



Layoff Impacts on Workers Compensation

A view of the individual company impact

Macro vs. Micro

- Macro-view
 - NCCI 2009 Study*
 - “in six of seven recessions...workplace injuries rates fell”
 - “...indemnity severity is likely to continue to rise but at a slower pace.”
 - “growth in medical loss costs will ease a bit due to increased decline in frequency”
- Micro-view
 - Aon 2009 Study
 - Median impact of layoff on company loss rates is +28%
 - No company/plant had reduced loss rates
 - Largest loss rate impact in study was 212%
 - NCCI 2009 Study*
 - ...there is no doubt that events such as plant closings and large layoffs do result in clusters of claims...”

* What does recession mean for Workers Compensation? Harry Shuford, PhD, NCCI

Aon 2009 Study

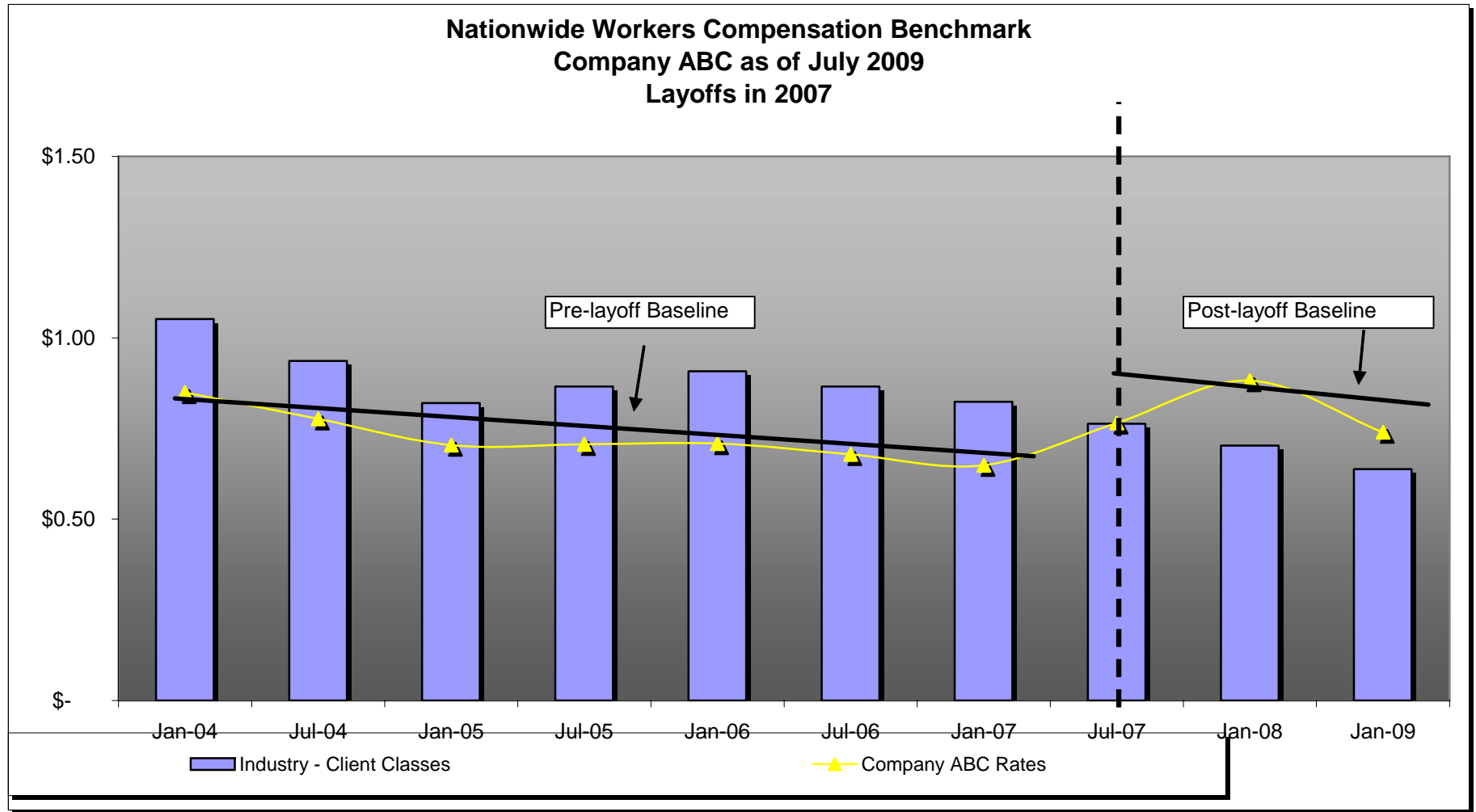
- **Background**

- 27 randomly selected companies/plants
- All major industries included
- Companies sized from Fortune 1500 – Fortune 50
- Layoffs impacts from last 5 years

Aon 2009 Study

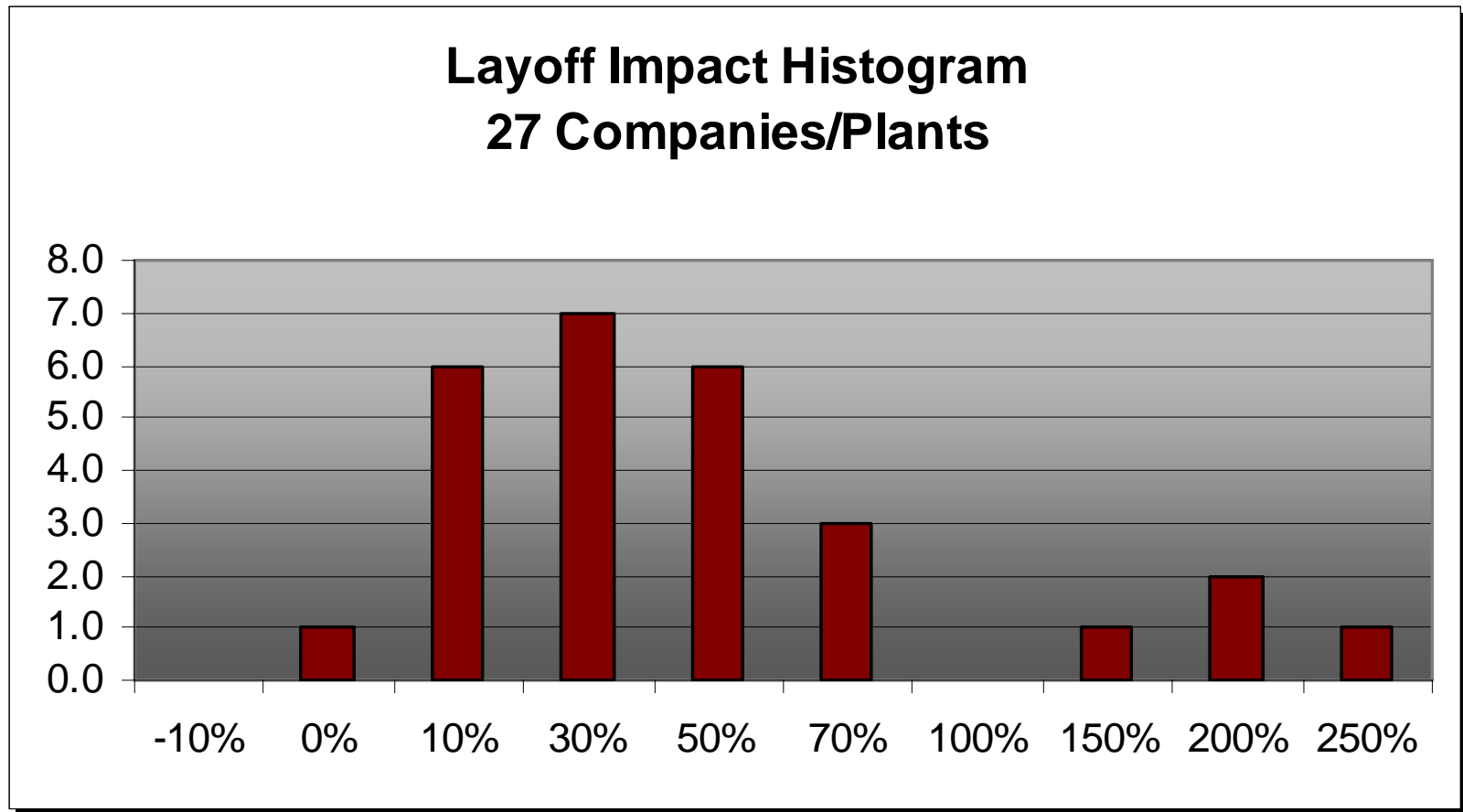
- **Process – What exactly is this change?**
 - Review limited ultimate loss rates by year
 - Create industry benchmark for similar class mix
 - Establish pre-layoff performance level (company rate / benchmark rate)
 - Compare post-layoff performance level to pre-layoff performance level. The change in these levels is the layoff rate impact.
- **Why do it this way?**
 - Comparison to industry allows for clearer event impact.
 - Ultimate limited loss rates and baselines stabilize randomness of loss data
 - Establishment of company risk profile allows performance measurement.

Aon 2009 Study



Aon 2009 Study

- Layoff Rate Impact Results:



Aon 2009 Study

- **Multiple Regression:**
 - Independent variables:
 - Layoff Size (as %)
 - State
 - Union involvement
 - Wage level of impacted employees
 - Local unemployment level
 - WARN act usage
- **Significant variables:**
 - Layoff Size
- All other variables were found to NOT have a significant impact on the post-layoff loss rates.

Aon 2009 Study

- **What does this mean?**
 - There is a positive relationship between size of layoff and increase in loss rates.
 - Other factors may still influence loss rates, but on a much more individual level
 - For example –
 - Union involvement has historically been cited as an influencing factor in layoff impact studies. The Aon study may indicate that union involvement is extremely varied, and just the presence of a union is not a significant factor.

Other “immeasurable” Factors

- Other possible influencing factors*:
 - Level of severance benefits
 - “downsizing” announcement tactics
 - Employee loyalty
 - Psychology of ongoing employees
 - Skill level of downsized staff and ability to learn new skills

* From “Reserving in a Changing Environment: Responding to the Impact of Layoffs, Plant Closures and Downsizing in Reserving for Workers Compensation Liabilities” by Atul Malhotra, FCAS and Ronald Kolzowski, FCAS

Aon 2009 Study

- **Limitations of Aon Study**

- Relatively small number of companies/plants reviewed. Possibility of skewed results.
- Significant assumptions regarding relationship to industry and layoff event study.
- Assumes companies performance vs. industry is consistent over analysis period.
- Attributes all change vs. baseline to layoff impacts

Panel Discussion

- What are our panel experts thoughts?
 - What are areas of consistency with study?
 - What are areas of Inconsistencies with study?
 - What are areas for future research?
 - How would you measure layoff impacts?
 - What can an actuary do to measure layoff impacts?



Panel Experts

- John Booth, ACAS, MAAA
- Teri Gass, CPCU
- David Mohrman, FCAS, MAAA
- Loren Nickel, FCAS, CFA, MAAA