

ISA Commercial Property

A case study (of sorts)

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ISA Commercial Property



Background

- Approximately \$850m GEP
 - ▶ 47% of market
- Includes Package, ISR, stand-alone
- Latest information 31 December 2007 Risk level information. Data includes
 - ▶ ANZSIC
 - ▶ Postcode
 - ▶ Sum Insured
- Individual claim data. Data includes
 - ▶ Type of claim



Introduction

- Perspective of user of ISA data. Presentation reflects experience in using ISA data for:
 - ▶ R&D
 - ▶ Benchmarking for FCRs
 - ▶ Insurer specific weather studies
 - ▶ Market pricing studies
 - ▶ Technical pricing advice
- Quality of data
 - ▶ Yes there are still issues and further work needed
 - ▶ Needs users to continue to report issues





ISA Commercial Property



Remainder of this presentation covers use of data for:

1. R&D
2. Benchmarking
3. Pricing related work



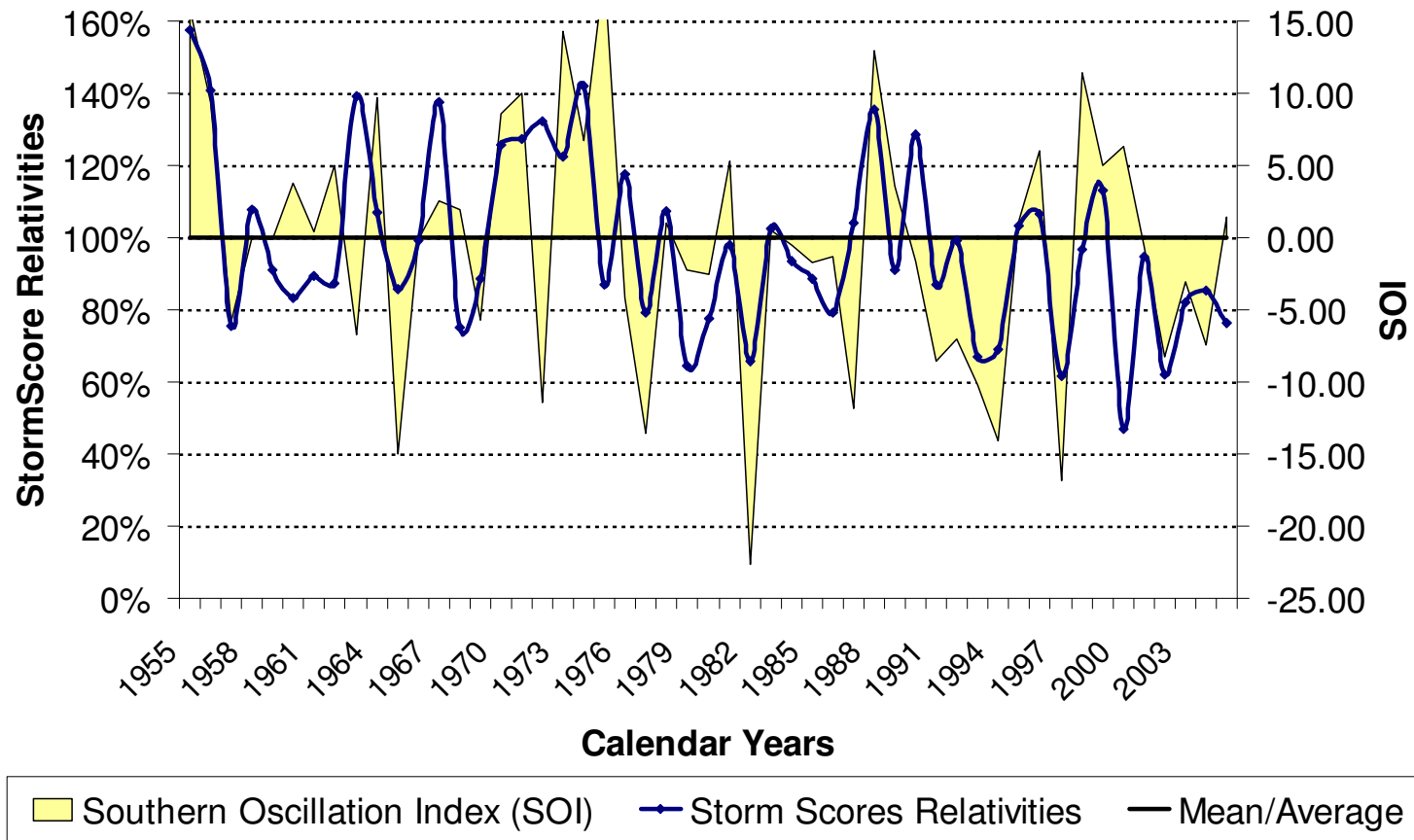
1. R&D



Recent use of data for R&D

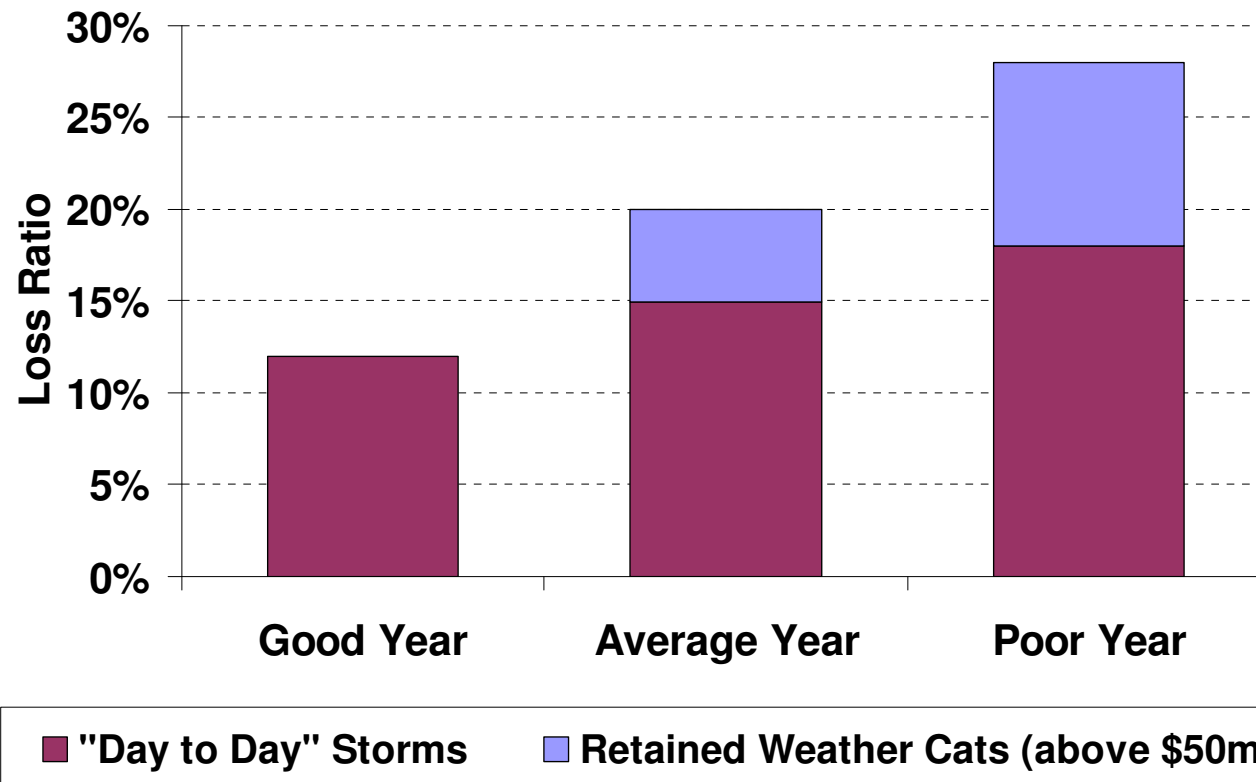


- Commercial Property was one of datasets we used for analysis of weather related claims – involving use of 50 years BoM data



Recent use of data for R&D

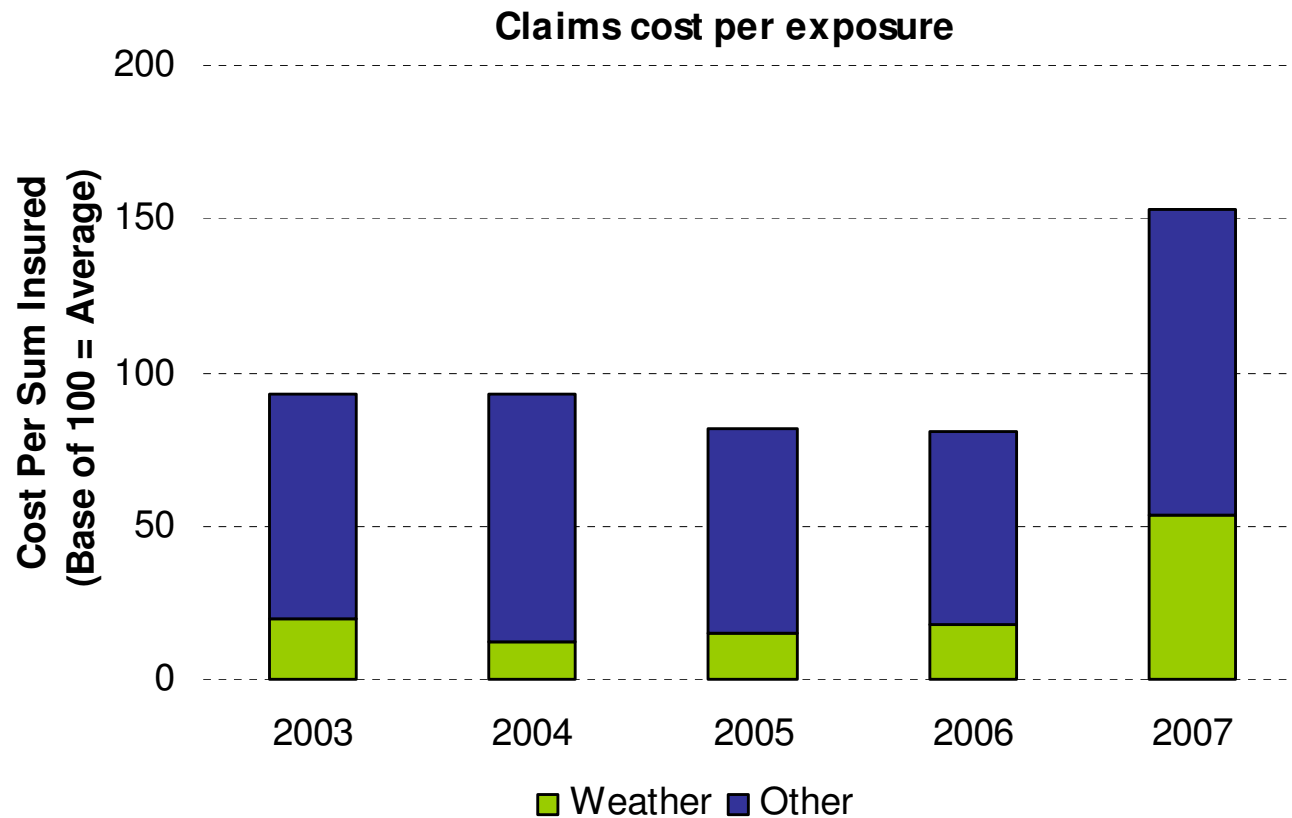
- Led us to view that whilst weather related claims average 20% loss ratio, including catastrophes, varies from 12% to 27% average in best and worst quartile



Recent use of data for R&D

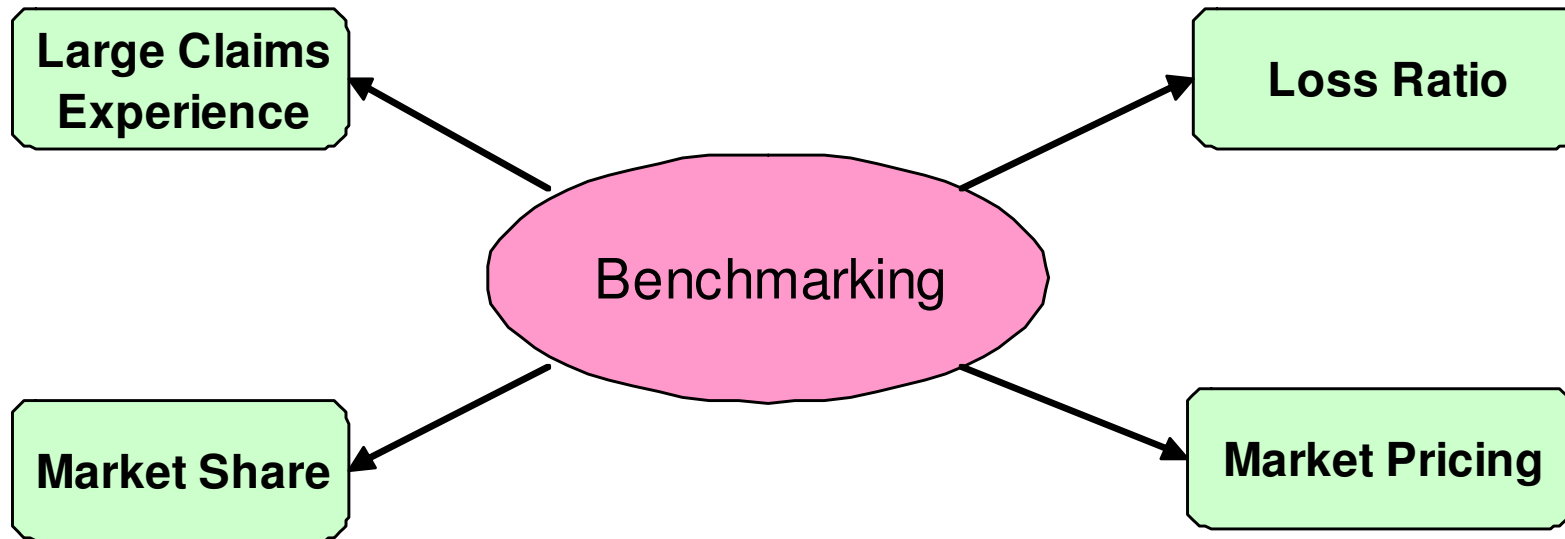


- From Pendulum 2008
- Weather related claims in 2007 around triple average between 2003 and 2006



2. Benchmarking







Benchmarking



- What makes ISA a useful source of benchmark information?
 - ▶ available within 3 months of completion of half-year
 - ▶ market prices and claims, not just loss ratios
 - ▶ information available at level of per risk and per claim
 - for those with specialised portfolios allows sufficient detail to construct benchmarks relevant to nature of business
 - for example, benchmarks can be developed to allow for mix relevant to bias by State, rural/metro, sum insured, and industry groups
 - ▶ note that costs are on movements in period basis (financial year) – no allowance for IBNR needed





Benchmarking

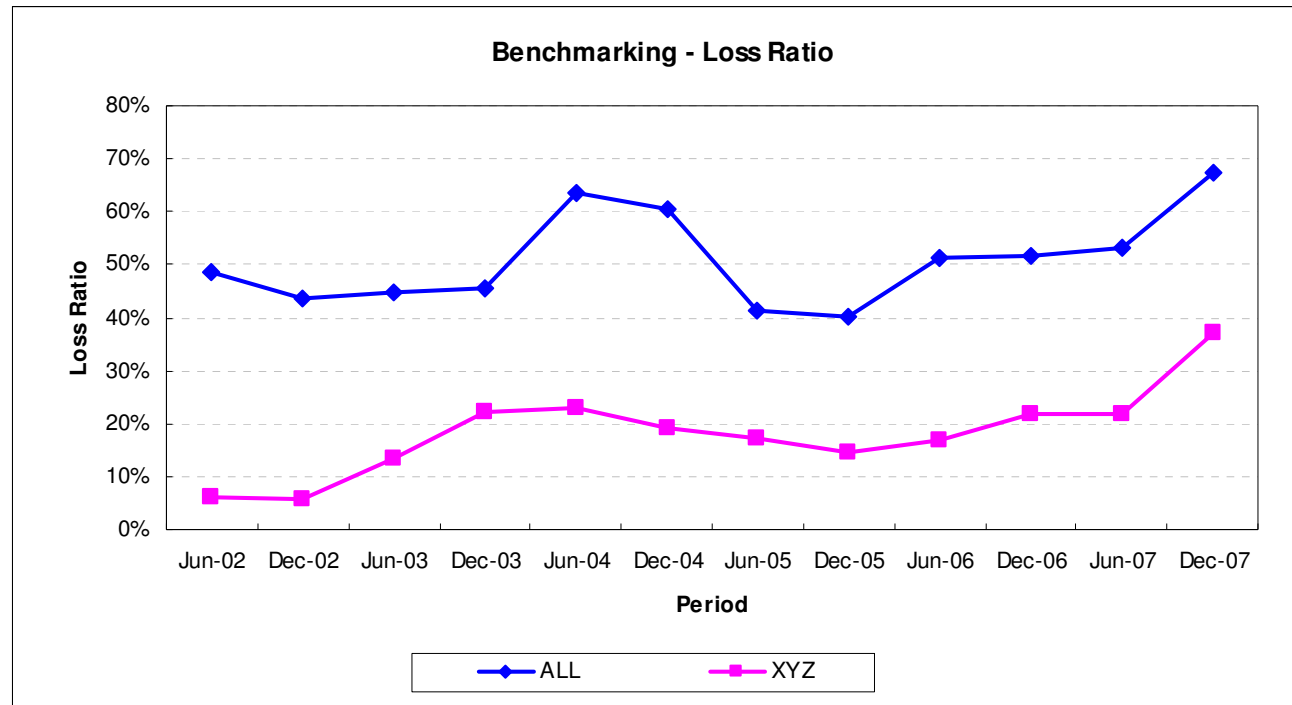


Company XYZ

- ▶ not a real insurer, but based on real data
- ▶ formed by combining two insurers, based on selected postcodes
- ▶ as such, illustrative, but we can see if it tells a story
- ▶ all graphs shown in remainder of presentation are for package, but can get useful results for other segments



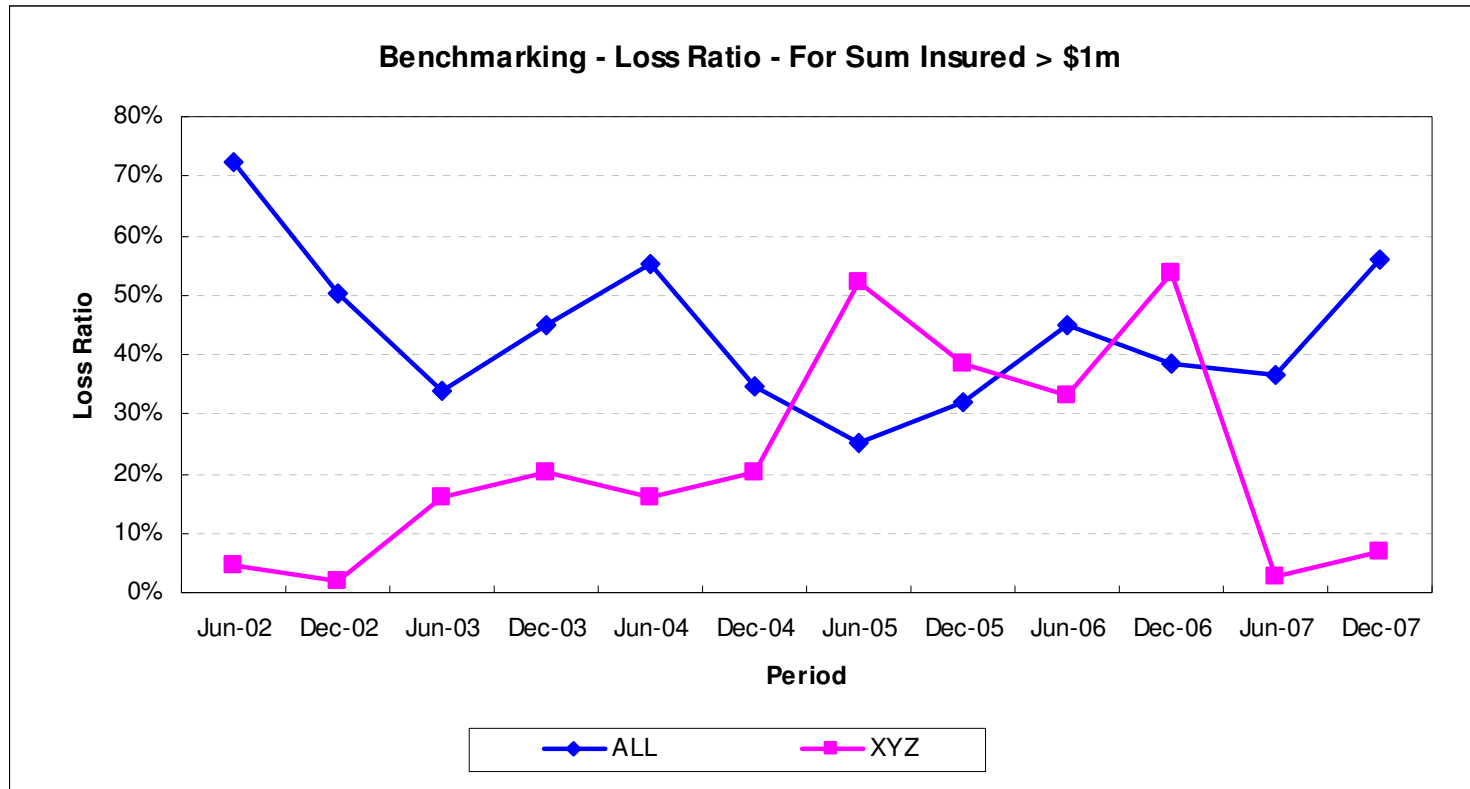
Benchmarking – Loss Ratio Trends



- Can benchmark separately for package, ISR, stand-alone. Can also use sum insured to categorise by size and by industry group and region
- Can separate large, weather etc as desired
- XYZ would appear to be consistently outperforming
- Note that high December partly reflects reporting of June storms



Benchmarking – Loss Ratio Trends



- XYZ also better at higher sums insured, although not as consistent
- Other groupings could readily be explored

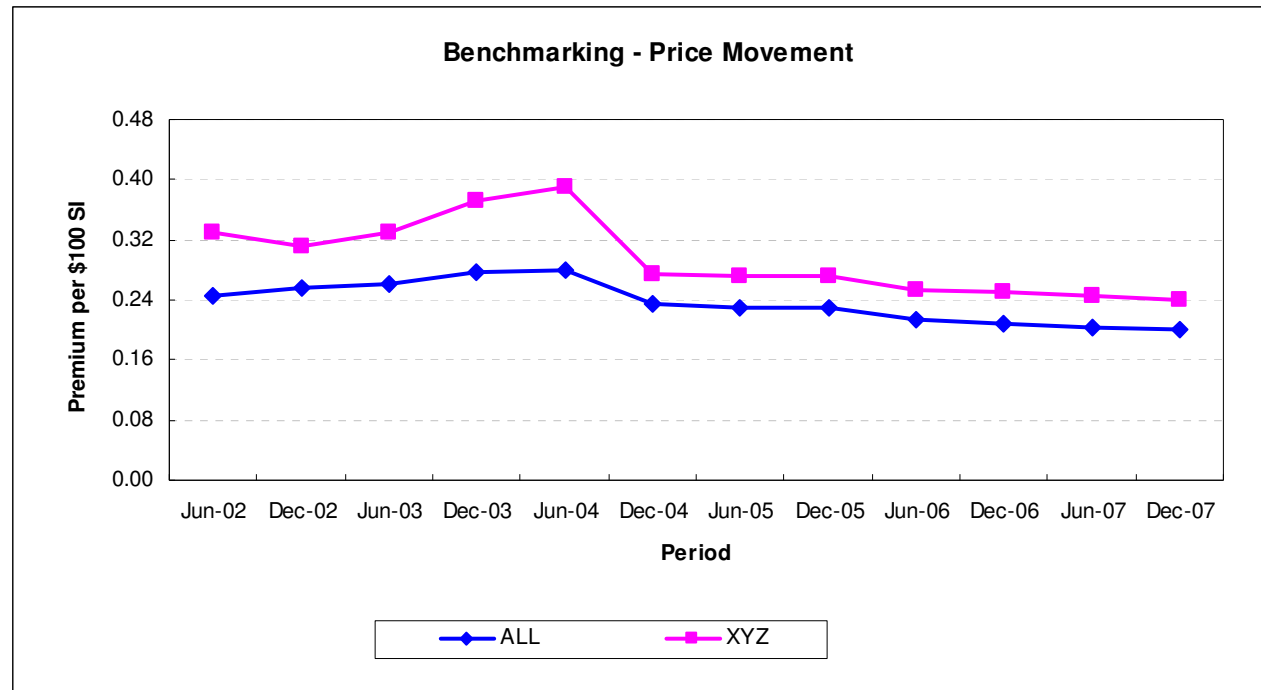


Benchmarking – Measuring Prices

- Measuring price a little tricky
 - ▶ Need to deal with co-insured risks
 - ▶ Need to deal with odd asset values
 - ▶ Need to deal with odd premiums, which may reflect adjustments etc
- As you would with any dataset
 - ▶ examine data
 - ▶ add rules to deal with possible sources of distortion (eg. this may involve excluding risks with high asset values or where the premium per asset value is clearly an outlier)
- Other approaches possible
 - ▶ Could be used to track rate movements on renewals vs new business

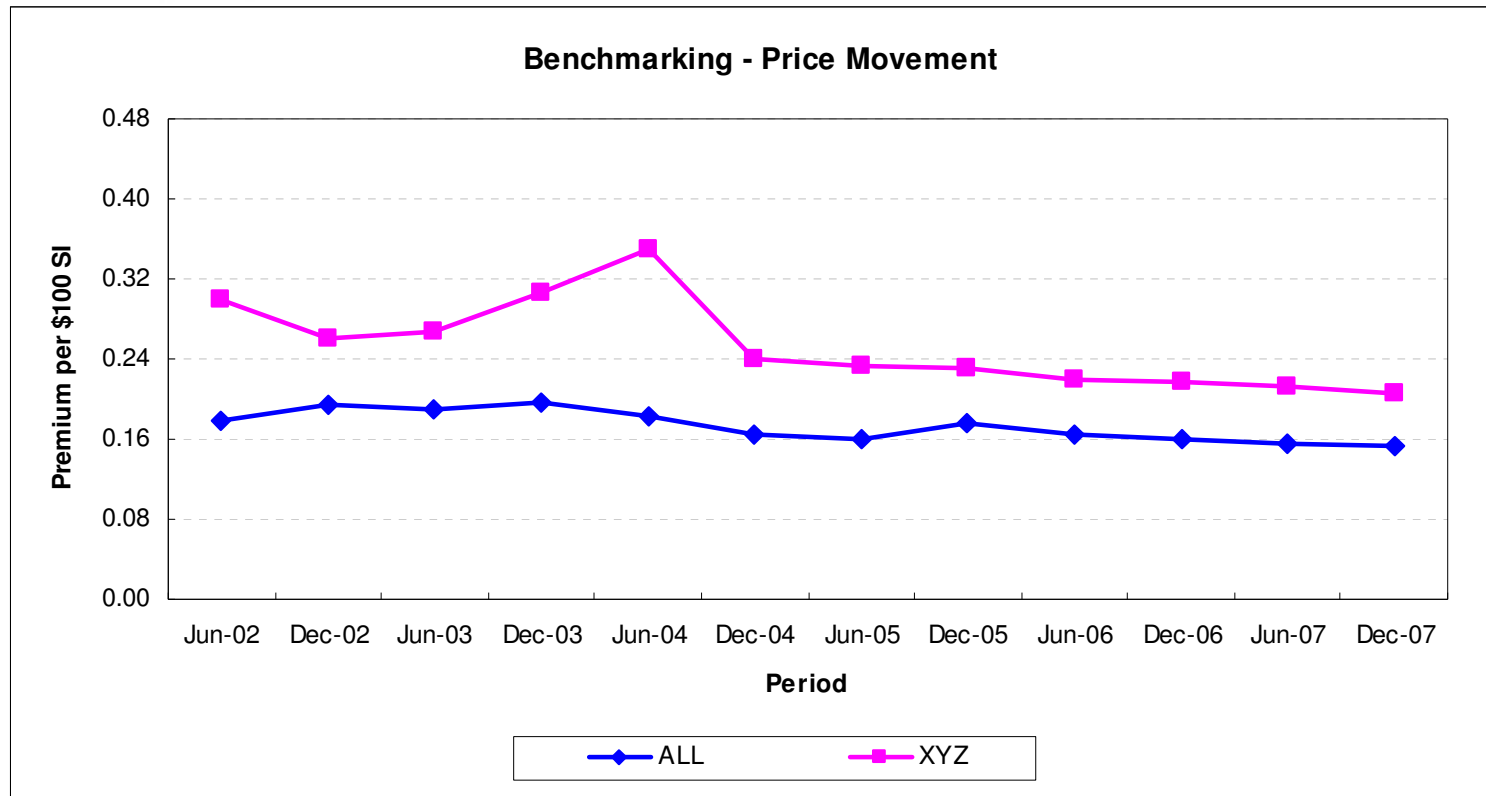


Benchmarking – Price Movements



- Getting reliable market pricing data on commercial property is difficult, if not impossible.
 - ▶ Is ISA a largely untapped source of this data, noting that it can be used at the segment level?
- Suggests market 2007 SME property premiums around 25% lower since 2003
- XYZ average premiums higher than market –may be possible driver of lower loss ratio

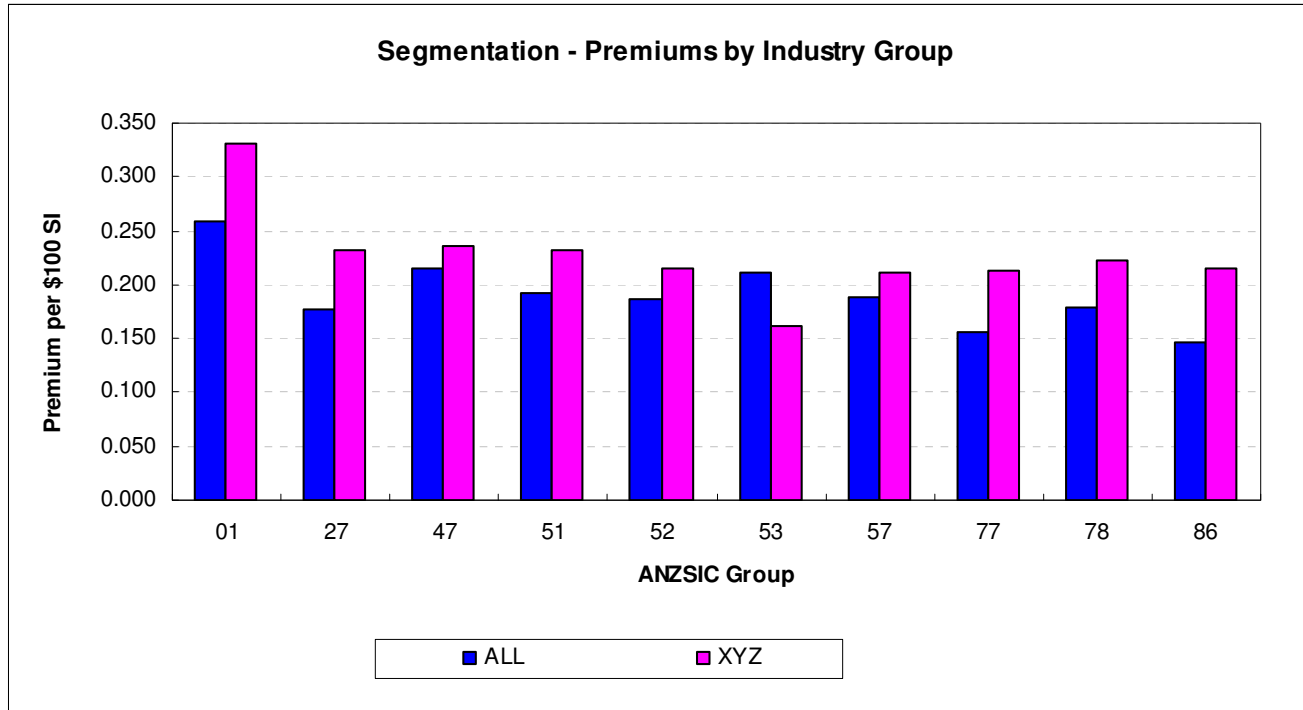
Benchmarking – Price Movements



- Here comparison is weighted so relates to main industry groups where XYZ has exposure – so that comparison is of like with like
- XYZ average premiums much higher for similar industry groups



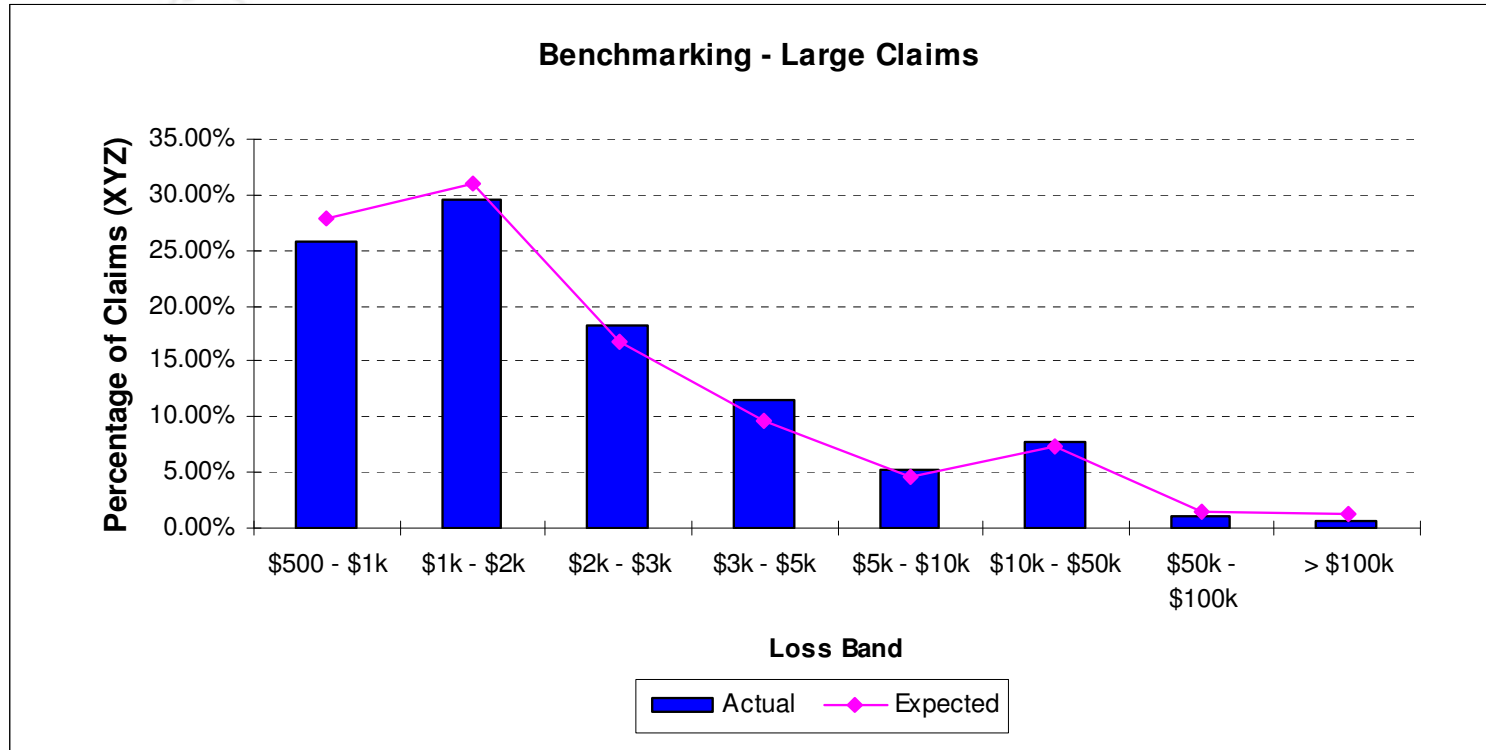
Segmentation – Premiums by Industry Group



- Variations in price by industry group for XYZ's 10 largest areas of exposure
- XYZ higher in all groups



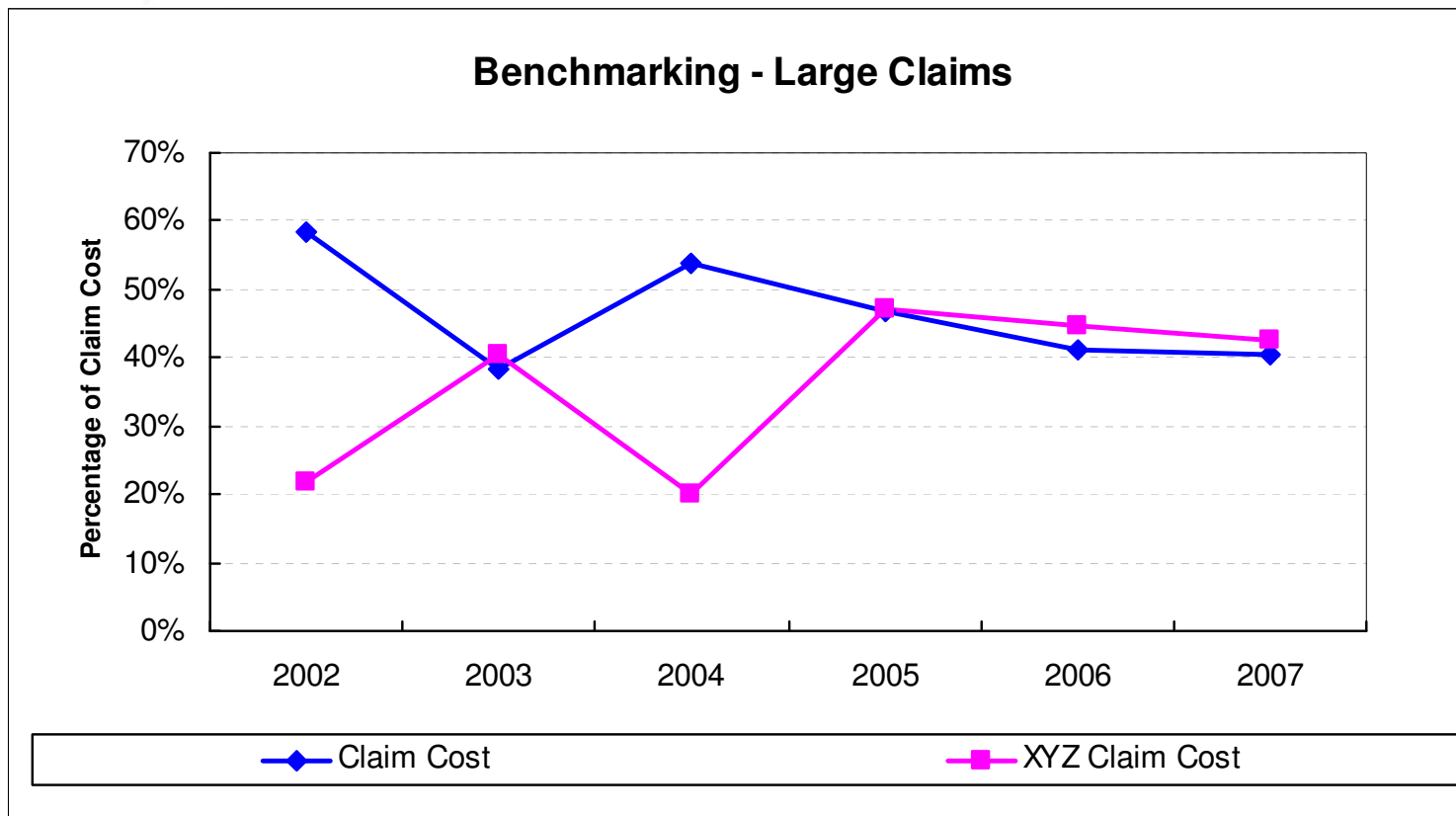
Benchmarking – Claim Size Distribution



- Distribution of claims by size very similar to benchmark
- Individual risk and claim data allows flexibility in designing reports
 - ▶ exclude weather etc as desired
 - ▶ can be tailored to risk profile



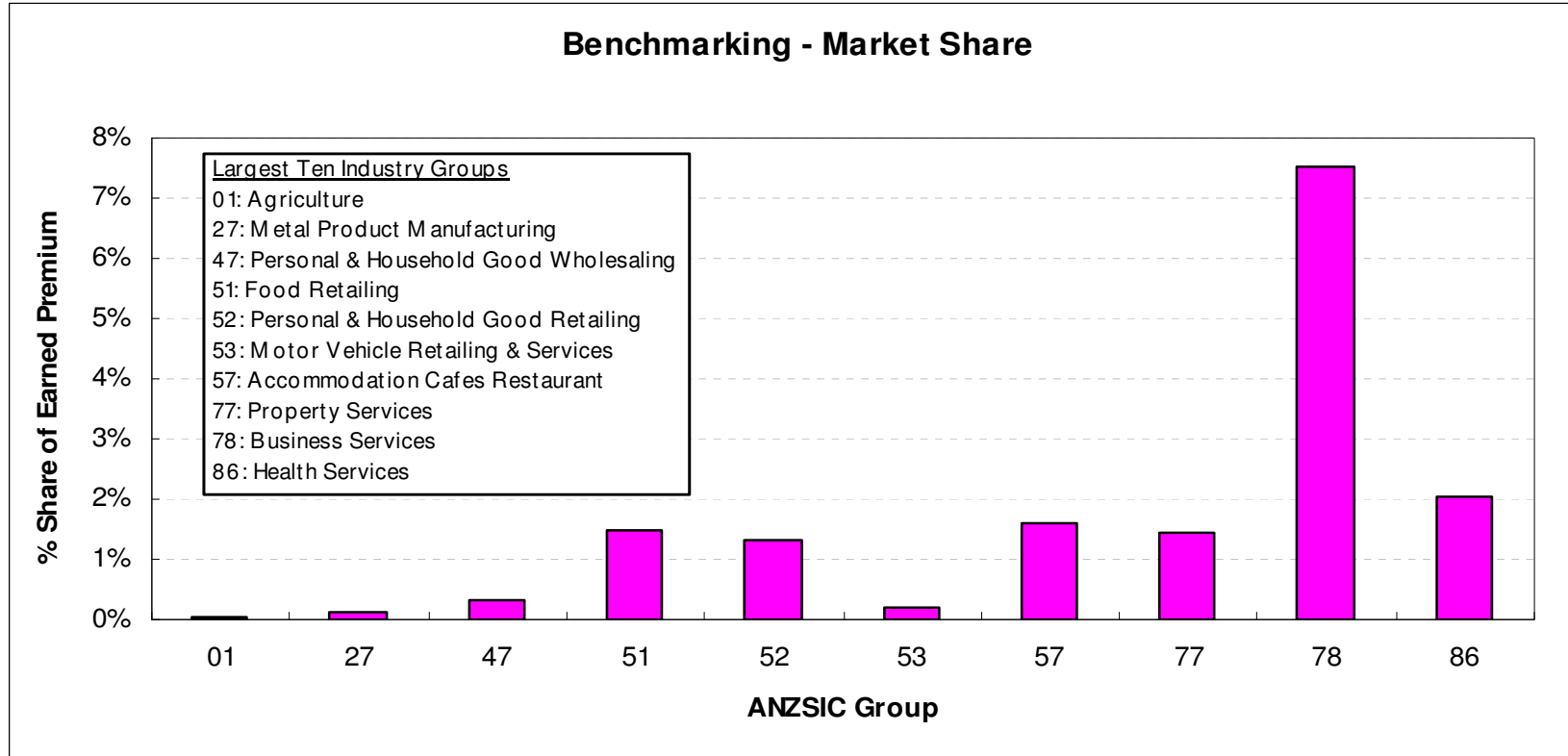
Benchmarking – Large Claims



- Proportion of cost that is in large claims (>\$100k) very similar for industry and XYZ



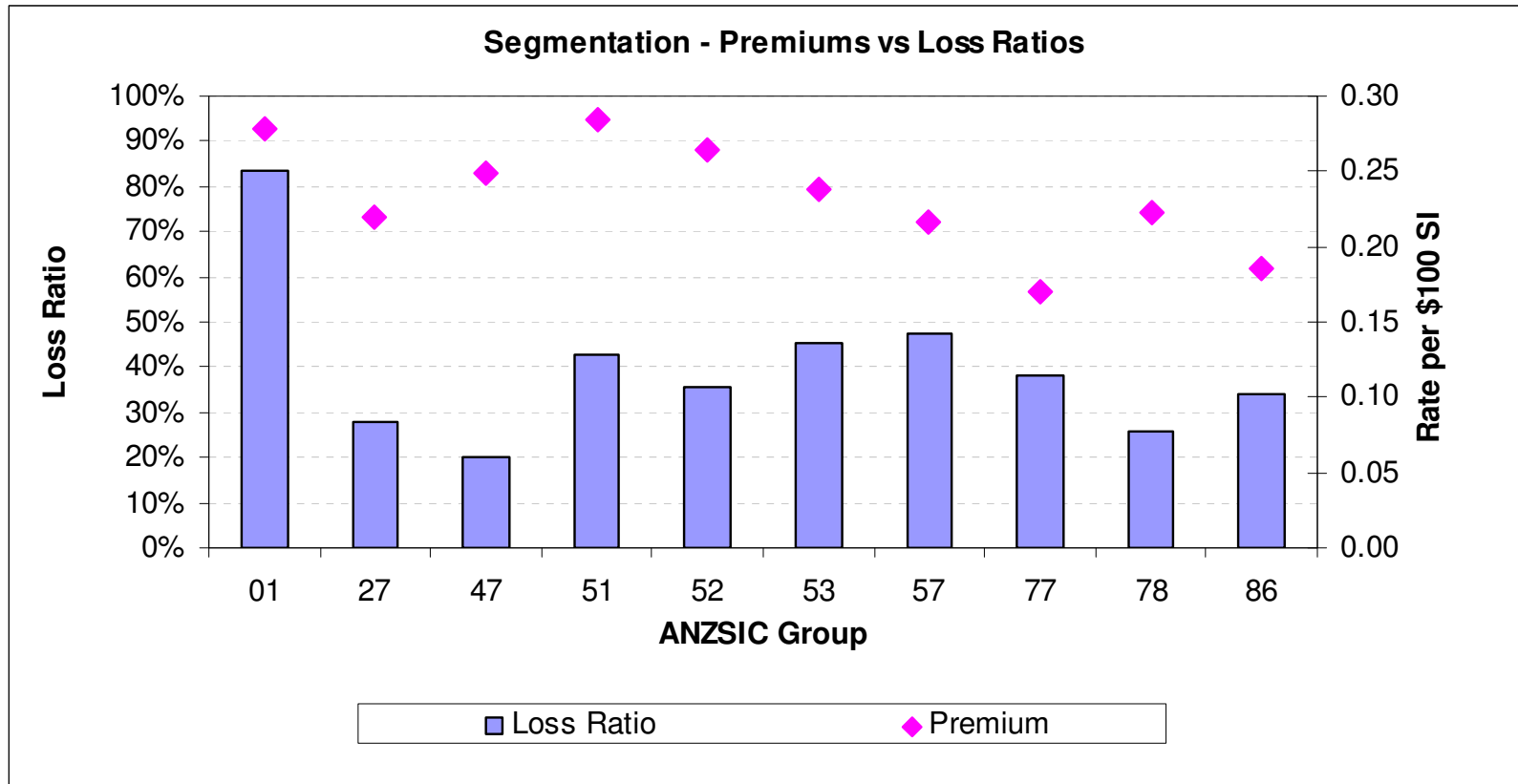
Benchmarking – Share of ISA Contributors



- Whilst ISA does not have 100% market coverage, probably large enough in most groups to highlight areas of high and low penetration
- XYZ’s portfolio appears dominated by Business Services
- I have used the ISA data to assist companies to understand their relative penetration by area



Segmentation – Premiums versus loss ratios by Industry Group



- Category 77 (Business Services) is one of the better performers
- Loss ratio <40% vs around 50% overall



3. Pricing Related





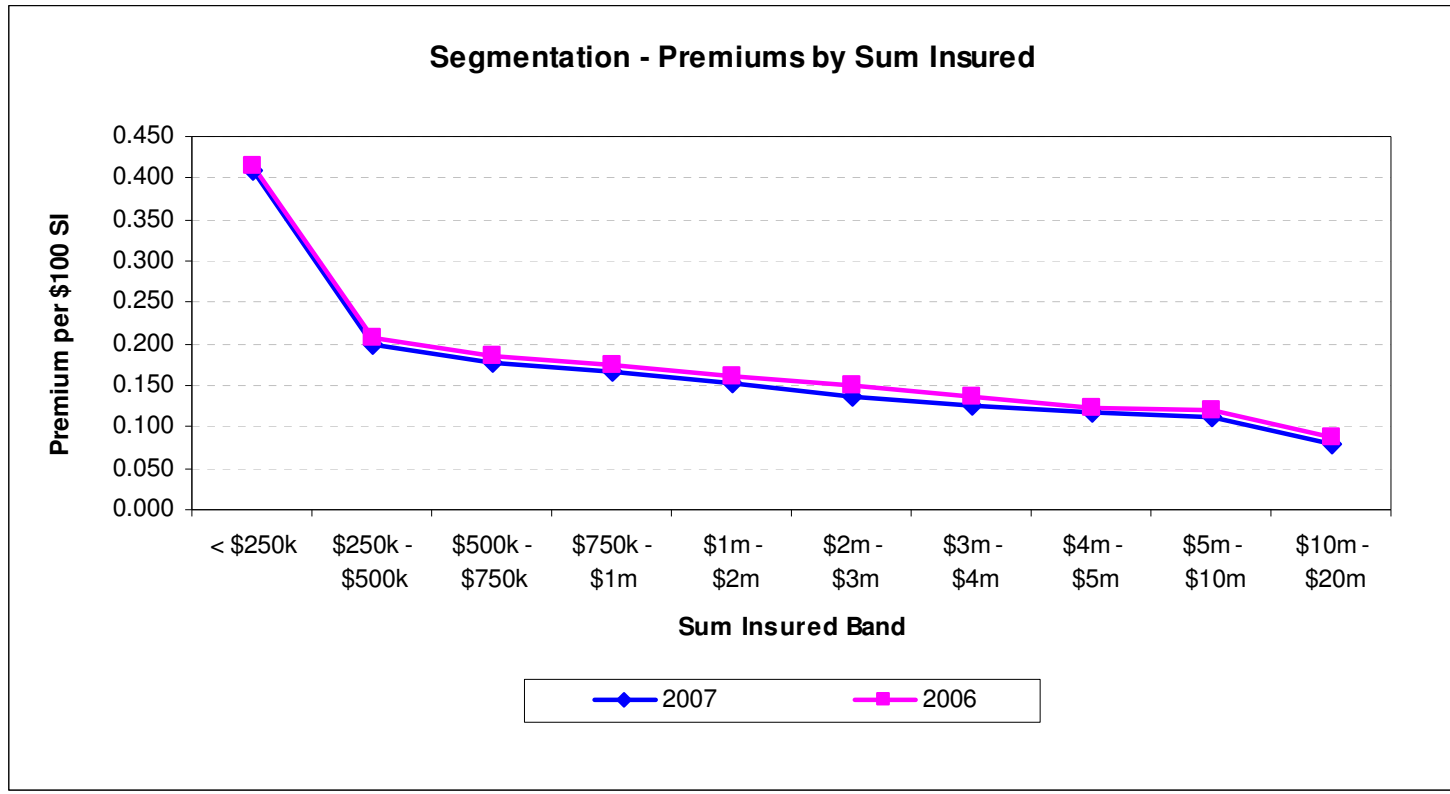
Pricing Related - Segmentation



- Few insurers have sufficient data in their own right to reliably estimate risk relativities by industry group, postcode and sum insured, especially for larger risk types.
- ISA provides access to \$1bn premium p.a., and spans 6+ years
- As data available at risk and claim level, can use statistical approaches to unravel effects of
 - ▶ industry *versus*
 - ▶ zone *versus*
 - ▶ risk size



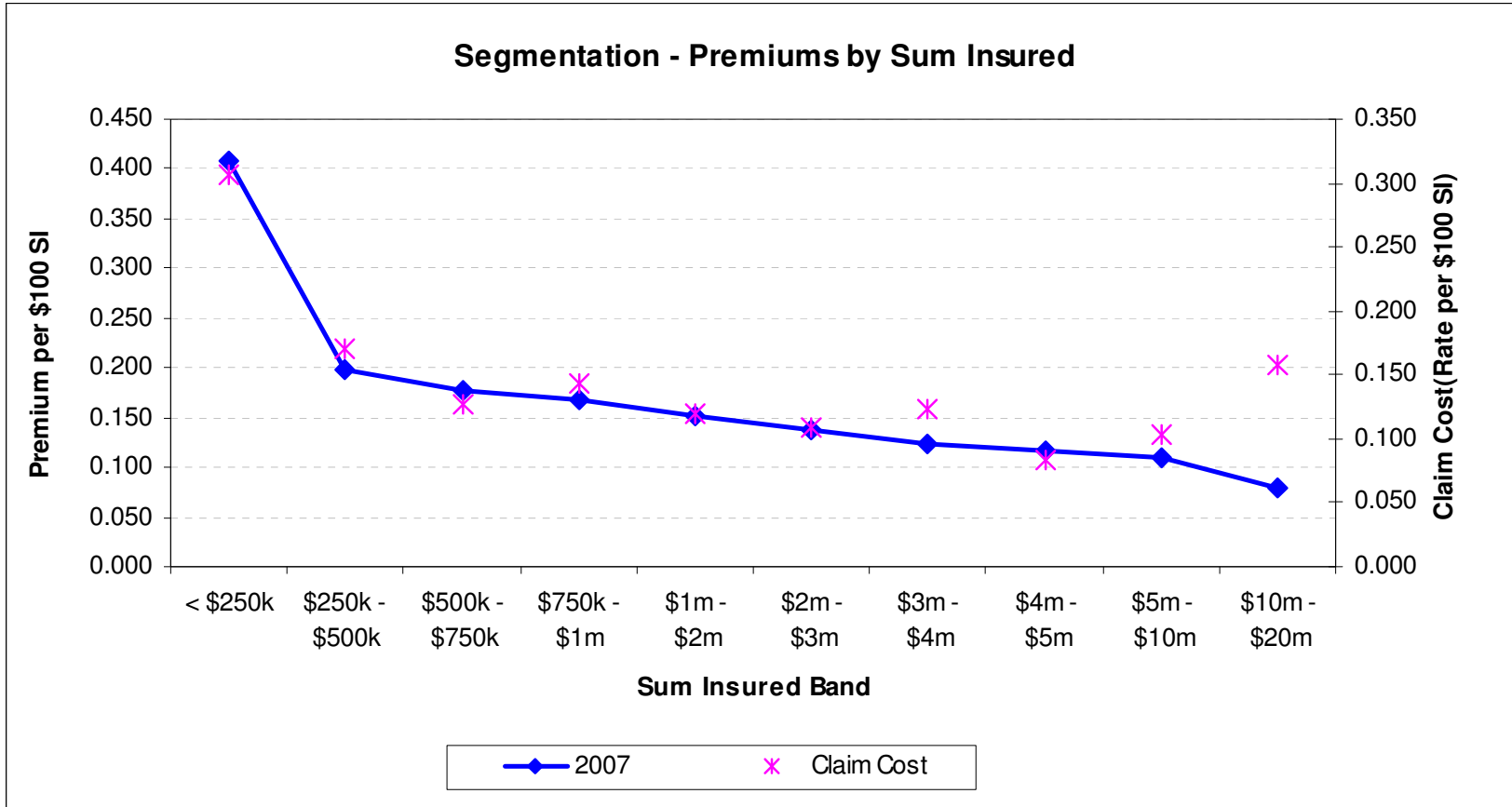
Segmentation – Premiums by Sum Insured



- Shape of market pricing by sum insured looks sensible
- Useful test of your own sum insured shape



Segmentation – Premiums by Sum Insured





Challenges



- Data quality
 - ▶ Treat ISA data like you would your own data
 - apply various data checks
 - report issues to ISA
 - design reports to deal with unresolved issues
- Ease of access
 - ▶ previous Excel model caused problems
 - ▶ size of file 4-7 mb
 - ▶ is the data getting to the right people?
 - ▶ size should not be a problem for your analysts





Summary



- Are you getting enough from your ISA data?
 - ▶ Do you have a good handle on your expected weather claims, and the type of variability that might be expected?
 - ▶ Have you measured changes in market prices?
 - ▶ Have you compared the prices you are achieving with market?
 - ▶ How does your large claim experience compare?
 - ▶ Where are segments of high or low penetration?





Reliances and limitations



- This presentation is of a general nature and reflects statistical measures of past performance. It does not provide advice in relation to any particular insurer's performance or prospects
- Please contact the presenter, Tim Andrews on (02) 8252 3385 if there are any matters that you would like to discuss further

