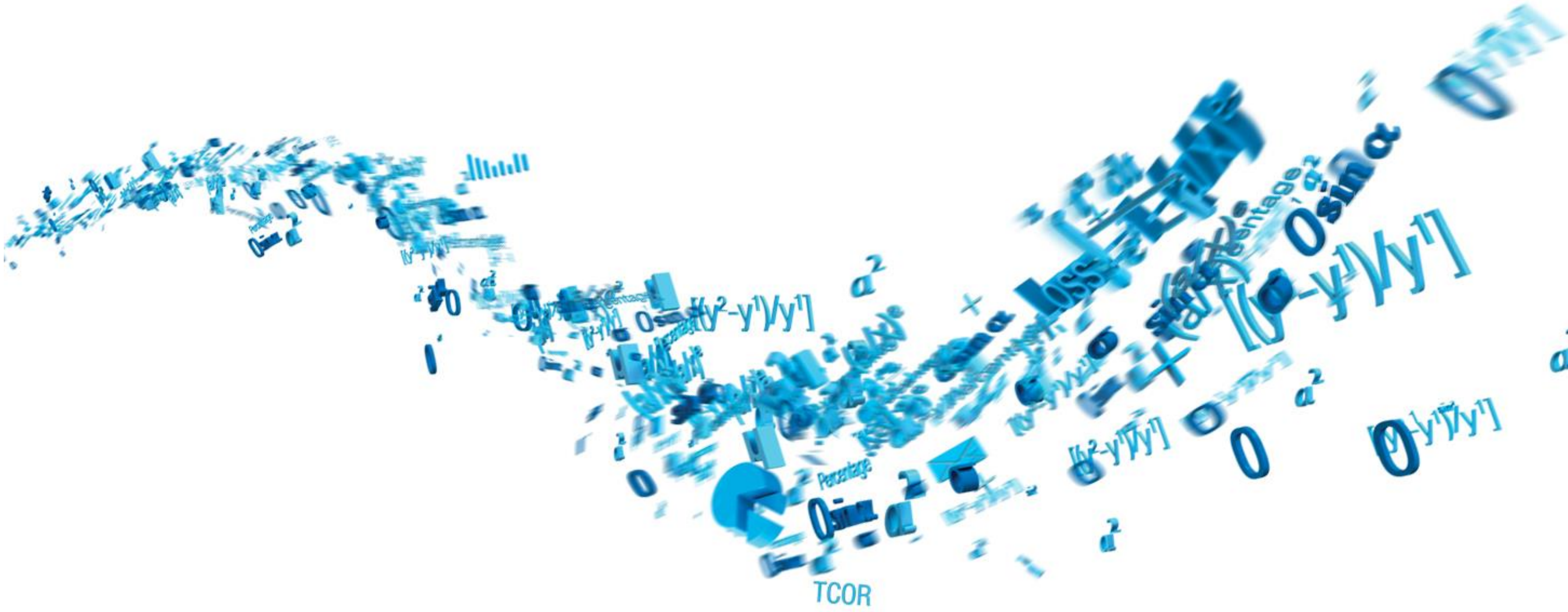

Insurance Market Dynamics

A Look Ahead

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2019 CAS Spring Meeting
New Orleans
May 20, 2019

Empower Results®

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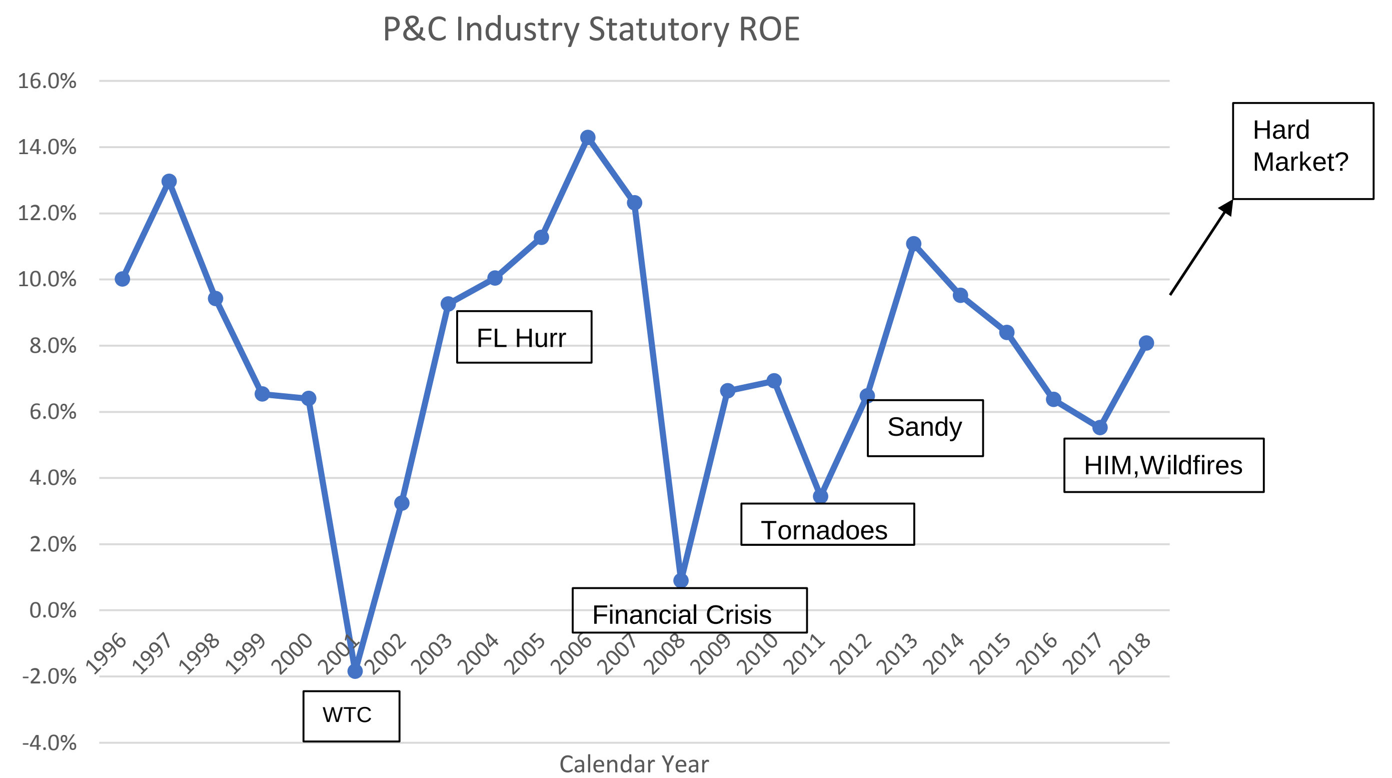
Cycles ?

- The underwriting cycle is the tendency of property and casualty insurance premiums, profits, and availability of coverage to rise and fall with some regularity over time (Wikipedia).
- Some regularity?

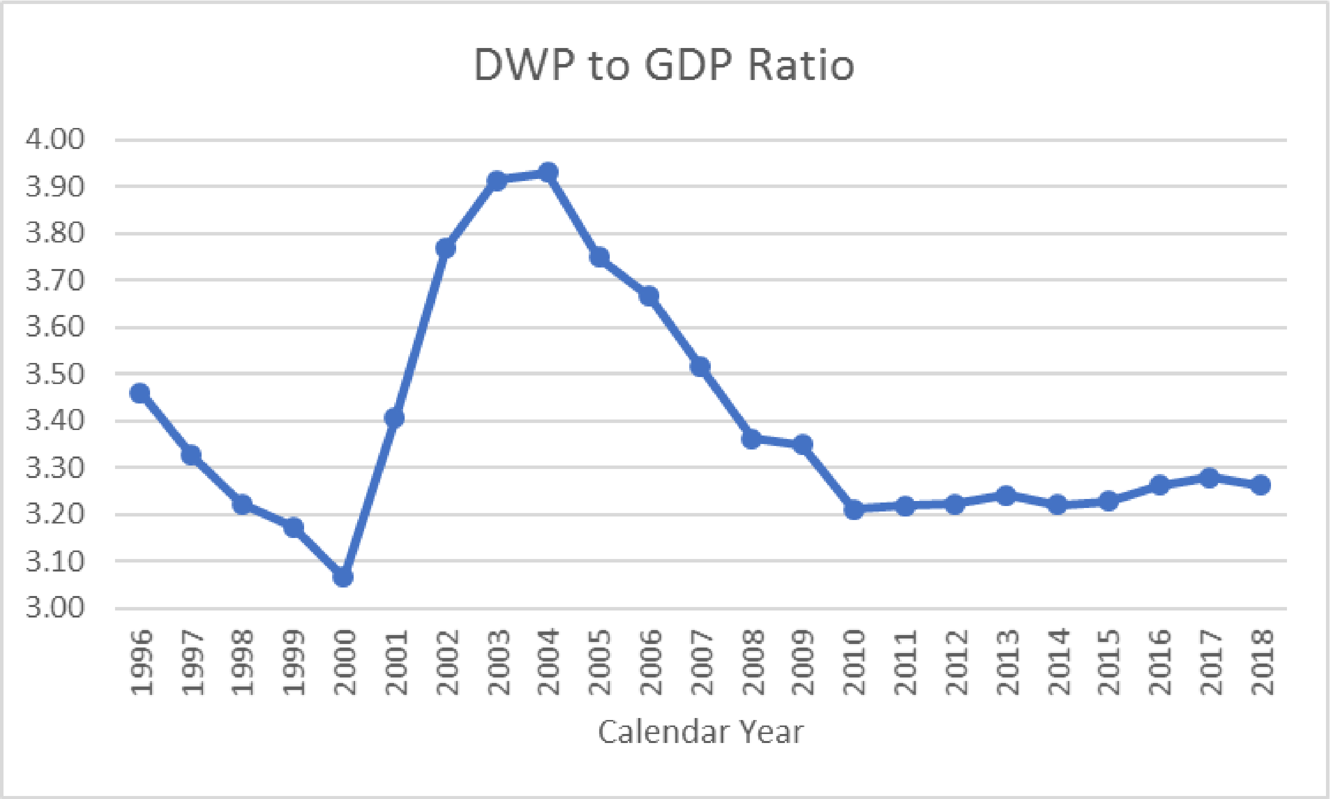


ROE = Net Income / Average Surplus

Source : S&P Global Market Intelligence

Historical DWP/GDP Ratios

- Insurance premiums tend to rise and fall with exposure (correlated with GDP)
- Ratios flat since 2010 : less demand for insurance than before?

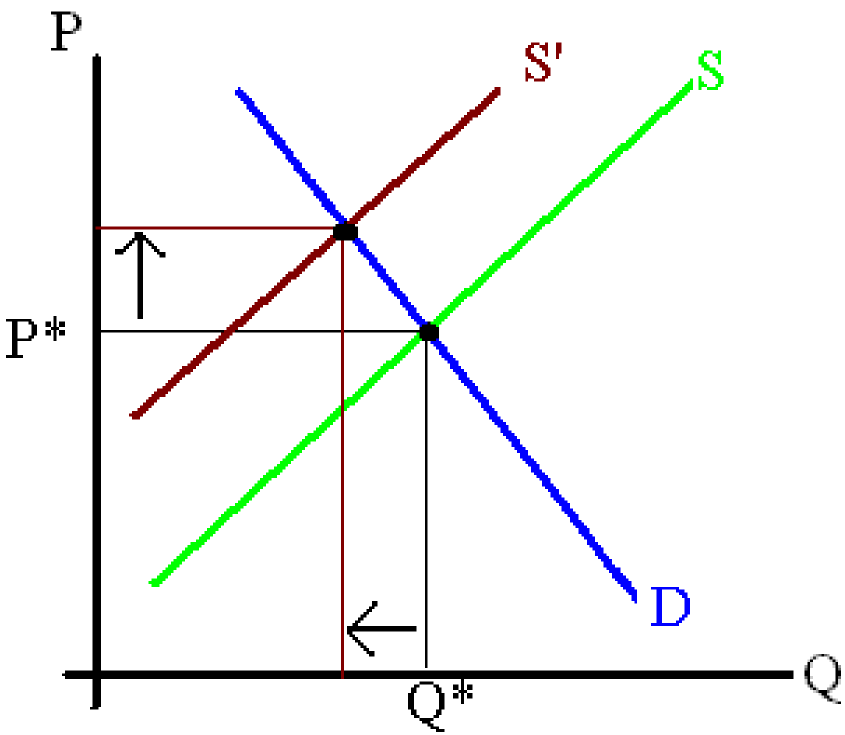


ROE = Net Income / Average Surplus

Source : S&P Global Market Intelligence, FRED Economic Data

Supply and Demand

- Many sophisticated theories about insurance market dynamics, but it all boils down to supply and demand
- With a relatively static demand, supply change drives the price



The Winner's Curse

- Insurers do not know the exact cost of products sold at time of sale and compete (bid) with other insurers to sell their products.
- The winner's curse is a phenomenon that may occur in common value auctions, wherein the winner will tend to overpay due to emotional reasons or incomplete information (Wikipedia).

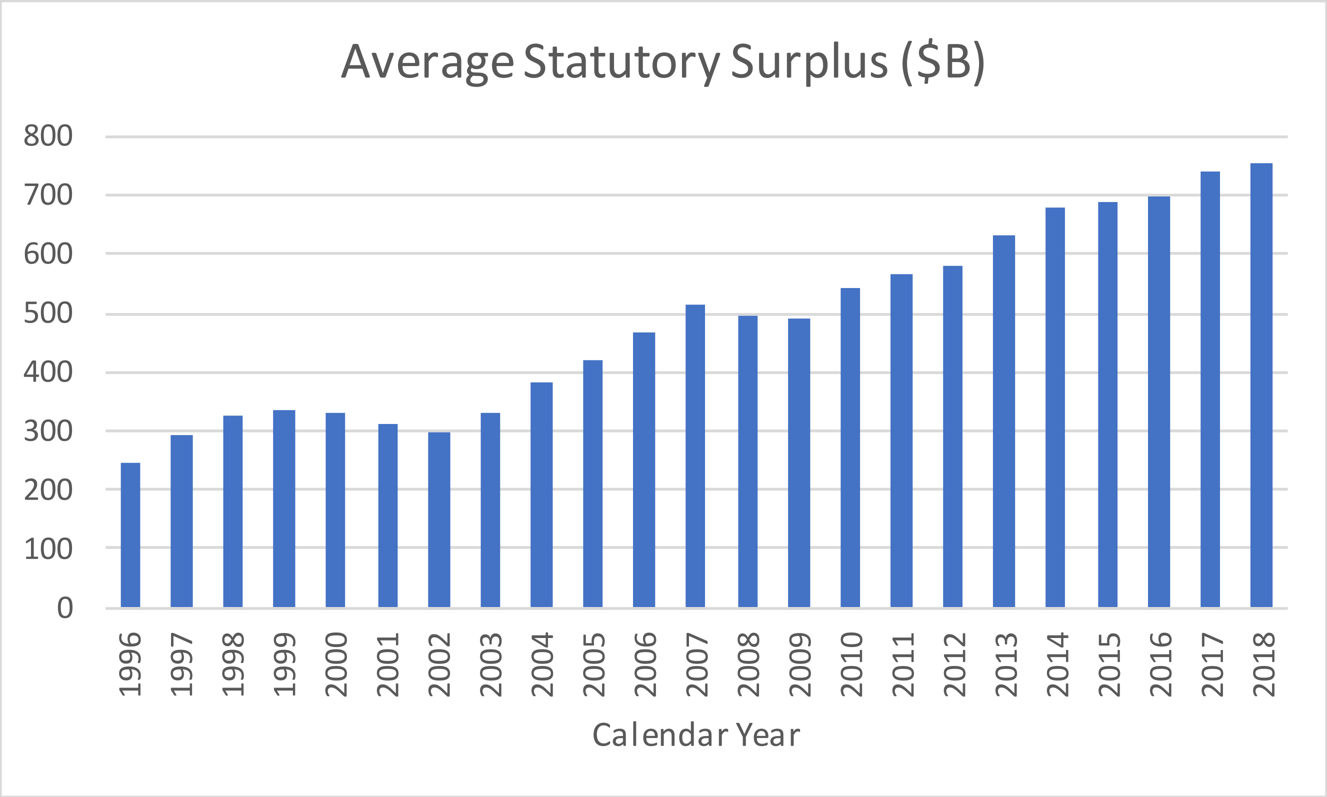
The Curse Cycle

- **This cycle works as long as supply is replenished :**

- Company A loses significant $ in a lob and pushes for rate increases.
- New Company B enters the market to take advantage of the rate increases.
- Company B’s rates not as high as Company A’s rates because no historical losses.
- Short-term period of profits for both companies (not as high as Company A hoped).
- Results deteriorate : Company A exits lob, Company B pushes for rate increases.
- New Company C enters the market to take advantage of the rate increases, after hiring former Company A employees.
- …

US P&C Industry Capital (Supply)

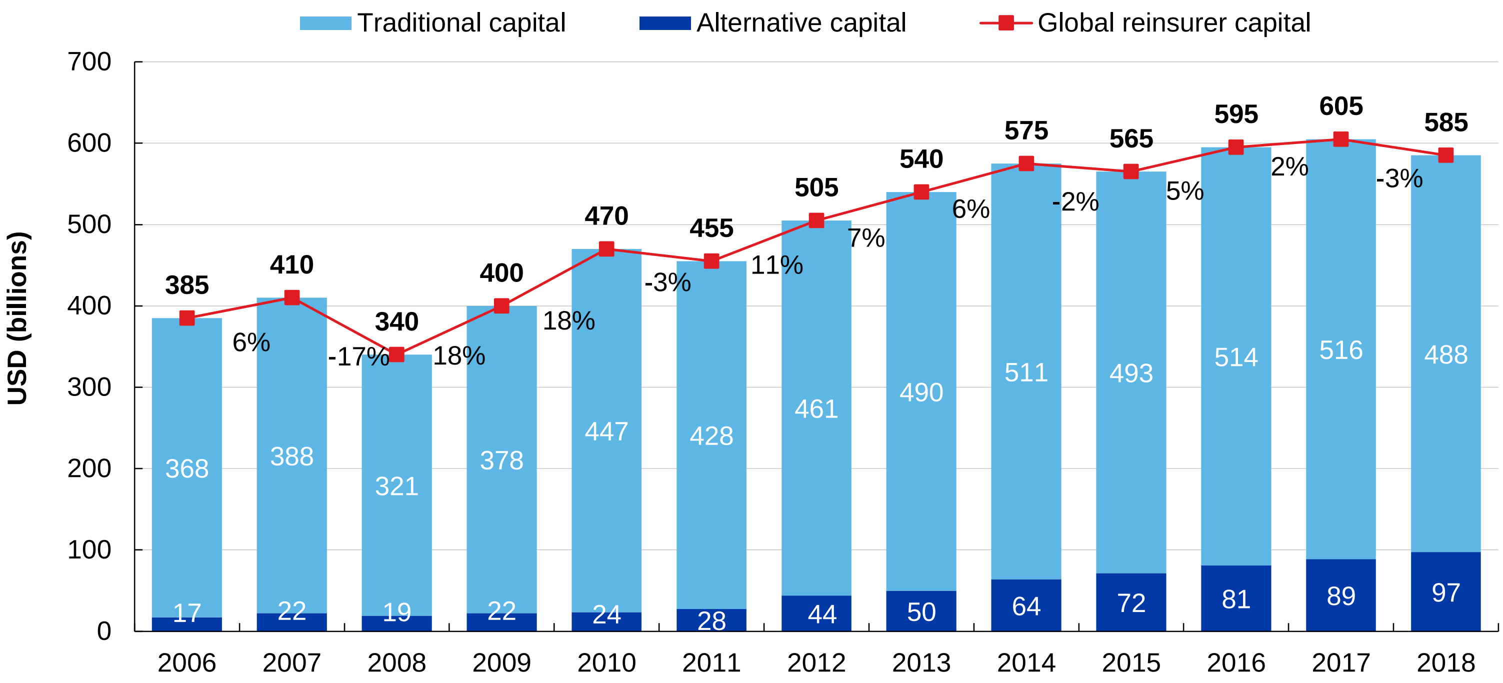
- Surplus still increasing



Source : S&P Global Market Intelligence

Global Reinsurer Capital (Supply)

- Global reinsurance capital stood at USD585 billion at December 31, 2018; down 3 percent relative to the end of 2017
- Traditional equity capital fell by USD28 billion, or 5 percent, to USD 488 billion while alternative capital rose by USD8 billion to USD97 billion (9 percent increase)



Source: Company financial statements, Aon Business Intelligence, Aon Securities Inc.

Supply Determinants and Industry Disruptors

SUPPLY DETERMINANTS

- Ease of entry in the market
- Regulatory Constraints
- Alternative Capital (diversification for investors)
- Start-Ups (opportunistic)

INDUSTRY DISRUPTORS

- InsurTech (new technologies reducing costs)
- Mergers & Acquisitions (economies of scale)
- Big Data and Predictive Modeling (identifying the better risks)
- Catastrophe Modeling (industry ready for large losses)

A Look Ahead

- With abundant capital, the P&C market will remain very competitive while traditional approaches are evolving :
  - Customer interactions are changing with digital transformation increasing (i.e. younger people use the internet more)
  - More analytics, with better technology to harvest exponentially increasing amount of data (internal, internet, other sources).
- Companies who embrace change will gain a competitive edge (less winner's curse).
- Actuary's role will evolve accordingly.