

POWER & COMMUNICATION CONTRACTORS ASSOCIATION



2019-2020 Economic Overview

Power & Communication Contractors Association (PCCA)
Annual Meeting
Park City, UT
Mark Bridgers - Continuum Capital
July 12, 2019

Overall Economic Summary

- ▶ The economic miracle continues...10+ years of economic expansion...while nearly everything is still good news, there are some areas of concern
 - Excitement and optimism abound for general economy and construction industry...consumer confidence has flattened and is still near a 17 year high
 - U.S. GDP growth continues, even with some government shutdown, tariffs, and slow global growth with 3.1% for 1st Q 2019; Full year growth still expected at 2.5%
 - Global growth is slumping with the US/China tariff hurting expectations
 - Low energy prices persist, even with the movement of oil up...natural gas will remain low
 - \$1.2 trillion in construction spending in 2017 both 2018 and 2019 forecast at slightly higher level
- ▶ 2019 & 2020 – Political environment in Washington is toxic, there is very little collaboration and very little legislation will be passed?
- ▶ 2019 & Beyond??
 - 10+ years into economic expansion, all expansions end with a recession, when?
 - 2019 will show stable economic growth, improving conditions, and continued optimism...how deep into 2019 or early 2020 is the question?
 - Short and shallow recession in early 2020 followed by return to faster economic growth

Utility Industry Perceptions

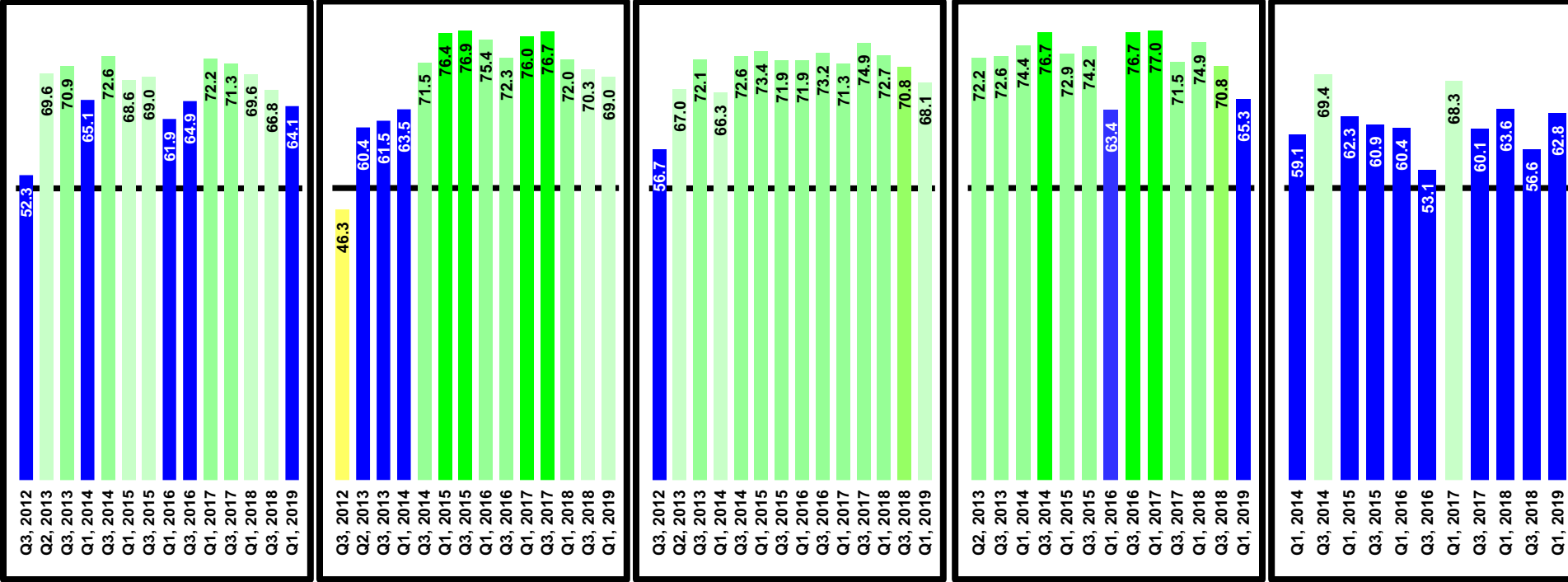
All Contractors

Telecom

Electric Dist.

Gas Dist.

Water & Sewer



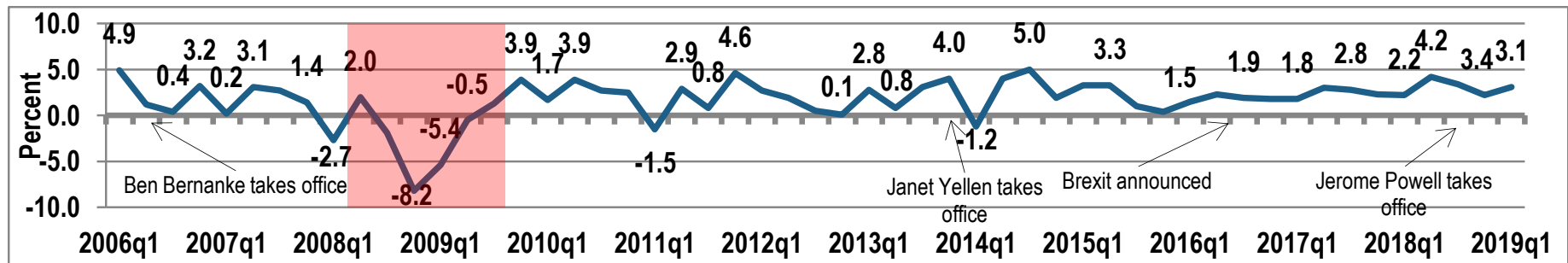
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 > 50 Indicates Growth (Better)
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Interpretation: A reduction from 72.6 down to 61.9 for All Utility Contractors indicates that while perceptions of the market are still positive, they are less positive than they were prior to 2015.

Source: Proprietary Continuum analysis of utility contractor perceptions over 2012-2019.

Gross Domestic Product (GDP)

- ▶ 2019 1st Q GDP at 3.1% and was surprising given short government shutdown, tariffs, and slow global growth...2019 anticipated at 2.6%
- ▶ Consumer confidence has flattened and is still high and near 1999 peak
- ▶ All expansions end the same way however...in recession...which we still predict as a short and shallow in 2020.



“I think it's a myth that expansions die of old age... So the fact that this has been quite a long expansion doesn't lead me to believe that... its days are numbered.” Janet Yellen

Source: xxx.

China Tariffs

- ▶ **Tariff Application Rounds**
 - Round 1: July 6, 2018 – Application of 25% tariff on approximately \$34 billion of imported items
 - Round 2: August 23, 2018 – Application of 25% tariff on approximately \$16 billion of imported items (additional items beyond those subject to the July 6, 2018 tariffs)
 - Round 3: September 24, 2018 – Application of 10% tariff on approximately \$200 billion of imported items (additional items beyond those subject to the July 6, 2018 and August 23, 2018 tariffs)
 - Round 4: May 10, 2019 – September 24, 2018 tariffs increased from 10% to 25%
 - Proposed Round 5: TBD – Application of 25% tariff on approximately \$300 billion of imported items that currently subject to tariffs
- ▶ **Recent G20 Trade Conference, US and China agreed to restart talks and Trump agreed to delay the implementation of the Proposed Round 5 tariffs**

Huawei

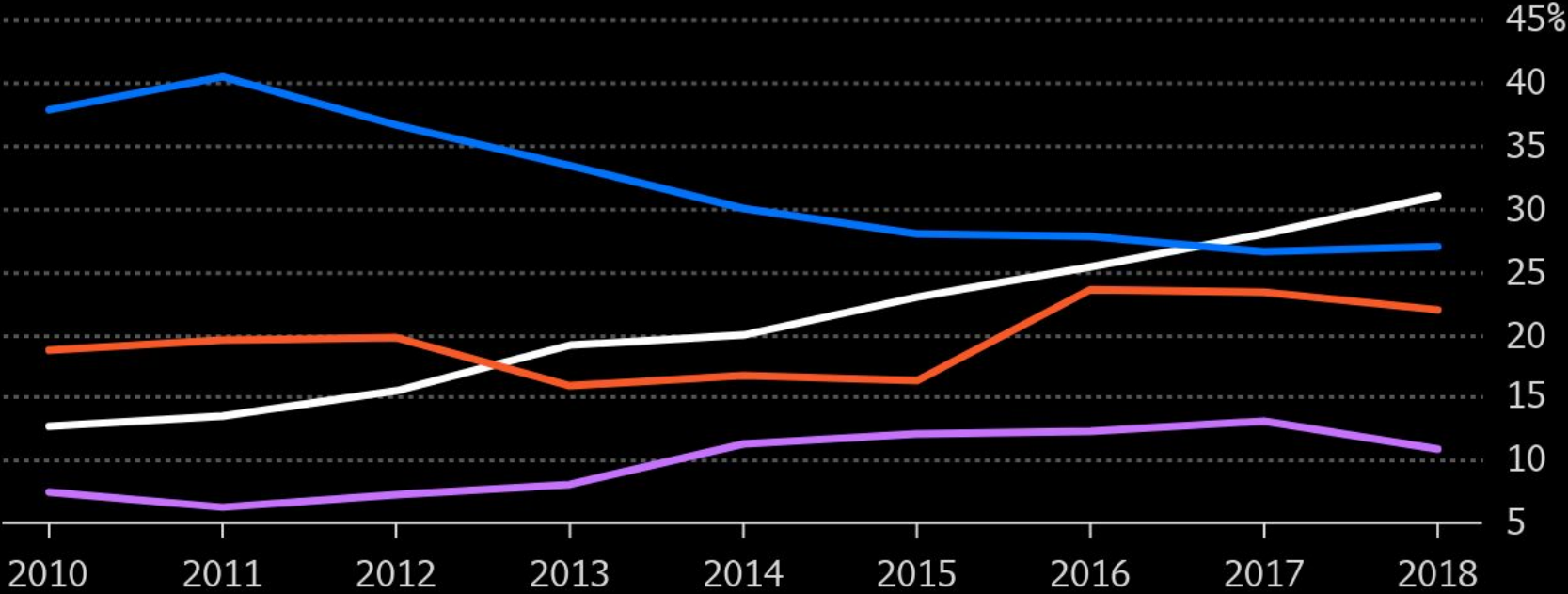
- ▶ The Art of War
 - “Whoever is first in the field and awaits the coming of the enemy, will be fresh for the fight; whoever is second in the field and has to hasten to battle will arrive exhausted.”
 - “Thus the highest form of generalship is to balk the enemy’s plans, the next best is to prevent the junction of the enemy’s forces, the next in order is to attack the enemy’s army in the field, and the worst policy of all is to besiege walled cities.”
- ▶ Privately held but state sponsored
- ▶ “Tip of the spear” for China’s “Belts & Roads” efforts
- ▶ Compromise of software and equipment?
- ▶ May 15, 2019 – Trump executive order, declaration of national emergency, and no Huawei equipment can legally be purchased by US companies –
- ▶ June/July 2019 - amendment allowing purchase or upgrade under certain conditions and Trump has proposed wrapping up the Huawei issues as part of the US and China trade deal

The Edge of Chinese Dominance?

Huawei's Rise

The Chinese supplier now dominates the wireless equipment market

Huawei Ericsson Nokia ZTE



Source: IHS Markit

Bloomberg

Political Environment

- ▶ Toxic and...will not change in 2019 or 2020
 - Big Question: What if any legislation can be pushed forward and signed in 2019/2020?
 - Big Answer: Very little and we do not hold out significant hope for a bipartisan infrastructure program
 - Big Transformation: Federal Judiciary
 - 127 judges confirmed in 2+ years (65% of nominations submitted to date)
 - 2 SCOTUS
 - 41 US Court of Appeals (89% of nominations submitted to date)
 - 84 US District Courts
 - 61 nominations awaiting action
 - 5 vacancies on the US Court of Appeals (2 nominations pending)
 - 114 vacancies on the US District Courts (53 nominations pending)
 - By comparison, Barack Obama had 329 judges confirmed in 8 years

Presidential Primary

And the Winner is?

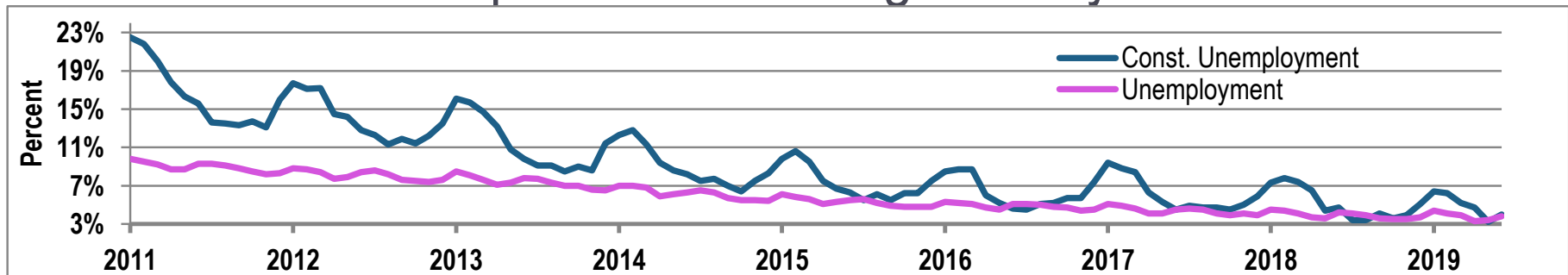


And the Winner is?

Unemployment

- ▶ Hitting all time lows compared past economic expansions
 - 224,000 jobs added **June 2019** is remarkable
 - Labor Participation slowly inching up and still headroom to add a significant number of people back into the workforce who left post 2008
 - Still very modest wage pressure and limited inflationary pressure given low unemployment rates

- ▶ It is historically rare when construction unemployment is essentially the same as overall unemployment – speaks to the labor and supervision challenges today



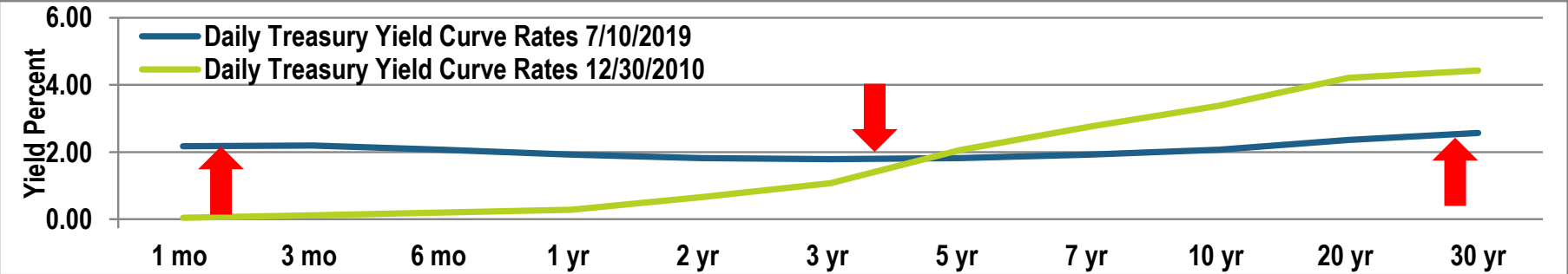
Source: xxx.

Stock Market Performance

- ▶ 2019 Superb YTD – what is driver?
 - Volatility will continue as traders attempt to second guess the market and perfect exit and entry timing before recession
- ▶ 2018 very volatile, ended down 10% but why?
 - 2018 Drivers...sense bull market must end
 - Technical correction (-10%) in January/February – recovered half of correction by end of February, market peaked in September 2018 gave all gain back and lost 10% before end of year
- ▶ Superb 2017
 - 2017 Drivers...combination of optimism, continued economic performance and continued low interest rates

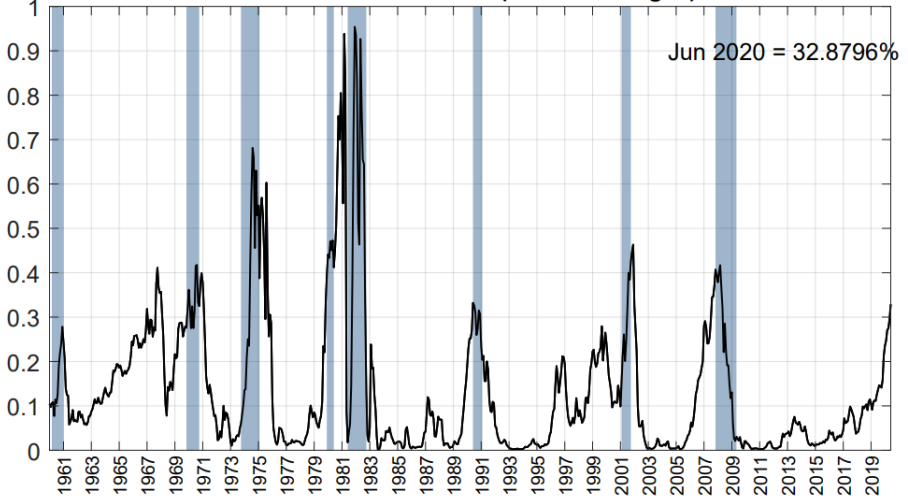
Finance & Banking *(1 of 4)*

▶ Inverted Yield Curve as a predictor of economic performance



▶ When the yield curve is inverted it speaks to a market problem that likely then drives the next recessionary period

**Probability of US Recession Predicted by Treasury Spread*
Twelve Months Ahead (month averages)**



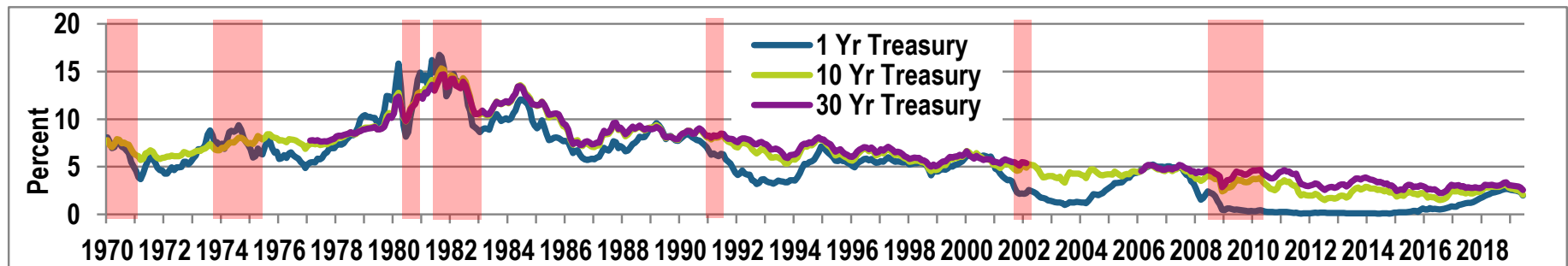
*Parameters estimated using data from January 1959 to December 2009, recession probabilities predicted using data through Jun 2019. The parameter estimates are $\alpha = -0.5333$, $\beta = -0.6330$.

Source: xxx.

Updated 05-Jul-2019

Finance & Banking *(2 of 4)*

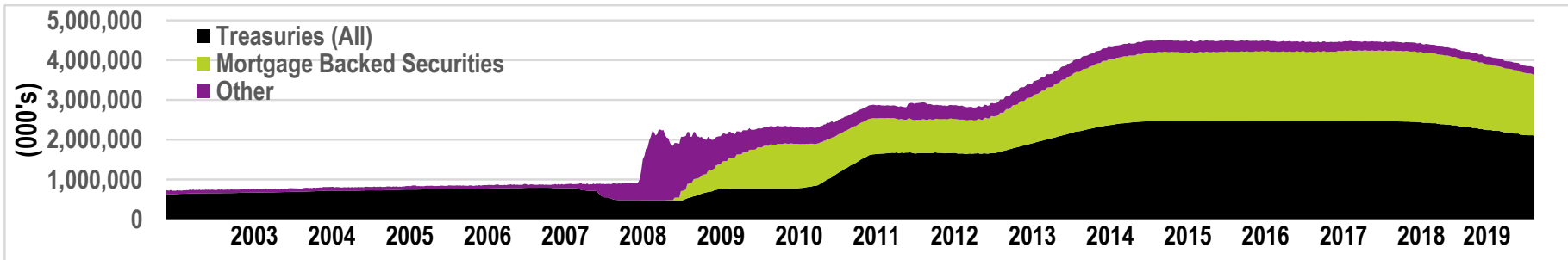
- ▶ Federal reserve is signaling that they will cut rates before the end of the year and the stock market is receiving this news and is reaching peaks
- ▶ Rates are still across the board at very low levels for all durations and the rise in short-term rates closer to long-term rates is reflective of the yield curve inversion.



Source: xxx.

Finance & Banking (3 of 4)

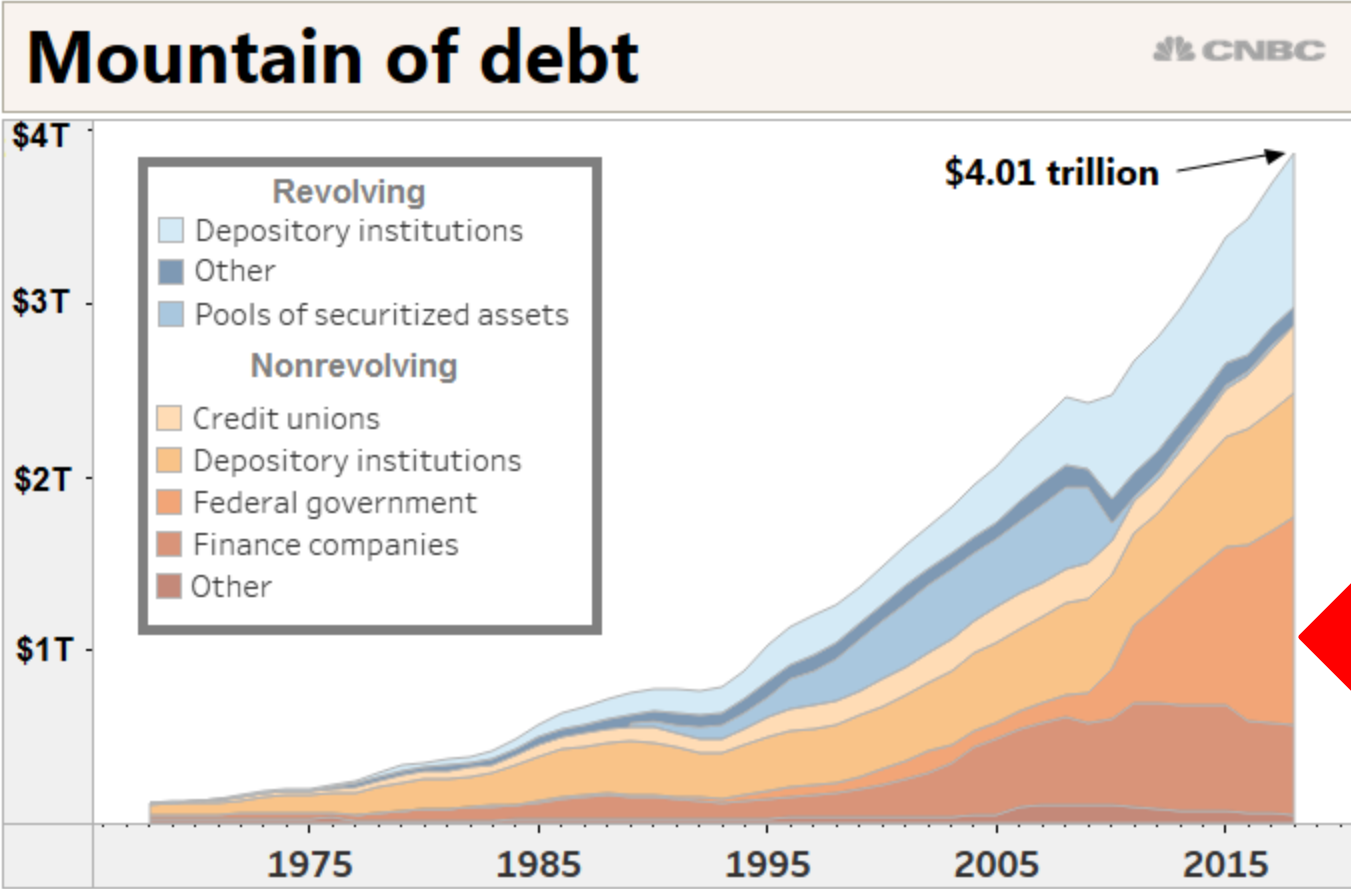
- ▶ Federal reserve open market operations still require attention and will continue apply inflationary pressure
- ▶ Fed balance sheet still requires significant clean up and continue selling of bond held is necessary to get the balance sheet back to more historical structure



Source: xxx.

Finance & Banking *(4 of 4)*

▶ Consumer debt is the risk we are most concerned about!



Primarily Student Loans

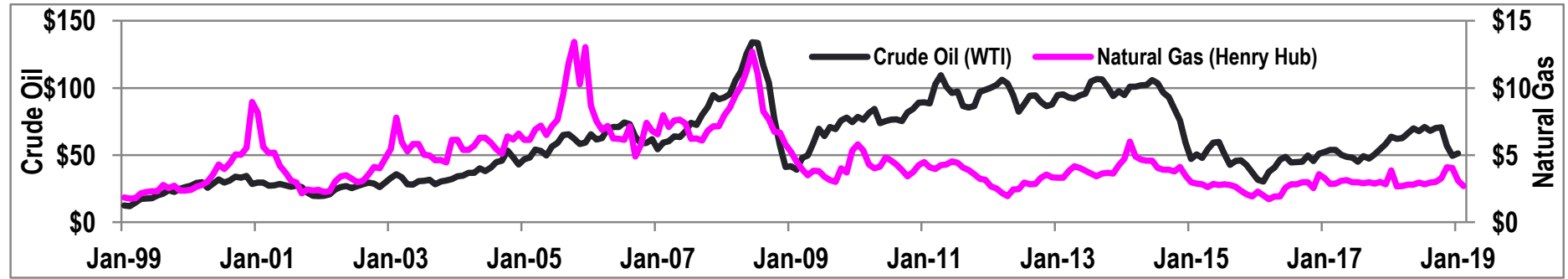
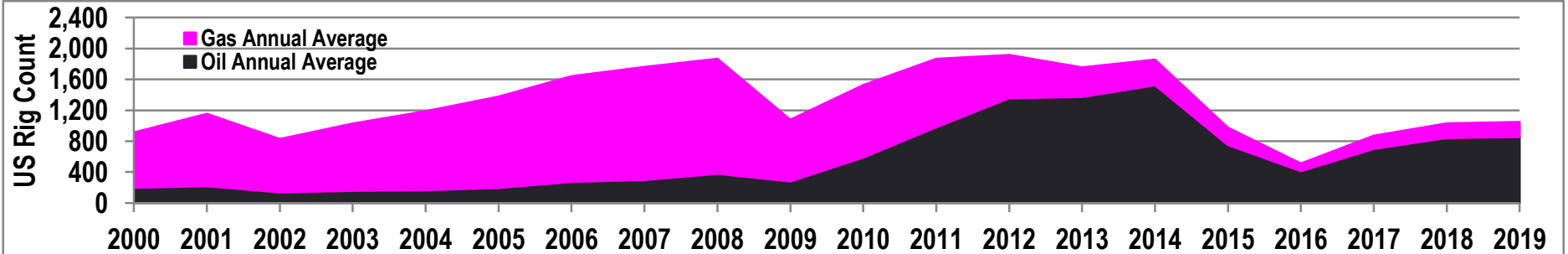
SOURCE: Federal Reserve, consumer debt outstanding, as of Dec, 2018

History of Inflation

- ▶ Flattening and near Fed target...still exceptionally low...expect no dramatic change until 2020 or later
- ▶ CPI and energy goods energy goods still showing modest inflation
- ▶ Fed is not currently worried about inflation and remains worried about general slowing economy and attempt to create softer landing for economy...they will lower rates at least once this calendar year

Domestic Oil & Gas Production

- ▶ U.S. is out producing competing countries
- ▶ Oil is still in the sweet spot where it is high enough to help producers and not so high as to slow economy – rig counts falling slowly
- ▶ More activity on major plants in Utica and TX/OK footprint, cracking, or transporting product – will help multiple markets



Source: xxx.

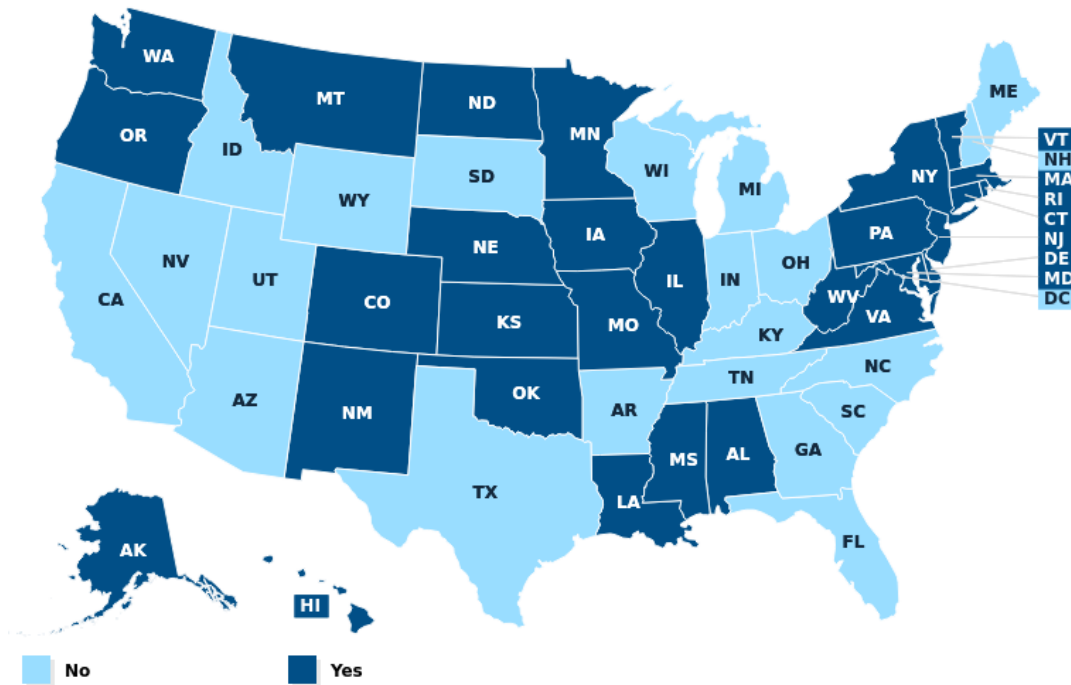
State & Municipal Agencies

- ▶ Revenues trending up but state deficits continue to plague many states

- Slowly seeing some reinstatement of previously cut programs during 2009-2012

- ▶ State & municipal debt is a long-term and thorny problem

State Budget Shortfalls, SFY 2017 and SFY 2018: Facing Shortfalls in either SFY 2017 or SFY 2018?, SFY 2017 and SFY 2018

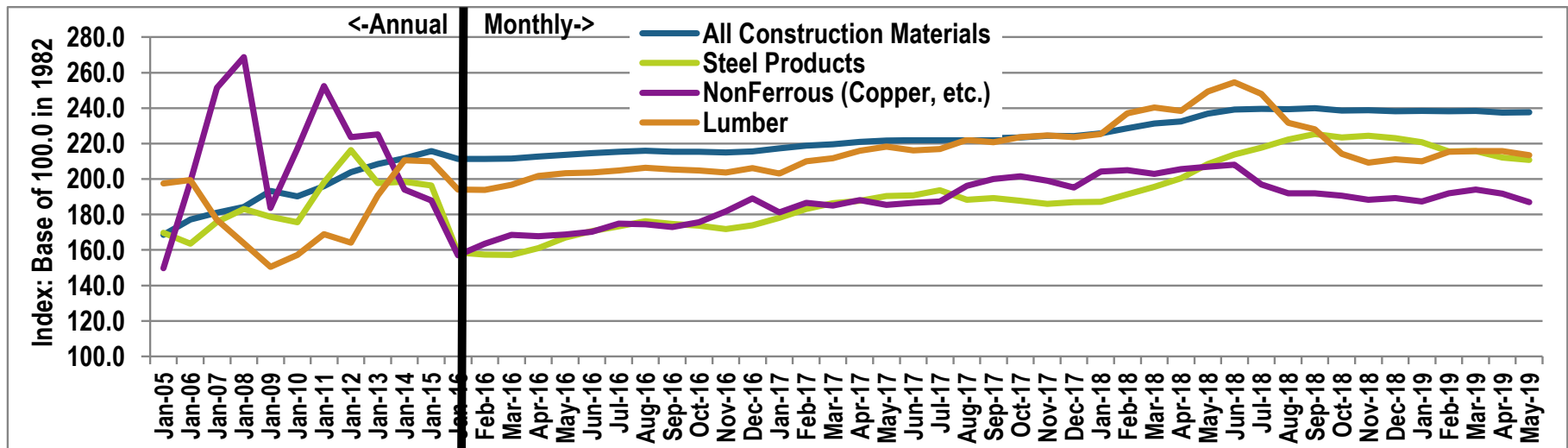


SOURCE: Kaiser Family Foundation's State Health Facts.

Source: U.S. Government Spending (www.usgovernmentpending.com).

Tariff Impacts On Commodities

- ▶ Material prices flattening or falling in 2019 as construction spending growth is slowing. Even with tariffs and retaliatory tariffs, steel prices are falling.
- ▶ Lumber prices fell in late 2018 and have leveled off with housing growth slowing.
- ▶ Global growth is slowing; Will the slide stop? Will tariffs accelerate the slide?



Source: Continuum analysis and presentation of US Department of Commerce raw data.

Utility Industry Perceptions

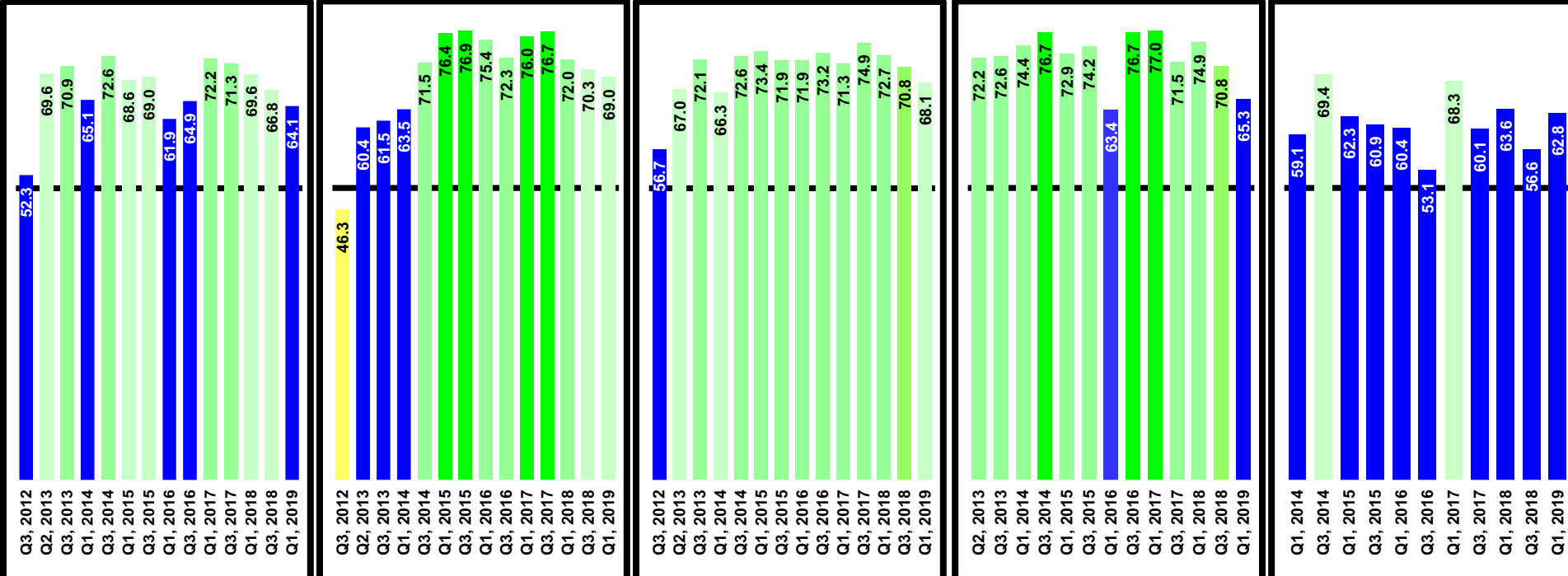
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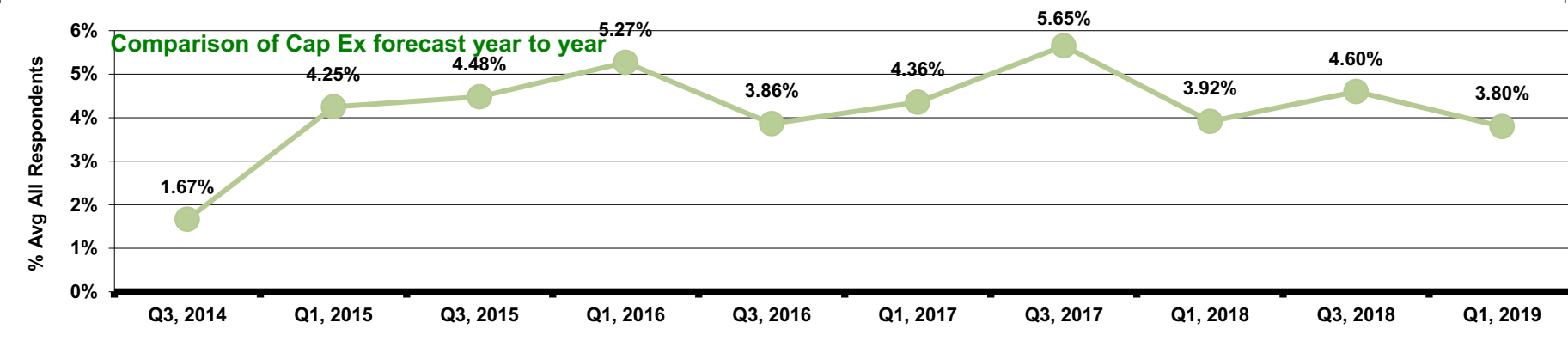
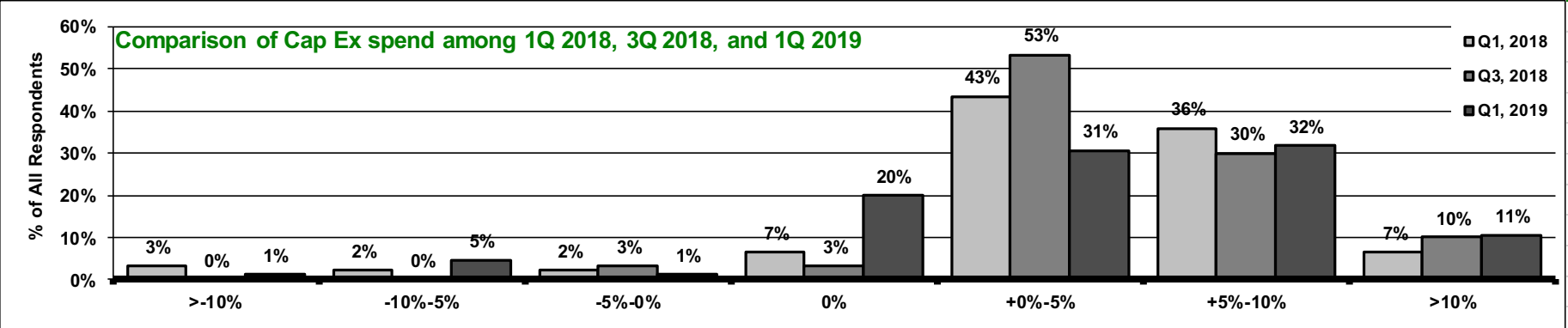
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Source: Proprietary Continuum analysis of utility contractor perceptions over 2012-2018.

Capital Expenditure Perspectives (1 of 2)

► Equipment and other capital expenditure expectations slowing slightly in 2018 after 2017 peak

Exhibit x What changes do you foresee in your Cap Ex for facilities, equipment and other resources in 2019?



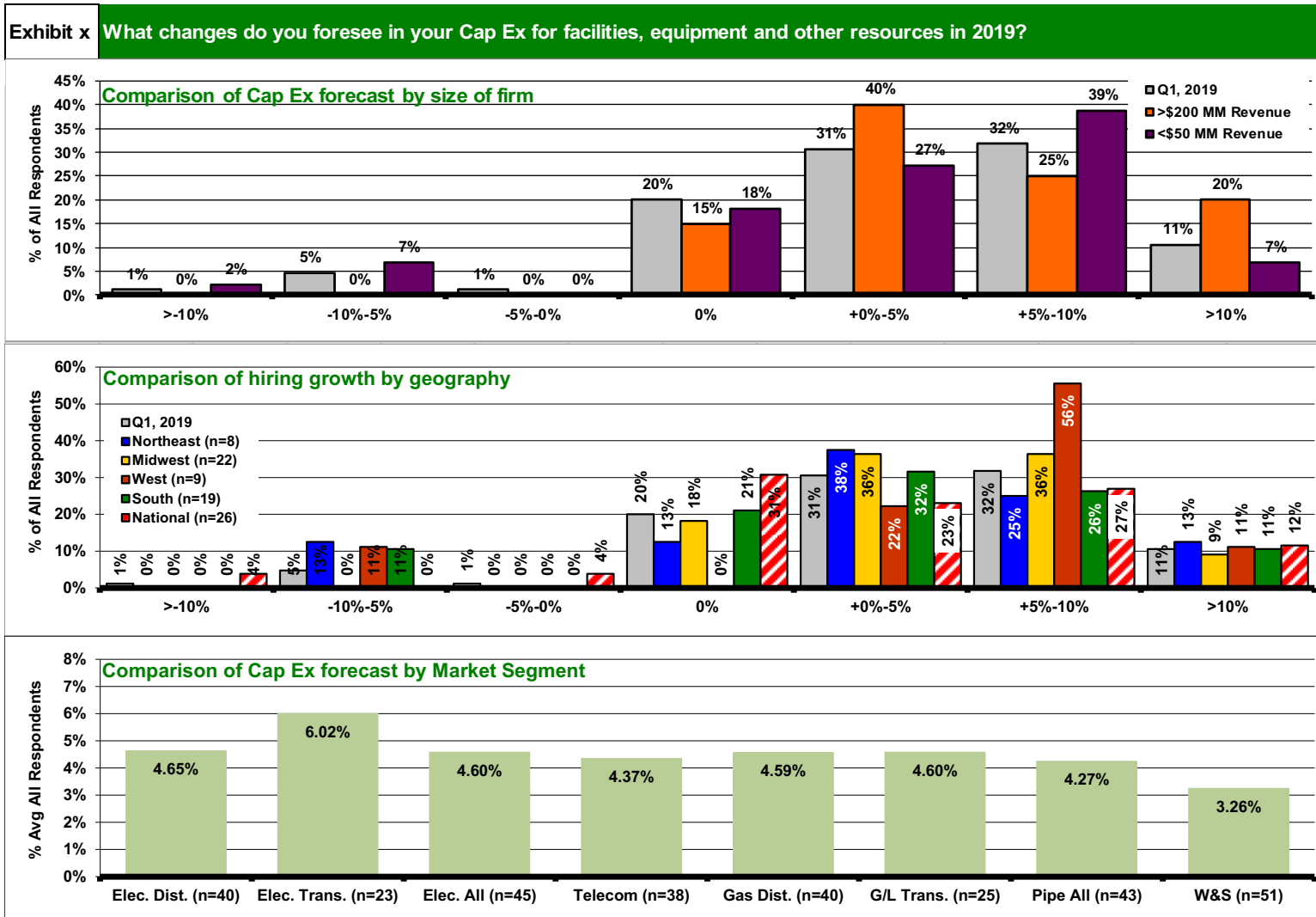
Source: Proprietary Continuum analysis of utility contractor survey feedback during 2012-2018.

Capital Expenditure Perspectives (2 of 2)

▶ Largest firms more aggressive with smaller firms still planning spending growth

▶ South and West most aggressive

▶ Elec. T&D, most aggressive

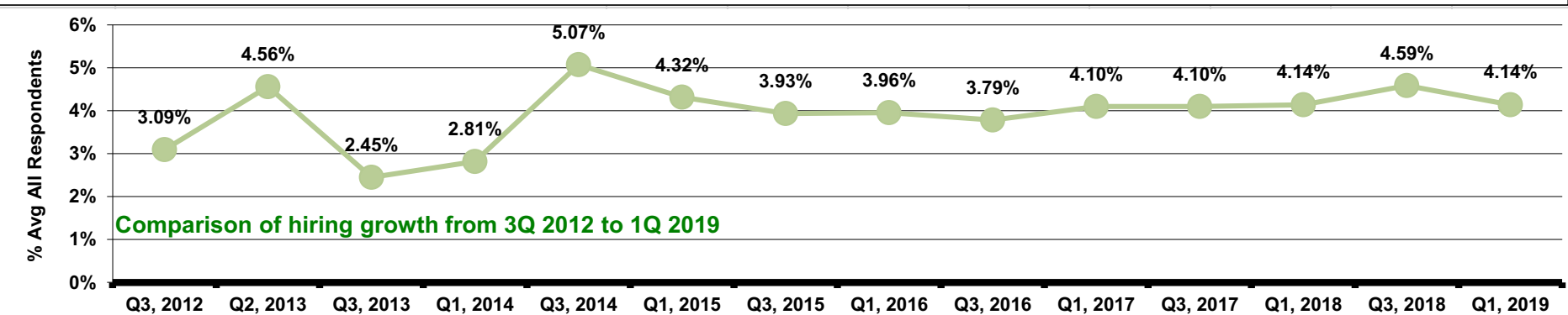
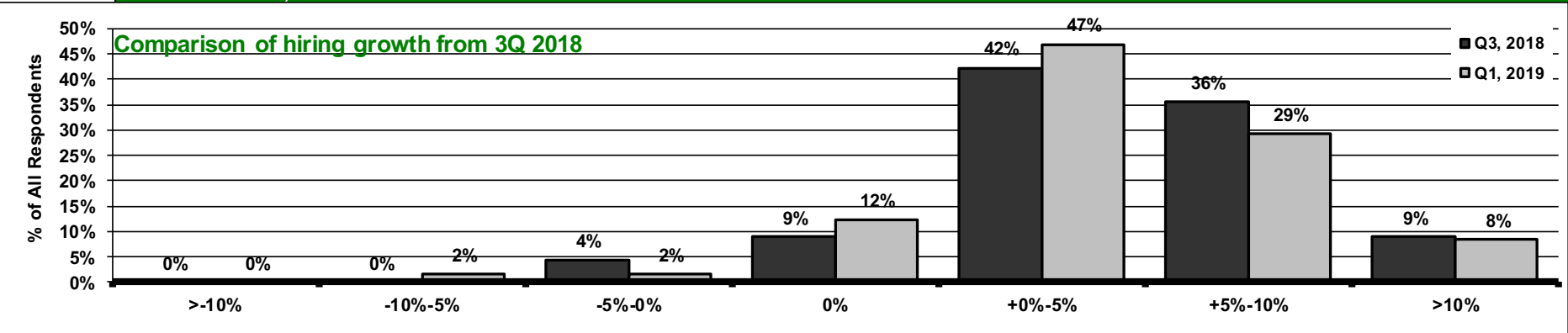


Source: Proprietary Continuum analysis of utility contractor survey feedback during 2012-2018.

Hiring Perspectives *(1 of 2)*

- ▶ Overhead and underground utility survey 2012-2019
 - Hiring growth rate peaked in 2014 and again in 2018
 - Natural growth rate of workforce is 1.5%

Exhibit x What changes do you foresee in the number of fulltime direct employees in your organization for 2019? (excluding natural attrition, retirements, etc.)



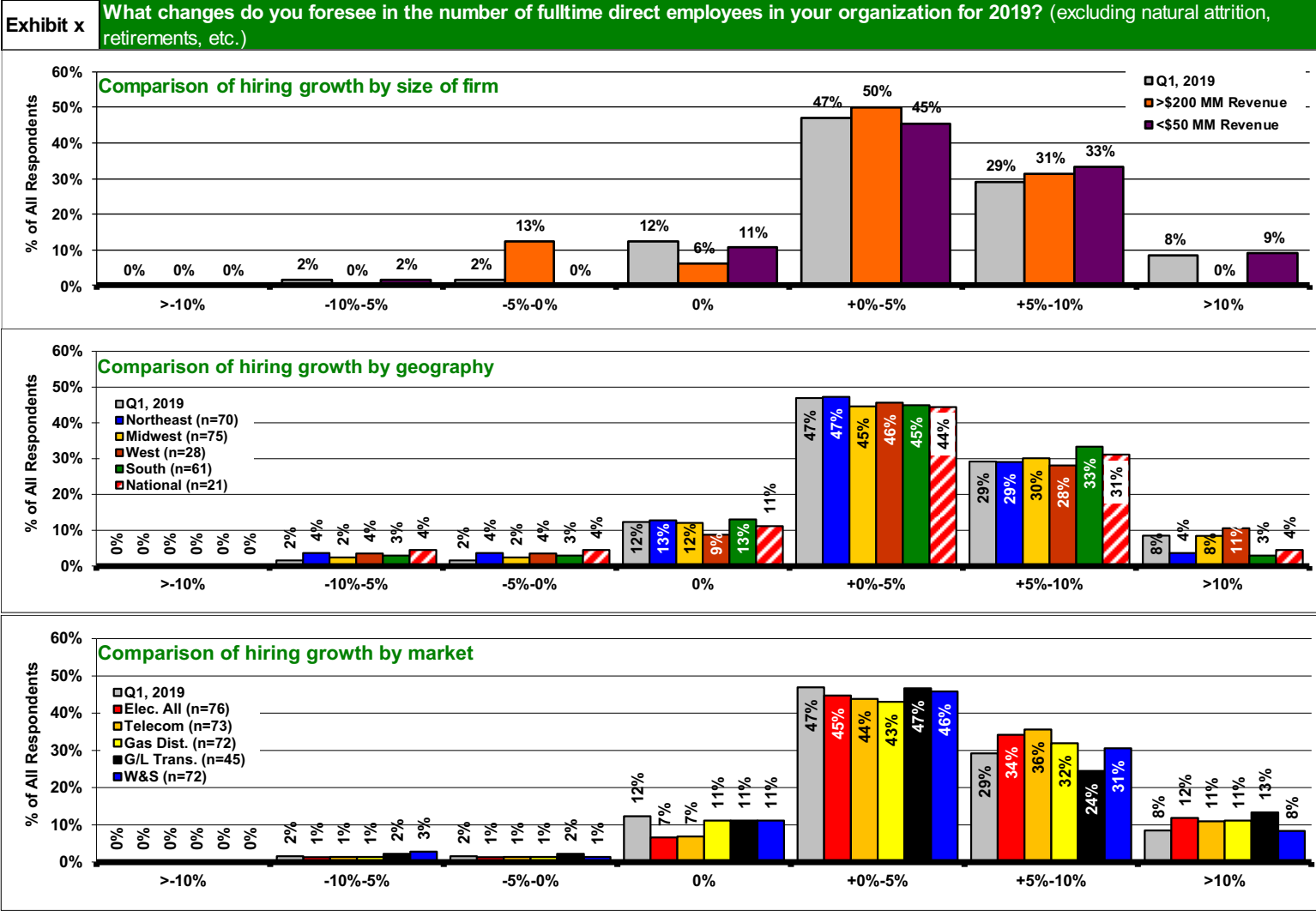
Source: Proprietary Continuum analysis of utility contractor survey feedback during 2012-2019.

Hiring Perspectives (2 of 2)

▶ Smaller firms more aggressive

▶ West and South most aggressive

▶ Pipeline & Electric most aggressive



Source: Proprietary Continuum analysis of utility contractor survey feedback during 2012-2018.

Other Perspectives

- ▶ Starting & Overtime Wage: Average starting wage for utility construction workforce is approximately \$50,000 with overtime wage of \$65,000.
- ▶ Workforce Size: The contractor average workforce has doubled in size in the last 5-7 years.
- ▶ Unmet Need: The average contractor reports work available for 6 additional crews if the supervision and crews were available.
- ▶ Biggest Obstacle: Workforce and supervision availability.
- ▶ Biggest Opportunity: Fiber build out
- ▶ Trump Support: Belief that Trump will achieve a significant infrastructure rebuild is starting to wane.
- ▶ Gold Shovel Standard: Perspectives on “Is Gold Shovel Standard Well Designed” have fallen with the average response choice of “Disagree”

Thank You

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Mark Bridgers

Mark founded and leads a Utility Vertical Market team team at Continuum Capital. He works with gas/electric utilities, power generators, pipeline companies, and energy companies. As a recognized expert in capital construction and operational challenges, Mark was recently honored with membership in the Society of Gas Operators (SOGO) and the Gild of Ancient Suppliers.

Mark helps firms prepare for and successfully navigate “strategic transitions.” His passion is helping organizations achieve breakthrough innovations through collaborative or integrated relationships. He is the architect of an approach for integrated service provider management referred to as the “Extended Enterprise” among construction industry participants.

Mark is an avid educator, trainer, and writer with more than 20 years of industry expertise including financial performance analysis; development and implementation of tools to reduce construction cost, life-cycle cost, and operational friction; restructuring of processes and procedures - often times using LEAN Construction techniques; and leader development.. He is a recognized expert in capital construction and operational challenges . Mark is also author of over 150 articles and research papers published internationally in industry journals, including ENR, PE – The Magazine for Professional Engineers, Pipeline & Gas Journal, Utility Contractor (NUCA), Underground Contractor, Electric Energy (RMEL) and Electric Perspectives (EEI).

Mark holds a master’s degree in business administration from the University of Virginia’s Darden school of Business and a bachelor’s degree in financial management from Clemson University. In addition, he earned the designation of Chartered Property and Casualty Underwriter (CPCU) and Associate in Reinsurance (ARe).



About Continuum

Continuum Capital is a boutique management consulting, training, investment banking, and capital services firm providing services to the worldwide construction industry. We provide services in the areas of strategic market information, acquisition integration, ownership transition, private equity financing, project delivery improvement, management and field-level training, strategic planning, strategic sourcing, and productivity improvement.

| | |
|---|---|
| <i>Mission Statement</i> | Transform capital asset construction worldwide. |
| <i>Founded</i> | 2011 |
| <i>Office Locations</i> | Raleigh, NC; Birmingham, AL; Denver, CO; Dallas, TX; Chicago, IL; Baltimore, MD |
| <i>Number of Employees</i> | 9 |
| <i>Geographic Market</i> | United States, Canada, Latin America, Europe, and Pacific Rim |
| <i>Continuum Capital's Clients</i> | Contractors; engineers; architects; government agencies; utility companies; manufacturers and distributors of construction materials and construction equipment |
| <i>Consulting Clients</i> | 15 per year (90% of whom are repeat customers) |
| <i>International Speaking Locations</i> | Brazil, Canada, France, Mexico, South Korea, United Arab Emirates |
| <i>Professional Lecture & Speaking</i> | 20 per year |
| <i>Knowledge & Database Access</i> | Proprietary database tools for benefit of clients: <ul style="list-style-type: none"> a) Utility construction index from 2009 to present; b) Utility construction field productivity improvement techniques from 1700 surveys; c) Utility contractor financial performance comparison of 50+ publicly traded and privately held firms; d) National and regional utility construction spending history and forecast e) Gas utility "Best Practice" database and knowledge defining superior performance from 2000 to present d) 35,000 contact database to support acquisition, research, and industry knowledge |
| <i>Corporate Web Site</i> | www.ContinuumCapital.net |
| <i>Energy & Utility Team Leader</i> | Mark Bridgers – President & Founder Continuum Capital; Director Utility Vertical Market |

About Continuum

Founded in 2011, Continuum Capital provides boutique management consulting, capital services, and training, to the energy, utility, pipeline, and industrial markets supporting the successful and efficient planning, design, construction, and operations of capital asset.

Continuum utilizes a proprietary “SMART Advisory” methodology to deliver innovative and customized solutions to energy, utility, or pipeline owners/operators who want to transform their capital asset construction processes. Service providers to these firms, including underground and overhead contractors and engineers, are integrated into the transformation process, frequently forming what Continuum refers to as an “Extended Enterprise.”

Continuum’s experienced consultants can assist your business with Capital Construction/O&M Unit Effectiveness, Program Management Office Transformation, Risk Management/Mitigation for Capital Asset Construction, Project Management/Controls Installation, Process Analysis & Improvement, Management of RFI / RFQ / RFP / Procurement, Extended Enterprise/Alliance Formation, and Field Productivity Assessment & Improvement.

Additional and specialized services include, M&A or Due Diligence Support, Market Strategy, Market Research, Cost Analysis & Savings, Cost to Complete Analysis, Cost to Convert to Best Purpose, and Cost to Restore Asset.

Let Continuum transform your business!

S – Strategic Relations

M – Measureable Objectives

A – Aligned Sourcing

R – Risk Controlled

T – Technology Enabled

