CAS RPM Seminar

Small Business Rating Plans: Challenges & Innovations

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Overview

- BOP Industry Trends
  - Rating Plans
  - Underwriting Approaches
- Competitive Analysis
  - Qualitative
  - Quantitative

Survey Question #1: What is the average premium for a BOP policy?

A. Less than $2,000

B. $2,000 - $4,000

C. $4,000 - $6,000

D. $6,000 - $8,000

E. More than $8,000

BOP Industry Trends

Survey Question #2: Which of the following aspects do companies feel the most competitive pressure for rating/writing BOP risks?

A. Classification rating

B. Liability exposure bases

C. Developing underwriting tiers

D. Introduction of business owner characteristics

E. Increased automation at the point of sale (i.e., “no touch” by underwriters)

As competition intensifies, companies are increasing the sophistication within their BOP rating plans

Increased rate refinement across classes of business	Allowing greater rate segmentation across class codes and other rating aspects, including amount of insurance (AOI) curves and age of building
Expanding approach to liability rating	Using a separate rating algorithm for liability that uses liability-specific exposure bases for all market segments
Incorporation of UW info into rating plan	Introducing tiers into manual rates, which incorporates new variables (including business owner characteristics); this allows for increased rate segmentation and increases in consistency/objectivity
Adoption of market segmentation focus	Adopting market-centric approach, which allows for greater ease of monitoring, analyzing and changing rates by market segment (office, retail, habitational, etc.).
Improve automation at point of sale	Developing a more efficient approach to verifying risk info (including external data sources); triage risks for appropriate level of underwriter review (no touch / light touch / heavy touch)

Example — Underwriting (profit) scoring models

- Profitability scoring models rank risks according to the profitability underlying current rates
- Model predictors can include existing rating variables and/or new underwriting information (internal or external data)

Raw Scorecard

Loss Control	
Yes	0
No	7

Company Size	
Small	0
Medium	9
Large	6

Claims	
0	-3
1	+5
2	15
3+	20

Policy Tenure	
New	12
1	7
2	4

Scoring rules generated from expected losses from the final models.

Score
< 20
20 – 25
26 – 30
31+

Cumulate rules to generate policy level scores

Score	Factor
< 20	0.90
20 – 25	1.00
26 – 30	1.05
31+	1.20

Derive score factors through modeling techniques

Underwriting scores can be used in a variety of ways

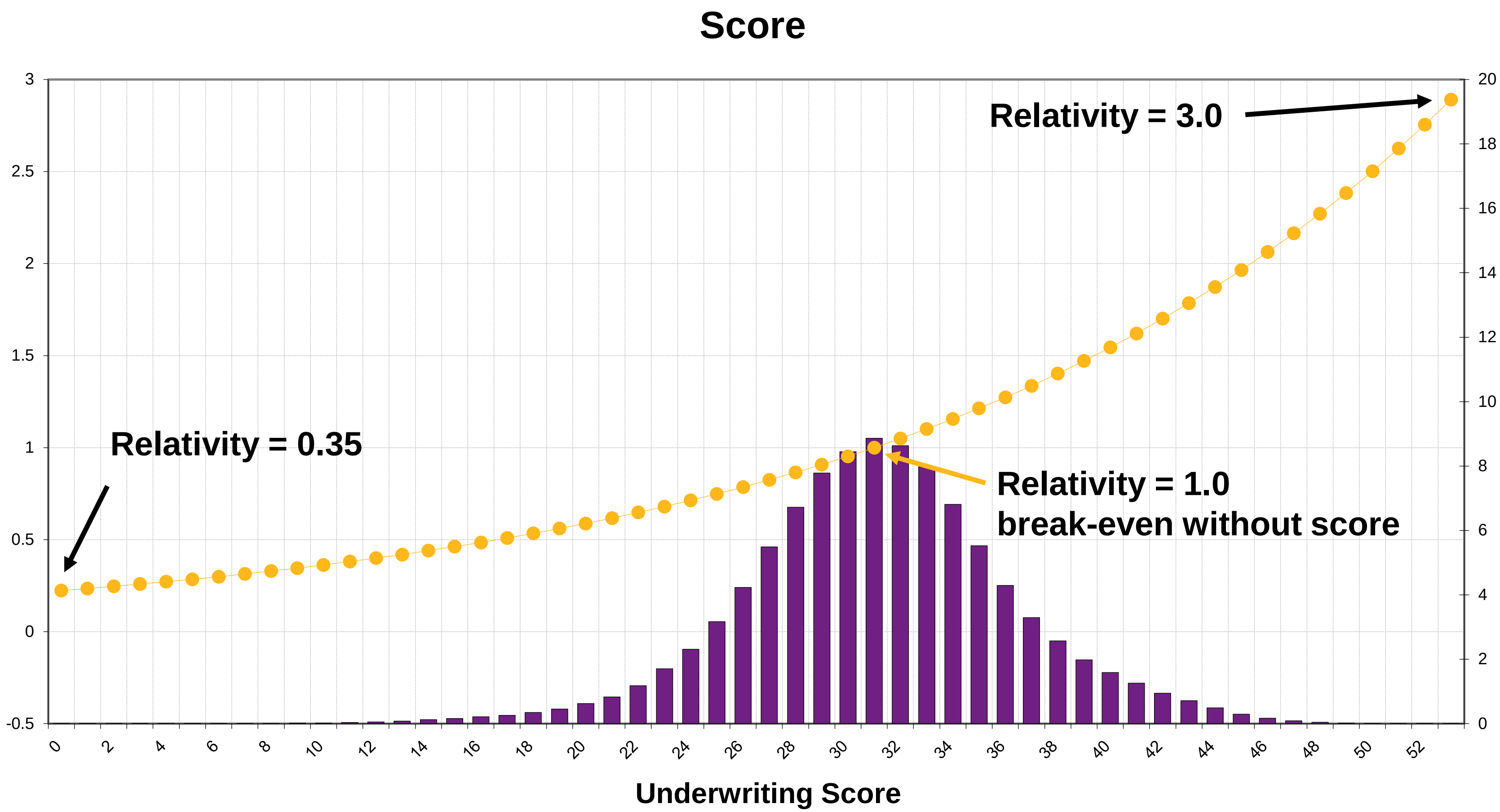
- Accept
- Reject
- Refer

Tiers with a relatively small (e.g. 3) or large (e.g. 50+) number of price points

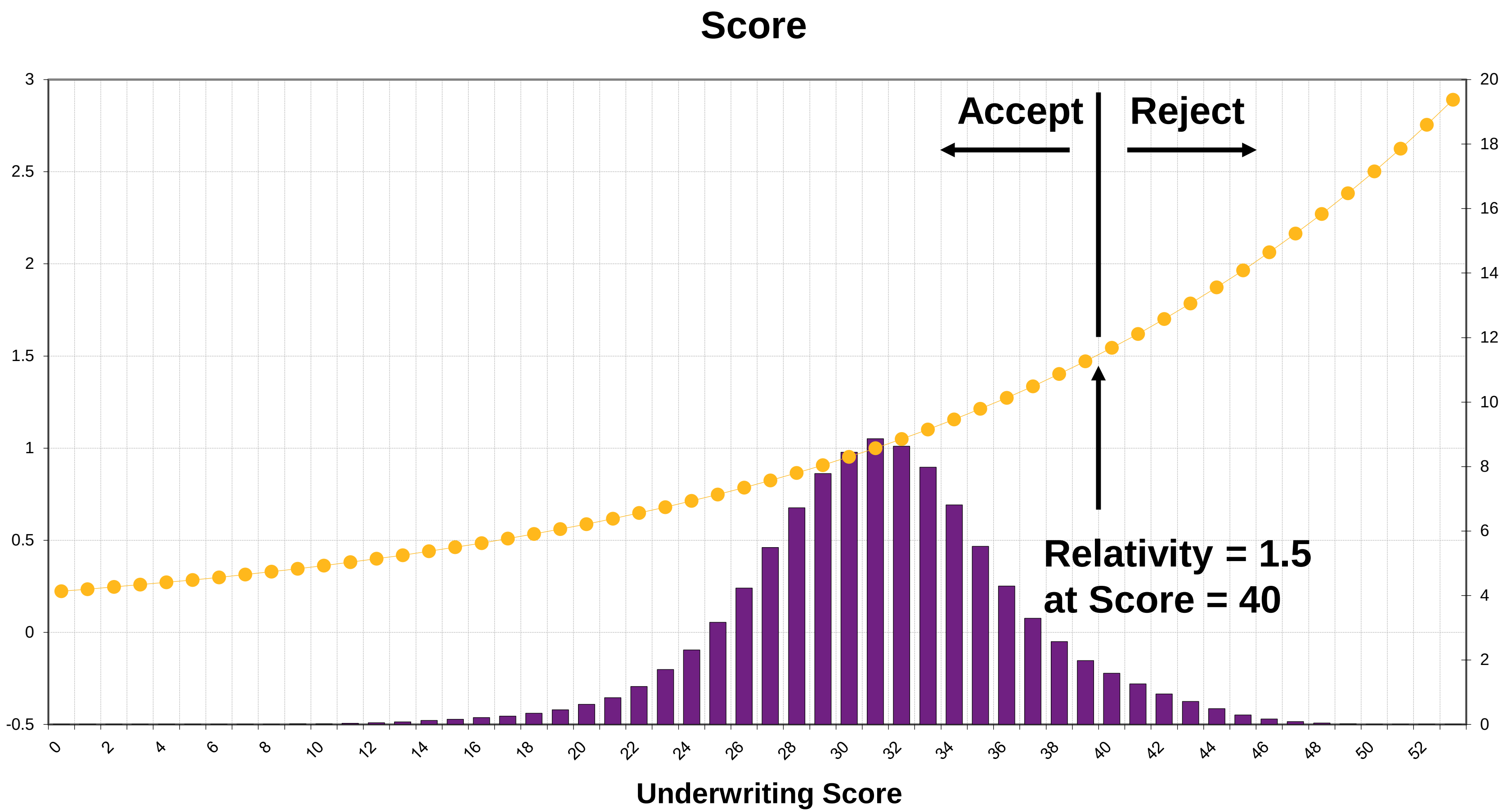
Schedule rating guidance

Combinations of the above

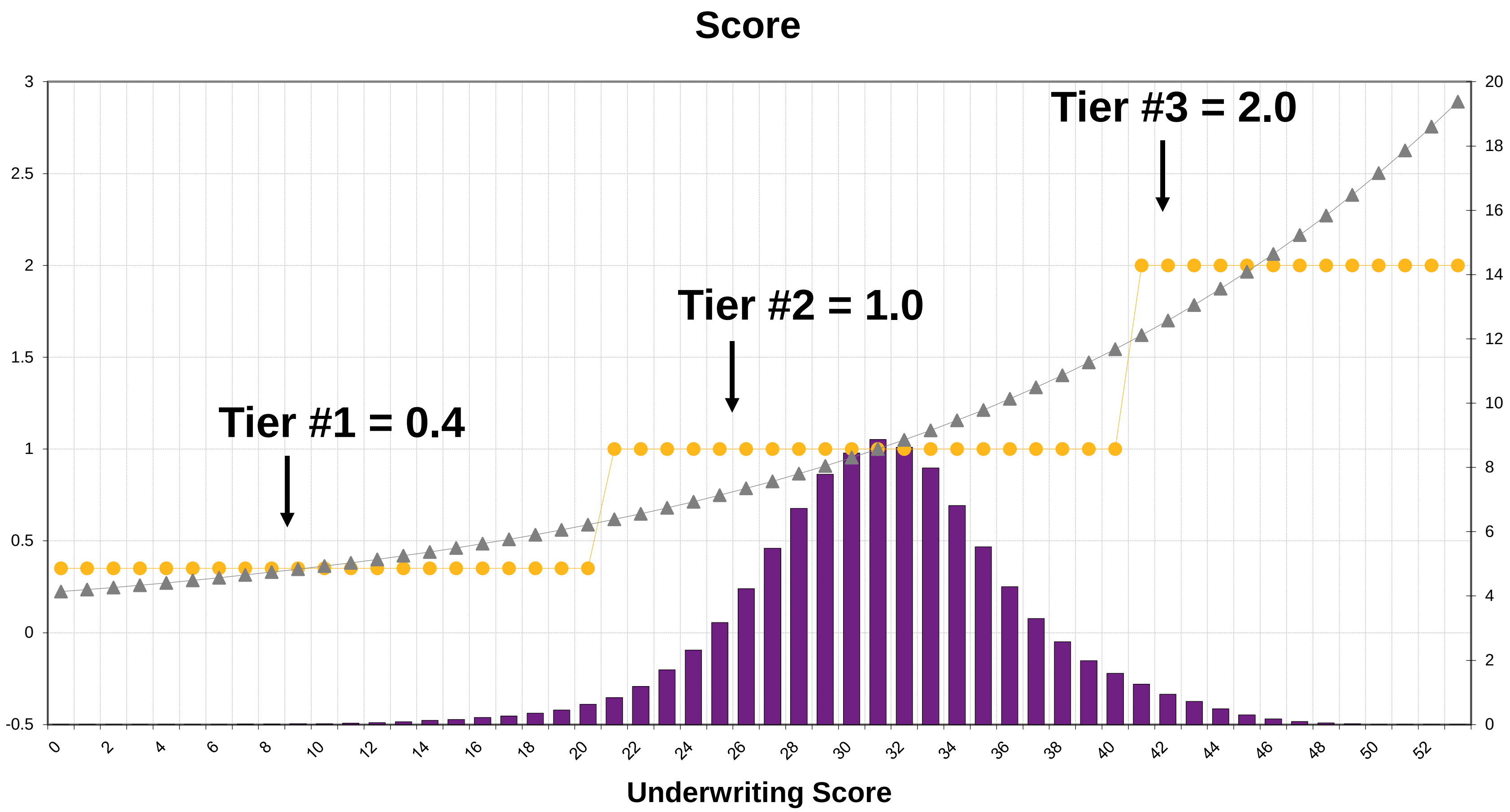
Illustrative underwriting (profit) score



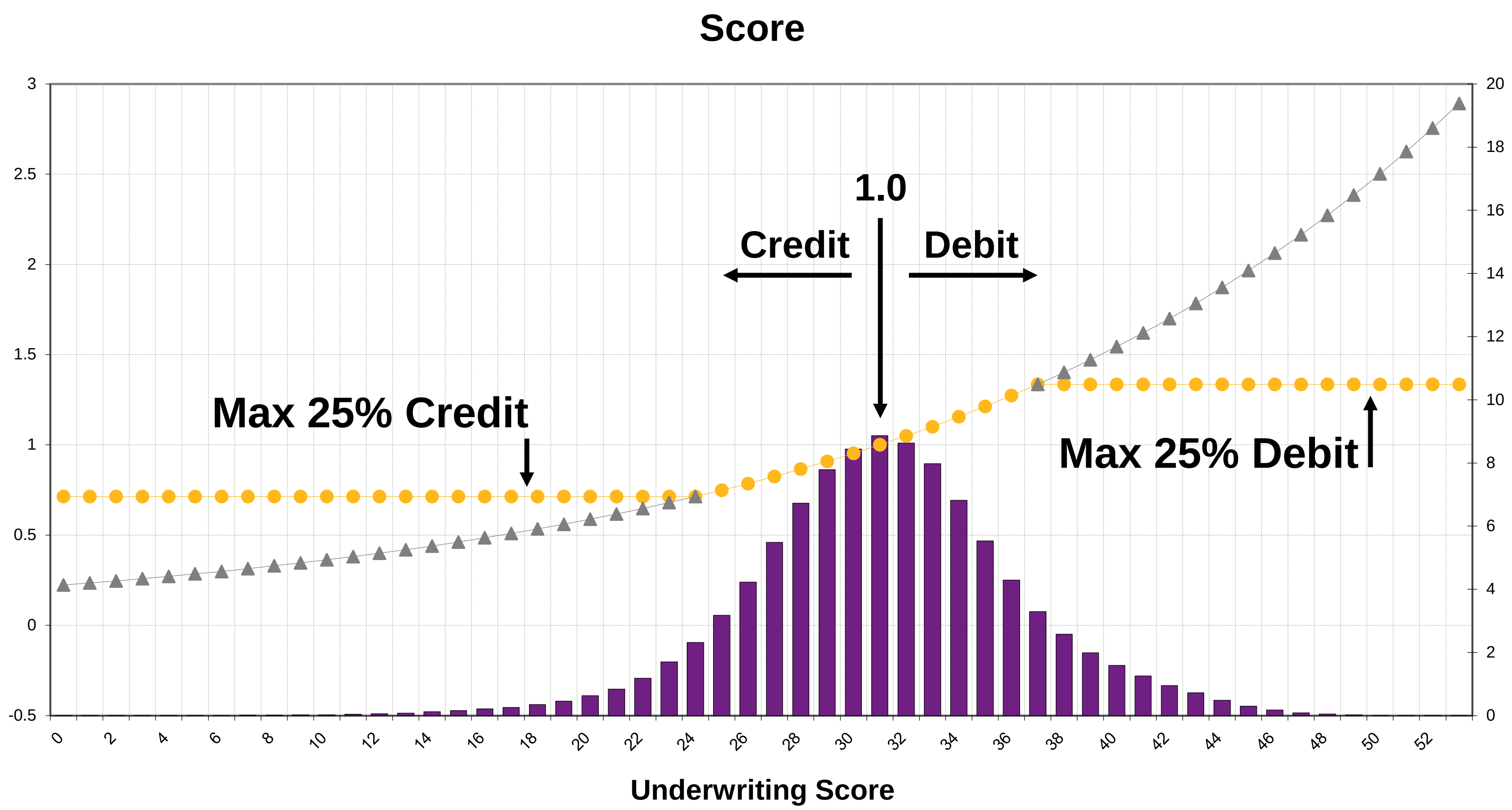
Accept/Reject Scoring



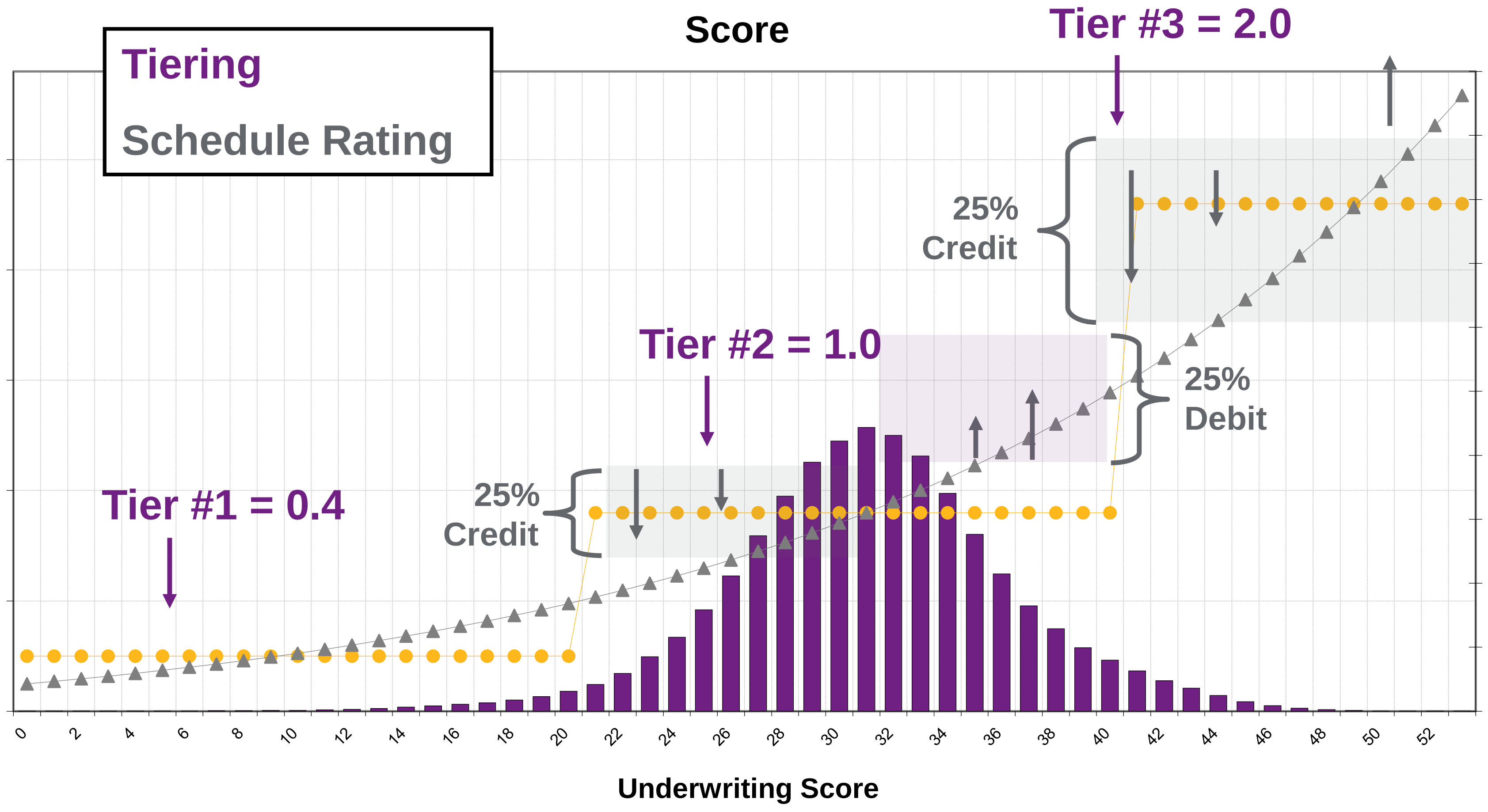
Tiers or separate underwriting companies



Schedule Rating



Tiering with schedule rating



Survey Question #3: What percentage of BOP risks are written without any underwriter “touch” or schedule rating adjustment?

A. Less than 20%

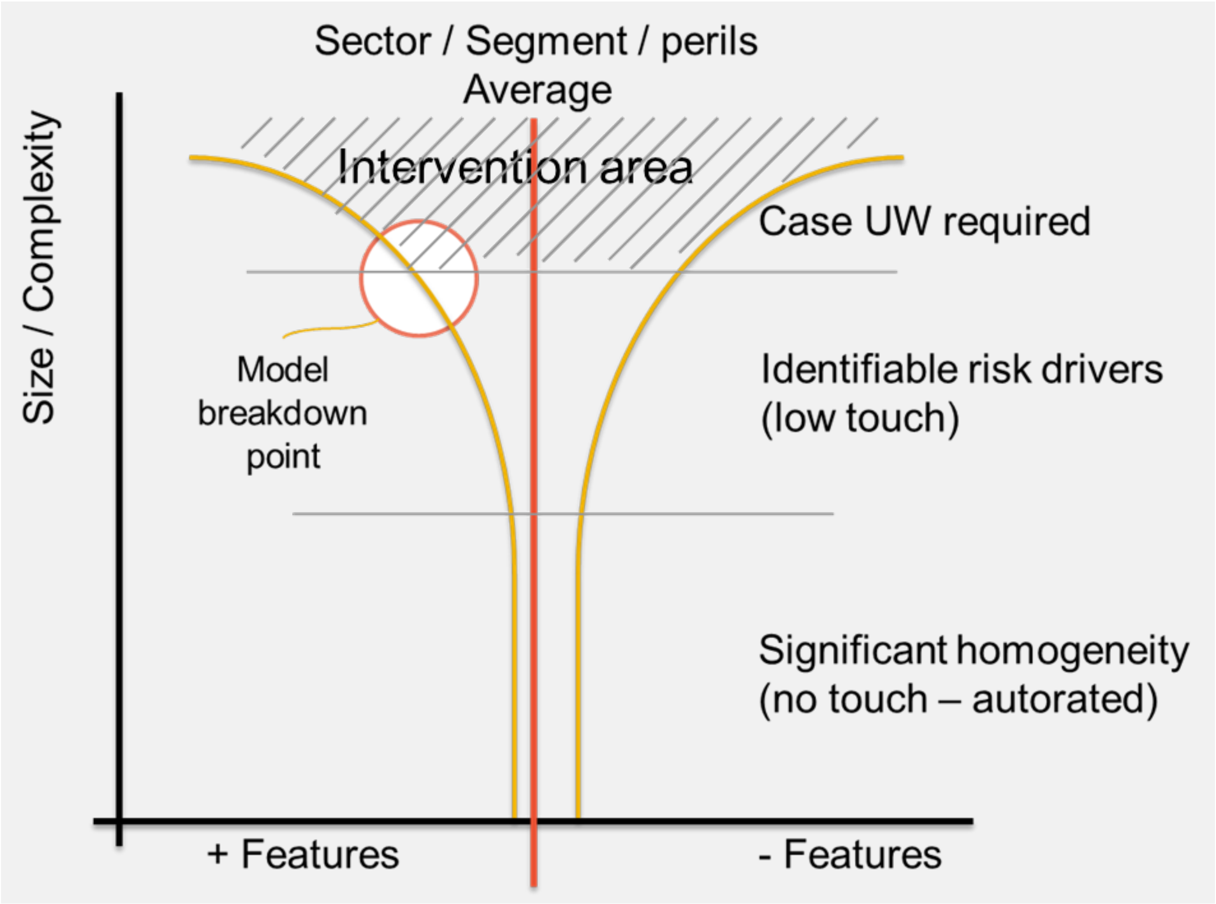
B. 20 – 40%

C. 40 – 60%

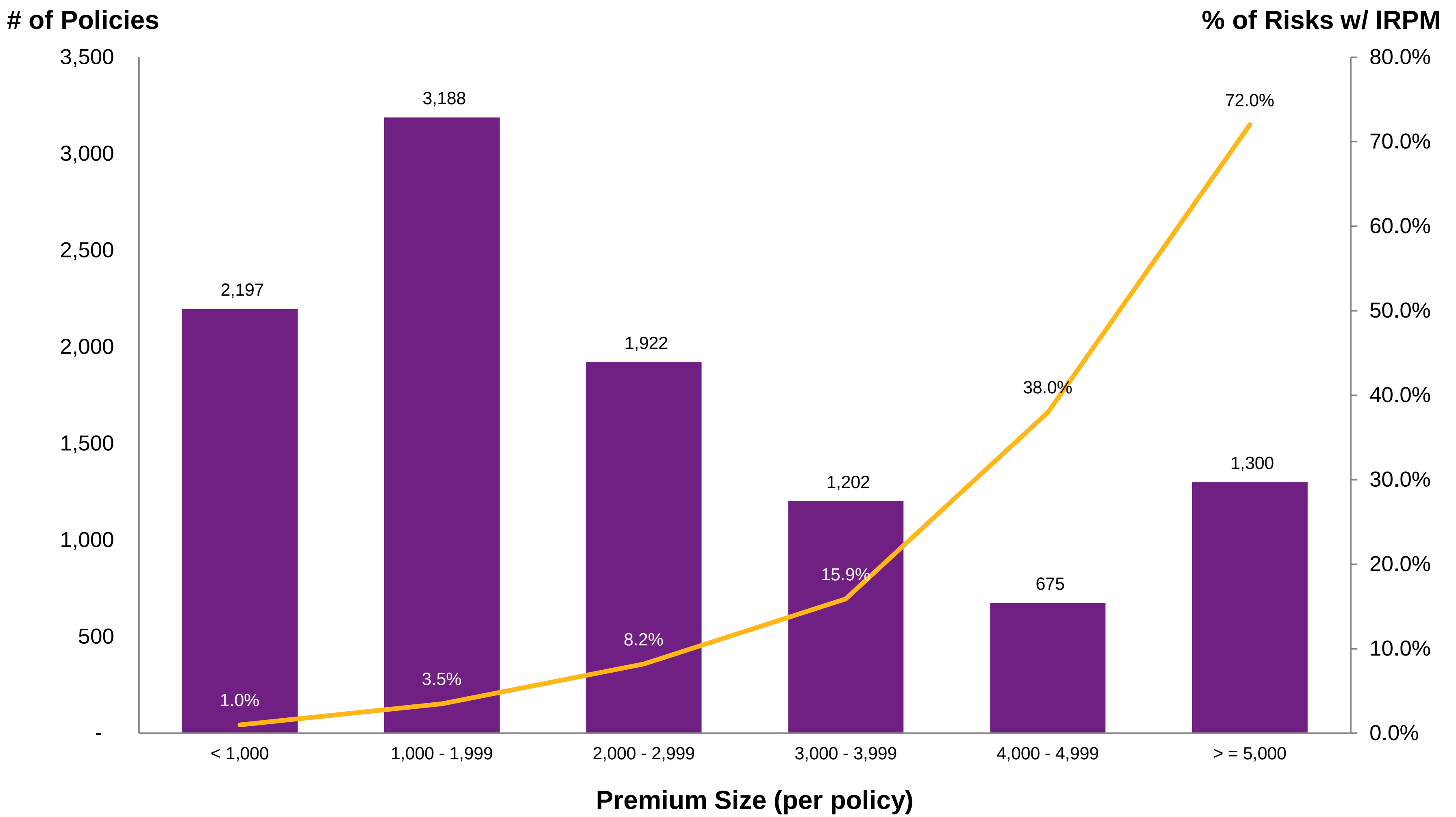
D. 60 – 80%

E. More than 80%

Increased rating plan sophistication can improve process flow and allow for better underwriter utilization



With increased confidence in rating plan, company's underwriting resources can be better allocated



Competitive Market Analysis (CMA) – Qualitative

Insurers use various approaches to CMA — we will consider qualitative and quantitative

Low Degree of Sophistication

High Degree of Sophistication

Agent Feedback

Competitor Rate and Product Changes

Company Statistics

CMA: Product Analysis

CMA: Qualitative Rate Analysis

CMA: Quantitative Rate Analysis

These options are not mutually exclusive — different approaches can be used in combination

A qualitative rating plan analysis may identify key strengths, gaps and enhancement priorities of your BOP rating plan

Qualitative Rating Plan Analysis

Step 1

Finalize project planning and launch project

- Select target (and backup) state for data collection
- Agree on target competitors and determine relevant writing companies

Step 2

Collect competitive information

- Gather rating plans and related filings for target competitors from departments of insurance websites, or third-party vendors
- Confirm/ensure collection of latest company filings
  - May need to reach beyond target state

Step 3

Conduct competitive analysis

- Evaluate each major rating variable based on degree of segmentation
  - As relevant, range of individual price points and range of factors
- Develop supplemental assumptions to fill gaps, as necessary

Step 4

Prepare and deliver report of findings

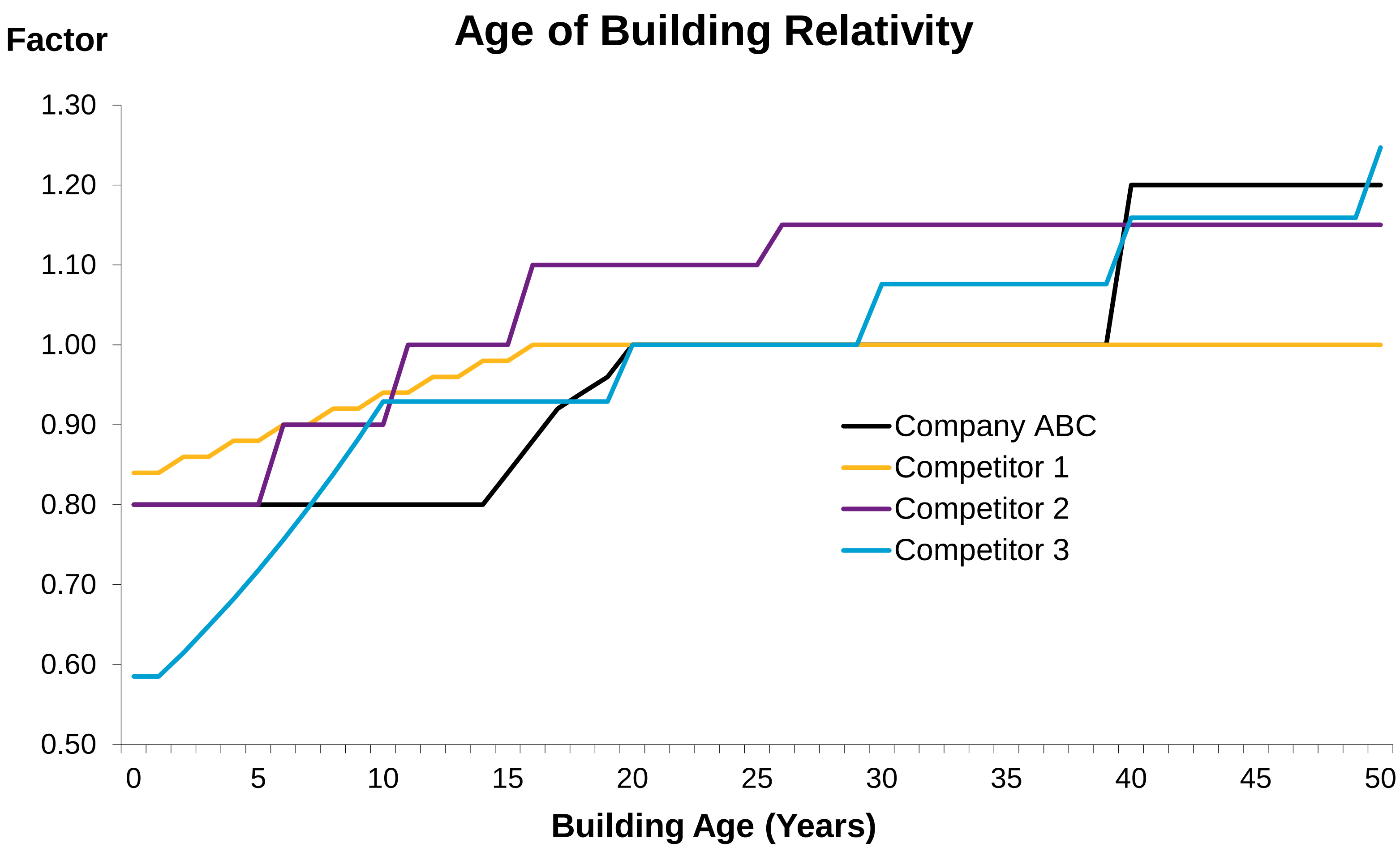
- Summarize and document findings and conclusions
  - Key strengths and weaknesses of BOP rating plan and recommended priority enhancements
  - Detailed comparison of rating plan components
- Review findings/ recommendations with all key stakeholders

A qualitative analysis includes review of each rating variable, organized by category

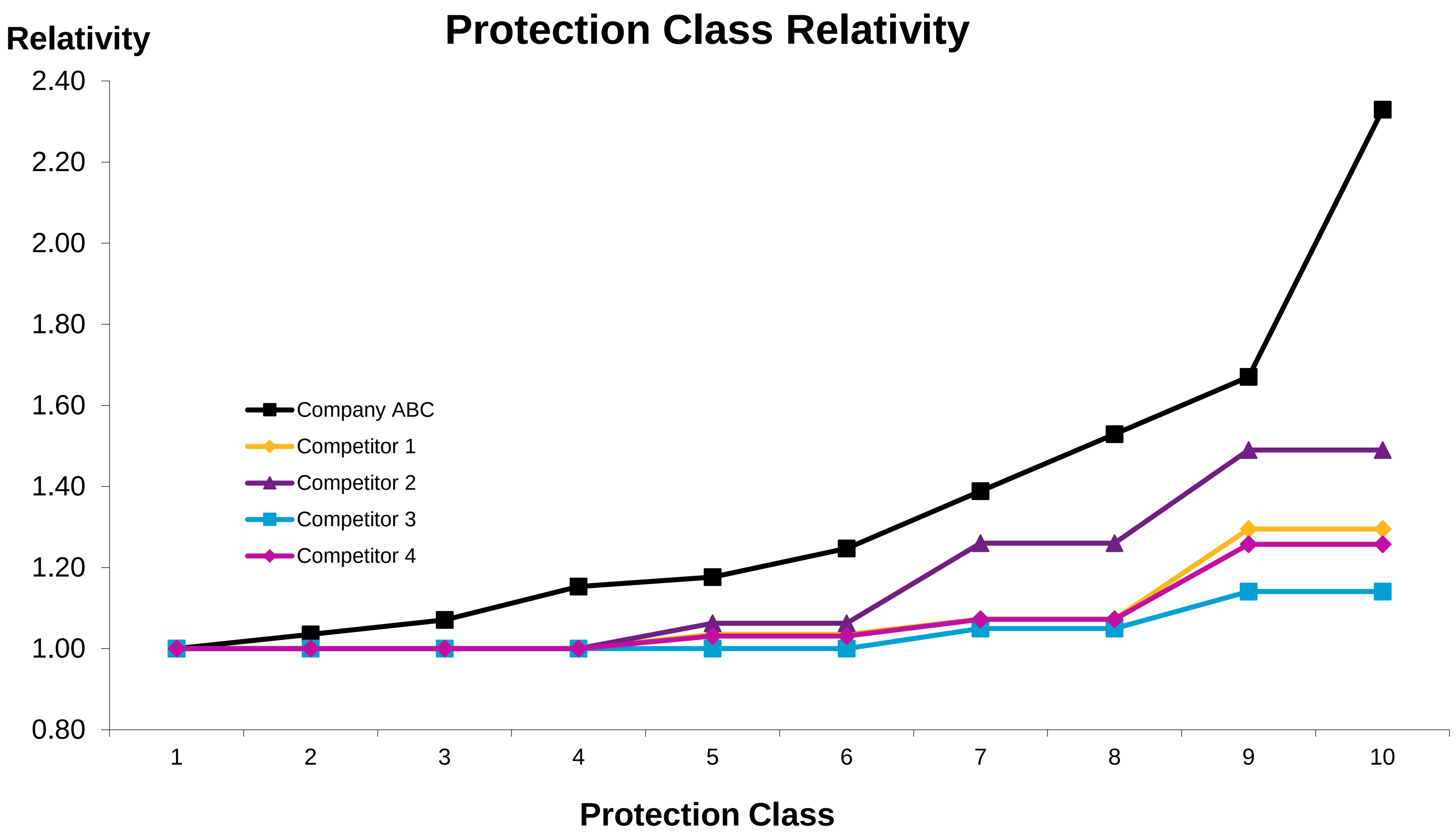
Variable Type/Category

- Coverage
  - Rating algorithm, exposure bases, limits, deductibles
- Territory
- Building-related variables
  - Construction type, protection class, sprinkler credit, age of building
- Insured-related variables
  - Market segment, class of business, number of locations
  - Years in business, claim history, payment history, credit score
- Insurance score/ tier
- Additional rating mechanisms
  - Schedule rating
  - Experience rating

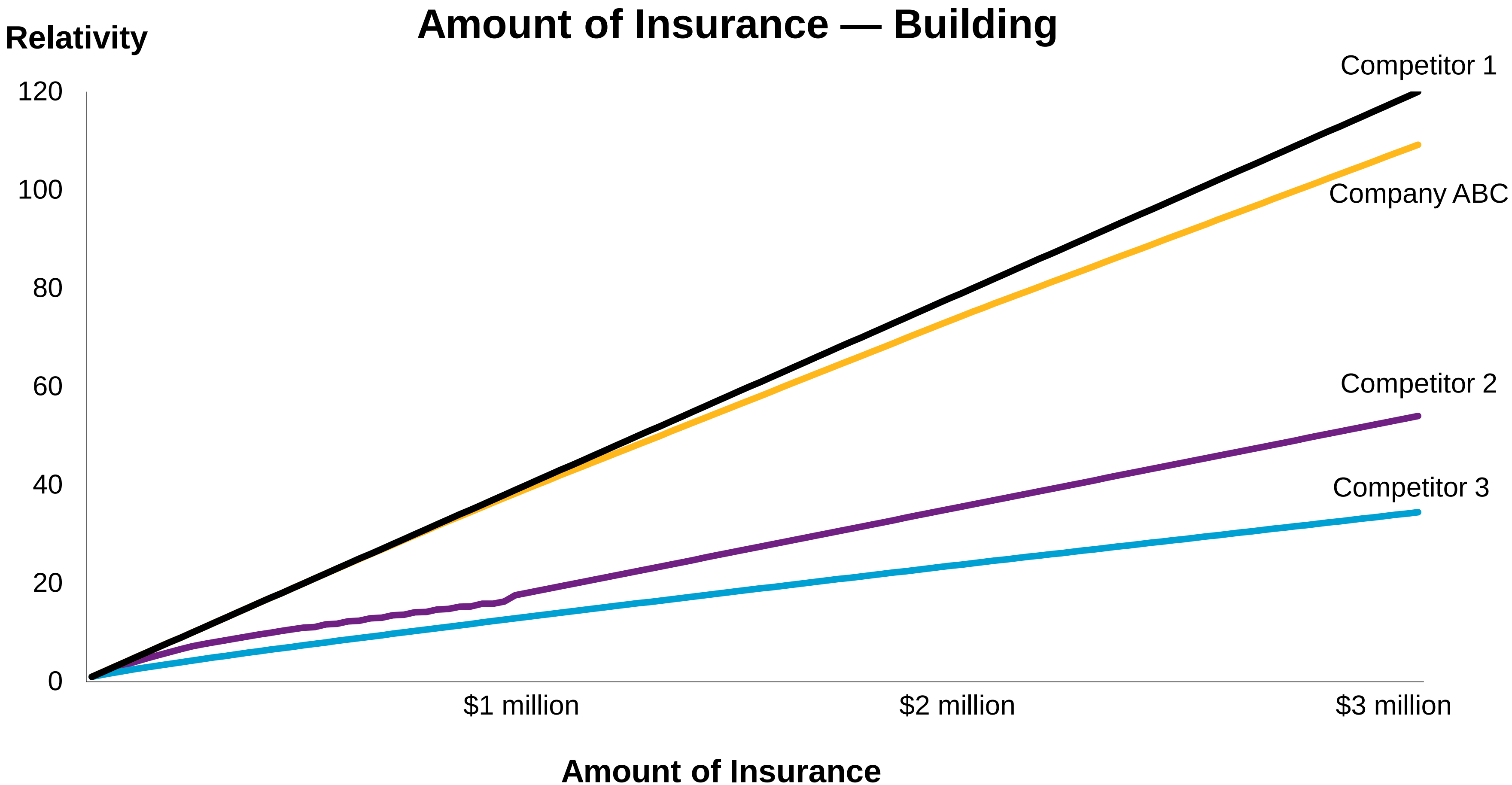
Age of building: there is a wide variety of approaches to rating for the newest buildings



Protection class: Company ABC has a significantly wider range of relativities than its competitors

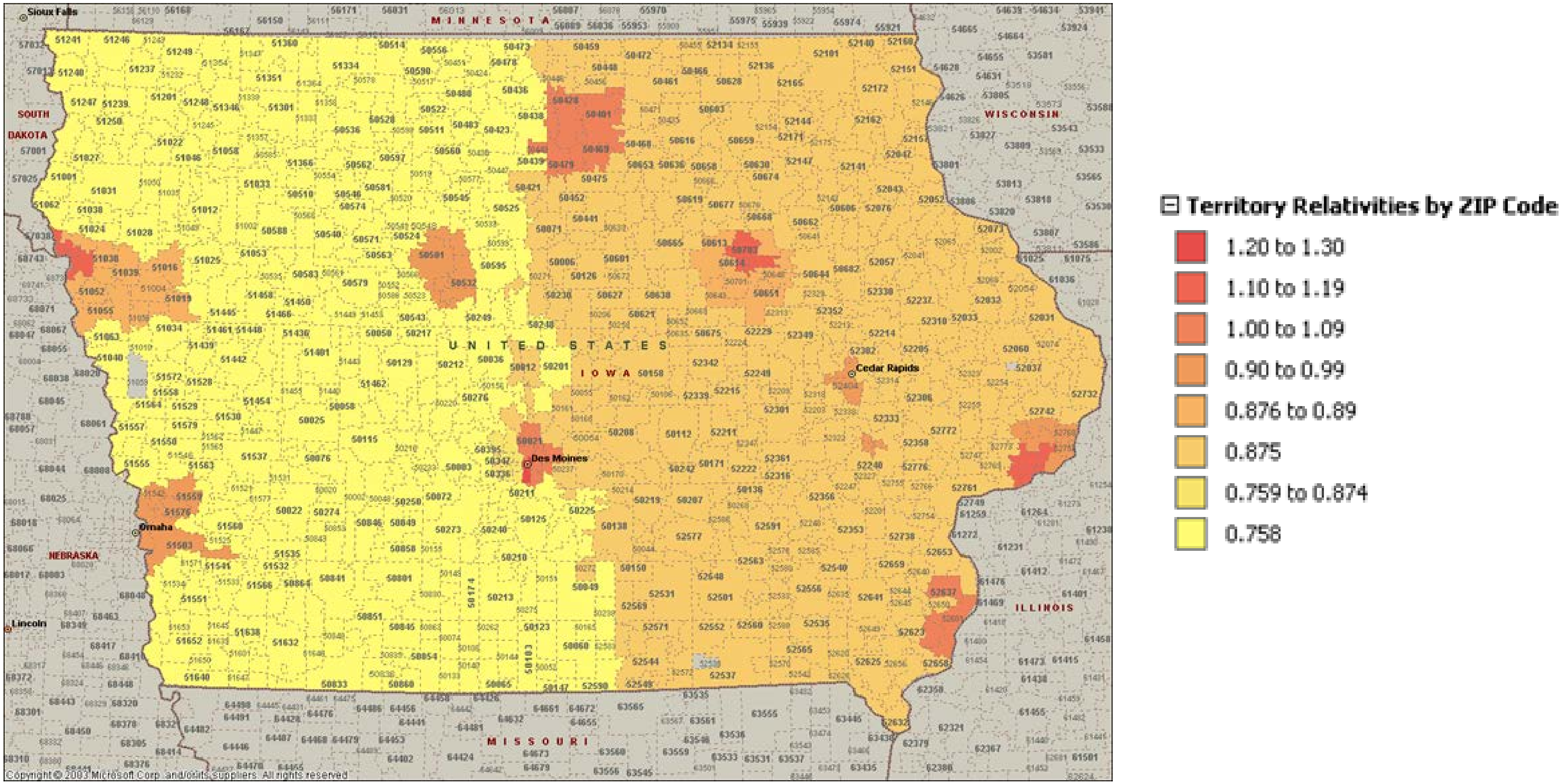


Amount of Insurance (AOI): Companies use different approaches to AOI curves



Note: Factor is based on the rate at each AOI divided by the rate at AOI of $25,000, which is assigned a factor of 1.0.

In its territorial rates, one of Company ABC’s competitors distinguishes between the east and west of Iowa and between urban, suburban and rural zip codes



A qualitative rating plan analysis highlights important competitive gaps that may impede profitable growth

Summary Comparison of Rating Sophistication by Category

Rating Variables	Relative Competitive Importance	Degree of Segmentation			
		Company ABC	Competitor 1	Competitor 2	Competitor 3
Overall rating approach	High	Low	Medium	High	Low
Territory	Medium	Low	Low	Very High	Low
Building-related	High	Medium	Medium	High	High
Insured-related	High	Low	Medium	Very High	High
Additional rating mechanisms	High	Medium	Medium	Very High	Very High
Overall		Low	Medium	High	Medium

N/A Low Medium High Very High Key Gap =

Competitive Analysis – Quantitative

The quantitative CMA focuses on actual pricing for a sample of risks (based on rating algorithms in competitors' rate filings)

Quantitative Rating Plan Analysis

Step 1
Finalize project planning and launch project

- Agree on target state for analysis
- Agree on target competitors and writing companies
  - Ideally, competitors will be those selected for the qualitative analysis
- Agree on industry target segments and define sample risk profiles

Step 2
Collect competitive information

- Gather rating plans and related filings for target competitors
  - It is likely that the materials gathered for the qualitative rating plan analysis will be sufficient
  - However, you may need to obtain external/competitor information on certain rating variables not used by Company ABC

Step 3
Develop algorithm alignment

- Develop alignment of competitor algorithms with Company ABC
- Validate results with competitor filing information (as available)
- Note: Final alignment will be used as input into Steps 4 and 5

Step 4
Create input database

- Create competitor algorithms in Excel or other software based on rule/rate manuals to generate premiums
- Create database of all necessary rating information
- Agree on assumptions/ approach for populating variables that competitors use and for which Company ABC does not collect data

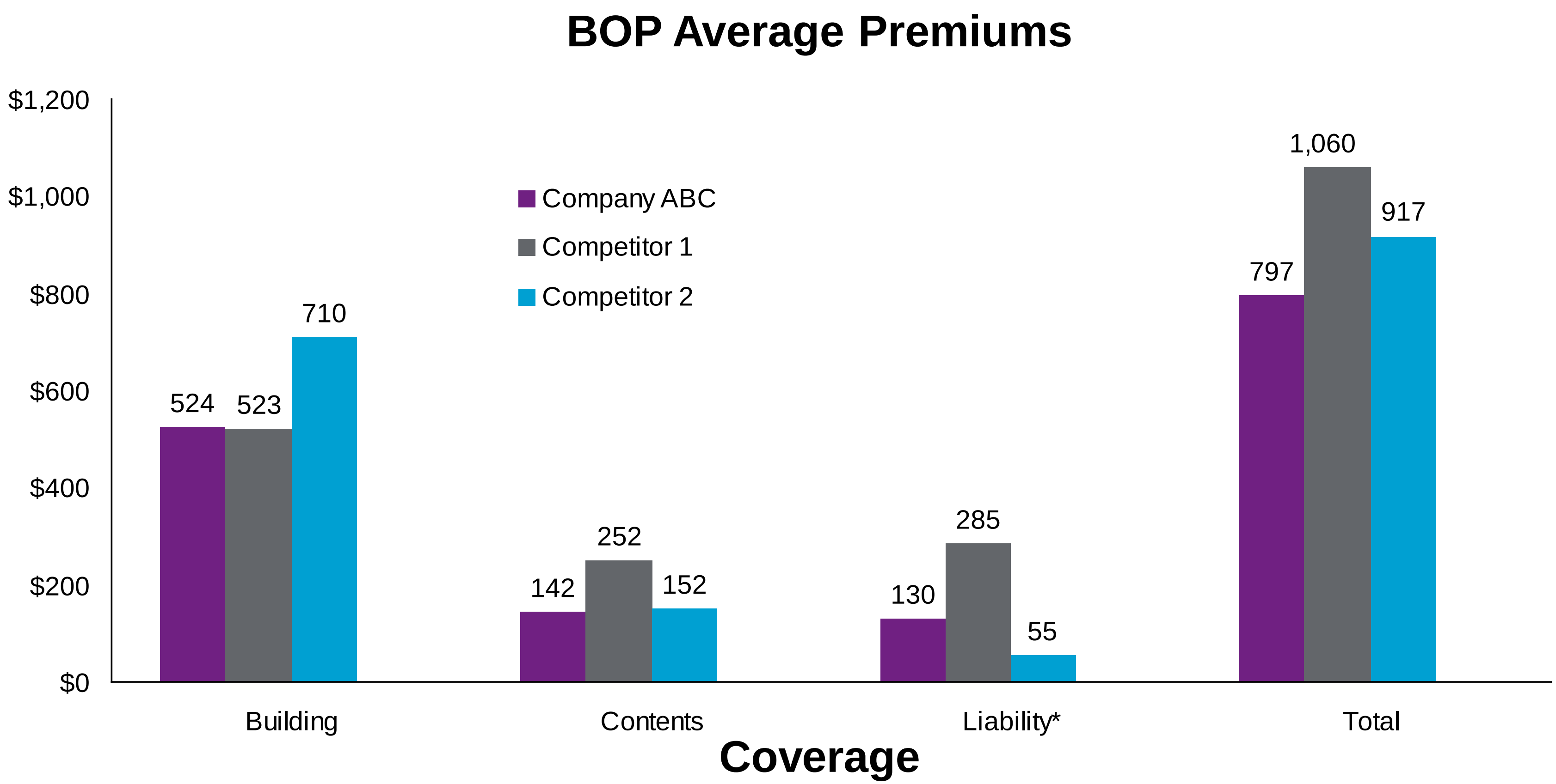
Step 5
Generate Company ABC and competitor premiums

- Generate premiums for sample risks identified in Step 1 using input database
- Create charts to display the premiums for all sample risks
- Present initial results to actuarial and/or underwriting for review/feedback
- (Optional) Present initial results to a handful of agents for feedback / validation

Step 6
Prepare and deliver report of findings

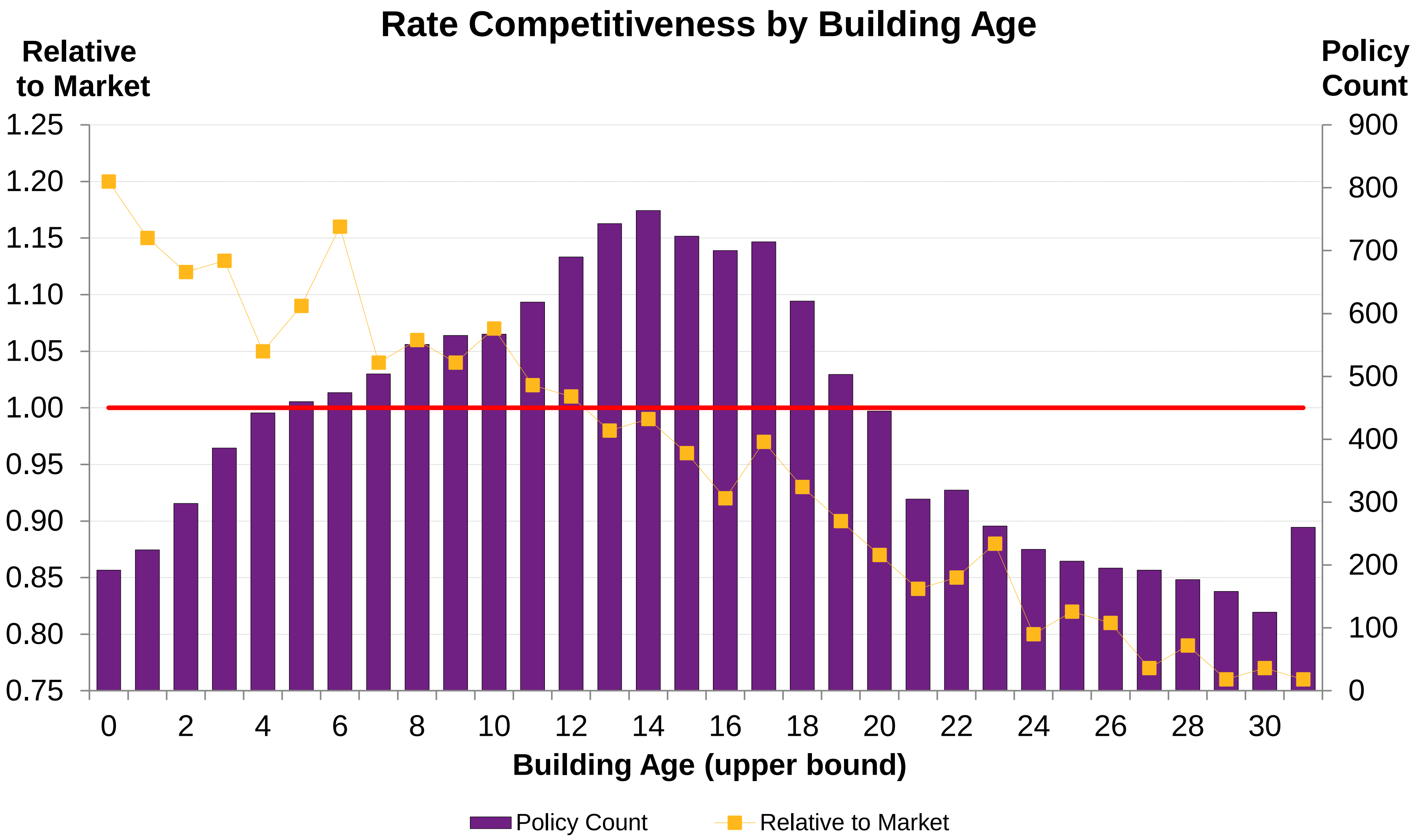
- Summarize and document findings and conclusions, e.g.:
  - Detailed summaries of competitive position by segment
  - Types of risks for which Company ABC is most likely to have a higher or lower price than the competitors
  - Recommended enhancements
- Review findings/ recommendations with all key stakeholders

A quantitative CMA will compare Company ABC premiums to competitors' premiums on a defined customer dataset for a selected state(s)

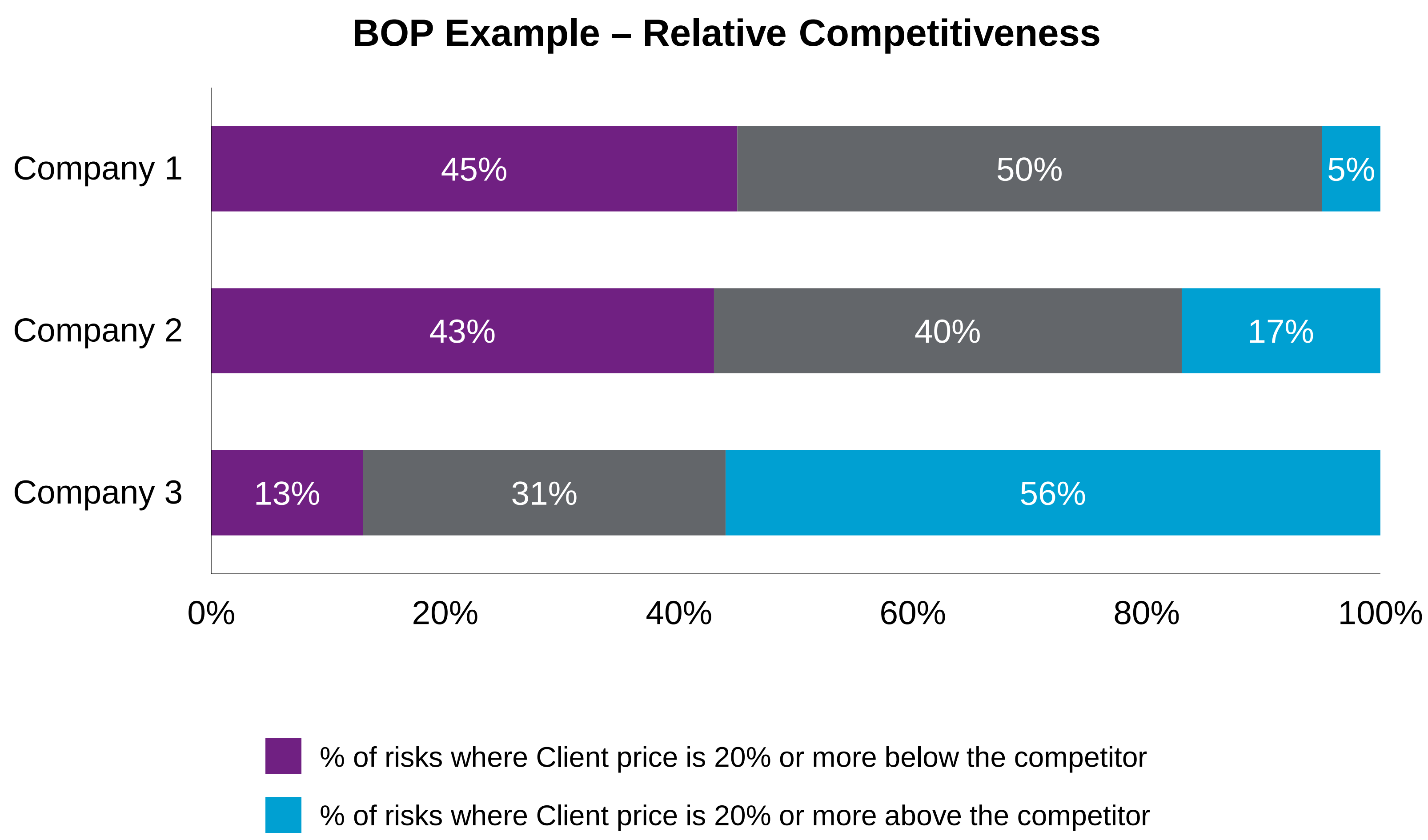


Beware of potential inherent bias in using current policy mix of business

The quantitative CMA will compare pricing by rating factor/segment



A quantitative CMA will compare Company ABC's price to each competitor for the sample of risks



Questions