Investors' Day
Reinsurance operations in Asia-Pacific

London, 30 June 2015
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<td>Buholzer 40</td>
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<td>P-C reinsurance in India</td>
<td>Kotak 58</td>
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<td>P-C reinsurance in Japan</td>
<td>Eckl 63</td>
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<td>Life reinsurance in Asia</td>
<td>Cossette 76</td>
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<td>P-C reinsurance in Australia/New Zealand</td>
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<td>Executive summary</td>
<td>Arnoldussen 134</td>
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Introduction

Today’s speakers

Joachim Wenning
Member of the Board of Management
Life Reinsurance

Steven Chang
CEO
Munich Re Beijing Branch

Claudia Buholzer
Head of Department
Chief Executive Asia Pacific and
Client Executive

Hitesh Kotak
Client Executive and Chief Representative
India and Indian Subcontinent

Roland Eckl
Chief Executive
Asia Pacific, Australasia/Japan/India/
Indian Subcontinent

Daniel Cossette
Head of Asia Pacific
Life Reinsurance

Ludger Arnoldussen
Member of the Board of Management
Germany, Asia Pacific and Africa (GAPA)

Andrew Linfoot
Head of Australasia
Life Reinsurance
Why hold an Investors' Day on reinsurance operations in Asia-Pacific?

**Introduction**

Attractive markets – Expected real premium growth\(^1\)

<table>
<thead>
<tr>
<th>Region</th>
<th>Life</th>
<th>P-C</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emerging Asia</td>
<td>9.3%</td>
<td>8.2%</td>
</tr>
<tr>
<td>Mature Asia-Pacific</td>
<td>1.7%</td>
<td>2.4%</td>
</tr>
<tr>
<td>North America</td>
<td>2.5%</td>
<td>1.9%</td>
</tr>
<tr>
<td>Western Europe</td>
<td>1.7%</td>
<td>1.6%</td>
</tr>
</tbody>
</table>

Important region for Munich Re – GWP growth\(^3\)

<table>
<thead>
<tr>
<th>Region</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>North America</td>
<td>6.5%</td>
</tr>
<tr>
<td>Asia-Pacific</td>
<td>5.4%</td>
</tr>
<tr>
<td>Other</td>
<td>2.3%</td>
</tr>
<tr>
<td>Europe</td>
<td>-0.3%</td>
</tr>
</tbody>
</table>

Opportunities in p-c – e.g. insurance gap in nat cat\(^2\)

<table>
<thead>
<tr>
<th>Year (1980-2010)</th>
<th>Overall losses</th>
<th>Insured losses</th>
</tr>
</thead>
<tbody>
<tr>
<td>1980</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1985</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1990</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1995</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2005</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2010</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Opportunities in life – Economics and demographics

- Growing but ageing population
- Rise of middle class
- Rising wealth
- High, albeit declining, savings rates

Numerous opportunities for profitable growth

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\(^1\) Real CAGR 2014–2020 of expected primary insurance premiums. Source: Munich Re Economic Research.

\(^2\) Source: Munich Re, Geo Risks Research, NatCatSERVICE.

\(^3\) Nominal CAGR 2010-2014 of reinsurance gross written premiums in Euro.
Introduction
Munich Re Group – A strong presence in Asia-Pacific

Group presence in Asia-Pacific – Gross written premium as at 31.12.2014

<table>
<thead>
<tr>
<th>Percentage</th>
<th>Gross Written Premium (€)</th>
</tr>
</thead>
<tbody>
<tr>
<td>97.0</td>
<td>€4.7bn</td>
</tr>
<tr>
<td>0.4</td>
<td></td>
</tr>
<tr>
<td>2.6</td>
<td></td>
</tr>
</tbody>
</table>

More details on ERGO's operations in Asia-Pacific were provided within the Investor Briefing on ERGO International, 10 July 2013.

Group synergies

- Capital/diversification benefits
- Joint organisation
- Knowledge exchange
- Reinsurance/fronting

Leveraging Group synergies

1 Total premiums ~€0.5bn. Minority shareholdings not included in GWP figures as being part of the investment result.
Introduction

P-C reinsurance business in Asia-Pacific (APAC) – Written by different business units

P-C reinsurance – GWP Asia-Pacific

<table>
<thead>
<tr>
<th>Region</th>
<th>GWP €bn</th>
</tr>
</thead>
<tbody>
<tr>
<td>Germany, Asia/Pacific, Africa (GAPA)</td>
<td>2.7</td>
</tr>
<tr>
<td>Greater China, Korea, SEA²</td>
<td>0.2</td>
</tr>
<tr>
<td>Australia, New Zealand, Japan, India</td>
<td>0.1</td>
</tr>
<tr>
<td>Germany</td>
<td>3.0</td>
</tr>
<tr>
<td>Middle East, Africa</td>
<td></td>
</tr>
</tbody>
</table>

P-C reinsurance – Underwriting result

<table>
<thead>
<tr>
<th>Region</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>GAPA</td>
<td>1.5</td>
<td>1.1</td>
<td>1.3</td>
<td>1.2</td>
<td></td>
</tr>
<tr>
<td>SFR⁴ Global Clients</td>
<td>-0.1</td>
<td>-3.3</td>
<td>-2.2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>1.4</td>
<td>0.8</td>
<td>1.1</td>
<td>1.2</td>
<td>0.2</td>
</tr>
</tbody>
</table>

Asia-Pacific taking a substantial share in top- and bottom-line

3 Technical result excluding income from technical interest.
⁴ SFR = Special and Financial Risks.
Introduction

SFR business\(^1\) in Asia-Pacific – Mainly credit and industrial business in China and Australia

<table>
<thead>
<tr>
<th>SFR in Asia-Pacific – GWP by line of business(^2)</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aviation/Space</td>
<td>5</td>
</tr>
<tr>
<td>Agriculture</td>
<td>13</td>
</tr>
<tr>
<td>Credit</td>
<td>55</td>
</tr>
<tr>
<td>CIP(^3)</td>
<td>27</td>
</tr>
<tr>
<td>TOTAL</td>
<td>€168m</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SFR in Asia-Pacific – GWP by region(^2)</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Other</td>
<td>21</td>
</tr>
<tr>
<td>China</td>
<td>54</td>
</tr>
<tr>
<td>India</td>
<td>5</td>
</tr>
<tr>
<td>Thailand</td>
<td>15</td>
</tr>
<tr>
<td>TOTAL</td>
<td>€168m</td>
</tr>
</tbody>
</table>

- **Credit**: China is target market – Recent market opening for export-credit – Providing opportunities; develop further business opportunities in Southeast Asia
- **CIP**: Traditional and innovative solutions across all business lines, with footprint in various countries
- **Agriculture**: China and India are strategic markets – Rural Affinity is the leading franchise in Australia
- **Aviation/Space**: Leading satellite launch and in-orbit (re-)insurer supporting satellite operators and launch vehicle manufacturers
- **Marine\(^4\)**: Strong footprint in Asia-Pacific – Watkins Syndicate expanding with Lloyds in the region

Continuous expansion in the Asia-Pacific region by increasing local presence

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1. More details were provided within the Investor Briefing on SFR operations, 11 October 2012.
3. Corporate Insurance Partner.
4. Since 2015 part of SFR.
Introduction

Life reinsurance business in Asia-Pacific –
Higher share of critical illness and disability products

ILLUSTRATIVE

Life reinsurance – GWP¹

<table>
<thead>
<tr>
<th>Region</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Japan</td>
<td>10</td>
</tr>
<tr>
<td>SEA/South Korea</td>
<td>20</td>
</tr>
<tr>
<td>Greater China</td>
<td>25</td>
</tr>
<tr>
<td>Australia/NZ</td>
<td>45</td>
</tr>
<tr>
<td>Asia-Pacific</td>
<td>16</td>
</tr>
<tr>
<td>TOTAL</td>
<td>100</td>
</tr>
</tbody>
</table>

€10.0bn

Life reinsurance – VNB²

<table>
<thead>
<tr>
<th>Year</th>
<th>Rest</th>
<th>APAC</th>
<th>€m</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td>88</td>
<td>475</td>
<td>573</td>
</tr>
<tr>
<td>2011</td>
<td>71</td>
<td>643</td>
<td>577</td>
</tr>
<tr>
<td>2012</td>
<td>101</td>
<td>573</td>
<td>577</td>
</tr>
<tr>
<td>2013</td>
<td>112</td>
<td>577</td>
<td></td>
</tr>
<tr>
<td>2014</td>
<td>78</td>
<td>453</td>
<td></td>
</tr>
</tbody>
</table>

Sustained growth path in Asia, challenging environment in Australia

¹ Gross written premium as at 31.12.2014.
² Value of new business.
Size of bubbles indicative of present value of future claims.
Agenda

Introduction  Becker-Hussong

**General introduction to Asia**  Wenning

P-C reinsurance in Greater China  Chang
P-C reinsurance in Southeast Asia and South Korea  Buholzer
P-C reinsurance in India  Kotak
P-C reinsurance in Japan  Eckl
Life reinsurance in Asia  Cossette

General introduction to Australia/New Zealand  Arnoldussen
Life reinsurance in Australia/New Zealand  Linfoot
P-C reinsurance in Australia/New Zealand  Eckl
Executive summary  Arnoldussen
Emerging Asia’s economies are expected to remain global growth drivers

- Regional split of global GDP
  - Rest of world: 12% in 2004, 16% in 2014
  - Mature Asia: 9% in 2004, 20% in 2014
  - Emerging Asia: 30% in 2004, 25% in 2014
  - North America: 35% in 2004, 30% in 2014

- Nominal GDP
  - Mature Asia: €5tn in 2004, €6tn in 2010, €7tn in 2014
  - Emerging Asia: €3tn in 2004, €7tn in 2014
  - Rest of world: €11tn in 2014
  - North America: €5tn in 2014
  - Europe: €7tn in 2014

- Two different speeds – Rapid economic growth in Emerging Asia, lower growth in Mature Asia
- Emerging Asia: Heterogeneous mix of countries with different growth characteristics
- Mature Asia: Low growth in Japan, moderate growth in other economies

Growing economic weight also reflected in global insurance markets

- Emerging Asia expected to sustain highest growth rates worldwide, albeit at more moderate levels than in the past
- Various risks could somewhat dampen this overall positive view, e.g. capital outflows from some emerging markets after a potential US interest-rate hike
**General introduction to Asia**

**Emerging Asia expected to catch up with insurance penetration**

<table>
<thead>
<tr>
<th>Life insurance</th>
<th>%</th>
<th>Property-casualty insurance</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gross national income per capita</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Insurance penetration</td>
<td></td>
<td>Insurance penetration</td>
<td></td>
</tr>
<tr>
<td>Emerging Asia</td>
<td></td>
<td>Emerging Asia</td>
<td></td>
</tr>
<tr>
<td>Mature Asia</td>
<td></td>
<td>Mature Asia</td>
<td></td>
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</tbody>
</table>

*Expectation for 2020*

**With growing wealth, better education and higher risk awareness, penetration rate will increase further**

---

1. Insurance premiums as % of GDP
2. Among others South Korea, Taiwan, Japan and Hong Kong.
3. Among others China, India, Indonesia and Philippines.
**General introduction to Asia**

**P-C: Protection gap in Asia – Underinsured market highly exposed to natural catastrophes**

<table>
<thead>
<tr>
<th>Asia – Overall and insured nat cat losses</th>
<th>US$bn</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall losses</td>
<td></td>
</tr>
<tr>
<td>Insured losses</td>
<td></td>
</tr>
</tbody>
</table>

**Overall and insured nat cat losses per continent**

- **North America**: 43%
- **Europe**: 28%
- **Asia**: 8%
- **South America**: 10%
- **Africa**: 5%
- **Australia**: 38%

- Munich Re providing sustainable reliable capacity – in particular after historic loss events as in 2011 ...
- ... facilitated by strong capital position and expertise of modeling various nat cat scenarios

**Demand for nat cat insurance covers expected to increase – Munich Re able to absorb high random losses by global diversification within regions and perils**

---

1 1980–2014. Size of bubbles indicative for share of overall losses in this time period – Asian share ~40%.
Source: Munich Re, Geo Risks Research, NatCatSERVICE.
Life: Catch-up potential in Emerging Asia

Emerging Asia

Demographics and economics
- High GDP growth
- Rising wealth
- Rise of middle class

Mature Asia

Demographics and economics
- Low GDP growth
- High wealth
- High savings rates

Growth in Emerging Asia driven by increasingly affluent middle-class and demographic changes

1 Based on China, India and Indonesia.
2 Based on Japan and South Korea. Source: UN, Oxford Economics.
Munich Re – Strong footprint in Asia

Having conducted business in Asia since 1912, Munich Re has established various offices over the years.

- 1962 Hong Kong
- 1967 Tokyo
- 1975 Singapore
- 1981 Kuala Lumpur, Taipei
- 1989 Seoul
- 1997 Beijing and Shanghai
- 2014 Mumbai

- Asian markets served through nine offices, with currently more than 400 staff
- Strong local presence – unique insight into Asian markets, enabling Munich Re to offer tailored solutions for various needs

Munich Re has been close to markets and clients for decades.
Munich Re participating in growth opportunities provided by Asian markets while focusing strictly on bottom line

**Munich Re portfolio in Asia – Premium development**

**General introduction to Asia**

Munich Re Automation Solutions.  

1.5  

2.3  

1.8  

1.9  

1.7  

2010  

2011  

2012  

2013  

2014  

**Asian operations – Gross written premium €bn**

- Life
- Property-casualty

**Life**

- Sustained growth across all major markets
- Significant broadening of traditional business – continued strong contribution of FinMoRe with volatile top line
- Premium reduction from planned solvency-relief treaty terminations
- Growth supported by state-of-the-art underwriting automation solutions (MRAS\(^1\))

**Property-casualty**

- China main growth driver, in particular due to volatile motor solvency-relief deals
- Significant business expansion in Emerging Asia
- Cycle-management-driven premium decline in Japan
- In total, rather stable premium development following strict underwriting discipline

\(^1\) Munich Re Automation Solutions.
Investors' Day Asia – Pacific

Munich Re portfolio in Asia – Pleasing profitability

Asia an integral part of Munich Re’s value generation – exploiting strong market position and ability to provide solutions beyond traditional reinsurance

- 2011 burdened by exceptionally high nat cat losses
- Competitive environment becoming noticeable while underlying profitability remains sound
- Higher share of solvency relief deals improving economic profitability but increasing combined ratio

- Strong growth in earnings contribution …
- … expected to persist – with underlying profit growth of 10%-15% p.a. …
- … despite continuing increase in competition and pressure on prices

1 Adjusted for expected larges losses. 5-year average normalised combined ratio: ~92%.
General introduction to Asia

Life reinsurance – Portfolio composition

Risk-return profile of selected sub-portfolios relative to core business

- **Traditional mortality/critical illness**
  - Representing the core – both in terms of new business value and bottom line

- **FinMoRe**
  - High strategic relevance and strong bottom-line contribution – very attractive risk/return profile

- **Long-term care (LTC)**
  - Currently written in Singapore

- **Asset protection**
  - Risk/return profile very similar to FinMoRe – currently taking advantage of opportunities mainly in Japan

**High weight in mortality and critical illness business in Asia**

Bubble size: Indicative of present value of future claims.
Result volatility of market vs. profitability

**Sustain portfolio**
- Developed market with comparatively low nat cat exposure
- Profitable portfolio with limited growth potential given competitive environment

**Facilitate growth**
- Participating in profitable growth of cedants via capacity and selective services
- China: While the introduction of C-ROSS will bring uncertainty, good opportunities remain

**Manage volatility**
- Achieve sufficient profits over time to compensate for single large loss events
- Growth potential expected for innovative solutions and new distribution channels

**Balance growth and risk**
- Many markets still offer good opportunities, but rates are tending to deteriorate
- Selective and cautious underwriting to safeguard profitability

---

**Well-diversified portfolio has facilitated good profitability in recent years**

Bubble size indicative of current Munich Re premium volume.
General introduction to Asia

Specifics of the Asian markets

Regulatory environment

Considerable changes in regulatory framework, e.g. China

Nationalisation/trade barriers, e.g. Indonesia

Changing political environment

Emerging Asia

- Diverging market needs ranging from plain capacity to complex risk solutions
- Underinsured risks, e.g. earthquake China

Enabling clients’ business

- Sharing best practices
- Offering expertise and value-adding services

Mature Asia

- Demand for capital management solutions
- Automatic underwriting trend across Asia

Seeking reliable partners

- Driving innovation
- Providing capacity
- Tailor-made and structured solutions
- Asset protection, Risk Solutions

Heterogeneous markets with different reinsurance demand – Regulatory changes may sometimes have significant impact
### What makes Munich Re different in Asia

<table>
<thead>
<tr>
<th>Asian markets</th>
<th>Expected to remain the most attractive growth region despite some challenges</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strong footprint</td>
<td>Market-leader position and well-established player in many dynamic growth areas</td>
</tr>
<tr>
<td>Capital strength</td>
<td>Reliable provider of significant capacity – based on superior risk modeling expertise and broad portfolio diversification</td>
</tr>
<tr>
<td>Solution provider</td>
<td>Premium reinsurer with product offering beyond pure capacity and traditional reinsurance – facilitating profitable future growth while improving portfolio quality</td>
</tr>
<tr>
<td>Outlook</td>
<td>Profitability of Asian business expected to remain above Group average</td>
</tr>
</tbody>
</table>
## Agenda

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<td>Eckl</td>
</tr>
<tr>
<td>Executive summary</td>
<td>Arnoldussen</td>
</tr>
</tbody>
</table>
**Greater China – Two different faces**

- **Mainland China (ML)** – The global growth engine, although at a slower pace
- **Hong Kong and Taiwan** – Wealthy economies with solid growth exceeding that of most Western countries

**High GDP growth and sharp increase in wealth in Mainland China indicate immense (re)insurance potential**

1 Constant 2013 USD based on purchasing-power parities. 
Economic ties getting closer as the country opens up its market further

P-C reinsurance in Greater China

Munich Re well positioned to exploit the market potential in Mainland China thanks to strong franchise and value proposition in the region

Source: Hong Kong Trade Development Council; Financial Supervisory Commission; Hong Kong Monetary Authority; Standard Chartered; Bloomberg.
**P-C reinsurance in Greater China**

**Substantial premium growth vs. small underwriting margins**

### Gross written premiums

<table>
<thead>
<tr>
<th>Year</th>
<th>ML China</th>
<th>Hong Kong</th>
<th>Taiwan</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>35.8</td>
<td>49.8</td>
<td>57.6</td>
</tr>
<tr>
<td>2010</td>
<td>49.8</td>
<td>74.1</td>
<td>57.6</td>
</tr>
<tr>
<td>2011</td>
<td>57.6</td>
<td>85.6</td>
<td>74.1</td>
</tr>
<tr>
<td>2012</td>
<td>74.1</td>
<td>98.3</td>
<td>85.6</td>
</tr>
<tr>
<td>2013</td>
<td>85.6</td>
<td>170.1</td>
<td>98.3</td>
</tr>
<tr>
<td>2014e</td>
<td>98.3</td>
<td>250.6</td>
<td>170.1</td>
</tr>
<tr>
<td>CAGR</td>
<td>+24%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CAGR</td>
<td>+17%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Growth momentum continues – Mainland China will be among top 3 insurance markets by 2020

### Underwriting margins\(^1\)

<table>
<thead>
<tr>
<th>Year</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>ML China</td>
<td>-4.5</td>
<td>2.7</td>
<td>4.7</td>
<td>2.9</td>
<td>0.5</td>
<td>0.8</td>
</tr>
<tr>
<td>CAGR</td>
<td>+17%</td>
<td>+24%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Underwriting cycle dominated by motor insurance performance and strongly influenced by regulators’ action

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\(^1\) 100% minus combined ratio.
Source: Munich Re; CIRC Yearbook; EUR/RMB = 8.2.
P-C reinsurance in Greater China

Primary insurance market dominated by motor business and top 4 domestic insurers

ML China: Market development – GWP

<table>
<thead>
<tr>
<th>Year</th>
<th>Other</th>
<th>Marine</th>
<th>Casualty</th>
<th>Motor</th>
<th>Property</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>73</td>
<td>1</td>
<td>4</td>
<td>13</td>
<td>76</td>
</tr>
<tr>
<td>2020e</td>
<td>90</td>
<td>10</td>
<td>5</td>
<td>13</td>
<td>76</td>
</tr>
</tbody>
</table>

- Market dominated by motor
- Insufficient insurance penetration for property hindering development of this business

ML China: Market share of P-C insurers (2014)

<table>
<thead>
<tr>
<th>Insurer</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Foreign</td>
<td>2</td>
</tr>
<tr>
<td>Other</td>
<td>19</td>
</tr>
<tr>
<td>China Life P-C</td>
<td>5</td>
</tr>
<tr>
<td>China Pacific</td>
<td>12</td>
</tr>
<tr>
<td>PICC</td>
<td>33</td>
</tr>
<tr>
<td>Ping An</td>
<td>19</td>
</tr>
</tbody>
</table>

- Top 4 account for ~70% market share
- 22 foreign-owned insurers with only marginal shares and at clear disadvantage

Motor remains backbone, though potential in other business lines – Largest growth rates by top 4 insurers

Source: Munich Re, Credit Suisse. Casualty incl. personal accident (CAGR: ~8%) and liability (CAGR: ~20%), Others incl. agro, credit. Nominal CAGR.
Disproportionate growth in reinsurance due to reduced motor cessions

Sitting on comfortable capital levels, insurers intend to retain more business – Munich Re among top 3 onshore reinsurers, though strict bottom-line focus prevails

1 Excludes reinsurance premium ceded offshore.
Source: Munich Re estimates.
Munich Re’s global risk expertise fits well with the reinsurance buying motivation in emerging markets

Reinsurance buying motivation in Greater China

<table>
<thead>
<tr>
<th></th>
<th>ML China</th>
<th>Taiwan</th>
<th>Hong Kong</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capacity</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Capital management</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Consultancy services</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- Capacity
- Capital management
- Consultancy services

Reinsurer’s expertise and knowledge

- Risk transfer
- Consultancy services
- Capital management

Reactive reinsurance buying based on loss records
Regulatory, solvency, credit rating, balance sheet protection

Mainland China
- Opportunistic buying behaviour
- Cedants demand large capacities for risk transfer and meeting solvency requirement as well as …
- … services and support for new products
- Growing demand expected from new government initiatives

Taiwan
- Transfer of nat cat and accumulation risks
- Need capacity to maintain credit ratings and fulfill solvency and other regulatory requirements

Hong Kong
- Demand mainly for traditional solutions

Very important
Not important
“New national 10 articles” highlight importance of insurance in supporting national development

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>5% insurance penetration and RMB 3,500 premium per capita by 2020</td>
</tr>
<tr>
<td>2</td>
<td>Insurance as part of social security system</td>
</tr>
<tr>
<td>3</td>
<td>Develop liability insurance</td>
</tr>
<tr>
<td>4</td>
<td>Refine nat cat insurance mechanisms</td>
</tr>
<tr>
<td>5</td>
<td>Insurance to support social development</td>
</tr>
<tr>
<td>6</td>
<td>Develop insurance for agriculture business</td>
</tr>
<tr>
<td>7</td>
<td>Expedite reform and opening of insurance industry</td>
</tr>
<tr>
<td>8</td>
<td>Enhance insurance supervision and regulatory system</td>
</tr>
<tr>
<td>9</td>
<td>Enhance infrastructure/systems (e.g. database, platforms)</td>
</tr>
<tr>
<td>10</td>
<td>Refine government policies (e.g. tax, subsidies)</td>
</tr>
</tbody>
</table>

Expected to be major growth driver for the industry – Munich Re well positioned to engage with CIRC/government bodies and leverage its global expertise

Source: CIRC.
C-ROSS\textsuperscript{1} – China evolving from a current volume-based to a risk-based capital regime

Current solvency regime in China (Solvency I)

- Similar to Solvency I, based purely on premium and incurred loss amount of the insurer
- Minimum capital calculation based on previous year’s premium and the average of last three years’ incurred claims, net of reinsurance and tax

C-ROSS framework (final release Feb. 2015) – Aiming for a balance between risk management and growth

<table>
<thead>
<tr>
<th>Pillar 1</th>
<th>Pillar 2</th>
<th>Pillar 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quantitative capital requirement</td>
<td>Qualitative supervisory requirement Integrated risk rating (IRR) and SARMRA\textsuperscript{1}</td>
<td>Market discipline mechanism Reporting and disclosure</td>
</tr>
</tbody>
</table>

Centralised supervision
Designed for Emerging markets
Risk-oriented with value consideration

Cession rates in motor expected to decrease substantially – Different credit risk charges for on-/offshore give onshore reinsurers clear competitive advantage

\textsuperscript{1} China Risk Oriented Solvency System.
\textsuperscript{2} Solvency Aligned Risk Management Requirement and Assessment.
C-ROSS: Impact on primary and reinsurance

**Primary market and deregulation**
- C-ROSS may release €5bn solvency capital for the major p-c market and will impact Munich Re’s current solvency-driven business model
- Motor deregulation will further narrow underwriting margins
- Competition in non-motor lines should stabilise

**Reinsurance market and deregulation**
- C-ROSS will require foreign reinsurance branch to establish local capital position
- Capital relief deals will be in new form due to decreased risk capital on motor – Capital/reinsurance demand for more volatile lines of business will increase
- Innovation, especially for new products, will be a key differentiator, e.g. Munich Re to pursue consultative business model and to invest in primary insurance expertise

**Munich Re’s strategy: Reinforce local presence to strive for profitable business in non-motor lines and fuel innovation**
### P-C reinsurance in Greater China

#### Commercial motor de-tarification reform

<table>
<thead>
<tr>
<th>Year</th>
<th>Commercial motor</th>
<th>Compulsory third-party liability</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>7</td>
<td>15</td>
</tr>
<tr>
<td>2010</td>
<td>22</td>
<td>24</td>
</tr>
<tr>
<td>2011</td>
<td>33</td>
<td>28</td>
</tr>
<tr>
<td>2012</td>
<td>38</td>
<td>36</td>
</tr>
<tr>
<td>2013</td>
<td>49</td>
<td>42</td>
</tr>
<tr>
<td>2014</td>
<td>58</td>
<td>50</td>
</tr>
</tbody>
</table>

**CAGR +25%**

**Source:** Munich Re analysis; Credit Suisse and BofAML research reports.

### Pricing data collection → Base rate setting → Own price setting

- The pilot reform roll-out in the six provinces/cities began in April 2015 – full implementation in other regions will follow.
- Qualified insurers have more flexibility to set their own premium by adjusting the expense loadings, e.g. underwriting and distribution channel factors.
- Possibly increase product sales through other channels, e.g. online/internet, with lower costs of sales.
- In the medium/long term, the reform should lead to better risk pricing as insurers build up a comprehensive risk database.

**Munich Re leverages its global product know-how to analyse potential needs for reinsurance solutions in commercial motor business post de-regulation.**

**China motor market premium in €bn**

- **2009:** €67
- **2010:** €58
- **2011:** €50
- **2012:** €42
- **2013:** €36
- **2014:** €38

**CAGR +25%**
P-C reinsurance in Greater China

P-C motor quota-share treaties

Munich Re portfolio – P-C quota shares

<table>
<thead>
<tr>
<th>Year</th>
<th>Actual</th>
<th>Expectation</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2014</td>
<td></td>
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<tr>
<td>2015</td>
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<td>2016</td>
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<td>2018</td>
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<tr>
<td>2019</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2020</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Comments

- Large p-c motor quota-share treaties balance out other volatile treaties written in ML China
- Thin margins for these treaties reflect the limited volatility/downside due to large motor proportion and sliding-scale commission
- Treaties offered by major players in ML China to their strategic reinsurance partners, who support them in many areas in long term
- Treaties used by cedants to improve solvency ratio under current solvency regime
- Higher combined ratios, but low risk capital requirements

Under C-ROSS, motor cessions will be reduced as it will have little impact on solvency – Reinsurance premiums will drop in the first years of implementation

1 Gross written premium.
Insured losses very low – Underlining the need for better nat cat protection in China

Source: Munich Re, Geo Risks Research, NatCatSERVICE.
**Munich Re nat cat strategy in ML China**

**Nat cat strategy**

<table>
<thead>
<tr>
<th>Government schemes</th>
<th>Earthquake pool</th>
<th>Commercial programmes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Government-initiated nat cat programmes</td>
<td>Nation wide residential earthquake pool</td>
<td>Commercial nat cat programmes</td>
</tr>
<tr>
<td>Disaster expense cover</td>
<td>Capital market solutions</td>
<td>Tailor-made cat solutions</td>
</tr>
</tbody>
</table>

- **Existing**
- **Exploring**
- **Upcoming**

- Nat cat strategy one of the main strategic building blocks for Munich Re’s future positioning in ML China
- Munich Re developed a proprietary risk model for Chinese earthquake risk

**Nat cat strategy will support diversification into non-motor lines while releasing immense profit potential of nat cat reinsurance**
Chinese government initiating the establishment of various nat cat insurance programmes

State Council’s main goal
Accelerate the development of the modern insurance industry

Main covers under Government programmes
Personal accident, property damage, natural perils, e.g. typhoon and flood, depending on the schemes

Munich Re’s role and value proposition
Rating, modelling, structural input, sparring partner for public authorities, capacity provider

Munich Re acts as consultant and capacity provider to support the development of these programmes
Key financials – Decent profitability

<table>
<thead>
<tr>
<th>Gross written premium (€m)</th>
<th>Combined ratio (%)</th>
<th>Underwriting result (€m)</th>
</tr>
</thead>
<tbody>
<tr>
<td>824 (2010)</td>
<td>82.1</td>
<td>90 (2010)</td>
</tr>
<tr>
<td>995 (2011)</td>
<td>91.8</td>
<td>107 (2011)</td>
</tr>
<tr>
<td>1,285 (2012)</td>
<td>92.8</td>
<td>100 (2012)</td>
</tr>
<tr>
<td>1,053 (2013)</td>
<td>94.9</td>
<td>52 (2013)</td>
</tr>
<tr>
<td>1,605 (2014)</td>
<td>94.6</td>
<td>69 (2014)</td>
</tr>
</tbody>
</table>

- Development in line with reinsurance market growth
- Good results due to selective underwriting and favourable loss development in the early years
- Spikes in 2011 and 2013 due to capital relief transactions
- Exceptionally high fire and typhoon losses in 2013
- Results currently under pressure due to intensifying competition in both the primary and reinsurance markets

Continuous bottom-line focus and selective underwriting approach to protect technical results amid intensifying competition
### Premium split by line of business

<table>
<thead>
<tr>
<th>Line of Business</th>
<th>2009</th>
<th>2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>Engineering</td>
<td>65</td>
<td>62</td>
</tr>
<tr>
<td>Marine</td>
<td>18</td>
<td>18</td>
</tr>
<tr>
<td>Casualty</td>
<td>9</td>
<td>8</td>
</tr>
<tr>
<td>Fire</td>
<td>4</td>
<td>8</td>
</tr>
<tr>
<td>Motor</td>
<td>2</td>
<td>8</td>
</tr>
</tbody>
</table>

### Comments

- **Moderate motor share reduction:**
  - In 2014 and 2015, no participation in motor solvency deals and general trend towards reduced motor cessions under quota shares – this trend will continue beyond 2015
- **Over 95% proportional business,** mainly due to large quota-share participations – XL and facultative business still minor
- **Mainly direct business,** also due to our excellent longstanding relationships with Chinese clients

---

**Decline in motor share expected to continue**
P-C reinsurance in Greater China

Market challenges and opportunities

Major market challenges

- In the primary insurance market, esp. the commercial sector, premium rate is far below risk-commensurate level
- Data transparency improved but still lack of systematic approach, i.e. white spots
- Overcapacity at reinsurance end – new capital chasing cash-rich programmes
- Main competitors in primary insurance market have clear top-line-driven strategy which has intensified the competition

Opportunities

- Nat cat programmes and quasi-compulsory liability products driven/encouraged by the government
- Further impressive growth of the top 4 insurers
- Emerging demand for special and individualised products, growth of special lines
- China still a growth market for new client groups and small and medium-sized insurance companies

Munich Re’s competitive advantage and strategic response

- Full Group value chain offerings
- Provider of knowledge and technical expertise
- Innovation partner
- Local presence and brand recognition

Utilising USPs to tackle market challenges and realise business opportunities
### Key takeaways and outlook

#### Financial results
- Underlying premium development in line with growth of the reinsurance market
- Decent profitability despite challenging market environment

#### Strategic positioning
- Munich Re well positioned in Greater China with its strong franchise
- Dedicated local team, long-lasting relationships and offerings along the full insurance value chain while supporting new government initiatives

#### Portfolio
- Motor business remains backbone with growing potential in non-motor segments
- Offer new innovative products and services

#### Outlook
- Dynamic operating environment due to C-ROSS and intensifying competition
- Growing demand expected due to more nat cat and peak-risk coverage
- Continuous bottom-line focus to safeguard profitability
## Agenda

<table>
<thead>
<tr>
<th>Section</th>
<th>Presenter</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduction</td>
<td>Becker-Hussong</td>
</tr>
<tr>
<td>General introduction to Asia</td>
<td>Wenning</td>
</tr>
<tr>
<td>P-C reinsurance in Greater China</td>
<td>Chang</td>
</tr>
<tr>
<td><strong>P-C reinsurance in Southeast Asia and South Korea</strong></td>
<td>Buholzer</td>
</tr>
<tr>
<td>P-C reinsurance in India</td>
<td>Kotak</td>
</tr>
<tr>
<td>P-C reinsurance in Japan</td>
<td>Eckl</td>
</tr>
<tr>
<td>Life reinsurance in Asia</td>
<td>Cossette</td>
</tr>
<tr>
<td>General introduction to Australia/New Zealand</td>
<td>Arnoldussen</td>
</tr>
<tr>
<td>Life reinsurance in Australia/New Zealand</td>
<td>Linfoot</td>
</tr>
<tr>
<td>P-C reinsurance in Australia/New Zealand</td>
<td>Eckl</td>
</tr>
<tr>
<td>Executive summary</td>
<td>Arnoldussen</td>
</tr>
</tbody>
</table>
P-C reinsurance in Southeast Asia and South Korea

Continuous GDP growth ...

Source: Munich Re Economic Research, IHS Global Insight.

Southeast Asia one of the world’s largest growth engines – Growth rates in most of these countries still well above most European and US markets
P-C reinsurance in Southeast Asia and South Korea

... and rising wealth, especially in Vietnam and Indonesia

**Gross national income (GNI) per capita**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Singapore</td>
<td>33.9</td>
<td>51.1</td>
<td>88.6</td>
<td>+24%</td>
</tr>
<tr>
<td>Indonesia</td>
<td>4.1</td>
<td>5.4</td>
<td>12.7</td>
<td>+58%</td>
</tr>
<tr>
<td>Malaysia</td>
<td>10.0</td>
<td>15.5</td>
<td>27.8</td>
<td>+37%</td>
</tr>
<tr>
<td>Philippines</td>
<td>4.9</td>
<td>5.3</td>
<td>10.4</td>
<td>+49%</td>
</tr>
<tr>
<td>Thailand</td>
<td>6.3</td>
<td>8.9</td>
<td>16.1</td>
<td>+30%</td>
</tr>
<tr>
<td>Vietnam</td>
<td>1.4</td>
<td>2.6</td>
<td>4.4</td>
<td>+66%</td>
</tr>
<tr>
<td>Korea</td>
<td>11.6</td>
<td>20.9</td>
<td>30.9</td>
<td>+31%</td>
</tr>
</tbody>
</table>

**Economic prospects indicate vast latent potential for ASEAN markets – South Korea with moderate potential as a mature market**

1 Constant 2013 USD based on purchasing power parities. Source: Munich Re Economic Research, IHS Global Insight.
ASEAN region – Key features of (re)insurance markets

- Fragmented insurance markets with approx. 350 players and large growth potential
- Heterogeneous characteristics in each market with varying needs for reinsurance
- Non-domestic reinsurers hold major shares of the markets
- Munich Re’s current target markets: Singapore, Malaysia, Thailand, Philippines

What makes the ASEAN markets attractive for Munich Re

- One of fastest-growing economic areas and (re)insurance regions worldwide
- Munich Re Group services selected strategic partners with its fully-fledged set-up and whole value chain according to their differing (re)insurance needs:
  - High nat cat exposures require the sustainable and significant capacity of a top-rated reinsurer
  - We see a lot of potential in emerging ASEAN markets and support their development

Expand Munich Re’s business with clear focus on selected strategic partners
P-C reinsurance in Southeast Asia and South Korea

South Korea – Key features of (re)insurance market

- Ninth-largest p-c insurance market in the world, third-largest in Asia
- Market share of top 4 insurers: ~75%
- Mature and saturated p-c market, growth mainly driven by long-term savings business
- Overall, low demand for reinsurance – low nat cat exposure, increasing retentions by primary insurers
- Seven international reinsurers with fully fledged operations, including Munich Re

What makes the South Korean market attractive for Munich Re

- Changing market conditions with increasing need for state-of-the-art expertise and solutions for complex issues
- Consistent demand for at least A-rated capacity for commodity business
- Regulatory changes opening up new business opportunities
- Large insurers are internationalising, requiring global level capacity and expertise

Twofold growth strategy: Support top 4 insurers with Munich Re’s full product range and develop selected smaller and medium-sized insurers
P-C reinsurance in Southeast Asia and South Korea

**Primary and reinsurance markets – Key features**

<table>
<thead>
<tr>
<th>Stage of development</th>
<th>Mature markets</th>
<th>Emerging markets(^1)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Insurance density</td>
<td>South Korea: High</td>
<td>Low</td>
</tr>
<tr>
<td></td>
<td>Singapore: Medium</td>
<td></td>
</tr>
<tr>
<td>Growth potential primary insurance (2014–2020, total growth)(^2)</td>
<td>Korea 34</td>
<td>Thailand 45, Malaysia 50, Vietnam 81, Philippines 85, Indonesia 94, Other ASEAN 90</td>
</tr>
<tr>
<td></td>
<td>Singapore 48</td>
<td></td>
</tr>
<tr>
<td>Growth potential reinsurance (2014–2020, total growth)(^2)</td>
<td>Korea 26</td>
<td>Thailand 34, Malaysia 40, Vietnam 68, Philippines 72, Indonesia 72, Other ASEAN 77</td>
</tr>
<tr>
<td></td>
<td>Singapore 38</td>
<td></td>
</tr>
<tr>
<td>Level of regulatory environment</td>
<td>Well regulated with high standards</td>
<td>Regulated with a trend to further tightening, e.g. Indonesia</td>
</tr>
<tr>
<td>Demand for reinsurance</td>
<td>South Korea: Low</td>
<td>High</td>
</tr>
<tr>
<td></td>
<td>Singapore: Medium</td>
<td></td>
</tr>
</tbody>
</table>

**ASEAN: Heterogeneous markets in terms of developmental stage and regulatory environment – South Korea: lower growth potential and tight regulation**

2. Gross premium written.
Primary and reinsurance markets – Premium development

Gross written premiums

- Other ASEAN
- Malaysia
- Vietnam
- Philippines
- Singapore
- Thailand
- Indonesia
- Korea

Cession rate: ASEAN
Cession rate: Korea

ASEAN: ~€14bn
- Over all periods ~30% of premium volumes accessible for private reinsurance markets
- Slightly declining cessions in future due to new regulatory restrictions increasing blocking of offshore cessions, e.g. Indonesia, Malaysia, and Myanmar

South Korea: ~€21bn
- Ceded premium volume stable as increased retention offsetting overseas expansion

Solid growth in all primary insurance markets – Cession rates in ASEAN region almost four times those in South Korea

Source: Munich Re Economic Research.
P-C reinsurance in Southeast Asia and South Korea

Primary insurance market – Line of business composition

Gross written premiums

- **Thailand**
  - 2010: 2,976
  - 2014: 5,180

- **Malaysia**
  - 2010: 2,947
  - 2014: 4,164

- **Singapore**
  - 2010: 2,428
  - 2014: 3,644

- **Indonesia**
  - 2010: 2,329
  - 2014: 3,407

- **Philippines**
  - 2010: 617
  - 2014: 1,155

- **Vietnam**
  - 2010: 672
  - 2014: 868

- **South Korea**
  - 2014: 53,092

- 2010: 36,800

**Source:** Office of Insurance Commission (OIC) reports, Munich Re assumptions.

**Big differences within ASEAN region – South Korea unique**

- Dominated by casualty/motor
- Property relatively strong
- Long-term insurance accounts for over 70% of premium income
Primary insurance market –
Development of loss ratios

Loss ratios for largest ASEAN markets

<table>
<thead>
<tr>
<th>Year</th>
<th>Korea</th>
<th>ASEAN</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>52.7</td>
<td>52.7</td>
</tr>
<tr>
<td>2010</td>
<td>50.2</td>
<td>50.2</td>
</tr>
<tr>
<td>2011</td>
<td>53.3</td>
<td>53.3</td>
</tr>
<tr>
<td>2012</td>
<td>84.3</td>
<td>84.9</td>
</tr>
<tr>
<td>2013</td>
<td>62.1</td>
<td>62.1</td>
</tr>
</tbody>
</table>

ASEAN – Loss ratio by line of business

<table>
<thead>
<tr>
<th>Year</th>
<th>Casualty</th>
<th>Marine</th>
<th>Property</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>58.3</td>
<td>36.6</td>
<td>277.2</td>
</tr>
<tr>
<td>2010</td>
<td>46.5</td>
<td>40.8</td>
<td>153.0</td>
</tr>
<tr>
<td>2011</td>
<td>43.4</td>
<td>42.7</td>
<td>52.0</td>
</tr>
<tr>
<td>2012</td>
<td>58.3</td>
<td>54.4</td>
<td>35.9</td>
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<tr>
<td>2013</td>
<td>46.5</td>
<td>52.1</td>
<td>58.5</td>
</tr>
</tbody>
</table>

South Korea – Loss ratio by line of business

<table>
<thead>
<tr>
<th>Year</th>
<th>Casualty</th>
<th>Marine</th>
<th>Property</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>52.1</td>
<td>46.5</td>
<td>58.3</td>
</tr>
<tr>
<td>2010</td>
<td>52.0</td>
<td>45.9</td>
<td>36.6</td>
</tr>
<tr>
<td>2011</td>
<td>78.9</td>
<td>47.3</td>
<td>54.4</td>
</tr>
<tr>
<td>2012</td>
<td>60.8</td>
<td>55.1</td>
<td>52.1</td>
</tr>
<tr>
<td>2013</td>
<td>45.2</td>
<td>60.8</td>
<td>58.5</td>
</tr>
</tbody>
</table>

ASEAN region prone to large nat cat losses – Higher, but much more stable, loss ratio in South Korea due to higher proportion of motor and long-term segments

1 Indonesia, Malaysia, Singapore and Thailand.
Source: National insurance regulators, Munich Re estimates.
Reinsurance – Buying motivations

Reinsurance buying motivation in Southeast Asia and South Korea

Risk transfer
Capacity
Consultancy services
Capital management

Improve balance sheet or finance growth

Munich Re well prepared to serve divergent reinsurance buying motivations according to market development stages
### Reinsurance – Distribution channels and market shares

**P-C reinsurance market premium (share of ceded premiums) %**

<table>
<thead>
<tr>
<th>Country</th>
<th>Direct 2013</th>
<th>Broker 2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>Indonesia</td>
<td>70</td>
<td>30</td>
</tr>
<tr>
<td>Malaysia</td>
<td>90</td>
<td>10</td>
</tr>
<tr>
<td>Philippines</td>
<td>30</td>
<td>30</td>
</tr>
<tr>
<td>Vietnam</td>
<td>65</td>
<td>30</td>
</tr>
<tr>
<td>South Korea</td>
<td>85</td>
<td>10</td>
</tr>
</tbody>
</table>

**Market shares**

- **Non-domestic reinsurers**
  - ~2/3

- **Domestic reinsurers**
  - ~1/3

**ASEAN**

- **Non-domestic reinsurers**
  - ~2/3

**South Korea**

- **Non-domestic reinsurers**
  - ~2/3

**P = Property, C = Casualty**

Source: OIC reports, Munich Re assumptions.

---

**Strong footprint of non-domestic reinsurers in all markets – Share of broker placements increasing as markets mature**
P-C reinsurance in Southeast Asia and South Korea

**Munich Re – Key financials**

<table>
<thead>
<tr>
<th>Gross written premium</th>
<th>€m</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td>284</td>
</tr>
<tr>
<td>2011</td>
<td>294</td>
</tr>
<tr>
<td>2012</td>
<td>339</td>
</tr>
<tr>
<td>2013</td>
<td>286</td>
</tr>
<tr>
<td>2014</td>
<td>342</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Combined ratio</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td>51.0</td>
</tr>
<tr>
<td>2011</td>
<td>19.1</td>
</tr>
<tr>
<td>2012</td>
<td>108.7</td>
</tr>
<tr>
<td>2013</td>
<td>82.8</td>
</tr>
<tr>
<td>2014</td>
<td>85.5</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Underwriting result</th>
<th>€m</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td>121</td>
</tr>
<tr>
<td>2011</td>
<td>63</td>
</tr>
<tr>
<td>2012</td>
<td>58</td>
</tr>
<tr>
<td>2013</td>
<td>27</td>
</tr>
<tr>
<td>2014</td>
<td>20</td>
</tr>
</tbody>
</table>

**ASEAN**
- 2012: Strong growth due to hardening markets after Thai floods
- 2014: Further portfolio expansion in Thailand and Singapore in casualty

**South Korea**
- Stable development – 2013 only nine months (change of fiscal year)

**Bottom-line-oriented approach will continue in view of still increasing competition, closer cooperation with selected strategic partners**
Singapore overtaken as leading market due to large motor quota-shares from other markets – Motor has become an important business line over recent years.

### Munich Re – Business in ASEAN

#### GWP – Breakdown by region

<table>
<thead>
<tr>
<th>Region</th>
<th>2010</th>
<th>2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>Singapore</td>
<td>61</td>
<td>22</td>
</tr>
<tr>
<td>Thailand</td>
<td>17</td>
<td>22</td>
</tr>
<tr>
<td>Malaysia</td>
<td>4</td>
<td>22</td>
</tr>
<tr>
<td>Indonesia</td>
<td>6</td>
<td>12</td>
</tr>
<tr>
<td>Other ASEAN</td>
<td>7</td>
<td>6</td>
</tr>
</tbody>
</table>

#### GWP – Breakdown by line of business

<table>
<thead>
<tr>
<th>Line of Business</th>
<th>2010</th>
<th>2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>Others</td>
<td>15</td>
<td>1</td>
</tr>
<tr>
<td>Casualty</td>
<td>16</td>
<td>22</td>
</tr>
<tr>
<td>Engineering</td>
<td>29</td>
<td>22</td>
</tr>
<tr>
<td>Marine</td>
<td>37</td>
<td>37</td>
</tr>
<tr>
<td>Motor</td>
<td>9</td>
<td>37</td>
</tr>
<tr>
<td>Fire</td>
<td>20</td>
<td>37</td>
</tr>
</tbody>
</table>

- Singapore, Thailand and Malaysia: Increase in motor solvency deals since 2011 supported by Munich Re’s motor consulting unit
- ~60% proportional business, ~20% non-proportional and ~20% facultative business
- ASEAN countries subject to regulatory changes – Munich Re well-positioned to meet the challenges
P-C reinsurance in Southeast Asia and South Korea

Munich Re – Business in South Korea

Split by line of business

<table>
<thead>
<tr>
<th></th>
<th>€149m</th>
<th>€127m</th>
</tr>
</thead>
<tbody>
<tr>
<td>Others</td>
<td>40</td>
<td>2</td>
</tr>
<tr>
<td>Motor</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>Marine</td>
<td>12</td>
<td>13</td>
</tr>
<tr>
<td>Engineering</td>
<td>17</td>
<td>36</td>
</tr>
<tr>
<td>Casualty</td>
<td>25</td>
<td>41</td>
</tr>
<tr>
<td>Fire</td>
<td>25</td>
<td>2</td>
</tr>
</tbody>
</table>

% 2010 2014

Outlook

- Continuing soft market given abundant capacity and increasing retentions
- Frequent sizable single losses due to higher values and business interruption element
- Regulatory developments and insurers’ internationalisation creating new opportunities
- Increasing demand for new products and coverage concepts to overcome saturation, mainly in casualty lines
- Munich Re well-positioned
  - Solid local presence and global expertise
  - Provision of significant capacity in traditional business …
  - … while offering innovative products
  - Differentiation through range and quality of services

Over 40% proportional business, almost 25% non-proportional and ~35% facultative business
Large motor quota-shares all cancelled in 2014

Strong growth in fire and casualty driven by persistent pursuit of private placements – Strict focus on bottom-line prevails
P-C reinsurance in Southeast Asia and South Korea

Singapore – Leading insurance marketplace in Asia

Economy
- Triple-A rated economy with strong growth potential
- Sound and stable location for business expansion into Asia
- World’s fourth most important financial centre, easily accessible
- Robust and transparent legal framework coupled with political stability

Market
- Small competitive domestic market
- Growth potential from regional business
- Local players and many major international insurers
- Asian hub for international reinsurers

Workplace
- Attractive living environment and workplace for international/regional staff …
- … stimulating battle for talented people
- International financial centre promoted by tax incentives
- Very proactive, business-friendly regulator

Singapore gaining importance as financial centre and insurance hub
P-C reinsurance in Southeast Asia and South Korea

Special feature – Lessons learnt from Thai floods in 2011

Background – Flood causation

- Monsoonal and tropical cyclone-triggered rains – braking floodgates and allowing water to traverse irrigation canals into large areas of paddy fields
- Early and mid-October 2011, 40% above-average rainfall added to the problem following on from the typhoon – an area the size of Denmark flooded
- Prompted Government to release more than 9 billion cubic metres down the river basin
- Economic losses: ~US$43bn
- Insured losses: ~US$20bn

Conclusions and recommendations

- Control risk accumulation, especially for nat cat scenarios – Munich Re flood modelling and Risk Mapper
- Assess protection measures for risks (flooding)
- Understand (contingent) business interruption risks, the nature of the business and production process along the entire supplier-manufacturer-customer chain
- Improve wordings
- Prepare for nat cat events

Now aware of increasing numbers and importance of industrial parks all over Asia, reinsurers need to improve transparency and limit exposures
P-C reinsurance in Southeast Asia and South Korea

Munich Re – Medium-term strategy in ASEAN region

Opportunities
- GDP growth, push for higher insurance density
- Increasing sophistication of regulatory frameworks
- Improved risk information/transparency
- Expansion of multi-national clients
- Flight to quality
- Large-scale projects
- Liability products emerging

Munich Re’s strengths
- Strong presence with full mandate
- Bundling of specific expertise
- Substantial shares/lead-positions
- Structured reinsurance solutions
- Risk Solutions

Challenges
- Reinsurance/broker competition
- Political risk
- Increasing retentions at multi-national clients
- Changing regulation
- Nationalisation/trade barriers
- Complex unknown loss scenarios, e.g. Thai floods

Munich Re’s USPs
- Sustainable commitment to all ASEAN markets and longstanding presence
- Focused approach to strategic partners
- Servicing various markets according to their specific needs

Striving for strengthened market presence and positioning as strategic partner
**Key takeaways and outlook**

**South Korea**
- **Twofold growth strategy:** Support top four insurers with Munich Re’s full product range and develop selected smaller and medium-sized insurers.

**ASEAN markets**
- Attractive growth markets despite some challenges.
- Heterogeneous markets call for differing approaches.

**ASEAN strategy**
- Strengthening market presence and expanding business with clear focus on strategic partners.
- Strong footprint in entire region, ideal partner for multinational clients.

**Outlook**
- Fiercer competition challenging profitability.
- High underwriting discipline and strict bottom-line focus, further developing portfolios in emerging markets.
<table>
<thead>
<tr>
<th>Agenda</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduction</td>
<td>Becker-Hussong</td>
<td></td>
</tr>
<tr>
<td>General introduction to Asia</td>
<td>Wenning</td>
<td></td>
</tr>
<tr>
<td>P-C reinsurance in Greater China</td>
<td>Chang</td>
<td></td>
</tr>
<tr>
<td>P-C reinsurance in Southeast Asia and South Korea</td>
<td>Buholzer</td>
<td></td>
</tr>
<tr>
<td><strong>P-C reinsurance in India</strong></td>
<td>Kotak</td>
<td></td>
</tr>
<tr>
<td>P-C reinsurance in Japan</td>
<td>Eckl</td>
<td></td>
</tr>
<tr>
<td>Life reinsurance in Asia</td>
<td>Cossette</td>
<td></td>
</tr>
<tr>
<td>General introduction to Australia/New Zealand</td>
<td>Arnoldussen</td>
<td></td>
</tr>
<tr>
<td>Life reinsurance in Australia/New Zealand</td>
<td>Linfoot</td>
<td></td>
</tr>
<tr>
<td>P-C reinsurance in Australia/New Zealand</td>
<td>Eck</td>
<td></td>
</tr>
<tr>
<td>Executive summary</td>
<td>Arnoldussen</td>
<td></td>
</tr>
</tbody>
</table>
Market: Strong momentum building up for resurgence in economic growth

After recent slowdown, economy expected to grow by ~7% p.a. to the third largest economy by 2020s – main drivers:

- Demography: population of 1.27 billion representing 17.3% of world population – 65% below 35 years of age
- Demand: 250 million middle-income households – close to total US population
- Services and manufacturing: contribute 86% of GDP – mix of internal consumption and export of knowledge-led sectors
- Infrastructure investments: needed by new government

Growth rates elevating India to eleventh largest insurance market by 2020s

Future growth linked to consumer demand (agro, motor, liability), regulatory reforms (property), infrastructure (construction, energy) and adequacy of cat protection

Pricing concerns, fierce competitive (amongst reinsurers) can be growth barriers

Indian market shows high potential in the medium to long term, with substantial growth opportunities and stable political regime

Sources: US Central Intelligence Agency (CIA) Factbook, Kohlberg Kravis Roberts & Co. (KKR) research, National Statistical Office – India, Munich Re Economic Research. INR 1 bn = €14.0m / USD 15.6m / GBP 10.2m.
Much-awaited insurance reforms add to the overall attractiveness of Indian p-c market

- Long-awaited Insurance Amendment (since 2008) passed by Indian parliament in March 2015
- Foreign JV partners to increase stake to 49% (currently 26%) through FDI\(^1\) or FII\(^2\)
- International reinsurers can open branches in India
- More autonomy given to Insurance, Regulatory and Development Authority of India (IRDAI) on future regulatory changes and framework

The underlying growth potential together with the insurance reforms present favourable opportunities for Munich Re

\(^1\) Foreign Direct Investments. \(^2\) Foreign Indirect Investments.
Sources: McKinsey India p-c reinsurance report, Munich Re analysis. INR 1bn = €14.0m/USD, 15.6m/GBP 10.2m.
Focus on four key pillars to explore p-c reinsurance opportunities in India

P-C reinsurance in India

Growth drivers

- **Under-penetration** to meet growing needs of large consumer base (motor, personal accident, home-owners)
- **Regulatory reforms** allowing reinsurance branches to be set up to develop capacity, technical expertise and innovative products
- Government’s impetus on **infrastructure development** leading to growth in construction, capacity expansion areas (power, oil and gas, renewable energy)
- **Services-led economy** driving growth of casualty and financial lines (cyber, general liability, technology D&O)
- **New companies** requiring more expertise and capacity through relaxation of FDI cap from 26% to 49%

Munich Re aiming to be amongst the first branches of foreign reinsurers in India and gearing up to explore the growing reinsurance opportunity

Sources: Munich Re analysis.
INR 1 bn = €14.0m/USD 15.6m/GBP 10.2m.
Munich Re (Group) in India – Strong presence and commitment

Reinsurance

Presence through representative office:

- Business presence in India for six decades – first treaty in 1951
- Current focus: Property and life segments with solutions-based approach in a competitive reinsurance space
- Investing in future growth opportunities (nat cat solutions, infrastructure, agro and casualty) through new product developments, skill transfer and client engagement
- Closely tracking the regulatory front in anticipation of reinsurance reforms – allowing reinsurers to set up branches in India

ERGO and Munich Health

Three joint ventures – HDFC ERGO for p-c (2007), Apollo Munich for health (2007) and Avantha ERGO\textsuperscript{1} for life

Strong footprint in India through presence across all possible Group companies – only country outside Europe to have full Group presence

\textsuperscript{1} Under application stage with the Indian regulator.
<table>
<thead>
<tr>
<th>Agenda Item</th>
<th>Presenter</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduction</td>
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<td>Eckl</td>
</tr>
<tr>
<td>Executive summary</td>
<td>Arnoldussen</td>
</tr>
</tbody>
</table>
Japan – Saturated and highly professional insurance market …

Limited growth opportunities …

- Japan the third-largest economy in the world
- Base trend of low growth expected to continue …
- … e.g. due to declining population – leading to lower unemployment rate and increasing labour cost
- Japanese corporations have recovered quickly from Tohoku earthquake by 2012

… with efforts by primary insurers to escape from this “growth trap” – supported by reinsurers

Innovation
Making the pie bigger by exploring new risk covers

International expansion
Partly compensating for subdued growth prospects of domestic market

Improve efficiency
Centralising buying programmes

Exploring new markets and risks
P-C reinsurance in Japan

... dominated by top three insurance groups

Macro environment

**Regulation**
- Focus on policyholder protection
- Economic value-based solvency regime under discussion
- Some moves to restructure government insurance schemes

**Technology**
- Advanced intelligent transportation system
- Advanced disaster prevention technology

**M&A**
- Industry consolidation in the mature domestic market

### Primary p-c market (2014e)

<table>
<thead>
<tr>
<th>Insurance companies</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kyosai</td>
<td>22</td>
</tr>
<tr>
<td>Sompo Japan</td>
<td>14</td>
</tr>
<tr>
<td>Aioi Nissaydowa</td>
<td>12</td>
</tr>
<tr>
<td>Mitsui Sumitomo</td>
<td>14</td>
</tr>
</tbody>
</table>

**TOTAL GWP €77.3bn**

| South Korea | 5.1 |
| Japan       | 2.5 |
| Australia   | 2.2 |
| Singapore   | 1.5 |
| Hong Kong   | 1.4 |

*Japan – Comparatively low insurance penetration given high wealth and significant nat cat exposure*

---

Primary insurance market – Steady top-line growth

- Low single-digit premium growth in a rather saturated market
- Major primary insurers seeking growth opportunities overseas
- Extremely strong and solid capital base with very high solvency ratios

Lower cession rates in 2014 due to mergers of clients/programmes

1 Compulsory auto liability insurance.
P-C reinsurance in Japan
Reinsurance market – A competitive environment

Ceded reinsurance premiums (incl. Kyosai) €bn

<table>
<thead>
<tr>
<th>Year</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013e</th>
<th>2014e</th>
</tr>
</thead>
<tbody>
<tr>
<td>Premium</td>
<td>9.2</td>
<td>10.3</td>
<td>11.0</td>
<td>11.8</td>
<td>11.3</td>
</tr>
</tbody>
</table>

- Hardening of market after 2011 earthquake now fading away
- CALI\(^1\) and residential earthquake: Government schemes not available to overseas reinsurers – pools set up on a non-profit/non-loss basis

Breakdown by line of business (total) %

- Available to overseas reinsurers 29
- CALI\(^1\) 46
- Residential earthquake 13
- Other 12
- Motor 7
- Fire 63
- Other casualty 13
- Marine 17

TOTAL €11.3bn

TOTAL €3.3bn

Less than 30% of ceded premiums available to overseas reinsurers – Mainly nat cat risks

\(^1\) Compulsory auto liability insurance.

Investors’ Day Asia-Pacific 67
Munich Re in Japan

- Business relations with the Japanese insurance market since 1912
- First permanent representative assigned to Tokyo in 1953
- First foreign reinsurer to open liaison office in Tokyo in 1967 – Converted to a full-service company in 1999

1912
First contract concluded with a Japanese client – Nippon Fire (now Sompo Japan Nipponkoa Insurance)

1953 – 1969
First reinsurer to write engineering business – Beginning of long-standing relationship between Japanese market and Munich Re

1999 – today
Greater need for reinsurance due to liberalisation of market – Munich Re positioned as stable and reliable partner
### Munich Re – Key financials

<table>
<thead>
<tr>
<th>Year</th>
<th>Gross written premium (€m)</th>
<th>Combined ratio</th>
<th>Underwriting result (€m)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td>398</td>
<td>22.6</td>
<td>287</td>
</tr>
<tr>
<td>2011</td>
<td>401</td>
<td>23.8</td>
<td>333</td>
</tr>
<tr>
<td>2012</td>
<td>444</td>
<td>537.3</td>
<td>-1,706</td>
</tr>
<tr>
<td>2013</td>
<td>331</td>
<td>43.2</td>
<td>190</td>
</tr>
<tr>
<td>2014</td>
<td>320</td>
<td>52.2</td>
<td>142</td>
</tr>
</tbody>
</table>

- **Gross written premium**
- **Combined ratio**
- **Underwriting result**

**Active risk management** maintains profitability in nat cat driven portfolio and supports optimisation of portfolio mix.

---

1. Before insurance risk transfer to the capital markets, being part of the investment result (€211m).
**P-C reinsurance in Japan**

**Munich Re portfolio**

**Breakdown by line of business – GWP 2014 %**

- Other: 2%
- Marine: 4%
- Casualty: 14%

**TOTAL €320m**

**Breakdown by nature of business – GWP 2014 %**

- Facultative: 11%
- Treaty: 89%

**TOTAL €320m**

**April renewal 2015 – Market environment**

- Challenging soft market environment
- Continued strong earthquake rates in primary insurance …
- … while reinsurance rates decrease overall

**April renewal 2015 – Portfolio development**

- Active cycle management through expansion of earthquake and reduction of wind business
- Diversification continued
- Foster position of Munich Re through new business initiatives

**Successful portfolio management throughout the cycle**
Munich Re writing earthquake and wind/flood business in Japan

Despite upward trend in nat cat losses, long-term commitment facilitating writing of profitable business over the cycle

After the Tohoku earthquake in 2011, the Japanese market has once again proved its discipline and loyalty

Competitive advantage

- Longstanding experience
- Own well-established nat cat models
- Premium reinsurer – offering tailor-made solutions, which are the key to success in managing a sustainable book of business

Source: Munich Re, Geo Risks Research, NatCatSERVICE.
P-C reinsurance in Japan

Significant nat cat events in recent years

Thai floods (10/2011)
- Accumulation of single large risk losses
- Detailed exposure data were not available
- Deep understanding of risk spread over each country
- In-depth understanding of economic relations and interdependencies of Japanese corporates

Snow Japan (2/2014)
- Fourth costliest insured nat cat event in Japan
- Timely and sufficiently accurate market data are necessary
- Support clients’ cat loss estimation process

Tohoku earthquake (3/2011)
- Return period: ~100 years
- No losses reported under personal accident
- Nuclear contamination not insured but makes claims handling difficult

- Coverage and accumulation control is essential
- Early communication with clients after the loss (post-event strategy)
- Claims handling remains a challenge

Major nat cat events prove value of partnership and cement client relationships
### Munich Re’s strategic positioning – Unique selling propositions

<table>
<thead>
<tr>
<th>Premium capacity provider</th>
<th>Premium partner</th>
<th>Premium solution provider</th>
</tr>
</thead>
<tbody>
<tr>
<td>▪ Offering large capacities with sustainable terms and conditions …</td>
<td>▪ Strong local presence providing clients access with global expertise</td>
<td>▪ Providing solutions in Japan and beyond</td>
</tr>
<tr>
<td>▪ … while positioning reinsurance as highly flexible and effective capital substitute</td>
<td>▪ Active role as “opinion leader” and “sparring partner” in selected topics¹</td>
<td>▪ Tailor-made solutions by holistic client management</td>
</tr>
<tr>
<td></td>
<td>▪ Create tailor-made values – dedicated client team and services</td>
<td>▪ Supporting the development and provision of concepts for complex and newly emerging risks</td>
</tr>
</tbody>
</table>

- Maintain target portfolio in spite of challenging market environment
- Broaden portfolio mix by further diversification – client segments and products
- Further strengthen key client relationships, making investments with a long-term perspective
- Differentiation from competitors – bringing unique/essential value to the client relationships

### Position Munich Re as a stable core partner today and for the future

¹ E.g. natural hazards, risk management, claims management, new technologies and emerging risks.
## Business opportunities

<table>
<thead>
<tr>
<th>Tailor-made solutions</th>
<th>Cyber</th>
</tr>
</thead>
<tbody>
<tr>
<td>▪ Capital efficiency solutions – close interaction with C-levels via dedicated teams</td>
<td>▪ Rising data volume creating potential for new risk segment</td>
</tr>
<tr>
<td>▪ Special product lines – e.g. renewable energy, sport events, pet insurance</td>
<td>▪ Munich Re already active in the USA and Europe …</td>
</tr>
<tr>
<td></td>
<td>▪ … and prepared to support Japanese clients</td>
</tr>
<tr>
<td>Clients’ international expansion</td>
<td>Telematics/motor consulting</td>
</tr>
<tr>
<td>▪ Global covers – international presence and centralised buying support</td>
<td>▪ Government’s ambition for 2020: Telematics transportation system in Tokyo area</td>
</tr>
<tr>
<td>▪ Local covers outside Japan – global office network</td>
<td>▪ Dedicated motor consulting unit</td>
</tr>
<tr>
<td></td>
<td>▪ Capital relief solutions</td>
</tr>
<tr>
<td>Government/public sector</td>
<td>First port of call</td>
</tr>
<tr>
<td>▪ Nat cat cover for public sector</td>
<td>▪ Sparring partner and enabler of innovations</td>
</tr>
<tr>
<td>▪ Agriculture – liberalisation to generate (re-)insurance demand</td>
<td>▪ Local office presence with global expertise</td>
</tr>
<tr>
<td>▪ Benefitting from experience in other markets</td>
<td>▪ Dedicated to making the pie bigger together with clients</td>
</tr>
</tbody>
</table>

**Munich Re an innovative, proactive, client-oriented solution-provider**
Key takeaways and outlook

Financial results
- Prone to volatile results due to high nat cat share
- Reliable partnership indispensable to perform in the Japanese market

Strategic positioning
- Sustainably provide capacity
- Support clients in their global growth strategies – Emerging global covers
- Promote product innovation and public sector solutions

Portfolio
- Active risk management to maintain profitability in a competitive environment
- Access new markets and risks with innovative solutions

Outlook
- Strict cycle-management and diversification remain key
- Managing nat cat volatility while further expanding product scope
# Agenda

<table>
<thead>
<tr>
<th>Topic</th>
<th>Presenter</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduction</td>
<td>Becker-Hussong</td>
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</tr>
<tr>
<td><strong>Life reinsurance in Asia</strong></td>
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<td>Executive summary</td>
<td>Arnoldussen</td>
</tr>
</tbody>
</table>
Life insurance in Asia

GDP growth will drive life insurance spending %

Premium CAGR 2014-2020

Comparatively limited social security cover

Number of social security branches covered by statutory programme

Large and growing workforce bn

Working-age population

Smaller family units, longer retirement

Fertility rate (children per woman) Life expectancy at 65 (years)

A generation of growth ahead
**Life reinsurance in Asia**

**Highly-diverse mix of mature and emerging markets**

<table>
<thead>
<tr>
<th>Mature Asia</th>
<th>Emerging Asia</th>
</tr>
</thead>
<tbody>
<tr>
<td>Japan</td>
<td>Philippines</td>
</tr>
<tr>
<td>Hong Kong</td>
<td>Hong Kong</td>
</tr>
<tr>
<td>Singapore</td>
<td>Singapore</td>
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<tr>
<td>Taiwan</td>
<td>Taiwan</td>
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<tr>
<td>South Korea</td>
<td>South Korea</td>
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<td>China</td>
<td>China</td>
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<tr>
<td>India</td>
<td>Malaysia</td>
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<tr>
<td>Malaysia</td>
<td>Indonesia</td>
</tr>
<tr>
<td>Thailand</td>
<td>Vietnam</td>
</tr>
</tbody>
</table>

**High**
- Ageing population
- Insurance penetration
- Product sophistication
- Pensions gap

**Low**
- Economic growth
- Interest rates
- Population growth
- Knowledge gap
- Protection gap

**Need to adapt products and services to each market**
Life reinsurance market in Asia

Individual new reinsurance premium (US$m)

- 2010: 375
- 2011: 445
- 2012: 468
- 2013: 513
- 2014: 553

Group total reinsurance premium (US$m)

- 2010: 344
- 2011: 603
- 2012: 565
- 2013: 576
- 2014: 642

Reinsurer market shares – Premium (%)

- Domestic reinsurers: 37%
- Munich Re: 18%
- Peer A: 14%
- Peer B: 12%
- Peer C: 11%

Past trend to continue driven by:
- Primary market protection growth
- Emerging Asia: Demand for knowledge transfer
- Mature Asia: Demand for capital and process optimisation

Life reinsurance market expected to grow by 10%-15% p.a. in nominal terms over the next five years

Note:
1 Contestable life traditional reinsurance market excluding capital-motivated transactions.
Life reinsurance in Asia

Life reinsurance environment

Non-cyclical
View that adequacy of life reinsurance pricing in Asia is rational

<table>
<thead>
<tr>
<th>Year</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>%</td>
<td>87</td>
<td>90</td>
<td>83</td>
</tr>
</tbody>
</table>

High barrier to entry
Market share of contestable cessions of top six reinsurers in Asia

<table>
<thead>
<tr>
<th>Year</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>%</td>
<td>83</td>
<td>80</td>
<td>79</td>
</tr>
</tbody>
</table>

Market (generally) disciplined
- Competition is intense, but generally pricing meets technical requirements
- High degree of technical sophistication among all life reinsurers

Difficult market for a new entrant
- Asia is expensive to serve
- Strong footprint needed, esp. for distribution
- Substantial decentralised infrastructure needed
- Large capital and expertise resources needed
- Brokers play a minor role in life reinsurance

No significant deterioration in market conditions expected

Munich Re life reinsurance in Asia

Decentralised structure

Regional hub in Singapore
Takaful hub in Malaysia
Strong local presence in all key markets
Infrastructure mostly complete

Munich Re well-positioned to participate in future growth in Asia
Life reinsurance in Asia

A leading life reinsurer

The no. 1 player

<table>
<thead>
<tr>
<th>Reinsurer</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
</tr>
</thead>
<tbody>
<tr>
<td>Munich Re</td>
<td>72</td>
<td>60</td>
<td>55</td>
<td>54</td>
<td>42</td>
</tr>
</tbody>
</table>

Market penetration – Individual and group

The leading brand in Asia

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<tr>
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<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
</tr>
</thead>
<tbody>
<tr>
<td>Munich Re</td>
<td>69</td>
<td>66</td>
<td>58</td>
<td>27</td>
<td>25</td>
</tr>
</tbody>
</table>

Local brand positioning

Pole position

Reinsurers likely to be approached in panel review

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<th>Reinsurer</th>
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<th>B</th>
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<th>D</th>
<th>E</th>
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<tr>
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<td>67</td>
<td>67</td>
<td>52</td>
<td>42</td>
<td>36</td>
</tr>
</tbody>
</table>

Pre-eminent position with clients

Business Capability Index – Munich Re lead relationships only

Life reinsurance in Asia

History of profitable growth

<table>
<thead>
<tr>
<th>Gross written premium</th>
<th>€m</th>
<th>Technical result</th>
<th>€m</th>
<th>Value of new business</th>
<th>€m</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-traditional</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Traditional</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>957</td>
<td>613</td>
<td>29</td>
<td>11</td>
<td>Non-traditional</td>
<td>59</td>
</tr>
<tr>
<td>959</td>
<td>571</td>
<td>35</td>
<td>7</td>
<td>Traditional</td>
<td>48</td>
</tr>
<tr>
<td>1,178</td>
<td>712</td>
<td>54</td>
<td>63</td>
<td></td>
<td>49</td>
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<tr>
<td></td>
<td>408</td>
<td></td>
<td>82</td>
<td></td>
<td>63</td>
</tr>
<tr>
<td></td>
<td>537</td>
<td></td>
<td>97</td>
<td></td>
<td>82</td>
</tr>
</tbody>
</table>

2010  2011  2012  2013  2014

Solid traditional business – CAGR: 11.8%
Bottom line focus – CAGR: 16.8%
Strong value generation – CAGR traditional: 15.4%

**Traditional**
- Emerging markets
- Service-driven
- Living benefits

**Non-traditional**
- Mature markets
- Complex, structured transactions
- Financially-motivated reinsurance

Top- and bottom-line expected to grow at 10%-15% p.a.
Life reinsurance in Asia

Quality back book

Claims experience better than assumed

<table>
<thead>
<tr>
<th>Year</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>€m</td>
<td>15</td>
<td>6</td>
<td>19</td>
<td>0</td>
<td>21</td>
</tr>
</tbody>
</table>

Munich Re evidence-based and disciplined underwriting policy to continue

Lead relationship

<table>
<thead>
<tr>
<th>Reinsurer</th>
<th>1st or 2nd most important</th>
</tr>
</thead>
<tbody>
<tr>
<td>Munich Re</td>
<td>110</td>
</tr>
<tr>
<td>A</td>
<td>88</td>
</tr>
<tr>
<td>B</td>
<td>61</td>
</tr>
<tr>
<td>C</td>
<td>55</td>
</tr>
<tr>
<td>D</td>
<td>43</td>
</tr>
<tr>
<td>E</td>
<td>21</td>
</tr>
</tbody>
</table>

No. of companies citing reinsurer as 1st or 2nd most important

- Acquired mostly through services standing out from competitors
- Long-term partnership
- Limited exposure to long-term guarantees on living benefit products
- Sustainable pricing

Positioned as premium provider

<table>
<thead>
<tr>
<th>Share seeker</th>
<th>Premium competitor</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
<td>Munich Re</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Price</th>
<th>Value</th>
<th>Profit maximiser</th>
</tr>
</thead>
<tbody>
<tr>
<td>D</td>
<td>E</td>
<td></td>
</tr>
</tbody>
</table>

Cost leader

Source: NMG Consulting Asia client survey 2014

Source: NMG four-year average 2011-2014

1 Operating variances and assumption changes.
Life reinsurance in Asia

Munich Re Asia life reinsurance portfolio

Shift to emerging markets – Premium income

<table>
<thead>
<tr>
<th>Year</th>
<th>Emerging Asia</th>
<th>Mature Asia</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2014</td>
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<td></td>
</tr>
</tbody>
</table>

Shift to living benefits – Premium income

<table>
<thead>
<tr>
<th>Year</th>
<th>Other living benefits</th>
<th>Critical illness</th>
<th>Mortality</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2014</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Risk profile is stable, limited exposure to long-term guaranteed living benefits
Value proposition tailored to market needs – Optimisation vs. know-how transfer

**Mature**

- Consultancy service
- Capacity
- Capital management

**Emerging**

- Consultancy service
- Capacity
- Capital management

**Optimisation**

- Industry-leading automation provider (MRAS)
- Capital management founded on financial strength with large, liquid balance sheet, and structuring expertise with strong record of execution
- High capacity provider
- Good understanding of risks through data, system, and research teams
- Asset protection

**Know-how transfer**

- Local market knowledge
- Access to global network
- Intellectual capital with expertise in all product lines
- Product ideas and development support
- Underwriting tools, audits, and reviews
- Claims assessments, reviews and process consultancy
Life reinsurance in Asia

Mature Asia market – Example: Japan

### Large but not growing

<table>
<thead>
<tr>
<th>Country</th>
<th>€bn</th>
</tr>
</thead>
<tbody>
<tr>
<td>United States</td>
<td></td>
</tr>
<tr>
<td>Japan</td>
<td></td>
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<tr>
<td>China</td>
<td></td>
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<tr>
<td>United Kingdom</td>
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<tr>
<td>France</td>
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<td>Italy</td>
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<td>Germany</td>
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<tr>
<td>South Korea</td>
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<tr>
<td>India</td>
<td></td>
</tr>
<tr>
<td>Taiwan</td>
<td></td>
</tr>
</tbody>
</table>

Top 10 life primary markets in 2020

### Market needs

- Increasing need for optimisation and efficiency, e.g., automation, data analytics
- Increasing need for capital management solutions
- Morbidity risk transfer

### Challenging environment

- Little or no GDP growth
- Challenging demographics
- Life insurance in structural decline except for tertiary sector (living benefits)
- Significant disintermediation risk
- Increase in regulatory capital requirements
- Cost pressure

### Reinsurance outlook

- Low growth in traditional reinsurance
- Growing demand for capital management and asset-protection solutions
- Growing demand for automated underwriting solution

Source: Munich Re Economic Research.
Life reinsurance in Asia

Emerging Asia market – Example: China

Market needs
- Increasing need for capital management post C-ROSS
- Traditional risk transfer, mostly living benefits
- Increasing need for protection for product development

Positive growth outlook
- Strong policy support
  - Target: 5% penetration by 2020, implies 15%+ CAGR
  - “national ten” initiatives
  - scheduled tax break (health, pension)
  - product liberalisation
- Underinsured population
- More focus on protection products

Reinsurance outlook
- Solid growth of traditional reinsurance expected to continue, mostly driven by underlying primary insurance growth
- Strong demand for reinsurer’s capital, service and training

Top 10 life primary markets in 2020

<table>
<thead>
<tr>
<th>Country</th>
<th>€bn</th>
</tr>
</thead>
<tbody>
<tr>
<td>United States</td>
<td>300</td>
</tr>
<tr>
<td>Japan</td>
<td>200</td>
</tr>
<tr>
<td>China</td>
<td>100</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>200</td>
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<tr>
<td>France</td>
<td>100</td>
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<td>Italy</td>
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<td>Germany</td>
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<tr>
<td>South Korea</td>
<td>100</td>
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<tr>
<td>India</td>
<td>70</td>
</tr>
<tr>
<td>Taiwan</td>
<td>70</td>
</tr>
</tbody>
</table>

Source: Munich Re Economic Research.
Life reinsurance in Asia

Emerging Asia market – Example: India

Still relatively small…

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<thead>
<tr>
<th>Top 10 life primary markets in 2020</th>
<th>€bn</th>
</tr>
</thead>
<tbody>
<tr>
<td>United States</td>
<td>300</td>
</tr>
<tr>
<td>Japan</td>
<td>200</td>
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<tr>
<td>China</td>
<td>200</td>
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<td>United Kingdom</td>
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<td>France</td>
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<td>Germany</td>
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<td>South Korea</td>
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</tr>
<tr>
<td>India</td>
<td>100</td>
</tr>
<tr>
<td>Taiwan</td>
<td>20</td>
</tr>
</tbody>
</table>

Life market is recovering

- Reinsurers can now open branches in India, increasing the scope of their activities
- Life sales are slowly recovering after several tough years of regulatory intervention
- Ongoing shift towards protection products

Market needs

- Expected to be easier under the new regulatory regime
- Increasing need for protection product development
- Traditional risk transfer, mostly living benefits

Reinsurance outlook

- Market expected to recover in the short term
- Solid demand for reinsurer’s service and training
- Reinsurance branch draft regulations look encouraging

Source: Munich Re Economic Research.
Life reinsurance in Asia

Product development – New products developed and reinsured in partnership with clients using global expertise and proven model

Integrate with client’s existing product development process

Discovery workshop
- Understand client
  - Business strategy
  - Marketing philosophy
  - Distribution
  - Technology
  - Client base
  - Underwriting and claims
  - Product development process

Preliminary analysis
- Perform
  - Market research
  - Competitor analysis
  - Trend analysis
  - Global benchmarking
  - Business risks and gap analysis

Production gap analysis and product opportunities report

Idea sharing
- Present
  - Innovative and marketable product ideas based on Munich Re’s experience in global markets
  - Refinement designs for more competitive products

Development and implementation
- Develop
  - Business case
  - Product designs and specifications
  - Underwriting and claims guidelines
  - Actuarial pricing and reinsurance rates
  - Training materials
  - Product management
  - Experience analyses

Agree one or two ideas that add sustainable value to client’s business

Support product launch

Most important life reinsurer service according to NMG client survey
Financially-motivated reinsurance –
A key strategic pillar with regional hub in Singapore

Market profile, needs
- Diverse regulatory markets and needs
- Client base both multinationals and local insurers
- Increasing local capital requirements, as well as parent desire for fungible capital

Munich Re unique proposition
- Liquid balance sheet
- Financial strength
- Structuring expertise

Important value contribution – VNB €m

<table>
<thead>
<tr>
<th>Year</th>
<th>VNB</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td>11</td>
</tr>
<tr>
<td>2011</td>
<td>7</td>
</tr>
<tr>
<td>2012</td>
<td>17</td>
</tr>
<tr>
<td>2013</td>
<td>15</td>
</tr>
<tr>
<td>2014</td>
<td>8</td>
</tr>
</tbody>
</table>

Outlook
- VNB in 2015 significantly higher than in 2014
- Regulatory changes drive opportunities for different structured solutions
- Low interest rates increase capital needs
- Continuing focus of multinationals on capital optimisation

Reinsurance has become a key capital management tool for Asian insurers
Financial solutions regional hub in Tokyo

Providing client solutions where:

- Design and reinsurance of savings products require enhanced capabilities to manage market, policyholder-behaviour and biometric risk – one focus being variable annuities (VA), provided for new business and closed blocks.

- Structuring and execution of capital management transactions responding to demanding finance and risk management objectives – in collaboration with regional business units.

Headquarters located in Munich, with a regional hub in Tokyo to cover Japanese clients and opportunistically serve clients in South Korea and Taiwan.

Japan – Historical milestones and key figures

Hedge effectiveness

<table>
<thead>
<tr>
<th>Year</th>
<th>Milestone</th>
</tr>
</thead>
<tbody>
<tr>
<td>2007</td>
<td>Strategic business initiative – Japan considered a key market in Asia</td>
</tr>
<tr>
<td>2008</td>
<td>First Japanese VA reinsurance closed, despite the financial crisis</td>
</tr>
<tr>
<td>2009+</td>
<td>Participated in the development and launch of various new VA products</td>
</tr>
<tr>
<td>2015</td>
<td>Launch of Tokyo hub</td>
</tr>
</tbody>
</table>
Enable change
Help clients enter new business segments

Grow via service
Take new business process to next level

Enable efficiency
Improve underwriting results and efficiency

Local solutions
Meet market-specific, local need

Munich Re provides consultancy for software and underwriting rules in exchange for reinsurance.
Family (life) Retakaful – Shari’a-compliant Islamic reinsurance hub in Kuala Lumpur

Munich Re’s unique value proposition

- Genuine Family Retakaful model
- High rating and full service capabilities
- Offices in the two key growth regions: SEA (Kuala Lumpur) and GCC (Dubai)
- Clients in all major Takaful markets

Outlook

- Trend from conventional to Retakaful in Islamic markets
- Higher reinsurance penetration rate under Takaful model
- Growth expected to continue

Early mover in 2007, now the leading global Retakaful company

1 Gross national income. Constant 2013 USD based on purchasing power parities.
## Key takeaways and outlook

### Financial results
- Track record of 10%-15% CAGR
- Disciplined underwriting philosophy

### Strategic positioning
- A dominant life reinsurer
- Premium reinsurer with differentiated services
- Strong local presence

### Portfolio
- Healthy back book
- Increasing share of prudently underwritten living benefits, mostly critical illness

### Outlook
- Future growth driven by emerging Asia markets
- Profitable growth rate of 10%-15% p.a. expected to continue
- Intense but generally rational competition; non-cyclical
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**General introduction to Australia/New Zealand**

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</tr>
</tbody>
</table>
General introduction to Australia/New Zealand

Australia/New Zealand – Macroeconomics at a glance

Real GDP growth (%)

<table>
<thead>
<tr>
<th>Year</th>
<th>Australia</th>
<th>New Zealand</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td>3.1</td>
<td>0.9</td>
</tr>
<tr>
<td>2012</td>
<td>2.9</td>
<td>2.1</td>
</tr>
<tr>
<td>2014</td>
<td>2.9</td>
<td>2.7</td>
</tr>
<tr>
<td>2016e</td>
<td>3.1</td>
<td>2.5</td>
</tr>
<tr>
<td>2018e</td>
<td>2.9</td>
<td>2.3</td>
</tr>
<tr>
<td>2020e</td>
<td>2.7</td>
<td>2.1</td>
</tr>
</tbody>
</table>

10-year government bond yields (%)

<table>
<thead>
<tr>
<th>Year</th>
<th>Australia</th>
<th>New Zealand</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td>6.1</td>
<td>4.3</td>
</tr>
<tr>
<td>2011</td>
<td>6.0</td>
<td>4.2</td>
</tr>
<tr>
<td>2012</td>
<td>5.5</td>
<td>3.9</td>
</tr>
<tr>
<td>2013</td>
<td>4.5</td>
<td>3.6</td>
</tr>
<tr>
<td>2014</td>
<td>3.5</td>
<td>3.2</td>
</tr>
</tbody>
</table>

Insurance penetration (2014) (%)

<table>
<thead>
<tr>
<th>Country</th>
<th>P-C</th>
<th>Life</th>
</tr>
</thead>
<tbody>
<tr>
<td>Korea</td>
<td>12.5</td>
<td></td>
</tr>
<tr>
<td>Japan</td>
<td>11.1</td>
<td></td>
</tr>
<tr>
<td>Australia</td>
<td>6.1</td>
<td></td>
</tr>
<tr>
<td>New Zealand</td>
<td>3.1</td>
<td></td>
</tr>
<tr>
<td>China</td>
<td>2.9</td>
<td></td>
</tr>
</tbody>
</table>

Economic outlook

- GDP growth still above most advanced economies …
- … and largely driven by commodity exports
- Growth prospects remain heavily exposed to China’s economic development

Insurance markets expected to benefit from a solid economic environment

Source: Munich Re Economic Research, Bloomberg.
Australia and New Zealand to operate as highly professional and well-regulated primary insurance markets

Market dynamics p-c

- Ongoing market concentration, top five players have ~85% of the primary market
- Good profitability largely dependent on nat cat events
- Increasing retention and shift from proportional to excess of loss

Market dynamics life

- Concentrated market: top nine players have ~90% of the primary market
- Poor experience in individual and group disability income business – major efforts to rehabilitate these segments

Competition

- Pricing under pressure due to the substantial amount of capacity
- No significant impact of alternative capital: current soft cycle driven by the incumbents
- Munich Re market-leading position with selective premium growth via capital relief deals

Regulatory framework

- APRA\(^1\): definition of (re-)insurers’ risk appetite and introduction of solid risk management
- Adaptation of an APRA-style regulatory framework for New Zealand
- General trend to reduce up-front commissions

Competitive market environment and further market consolidation will lead to continued pressure on profitability

\(^1\) Australian Prudential Regulation Authority.
Absence of large nat cat losses putting p-c rates under pressure – Life market expected to harden

- Development largely influenced by inflation and the occurrence of large nat cat events
- ~10% of total GWP freely available for reinsurers
- Munich Re strongly committed to the Australian market, providing substantial capacity
- Growth limitations due to leading market position in the nat cat segment, compensated for by ...
- … further growth opportunities in customised solutions and new segments/products

Increase in 2014 mainly driven by investment-linked products – of low significance for the reinsurance market …
- … insurers’ responses to recent poor claims performance are also reflected
- Cession rates quite stable – price is important, but not always the primary driver for purchasing reinsurance
- Munich Re core clients show willingness to improve claims and underwriting management

---

1 Primary insurance GWP include Australia and New Zealand. Source: Munich Re Economic Research.
Property-casualty – Focus on managing volatility and exploiting innovative solutions in Australia/NZ

Result volatility of market vs. profitability

- **Sustain portfolio**
  - Developed market with comparatively low nat cat exposure
  - Profitable portfolio with limited growth potential given competitive environment

- **Facilitate growth**
  - Participating in profitable growth of cedants via capacity and selective services
  - China: While the introduction of C-ROSS will bring uncertainty, good opportunities remain

- **Manage volatility**
  - Diversification is key
  - Reducing dependence on nat cat by exploiting growth potential for innovative solutions and new distribution channels

- **Balance growth and risk**
  - Many markets still offer good opportunities, but rates are tending to deteriorate
  - Selective and cautious underwriting to safeguard profitability

- **Achieve sufficient long-term profitability to compensate for single large loss events**

Bubble size indicative of current Munich Re premium volume.
P-C markets in Australia and New Zealand prone to nat cat volatility of various perils

General introduction to Australia/New Zealand

Key characteristics

- Random large loss occurrence with most years showing benign claims experience
- Variety of different perils – bushfire, cyclone, hail, earthquake, flood and drought
- 2010/11: Accumulation of severe nat cat events
  - Cyclone Yasi
  - Floods in Queensland
  - Hailstorms in Perth and Melbourne
  - Earthquakes in Christchurch, New Zealand
- 1982/83 and 2002: High uninsured losses driven by severe drought events

Capacity commitment of Munich Re balancing out in the long-term – Extreme catastrophes preceded by years with relatively low large loss burden

Source: Munich Re, Geo Risks Research, NatCatSERVICE.
Long-term business commitment and a well-established local market presence

Munich Re offices in Australia and New Zealand

- Munich Re has been active in Australia since August 1955
- Markets served through three offices with more than 250 staff
- Sydney regional hub for both p-c and life markets …
- … safeguarding interlinked business operations and optimally leveraged synergies with Munich Re (Group)

Sydney 1955
Affiliated Reinsurances Pty Ltd., today Munich Holdings of Australasia Pty. Ltd., was founded

Melbourne 1963
Representative office opened to create access to the local single risk market

Auckland 1977
Branch opened to ensure New Zealand markets properly served
General introduction to Australia/New Zealand

Significant premium increase – Australia and New Zealand gaining in importance

Australia/NZ operations – GWP (€m)

<table>
<thead>
<tr>
<th>Year</th>
<th>P-C</th>
<th>Life</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td>1,173</td>
<td>789</td>
<td>1,962</td>
</tr>
<tr>
<td>2011</td>
<td>1,388</td>
<td>901</td>
<td>2,289</td>
</tr>
<tr>
<td>2012</td>
<td>1,695</td>
<td>1,066</td>
<td>2,761</td>
</tr>
<tr>
<td>2013</td>
<td>1,661</td>
<td>698</td>
<td>2,359</td>
</tr>
<tr>
<td>2014</td>
<td>1,932</td>
<td>727</td>
<td>2,659</td>
</tr>
</tbody>
</table>

Share of reinsurance GWP (2014 (2010) %)

- AUS/NZ: 7 (5)
- Asia: 10 (11)
- Other: 83 (84)

P-C – Premium development

- Improving rate levels and increasing shares for nat cat business and capital relief deals
- Further development will be supported by growing share of Risk Solutions business

Life – Premium development

- GWP expected to plateau for the short to medium term – proportion of disability income business will decrease
- Group business expected to steadily increase over medium term

P-C premiums expected to continue growth path while life premiums remain flattish
**General introduction to Australia/New Zealand**

**Natural catastrophes resulting in earnings volatility for the property-casualty business**

<table>
<thead>
<tr>
<th>Combined ratio</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td>167.2</td>
</tr>
<tr>
<td>2011</td>
<td>258.4</td>
</tr>
<tr>
<td>2012</td>
<td>51.5</td>
</tr>
<tr>
<td>2013</td>
<td>53.1</td>
</tr>
<tr>
<td>2014</td>
<td>105.4</td>
</tr>
</tbody>
</table>

- Actual performance dependent on frequency and severity of nat cat events
- 5-year average normalised combined ratio: $^1$ ~85% (2014: ~91%)
- Changes in portfolio mix (e.g. capital relief deals) and ultimate increase for earthquake New Zealand impacted actual (and normalised) combined ratio in 2014

<table>
<thead>
<tr>
<th>Underwriting result</th>
<th>€m</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td>−516</td>
</tr>
<tr>
<td>2011</td>
<td>−1,452</td>
</tr>
<tr>
<td>2012</td>
<td>519</td>
</tr>
<tr>
<td>2013</td>
<td>473</td>
</tr>
<tr>
<td>2014</td>
<td>−60</td>
</tr>
</tbody>
</table>

Despite extreme loss burden in recent years, long-term profit expectations are favourable

$^1$ Adjusted for expected large losses.
Australian operations run on the basis of a shared services model with powerful synergy opportunities

Business model

**Traditional p-c reinsurance**
- Mainly nat cat business
- Leading market share
- Expertise, reliability and strong financials

**Risk Solutions**
- Great Lakes acting as insurance carrier for
  - corporate industrial business
  - agency business

**Life reinsurance**
- Leading retail market reinsurer
- Falling relative share of disability income
- Portfolio improvements

Ambition

**Optimising value for clients**
- Opinion leader and preferred discussion partner
- Innovative and tailor-made solutions
- Reliable capacity provider

**Profitable business in highly specialised niches**
- Complementing the more volatile traditional book
- Leveraging Group’s underwriting expertise
- Selective acquisition of MGA business

**Focus on profitable business**
- Disciplined bottom-line-oriented underwriting
- Expand on innovation and client solutions
- Promote synergies with partners

Well-diversified organisational set-up helps to exploit synergies within the business units while focusing on overall profitability
What makes Munich Re different in Australia/New Zealand

<table>
<thead>
<tr>
<th>Pacific markets</th>
<th>Australia and New Zealand key markets for Munich Re</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strong footprint</td>
<td>Market-leading position driven by outstanding services, a high level of expertise and tailor-made solutions that go beyond traditional standard products</td>
</tr>
<tr>
<td>Property-casualty</td>
<td>Traditional reinsurance: Expertise and discipline in underwriting and claims management Risk Solutions: Access to specialty niche business and innovative distribution channels</td>
</tr>
<tr>
<td>Life</td>
<td>Clear focus on profit rather than market share via improvements in portfolio management and discipline across all Munich Re key functions</td>
</tr>
<tr>
<td>Outlook</td>
<td>P-C: Safeguarding current level of profitability and continue growth path Life: Restore profitability in short term to participate in an attractive market long-term</td>
</tr>
</tbody>
</table>
Introduction

General introduction to Asia

P-C reinsurance in Greater China

P-C reinsurance in Southeast Asia and South Korea

P-C reinsurance in India

P-C reinsurance in Japan

Life re in Asia

General introduction to Australia/New Zealand

Life re in Australia/New Zealand

P-C reinsurance in Australia/New Zealand

Executive summary

Becker-Hussong

Wenning

Chang

Buholzer

Kotak

Eckl

Cossette

Arnoldussen

Linfoot

Eckl

Arnoldussen
Life reinsurance in Australia/New Zealand

Primary life insurance market – Players and market shares

Market share (2014 in-force premiums\(^1\))  A$m

<table>
<thead>
<tr>
<th>Player</th>
<th>Group Risk</th>
<th>Individual DII</th>
<th>Individual LS</th>
</tr>
</thead>
<tbody>
<tr>
<td>TAH</td>
<td>2,500</td>
<td>1,000</td>
<td>500</td>
</tr>
<tr>
<td>MLC</td>
<td>2,000</td>
<td>1,500</td>
<td>1,000</td>
</tr>
<tr>
<td>CommInsure</td>
<td>1,500</td>
<td>1,000</td>
<td>500</td>
</tr>
<tr>
<td>AMP</td>
<td>1,000</td>
<td>500</td>
<td>0</td>
</tr>
<tr>
<td>OnePath</td>
<td>500</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>AIA</td>
<td>500</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>BT</td>
<td>250</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>SunCorp</td>
<td>250</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Zurich</td>
<td>200</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Macquarie Life</td>
<td>150</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Clearview</td>
<td>100</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Others</td>
<td>50</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

Distribution channel breakdown (2014)  %

<table>
<thead>
<tr>
<th>Channel</th>
<th>In-force</th>
<th>New sales</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group</td>
<td>41%</td>
<td>17%</td>
</tr>
<tr>
<td>IFA(^2)</td>
<td>38%</td>
<td>48%</td>
</tr>
<tr>
<td>Direct</td>
<td>6%</td>
<td>35%</td>
</tr>
<tr>
<td>Bank</td>
<td>15%</td>
<td></td>
</tr>
</tbody>
</table>

Comments

- Market dominated by local players
- Nine players account for 90% of Australian Life business
- Most with medium to strong new business growth
- Of top ten players, nine are Munich Re clients, of which six are open for new business

Concentrated market dominated by banks and large conglomerates – Independent financial advisors dominate the distribution of life insurance

\(^1\) DII: Disability income insurance. LS: Lump sum. \(^2\) Independent financial advisors.
Significant changes for financial advisers – Restructuring of remuneration affecting primary life insurance market...

The ASIC Review

- More than 37% of advice received by consumers failed to comply with the relevant legal standards
- Up-front commissions are a problem
  - Strong correlation with non-compliant advice – up-front commissions tempting advisers to put profits ahead of clients' interests
  - Correlation with high lapse rates – advisers switching their clients from one insurer to another to pocket higher commissions (“churning”)

The Trowbridge Report

- Max. 20% level commission on advice
- Additional initial advice payment of 60%, subject to limit of $1,200, once in 5 years
- Licensees are obliged to include at least half of retail insurance providers in the Approved Product List
- Must re-examine the advice process to improve client engagement
- Develop an industry code of practice and eliminate conflicting remuneration

Need for the industry to improve quality of advice and safeguard the interests of consumers

Restructure remuneration of advisers and licensees required to minimise conflicts of interest

Industry consensus likely to result in significant change to commissions, exit of some advisors, better quality sales, lower lapses and more level premiums

1 ASIC – Australian Securities & Investments Commission.
2 John Trowbridge, a former APRA member, is the independent chair of a joint working party to respond to the ASIC review.
Life reinsurance in Australia/New Zealand

... as well as various other compounding factors contributing to a complex structure

<table>
<thead>
<tr>
<th>External factors – Examples</th>
<th>Workplace conditions</th>
<th>Internal factors – Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ageing demographics</td>
<td></td>
<td>Data and analytics</td>
</tr>
<tr>
<td>• Increase in the number of lives reaching 50s and 60s</td>
<td>• Changes in statutory workers’ compensation schemes</td>
<td>• Limited business intelligence reporting</td>
</tr>
<tr>
<td>• Improvement in mortality and increase in chronic illness</td>
<td>• Patterns in workplace stress and bullying</td>
<td>• High reliance on people</td>
</tr>
<tr>
<td>Consumer behaviour</td>
<td></td>
<td>• Limited data integrity and resultant analytical reliability</td>
</tr>
<tr>
<td>• Heightened awareness of health</td>
<td></td>
<td>Claims philosophy</td>
</tr>
<tr>
<td>• Selective lapsation</td>
<td></td>
<td>• Lack of focus on return-to-work plans</td>
</tr>
<tr>
<td>• Increased legal representation</td>
<td></td>
<td>• Reliance on doctors to determine ability to work</td>
</tr>
<tr>
<td>Mental health</td>
<td></td>
<td>• Focus on condition rather than ability</td>
</tr>
<tr>
<td>• Increasing medicalisation</td>
<td></td>
<td>Product design</td>
</tr>
<tr>
<td>• Importance of other non-physical factors</td>
<td></td>
<td>• High real replacement ratios</td>
</tr>
<tr>
<td>• Conditions that are subjective in nature</td>
<td></td>
<td>Lenient underwriting</td>
</tr>
<tr>
<td>Data and analytics</td>
<td></td>
<td>• Reduced underwriting criteria</td>
</tr>
<tr>
<td>Claims philosophy</td>
<td></td>
<td>• Simplified access</td>
</tr>
</tbody>
</table>

The complex state of the market requires a comprehensive understanding to successfully manage a life book
Focus on Individual Disability Income Insurance (DI)

Industry quarterly net results for individual disability income insurance

- Numerous product features added with little or no change in price
- Complex products
- Simplified underwriting
- Insufficient claims management
- Inadequate analysis of exposure to risk
- Stepped premium rates and high initial commissions led to anti-selective lapses

Industry response
- Policy conservation measures
- Review of commission structures
- Price increases
- Tightening of conditions

Munich Re’s response
- Detailed ten-year experience analysis covering more than half of industry exposure
- New prices, new limitations on certain benefits, reduced exposure to lapse by new treaty conditions, exited several accounts
- Focus on sustainable terms and conditions

After developing a comprehensive understanding, now focusing on terms and conditions to participate only in quality business delivering sustainable results

Source: APRA Quarterly Life Insurance Performance.
Focus on Group insurance business

- Substantial price increases and tightening of conditions
- Lobby government for sunset clause (requires legislative change)
- APRA requirements on improved data management

Industry response
- Short-term policies but guaranteed renewable
- No sunset clause, resulting in a long tail of TPD\(^1\) claims
- Large industry superannuation funds dominate, competing for funds under management – generous underwriting conditions offered
- Aggressive (re)insurance pricing
- Poor data capture and management – inability to analyse experience at a granular level
- Generous TPD definitions and increasing awareness driven by lawyer advertising

Munich Re’s response
- Cautious approach to renewal of existing business
- Continue analysis of recently observed experience
- Redefine group underwriting strategy before participating in new business quotations
- Improve data management to permit early insights

Still cautiously acting in Group business – engaging in new opportunities once a prudent underwriting strategy has been defined

---

\(^1\) Total and permanent disability.
Source: APRA Quarterly Life Insurance Performance.
Life reinsurance in Australia/New Zealand

Reinsurance market

Individual new cessions 2014 – Market shares

<table>
<thead>
<tr>
<th>Peer</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>Peer 5</td>
<td>188</td>
<td>217</td>
<td>259</td>
<td>304</td>
<td>337</td>
</tr>
</tbody>
</table>

Group total cessions 2014 – Market shares

<table>
<thead>
<tr>
<th>Peer</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>Peer 1</td>
<td>979</td>
<td>1,071</td>
<td>1,269</td>
<td>1,542</td>
<td>1,969</td>
</tr>
</tbody>
</table>

Highly competitive market, dominated by large global players

Source: NMG.
Drivers for purchasing reinsurance

- Cession rates are relatively stable and high for group business
- Principal motivations for reinsurance according to NMG Consulting
  - Risk transfer
  - Solvency/capital motivation
  - Access to other reinsurance services
- Leading factors for reinsurance selection by cedants
  - Price competitiveness,
  - followed by an aligned partnership mindset

Price is important, but not always the primary driver for purchasing reinsurance

Source: Plan for Life and NMG Consulting.
Snapshot of Munich Re Australia

- Business relations with the Australian insurance market since 1955
- Market is served throughout 3 offices
- Total number of staff (Life): 77

Client structure (2014)

<table>
<thead>
<tr>
<th>Client</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Other</td>
<td>14</td>
</tr>
<tr>
<td>Client 6</td>
<td>9</td>
</tr>
<tr>
<td>Client 5</td>
<td>10</td>
</tr>
<tr>
<td>Client 4</td>
<td>10</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Client</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Client 1</td>
<td>23</td>
</tr>
<tr>
<td>Client 2</td>
<td>18</td>
</tr>
<tr>
<td>Client 3</td>
<td>16</td>
</tr>
</tbody>
</table>

Geographic and product mix (2014)

- New Zealand: Individual DI 35, Group lump sum 1
- Australia: GWP €0.7bn, Individual lump sum 20, Group lump sum 5
- Group salary continuance.

Comments

- Largest reinsurer of individual business – looking to consolidate position and improve profitability
- Well diversified portfolio of clients
- Modest position in group – opportunity to grow prudently by leveraging brand and balance sheet

Future growth from premium increases and prudent growth from group segment

1 Group salary continuance.
Growth slowing due to remediation work
Stabilise at or about current level in short term

Disability business leaving its mark in technical result …
.. as well as economic financials: Negative impact on MCEV (assumption changes and other operating variances) and VNB
Some volatility still possible as business stabilised

Return to modest profit expected in short term – Clear focus is to stabilise bottom-line and then seek sustainable growth
Life reinsurance in Australia/New Zealand

Munich Re Australia – Short-term stabilisation and re-engineering of the business

Business plan – Development phase

What have we done?

Re-engineered operations
- Redesign of organisational structure
- New valuation system introduced
- Review of all key treaties – closing some, increasing prices for many and changing terms and conditions for all

What are we doing?

Refining capabilities
- Defining risk appetite
- Getting a better understanding of market conditions
- Retaining clients only on acceptable new terms and conditions
- Methodical approach to rebuilding Group proposition
- Continued review of processes and infrastructure

Where are we going?

Realise competitive advantage
- Rebound with risk management excellence
- Establish a business that delivers sustainable growth and profitability
- Promote synergies with our partners
- Expand on previous innovation and client solutions

Setting the course for participating in an attractive market long-term
## Key takeaways and outlook

**Business strategy**
- Adjust rates and conditions to safeguard profitably
- Retain clients on acceptable new and sustainable terms and conditions
- Rebuilding the Group proposition with an analytical approach

**Operational excellence**
- Using the right tools to deliver outstanding services to our clients
- Design and implement a comprehensive control cycle
- Focus on reliable data to derive meaningful and actionable insights

**Portfolio**
- Deliver strategic innovations: promote simple DI, claims automation, etc.
- Become more “outward looking” and play a leadership role around sustainable pricing and terms and conditions

**Outlook**
- Develop high performance teams to …
- … return to modest profit in short term …
- … and set the course for participating in an attractive market long-term
<table>
<thead>
<tr>
<th>Agenda Item</th>
<th>Presenter</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduction</td>
<td>Becker-Hussong</td>
</tr>
<tr>
<td>General introduction to Asia</td>
<td>Wenning</td>
</tr>
<tr>
<td>P-C reinsurance in Greater China</td>
<td>Chang</td>
</tr>
<tr>
<td>P-C reinsurance in Southeast Asia and South Korea</td>
<td>Buholzer</td>
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<tr>
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<td>Kotak</td>
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<tr>
<td>P-C reinsurance in Japan</td>
<td>Eckl</td>
</tr>
<tr>
<td>Life reinsurance in Asia</td>
<td>Cossette</td>
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<tr>
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<td>Arnoldussen</td>
</tr>
<tr>
<td>Life reinsurance in Australia/New Zealand</td>
<td>Linfoot</td>
</tr>
<tr>
<td><strong>P-C reinsurance in Australia/New Zealand</strong></td>
<td>Eckl</td>
</tr>
<tr>
<td>Executive summary</td>
<td>Arnoldussen</td>
</tr>
</tbody>
</table>
Munich Re – Position in the Australian property-casualty market

Responsible region
- Australia
- New Zealand
- Pacific Islands

Reinsurance market – GWP

<table>
<thead>
<tr>
<th>Reinsurance</th>
<th>GWP (A$m)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Munich Re</td>
<td>901</td>
</tr>
<tr>
<td>Reinsurer 1</td>
<td>635</td>
</tr>
<tr>
<td>Reinsurer 2</td>
<td>197</td>
</tr>
<tr>
<td>Reinsurer 3</td>
<td>103</td>
</tr>
<tr>
<td>Reinsurer 4</td>
<td>87</td>
</tr>
</tbody>
</table>

Primary insurance market – GWP

<table>
<thead>
<tr>
<th>Insurer</th>
<th>GWP (A$m)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Insurer 1</td>
<td>10,831</td>
</tr>
<tr>
<td>Insurer 2</td>
<td>8,589</td>
</tr>
<tr>
<td>Insurer 3</td>
<td>4,985</td>
</tr>
<tr>
<td>Insurer 4</td>
<td>4,011</td>
</tr>
<tr>
<td>Insurer 5</td>
<td>1,358</td>
</tr>
<tr>
<td>Insurer 6</td>
<td>702</td>
</tr>
<tr>
<td>Insurer 7</td>
<td>683</td>
</tr>
<tr>
<td>Insurer 8</td>
<td>676</td>
</tr>
<tr>
<td>Insurer 9</td>
<td>554</td>
</tr>
<tr>
<td>Risk Solutions</td>
<td>471</td>
</tr>
</tbody>
</table>

Market leader in traditional reinsurance complemented by Risk Solutions

1 Risk Solutions via Great Lakes.
Traditional reinsurance – Key financials

Gross written premium (€m) | Combined ratio (%) | Underwriting result (€m)
---|---|---
551 | 664 | 754 | 639 | 847 | 311 | 195 | 33 | 34 | 106 | 523 | 459 | 48

- **2011/12**: Taking advantage of hard market after large nat cat losses
- **2013/14**: Cycle-management-driven reductions offset by capital relief deals
- **Future growth limited given leading market position**

- **Volatile results reflecting cat-exposed portfolio profile**
  - **2010/11**: Severe nat cat losses
  - **2012/13**: Benign claims experience
  - **2014**: Sound underlying economic profitability affected by reserve increase for New Zealand earthquakes
- **Underwriting discipline prevails**

**Outlook remains positive** – Continued top-line growth with good returns in “normal” years to recover from extreme catastrophe losses

---

1 Management view, not comparable with IFRS reporting, figures do not include internal cessions for Australia, New Zealand and Pacific Islands.
Traditional reinsurance – Nat cat business a core element of the Group

Munich Re (Group) – Nat cat exposure (net of retrocession)\(^1\)

<table>
<thead>
<tr>
<th>AggVaR (return period 200 years, pre-tax)</th>
<th>€bn</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td></td>
</tr>
</tbody>
</table>

- Australia within the top 5 nat cat exposures
  - Australian regulatory requirements drive large nat cat purchases
  - Exposure reduced due to cycle management and currency effects

Risk appetite
- Unchanged high risk appetite and willingness to deploy large amount of capital, based on risk-adequate pricing
- Strict cycle management: Increased capacity in the hard market, reduced exposures when terms soften

Benefitting from strong diversification between natural catastrophe risks

---

\(^1\) Exposures relate to the full year, e.g. 2015 relates to the period from 1.1.2015 to 31.12.2015.
Traditional reinsurance – Special feature: Christchurch earthquakes

Christchurch earthquakes
- Series of earthquakes with three severe events
- Current market loss ~€20bn – increased from original loss estimate of ~€13bn in 2011
- 90% of commercial losses and 60% of domestic losses closed

Loss complexities
- Delayed adjustment process: Multiple events, land classification, earthquake commission (EQC)
- Cost increase and reapportionment of the events: complex repairs, land remediation issues
- Legal risk: litigation; change in legislation

Lessons learnt
- Ceased writing new earthquake-exposed risks until seismic activity settled down
- Reduced exposure to NZ stand-alone programmes
- Introduction of capped sum insured and improvements in seismic strengthening conditions
- Review of the EQC scheme
Traditional reinsurance – Client structure

Gross written premium by client\(^1\) in 2014

<table>
<thead>
<tr>
<th>Client</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Other</td>
<td>17</td>
</tr>
<tr>
<td>Client 5</td>
<td>5</td>
</tr>
<tr>
<td>Client 4</td>
<td>6</td>
</tr>
<tr>
<td>Client 3</td>
<td>16</td>
</tr>
<tr>
<td>Client 1</td>
<td>33</td>
</tr>
<tr>
<td>Client 2</td>
<td>23</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>€847m</strong></td>
</tr>
</tbody>
</table>

- Highly concentrated market – several large insurers dominating personal and commercial lines
- Munich Re portfolio reflects market structure, i.e. dominated by a few large players
- Nat cat covers continue to be the dominant driver of reinsurance demand
- Munich Re portfolio well diversified – in terms of business lines and geographic areas …
- … complemented by recent growth in non-catastrophe lines

---

Munich Re’s portfolio follows the original market and is driven by several large clients

---

\(^1\) Management view, not comparable with IFRS reporting.
Traditional reinsurance –
Business model: Value optimiser and complex risk taker

A unique offering ...

**Premium discussion partner**
- Opinion leader – providing local/global knowledge of key topics, e.g. nat cat, emerging risks
- Providing added value through a range of services

**Premium solution provider**
- Tailor-made solutions
- Concepts for complex and emerging risks
- Solutions beyond Australasia

**Premium capacity provider**
- Positioning reinsurance as a flexible and effective capital management tool
- Offering large capacities on sustainable terms and conditions

... exemplified by

- **Strong local presence and expertise**
  Easy access to Munich Re’s global expertise
- **Broad local mandate and authorities**
  Backed by efficient and fast referral processes
- **Motivation and ability to develop solutions**
  Leveraging and combining Munich Re’s skills from various business units and countries
- **Superior modeling capability**
  e.g. nat cat, claims handling, financial analysis
- **Flexible staffing of necessary experts**
  e.g. market intelligence, risk assessment, legal, tax, underwriting, actuarial, financial
- **International development opportunities**
  for local talents

Recognised value permits differential terms/private placements and larger shares
**Traditional reinsurance – Portfolio mix**

### 2010¹
- **Property facult.** 7
- **Casualty** 15
- **Property prop.** 50
- **Total** €551m

### 2014¹
- **Other** 1
- **Property facult.** 2
- **Casualty** 13
- **Capital relief** 28
- **Property XL** 45
- **Total** €847m

### Recent development
- Change in cedants’ purchasing, e.g. switch from property proportional to non-proportional
- Active portfolio management to improve diversification, e.g. via capital relief or optimisation transactions

### Mid-term outlook
- Capitalise on new business opportunities
- Continue to develop non-catastrophe exposed business
- Selectively grow facultative book

---

**Active portfolio management safeguarding profitability while improving portfolio diversification**

1. Excludes one-off effects, management view, not comparable with IFRS reporting.
P-C reinsurance in Australia/New Zealand

Traditional reinsurance – Portfolio management

**Property**
- Maintain leading shares in core nat cat and risk programmes
- Balanced participation across programmes and regions
- Focus on profitability and strict exposure accumulation
- Selective approach to frequency covers
- Ensure long-term price adequacy
  - Consistent nat cat pricing
  - Disciplined underwriting and cycle management

**Casualty**
- Keep shares in preferred programmes
- Potential business opportunities through privatisation of government schemes
- Expand capital relief transactions
  - Capital-efficient customised solutions
  - Target sustainable business partnerships

Example: Global client management approach
- Enabling tailored reinsurance arrangements
- Joint effort by staff located in Sydney, London, Princeton and Munich helped one of our top clients to move away from a decentralised to a consolidated purchase of reinsurance

Maintain profitability whilst continuing to develop new business opportunities
Traditional reinsurance – Competitor landscape

Competitor landscape – Top-tier global reinsurers dominate the market\(^1\)

<table>
<thead>
<tr>
<th>Offshore placements</th>
<th>Munich Re</th>
<th>23</th>
</tr>
</thead>
<tbody>
<tr>
<td>Other local offices of global reinsurer</td>
<td>Global reinsurer 2</td>
<td>21</td>
</tr>
</tbody>
</table>

- Challenging environment with gradually declining premiums
  - Shift from proportional to XL
  - Trend towards higher retentions
- Successfully maintaining leading market position by increasing shares in hard markets and generating new capital relief business
- Majority of business written on differential terms
- Exposures continue to be very attractive – all major reinsurers writing business in Australia/New Zealand

Opportunities for Munich Re

- Continuation of differential rates/terms by leveraging our selling proposition
- Selectively increase shares and write new business
- Multi-year deals, complex covers and customised solutions

Cedants continue to access traditional reinsurance capacity – Alternative capital playing only a minor role

\(^1\) Gross written premium, Australian Prudential Regulation Authority (APRA) and Munich Re analysis, 2014.
Australia/New Zealand market overview

- Primary insurance premium growth driven by inflation-linked increases in personal lines rather than underlying price increases or expansion of insurance market or products
- Major changes in market shares of larger insurers only likely as the result of M&A activities
- Retentions remain high

Key implications for Munich Re

- Business growth in traditional reinsurance rather limited given already high market share and extensive nat cat budgets …
- … while non-traditional lines provide opportunities for profitable growth and gradually improve portfolio diversification

Diversification remains key in managing our portfolio

---

1 Gross written premium (property-casualty), Australian Prudential Regulation Authority (APRA) and Munich Re estimates.
Market characteristics Australia

- Market consolidation in an advanced stage as top 3 insurers control more than 50% of the market
- Trend towards increasing retentions result in shrinking reinsurance market
- Risk Solutions enable business retained by clients in the primary specialty segment to be re-accessed
- Underwriting excellence and expertise remains our core USP, just as in traditional reinsurance

Munich Re’s strategic approach on Risk Solutions

**Personal**

- Specialty/niche e.g. manufactured housing
- Mass/commodity e.g. personal motor

**Commercial**

- Specialty/niche e.g. equipment breakdown, cyber

**Industrial**

- Specialty/niche e.g. equipment breakdown, CBI, product liability, cyber

- **Focus on primary specialty**

**Increasingly valuable business segment with strong premium growth and bottom-line contribution**

- Focus on commercial and industrial primary specialty business
- Criteria are specialty/niche capabilities and know-how, leveraging our expertise in reinsurance
- Continuation of specialised distribution via strategic alliances and managing general agents (MGAs)
- Further investments to reap organic growth potential
<table>
<thead>
<tr>
<th>At a glance</th>
<th>Value proposition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Established in Australia/New Zealand since 2008</td>
<td>100% owned by Munich Re Group</td>
</tr>
<tr>
<td>Underwriting &gt; A$500m per year</td>
<td>Munich Re (Group) financial strength rating</td>
</tr>
<tr>
<td>Equity interests in selected MGAs to share distribution profits and to</td>
<td>Access to Munich Re (Group) expert knowledge, tools, product development</td>
</tr>
<tr>
<td>direct and protect distribution capabilities</td>
<td></td>
</tr>
<tr>
<td>High reinsurance cession to Munich Re and underwriting expertise</td>
<td></td>
</tr>
<tr>
<td>Munich Re Group ensures low required capital and net volatility</td>
<td></td>
</tr>
</tbody>
</table>

Focus on growth in niche segments where price is not the sole differentiator and SME segment (i.e. non-commodity business)

Largely decoupling from traditional reinsurance cycle while meeting demand from MGA partners

MGA partners looking for insurance capacities that can offer global breadth, first class expertise and financial strength
P-C reinsurance in Australia/New Zealand

Risk Solutions – Key Financials

<table>
<thead>
<tr>
<th>Gross written premium</th>
<th>€m</th>
<th>Combined ratio</th>
<th>%</th>
<th>Underwriting result</th>
<th>€m</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td>238</td>
<td>97</td>
<td>7</td>
<td>2010</td>
<td>7</td>
</tr>
<tr>
<td>2011</td>
<td>237</td>
<td>105</td>
<td>-11</td>
<td>2011</td>
<td>-11</td>
</tr>
<tr>
<td>2012</td>
<td>312</td>
<td>102</td>
<td>-4</td>
<td>2012</td>
<td>-4</td>
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<tr>
<td>2013</td>
<td>324</td>
<td>95</td>
<td>14</td>
<td>2013</td>
<td>14</td>
</tr>
<tr>
<td>2014</td>
<td>358</td>
<td>104</td>
<td>-12</td>
<td>2014</td>
<td>-12</td>
</tr>
</tbody>
</table>

- Underlying organic growth in existing agencies and selective addition of new partners
- 2014: Providing capacity to Australia’s largest travel insurer
- 2010–2012: Combined ratio naturally higher as a green-field investment
- 2014: Medium-sized per risk losses resulting in increased volatility – portfolios that caused historic volatility have been cancelled
- Outlook: Results to improve and stabilise in the medium-term – 10% annual premium growth, following the recent Calliden acquisition

Risk Solutions improving portfolio diversification in selective niche markets

Management view, not comparable with IFRS reporting, figures do not include internal cessions for Australia, New Zealand and Pacific Islands.
### Key takeaways and outlook

**Financial results**
- Australia/New Zealand a core market with good underlying performance
- Benefitting from covering the full value chain – limited growth prospects in traditional reinsurance largely offset by primary insurance operations

**Strategic positioning**
- Maintain leading market position in reinsurance …
- … while continuing to support niche and commercial insurance within Risk Solutions – largely decoupling from purely price-driven demand

**Portfolio**
- Maintain balanced portfolio composition
- Access new markets and portfolios with innovative solutions (reinsurance) and distribution partners (primary insurance)

**Outlook**
- Strict cycle-management safeguarding good underwriting profitability
- Diversification remains key – Managing nat cat volatility while further expanding capital relief transactions and Risk Solutions
<table>
<thead>
<tr>
<th>Topic</th>
<th>Presenter</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduction</td>
<td>Becker-Hussong</td>
</tr>
<tr>
<td>General introduction to Asia</td>
<td>Wenning</td>
</tr>
<tr>
<td>P-C reinsurance in Greater China</td>
<td>Chang</td>
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<tr>
<td>P-C reinsurance in Southeast Asia and South Korea</td>
<td>Buholzer</td>
</tr>
<tr>
<td>P-C reinsurance in India</td>
<td>Kotak</td>
</tr>
<tr>
<td>P-C reinsurance in Japan</td>
<td>Eckl</td>
</tr>
<tr>
<td>Life reinsurance in Asia</td>
<td>Cossette</td>
</tr>
<tr>
<td>General introduction to Australia/New Zealand</td>
<td>Arnoldussen</td>
</tr>
<tr>
<td>Life reinsurance in Australia/New Zealand</td>
<td>Linfoot</td>
</tr>
<tr>
<td>P-C reinsurance in Australia/New Zealand</td>
<td>Eckl</td>
</tr>
<tr>
<td><strong>Executive summary</strong></td>
<td>Arnoldussen</td>
</tr>
</tbody>
</table>
## Executive summary

### Business in Asia-Pacific providing substantial earnings contribution

<table>
<thead>
<tr>
<th>Category</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Emerging Asia</strong></td>
<td>Driver of global GDP and insurance premium growth – Accompanying clients as knowledge partner and service provider</td>
</tr>
<tr>
<td><strong>Mature Asia-Pacific</strong></td>
<td>Saturated markets with rather limited growth prospects – Reliable capacity provider while expanding the scope of insurance solutions</td>
</tr>
<tr>
<td><strong>Innovation</strong></td>
<td>Munich Re in an advanced position to profitably grow the business with innovative concepts, e.g. capital relief transactions and asset protection</td>
</tr>
<tr>
<td><strong>Risk Solutions</strong></td>
<td>Improving portfolio diversification by expanding the insurance value chain via less-cycle-exposed specialised niche business in Australia/New Zealand</td>
</tr>
<tr>
<td><strong>Mid-term outlook</strong></td>
<td>Life: Share expected to increase to 20–25% of Group's value generation and IFRS bottom-line, P-C: Normalised combined ratio expected to be better than Group average</td>
</tr>
</tbody>
</table>
## Shareholder Information

### Financial Calendar

**2015**

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>6 August</td>
<td>Interim report as at 30 June 2015</td>
</tr>
<tr>
<td>5 November</td>
<td>Interim report as at 30 September 2015</td>
</tr>
</tbody>
</table>

**2016**

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>4 February</td>
<td>Preliminary key figures 2015 and renewals</td>
</tr>
</tbody>
</table>
| 16 March      | Balance sheet press conference for 2015 financial statements  
|               | Analysts' conference in Munich with videocast            |
| 27 April      | Annual General Meeting 2016, ICM – International Congress Centre Munich |
| 10 May        | Interim report as at 31 March 2016                      |
| 9 August      | Interim report as at 30 June 2016                      |
| 9 November    | Interim report as at 30 September 2016                  |
Shareholder information

For information, please contact

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<table>
<thead>
<tr>
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<th>Title</th>
<th>Tel.</th>
<th>E-mail</th>
</tr>
</thead>
<tbody>
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<td>E-mail: <a href="mailto:igrunwald@munichre.com">igrunwald@munichre.com</a></td>
<td></td>
</tr>
</tbody>
</table>

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