

Financial Strategies for Oil and Gas Companies in *Slightly Less Challenging Times*

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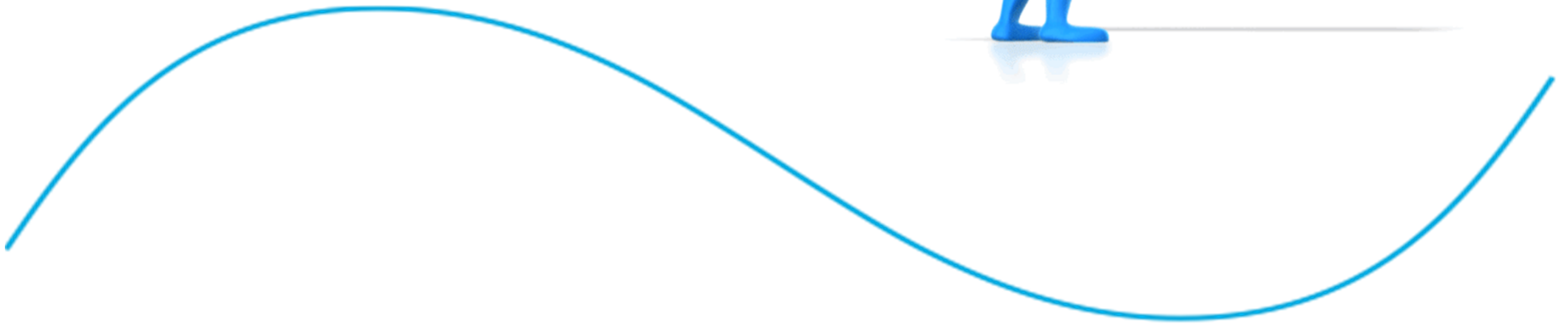
Betty Simkins, PhD

Outline

- Financial strategies in challenging times
- Financial strategies in *not so challenging times*
- Conclusion



Financial Strategies in Challenging Times

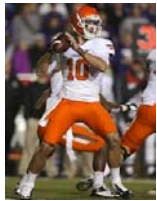


In All Times: Strategies involve Analysis and Competitive Benchmarking

Type of Comparison

Example

1. Comparison between companies



Revenue Growth



Revenue Growth

- Compare performance for **OSU** with performance for **OU**.

2. Comparison over time



2017



2016

- Compare **OSU** this year with last year.

3. Comparisons to Industry



Company Performance



Industry Performance

- Compare **OSU's** performance with the average performance for the entire Big 12 Conference.

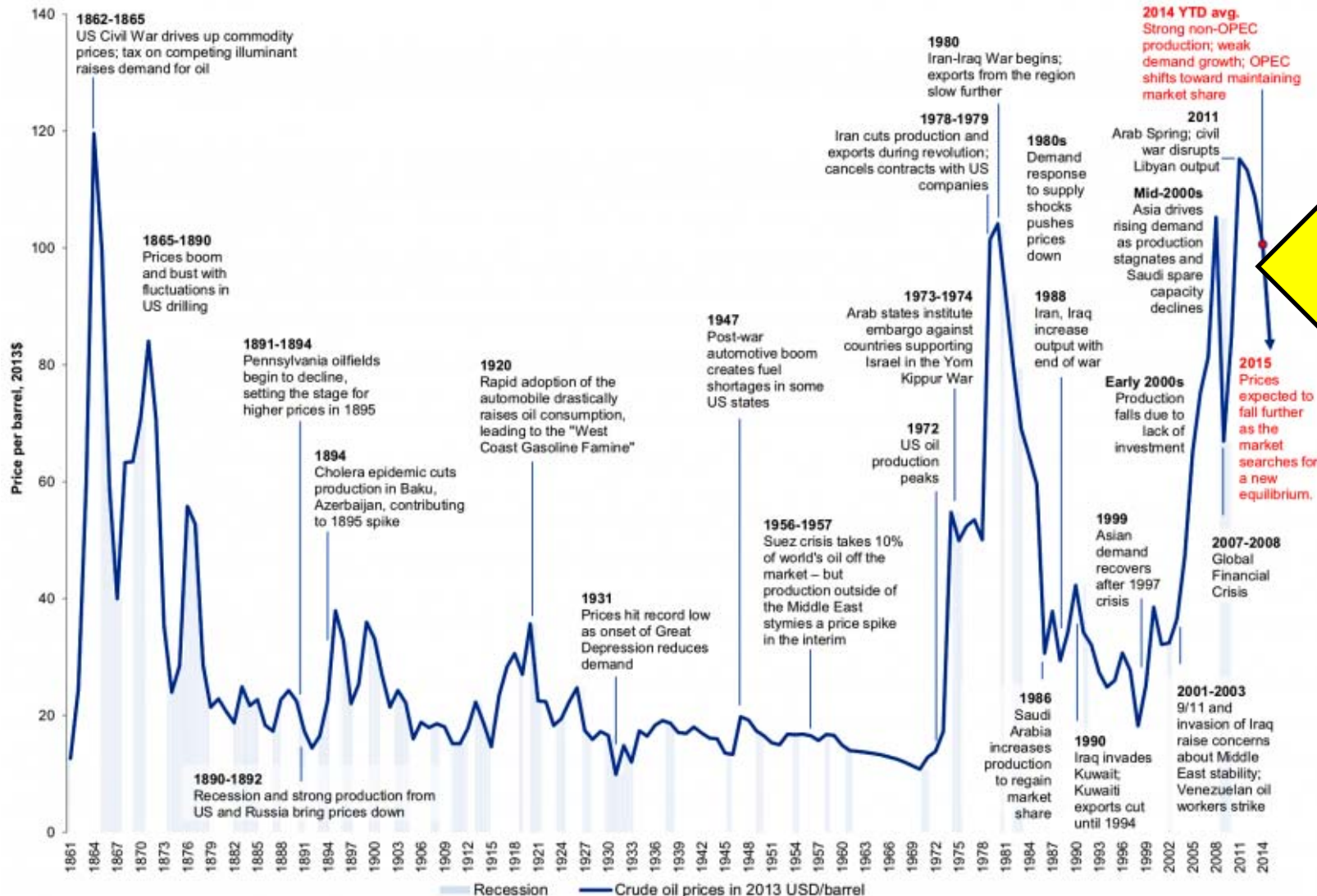




May 16, 2018

Goldman Sachs Oil History

History of crude oil prices



There have been many price shocks. Since 1983, the oil sector has had 7 shocks in which oil prices dropped by > 40%.

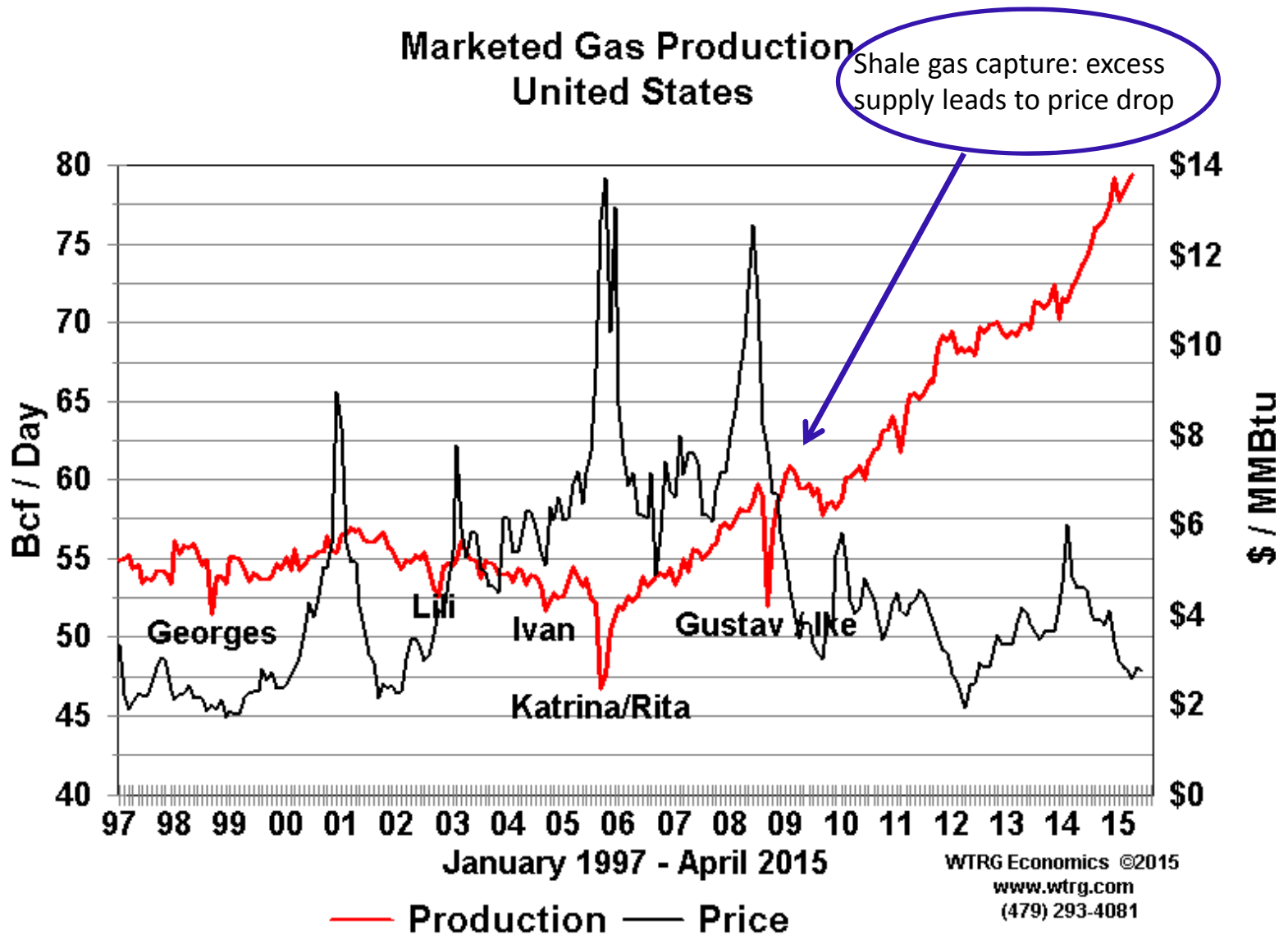
Note: 2014 YTD average price is as of December 8, 2014.
Source for data: BP, NBER/Federal Reserve Bank of St. Louis.
Source for annotations: Hamilton, James, "Historical Oil Shocks," University of California, San Diego; various news sources; Goldman Sachs Global Investment Research.

Simulation of Oil Prices

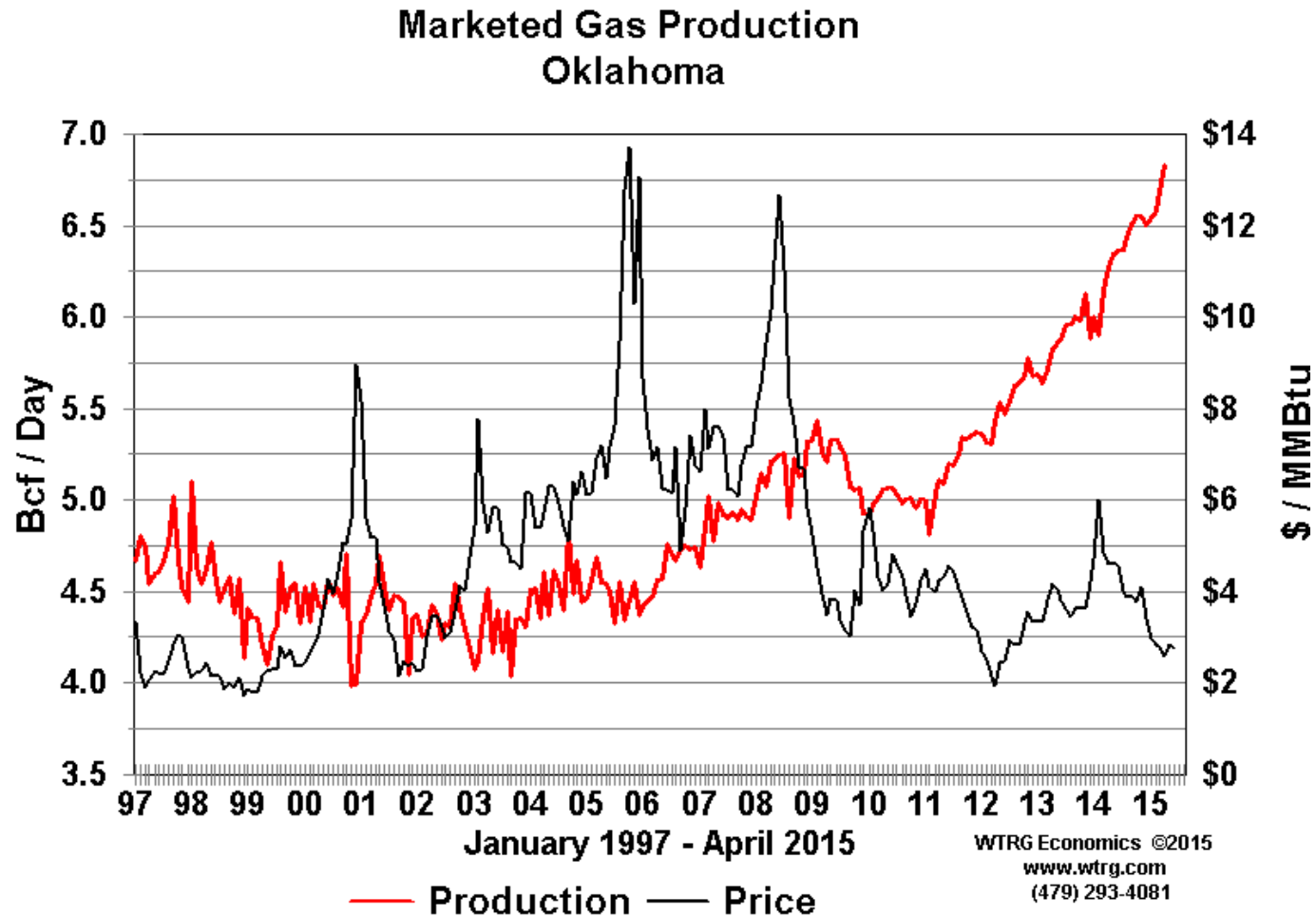
- <https://youtu.be/tLZxzgDL1V0>



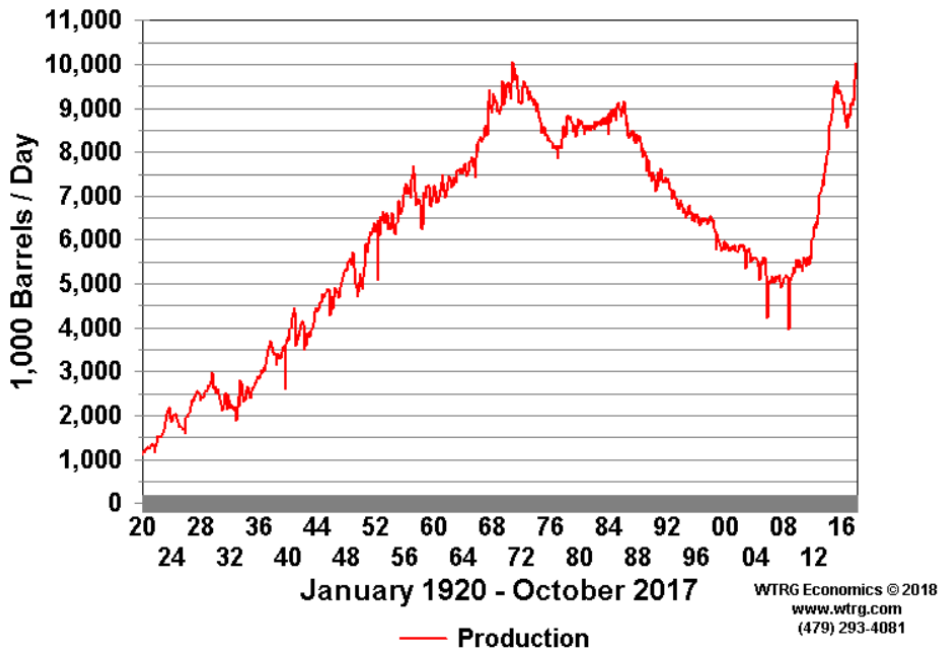
US Natural Gas Price and Production Since 1997



Oklahoma Price and Production Since 1997

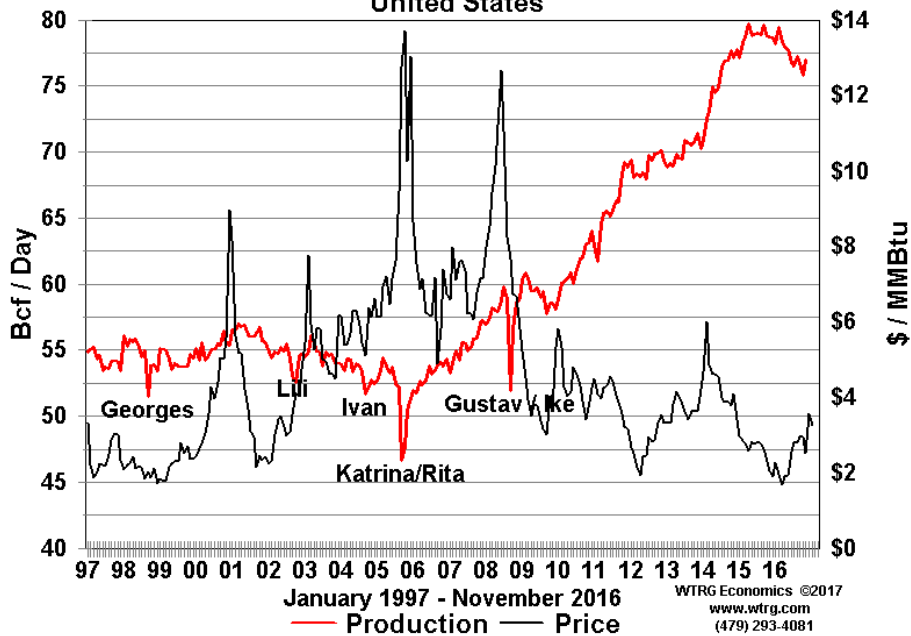


Crude Oil Field Production U.S.

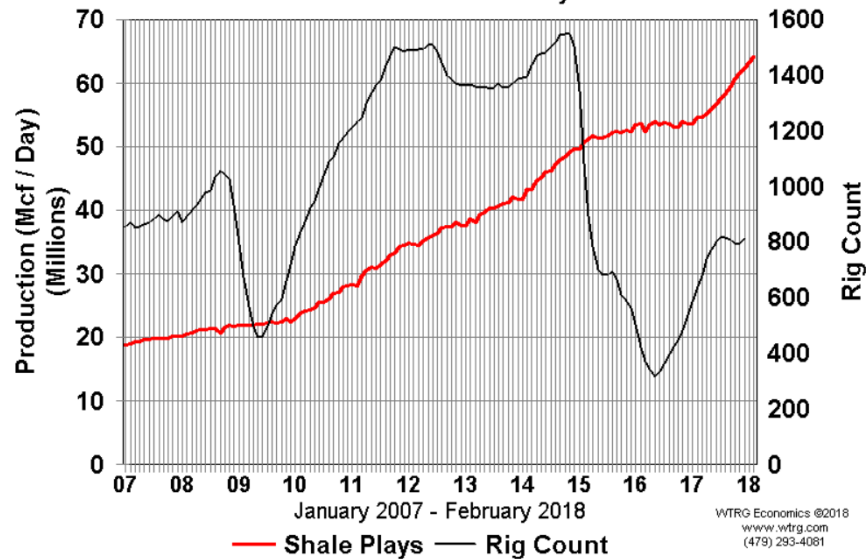


We are not running out of fossil fuels in the US.

Marketed Gas Production United States



Gas Production Lower 48 Shale Plays



Financial Strategies in Challenging Times

- Using optimal financial policies under various recovery scenarios will help firms make better decisions.
- Energy firms should maintain a conservative capital structure across time.
 - Integrated, upstream, midstream, downstream, and oil field service firms
 - Helps to withstand the “shocks”



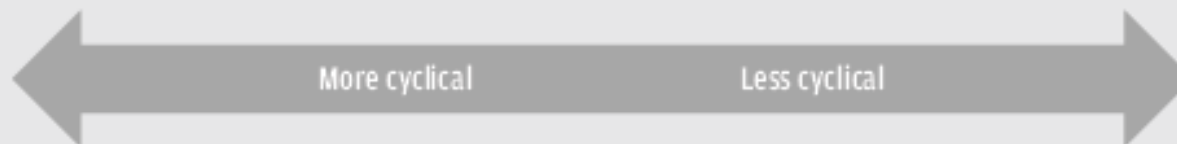
Given the propensity for “surprises” in oil prices, energy firms typically have conservative capital structures, even relative to firms in other cyclical sectors.

Figure 1

Cyclical firms tend to maintain through-cycle financial policies

Financial policies for BBB-rated firms in select sectors

	Energy	Industrials, Materials	Consumer staples, Healthcare	Utilities
Net debt/ EBITDA ¹	~1x	~2x	~3x	~4x
Shareholder payout ratio ^{1,2}	~30%	~70%	~50%	~70%



Source: J.P. Morgan, Bloomberg

¹ Median for S&P 500 firms, in their respective sectors, which are rated in the BBB category by S&P

² Payout ratio defined as all dividends and repurchases over the last twelve months as a percentage of net income before extraordinary items



Source: JPMorgan Research Report, Feb. 2015

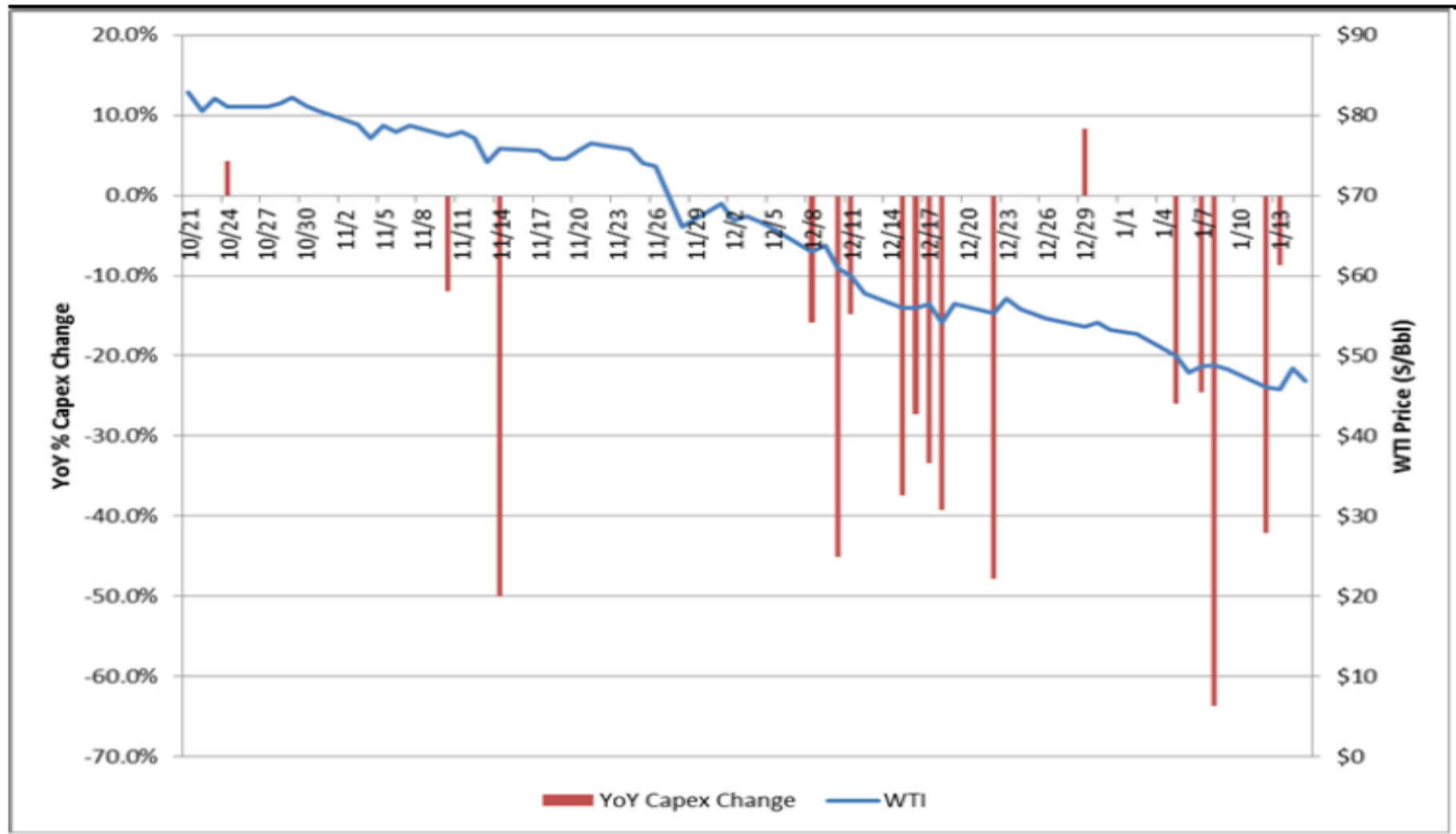
Once the Shock Hits

- Once the shock hits, energy firms have “well-oiled” tools in their tool chest to raise \$\$\$.
- These can be internal and external tools.
- **Internal tools** are used first.
 - The least disruptive is to cut capital expenditures (capex).
 - Cut SG&A
 - Reduce dividends
 - Put share buybacks on hold



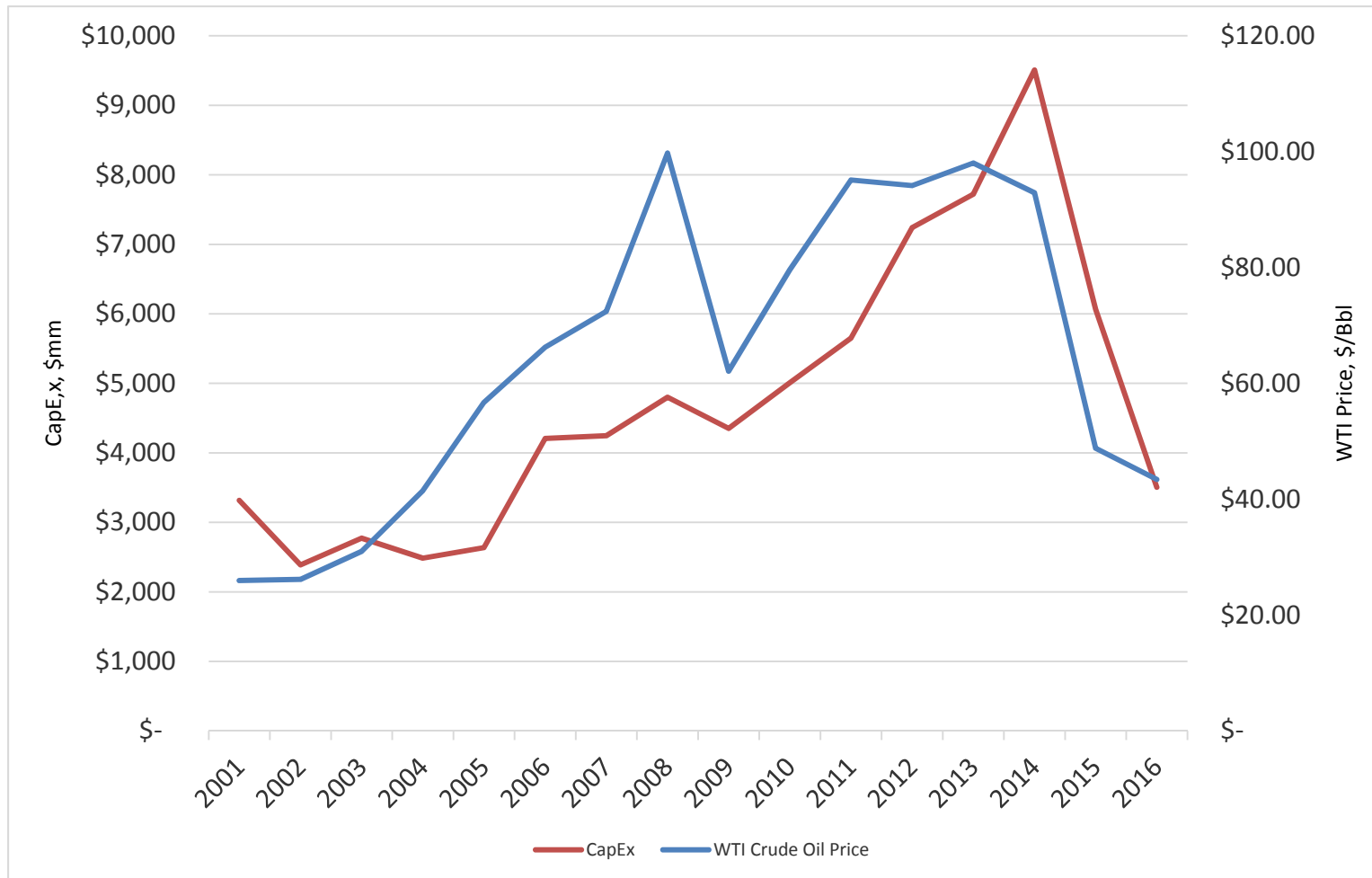
Capex Cuts began with the Downturn as Industry Gets Further into 2015

Source: UBS

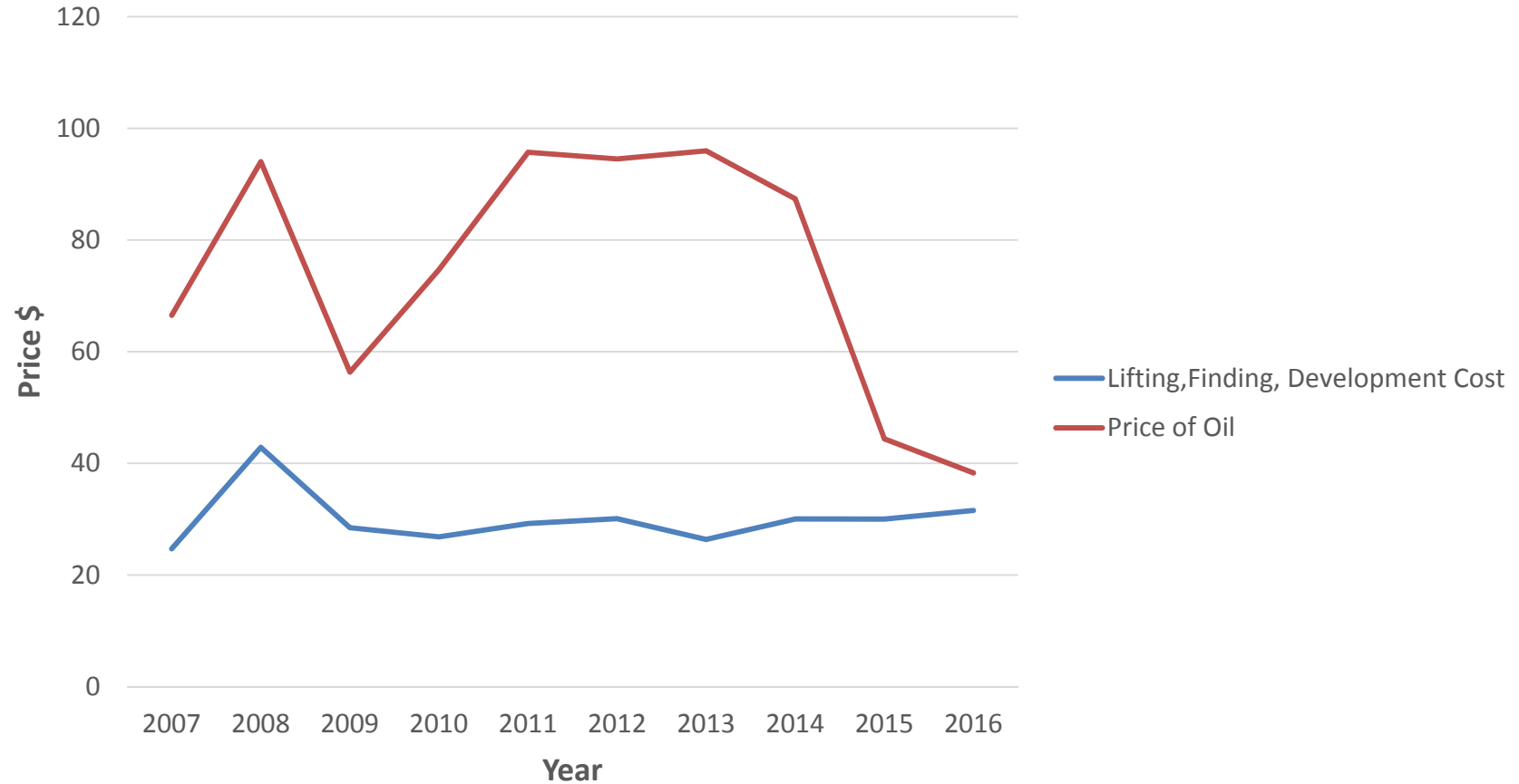


Source: Company documents, Factset, and UBS estimates

Anadarko Capital Expenditures versus WTI Price (2001-2016)

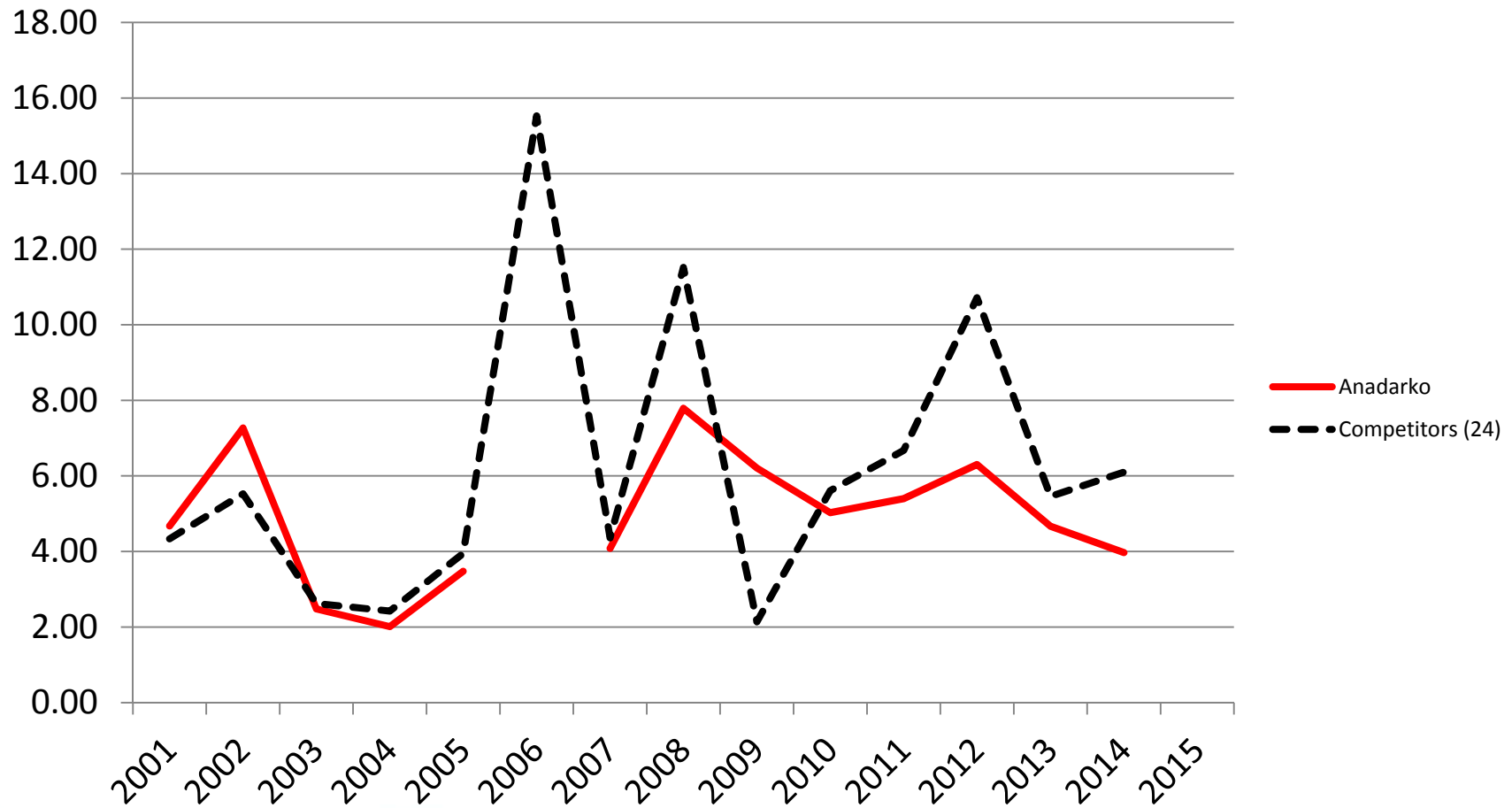


Price of Oil vs Cost to Produce It for Anadarko

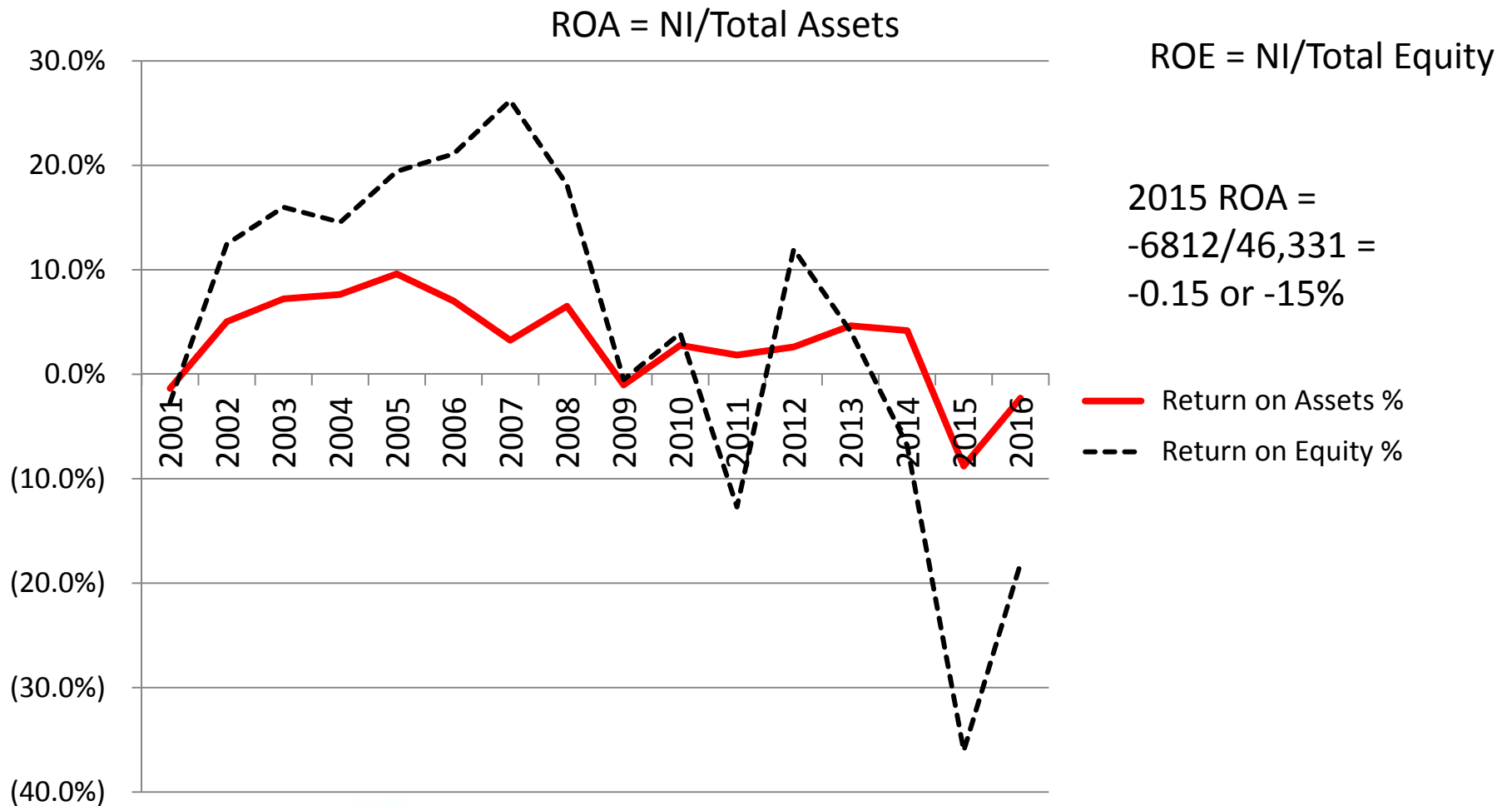


Anadarko Finding Cost versus Competitors (2001-2014)

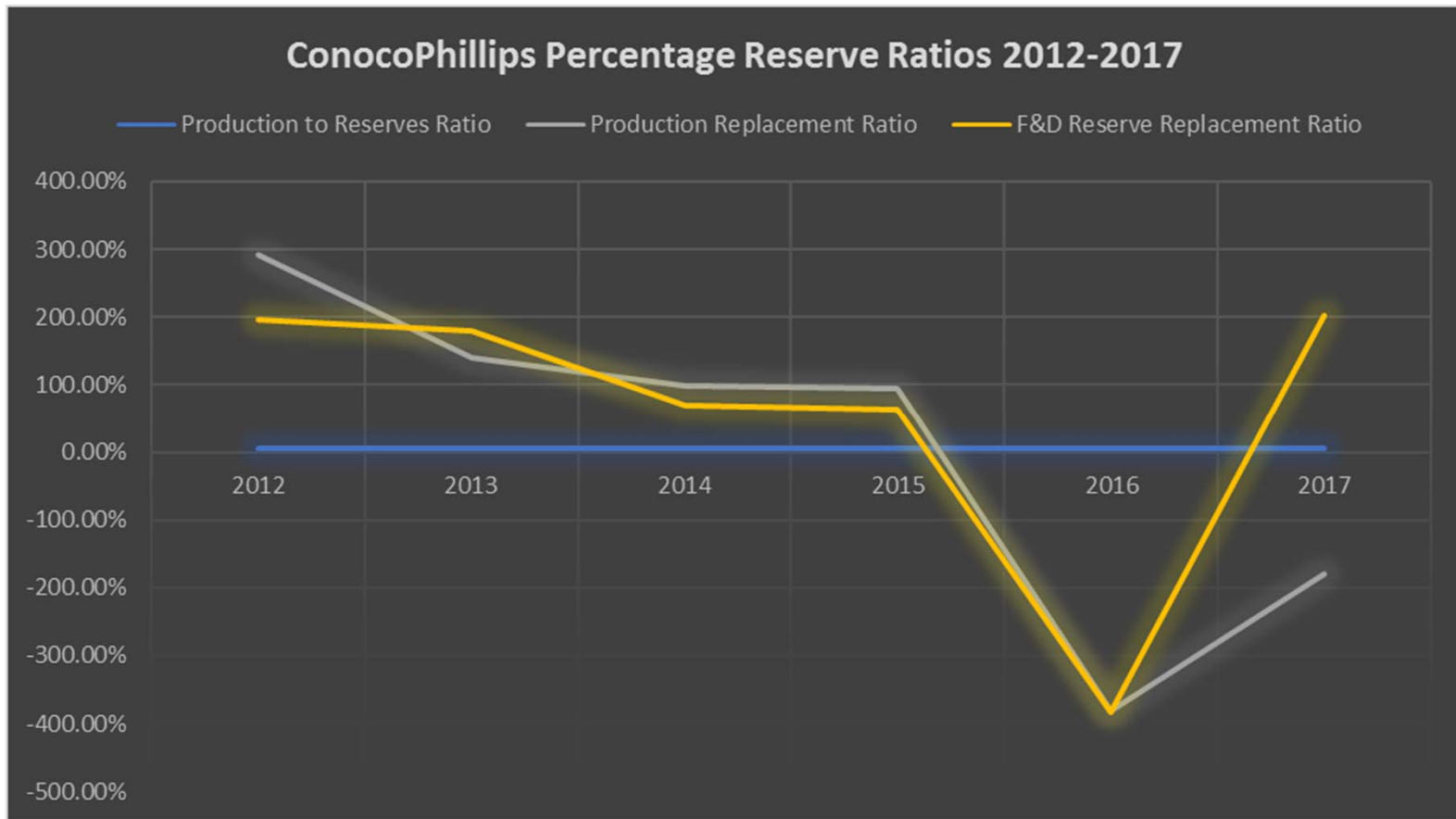
Note: 2015 and 2016 are “not meaningful” because of the oil industry downturn.



Anadarko ROA and ROE (2001-2016)



ConocoPhillips



How does the 2015-2017 collapse compare to past downturns?

- **1985-1986's Oil Price Collapse (recovery took over 10 years)**
 - Comparable to current given OPEC then abandoned strategy to defend prices in response to non-OPEC production growth.
 - Two major differences: (1) Unlike growing demand today, consumption had declined from 65 mmbpd in 1979 to 59 mmbpd in 1985, and (2) OPEC had massive surplus capacity of 8.8 mmbpd in mid-1980s (18.2% extra as compared to 3.6% today).
- **1998 Asian Currency Crisis (recovery took about 1.5 years)**
 - Comparable to current given slow down in global demand growth and increase in oil supply.
 - Different now in the new supply growth and OPEC's dramatic shift in policy from defending oil prices to let the free markets set prices.
 - Oil prices fell ~45% in 1998.
 - OPEC miscalculated to increase quotas into the economic slowdown.
- **2008-2009 Financial Crisis (recovery took about 1.5 years)**
 - Not really comparable
 - Drop in demand due to global recession. OPEC made sharp cuts to quota to defend price (2 cuts totaling ~5mmbpd).
 - Oil speculation by firms such as Semgroup contributed to oil price run up and collapse.



POP QUIZ

Which are internal strategies that energy firms use in a downturn?

- A. Capex cuts
- B. Workforce reductions
- C. Put share buybacks on hold
- D. Cut dividends
- E. All of the above



Pecking Order: After Internal Strategies used, External Strategies Implemented

Figure 8

The downcycle liquidity pecking order



Raise capital internally



- Lower capital expenditures
- Place share buybacks on hold
- Cut selling, general & administrative expenditures
- Manage working capital



Raise capital externally



- Monetize in-the-money hedges
- Seek covenant relief
- Issue bonds/hybrids
- Issue equity/convertibles



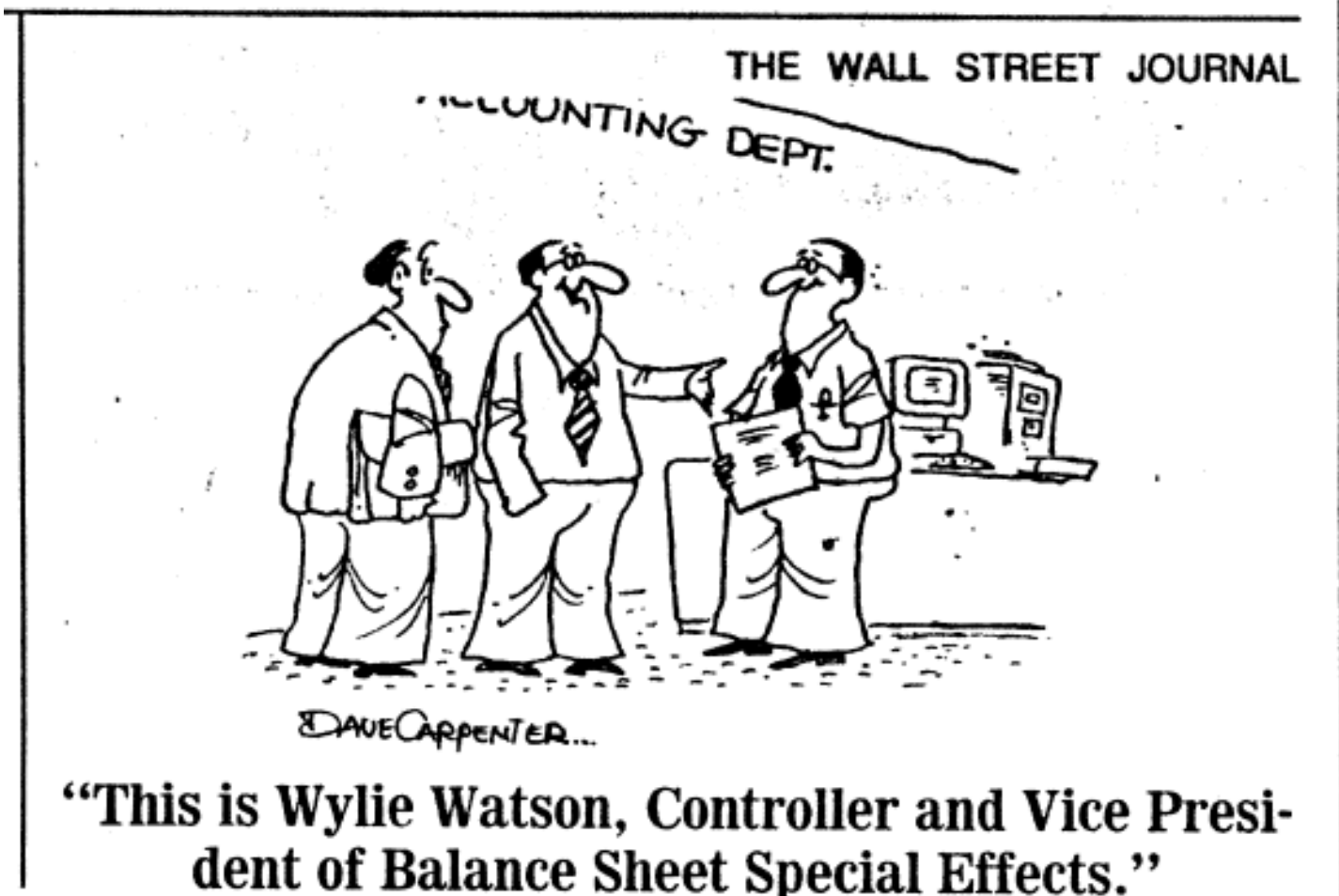
Pursue M&A opportunities



- Explore strategic M&A alternatives
- Leverage fortress balance sheet
- Merge to obtain size and diversity ratings benefits
- Sell assets to provide liquidity

Source: J.P. Morgan

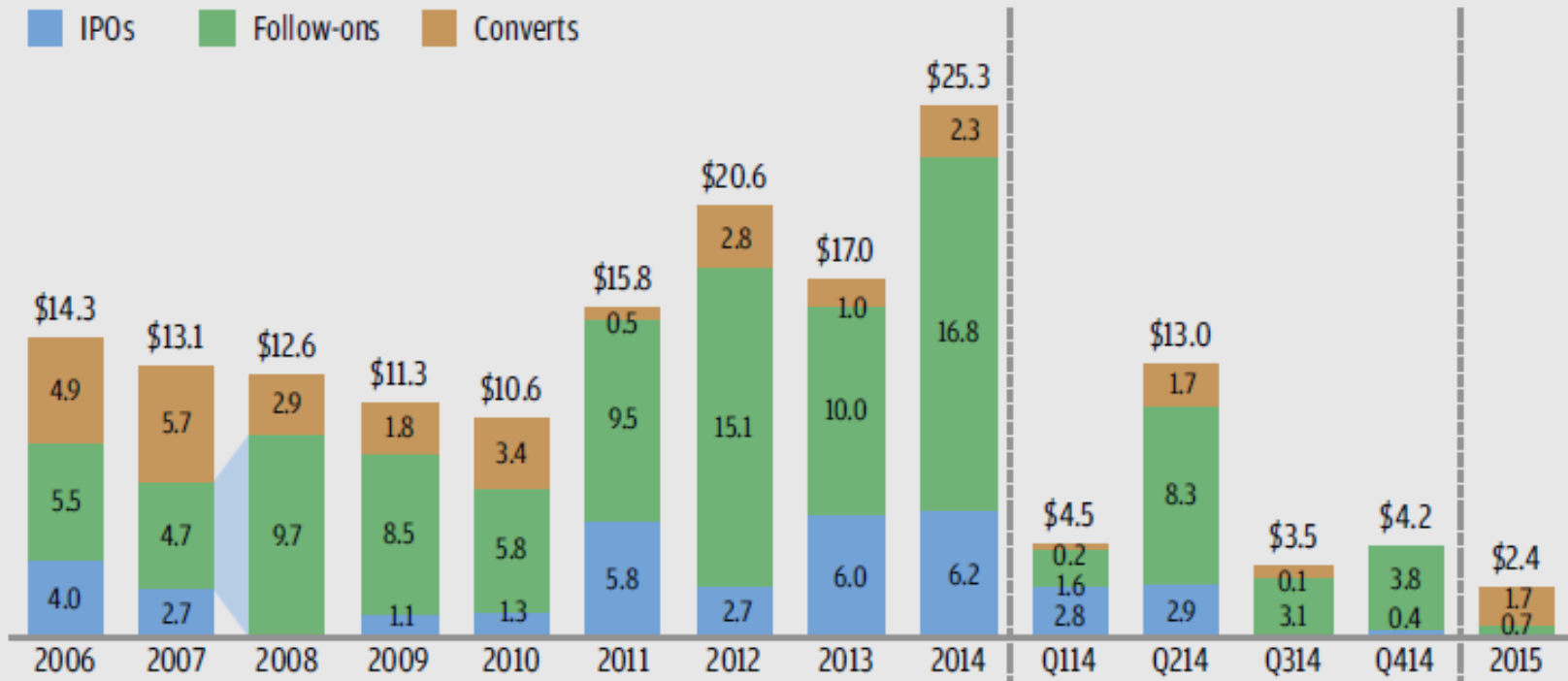
Source: J.P. Morgan February 2015, "Here we go again..."



Source Capital Externally

In challenging conditions, the sources of capital change

Energy equity capital raised (\$bn)



Source: J.P. Morgan, Dealogic. Excludes Master Limited Partnerships, data as of 1/30/2015



Executive Takeaways

EXECUTIVE TAKEAWAY

Energy firms are typically conservatively financed and have a battery of strategies and tactics to respond to downcycles. In addition, rating agencies rate these firms through the cycle, expecting fluctuations in EBITDA and cash flow. Nevertheless, debt and equity markets have responded harshly to the recent oil price declines, especially with regard to non-investment grade firms. As a result, some of these firms may find debt market access challenging or extremely expensive. This brutal financial market response alone may be self-fulfilling by reducing access to liquidity and making balance sheet repair more difficult.

EXECUTIVE TAKEAWAY

Historically, energy firms have taken both internal and external actions in response to challenging market conditions. Raising liquidity—whether internally via capex cuts, reductions in shareholder distributions or headcount reductions, or externally via debt or equity offerings—is a viable option. Well-capitalized firms will, however, find this an opportune time for strategic M&A opportunities, not only to preserve value, but also to capitalize on the optionality from their strong balance sheet.

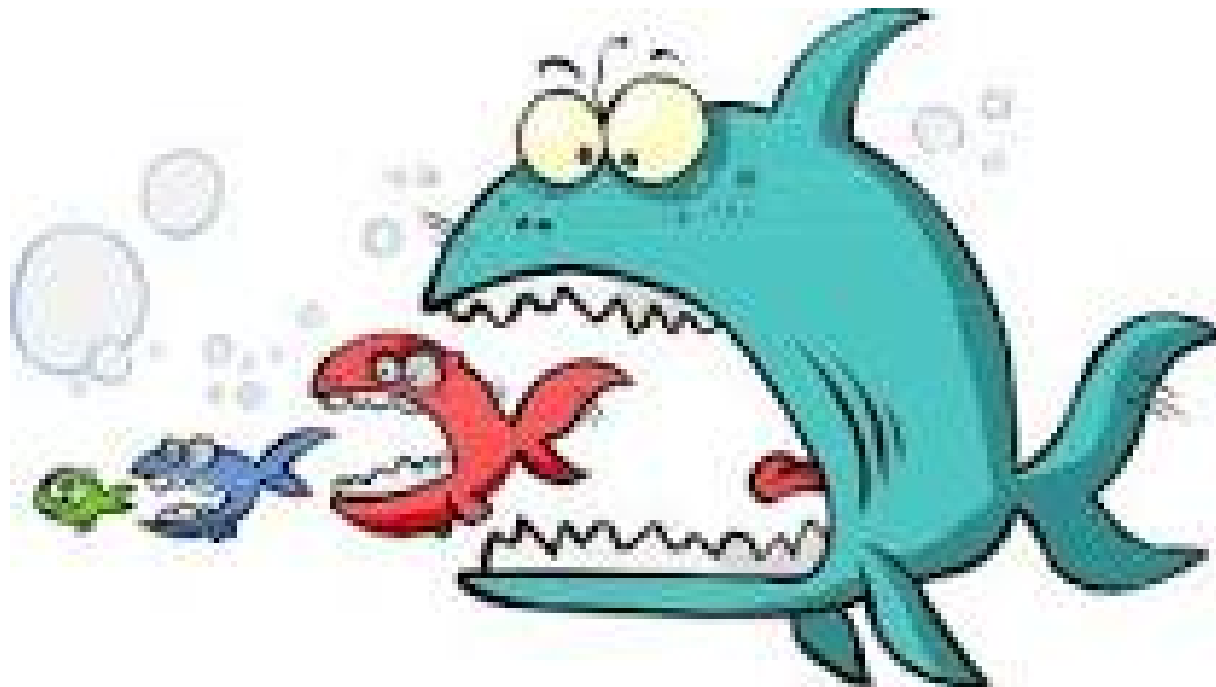


Source: J.P. Morgan February 2015, “Here we go again...”

Trends in Mergers, Acquisitions And Divestitures



Mergers & Acquisitions (M&A)



M&A Drivers

Economies of scale (i.e. consolidation)

Revenue diversification – via adjacent product categories or geographical expansion

Operational efficiency (i.e. revenue/cost synergies)

Financial engineering (i.e. the benefits of debt financing)

Available (and typically cheap) liquidity/financing

Access to “new” products or capabilities (i.e. technology)

Source: UBS



Expand Size and Scale: M&A

- Another strategy to improve an energy firm's balance sheet strength and to enhance their access to debt markets is to expand their size and scale.
- A larger size and more diverse business can help firms move into higher ratings categories.
 - Can help in prosperous times and provide downside risk management.
 - See next slide

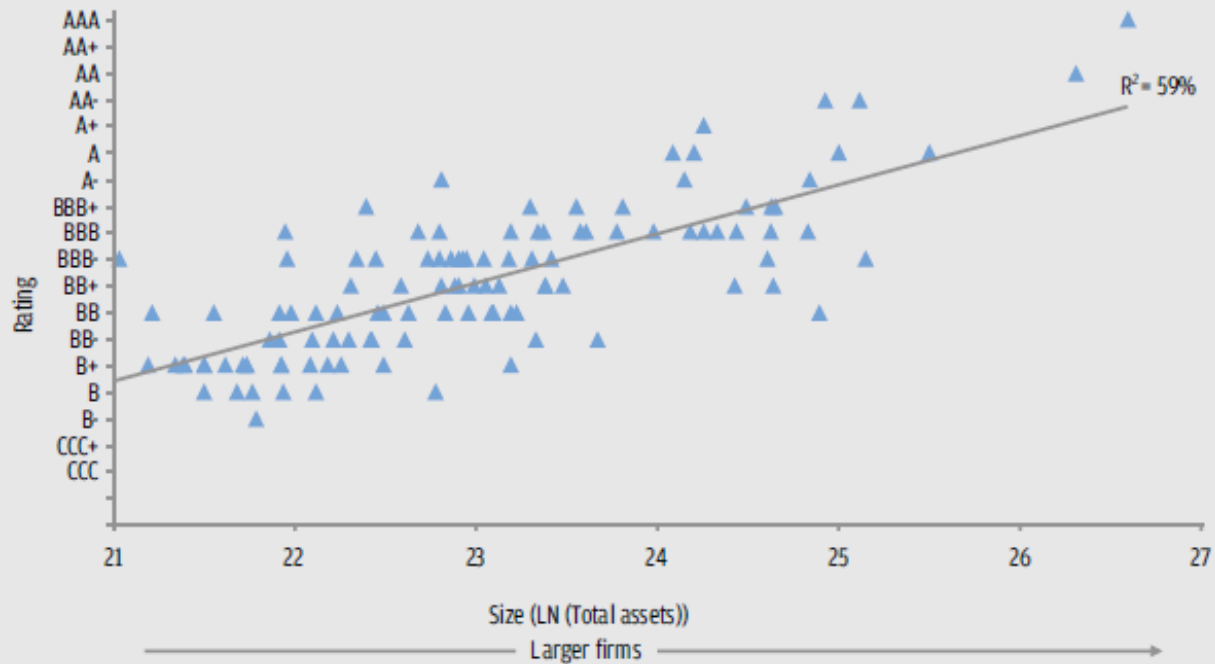


Size and Scale are Key Determinants of Credit Quality in the Energy Space

Figure 12

Size and scale are key determinants of credit quality in the energy space

Credit rating versus asset size for energy firms



Source: J.P. Morgan, Bloomberg

Note: Ratings data calculated based on average of S&P and Moody's ratings. Sample includes firms within GICS sectors as follows: Energy (including E&P, Integrated, Oilfield Services, Midstream and Refining), U.S. and with a market capitalization that exceeds \$1 billion



Source: J.P. Morgan February 2015, "Here we go again..."

Examples of M&A in Past Price Collapses

- Super-major consolidations
 - BP acquisition of Amoco (approved Dec. 1998)
 - ExxonMobil Merger (Approved Nov. 1999)
 - TotalFina and Elf (Approved Sept. 1999)
 - Chevron and Texaco (Sept. 2001)
 - Conoco and Phillips Petroleum merger (approved Aug. 2002)



POP QUIZ

List five external strategies that firms can use during these challenging times.



Strategies to Unlock Value in the Energy Value Chain Past 5 Years

- Spinoffs, MLPs, M&A
- There are not a lot of integrated oil companies left; just majors who are unlikely to spin.
- Current strategies in EVC:
 - Form an MLP for logistics assets
 - Sell international assets to focus on NA; or sell non core NA to become a pure play in a particular basin.
- Petrochemical growth



Historically:

Why are IOCs Vertically Integrated?

- Very few industries have traditionally had this degree of vertical integration.
- Some characteristics of vertical relationships that support this:
 - Small number of firms
 - Market transactions subject to taxes
 - High uncertainty about costs, technology, demand
 - Similar scale of operations in the stages
 - Similar strategies between stages
 - Limited need for entrepreneurial behavior
 - Predictable market demand
 - Controllable risk to other elements of value chain



What holds NOW?

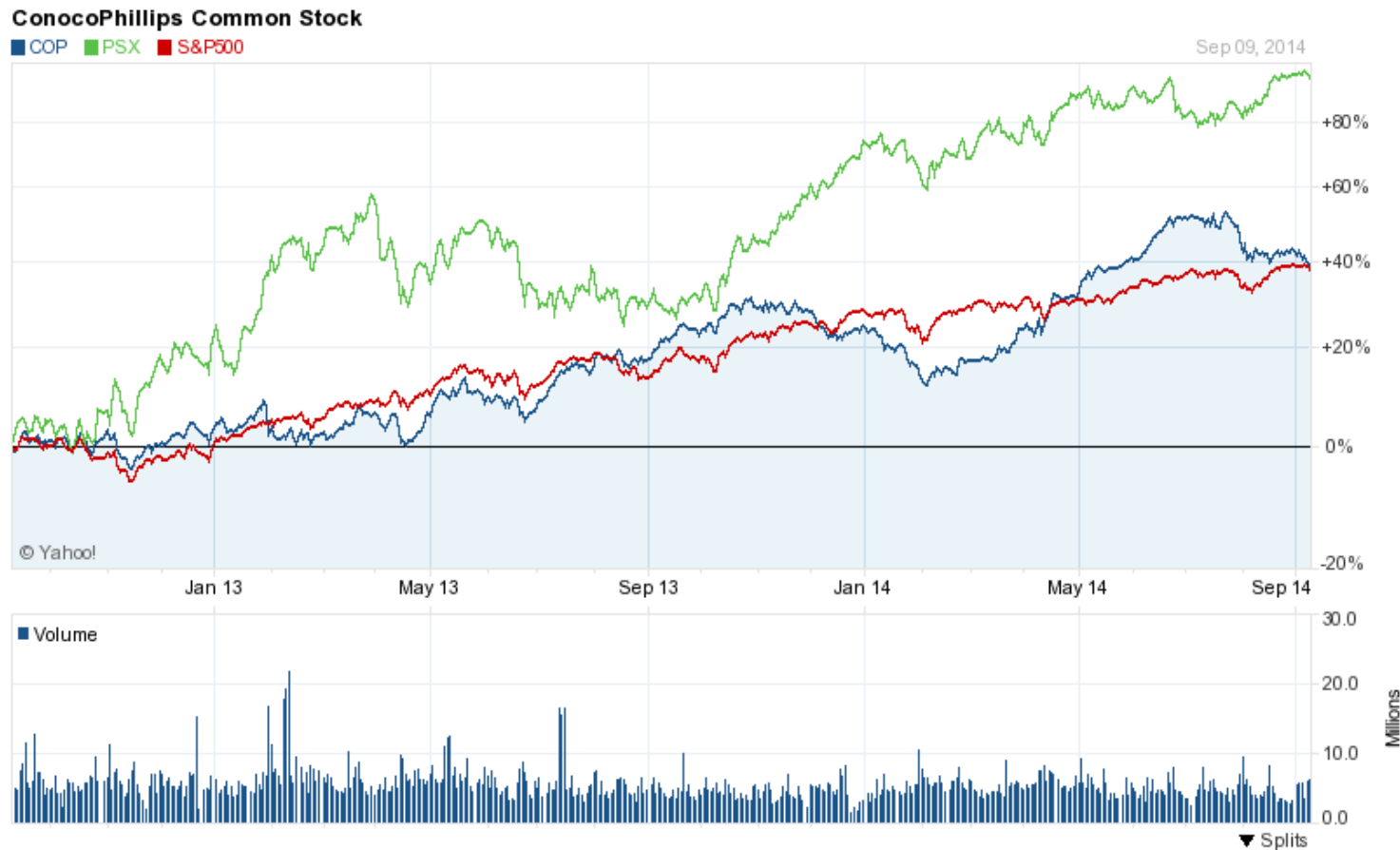
- Some characteristics of vertical relationships that support this:
 - ~~Small number of firms~~
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 - ~~Similar scale of operations in the stages~~
 - ~~Similar strategies between stages~~
 - ~~Limited need for entrepreneurial behavior~~
 - ~~Predictable market demand~~
 - Controllable risk to other elements of value chain



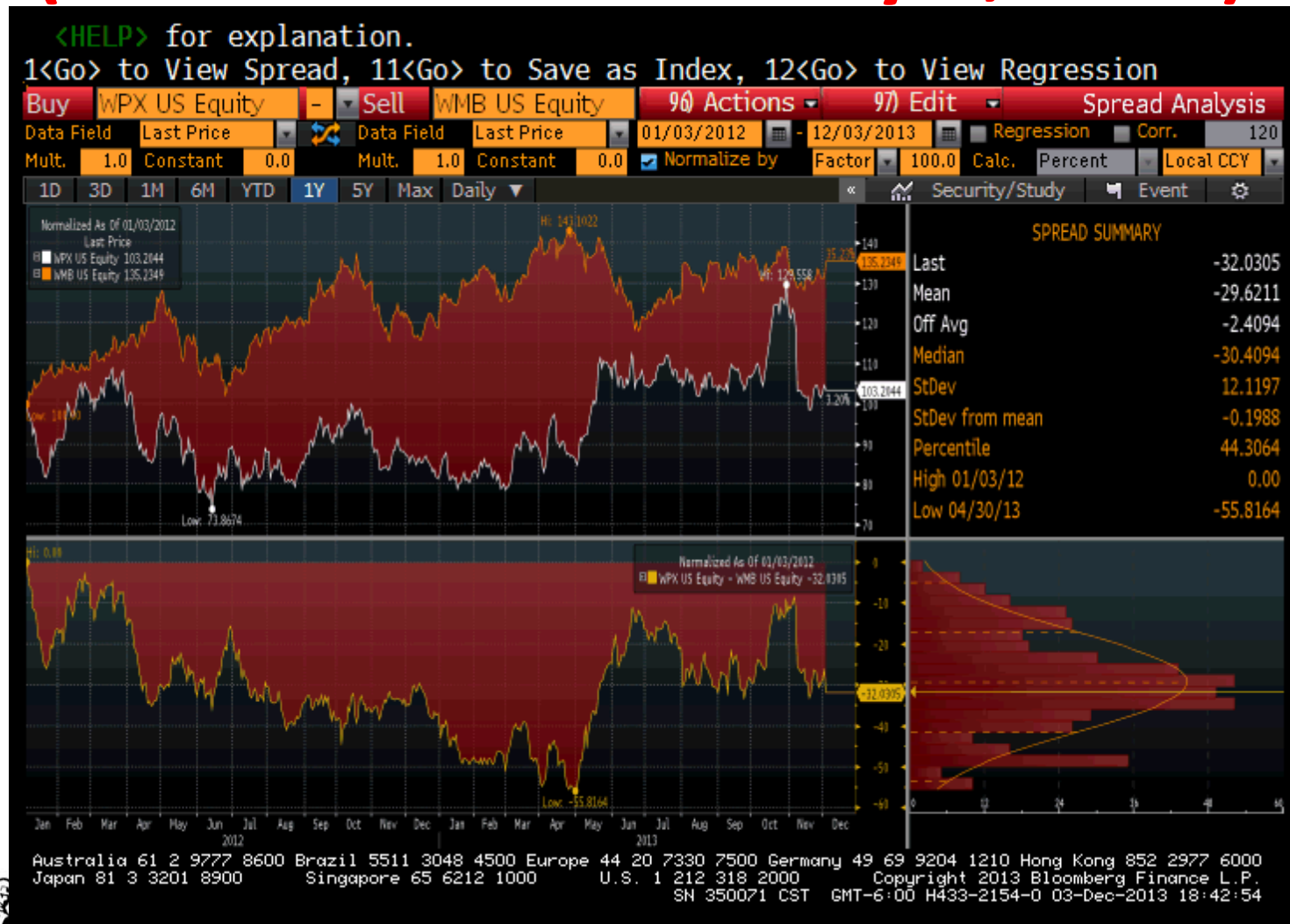
Can you name companies that have done spin-offs of parts of the energy value chain?



ConocoPhillips Spin-off of Phillips 66, Share Price Performance since Effect Date of May 1, 2012 through Fall 2014

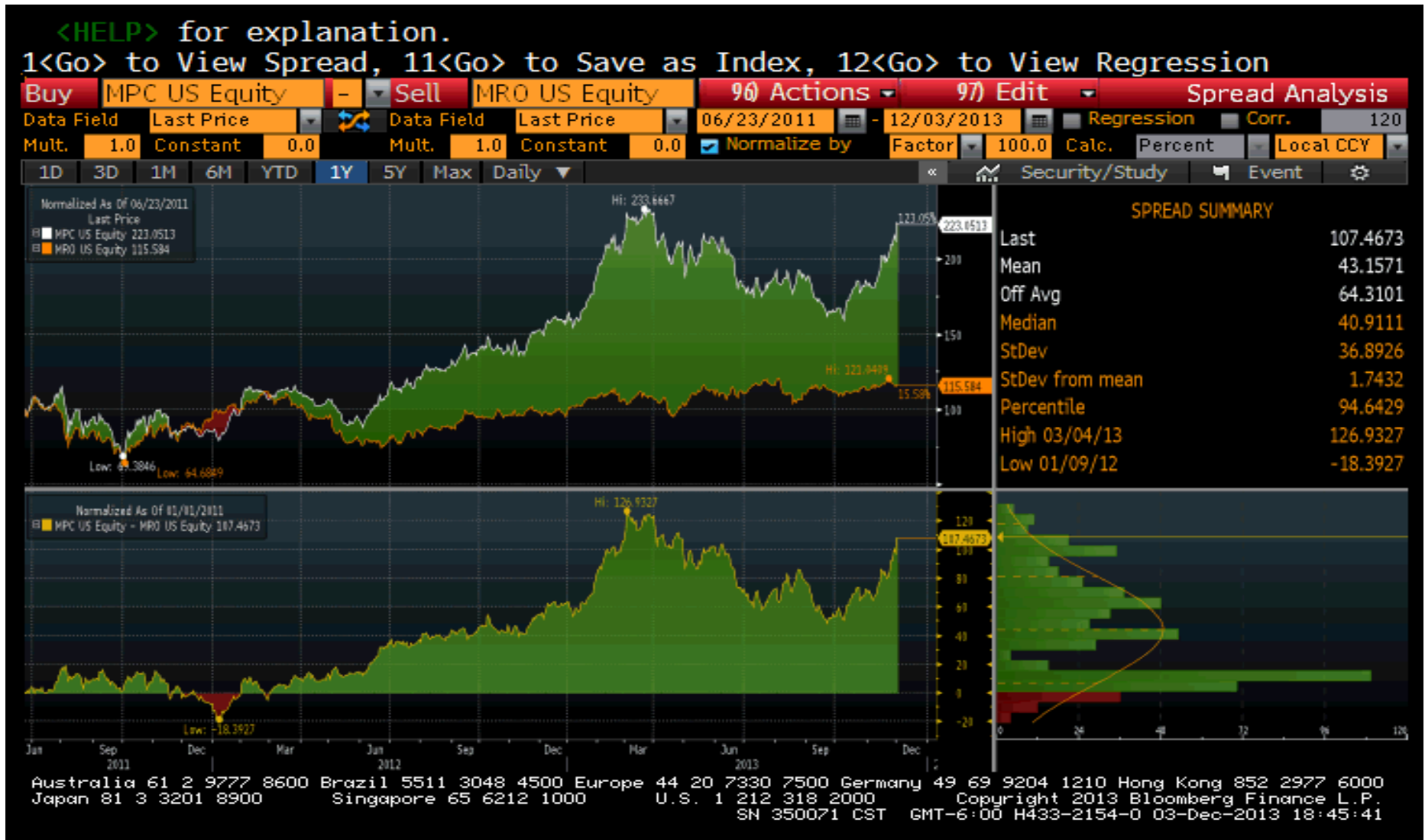


Williams Companies Spin-off of WPX (effective date January 3, 2012)



Marathon Oil (MRO) and Marathon Petroleum (MPC)

Split June 30, 2011. MRO (Upstream) and MPC (Mid/Downstream)

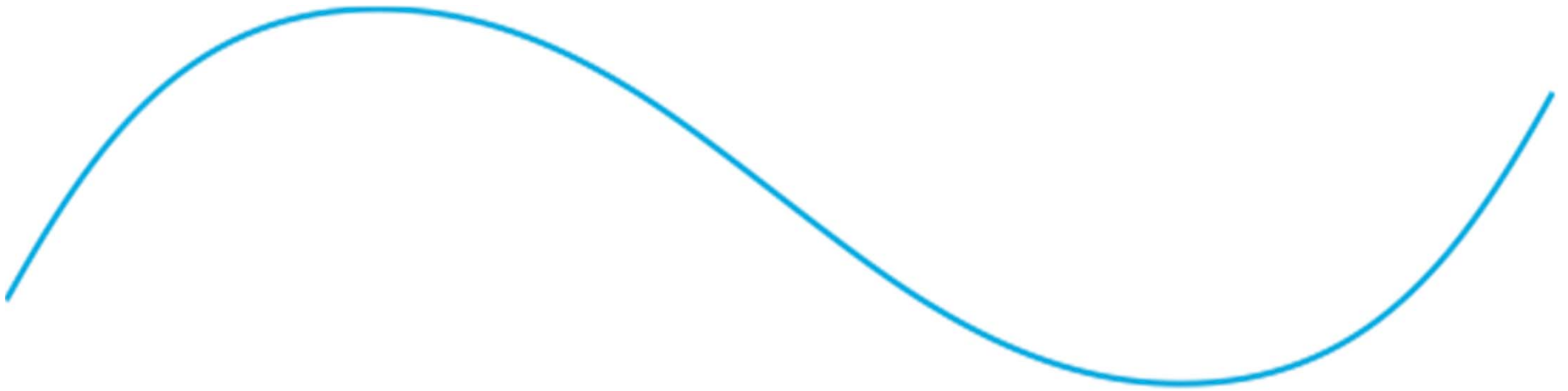


Spinoffs: What Part of Value Chain Performed Best for These Examples

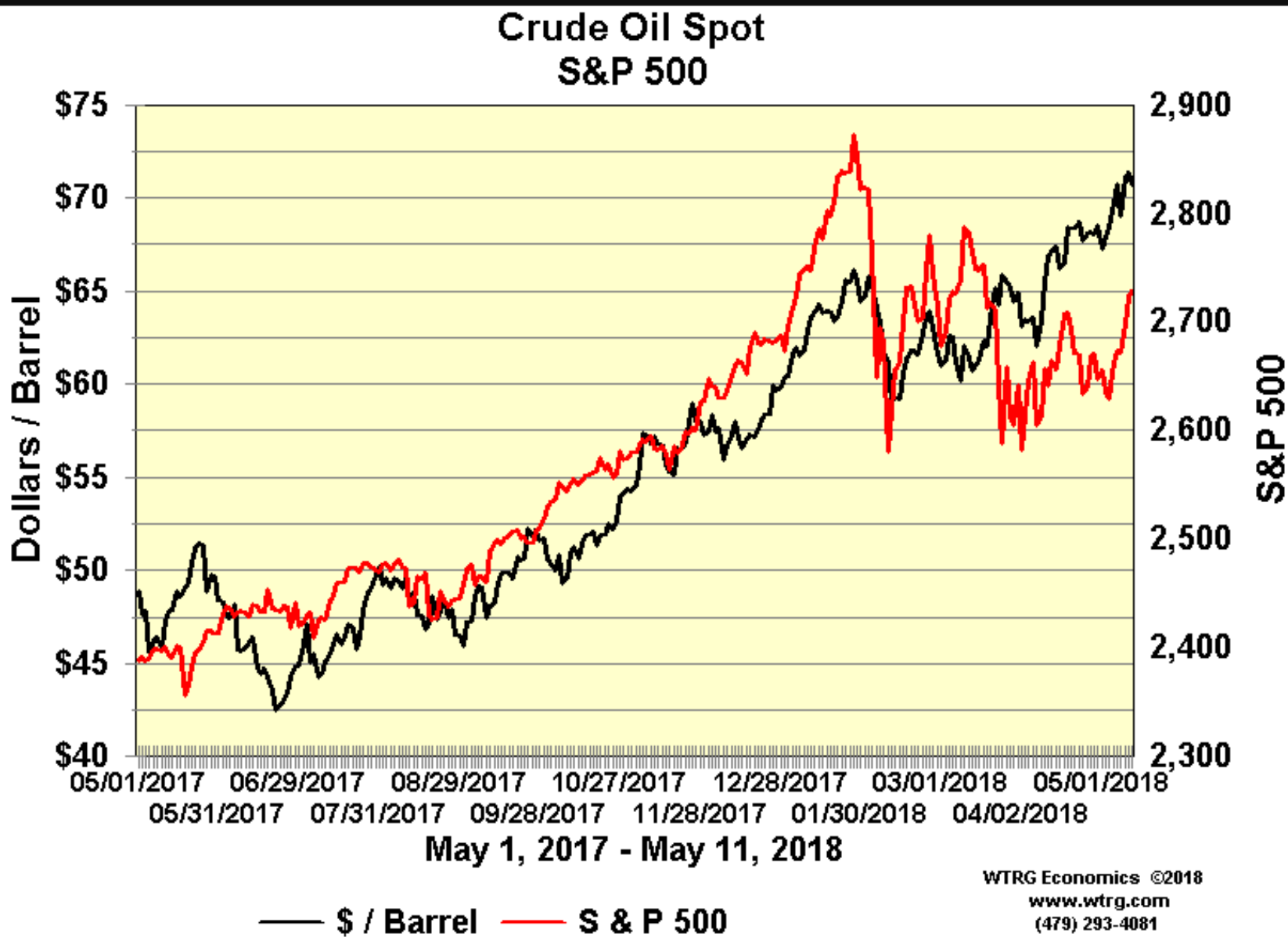
- A. Upstream
- B. Midstream
- C. Downstream



Financial Strategies in *Not So Challenging Times: NOW!*



The Past Year



Wall Street Viewpoint

Wall Street looking for:

- Disciplined capital allocation
- Less emphasis on production growth and more emphasis on returns-based growth
- Liquidity, cash flow, and debt management
- Cash return to shareholders (***show me the money!***)

Characteristics of a Successful E&P Company

- High-quality asset portfolio
- Superior operational execution
- Financial strength and liquidity
- Strong corporate governance



Wall Street Viewpoint

“The focus on discipline, cash flow and returns changes the dynamics of the industry for investors.”

— Paul Grigel, Macquarie Research

“2018 begins with a change in behavior as E&Ps return capital and change compensation plans.”

— Subash Chandra, Guggenheim Partners

“The best E&Ps are entering a renaissance of corporate governance, profitability, and shareholder return.”

— Paul Sankey, Wolfe Research



NYMEX Oil and Gas Price Outlook: Lower for Longer

Current market conditions imply "lower for longer" commodity pricing.

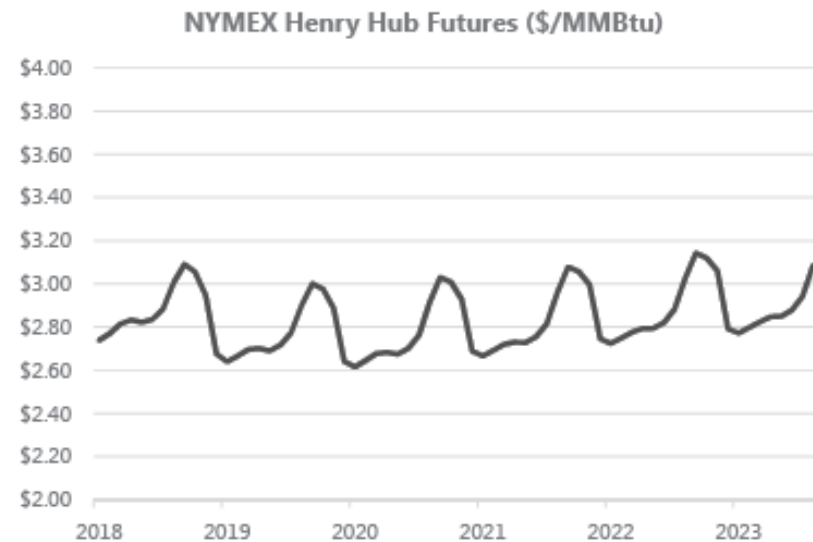
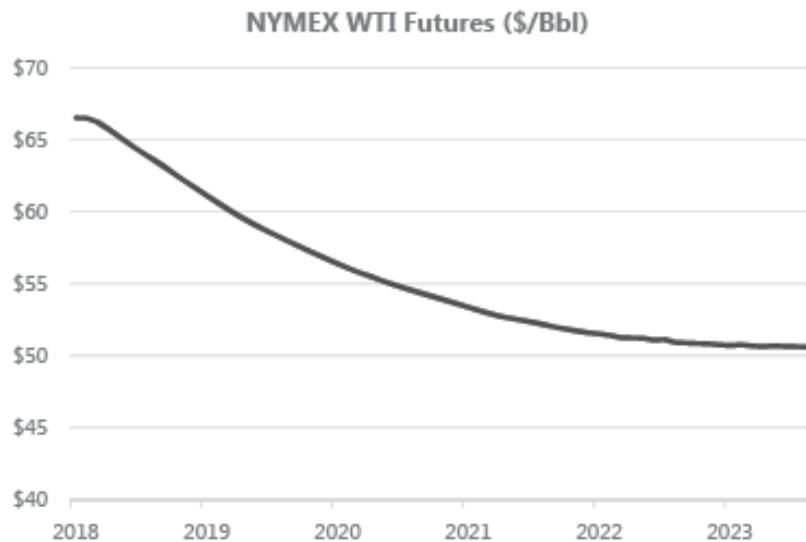


Image source: Presentation by Tony Vaughn, Chief Operating Officer, Devon Energy Corporation, Oklahoma State University Energy Conference, May 10, 2018



Key Elements of Success for E&P Companies: Example from Devon

- Great asset portfolio
 - Low break-even economics
 - Deep inventory of opportunities (focus on Delaware & STACK)
 - Portfolio simplification (\$1.1 billion of assets sold last yr)
 - Superior execution
- Strong balance sheet
 - Target new debt to EBITDA of 1.0x to 1.5x
 - Attain high investment-grade credit rating
 - \$1 billion share-repurchase program underway
- Show me the money: Dividend increases
- Environmental stewardship (see next slide)



Information obtained from presentation by Tony Vaughn, Chief Operating Officer, Devon Energy Corporation, Oklahoma State University Energy Conference, May 10, 2018

Key Elements of Success for E&P Companies: Example from Devon

- Environmental stewardship

"Society is demanding that companies, both public and private, serve a social purpose. To prosper over time, every company must not only deliver financial performance, but also show how it makes a positive contribution to society. Companies must benefit all of their stakeholders, including shareholders, employees, customers, and the communities in which they operate."

– Larry Fink, Founder, Chairman & CEO, BlackRock



Information obtained from presentation by Tony Vaughn, Chief Operating Officer, Devon Energy Corporation, Oklahoma State University Energy Conference, May 10, 2018

Viewpoint from Oilfield Service Industry

- Respond to operator requirements in a dynamic environment
- Improve processes and develop technologies that help maximize production and reduce cost/BOE



Quote by Jerome Loughridge, President, Great Plains Oilfield Rental/Patterson UTI, OKC, Oklahoma State University Energy Conference, May 10, 2018

Viewpoint from Oilfield Service Industry

The Environment is Getting More Dynamic

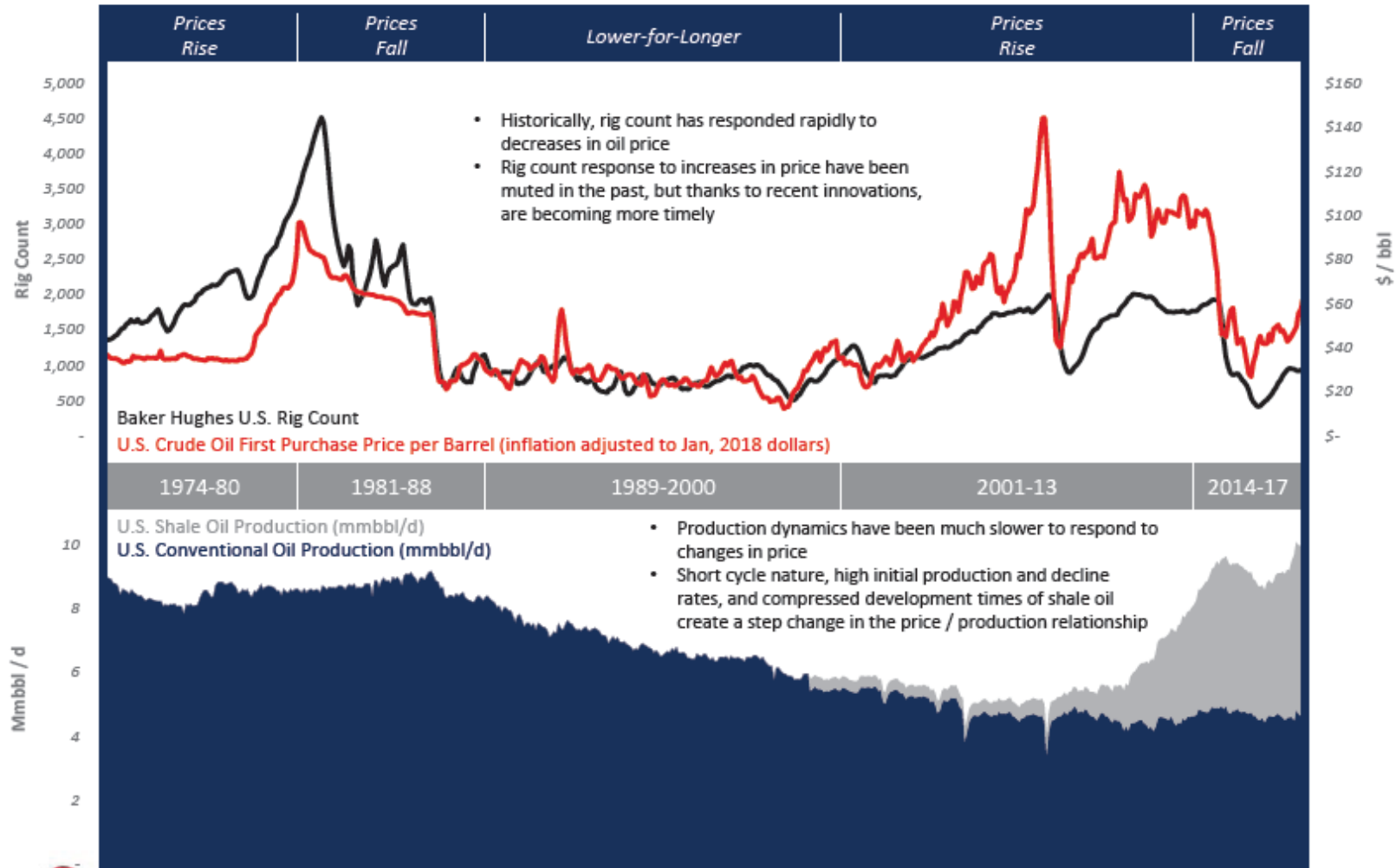


Image source: Jerome Loughridge, President, Great Plains Oilfield Rental/Patterson UTI, OKC, Oklahoma State University Energy Conference, May 10, 2018

Viewpoint from Oilfield Service Industry

The Shift to Shale Oil

Rig Count Distribution by Hydrocarbon Focus

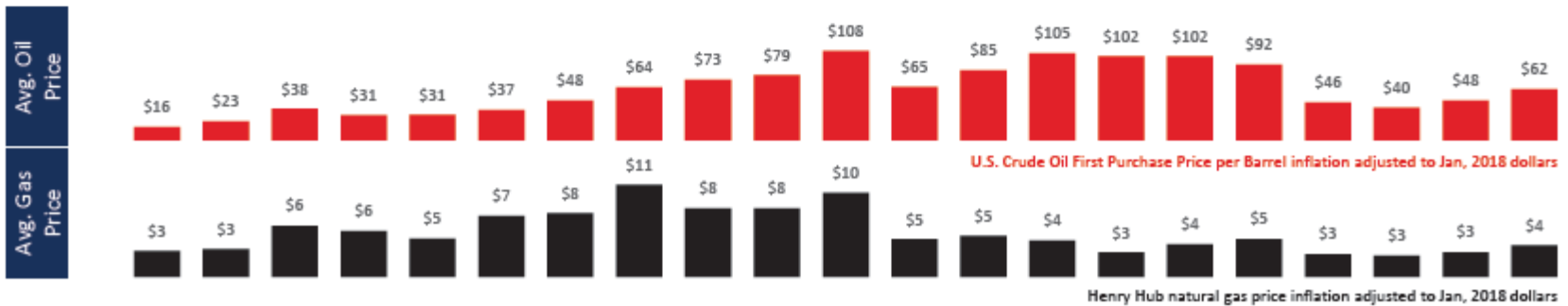
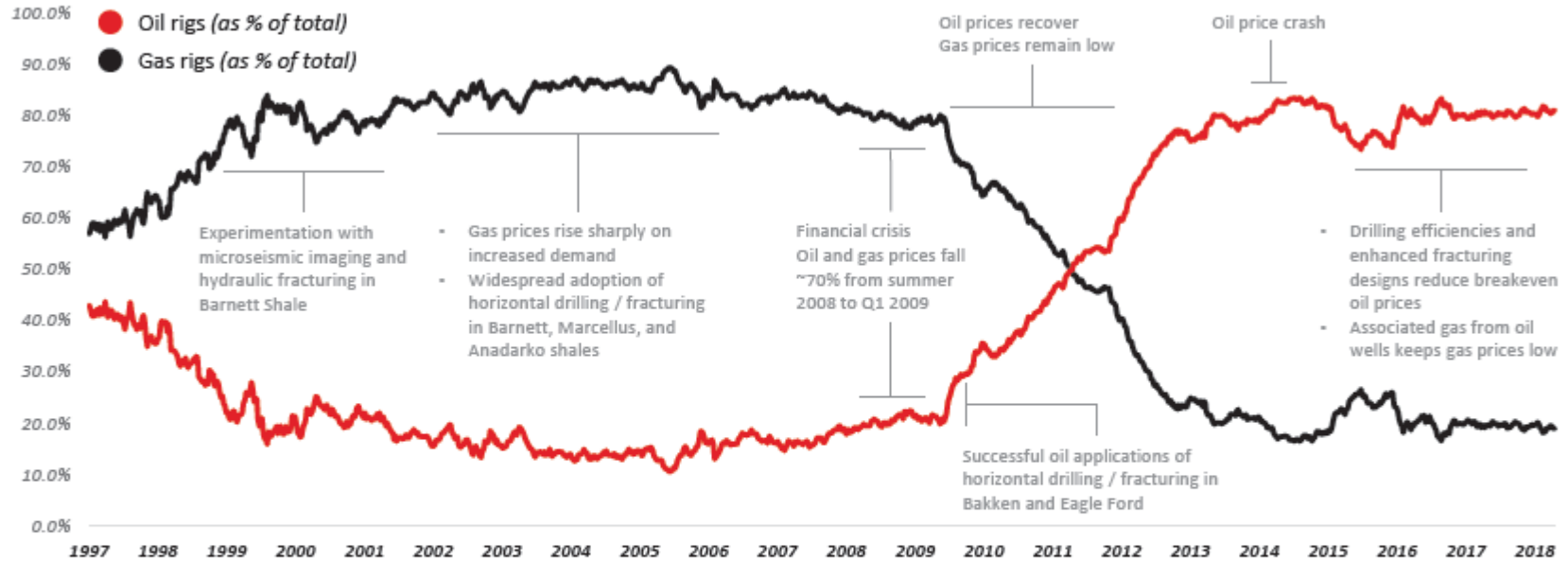


Image source: Jerome Loughridge, President, Great Plains Oilfield Rental/Patterson UTI, OKC, Oklahoma State University Energy Conference, May 10, 2018

Viewpoint from Oilfield Service Industry

U.S. Shale Development Phase Analysis & Rig Trajectory Trends

Rig Count Distribution by Well Trajectory

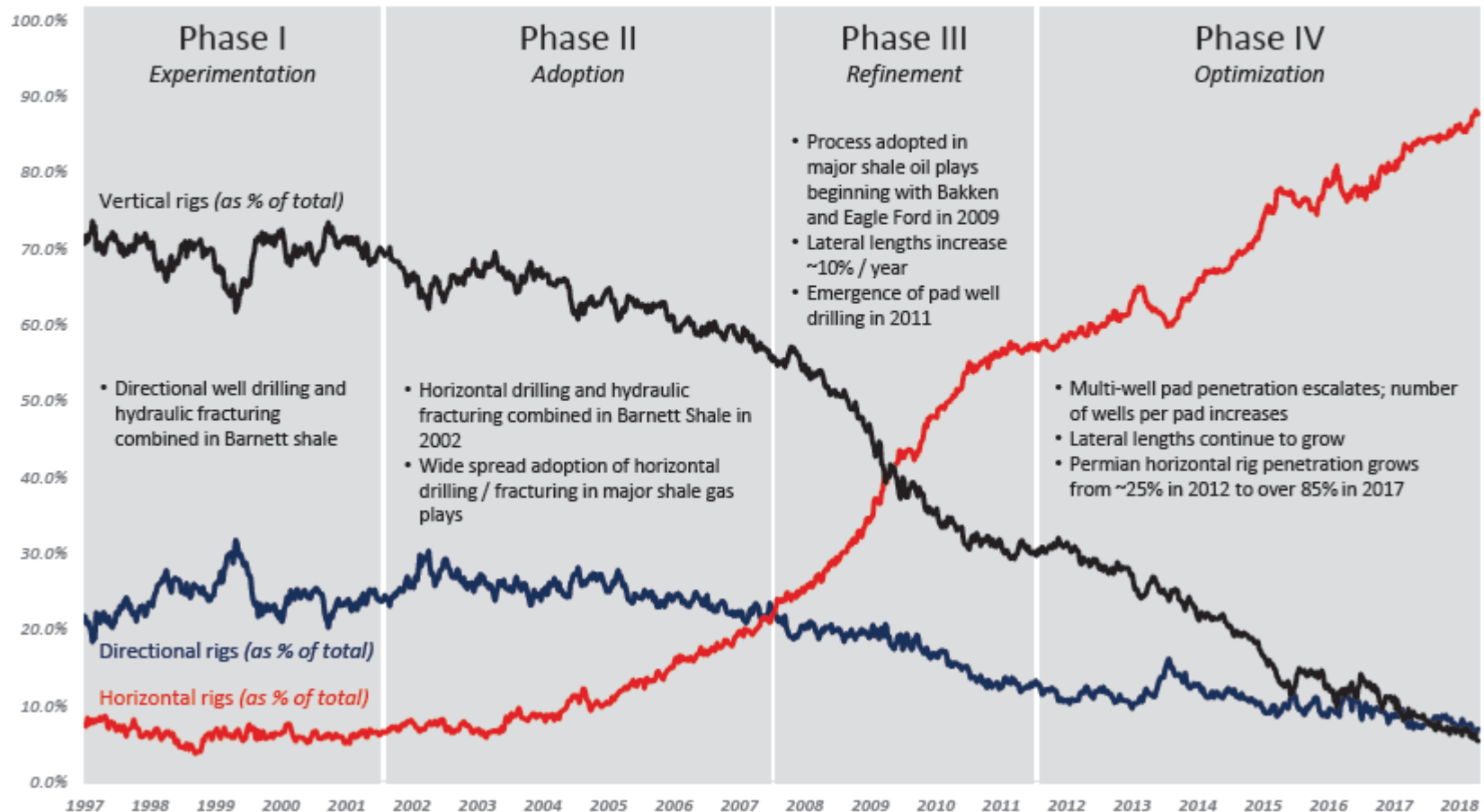


Image source: Jerome Loughridge, President, Great Plains Oilfield Rental/Patterson UTI, OKC, Oklahoma State University Energy Conference, May 10, 2018

Data, Data, BIG Data – Key to Future!

O&G DATA LANDSCAPE

At Oseberg, we extract:

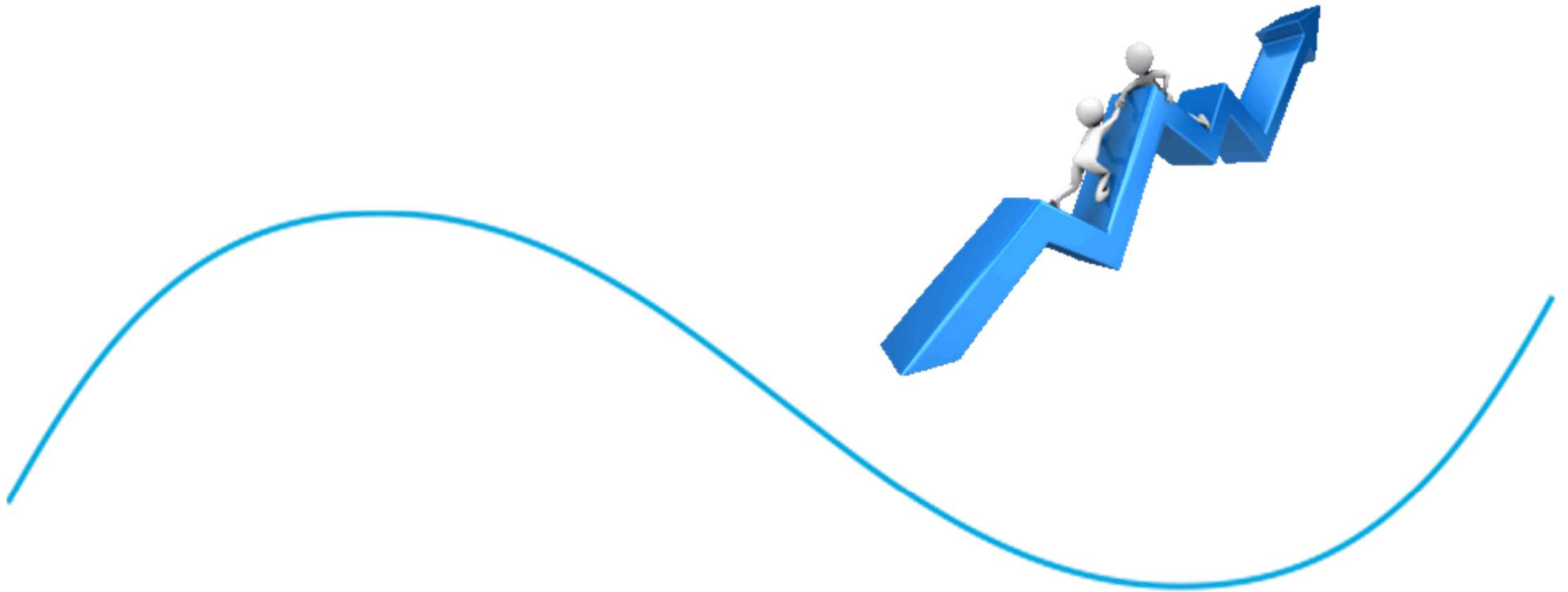
- **7,000,000** O&G regulatory & county records.
- **1,200,000** well filings across three states.
- **800+** attributes within **17** datasets.
- Data on more than **120,000** hydraulic fracturing jobs.

Well Name	County	Operator	Well Type	Well Status	Well Depth	Well Completion Date
...



Image source: Evan Anderson, CEO, Oseberg, OKC, Oklahoma State University Energy Conference, May 10, 2018

Concluding Comments



Risks: The Macroeconomy

- A global macro/recessionary shock could place further downside risk on the industry and have implications for demand growth and the impacts of a deflationary cycle.
- The force of that shock would need to be quite large
 - Would not only need to result in less demand growth, but likely an actual drop in demand year on year, in order to bring about a situation in which prices would need to fall to a level that dips below cash costs for many global producers.



Innovation: The Key to Success

We usually find oil in new places with old ideas. Sometimes, we find oil in an old place with a new idea, but we seldom find much oil in an old place with an old idea. Several times in the past we have thought that we were running out of oil, when actually we were running out of ideas.

Professor Parke A. Dickey
University of Tulsa
September 15, 1958



As Charles Darwin noted over 150 years ago, in a world where mutability is the only permanent feature of the landscape,

“It’s not the strongest of the species that survive, nor the most intelligent, but those that are the most responsive to change.”



Betty Simkins, PhD

To Recap

- Energy firms, like other cyclical firms, should be capitalized to sustain in down cycles.
- Once downturn hits, many strategies are used to withstand.
- Internal and external strategies used.
- Ironically, as always in cyclical sectors, it is this perspective that leads to capex cuts and the associated production declines, which then plants the seeds for the next rebound.
- Now focus is on capital discipline, core strategies, financial statement strength, good governance, and ESG.



Questions?



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