INSURANCE INFORMATION INSTITUTE

Property/Casualty 2017:
An Overview of the Industry

Western States Surplus Lines Conference
Las Vegas, NV
June 12, 2017

James Lynch, Chief Actuary

Insurance Information Institute ◆ 110 William Street ◆ New York, NY 10038
212.346.5533 ◆ jamesl@iii.org ◆ www.iii.org

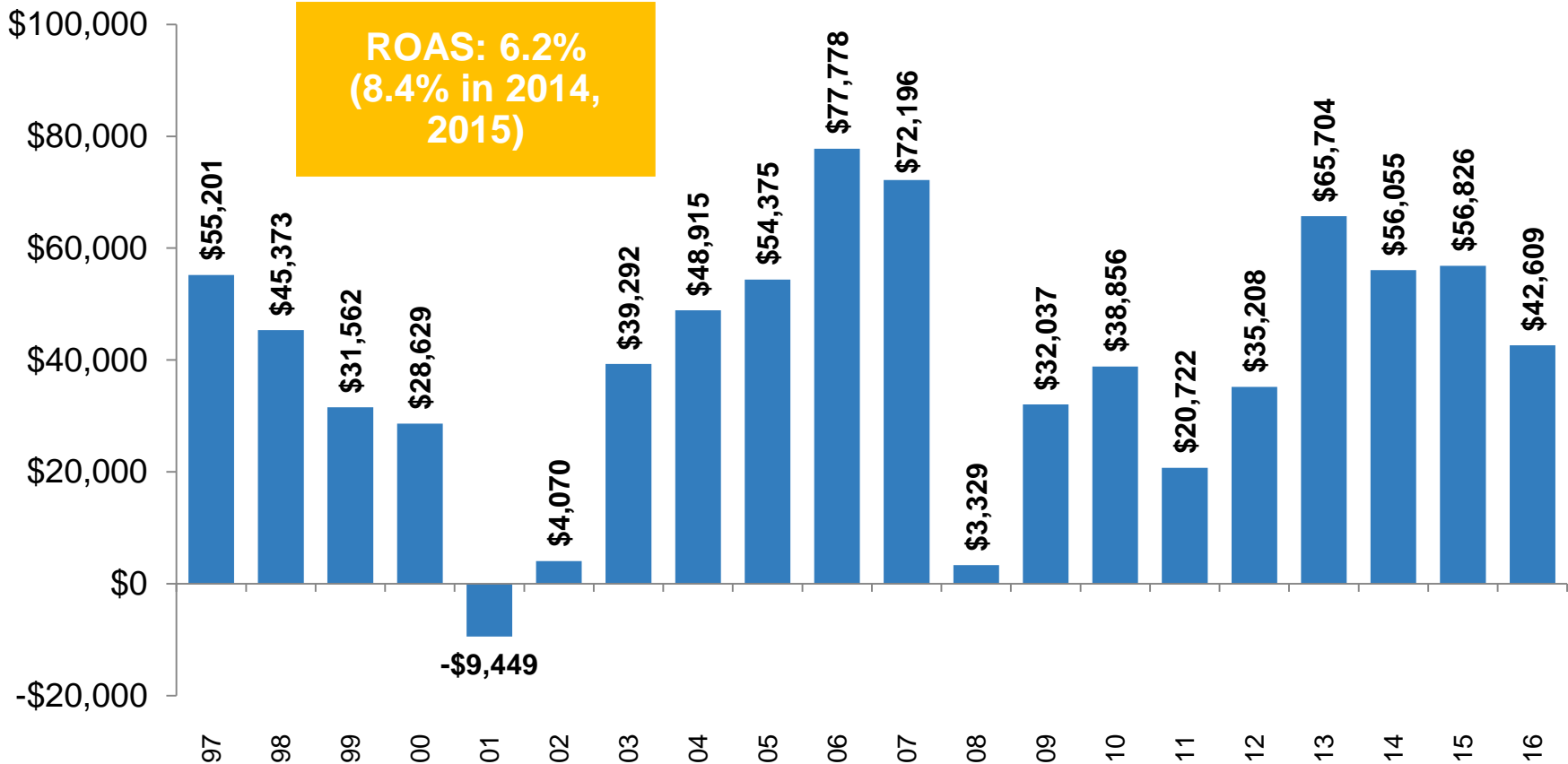# The P/C Insurance Industry: Financial Update & Outlook

Higher Cats Create Slight U/W Loss

P/C Industry Net Income After Taxes* 1997-2016

$ Millions, 2016 dollars

The median profit for this 20-year period is about $40 billion.

ROAS: 6.2% (8.4% in 2014, 2015)

Bar chart of P/C Industry Net Income After Taxes (in $ Millions, 2016 dollars):

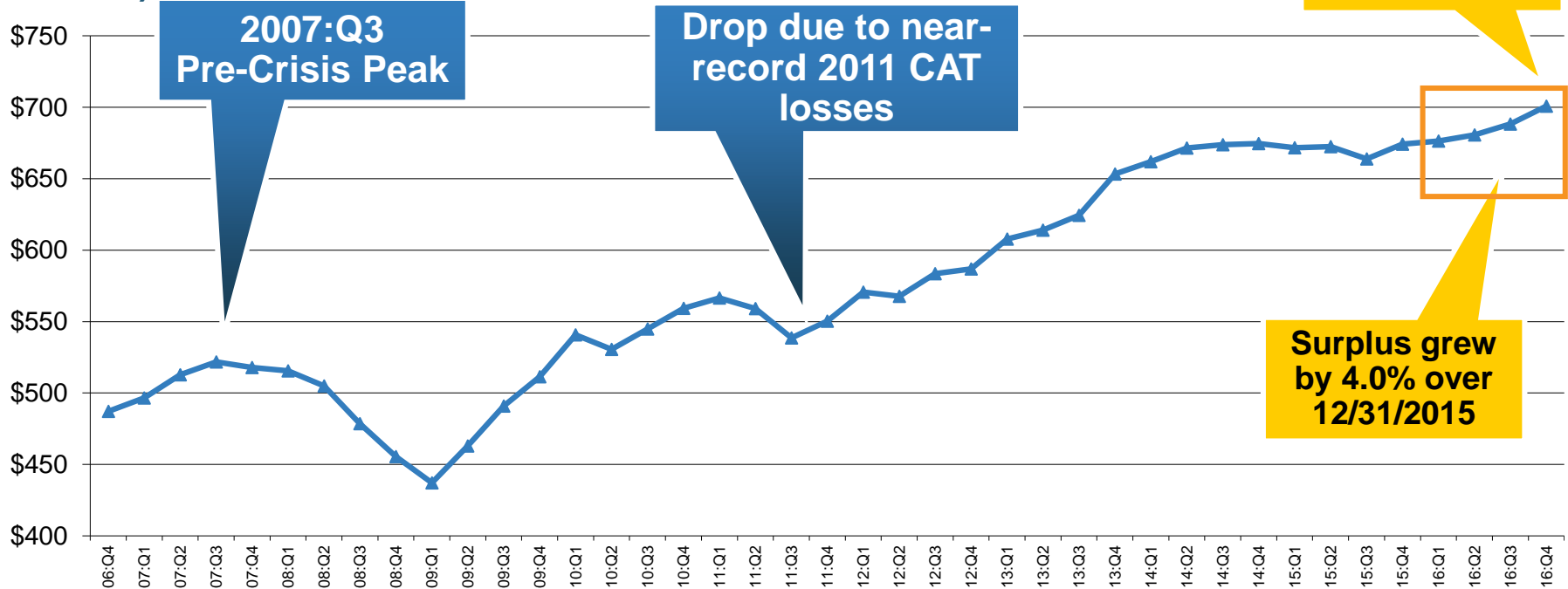| Year	Net Income
97	$55,201
98	$45,373
99	$31,562
00	$28,629
01	-$9,449
02	$4,070
03	$39,292
04	$48,915
05	$54,375
06	$77,778
07	$72,196
08	$3,329
09	$32,037
10	$38,856
11	$20,722
12	$35,208
13	$65,704
14	$56,055
15	$56,826
16	$42,609

*adjusted for inflation using the BLS CPI calculator, to 2016 dollars
Sources: A.M. Best; ISO, a Verisk Analytics company; Insurance Information Institute.

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Policyholder Surplus, Quarterly, 2006:Q4–2016:Q4

($ Billions)

Surplus as of 12/31/16 stood at $700.9B

2007:Q3 Pre-Crisis Peak

Drop due to near-record 2011 CAT losses

Surplus grew by 4.0% over 12/31/2015

**The industry now has $1 of surplus for every $0.75 of NPW, the strongest claims-paying status in its history.**

2010:Q1 data includes $22.5B of paid-in capital from a holding company parent for one insurer's investment in a non-insurance business.

The P/C insurance industry entered 2017 in very strong financial condition.

Sources: ISO, A.M .Best.

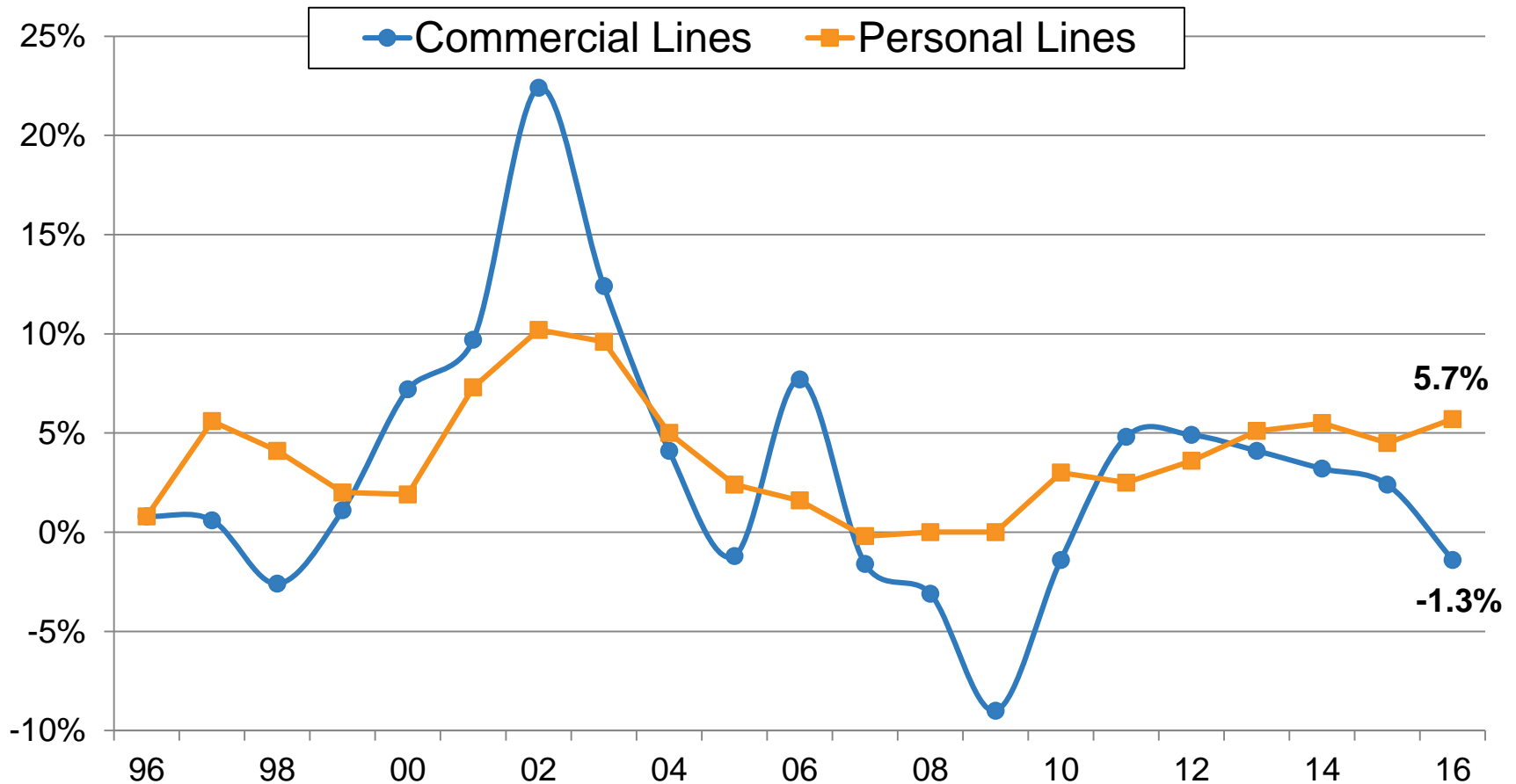# Net Premium Growth (All P/C Lines): Annual Change, 2007-2016
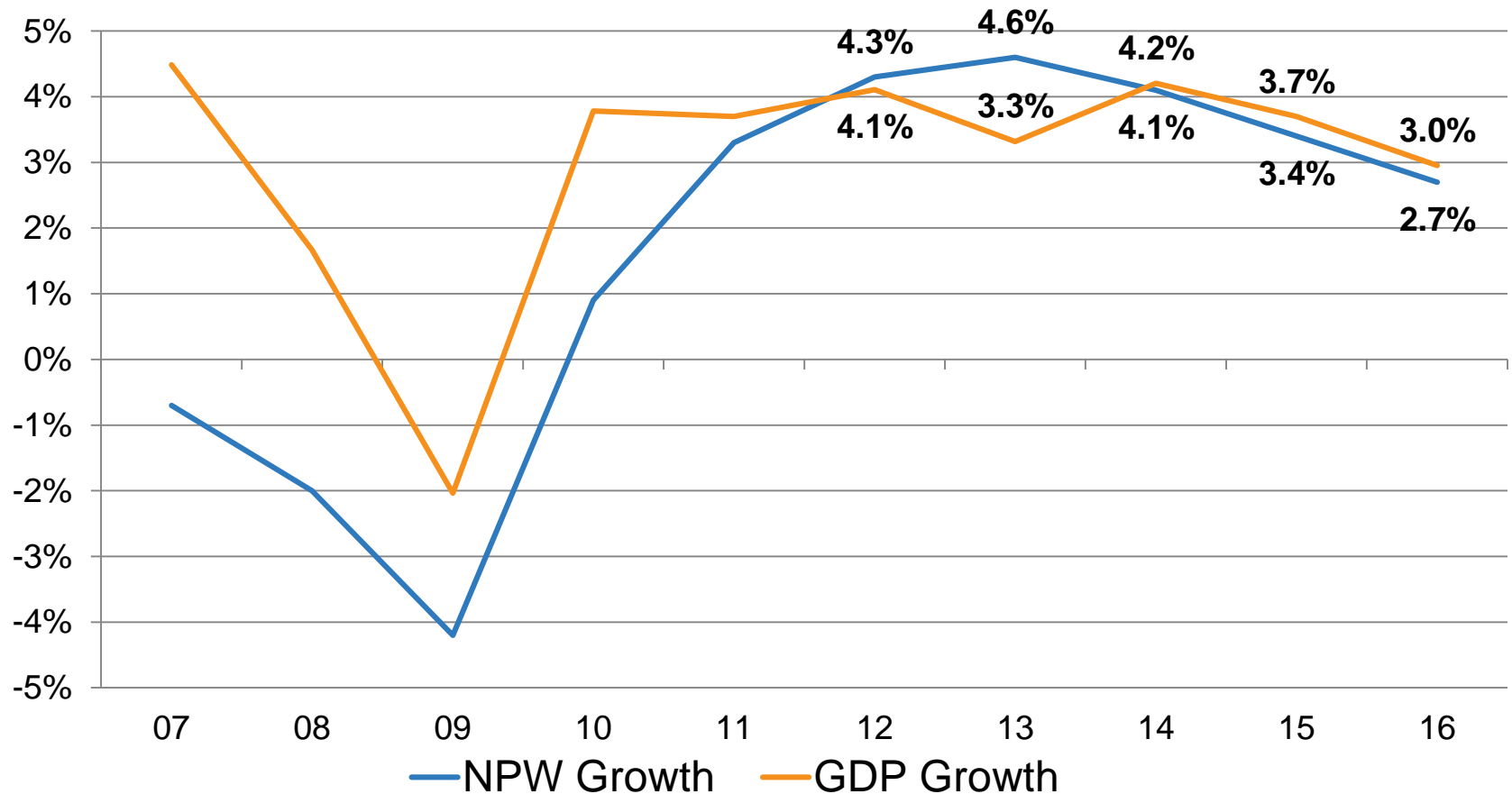
Premium Growth Has Followed Economic Growth, Inflation.

Commercial & Personal Lines NPW Growth: 1996-2016

Commercial Lines is Prone to Much More Cyclical Volatility Than Personal Lines.

Note: Data include state funds beginning in 1998.
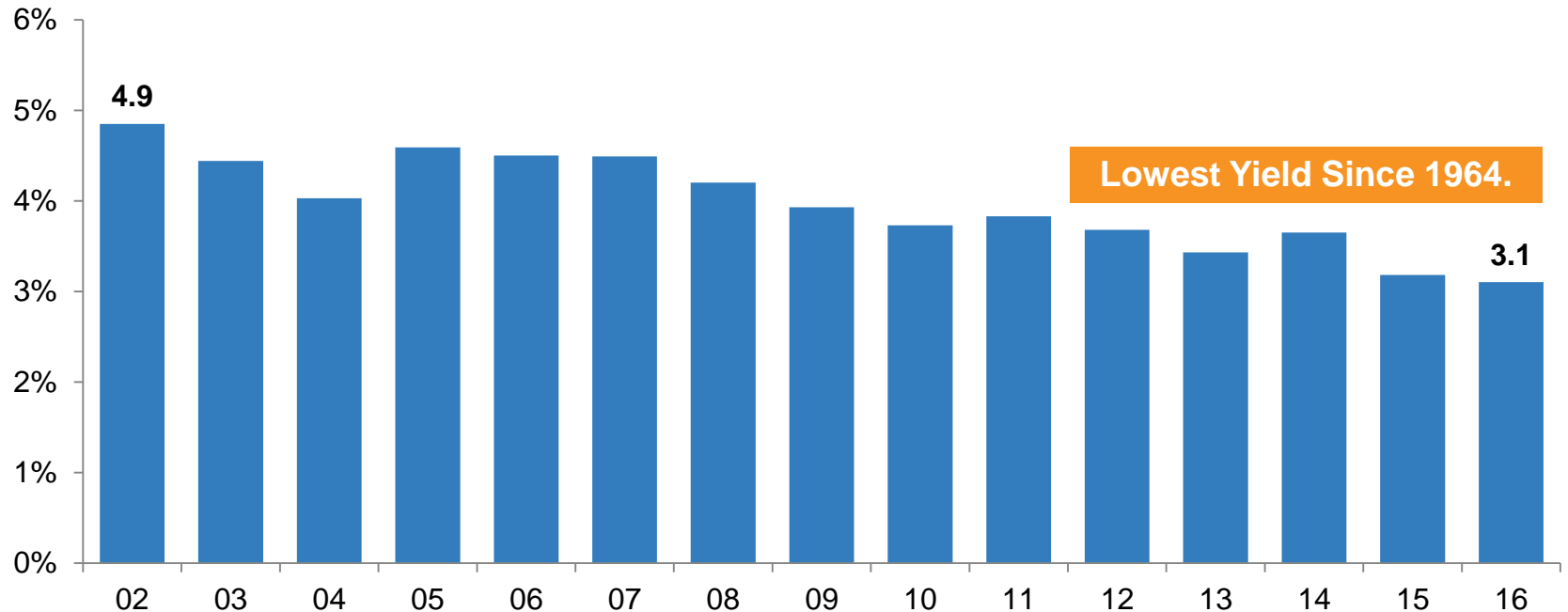Sources: A.M. Best; Insurance Information Institute.

Investments

Investment Performance is a
Key Driver of Profitability

Depressed Yields Will Necessarily
Influence Underwriting & Pricing

P/C Insurer Portfolio Yields, 2002-2016

(Yield on Invested Assets)

Lowest Yield Since 1964.

P/C Carrier Yields Have Been Falling for Over a Decade, Reflecting the Long Downtrend in Prevailing Interest Rates.

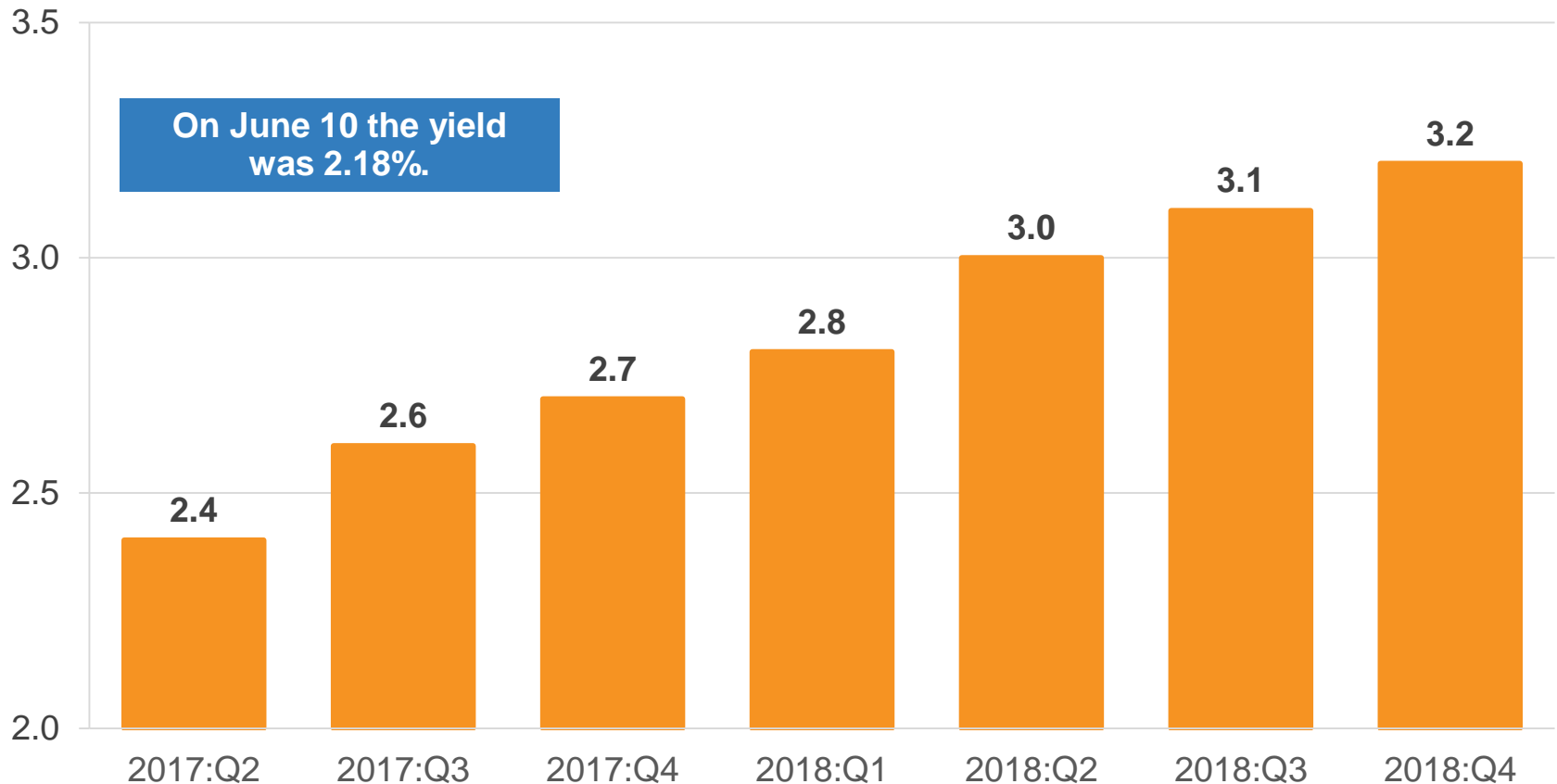# 10-Year Treasury Forecast

Yield (%)

On June 10 the yield was 2.18%.

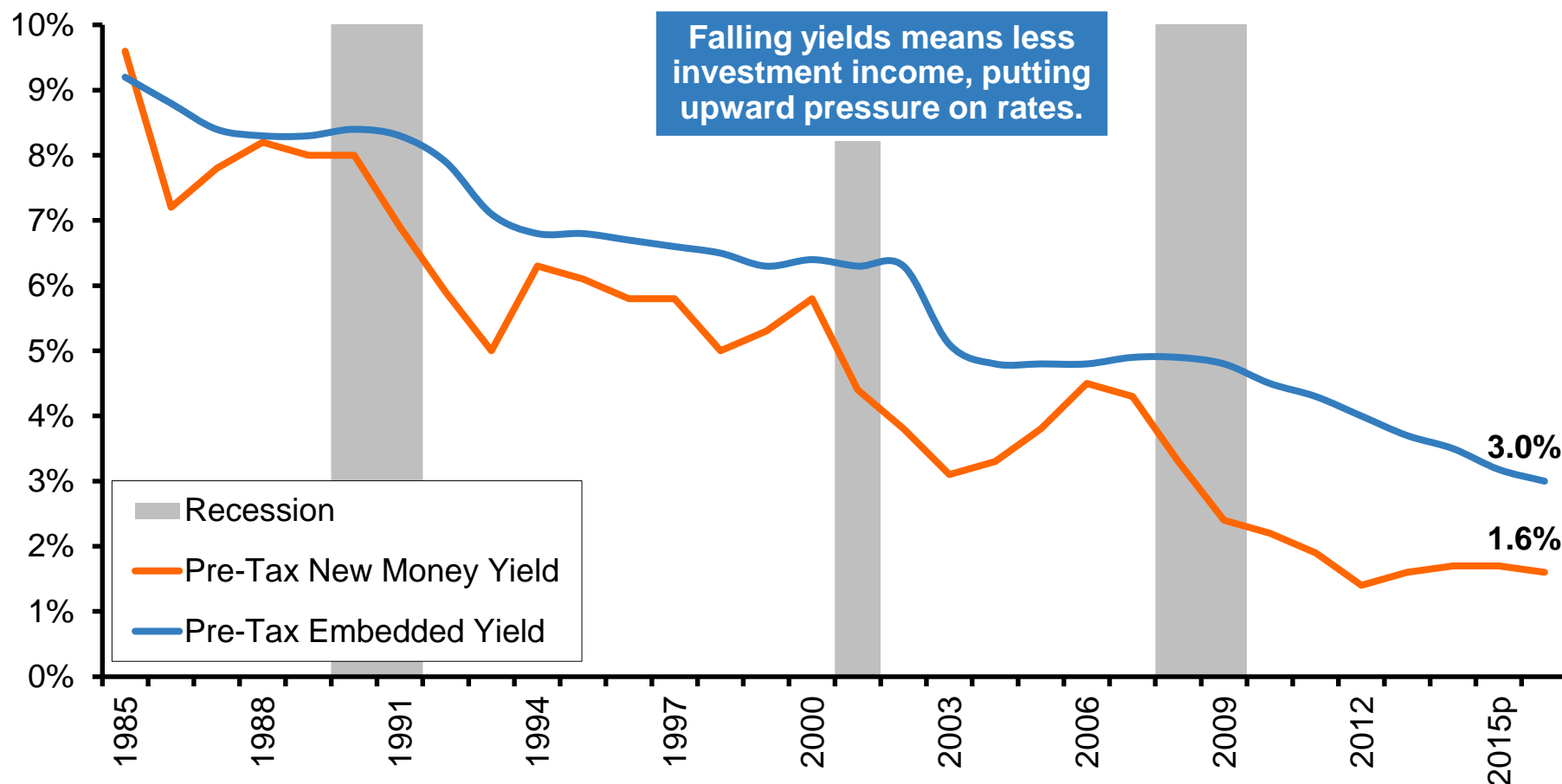| Quarter	Yield
2017:Q2	2.4
2017:Q3	2.6
2017:Q4	2.7
2018:Q1	2.8
2018:Q2	3.0
2018:Q3	3.1
2018:Q4	3.2

Virtually all of the 53 forecasts in the Blue Chip survey expect continual increases in the yield of long-term bonds in 2017-18.

Sources: Blue Chip Economic Indicators (6/10); CNBC.com (June 10 yield); Insurance Information Institute.

New Money vs. Embedded Yields, U.S. Insurers, 1985-2016

Falling yields means less investment income, putting upward pressure on rates.

Legend:
- Recession
- Pre-Tax New Money Yield
- Pre-Tax Embedded Yield

3.0%

1.6%

As long as new money rates are below the rates of maturing bonds, the portfolio yield will continue to sink.
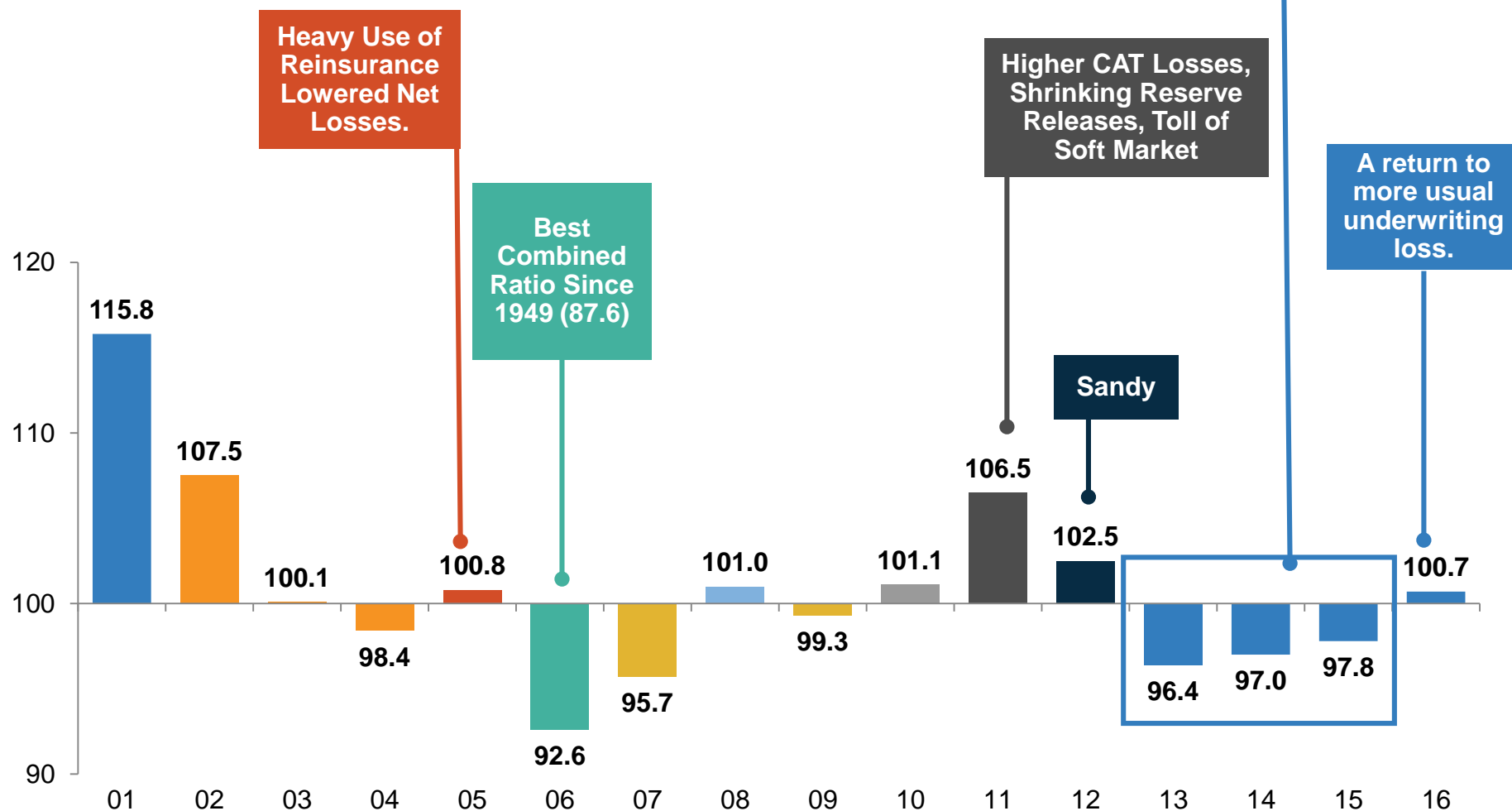
p: Preliminary

Sources: NCCI, ISO, a Verisk Analytics company, U.S. Treasury (5-year note as proxy for new money yield for 2016); Insurance Information Institute.

Underwriting Performance

P/C Insurance Industry Combined Ratio, 2001-2016*

3 Consecutive Years of U/W Profits; 1st time since 1971-73

Heavy Use of Reinsurance Lowered Net Losses.

Higher CAT Losses, Shrinking Reserve Releases, Toll of Soft Market

A return to more usual underwriting loss.

Best Combined Ratio Since 1949 (87.6)

Sandy

Year	Combined Ratio
01	115.8
02	107.5
03	100.1
04	98.4
05	100.8
06	92.6
07	95.7
08	101.0
09	99.3
10	101.1
11	106.5
12	102.5
13	96.4
14	97.0
15	97.8
16	100.7

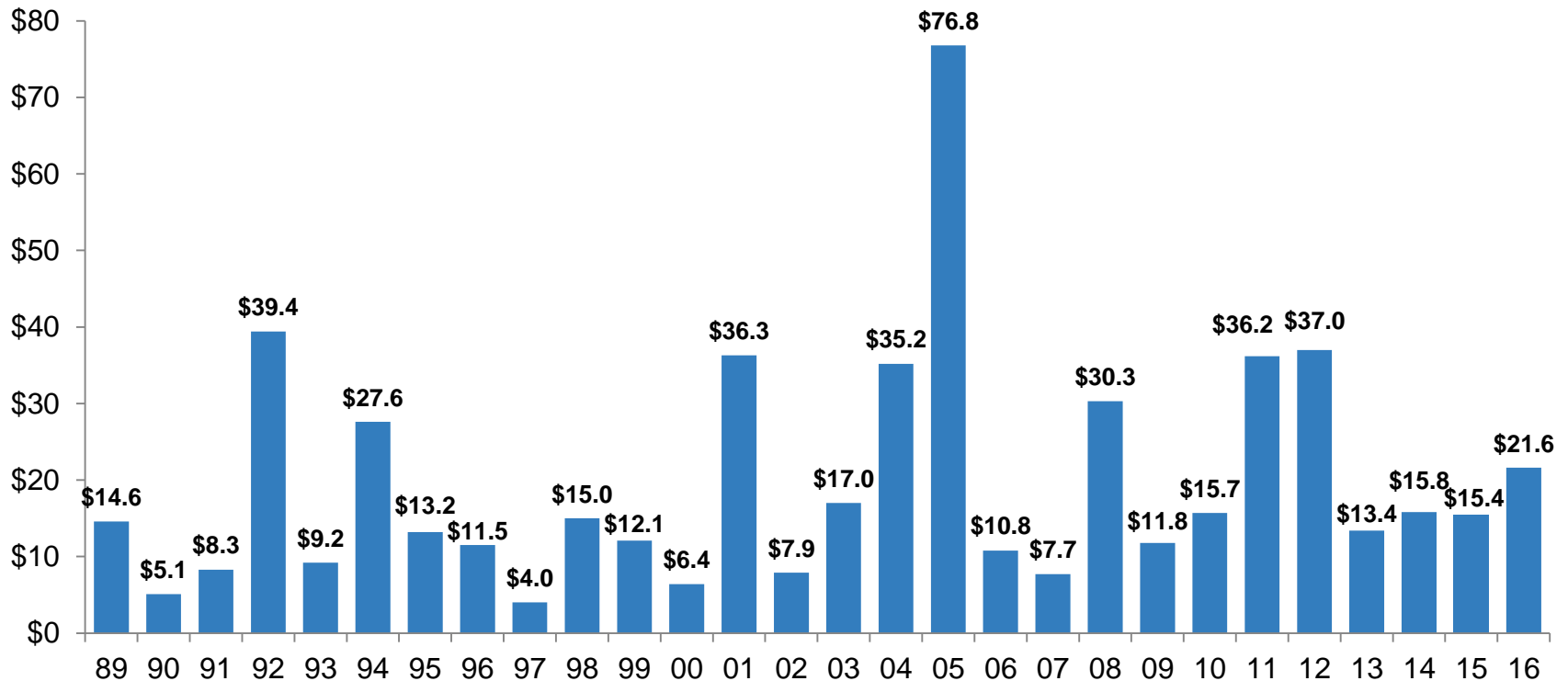*Excludes Mortgage & Financial Guaranty insurers 2008-2014.
Including M&FG, 2008=105.1, 2009=100.7, 2010=102.4, 2011=108.1; 2012:=103.2; 2013: = 96.1; 2014: = 97.0.
Sources: A.M. Best; ISO, a Verisk Analytics company; I.I.I.

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U.S. Insured Catastrophe Losses, 1989-2016

($ billions, 2016 dollars)

2013/14/15 Were Welcome Respites from 2011/12, Which Were Among the Costliest Years for Insured Disaster Losses in U.S. History. Longer-term Trend is for More – Not Fewer – Costly Events.
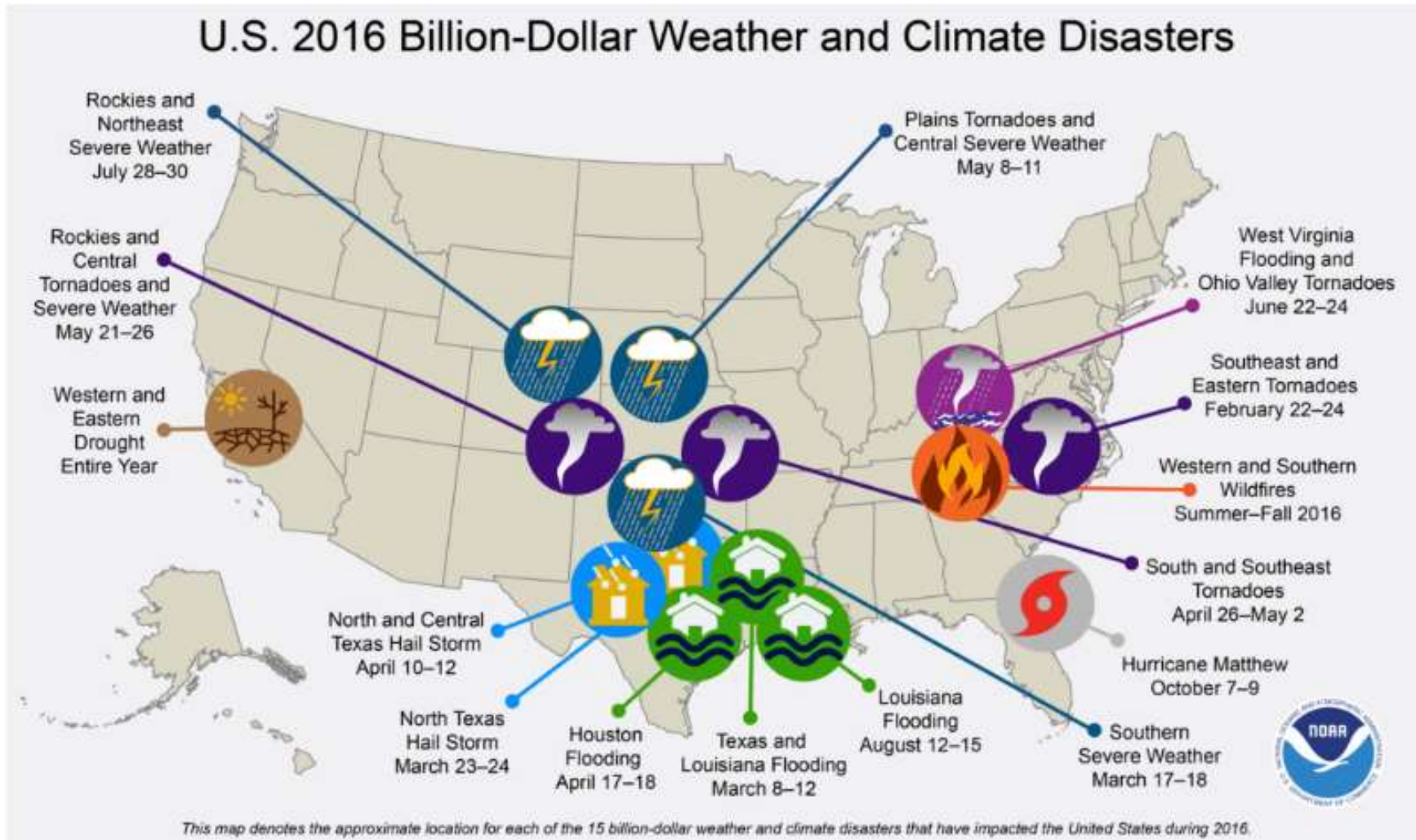
*2016 estimate is subject to change

Note: 2001 figure includes $20.3B for 9/11 losses reported through 12/31/01 ($25.9B 2011 dollars). Includes only business and personal property claims, business interruption and auto claims. Non-prop/BI losses = $12.2B ($15.6B in 2011 dollars).

Sources: Property Claims Service, a Verisk Analytics business; Insurance Information Institute.

Billion-Dollar Events

U.S. 2016 Billion-Dollar Weather and Climate Disasters

Rockies and Northeast Severe Weather July 28–30

Rockies and Central Tornadoes and Severe Weather May 21–26

Western and Eastern Drought Entire Year

North and Central Texas Hail Storm April 10–12

North Texas Hail Storm March 23–24

Houston Flooding April 17–18

Texas and Louisiana Flooding March 8–12

Louisiana Flooding August 12–15

Plains Tornadoes and Central Severe Weather May 8–11

West Virginia Flooding and Ohio Valley Tornadoes June 22–24

Southeast and Eastern Tornadoes February 22–24

Western and Southern Wildfires Summer–Fall 2016

South and Southeast Tornadoes April 26–May 2

Hurricane Matthew October 7–9

Southern Severe Weather March 17–18

This map denotes the approximate location for each of the 15 billion-dollar weather and climate disasters that have impacted the United States during 2016.

Events with economic costs greater than $1 billion.
SOURCE: National Oceanic and Atmospheric Administration.

Billion-Dollar Events

1980-2017 Year-to-Date United States Billion-Dollar Disaster Event Frequency (CPI-Adjusted)
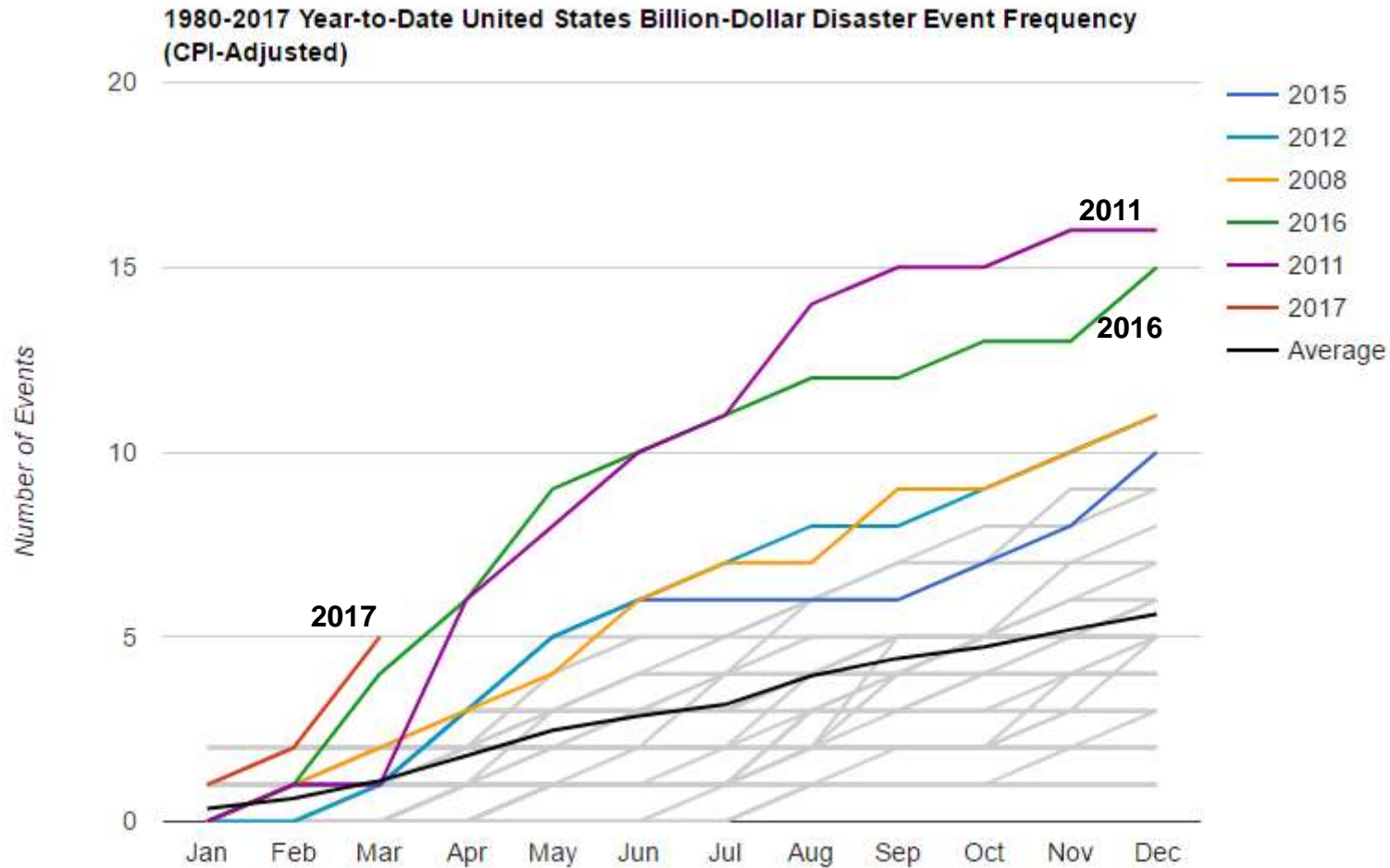
Event statistics are added according to the date on which they ended. Statistics valid as of April 6, 2017.

Events with economic losses greater than $1 billion, adjusted for inflation.
SOURCE: National Oceanic and Atmospheric Administration.

P/C Direct Written Premium by Line

(Billions of Dollars)

LOB	2015	2016	% Chg From Year Earlier	
Personal Auto	199.9	214.6		7.3%
Homeowners	93.3	95.7		2.5%
GL (incl Products)	65.7	66.9		1.9%
WC	57.6	58.5		1.6%
Fire & Allied Lines	42.2	40.6	-4.0%	
CMP	39.7	39.9		0.6%
Comm Auto	31.3	33.1		5.5%
Other	61.9	63.0		1.8%
Total	**591.8**	**612.3**		**3.5%**

Auto Premiums Rising; Property Falling.

Sources: NAIC Data, sourced from S&P Global Market Intelligence, Insurance Information Institute.

P/C Direct Incurred LR by Line

(Billions of Dollars)

LOB	2015	2016	Pt Chg From Year Earlier
Personal Auto	68%	73%	4
Homeowners	50%	53%	3
GL (incl Products)	56%	60%	4
WC	57%	55%	(3)
Fire & Allied Lines	46%	54%	8
CMP	45%	51%	6
Comm Auto	66%	69%	3
Other	43%	46%	3
Total	**57%**	**60%**	4

Auto Costs, Cats Drive Loss Ratios Higher.

Sources: NAIC Data, sourced from S&P Global Market Intelligence, Insurance Information Institute.

Commercial Lines Rates

Rate Changes

Rates Soft/Flat, Especially in Reinsurance

U.S. Commercial Thru Q4 2016
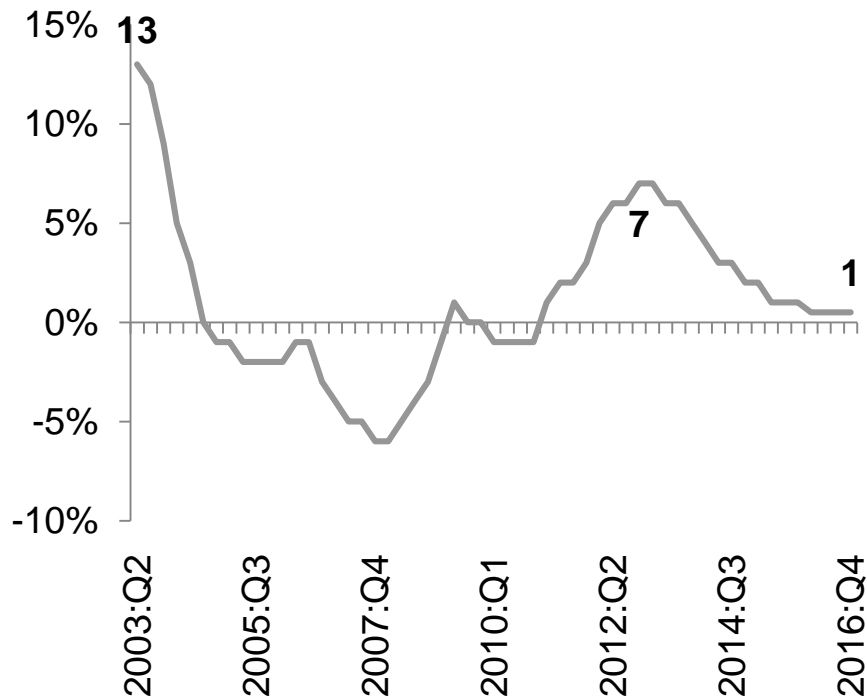
Global Reinsurance January Renewals
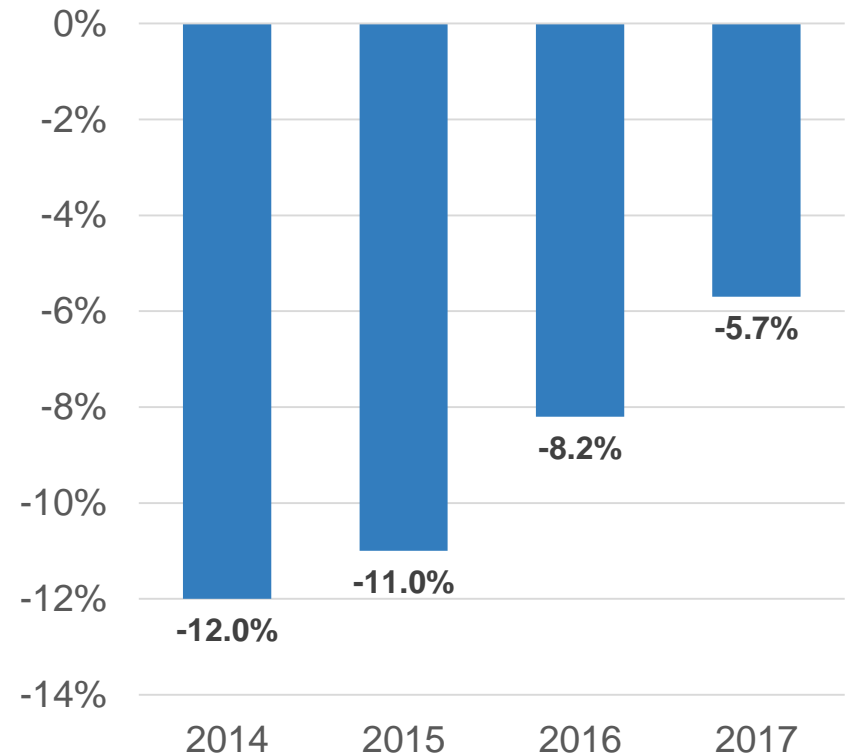
Sources: Willis Towers Watson Commercial Lines Insurance Pricing Survey, Marsh Insurance Market Index, Q4 2016, Insurance Information Institute.

Rate Changes by LOB Thru Q4 2016

Slight Softening, Though Local Markets Vary

U.S. Casualty — chart showing quarterly rate changes Q1 2012 through Q4 2016, ending at **-2.1%**

U.S. Property — chart showing quarterly rate changes Q1 2012 through Q4 2016, ending at **-4.8%**
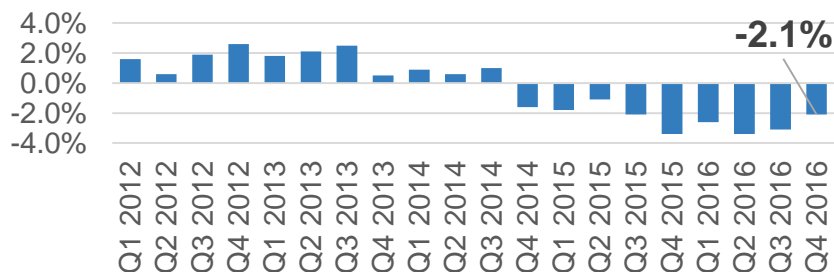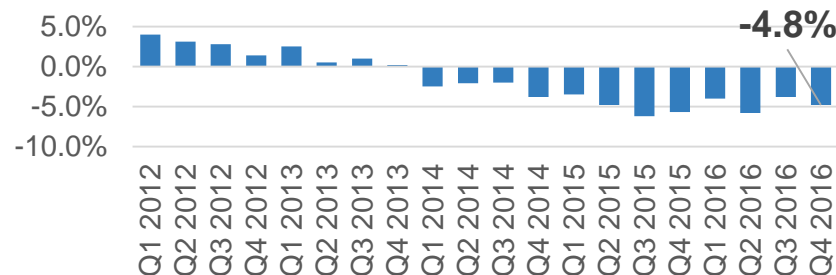
U.S. Financial and Prof Liab — chart showing quarterly rate changes Q1 2012 through Q4 2016, ending at **-2.5%**

U.S. Cyber — chart showing quarterly rate changes Q1 2012 through Q4 2016, peak **20.0%**, ending at **1.4%**

Commercial Rates (Pacific NW), Q1 2017

By Account Size

	Down > 10%	Down 1-10%	No Change	Up 1-10%	Up > 10%
Small (<25K)	0%	38%	38%	15%	0%
Medium (25-100K)	0%	36%	43%	14%	0%
Large (100K+)	15%	46%	23%	8%	0%

By Line of Business

	Down > 10%	Down 1-10%	No Change	Up 1-10%	Up > 10%
Commercial Auto	0%	7%	14%	43%	29%
Commercial Property	0%	50%	36%	14%	0%
Cyber	7%	43%	43%	7%	0%
D&O	0%	15%	62%	8%	8%
General Liability	0%	36%	64%	0%	0%
Terrorism	0%	0%	77%	0%	0%
Umbrella	0%	14%	57%	14%	7%
Workers Compensation	0%	43%	50%	7%	0%

Rate Changes Can Vary Significantly Within States, Lines of Business or Individual Markets.

SOURCE: Council of Insurance Agents & Brokers, Insurance Information Institute.

Politics

Divisions Make Progress Difficult

Disruption is Everywhere

Catastrophes – Increases in frequency and severity

Natural Catastrophes

Climate Change

Wild Fire

Earthquake

Water

Disruption is Everywhere

Catastrophes – Increases in frequency and severity

Man-Made Catastrophes

Cyber

Autos
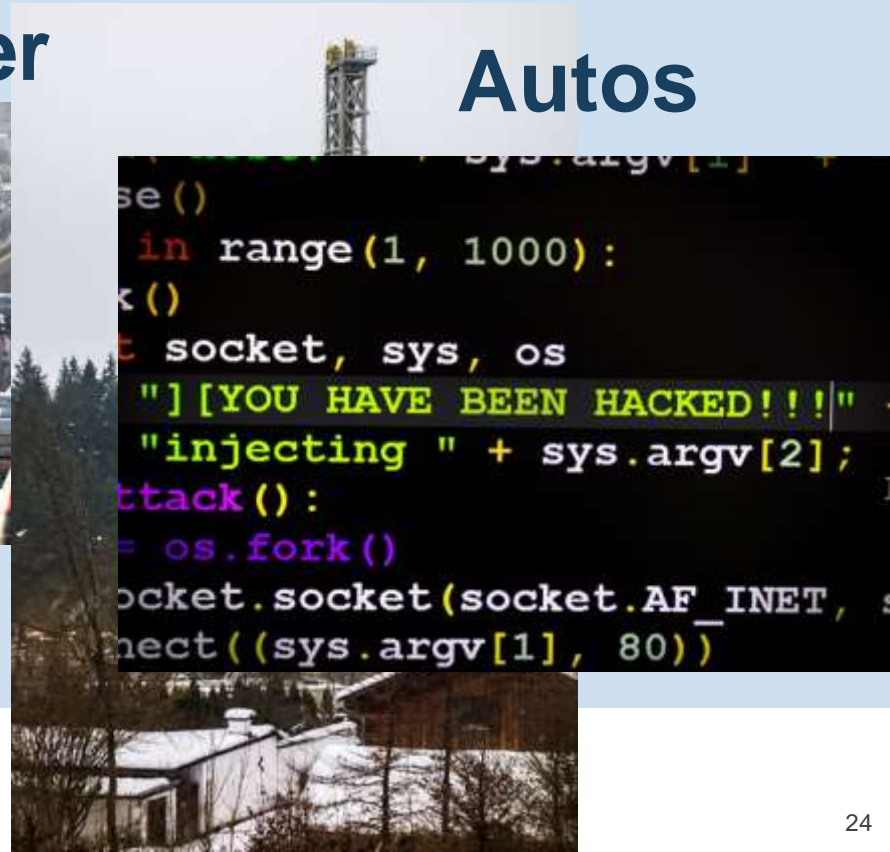
Globalization → **Geopolitical Polarization**

Rise of Nationalism | **Regional Tensions** | **Global Trends Impacting Domestic Market**

Regulatory Trends

"Conduct of Business"

Capital/Solvency

Dodd-Frank

* Mainland purchases of insurance and related investment policies in the nine months ended September 2016 surged to a record high.

Economic Uncertainty

Global Growth...

*Since **2008** we've had the **longest period of relative trade stagnation** since **World War II**...

US Growth...

GDP
1.6

Investment Growth

...Monetary vs. Fiscal Policy

- **Monetary:** Low interest rates mean insurers are struggling to meet interest rate guarantees for life insurance and annuities must diversify their investment portfolios

- **Fiscal:** Supply-side debate heating up, i.e., tax reform

The Trust Gap

Largest Gaps

🇺🇸 21 pts

🇬🇧 19 pts

🇫🇷 18 pts

Informed Public

12pt Gap

15pt Gap

A 3-point increase in the last year

Mass Population

60 ——— 60

48 ——— 45

2016   2017
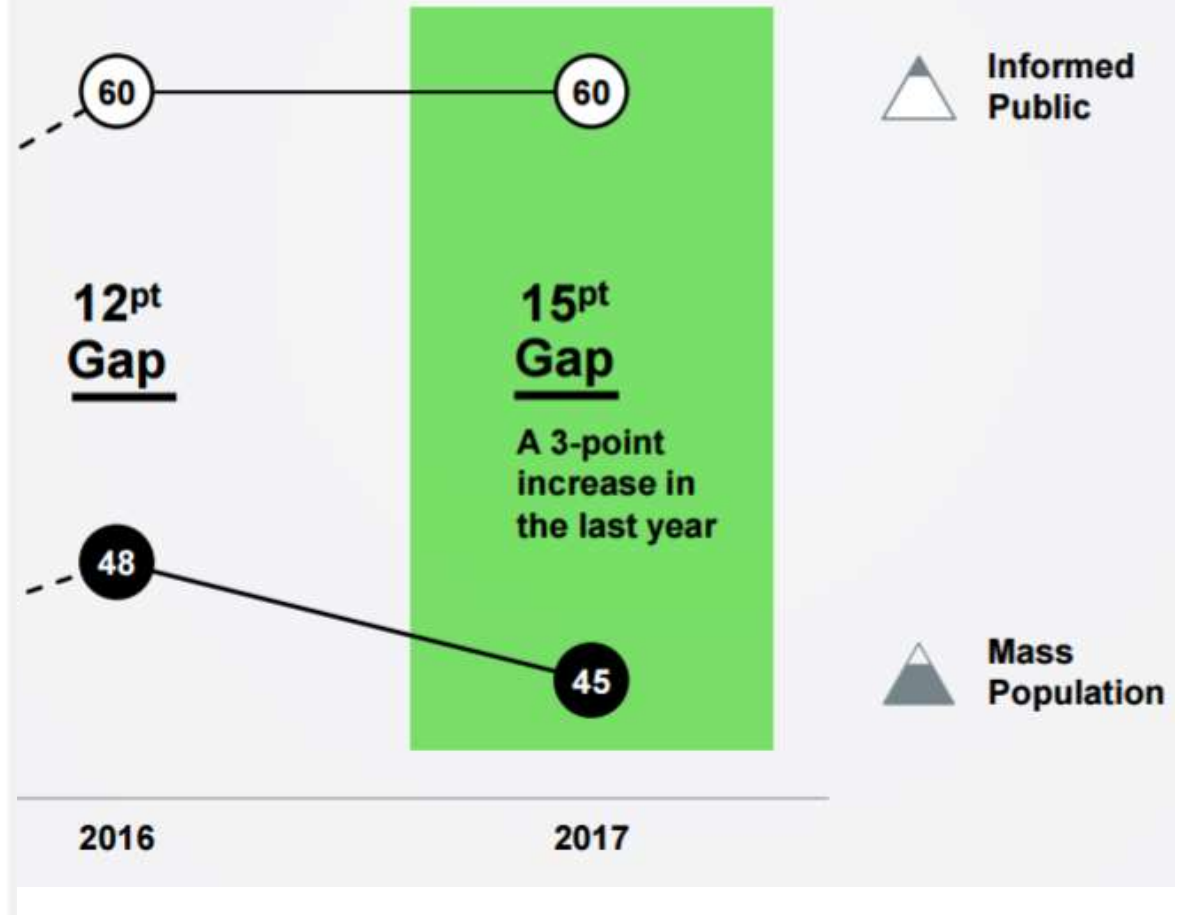
Average of trust in Government, NGOs, Media and Business.
SOURCE: Edelman Trust Barometer, 2017

Stagnation's Toll

Cumul Chg in Real Avg Income
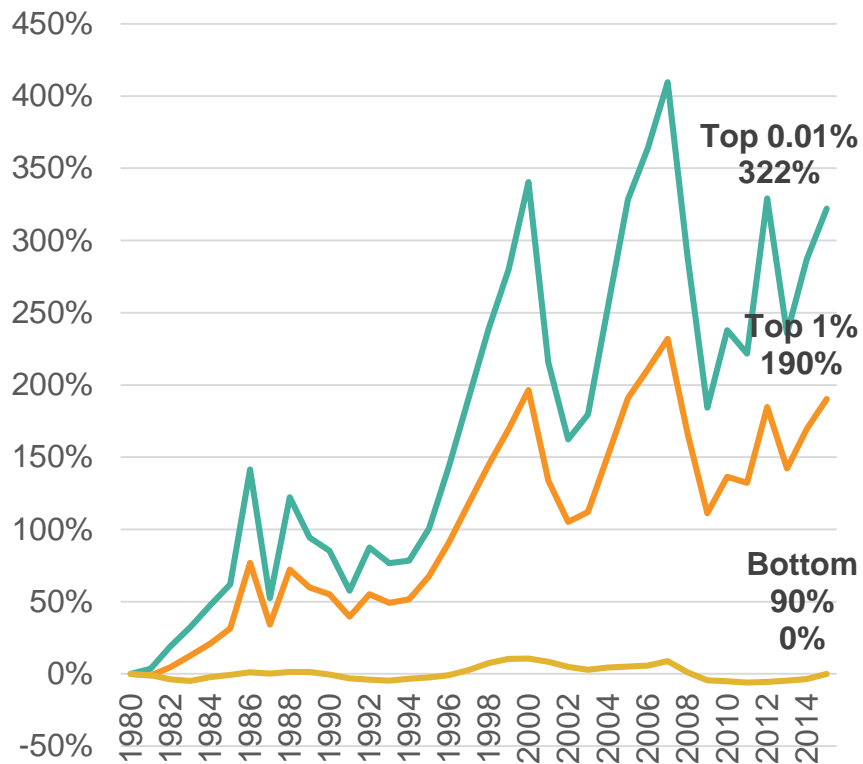
Death Rates, 45-64
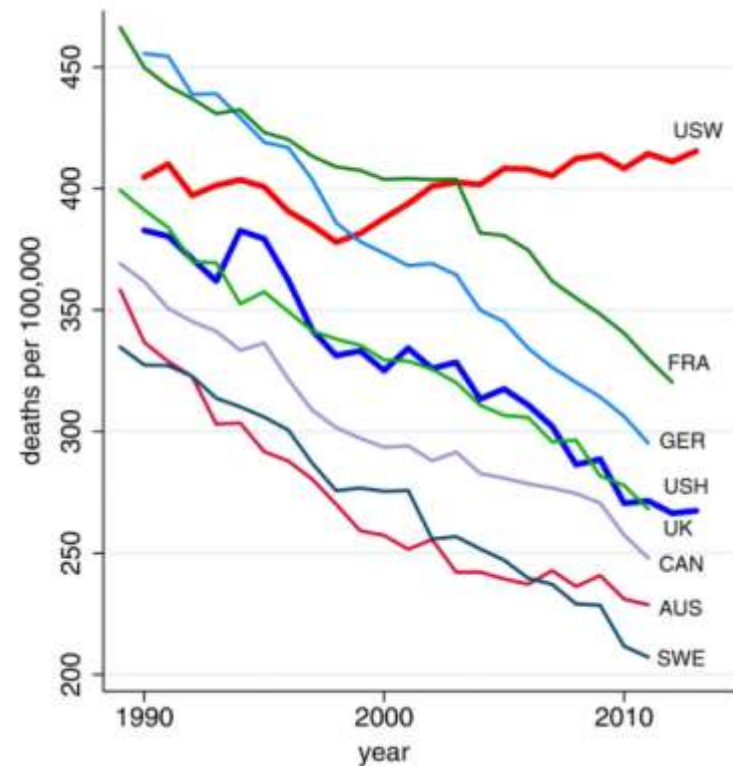
Geopolitics – US
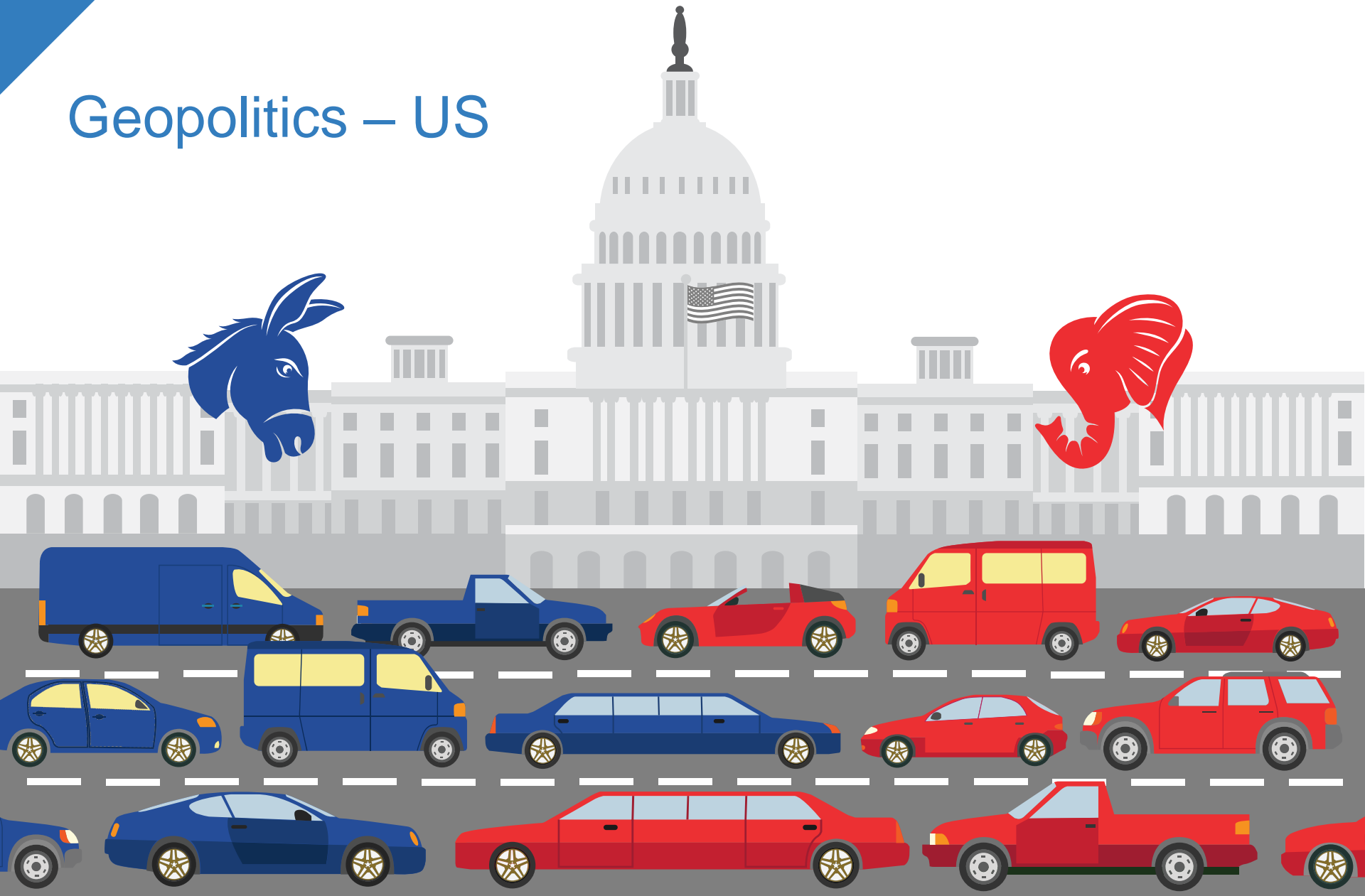
The 'Bully Pulpit' Evolution

Trump has potential to change the game…

@USTreasSec where is #TaxReform? Get R done!

@USAG #Waterboarding will #MakeAmericaGreat!

P/C Insurance Industry ROE by Presidential Party Affiliation

1950-2016*

BLUE = Democratic President   **RED = Republican President**
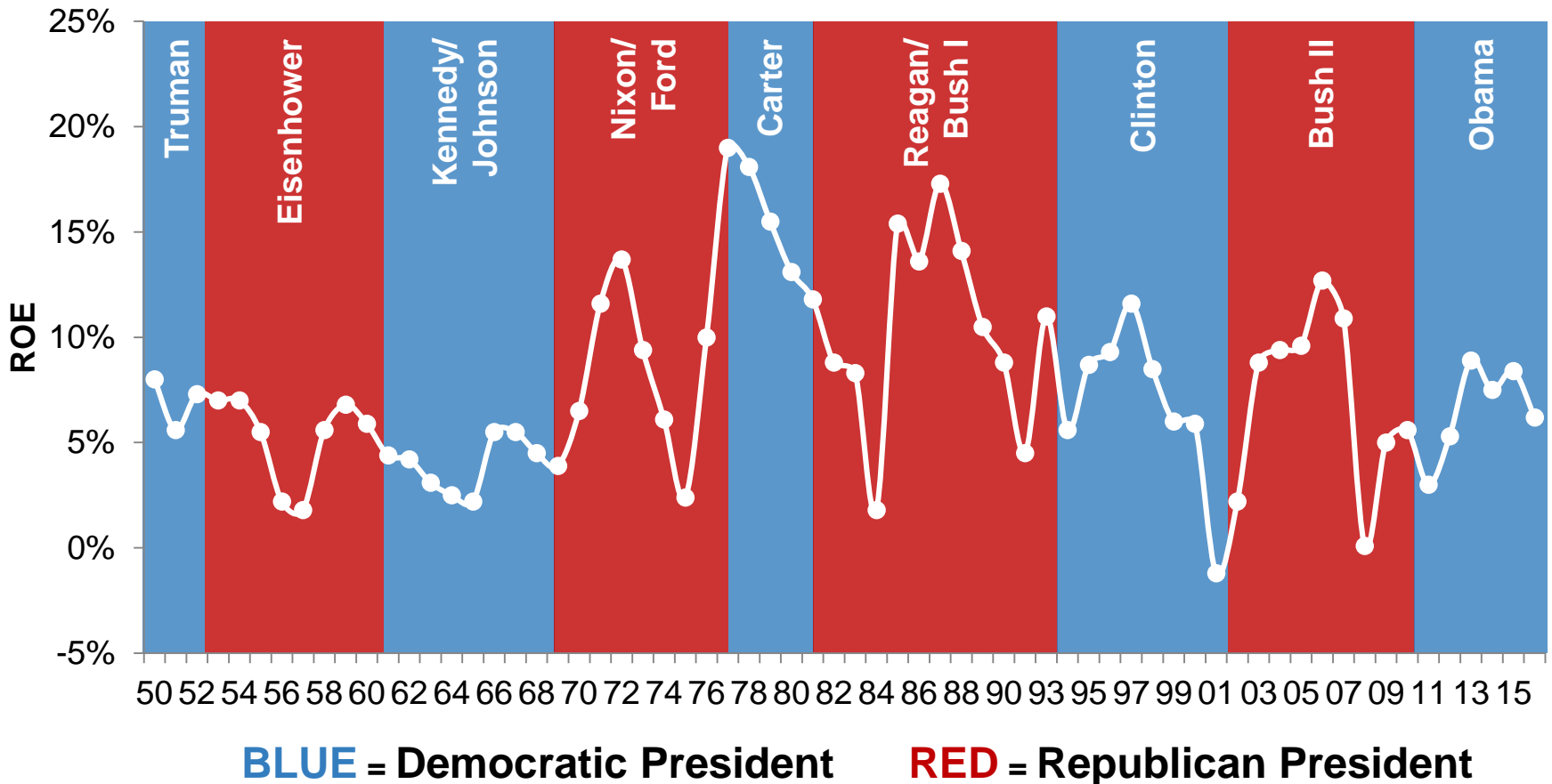
*2016 data is through Q3.
Source: Insurance Information Institute

Federal and State Issues

Affordable Care Act

Going …. Going ….. Maybe Not Going Anywhere

But State Politics Drives Insurance
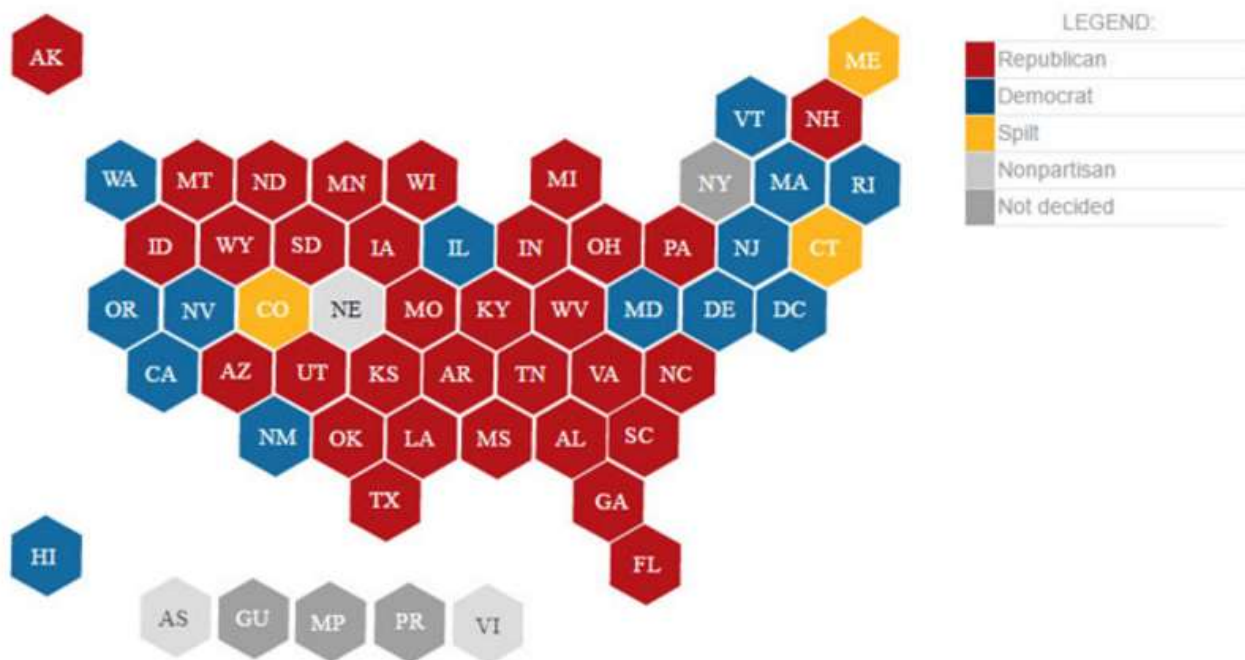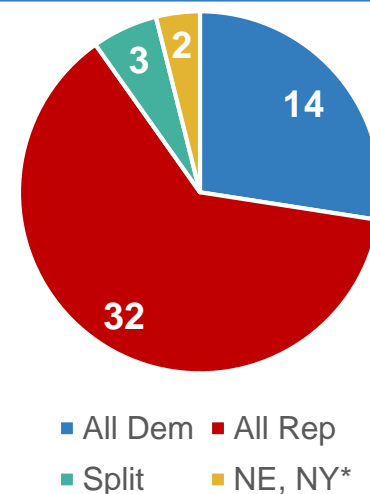## And Every State is Different
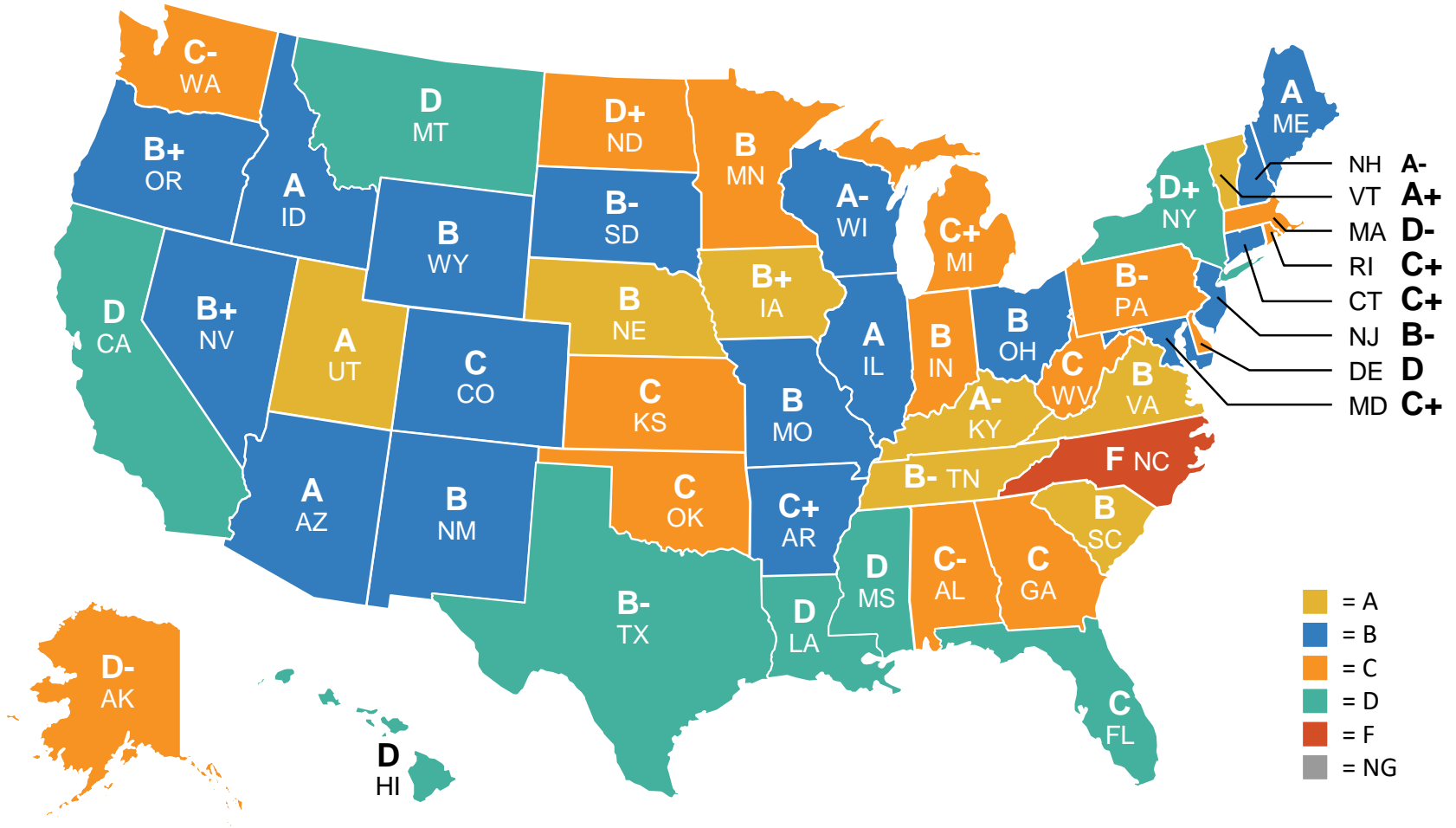
Source: R Street Insurance Regulation Report Card, December 2016

Republicans Control Most States . . .

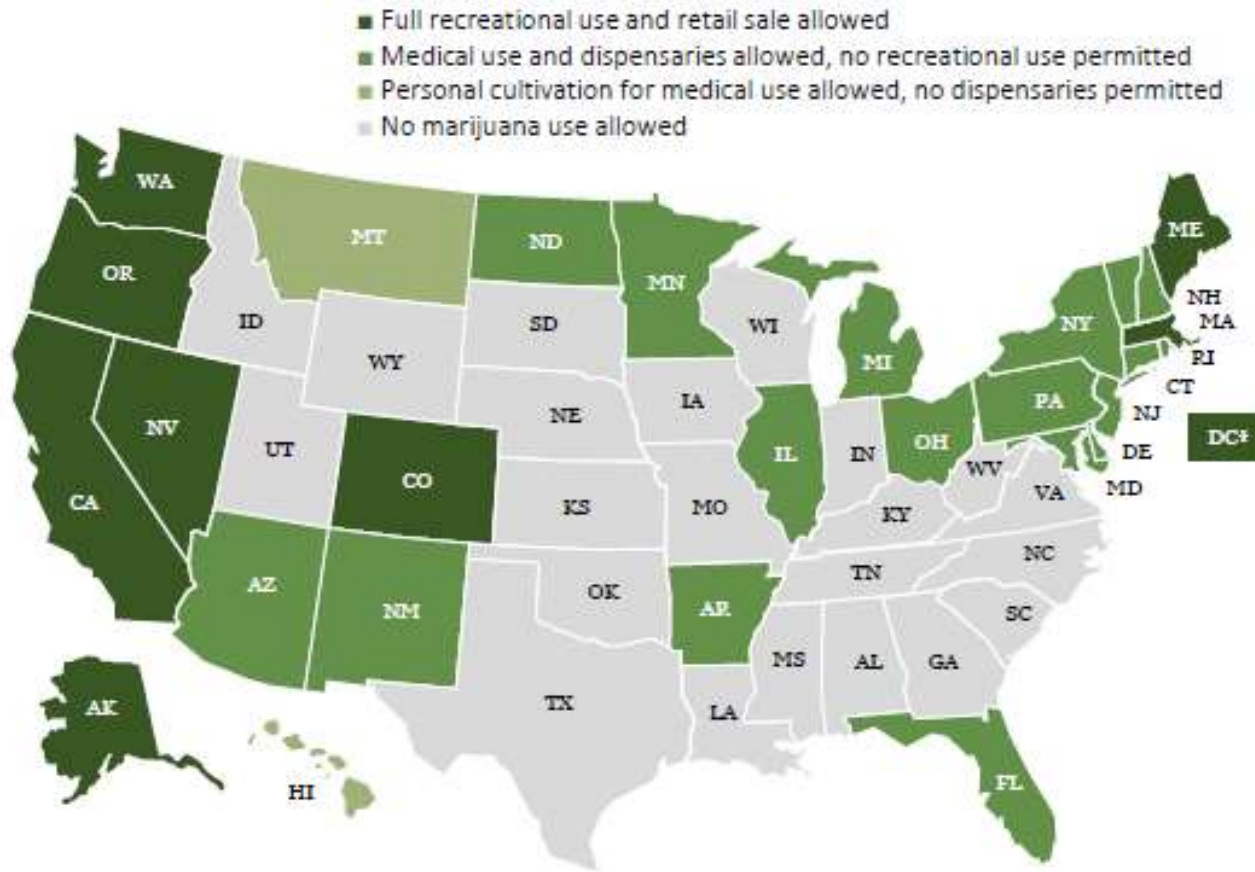## In The November Election They Lost One Legislature Overall

LEGEND:
- Republican
- Democrat
- Split
- Nonpartisan
- Not decided

Makeup Today

All Dem: 14
All Rep: 32
Split: 3
NE, NY*: 2

- All Dem
- All Rep
- Split
- NE, NY*

Seven chambers flipped control after the November 2016 elections.

Medical Marijuana

Comp Caught in the Middle

- ■ Full recreational use and retail sale allowed
- ■ Medical use and dispensaries allowed, no recreational use permitted
- ■ Personal cultivation for medical use allowed, no dispensaries permitted
- ■ No marijuana use allowed

Congressional Cannabis Caucus

Rohrbacher (CA)

Bluemenauer (OR)

Young (AK)

Polis (CO)

Medical Marijuana
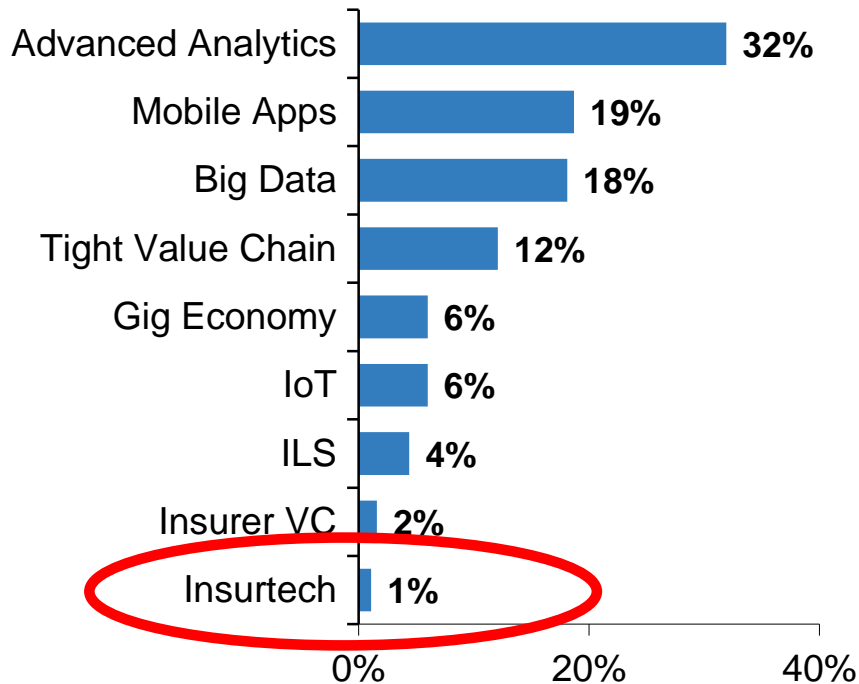## Comp Caught in the Middle

Opioid Alternative?
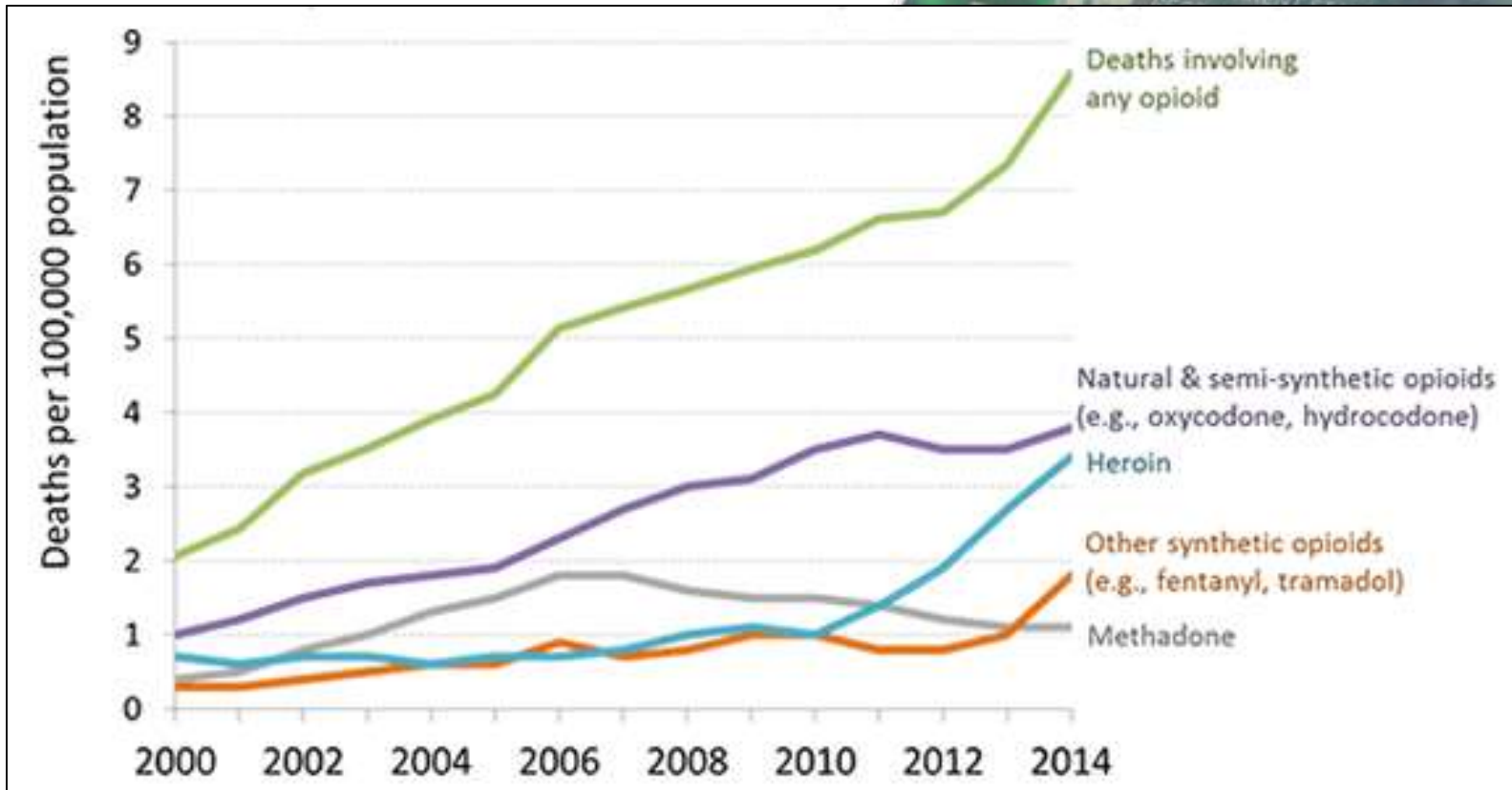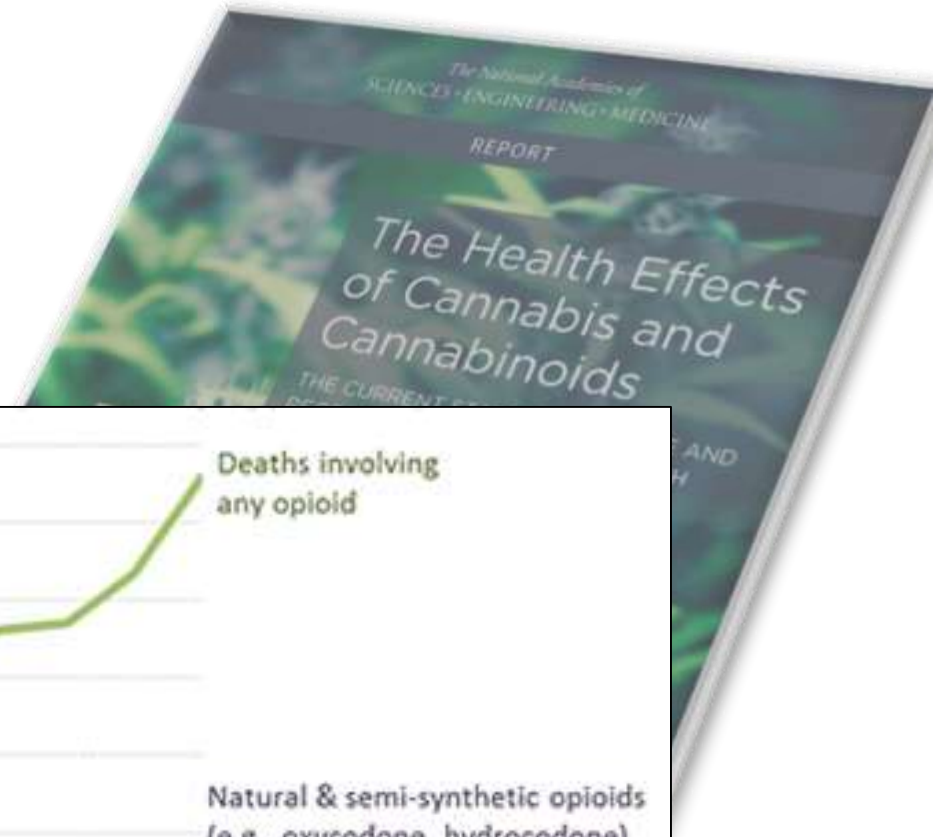
On the Horizon

Sharing Economy and Disruption

Greatest Threats, Opportunities
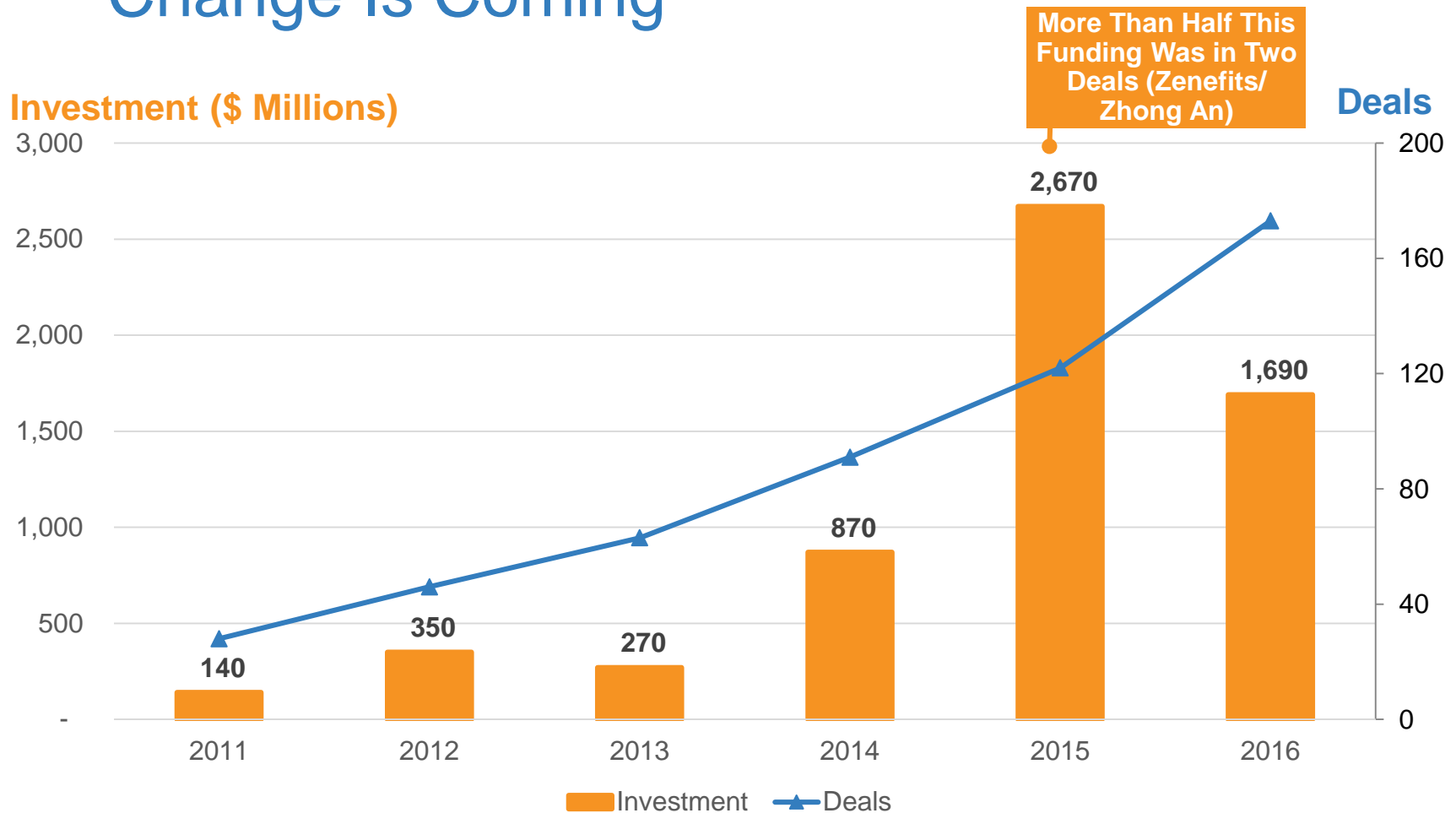
Whither Silicon Valley?

Greatest Opportunity	Greatest Threat

Greatest Opportunity

- Advanced Analytics — **32%**
- Mobile Apps — **19%**
- Big Data — **18%**
- Tight Value Chain — **12%**
- Gig Economy — **6%**
- IoT — **6%**
- ILS — **4%**
- Insurer VC — **2%**
- Insurtech — **1%**

0% 20% 40%

Greatest Threat

- Insurtech — **17%**
- Mobile Apps — **16%**
- Tight Value Chain — **14%**
- ILS — **12%**
- Big Data — **10%**
- Advanced Analytics — **9%**
- Insurer VC — **8%**
- Gig Economy — **8%**
- IoT — **6%**

0% 20%
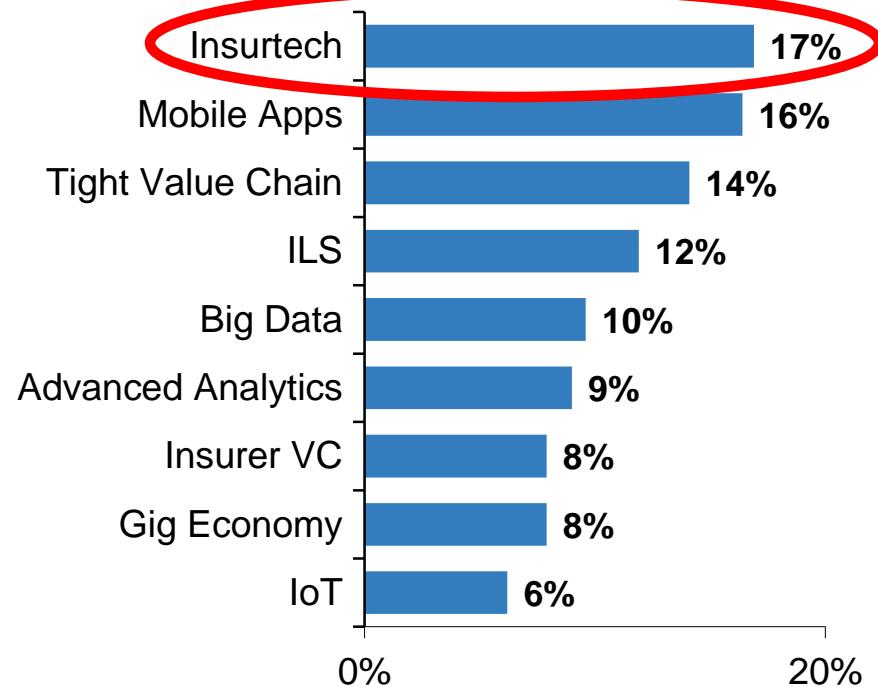
Insurance Technology Financing – Change Is Coming

Investment ($ Millions)

Deals

More Than Half This Funding Was in Two Deals (Zenefits/ Zhong An)

Year	Investment
2011	140
2012	350
2013	270
2014	870
2015	2,670
2016	1,690

Investment ● Deals

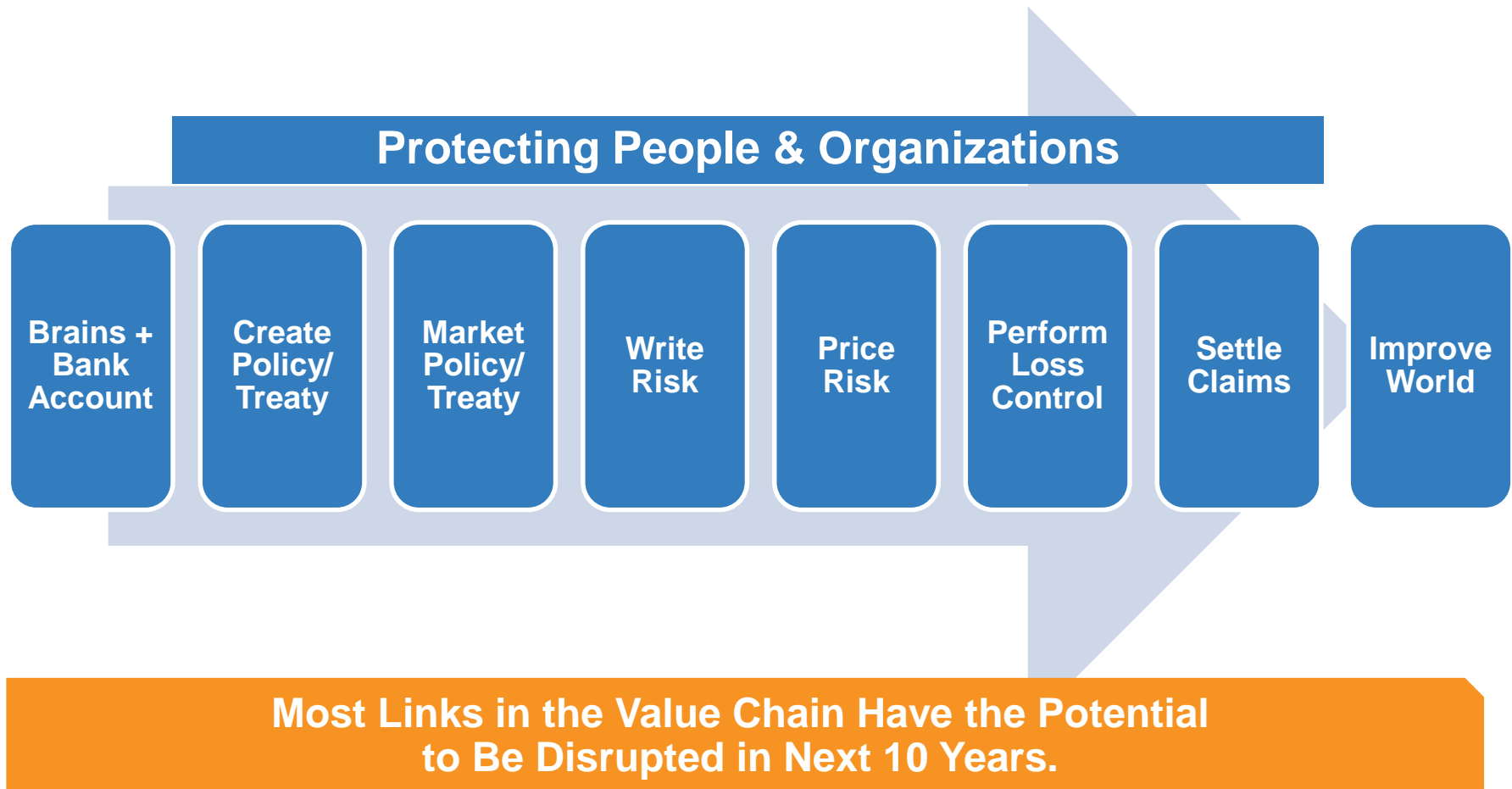**Investment In Insurance Tech Is Rising. Number of Deals Set A Record Last Year.**

SOURCES: CB Insights, Insurance Information Institute.

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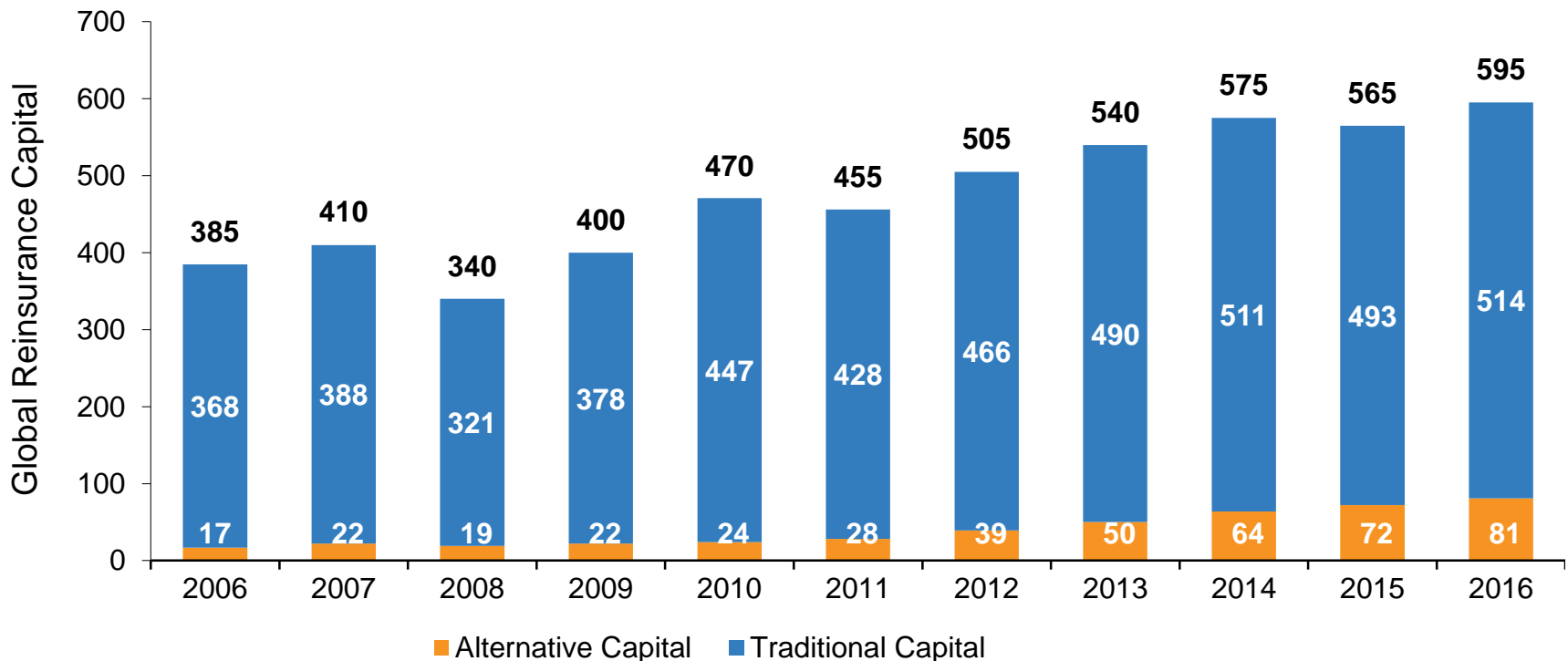# The (Re)Insurance Value Chain

Where Could Disruption Lie?

Protecting People & Organizations

| Brains + Bank Account | Create Policy/ Treaty | Market Policy/ Treaty | Write Risk | Price Risk | Perform Loss Control | Settle Claims | Improve World |

Most Links in the Value Chain Have the Potential to Be Disrupted in Next 10 Years.

Alternative Capital
Potentially Disrupting the Bank Account

(Billions of USD)

Alternative capacity has grown 350% since 2006. It has more than tripled in the past six years.

Source: Aon Benfield Analytics; Insurance Information Institute.

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The Internet

Will It Disrupt Marketing?

- ◢ **Lead Generators**
  - ◆ InsWeb, NetQuote, Insurance.com
  - ◆ Site allows comparison shopping, sells lead to insurer
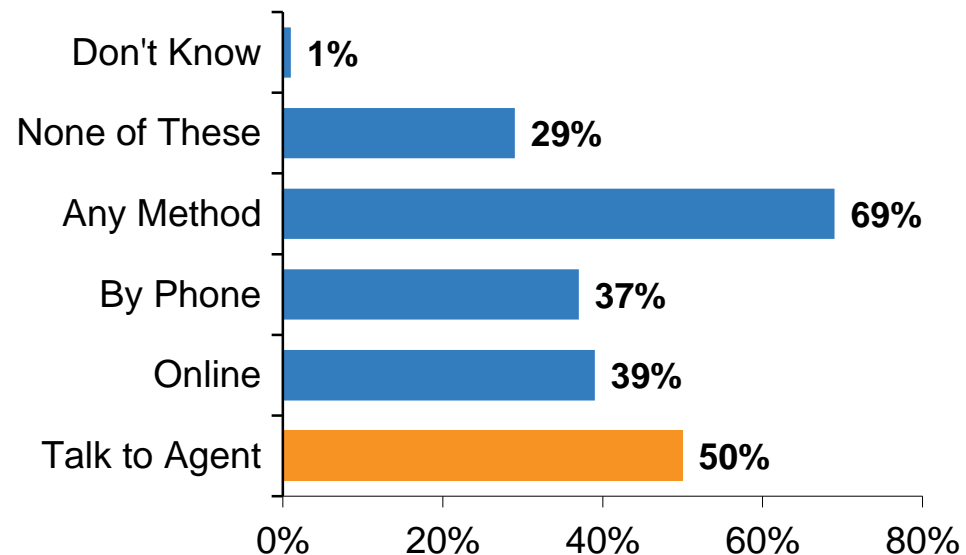
- ◢ **Call Center Agencies**
  - ◆ SelectQuote, Goji
  - ◆ Call center employs agents

- ◢ **Digital agencies**
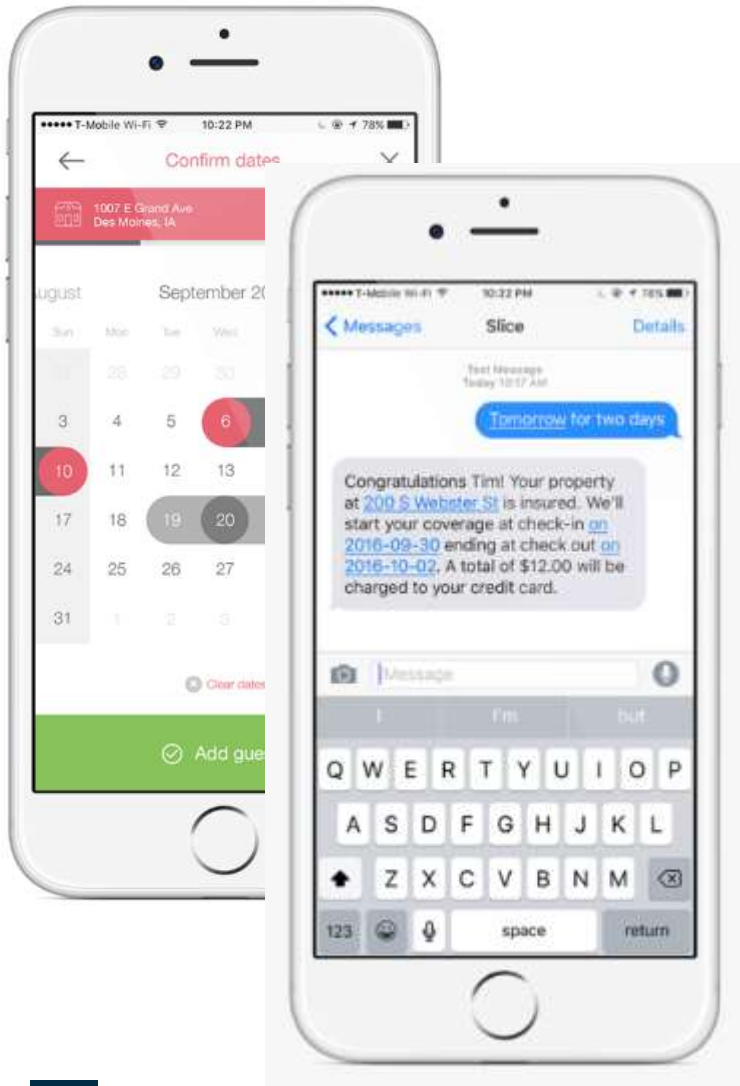 - ◆ Esurance, Policy Genius
  - ◆ Quote and buy online

But Customers Still Like Agents

- ◢ **Did You Compare Prices When Your Auto Policy Was Up for Renewal?**

Category	Value
Don't Know	1%
None of These	29%
Any Method	69%
By Phone	37%
Online	39%
Talk to Agent	50%

0% 20% 40% 60% 80%

Pricing Disruptor: The Fragmented Risk

One-Day Auto Insurance

Pre-register | Buy | Pay

こんな心配ありませんか？

そんなときは
運転するときだけ加入できる便利で安心な
1日500円からの自動車保険

Premium is added on the monthly mobile phone bill

Read
QR Code
(agency code
embedded)

Register
• Name
• Birthday
• Address
• e-mail address
• Driver's License No.
• License expiry date

Input
• License plate No.
• Date of driving

Loss Control Disruptor

The Internet of Things

Telematics Today

Telematics Tomorrow

Claims Disruptor

Artificial Intelligence + Behavioral Economics

Lemonade

It's Not Our Money!!

- Expenses 20%
- Reinsurance 20%
- 'Rainy Day Fund' 20%
- Subject to Giveback 40%
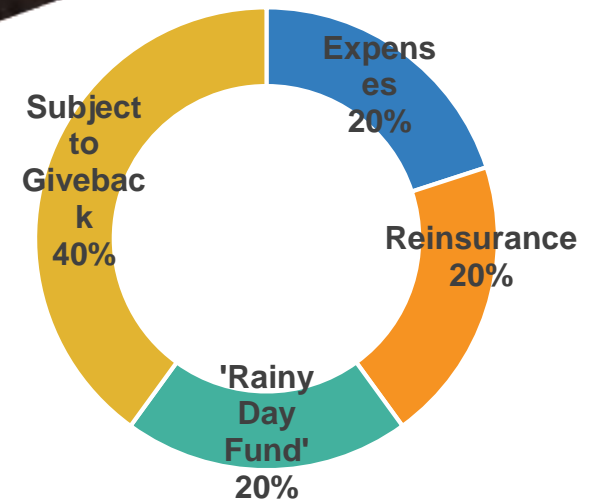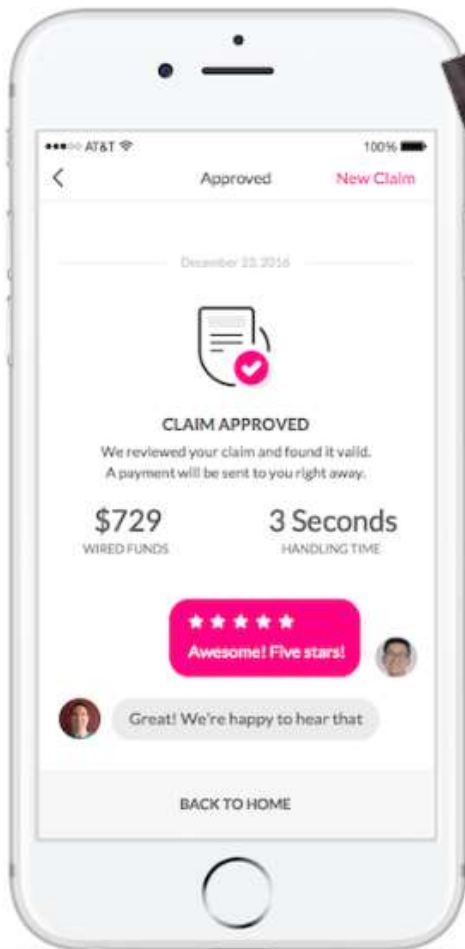
Peer-to-Peer (P2P) Insurance
Taking on the _Entire_ Value Chain

A Typical P2P Model

- Resembles Mutuals/Reciprocals

- People Join Small Group of Friends to Prefund Deductible or Bear Other Small Risk.

- Leftover Deductible $$ Rolled Forward.

- May Deter Fraud – You Wouldn't Cheat Your Friends!

Source: "UberX-ing Insurance : Is Peer-to-Peer Insurance Viable?", presentation by Jay Sarzen, Aite Group at Drinker Biddle Insurance Conference, June 21, 2016.

Lemonade

The world's first Peer to Peer insurance carrier
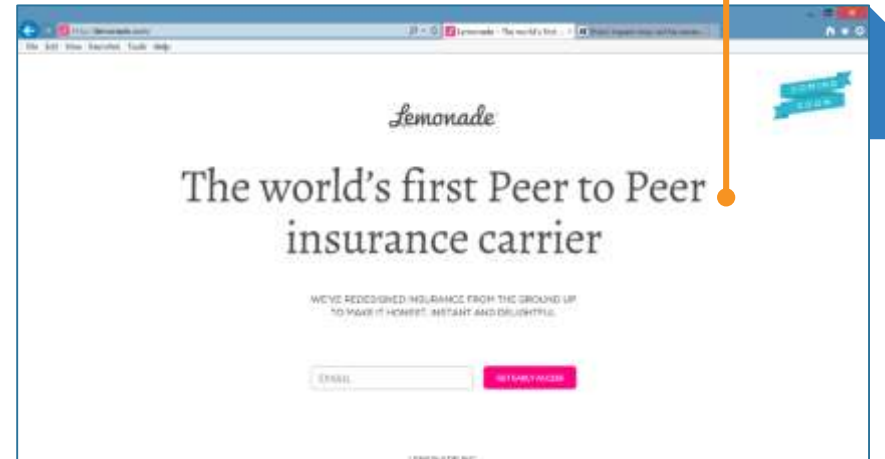
CEO Daniel Schreiber

- Our Chief Behavioral Officer, Professor Dan Ariely, says that "If you tried to create a system to bring out the worst in humans, it would look a lot like the insurance of today."

Summary

◢ Higher catastrophe losses caused industry profits to deteriorate.

◢ Low interest rates continue to dog industry results.

◢ Commercial rates may be softening.

◢ Political leaders face a complex, disruptive environment.

INSURANCE INFORMATION INSTITUTE

Thank you for your time and your attention!

Read our auto [White Paper](link) on Rising Personal Auto Costs at www.iii.org