

POWER & COMMUNICATION CONTRACTORS ASSOCIATION



2019-2020 Economic Overview

Power & Communication Contractors Association (PCCA)

Annual Meeting

St. Kitts & Nevis

Mark Bridgers - Continuum Capital

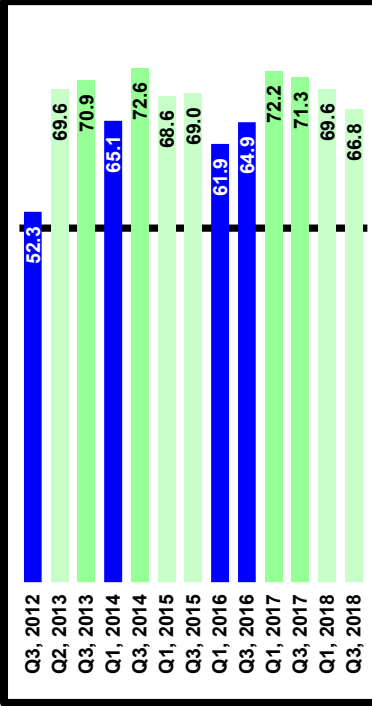
March 19, 2019

Overall Economic Summary

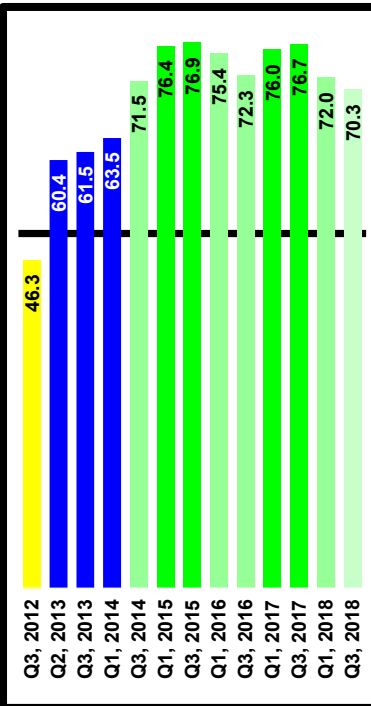
- ▶ In the midst of an economic miracle - 2018 & 2019 includes great news
 - Excitement and optimism abound for general economy and construction industry...consumer confidence is at a 17 year high
 - U.S. GDP growth accelerated at the end of 2017, 2018 at higher rate and will close the year at 3%; 2019 will yield continued growth but at lower rate
 - Global growth is now 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 poisoned, will be problematic for next two years – can any legislation be passed?
- ▶ 2019 & Beyond??
 - 9+ 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?
 - Rule of thumb: The likelihood of economic slowdown is inversely correlated to the number of tower cranes observed...there are lots of tower cranes out there
 - Short and shallow recession in early 2020 followed by return to faster economic growth

Utility Industry Perceptions

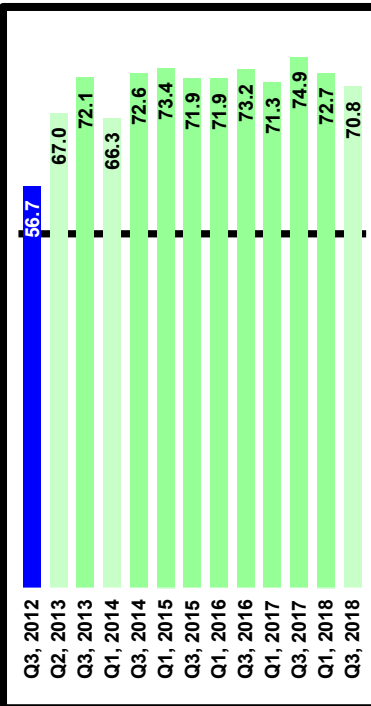
All Contractors



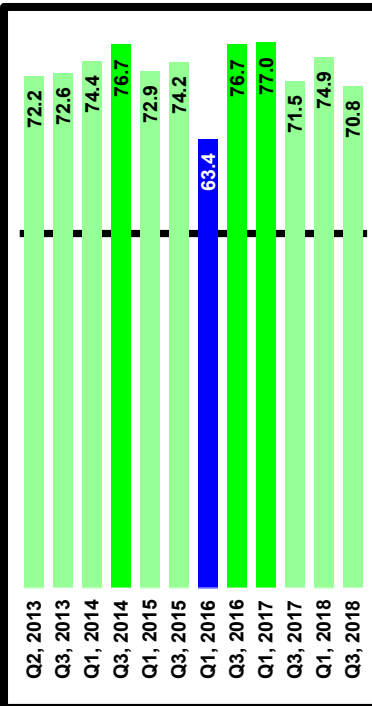
Telecom



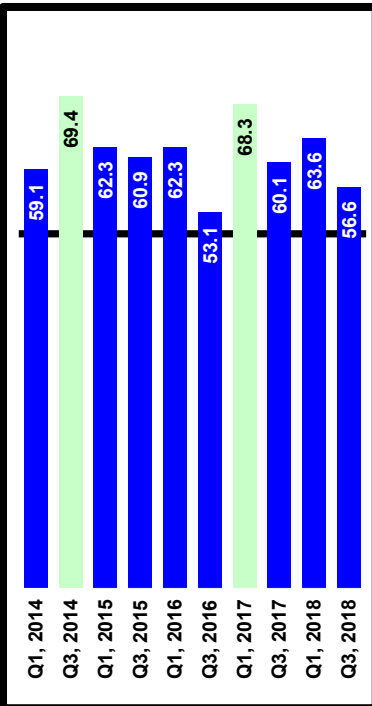
Electric Dist.



Gas Dist.



Water & Sewer



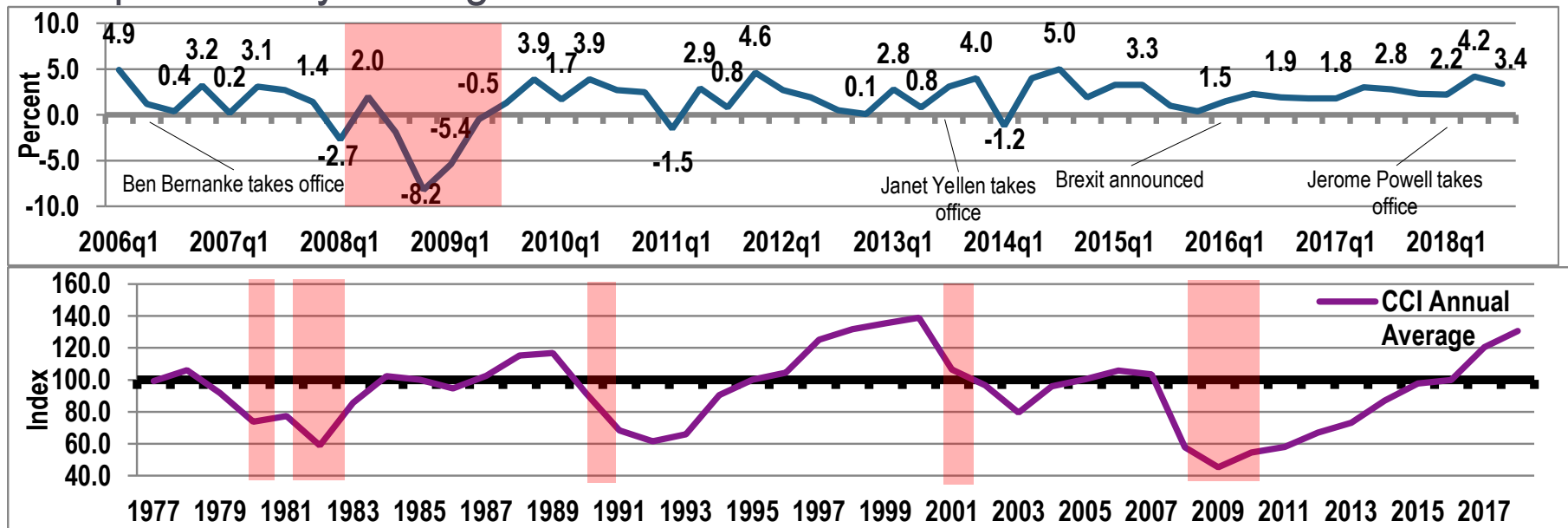
Utility Construction Index
 > 50 Indicates Growth (Better)
 < 50 Indicates Slowing (Worse)

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 2012-2018.

Gross Domestic Product (GDP)

- ▶ 2018 GDP exceeded 3% and was one of the best full year results in recent memory (2016=1.6%; 2017=2.3%)...2019 anticipated at 2.6%
- ▶ Consumer confidence continues to rise and is approaching 1999 peak - 17 years ago!

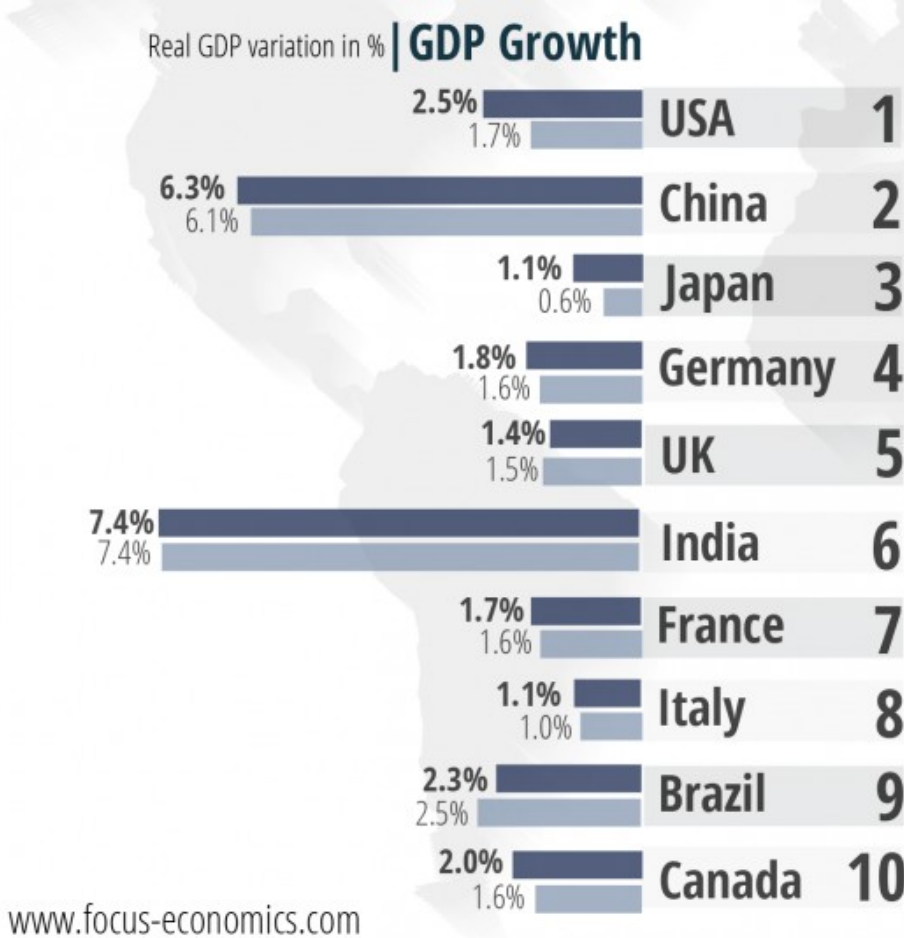
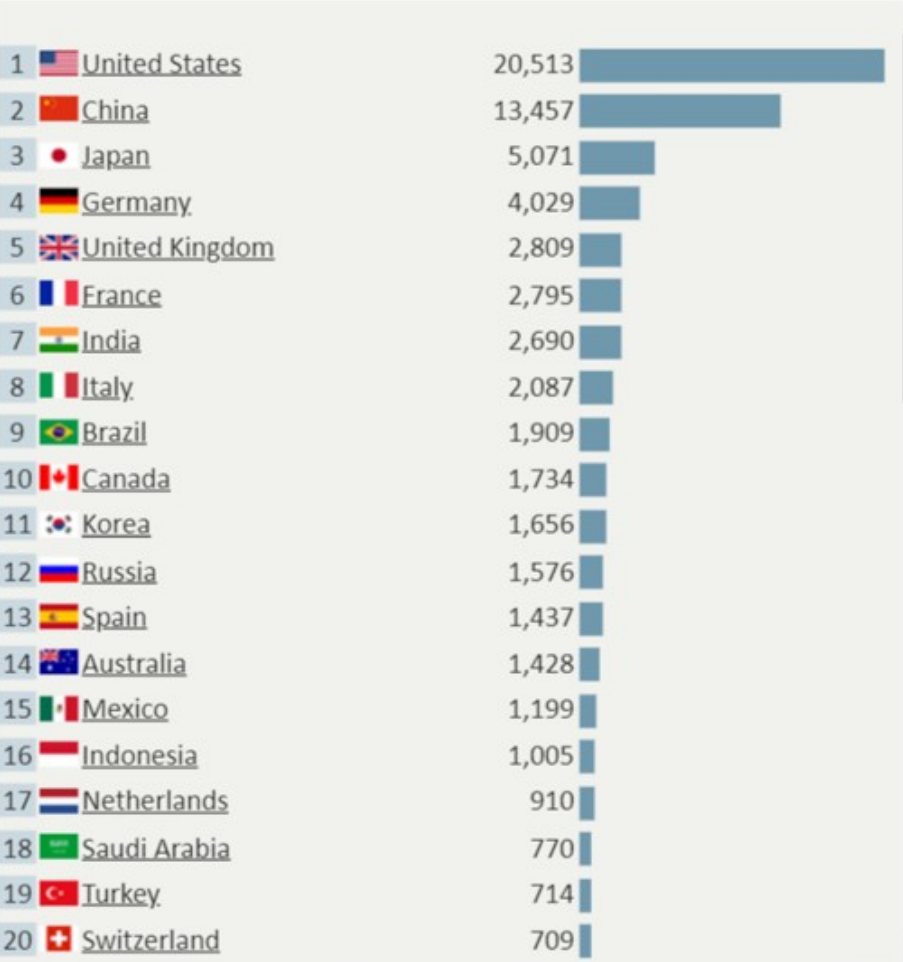


“I think it's a myth that expansions die of old age... So the fact that this has been quite a long expansion doesn't lead me to believe that... its days are numbered.” Janet Yellen

Global GDP Comparisons

GDP in Current Prices

Billion USD



Huawei

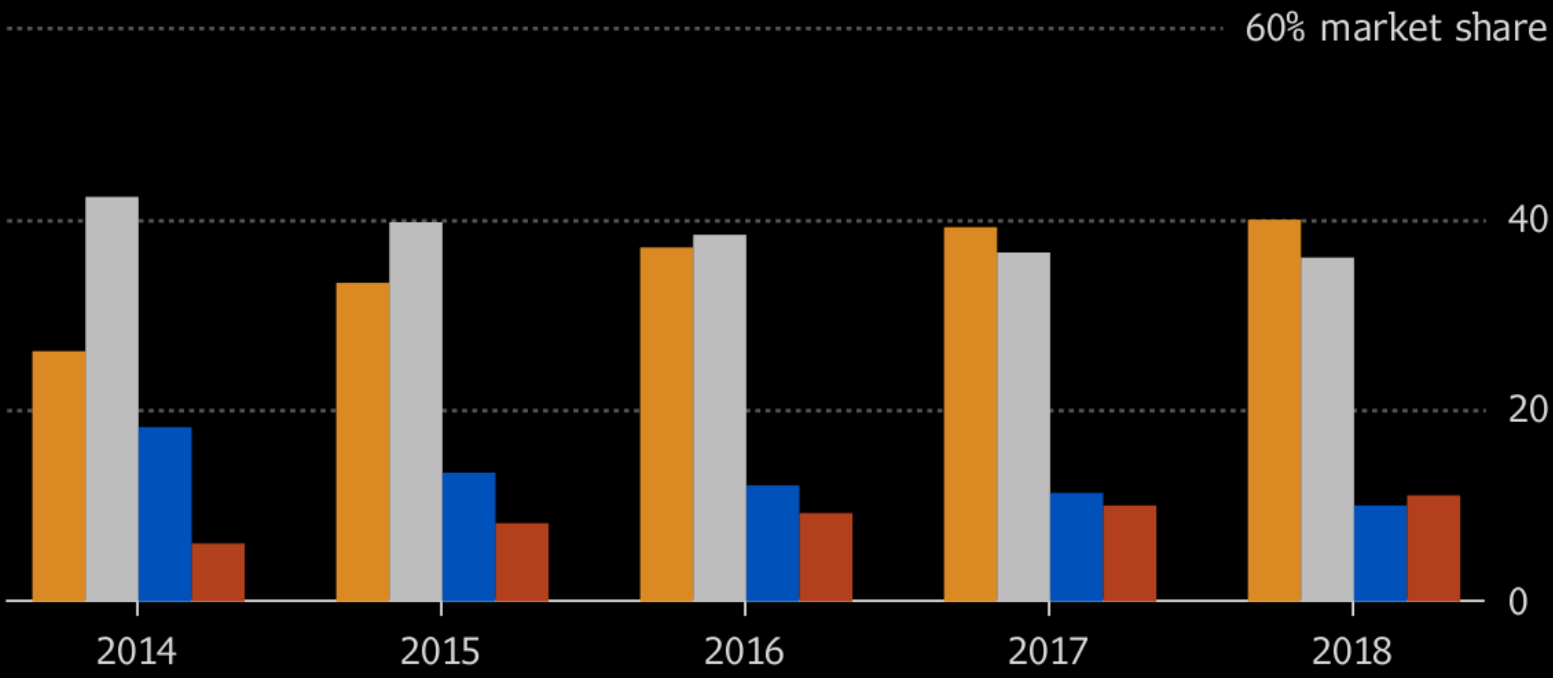
- ▶ The Art of War
 - “Whoever is first in the field and awaits the coming of the enemy, will be fresh for the fight; whoever is second in the field and has to hasten to battle will arrive exhausted.”
 - “Thus the highest form of generalship is to balk the enemy’s plans, the next best is to prevent the 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?

The Edge of Chinese Dominance?

Made in China

Chinese wireless technology is winning in Europe, the Middle East and Africa

■ Huawei ■ Ericsson ■ Nokia ■ ZTE



Source: IHS Markit

Bloomberg

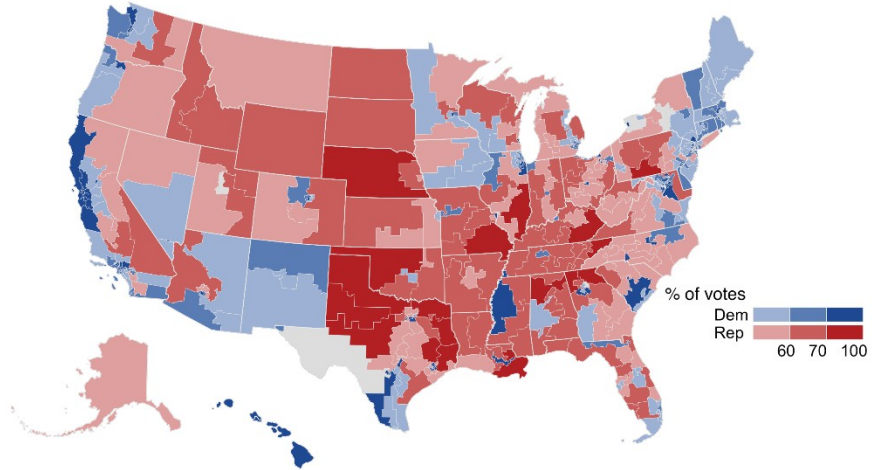
Political Environment

- ▶ Continues to be both poisonous and a mess...will not change in 2019 or 2020
 - Big Question: What if any legislation can be pushed forward and signed in 2019/2020?
 - Big Transformation: Federal Judiciary
 - 91 judges confirmed in 2 years
 - 2 SCOTUS
 - 36 US Court of Appeals
 - 53 US District Courts
 - 62 nominations awaiting action
 - 9 vacancies on the US Court of Appeals
 - 129 vacancies on the US District Courts
 - By comparison, Barack Obama had 329 judges confirmed in 8 years

Post Election Result – House & Senate

▶ Democrats retake the house

Democrats take the House

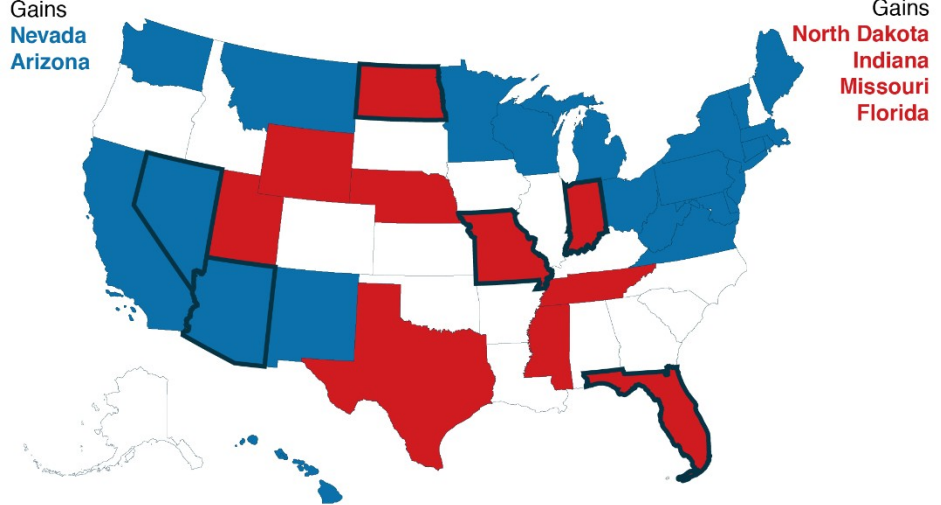
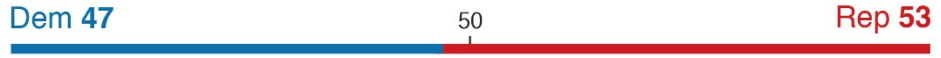


Source: AP. Grey districts are undeclared



▶ Republicans hold the senate

Republicans hold the Senate



Source: AP. White areas have no senate election.

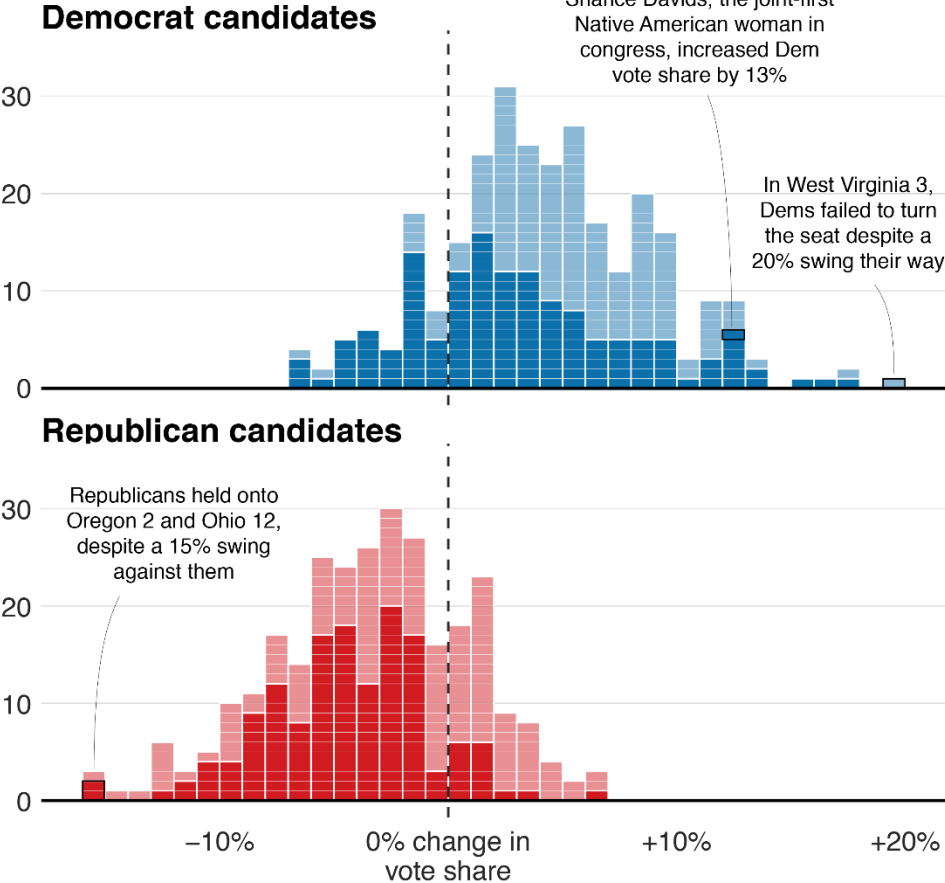


Competitiveness

► Democrats much more competitive - increased their vote share in 239 districts

Blue wave

■ Won seat ■ Didn't win



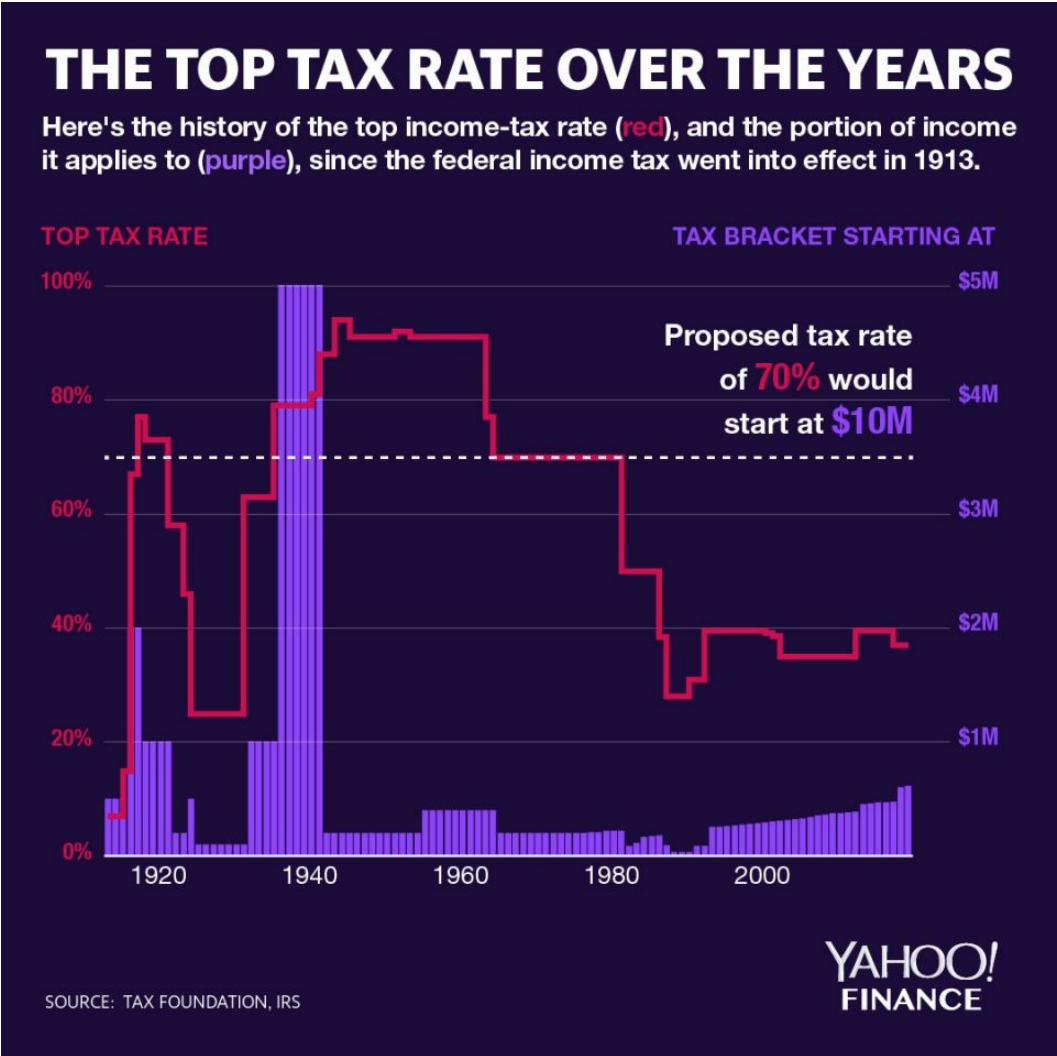
Source: AP, 19:01 ET



A Green New Deal! *(1 of 3)*

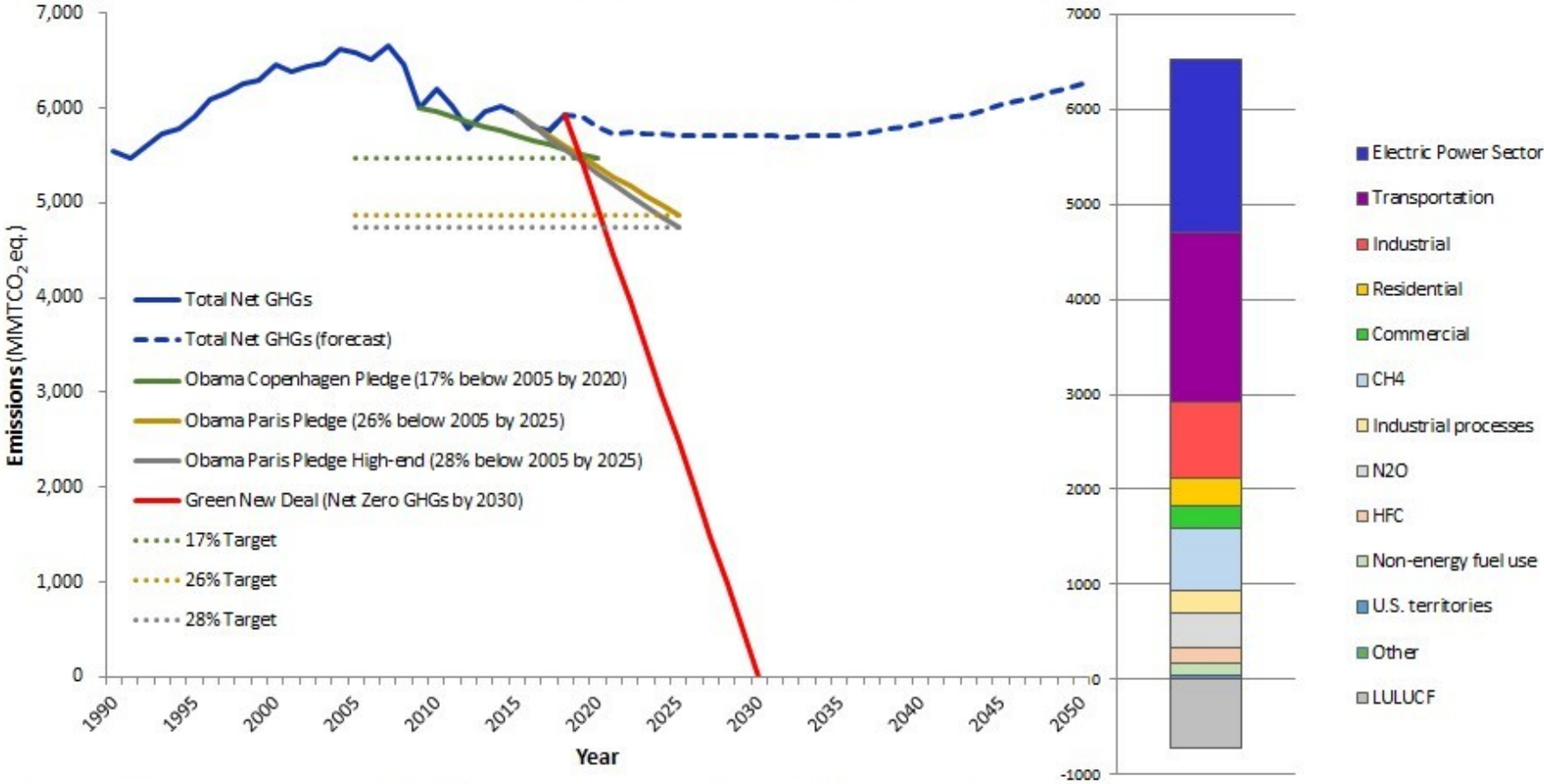
1. Guaranteeing a job
2. Providing all people of the United States with — (i) high-quality health care; (ii) affordable, safe, and adequate housing; (iii) economic security; and (iv) access to clean water, clean air, healthy and affordable food, and nature."
3. Providing resources, training, and high-quality education, including higher education to all
4. Providing 100 percent clean, renewable, and zero-emission energy sources
5. Repairing and upgrading the infrastructure to eliminate pollution and greenhouse gas emissions
6. Building 'smart' power grid to ensure affordable access to electricity
7. Upgrading all existing buildings for maximal energy efficiency and water efficiency through electrification
8. Overhauling transportation systems to eliminate pollution and greenhouse gas emissions
9. Spur massive growth in clean manufacturing
10. Working collaboratively with farmers and ranchers to eliminate pollution and greenhouse gas emissions

A Green New Deal! (2 of 3)



A Green New Deal! *(3 of 3)*

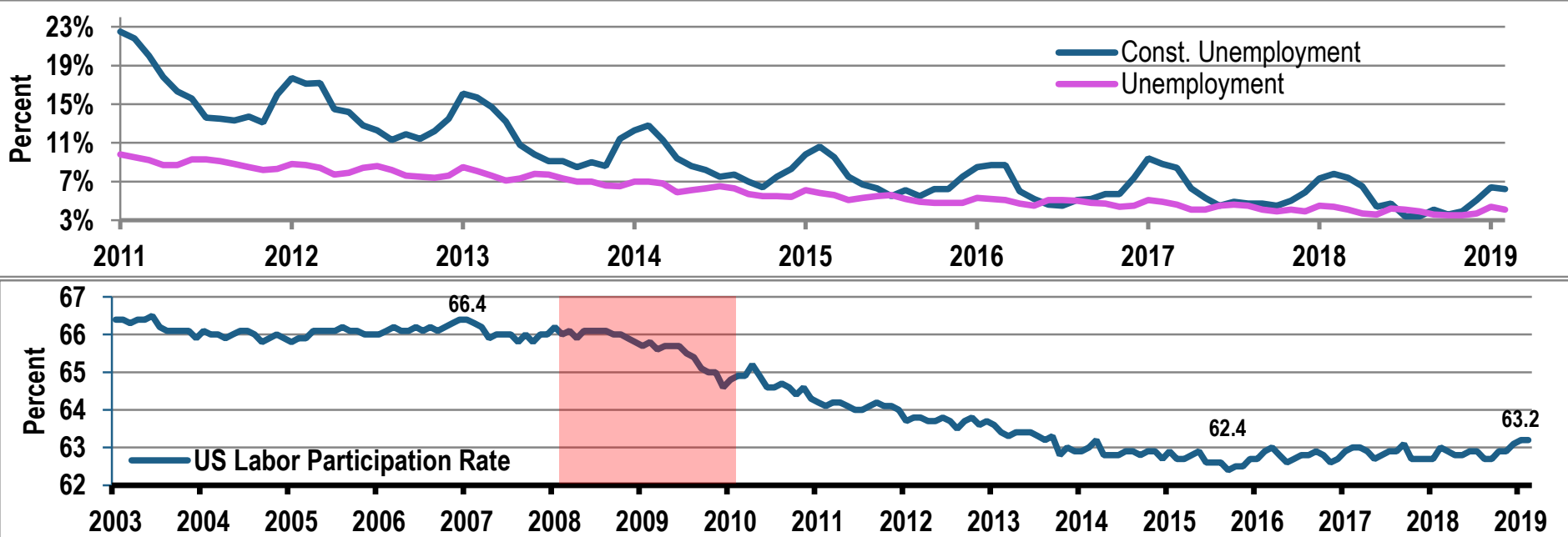
Economy-wide GHG Emissions Sources and Projections Under Various Scenarios



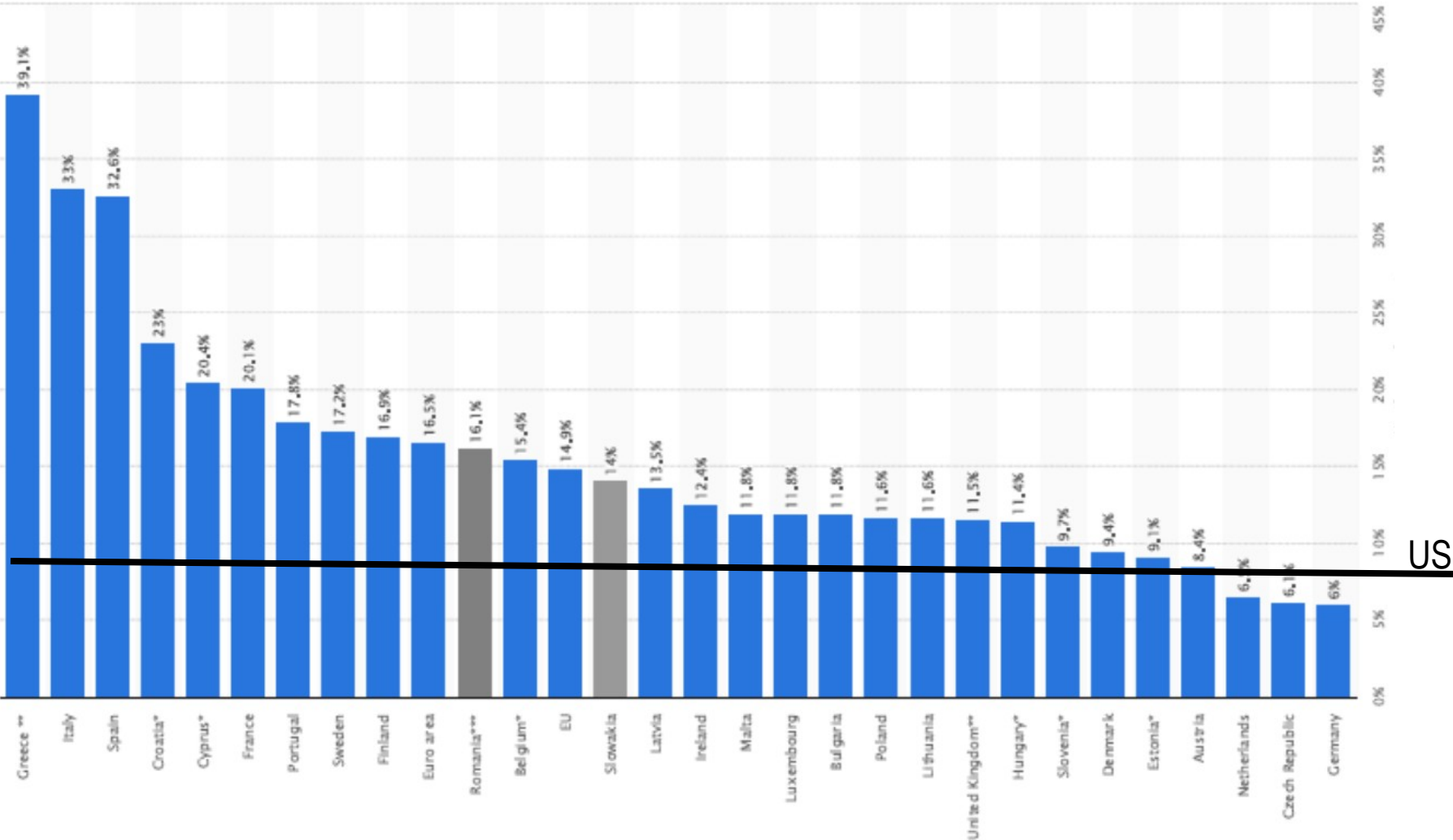
Sources: EPA, 2019 Inventory of U.S. Greenhouse Gas Emissions and Sink; forecast data based on and EIA, Annual Energy Outlook 2019.
Legend key: CH4 = methane; N2O = nitrous oxide; LULUCF = Land Use, Land Change, and Forestry

Unemployment

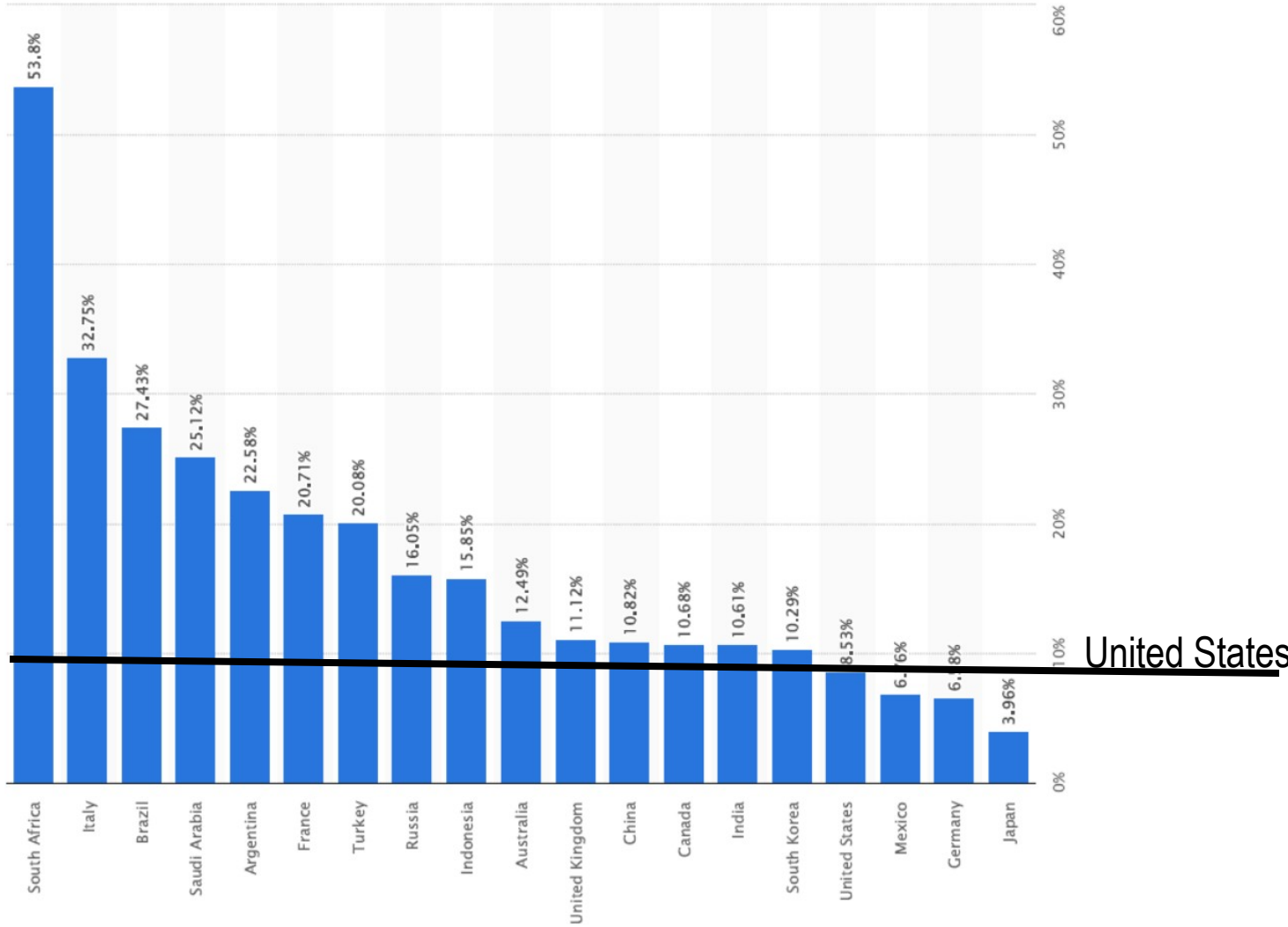
- ▶ Hitting all time lows compared past economic expansions
 - 200,000+ jobs added in D, N, O, A, Jun, May 2018; **304,000 in January 2019**
 - Labor Participation slowly inching up and still opportunity to pull 4% or more back into the workforce to support continued growth – each point = 3-4 million workers rejoining the labor force



Youth Unemployment – EU Countries



Youth Unemployment – G20 Countries

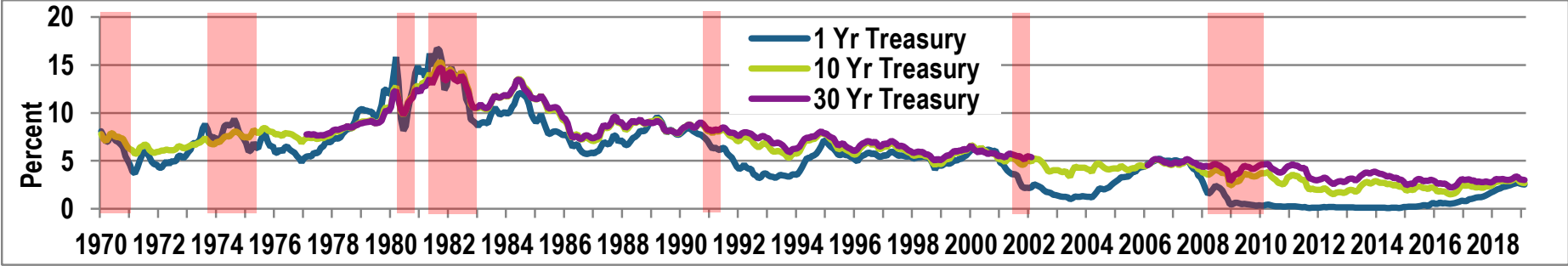
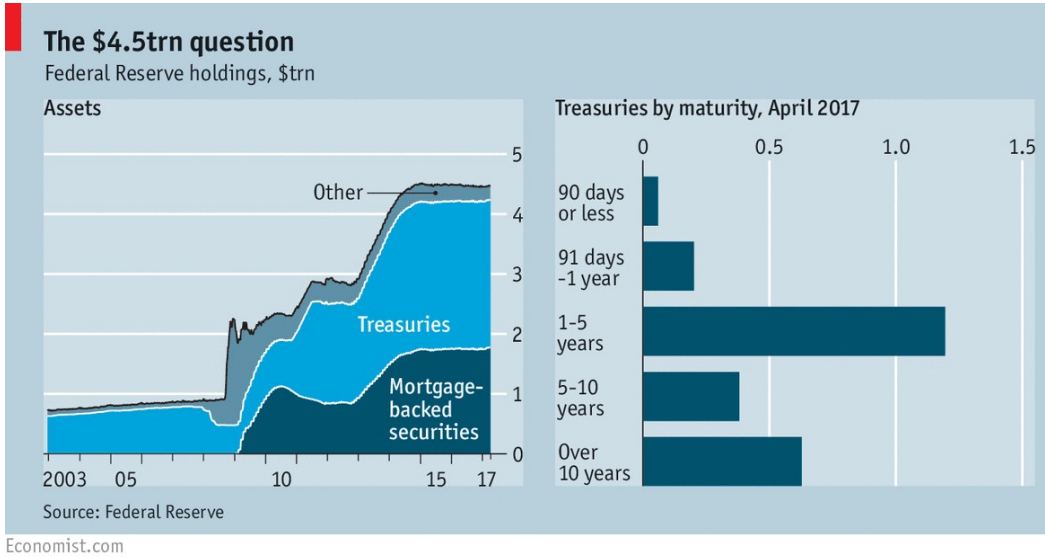


Stock Market Performance

- ▶ Superb 2017
 - 2017 Drivers...combination of optimism, continued economic performance and continued low interest rates
- ▶ 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
- ▶ 2019 up 10+% YTD
 - Remainder of year will show volatility as traders attempt to second guess the market and perfect exit and entry timing before recession

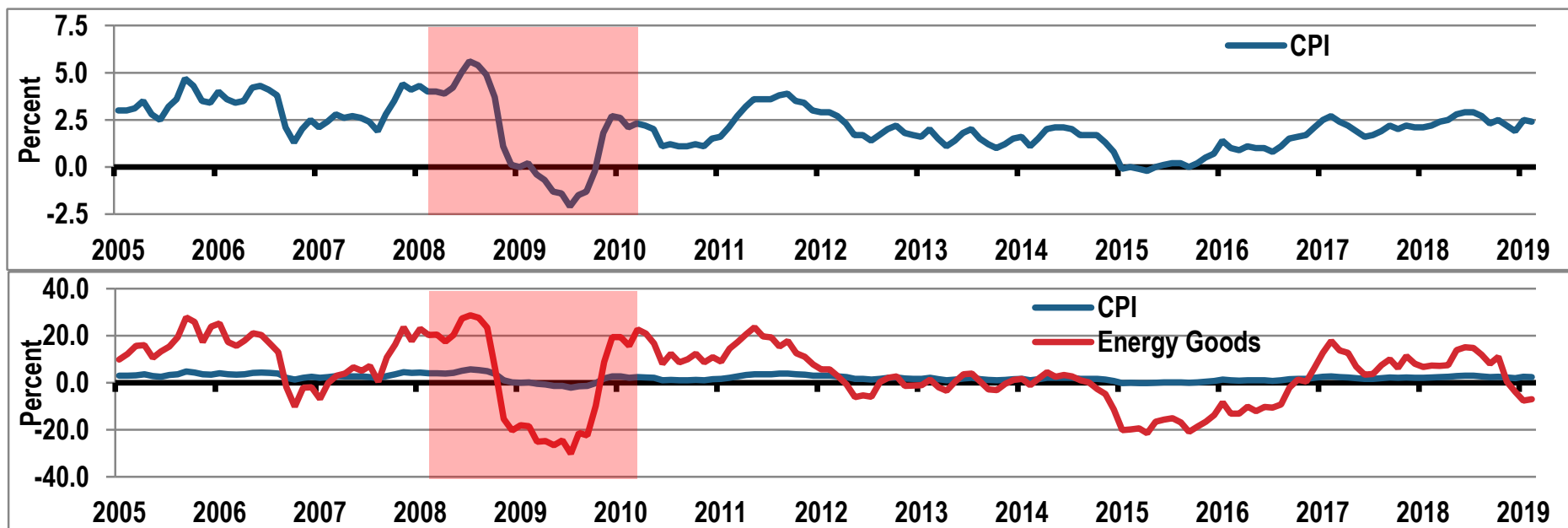
Finance & Banking

- ▶ Federal reserve will raise rates 1 or 2 times this year – rates are still and will remain at historically low figures throughout 2019.
- ▶ Federal reserve has announced intention to unwind last 10 years of bond purchases...what will the impact be?



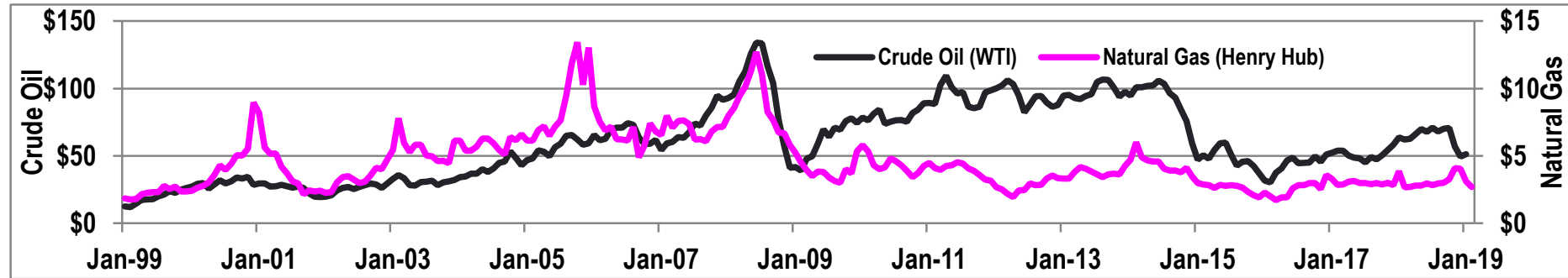
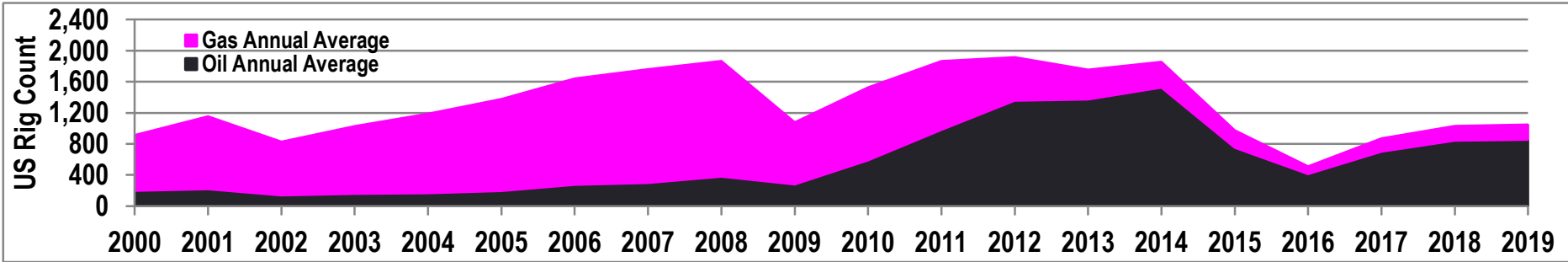
History of Inflation *(1 of 2)*

- ▶ Inching up and slightly above Fed target - still exceptionally low and will continue up through remainder of the year ending around 3%... expect no dramatic change until 2020 or later
- ▶ Even with price of oil moving up then down, energy goods still showing modest inflation



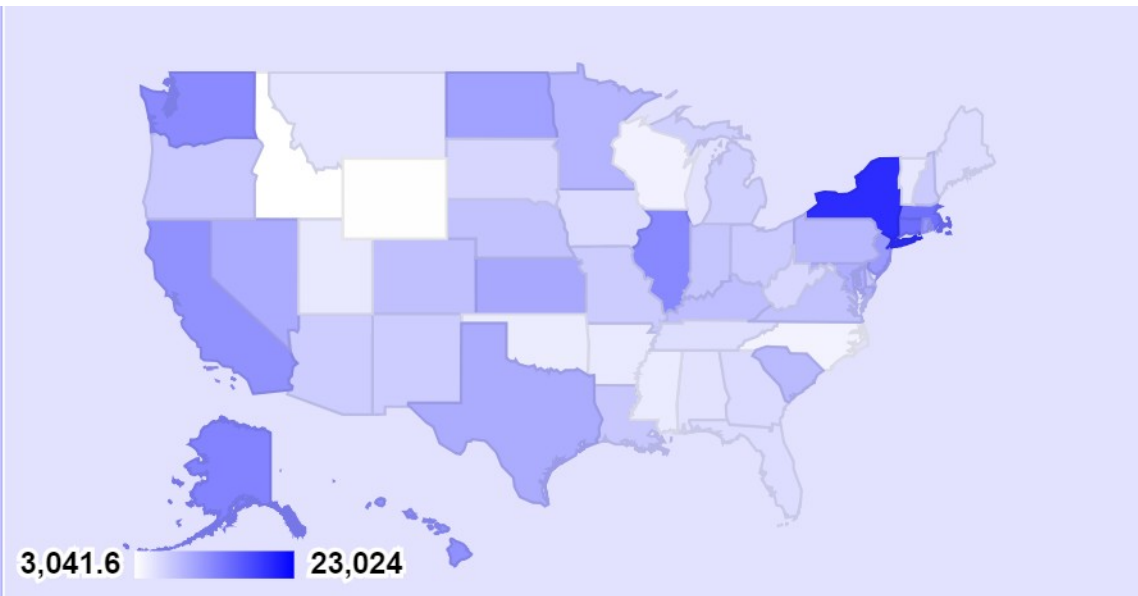
Domestic Oil & Gas Production

- ▶ U.S. is out producing competing countries
- ▶ \$70 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 moving up slowly
- ▶ More activity on major plants in Utica and TX/OK footprint, cracking, or transporting product – will help multiple markets



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

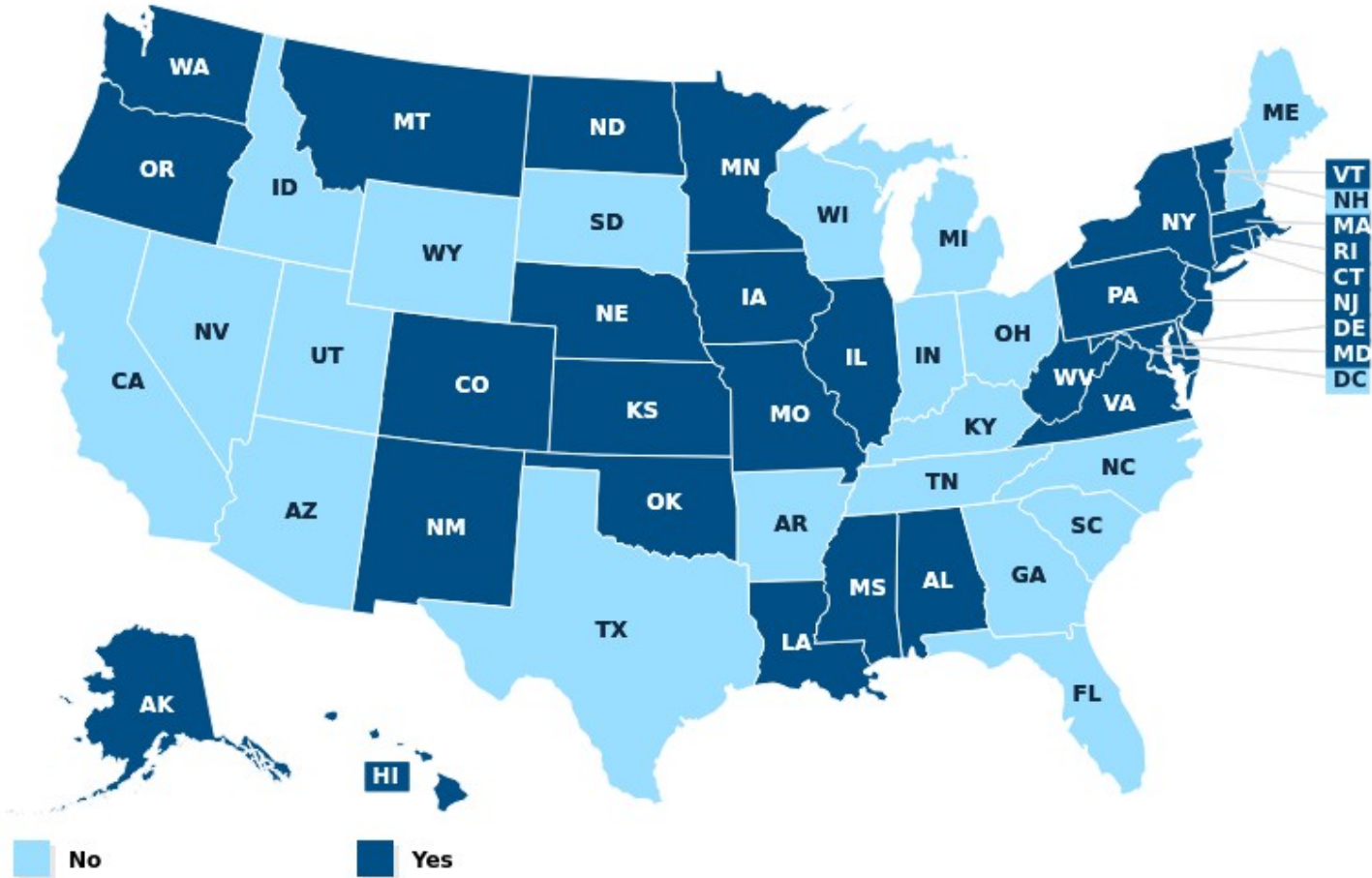


Debt
in \$ per capita

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

State Deficit Status

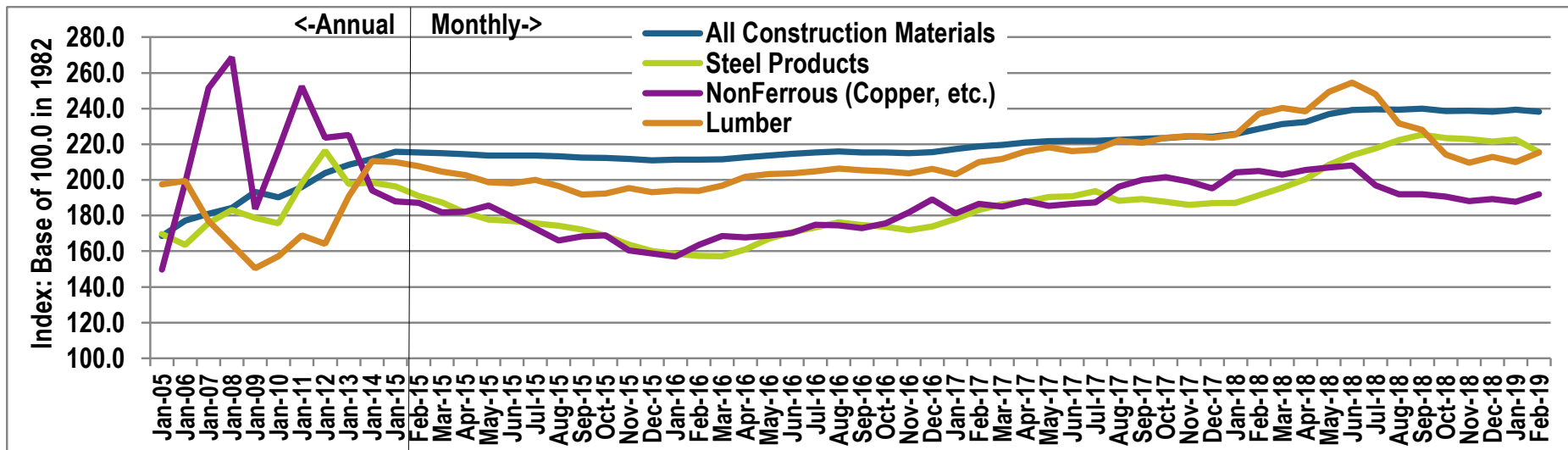
State Budget Shortfalls, SFY 2017 and SFY 2018: Facing Shortfalls in either SFY 2017 or SFY 2018?, SFY 2017 and SFY 2018



SOURCE: Kaiser Family Foundation's State Health Facts.

Tariff Impacts On Commodities

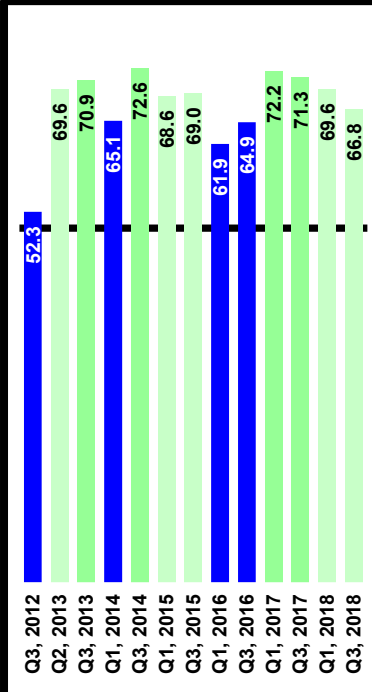
- ▶ Tariffs, global and US growth were pushing commodity prices, global growth is now slowing and mitigating price impacts
- ▶ Tariff impact starting to show up in steel – price increases are not yet significant enough to hurt growth
- ▶ Global growth is slowing; Will the slide stop? Will tariffs accelerate the slide?



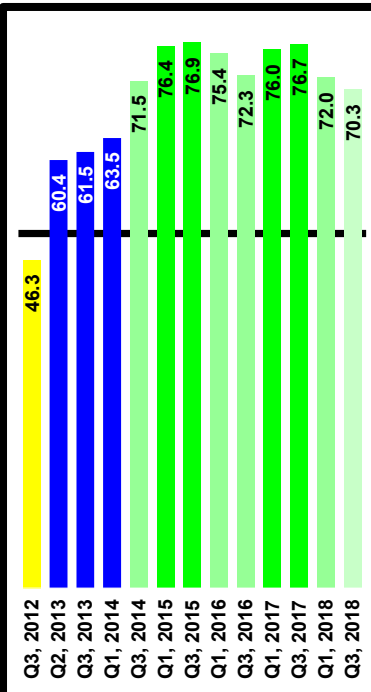
Source: Continuum analysis and presentation of US Department of Commerce raw data.

Utility Industry Perceptions

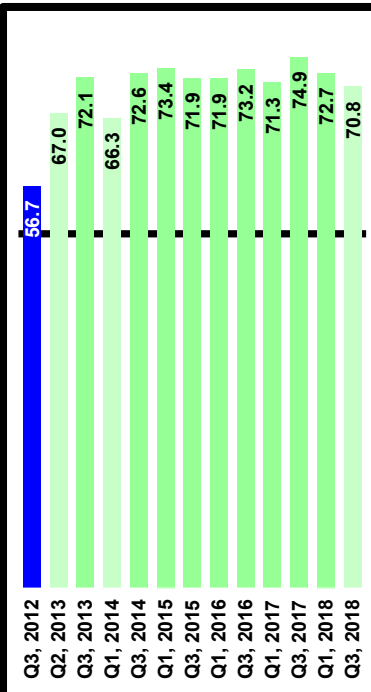
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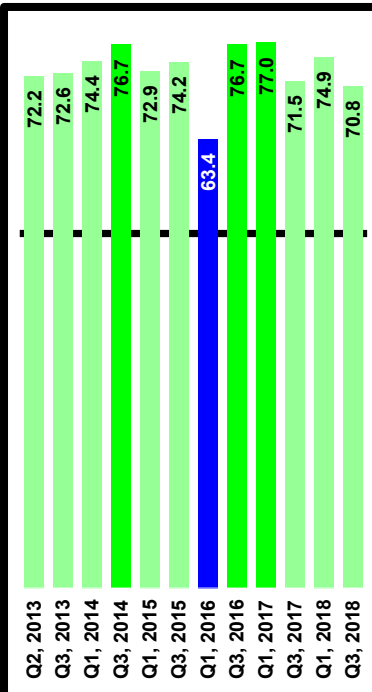
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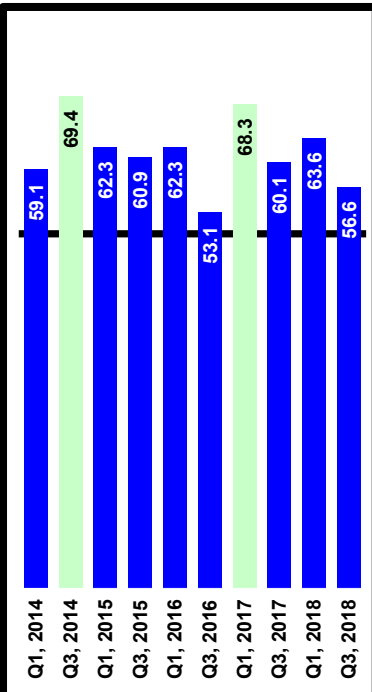
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Water & Sewer



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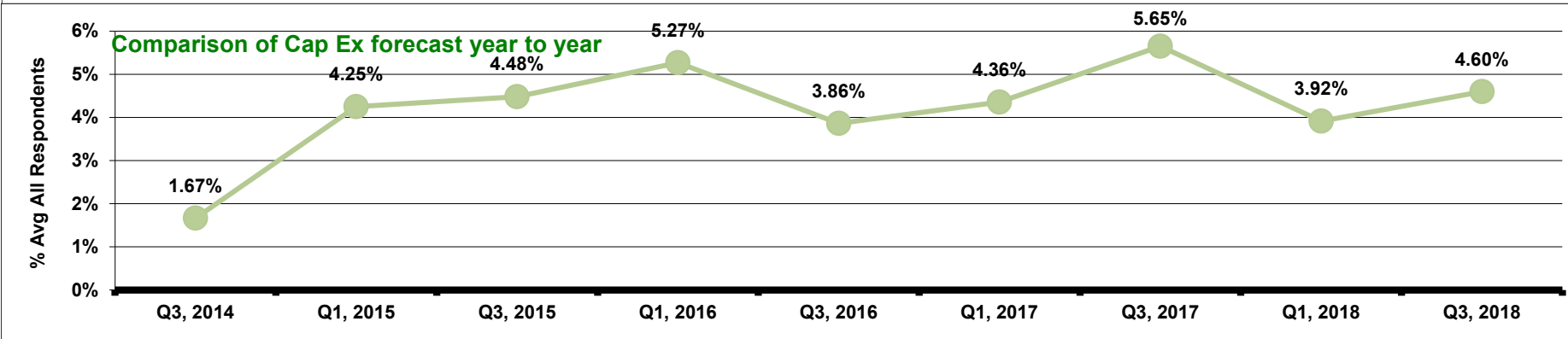
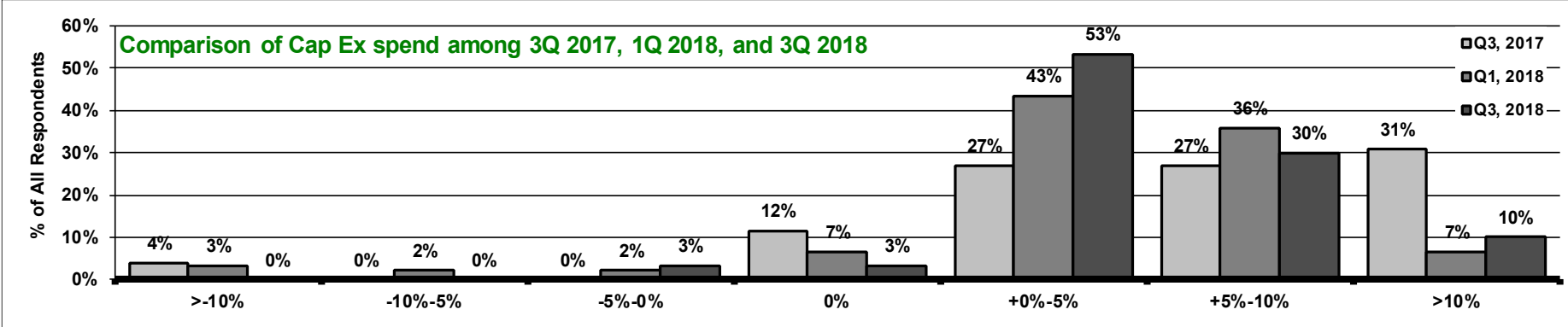
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Source: Proprietary Continuum analysis of utility contractor perceptions over 2012-2018.

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?



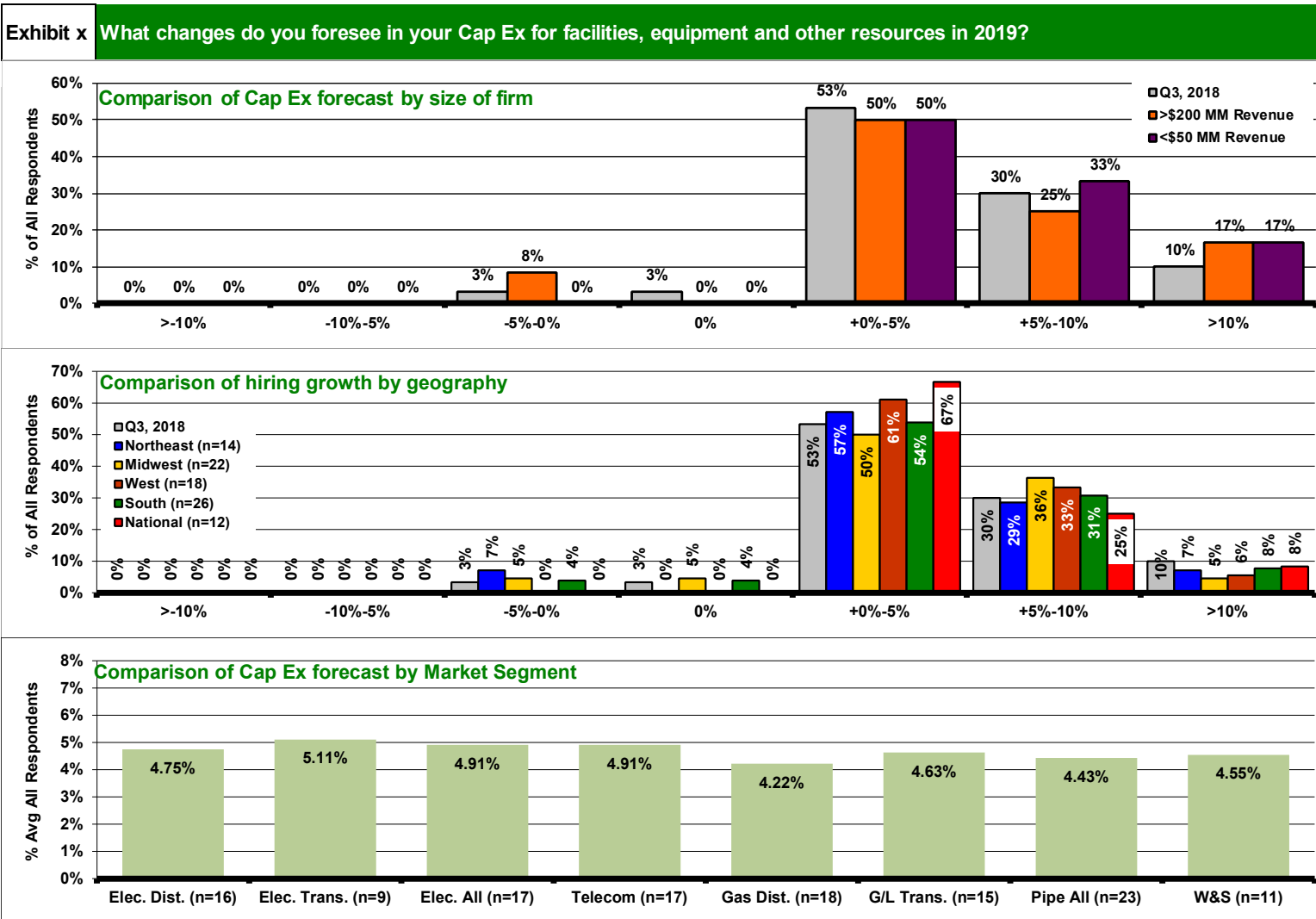
Source: Proprietary Continuum analysis of utility contractor survey feedback during 2012-2018.

Capital Expenditure Perspectives (2 of 2)

▶ Smaller firms more aggressive

▶ South and West most aggressive

▶ Elec. Trans. & Telecom most aggressive

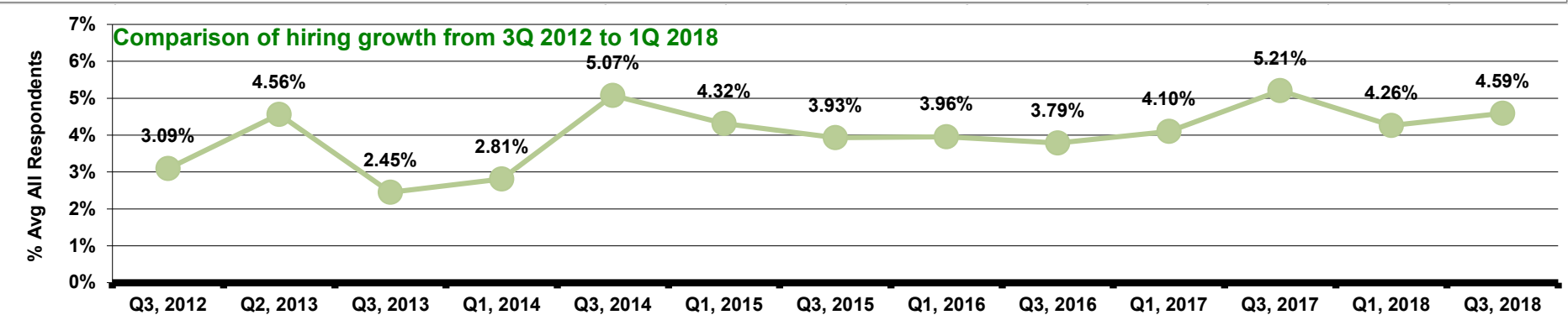
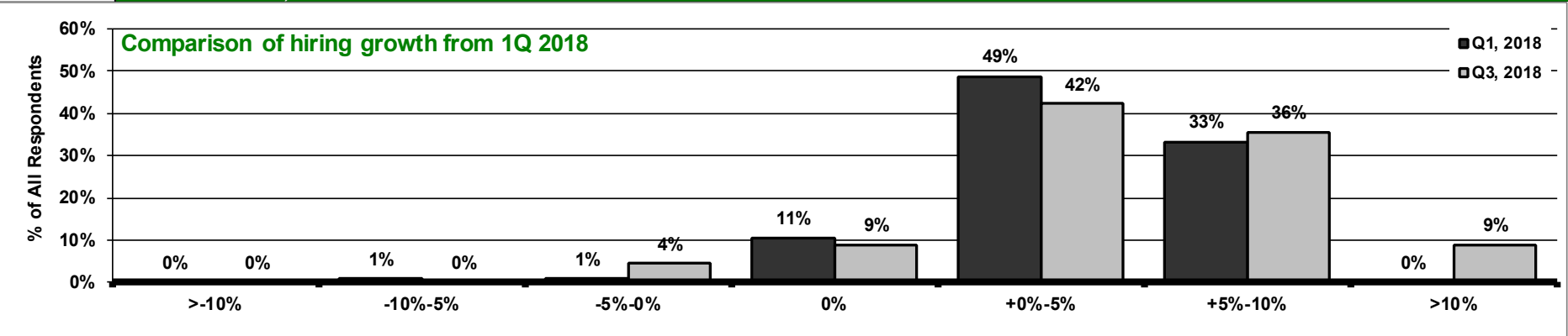


Source: Proprietary Continuum analysis of utility contractor survey feedback during 2012-2018.

Hiring Perspectives *(1 of 2)*

- ▶ Overhead and underground utility survey 2012-2018
 - Hiring growth rate peaked in 2014 and again in 2017
 - Natural growth rate of workforce is 1.5%

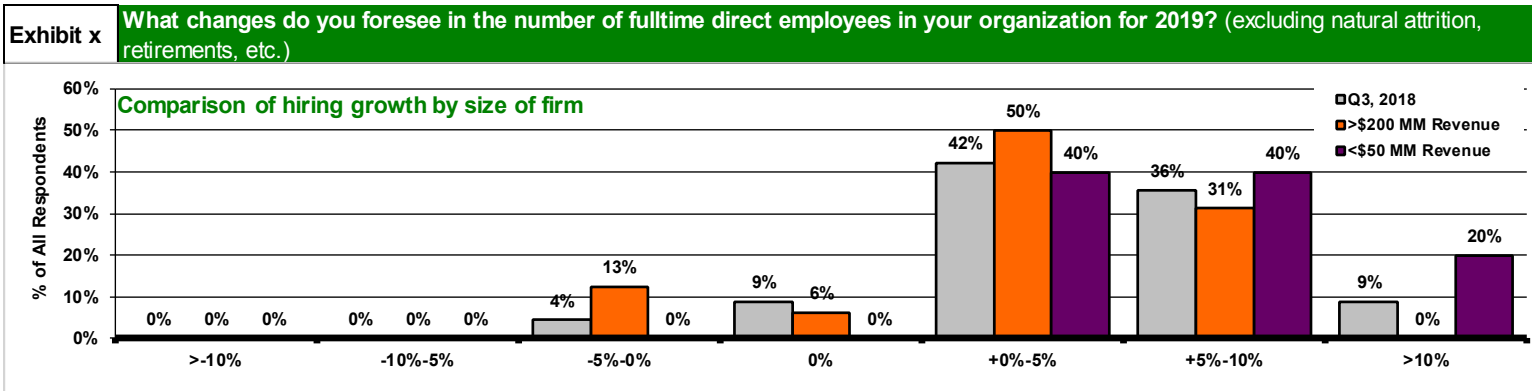
Exhibit x What changes do you foresee in the number of fulltime direct employees in your organization for 2019? (excluding natural attrition, retirements, etc.)



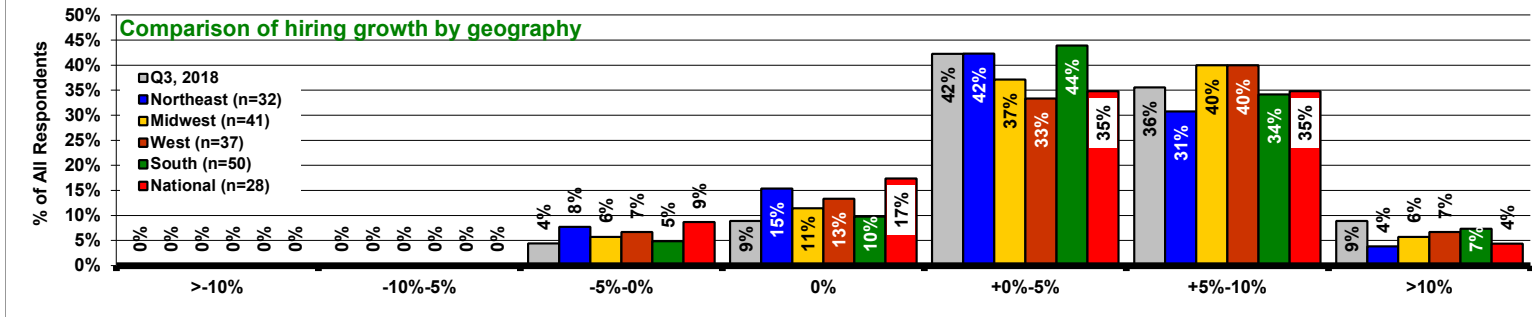
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Hiring Perspectives (2 of 2)

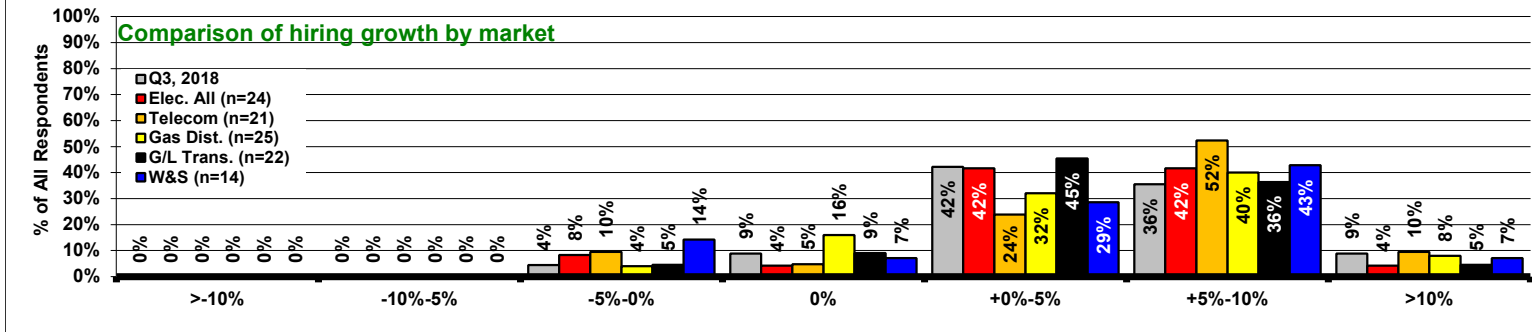
▶ Smaller firms more aggressive



▶ Midwest and West most aggressive



▶ Telecom 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.
- ▶ **Trump Support:** Belief that Trump will achieve a significant infrastructure rebuild is starting to wane.

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 Guild 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

