

Reserving 2020 (or maybe sooner ...)

CAS Casualty Loss Reserve Seminar- Sept 11, 2017

Chris Gross, ACAS, MAAA
President & CEO
Gross Consulting

Internet of Things

- Components
 - Sensors
 - Data Stores
 - Analytics
- Value proposition/ Disruption
 - Insurance & Risk Management Industry
 - Measuring risk
 - Pricing risk
 - Managing risk
 - Actuarial Profession
 - Does not require our credentials
 - Engineers outnumber us 100:1 or more

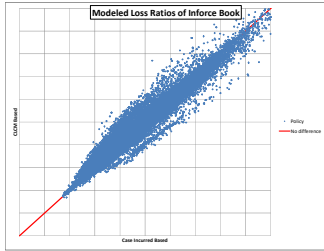


So what... I'm a *reserving* actuary...

- Changes in environment can cause distortions in our relied-upon patterns.
- Reserving and pricing questions become more inseparable as detail becomes more relevant.
- Understanding the intricacy of this interplay can be our professional *advantage* in this new world– provided we are willing to embrace it.
- Our standard analytical tools are not up to the challenge



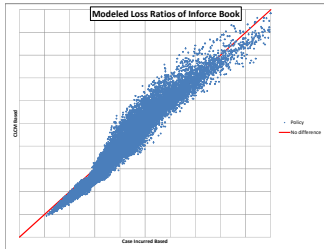
Example 1



GROSS CONSULTING

4

Example 2



GROSS CONSULTING

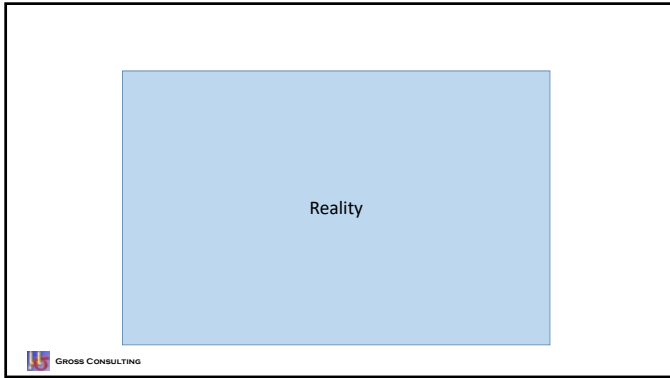
5

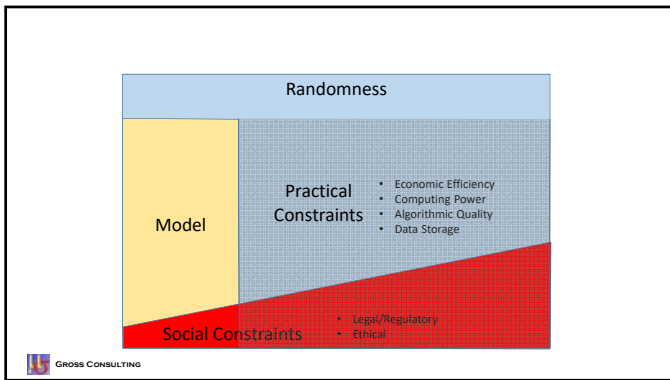
Example 3

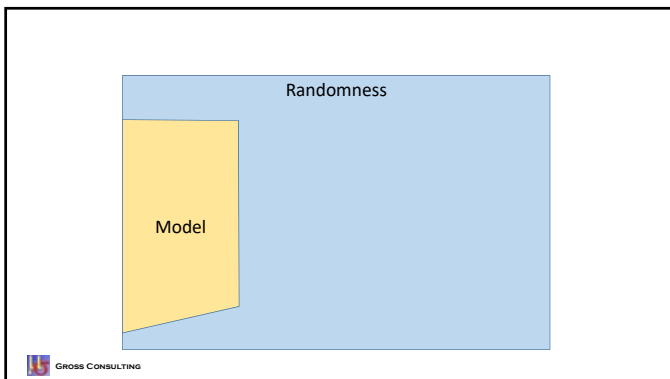


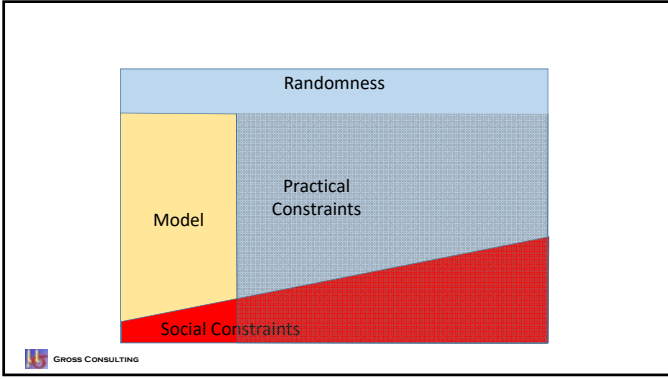
GROSS CONSULTING

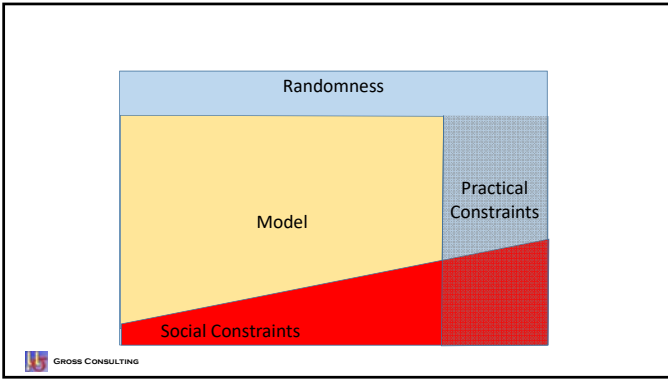
6

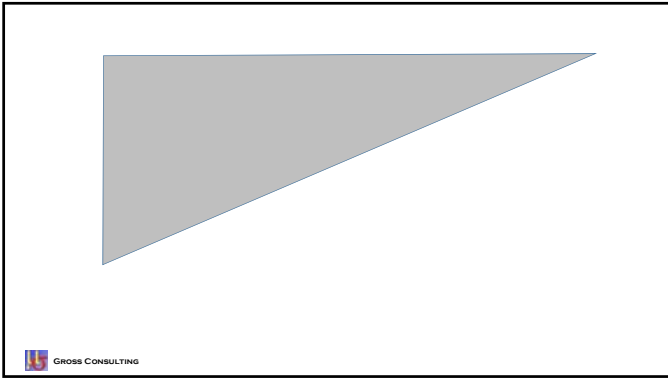


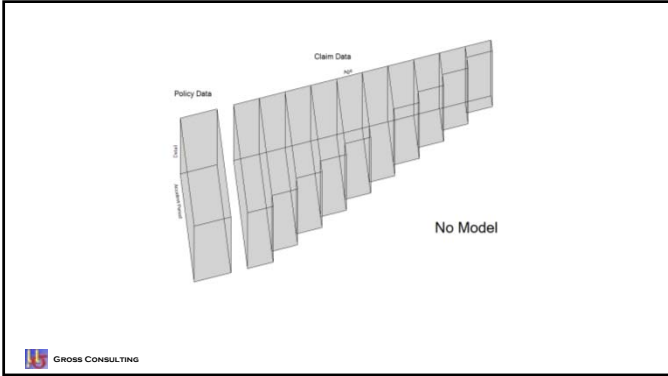


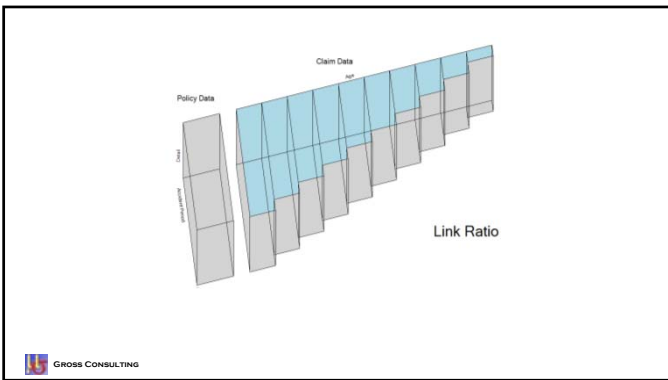






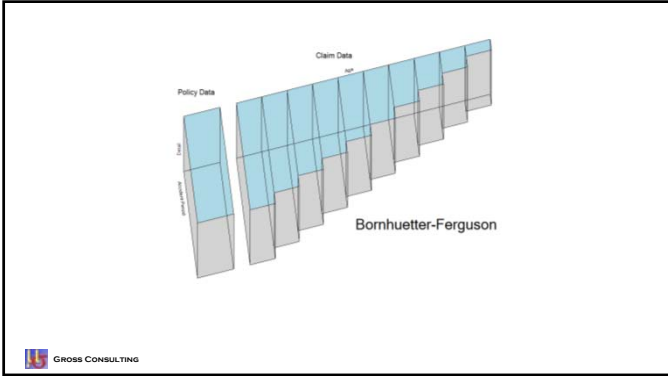


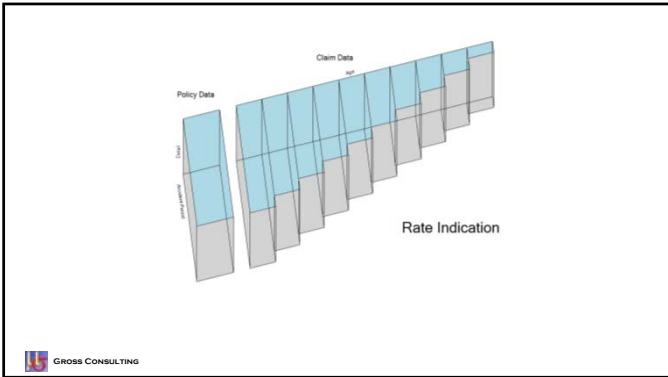


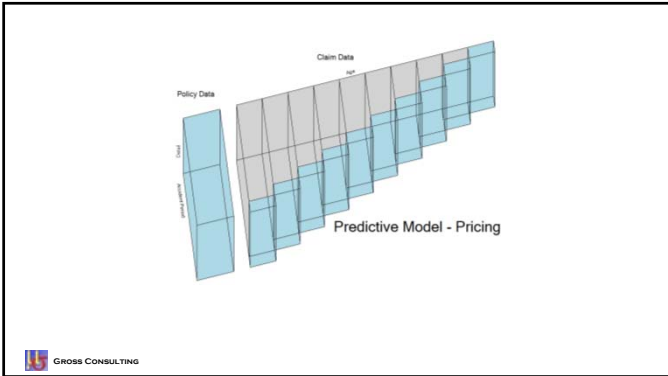


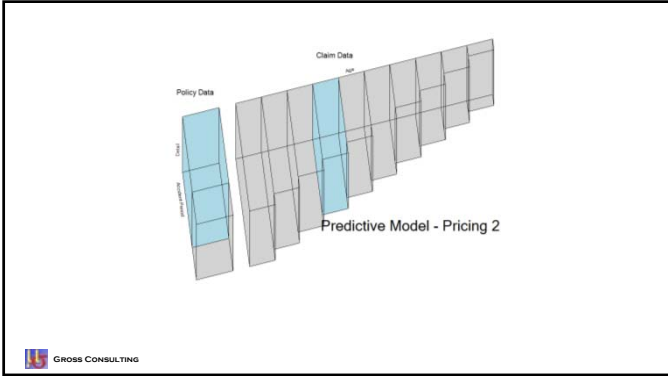
Data Aggregated is Information Lost

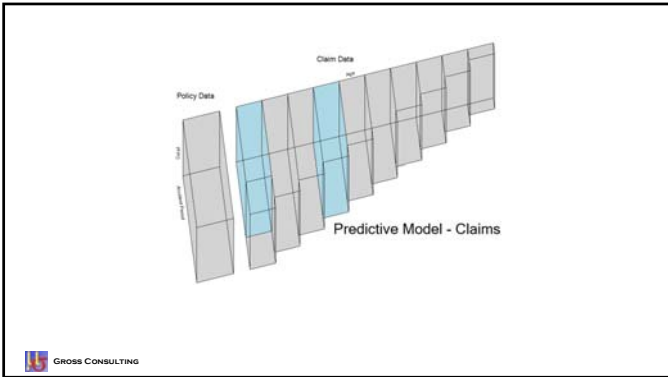
GROSS CONSULTING

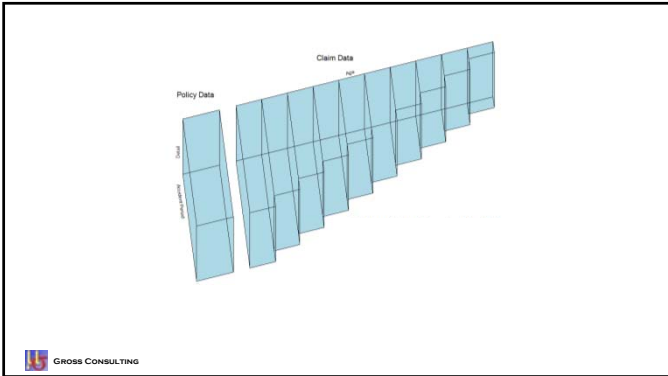












Bridging the gap

- Need to use all the information
- Calculate expectation of future payments for any policy/claim given information
- How to reconcile with triangle approaches

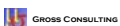


What if?



'Actuarial' Case Reserves

- Claim Level
- Objective and formulaic – based on verifiable characteristics such as:
 - Cause of Loss
 - Injury Type
 - Limit/Reinsurance
 - Jurisdiction
 - Recent claim activity
 - Class code
 - Credit Score?
 - ...



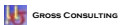
'Actuarial' Case Reserves

- Unbiased
- Applied retrospectively to all claims
 - May be different from last analysis
 - May include new fields
 - Not all fields may need to exist for each claim



Triangles still?

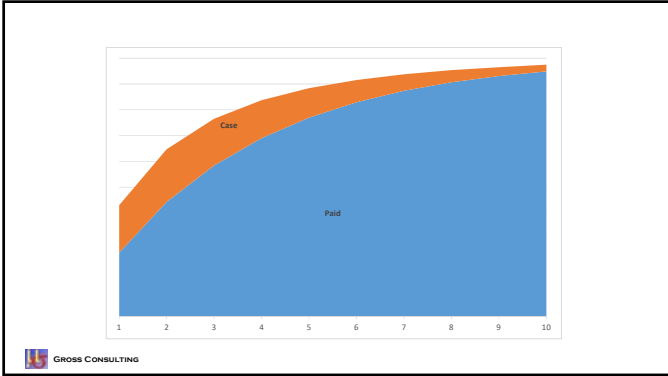
- Here for the foreseeable future, but what if...
 - Use 'Actuarial' case reserves
 - Fewer problems with mix issues (reduce differentiated bias)
 - Less development in general

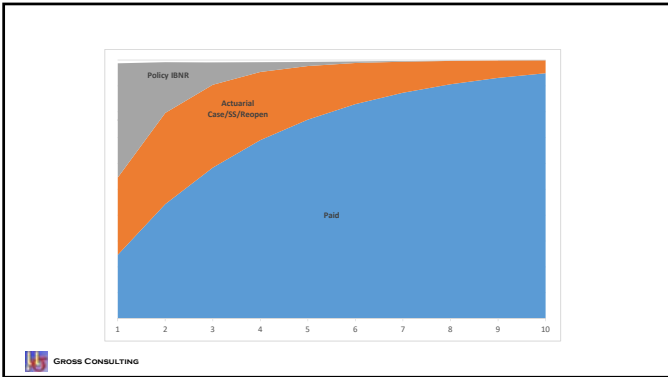


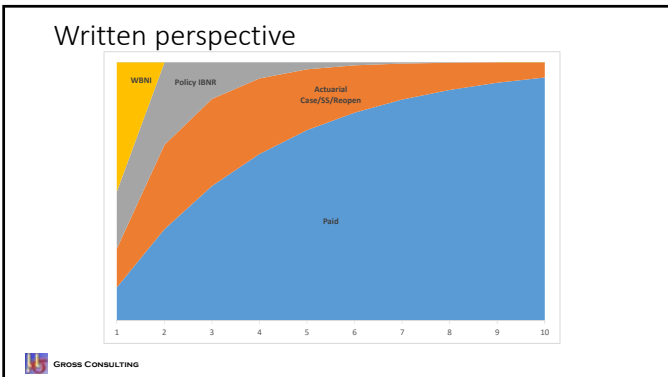
Why stop there?

- True IBNR Reserve
 - Policy Level
 - Include all policies that could still give rise to a claim
 - Reflect report lag and loss ratio differences
- WBNI Reserve (Written But Not Incurred)
 - Policy Level
 - Associated with Unearned Premium
- Salvage/Subrogation Asset
 - Claim level
 - Based on payment information, time since payment, characteristics, etc.
- Reopen Reserves
 - Claim level (closed claim only)









Concurrent Session

- More on the idea of using detailed data in reserving work
- Practical approaches to getting there
- Complications