



# Empowering Non-Life Actuaries in Asia

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## The non-life actuary in Asia has faced significant barriers...

- Actuaries not seen as key for industry's "growth"
- Viewed as "compliance" rather than "strategic"
- Short-tailed liabilities don't require significant reserving expertise
- Reserve-setting pressure from management and regulators
- Pricing is often based on competition
- Tariff structure has limited the actuary's role
- Data limitations
- Challenges with small books of business
- Few industry role models





## ...but let's look at our opportunities

- Insurance business is growing significantly
- More focus on profitability, including profitable growth
- Pricing analysis is becoming more mainstream
  - Tariff structures are gradually being eliminated
  - Predictive modeling is starting to be employed
- Data is improving, but still a long way to go
- Catastrophe exposure awareness increasing
- More scrutiny of reserve accuracy



2



## ...but let's look at our opportunities

- Regulations increasing need (e.g., stress testing)
- Actuaries becoming more involved in “strategic projects”
- More higher-profile non-life actuaries arriving from other markets with excellent backgrounds and expertise
- Increased staffing as actuarial needs increase



3





## Empowering non-life actuaries

- Think outside the triangle
- Need to learn the broader insurance business
- Improve delivery of traditional actuarial services
- Improve communication skills
- Need better sales capabilities
- Champion better data collection



4



## Learn the insurance business

- Need to see the business through the eyes of others
- Attend industry seminars (underwriting training, distribution, line specific knowledge, CEO forums)
- Develop a network of industry insiders
- Develop a “point of view” about a line of business
- Develop a good understanding of business management
- Shed the actuarial reputation (of being remote, not business-focused, of dictating rather than listening)
- Be a problem-solver, not just an actuary



5





## Think outside the triangle

- Reserving is more than just triangles
- We must understand the specific products/risks, especially changes
  - Marketing
  - Underwriting
  - Claims
  - Reinsurance
- Relate the reserving issues into business opportunities



6



## Improve reserving

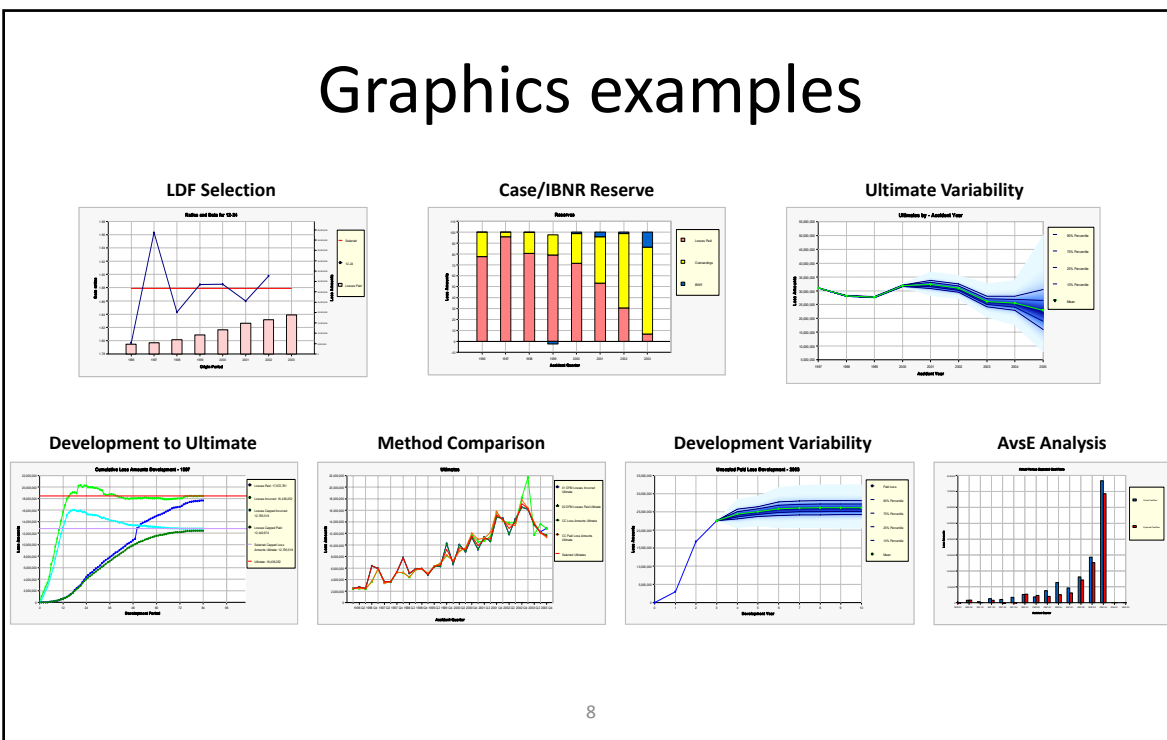
- Shed the reputation of being a compliance exercise
- Use diagnostic analysis that is meaningful to the business
- Explain using graphics — but use headlines to get message across
- Sensitivity test assumptions
- Compare actual versus expected
- Forecast future development
- Explain reasons for changes in estimates
- Create dashboards for management
- Explain reserve uncertainty/risk margins
- Present to the Board/senior management



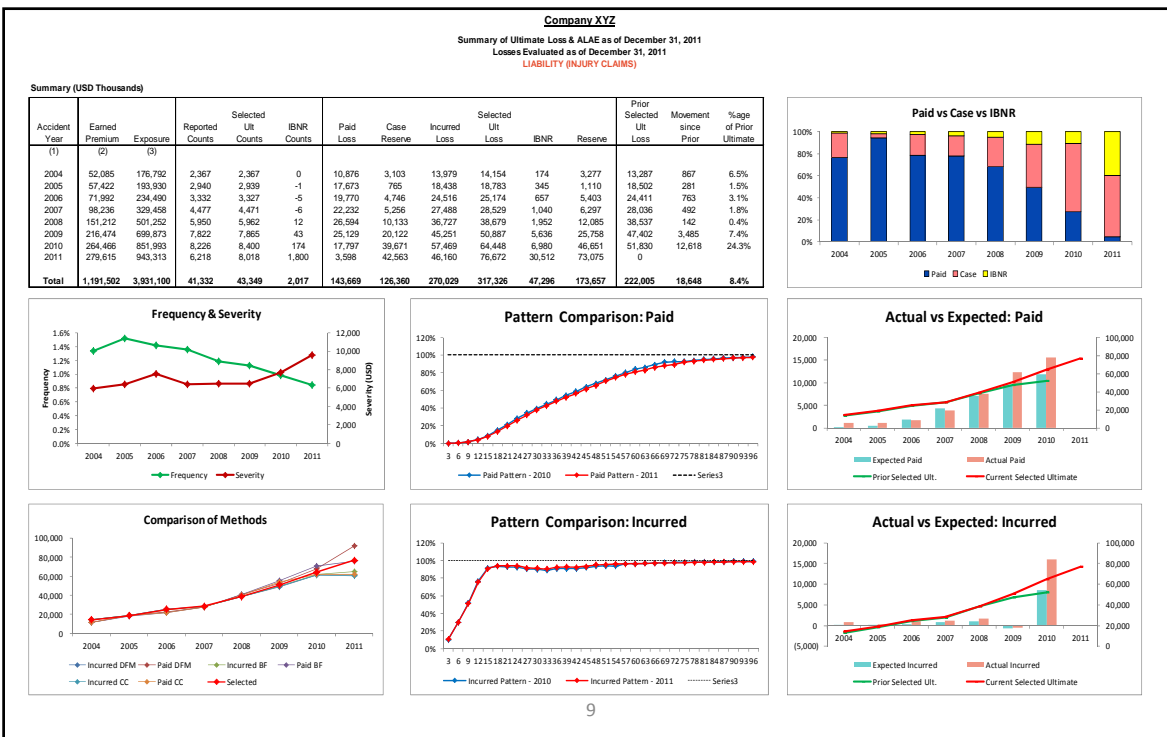
7



# Graphics examples



8



9



## Perform strategic reserving

- Can reserving help other business functions , e.g.:
  - Marketing, underwriting, claims, reinsurance?
- Developing ultimate losses is an important component in pricing
- Are there segments that should be divested or trimmed?
- Suggest broadening or limiting of coverage based on results
- Identify unusual trends, fraud, claim types, etc.
- Evaluate reinsurance proposals by exploring historical and theoretical distributions of claims
- Explain financial impacts of strengthening/weakening of reserves on calendar-year results



10



## Improve pricing/underwriting

- Should be pushing for more refined pricing (e.g., predictive modeling, better classification system)
- Competitor rate analysis
- Marketing/Underwriting analysis
  - Conversion trends, retention trends, discount trends, elasticity analysis, product trends
- Can I implement automated underwriting?



11

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## Predictive modeling applications

**Underwriting**

- Solve where to grow profitably
- Add discipline to schedule rating and tiering
- Target inspections or audits
- Measure agency performance

**Pricing**

- Identify rating variables
- Quantify relationships
- Develop territories
- Deviate from loss costs sensibly

**Marketing**

- Predict conversion rates
- Predict direct response rates
- Perform demand analysis
- Identify profitable risks with high expected longevity

**Claims**

- Triage claims
- Set reserves
- Predict fraud
- Predict lawsuits

**Value**

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12

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## Thinking outside the triangle: ERM

- ERM enables YOU to help your firm manage its business risk
  - It facilitates making informed, common-sense business decisions
- Position ERM as addressing the firm’s “business risk”; identifying, assessing, and quantifying, then developing cost-effective means to mitigate threats to the firm...YOU will add real value!
- Consider what losses can occur, and how they might aggregate
  - Natural catastrophes — use models or rely on concentration analysis
  - Large policy limits or correlated portfolios
  - Operational risk; What can be learned from other events?
- Manage pricing and reserving risk and implications on capital

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13



## Improve communication skills

- Know your audience...how do your executives speak to each other?
  - Use plain language and sufficient supporting exhibits
- Listening skills are key
- Explain the basics
- Don't make explanations too technical
- Avoid the “black box” perception
- Executive summaries and elevator speech are key
- Use appropriate formats
  - Graphs and betting odds are better than probability distributions and percentiles



14



## Champion better data collection

- Data provides opportunities; we have the skills to find those opportunities and demonstrate the value they will add to the firm
- Work to improve the data you already have
- Use data to provide insights on the business
- Think what data is needed for tomorrow; “sell” how you will use it to add value
- Data is needed for predictive modeling and winning in a tariff environment; show how!
- Sell the concept that improved data analytics can improve performance
  - Agent analysis
  - Finer underwriting and claim settlements
- If YOU could get any data, how would you use it to create value and convince others of that value?



15







## The role of local actuarial associations

- Provide guidance to our younger members
- Encourage and develop forums for knowledge sharing
- Work with credentialing organizations to provide local hands-on training
- Organize working groups to tackle industry issues
- Promote data standards and industry data repositories
- Develop well-rounded actuarial and insurance knowledge
- Develop & enforce codes of conduct and standards of practice



## Actuarial associations: Improving visibility and branding

- Publish articles on actuarial problem solving in industry publications
- Embrace the GIA & other insurance organizations
  - Showcase actuaries thinking outside the triangle
- Work with regulators to promote actuarial capabilities to address industry issues
- Give presentations on “demystifying actuarial work”
- Provide mentorship on selling ideas and improve communication skills
- Develop well-rounded actuarial knowledge





## Actuarial associations: Enforcing conduct and professionalism

- Run sessions on codes of conduct and professionalism
- “Raise the bar” on the expected work quality
- Provide training through actuarial societies
  - Delivering results
  - Quality work
- Work with regulators to develop Standards and similar requirements for them to require and depend on
- Enforce proper quality and standards



18



## Special thanks to:

- |                 |                |
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19





## Four things to remember

- Learn the insurance business
- Improve your communication skills
- Take some risk – don't avoid it
- Think outside the triangle



20

