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## THE MARKET CYCLE & RESERVING CYCLE

CAS Seminar on Reinsurance – June 6-7, 2016

Dave Clark Munich Reinsurance America, Inc



## Agenda

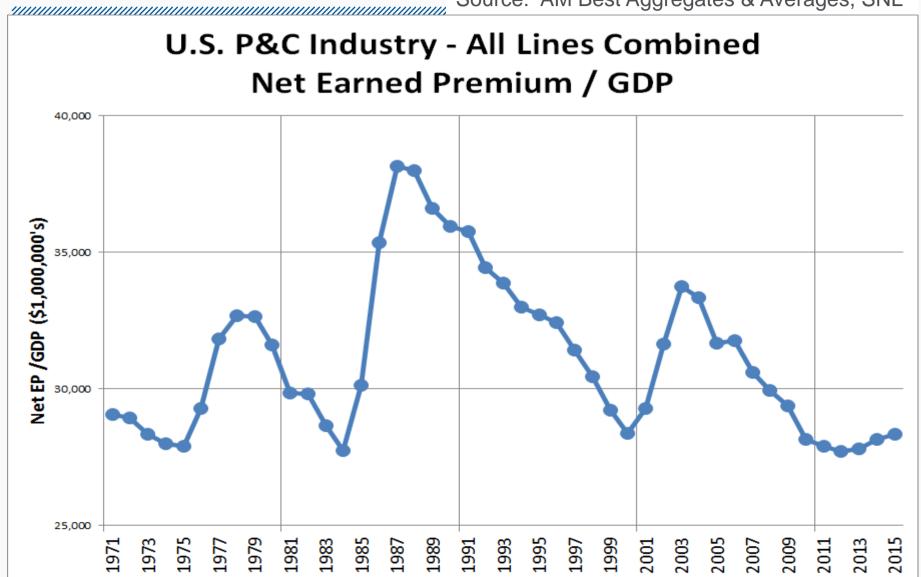


- 1. High-Level View of the Market Cycle and Reserving Cycle
- 2. Specialty Carriers
- 3. Commercial Auto Liability

#### High-Level View of Market Cycle

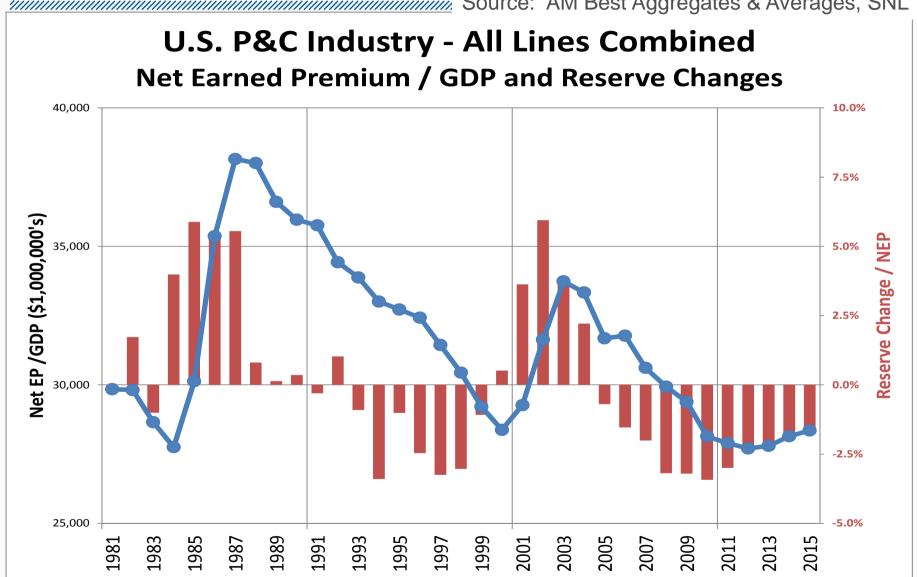


Source: AM Best Aggregates & Averages, SNL

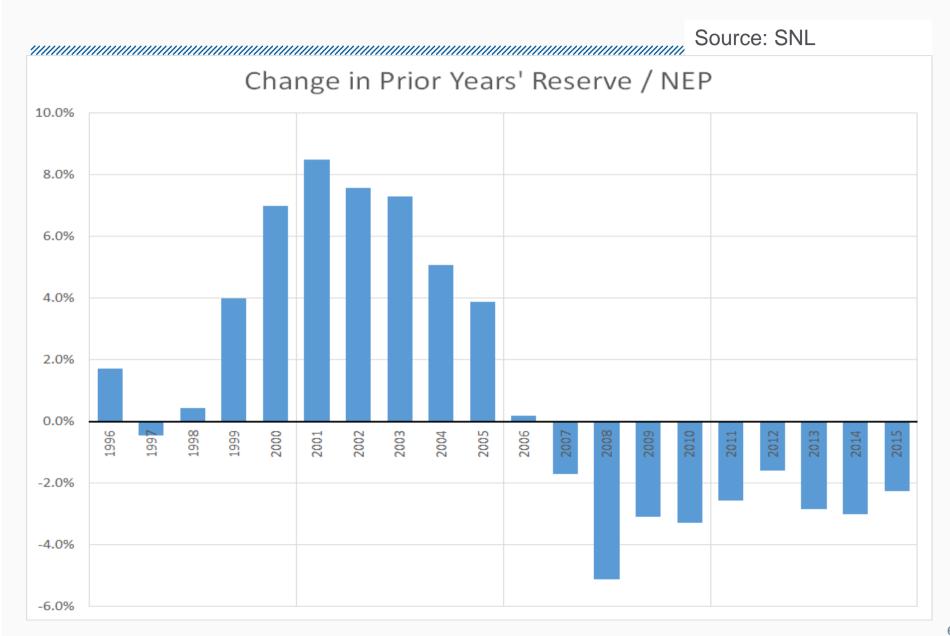


## High-Level View of Market Cycle: Correlation with Reserve Changes

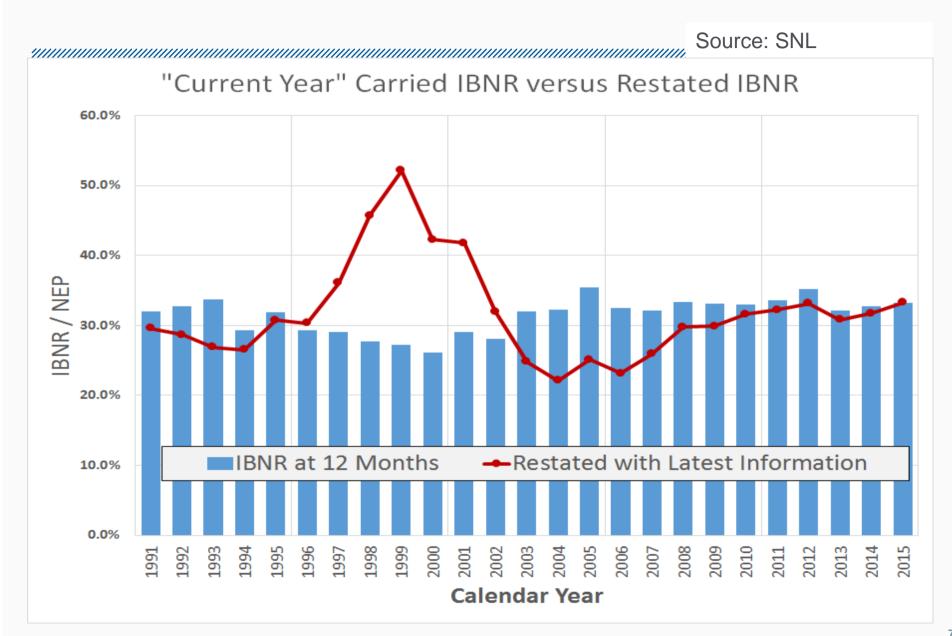




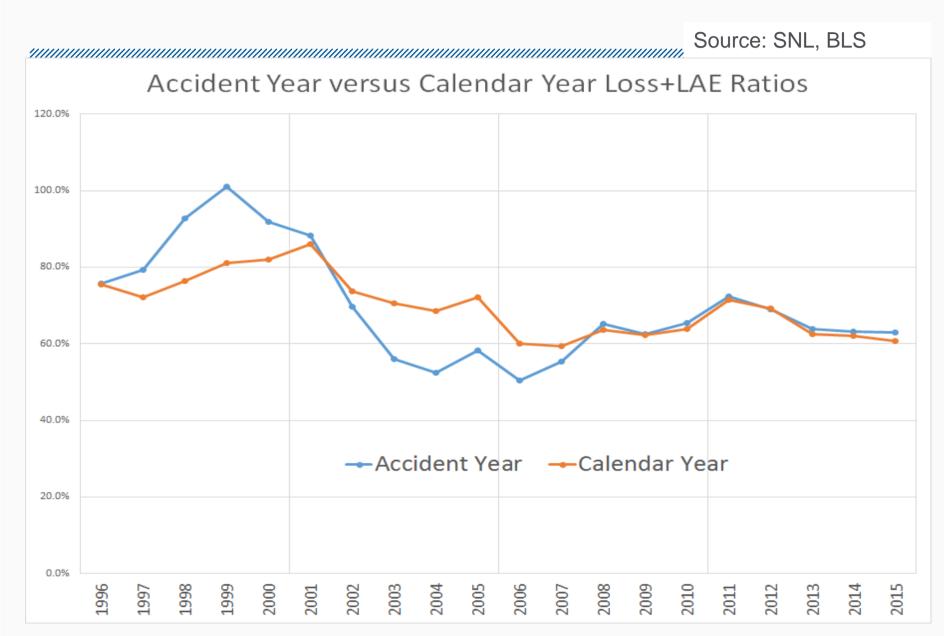




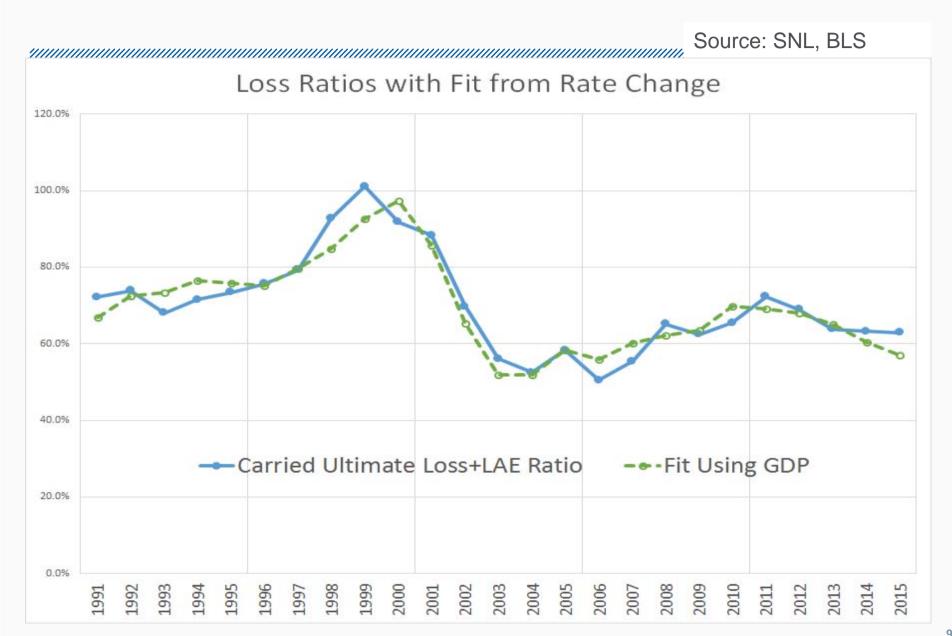






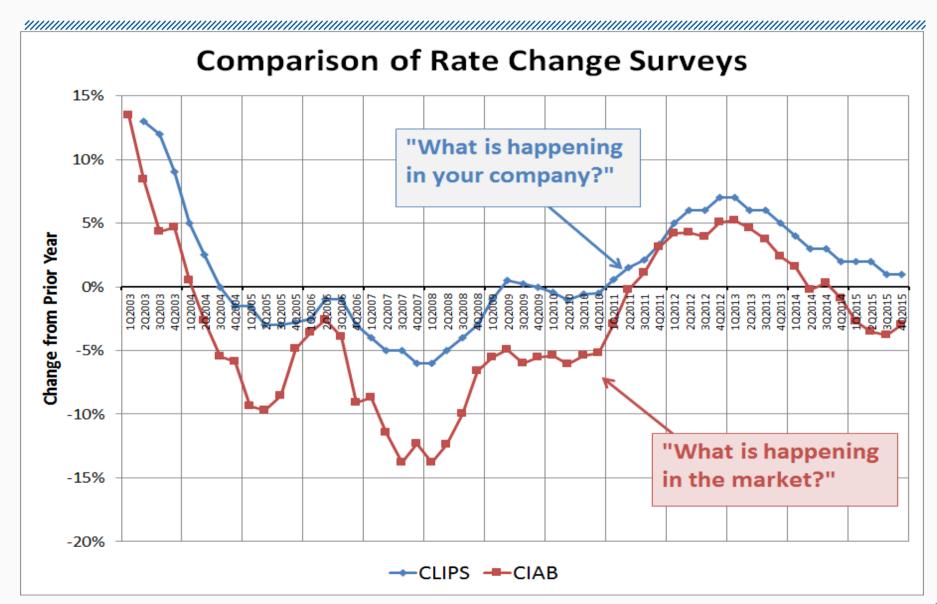






### Looking for Measures of Rate Change

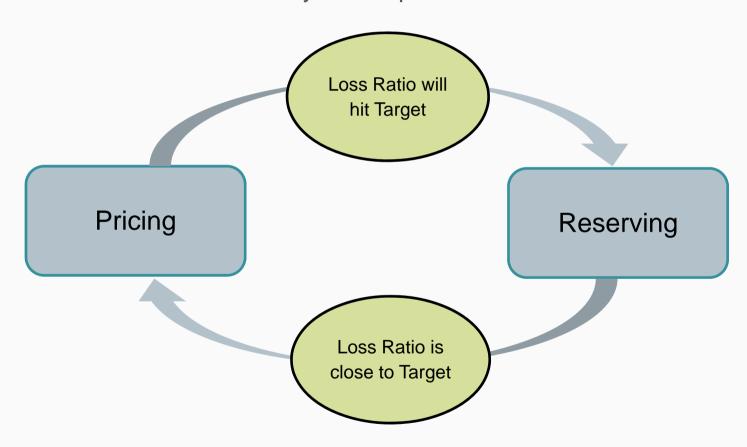




## Interaction of Pricing and Reserving?

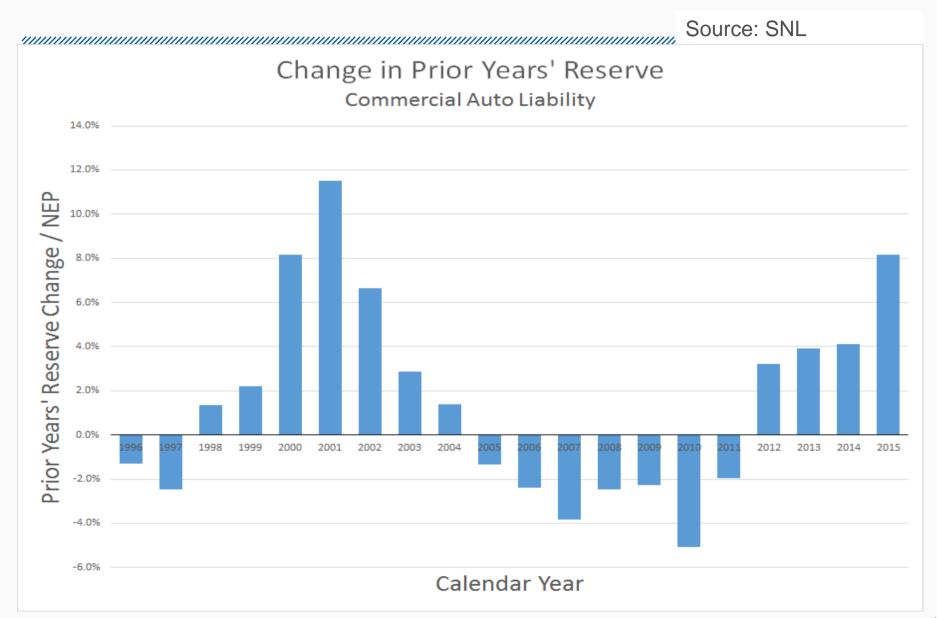


#### A Control Cycle or Operational Risk?



See "An Introduction to Insurer Operational Risk" by Mango & Venter

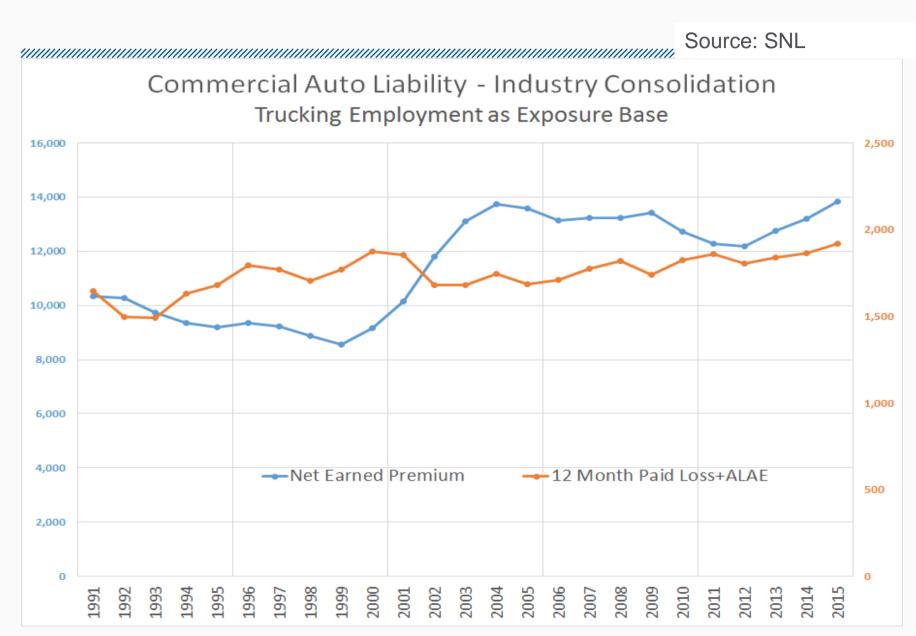




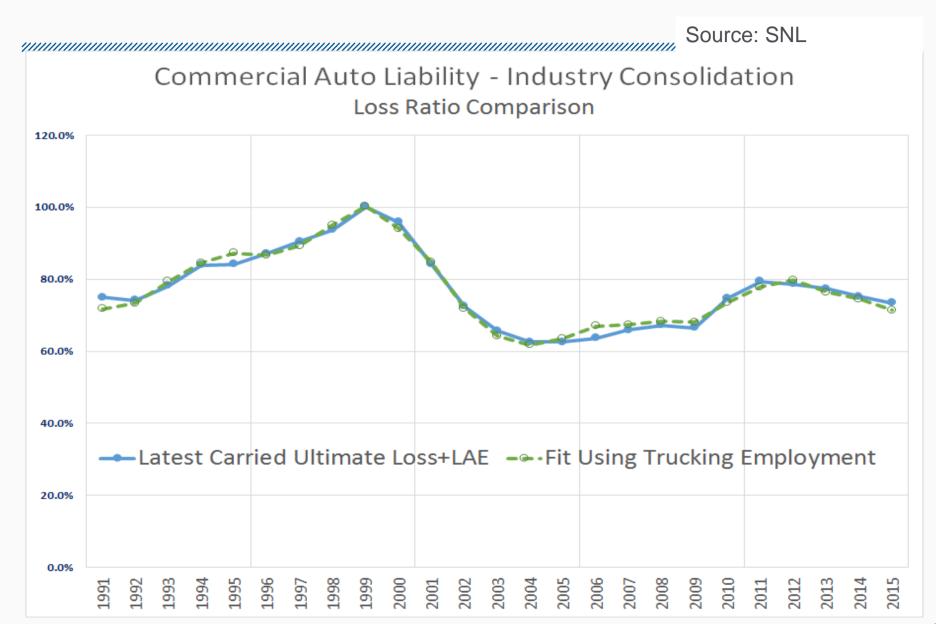


Source: SNL "Current Year" IBNR versus Restated IBNR 45.0% 40.0% 35.0% 30.0% 25.0% 20.0% 15.0% 10.0% Original IBNR → Restated IBNR 5.0% 0.0% 











Source: SNL Commercial Auto - Liability vs. Physical Damage 100.0% 90.0% Correlation Coefficient: .898 80.0% 70.0% 60.0% 50.0% 40.0% 30.0% 20.0% 10.0% 0.0% 2009 2010 2002 2011 2004 2005 2014 2015 2003 2006 2007 2013 1997 1998 1999 2000 2001 2012

#### Conclusions



• We see both a pricing cycle and a reserving cycle, which are inter-related.

 Main driver appears to be failure to capture accurate rate changes and/or exposure base. That is, operational risk.



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