WC-4: Workers Compensation Ratemaking—Adjusting for Residual Markets

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Outline

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  - Ratemaking Basics
  - NCCI Financial Data Calls
  - Designated Statistical Reporting Level
- Adjusting Statewide Data to a Common Level
- Economic Research Question

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Ratemaking Basics

- Loss costs: that portion of the rate intended to cover losses (and loss adjustment expenses)*

- Indicated overall average loss cost level change:

$$\frac{\text{Projected Losses \& LAE*}}{\text{On-Level Premium}}$$

*Note that in some states, filed loss costs do not include a provision for LAE

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NCCI Financial Data Calls

- Reported annually (valued as of December 31)
- Premium, losses and claim counts
- Aggregated by state and year
- Statewide calls include business written voluntarily and assigned risks
- Assigned risk business also reported on a separate call

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Designated Statistical Reporting (DSR) Level

- NCCI Financial Call Reporting Guidebook, Part 7:
  - *The common benchmark level at which carriers report premium on the Financial Calls.*
  - *The standard earned premium that would result if business were written at NCCI state-approved loss costs or rates instead of at the company rates.*

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DSR in a State with Assigned Risks

- What is DSR level?
  - Depends on whether the business is voluntary or assigned risk
- Statewide premium includes a blend of premium at the voluntary DSR level and assigned risk DSR level
- Typically, the assigned risk DSR level exceeds that of voluntary business
- So, how do we combine DSR level premium for voluntary and assigned risk business for the purpose of the loss cost level indication?

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Data for the Loss Cost Indication

Three Options for Combining Assigned Risk and Voluntary Market Business:

1) Combine the data as reported

2) Use only voluntary market data

3) Combine the data after bringing it to a common level

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Combining Data as Reported

- Equivalent to assuming a constant market mix
- Treats the two market segments as completely separate and static markets
- In reality, assigned risk market shares fluctuate over time
  - Business regularly moves back and forth
  - Impacted by the underwriting cycle and voluntary loss cost levels
- All else being equal, a larger residual market could put downward pressure on voluntary loss cost levels

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Using Only Voluntary Data

- When the residual market share increases, the collective experience remaining in the voluntary market typically improves
  - Loss experience for assigned risks tends to be worse than average
  - Typically the worst risks will be forced into the assigned risk market
- All else being equal, improved experience in the voluntary market could put downward pressure on voluntary loss cost levels

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Adjusting to a Common DSR Level

- Goal: To calculate an adequate loss cost for the average employer in the state, regardless of current voluntary / assigned risk status
- To do this, we adjust the assigned risk premium to the voluntary level

Business Type	DSR Premium	On-Level Factor	On-Level Premium	On-Level Prem at Voluntary DSR Level*
Voluntary	$90M	1.050	$94.5M	$94.5M
Assigned Risk	$10M	1.100	$11M	$7.3M
Statewide	**$100M**	**1.055**	**$105.5M**	**$101.8M**

* Assumes ratio of assigned risk DSR to voluntary DSR = 1.500

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Benefits of Using Statewide Data

- Utilizes the largest volume of credible and usable data
  - Loss costs are appropriate for the average employer, regardless of whether or not the risk is currently written voluntarily
- Makes no assumption about the market mix
  - Loss costs are not dependent on the size of the assigned risk market
- Encourages an actively competitive voluntary market

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Economic Research Question

Does economic theory support the methodology and the rationale behind it?

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