excellence key for risk management

- Individual underwriting of every single risk
- Risk assessment – Combining the broad range of underwriting expertise with Munich Re's comprehensive global loss and exposure database

Lessons learned

- Coverage design should avoid ambiguities
- Avoid multi-year policies to counter risk of change

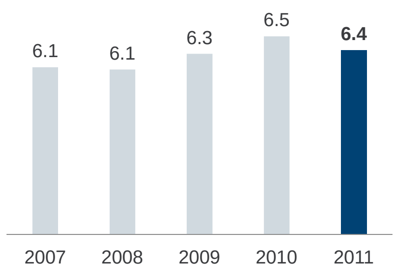
Sustainable profitability achieved through underwriting strength and learning from losses

Aviation/Space

Aviation – Attractive (re)insurance market with few leading players and ample capacity available

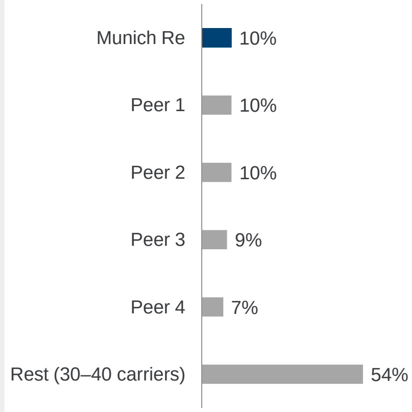
Munich RE

Aviation – Market development[1] US$bn



Increasing global demand for air traffic partially offset by pressure on rates

Aviation – Market share (net)[2] %



Munich Re maintaining leading position despite the competitive environment

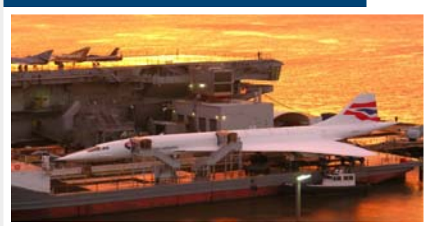
Source: Munich Re estimate. [1] Gross written premiums, including commissions. [2] Based on net earned premiums per ultimate carrier (primary insurance and reinsurance); Peers: AGCS, Chartis, Hannover Re, Swiss Re.

Aviation/Space

Aviation – Standardised, highly competitive specialty market with large catastrophe exposure

Munich RE

Aviation



- Covering liability to passengers, third-party liability and hull
- Insured are
  - Airlines
  - Aircraft manufacturers and airports
  - General aviation: Corporates (business jets), small commercial aircraft enterprises and private persons

Aviation (re)insurance specifics

- **High degree of commoditisation**
  Products are mostly standardised
- **Low correlation**
  Low correlation with other industry peak scenarios (except terrorism)
- **High limits bought**
  Airlines and manufacturers buy limits up to USD 2.25bn and general aviation clients buy limits up to USD 500m
- **High volatility**
  Rising demand for bigger planes and higher indemnities increasing industry's catastrophe PMLs
- **Reinsurance**
  Small but attractive segment, detached from original market, absorbing most of the catastrophe exposure

Aviation/Space

Aviation – Specialised set-ups operating along the value chain coupled with Munich Re's franchise value

Munich RE

Core strengths applying to all specialised set-ups

- Close personal relationship
- Superior financial strength
- Underwriting excellence

Market access via specialised set-ups

Primary insurance	Global Aerospace pool[1]	▪ Insurance pool (Munich Re share 45%) underwritten by MGA ▪ Leading insurer for manufacturers and airlines ▪ Leading insurer for general aviation in North America
Primary insurance	Munich Re direct	▪ Qualified follower ▪ Offering capacity for major airlines and manufacturers
Primary insurance	Pritchard	▪ Lloyd's syndicate owned by Munich Re ▪ Leading insurer of 3rd/4th-tier airlines
Reinsur.	Munich Re treaty re-insurance	▪ Supporting insurance clients globally with reinsurance protection for aviation ▪ Among top three treaty reinsurers

[1] GAUM is a partially owned MGA, underwriting on behalf of a pool of insurers.

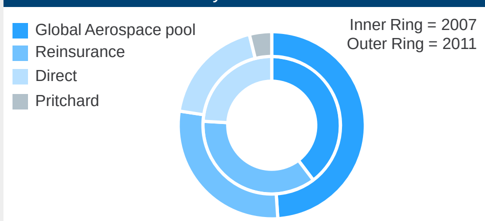
Aviation/Space

Aviation – Portfolio developed in recent years to expand leading position …

Munich RE

Portfolio – Breakdown by source

%

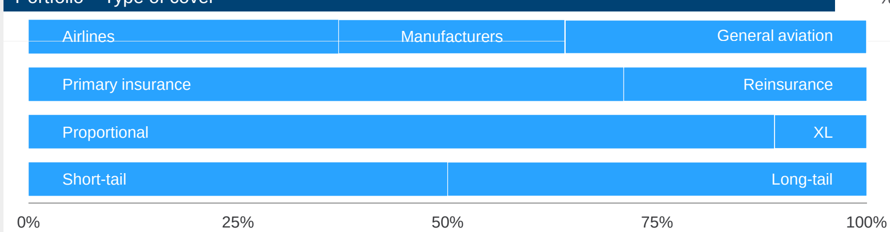


Portfolio steering

- Strategic expansion of set-ups with leading position (e.g. Global Aerospace pool, Pritchard) due to ability to charge above-average prices …
- … while actively managing the cycle of the direct airline book

Portfolio – Type of cover

%



Aviation/Space

Aviation – … and aligned to market trends and key success factors

Munich RE

Trends and our approach in aviation market

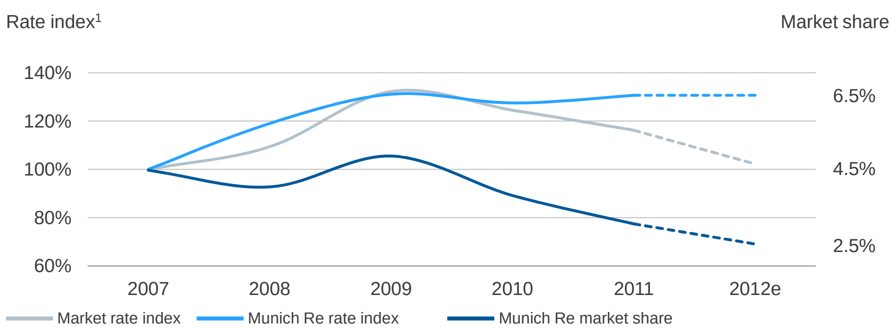
	Airlines	**Manufacturers**	**General aviation**
Market trends	Strong pressure on rates due to ample short-tail capacity, price-sensitive buyers and (recently) absence of major losses	Longer-tail; buyers are more sensitive to financial security and long-term partnerships, but pressure on rates	Pressure on rates, ample capacity, very different sub-segments per exposure and geographical region
Success factors	▪ Cycle/PML management to manage volatility and price adequacy ▪ Differentiate opportunistic vs. partnership clients	▪ Differentiate from the mainstream and offer value-added solutions	▪ Efficient set-up essential ▪ Succeed through risk selection, channel management and value added offerings
Action	▪ Primary insurance: Focusing on set-ups with leading position and on core clients that value our services and security ▪ Reinsurance: Reducing proportional reinsurance for major risks and maintaining position in XoL reinsurance		Increasing share of business with best-in-class GA underwriting partners (on proportional basis) and offer XoL for cat exposure

Aviation/Space

Aviation – Active cycle management of direct airline book

Munich RE

Direct book – Airlines rate development vs. Munich Re market share %



Successfully decoupling rates from overall market trend by consistent shifts in the direct book	Deliberately reducing business to sustain profitability level

Bottom-line-driven underwriting coupled with professional client management

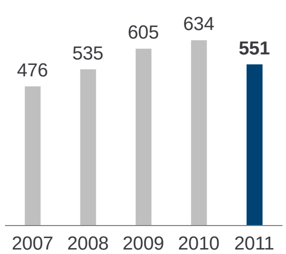
Source: Munich Re research. [1] Rate = net premiums/passengers. 2007=100%.

Aviation/Space

Key figures – Good performance in Aviation/Space due to disciplined underwriting and strong market position

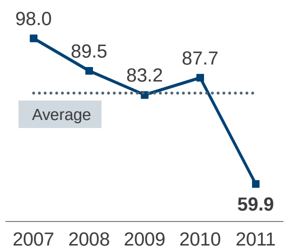
Munich RE

Gross written premium €m



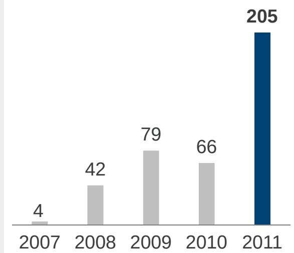
- Active cycle management in aviation leads to reduced top line in 2011
- Growth between 2007 and 2010 partly driven by increasing shares in strategic partnerships

Combined ratio %



- Good profitability driven by selective underwriting, strong market position and below-average major losses
- Reserve release from prior underwriting years in 2011
- Five-year average combined ratio of 83.7%

Underwriting result €m



- Aviation and space profitable lines of business within Munich Re with a significant contribution to Group net earnings

Aviation/Space

Aviation/Space – Key takeaways

Munich RE

Market outlook

- In the short run, pressure on rates expected to continue. However, in the long run, aviation and space are still attractive industries because of demographic and economic effects
- Additionally, increasing recognition of financially strong insurance carriers expected

Market characteristics

Aviation and space are two different markets – know-how-driven space market demands customised solutions while standardised, highly competitive aviation market is more capacity-driven

Strategy

Munich Re maintains and expands its leading position based on its core competencies

- Superior financial security providing clients with high level of reliability
- Solution-oriented underwriting excellence fostering intensity and continuity of personal relationships
- Specialised set-ups facilitating efficient market access

Ambition

Combined ratio of below 94% over the cycle

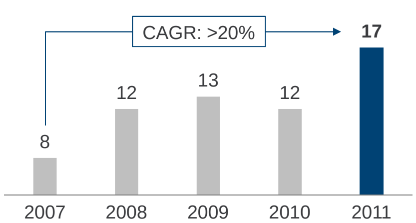
Munich RE

Agriculture

Crop insurance – Attractive specialty market for Munich Re

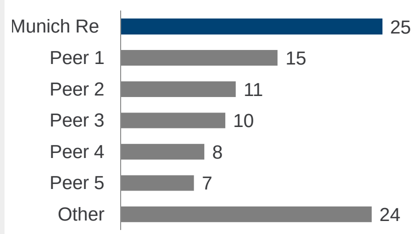
Munich RE

Crop insurance market development[1] €bn



- Only ~20% of agricultural land is insured
- US constitutes biggest crop insurance market
- Positive trend in premium development due to increasing commodity prices
- Further implementation of crop insurance markets likely

Reinsurance market shares[2] %



- Munich Re clear market leader with proven strategy – SystemAgro
- Munich Re market developer and pioneer in agricultural (re)insurance
- Strategic long-term partnerships secure high market share

Benefit from strategy: Reinsurance market leader

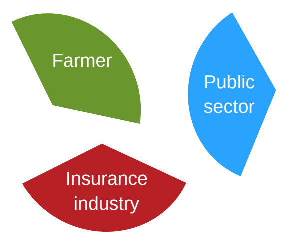
[1] Gross written premiums.
[2] Munich Re estimate based on gross written premiums. Peers: Allianz Re, Hannover Re, Partner Re, Scor, Swiss Re.

Agriculture

Characteristics of crop insurance markets

Munich RE

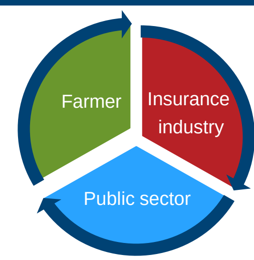
Non-comprehensive approach and activities of stakeholders



No sustainable crop insurance market will develop

- Adverse selection
- Low market penetration
- Substantial basic risk not covered

Public-private partnership (PPP)



- Involved interests and dependencies have to be translated into a sustainable system approach
- Only after system installation is there an existing crop insurance market

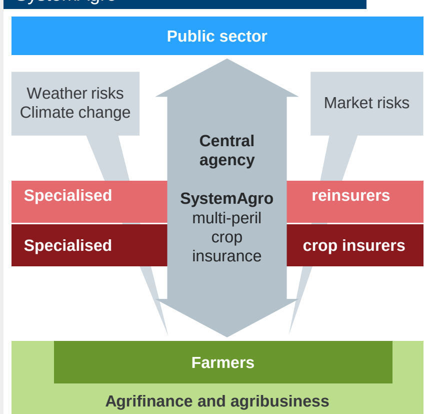
Balanced and self adjusting PPP systems for crop insurance are in the public interest

Agriculture

Agro insurance specifics – PPP as agricultural insurance system

Munich RE

SystemAgro



Agro insurance specifics

What is SystemAgro?

- Built on international experience
- Public-private framework for sustainable agricultural insurance
- A system rather than a product (central: comprehensive coverage)
- Local solutions built around general key components

Key components of SystemAgro

- Integrated in agricultural law and policy
- Public co-financing of premiums and cat losses
- Open to all farmers
- Transparent, uniform coverage
- Comprehensive coverage benefiting individual farmers
- Operated through specialised crop insurers

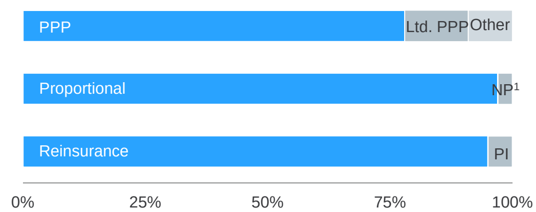
Sustainable agricultural insurance follows from SystemAgro

Agriculture

Munich Re portfolio – Focus on PPP systems rather than products

Munich RE

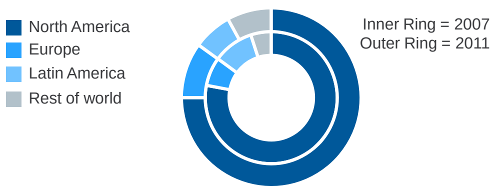
Portfolio – Type of cover 2011 %



Risk management

- Prepared to introduce and develop sustainable crop insurance systems
- Quota shares preferred
- Minor shares in stop-loss covers
- Knowledge for agricultural primary insurance secured via MGA participations

Portfolio – Regional breakdown %



Portfolio steering

- US system established and sustainably successful long-term
- Strength of PPP markets: high penetration (regional spread) and stability
- Governmental decisions challenge PPP markets

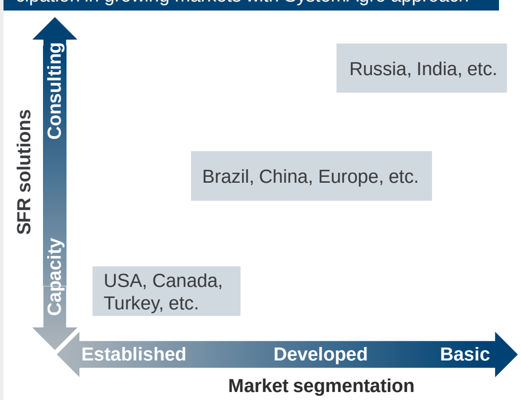
[1] Non-proportional in agriculture business = stop loss (annual aggregate).

Agriculture

Strategy – Transferring experience via SystemAgro to new markets

Munich RE

Lion's share in established markets – Substantial participation in growing markets with SystemAgro approach



Competitive advantages

- Specialised and centralised set-up for agriculture allows quick response to client demand and secures multi-year contracts (long-term commitment)
- Comprehensive agricultural expertise through
  - experienced and stable team;
  - strategic partnering with specialised agro-insurance companies, universities, agribusiness and technology companies;
  - ownership of/share in MGAs to secure expertise in primary insurance

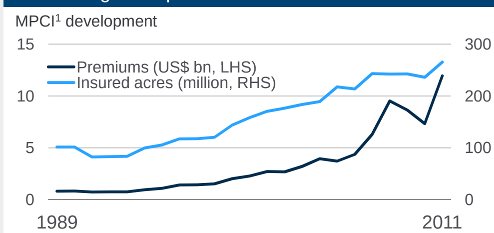
30 years' experience form the basis for creating sustainable systems and business opportunities

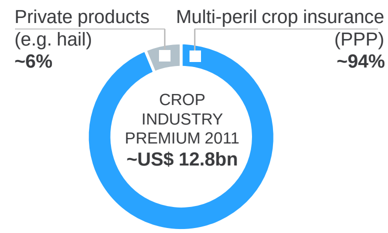
Agriculture

US crop insurance market – Overview

Munich RE

USA – Largest crop insurance market worldwide

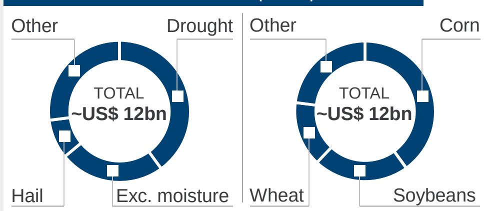




Federal subsidised MPCI[1] programme

- ~60% of the premium is subsidised
- FCIC[2] reimburses each company for acquisition and operational costs
- FCIC administers the MPCI programme and bears associated expenses
- Catastrophe reinsurance: Extensive proportional and non-proportional reinsurance

MPCI[1] causes of loss and crop composition



[1] MPCI = Multi-peril crop insurance, [2] FCIC= Federal Crop Insurance Corporation.

Agriculture

US crop insurance market – Profit and loss sharing mechanism limiting upside and downside potential

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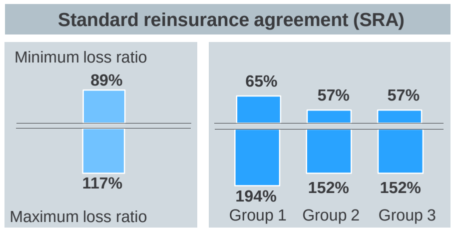
Individual policy assignment to one "risk fund"

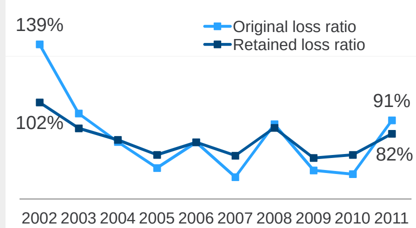
Assigned risk fund	Commercial fund
▪ For historically unprofitable business ▪ Profit and loss potential strictly limited ▪ Cession limit per state (gross premium): 75%	▪ For historically profitable business ▪ Maximum profit but also maximum loss potential ▪ Business distribution per state (group 1–3)

Standard reinsurance agreement (SRA)



SRA smoothing industry loss ratios

%



Definition of state group 1–3

Group 1
Historically profitable states

Group 2
Other states

Group 3
States characterised by hitherto low insurance density

Agriculture

US drought – Impact on Munich Re's agricultural business

Munich RE

US drought severity[3]

May June July

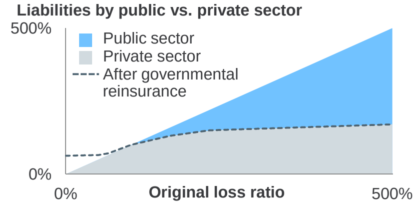
Optimal growing conditions

Rapid deterioration with onset of drought and extreme heat: early summer drought

75% of corn and soybean area affected – ~50% of Munich Re's US MPCI portfolio

Munich Re loss expectation

Liabilities by public vs. private sector



Expected combined ratio 120–130% for Munich Re's US portfolio in 2012

Low administration expenses of ~2% and below-average commissions due to losses – expected total expense ratio in 2012: <10%

Expected combined ratio in 2012 for aggregate agriculture portfolio below 120%

Subsidised MPCI system limiting loss potential for Munich Re – US drought increasing loss history thus leading to improvement of insurance terms

[1] Source: http://droughtmonitor.unl.edu/

Agriculture

US drought – Impact on agricultural business

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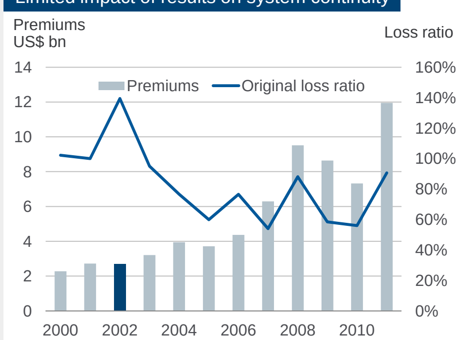
Limited impact of results on system continuity



2002
Drought

Effects 2003
- Market penetration: +1% (area)
- Average rate increase: 8%

Implications

- Commodity prices most relevant driver for insurance values (base price) thus affecting overall market premium – Munich Re participating via proportional covers
- RMA[1] rating methodology based on historical loss experience – actual losses in 2012 triggering rate increases …
- … while yield losses show that crop insurance is an effective risk management tool – with positive impact on market penetration
- Premium development after drought in 2002 proving stability of PPP system

Moderate increase in market penetration and premium expected

Even large cat events do not jeopardise the system – involvement will be continued

[1] RMA = Risk Management Agency.

Agriculture

Key figures – Long-term track record with sustainable growth and profitability

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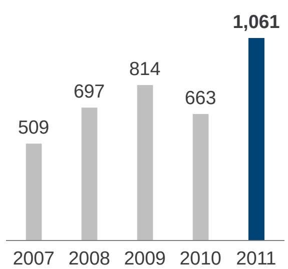
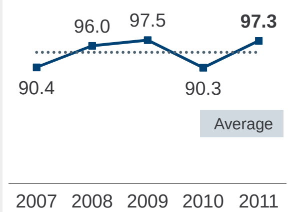
Gross written premium €m



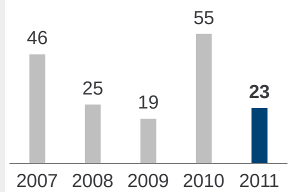
Doubling of premium volume over the last four years driven by strong market position, rising commodity prices and positive currency contribution from US dollar

Combined ratio %



- Leading position in agricultural reinsurance with five-year average combined ratio of 94.3%
- Rather stable development as state-supported crop insurance in the USA limits loss potential

Underwriting result €m



- Quite stable earnings contribution over time
- 2012 results will be burdened by US drought

Agriculture

Key takeaways

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Crop insurance market

- No clear separation between primary insurance and reinsurance
- Potential growth: Agriculture has governmental attention with increased awareness of SystemAgro

Reinsurance

- Munich Re well positioned with partners in food and agriculture business, specialised insurance partners and own MGAs
- Munich Re has important role in introducing "System" approach
- Uninformed capacity will retreat from the market

Potential

- Currently ~€17bn premium from PPP systems (less than 20% of insurable land)
- Farmers, governments and insurance industry realised success of PPP and further markets will follow

Ambition

- In its leading market position, Munich Re continues developing sustainable crop insurance markets
- Munich Re is strictly focused on sustainable profitability and will systematically increase its crop insurance portfolio – Ambition: combined ratio ~95% over the cycle

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General overview of SFR	Thomas Blunck
Corporate Insurance Partner	August Pröbstl
Financial Risks	Thomas Lallinger
Aviation/Space	Guido Funke
Agriculture	Karl Murr

Backup

Backup: General overview of SFR

SFR also includes business from some subsidiaries and insurance risk-transfer solutions

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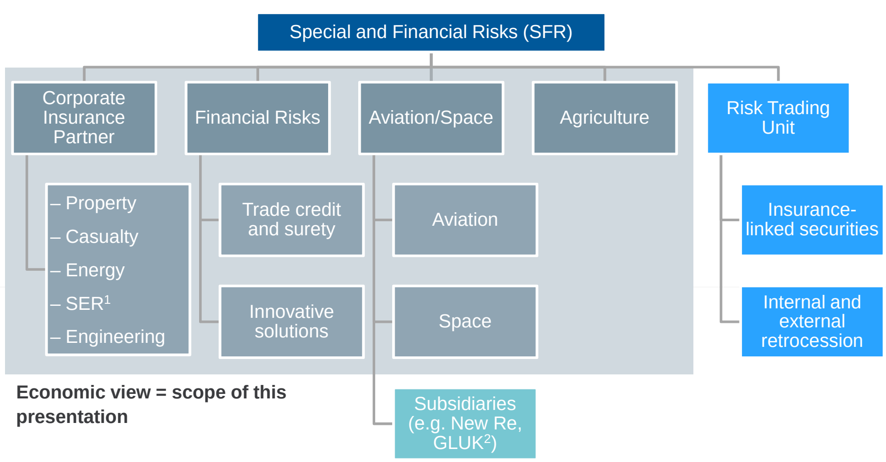
Reconciliation of economic view vs. annual report – Organisational set-up



[1] Special enterprise risk. [2] Great Lakes UK.

Backup: General overview of SFR

Difference between economic view and annual report

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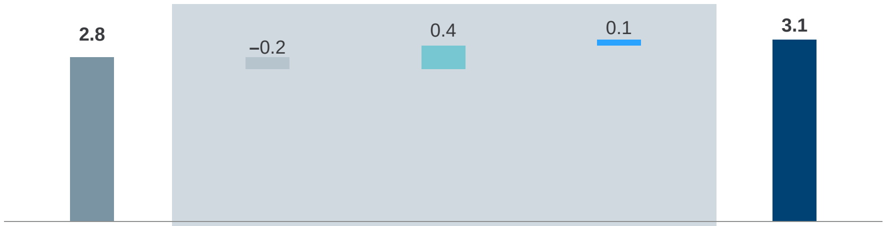
Reconciliation of economic view vs. annual report – Gross written premiums as at 31.12.2011 €bn



Economic view	Specialty business written outside SFR	Premiums from subsidiaries	Consolidation effects, mainly retrocession	Annual report
Data set used for this presentation	Almost all relating to credit business allocated to other regional units	Mainly New Re – others including e.g. GLUK[1]	All Munich Re retrocession business bundled within SFR unit	Includes premiums from subsidiaries and retrocession

Differences in scope impacting combined ratio on single-year basis – but average annual difference over five years (2007 – 2011) only 0.2 percentage points

[1] Great Lakes UK.

Backup: Shareholder information

Financial calendar

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FINANCIAL CALENDAR

7 November 2012	Interim report as at 30 September 2012
14 November 2012	Citi "Global Financial Conference 2012", Hong Kong
4 December 2012	UBS “Senior Investor Day”, Munich
7 December 2012	Citi Global Financial Conference 2012, London
16 January 2013	Commerzbank "German Investment Seminar 2013", New York
23 January 2013	Cheuvreux "12. German Corporate Conference 2013“, Frankfurt
5 February 2013	Preliminary key figures 2012 and renewals
13 March 2013	Analysts' conference, London

Backup: Shareholder information

For information, please contact

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