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# **IPAA Leaders in Industry Luncheon**

## **“Trees Don’t Grow to the Sky”**

### **U.S. Deal Flow in the Current Oil Price Environment**

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January 7, 2015

**William A. Marko**  
**Managing Director**  
**Jefferies LLC**

# Jefferies Energy Group Has a Leading Global Market Share

- In last 6 years, completed 230 transactions for more than \$325 Billion
- Our practice is the largest dedicated to oil and gas by any Bank in the world
  - Focus on upstream, midstream and service
  - 35 technical professionals, we go deeper technically than anyone


Energy October 2014



**\$1,950,000,000**

Acquisition of Granite Wash assets from **LINN Energy, LLC**  
Sole Financial Advisor

Energy August 2014




Kinder Morgan, Inc.'s acquisition of Kinder Morgan Energy Partners, Kinder Morgan Management and El Paso Pipeline Partners

**\$71,700,000,000**

Sole Financial Advisor to the Conflicts Committee of KMP and KMR

Energy August 2014



**\$1,200,000,000**

Credit Facilities to Finance Acquisition of **Marcellus Shale assets**  
Joint Lead Arranger

Energy July 2014



**\$450,000,000**  
+ Powder River Basin Assets

Sale of Powder River Basin assets to **Chesapeake Energy Corporation**  
Sole Financial Advisor

Energy June 2014



**\$2,300,000,000**

Sale of Onshore U.S. Assets to **Linn Energy, LLC**  
Joint Financial Advisor


June 2014



**Undisclosed**

Sale of Chevron's Beaumont Crude Oil and Refined Products Terminal to **Phillips 66**  
Exclusive Financial Advisor

Energy June 2014




and  
Unnamed Private Company

**\$1,750,000,000**

Sale of Utica and Marcellus assets to **American Energy – Utica and American Energy – Marcellus**  
Sole Financial Advisor

Energy June 2014



**\$2,500,000,000**

Sale of Permian Basin Assets to **American Energy – Permian Basin**  
Sole Financial Advisor

Energy May 2014  
Pending



**\$1,400,000,000**

Sale of Gulf of Mexico Deepwater Assets to **Freeport-McMoRan Copper & Gold Inc.**  
Joint Financial Advisor

Energy February 2014



**\$750,000,000**

Convertible Notes Offering  
Joint Bookrunner

## Running at the Redline Now a Thing of the Past

- In September 2014 I discussed the fact that industry was running at full speed
  - Rig count plateauing about 1,900
  - Oil price at  $\pm$  \$90/Bbl and natural gas price at \$4.00 per MMBtu
  - Vast majority of companies running as many rigs as possible limited by people, capital, execution capability
- Many companies complaining about capital efficiency and the need to do better
  - Still challenged by execution efficiency
  - Have more acreage than they can possibly ever drill
- It felt like we were heading to a bubble
- Now the bubble has burst

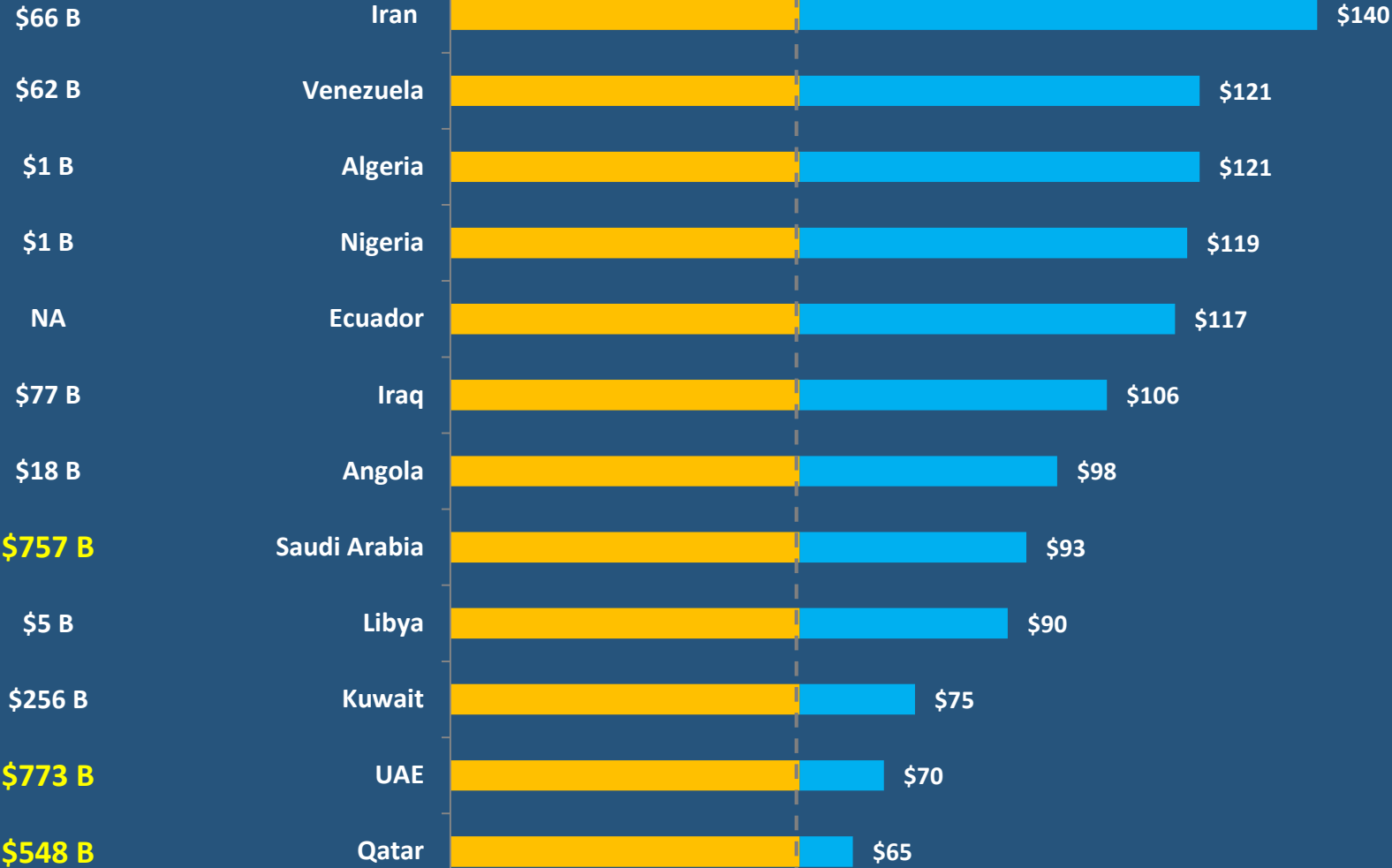
## Oil Price Uncertainty – Fasten Your Seatbelts, it is Going to be a Bumpy Ride

- Saudi Arabia defending its market share inside and outside of OPEC
  - It can hold its breath for a long time
  - This also hurts Russia, Venezuela, Iran, which is not a bad thing
- We are now participants in a grand experiment to see how much U.S. production changes based on the level at which pricing stabilizes
  - Will depend upon how quickly companies live within cash flow
  - Will also depend upon how and where rigs are cut and how long it takes for production to be impacted
- Prepare to live in \$60-70/Bbl oil in the near term
- Hopeful long term is \$70-80/Bbl oil
- Absent any disruptions in Middle East or wild swings in Chinese or other demand

# Estimated Oil Price Needed to Balance Budgets

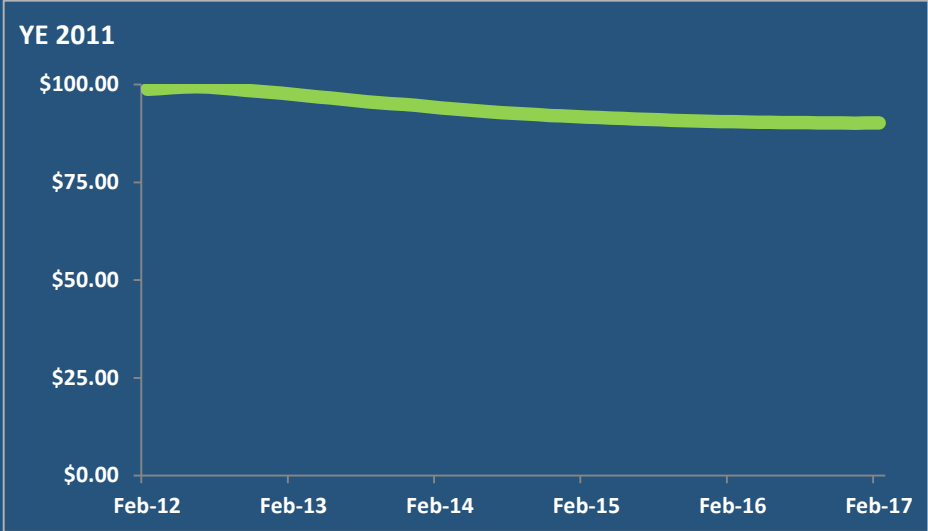
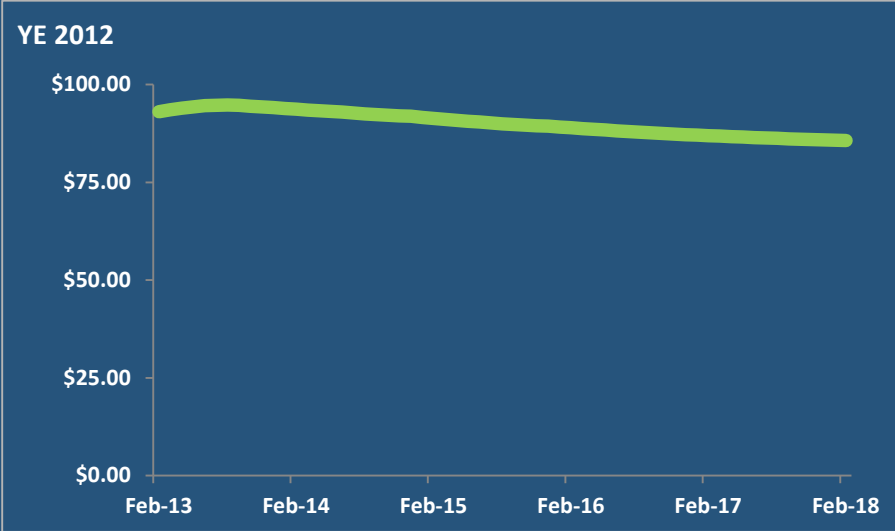
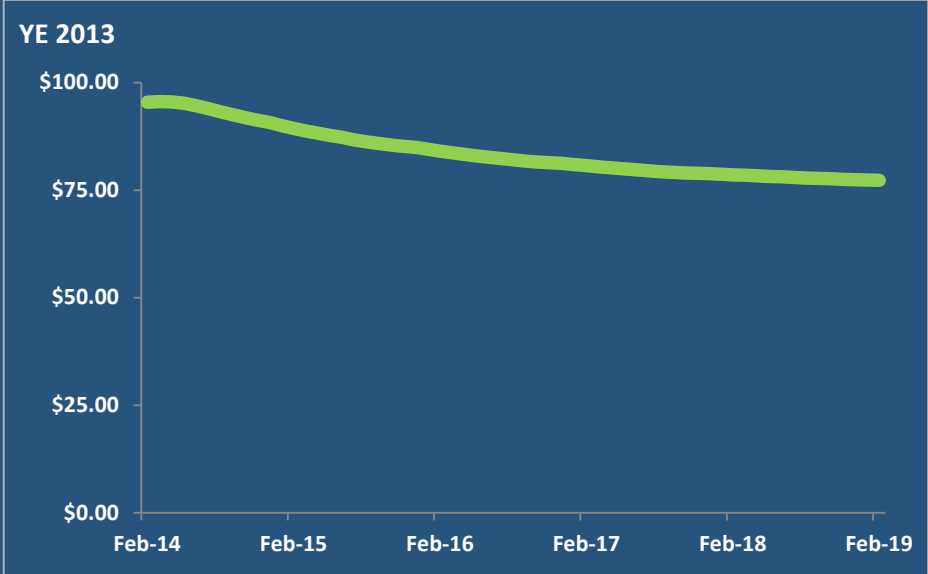
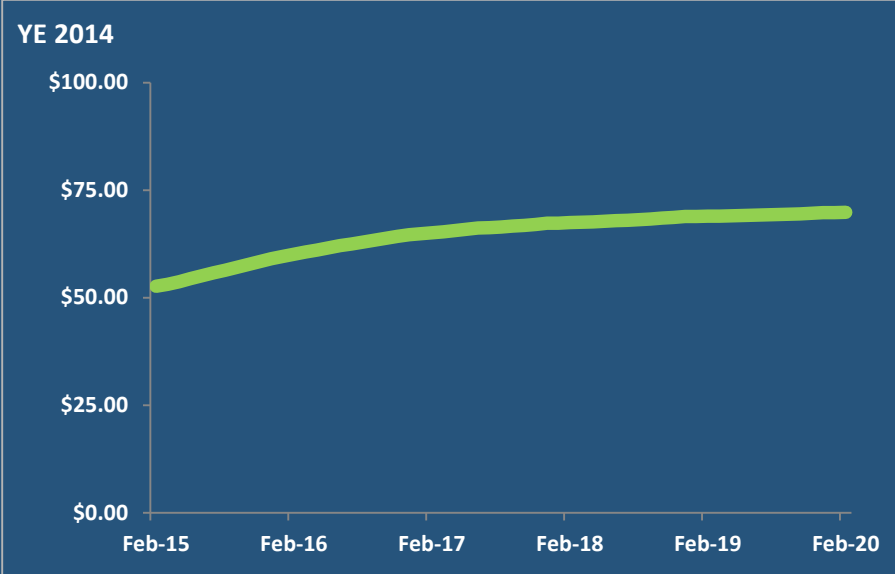
Sovereign Wealth Fund Size

December 31<sup>st</sup> Brent Crude Price: \$56.42 / Bbl



Source: Libyan government; Angolan Ministry of Finance; International Monetary Fund; Arab Petroleum Investments Corp.; Deutsche Bank.

# Falling Oil Price Should Not Have Been a Big Surprise But the Current Size of the Fall Certainly Is



## Natural Gas Price Weakness – The One-Two Punch

- Natural gas is not necessarily the safe port in the storm
- Price has broken through \$3.00 per MMBtu
- We were fortunate last year with a very cold winter and record high storage draws
- Still a great deal of potential supply
  - New wells in Utica dry gas
  - Potential from SCOOP, Haynesville, more Marcellus, other areas
- Industry continues to improve efficiencies so cost of supply decreasing in the best areas
- One potential bright spot - Some near term demand increases
  - Switching from coal for power generation
  - First LNG exports in 2015 with more to follow
  - Natural gas fed manufacturing starting to come online
  - Feels like we live in \$3.00 - 4.00 per MMBtu and hope for +\$4.00 per MMBtu in the future

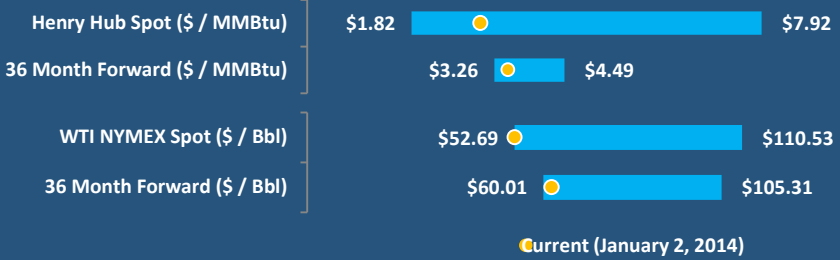
# Energy Supply Sources

- ARC Test – to be used when considering choices and the best choices adhere to all three premises
- **Affordable**
- **Reliable**
- **Clean**
- Good Examples
  - Natural gas switching from coal for power generation
  - Solar/wind with natural gas supplemented power generation
- Bad Examples
  - Germany pushing solar and wind while shutting in nukes, banning fracking and increasing coal use for power generation
  - Solar or wind powered automobiles

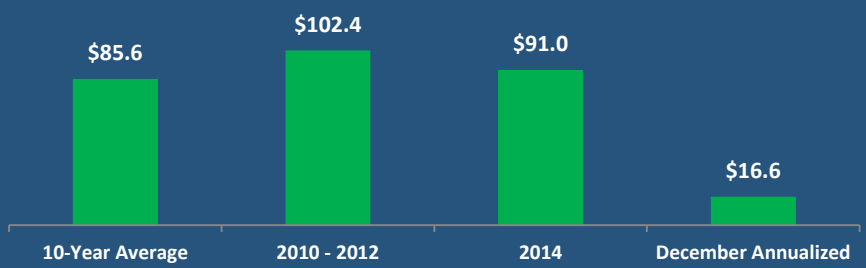


# Market Update

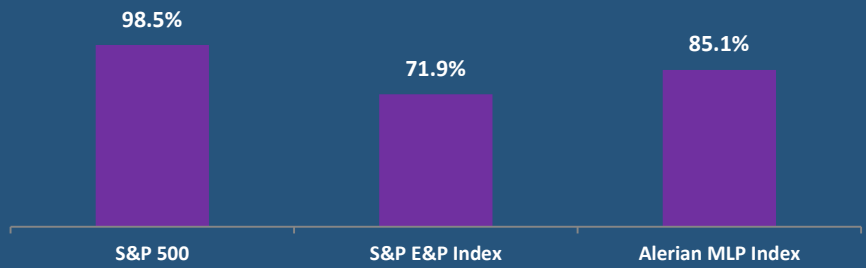
## 3 Year Historical Commodity Pricing Range



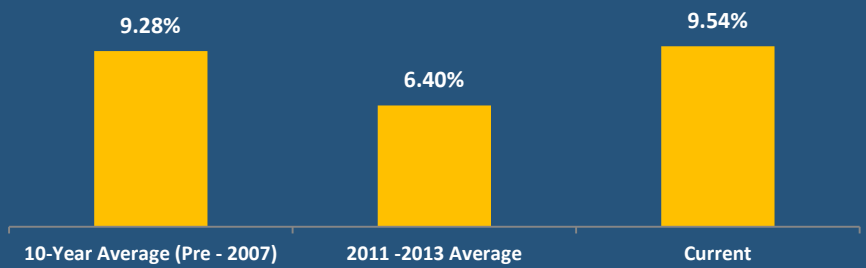
## Average North American E&P M&A Volume (\$B)



## Equity Performance (% of 52 Week High)



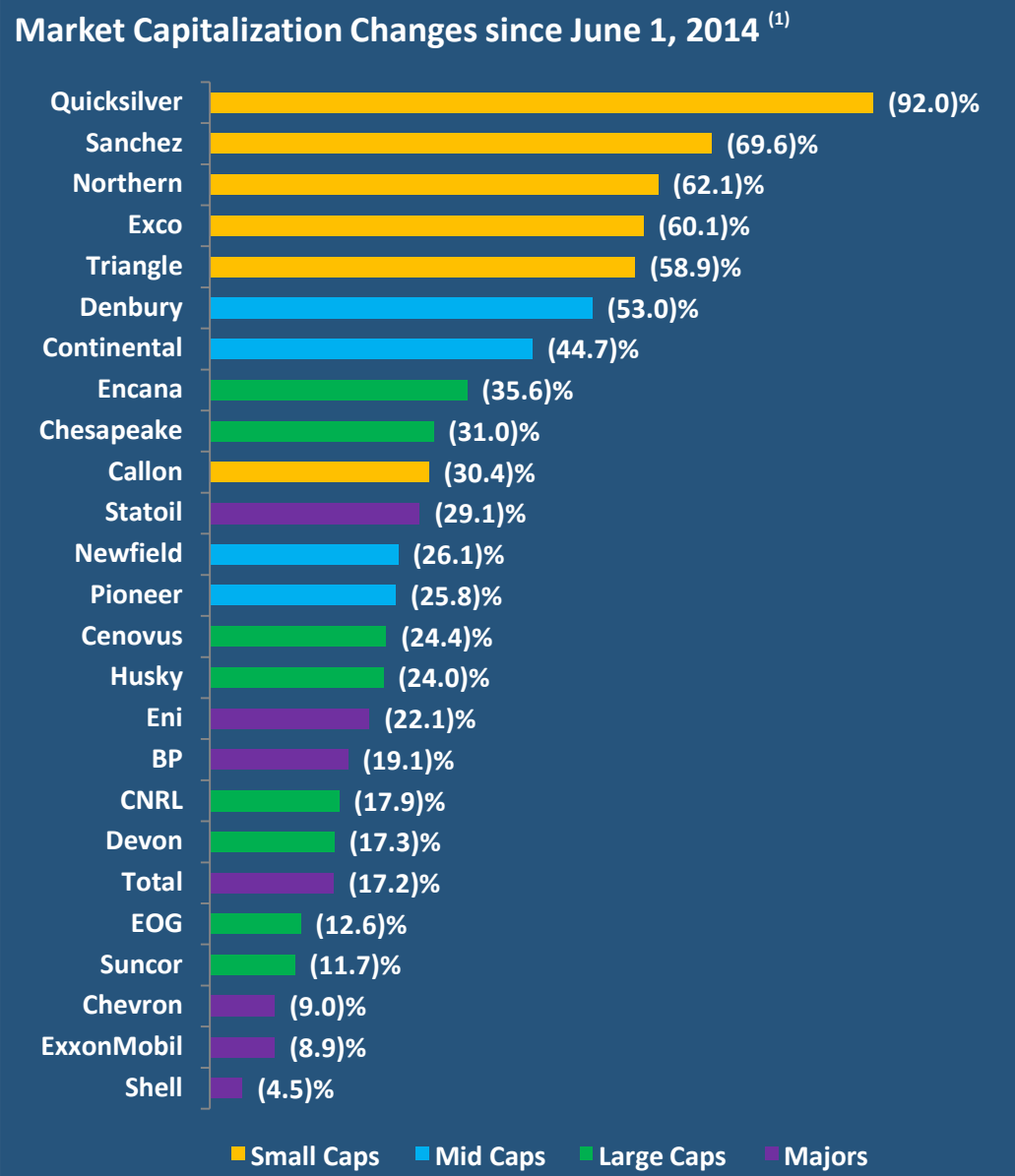
## US Energy HY Index (%)



- **NYMEX WTI spot trading below \$60 for the first time in over five years and the range of price expectations amongst buyers / investors has widened**
  - Driven by oversupplied markets and weak demand, despite backdrop of highly elevated geopolitical tensions
- **Forward expectations for gas prices remained relatively stable over the past few years**
- **M&A activity was in full rebound in 2014, prior to recent downturn, where recent volatility has resulted in a significant slow down**

# Collapsing Oil Prices Have Triggered a Sell-Off in Oil and Gas Equities

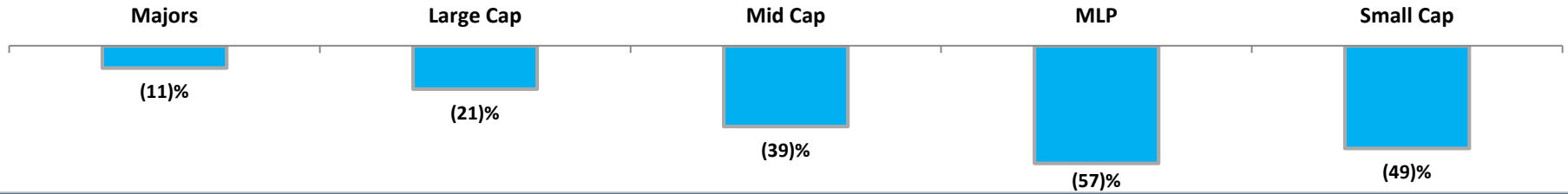
- WTI has fallen by nearly 50% since June 1; \$327 B removed from the market value of largest 40 companies over the same period
- Industry implications – anticipated behavior in the event of prolonged weakness
  - Tighter capital discipline: more project deferrals, JVs with cost carries, opex cuts
  - Exploration: budgets reduced in 2015, notably on frontier; focus shift to mature, lower-risk plays
  - Tight oil: rigs dropped in new or marginal plays, retrenchment to sweet-spots to maintain production growth
  - M&A: a flush of assets onto an opportunity-rich market; potential for distressed sellers / countercyclical buyers



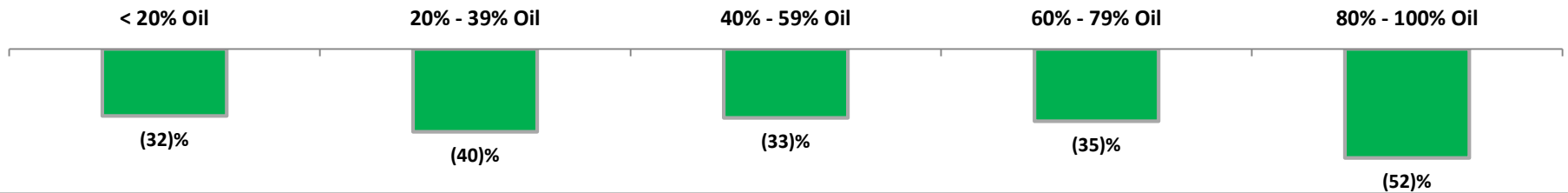
(1) Source: Bloomberg Financial, as of 1/2/2015.

# Recent E&P Market Performance <sup>(1)</sup>

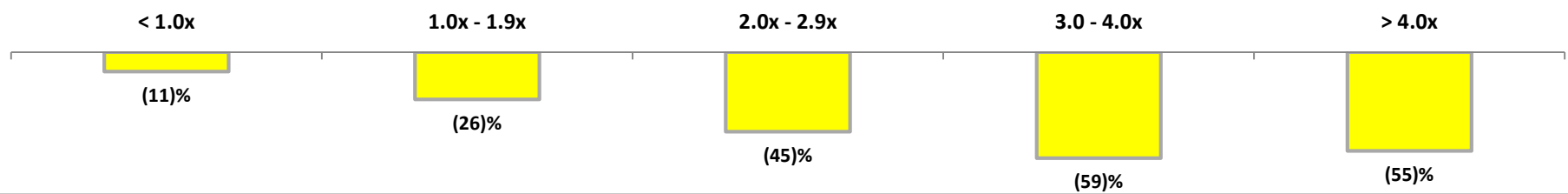
## 12-Month Price Performance by Size



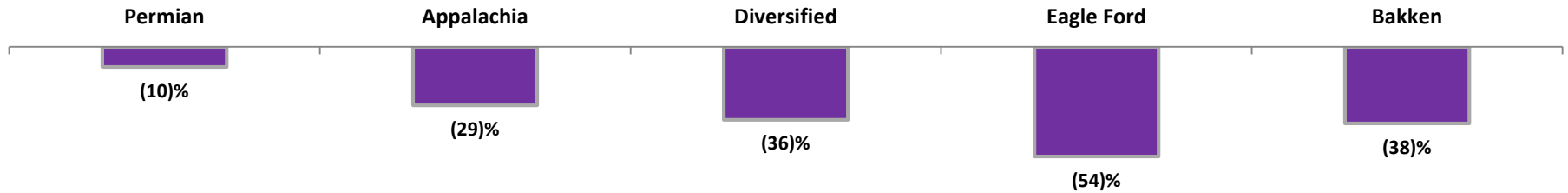
## 12-Month Price Performance by Oil Commodity Mix



## 12-Month Price Performance by Leverage (Total Debt / 2014E EBITDA)



## 12-Month Price Performance by Focus Area



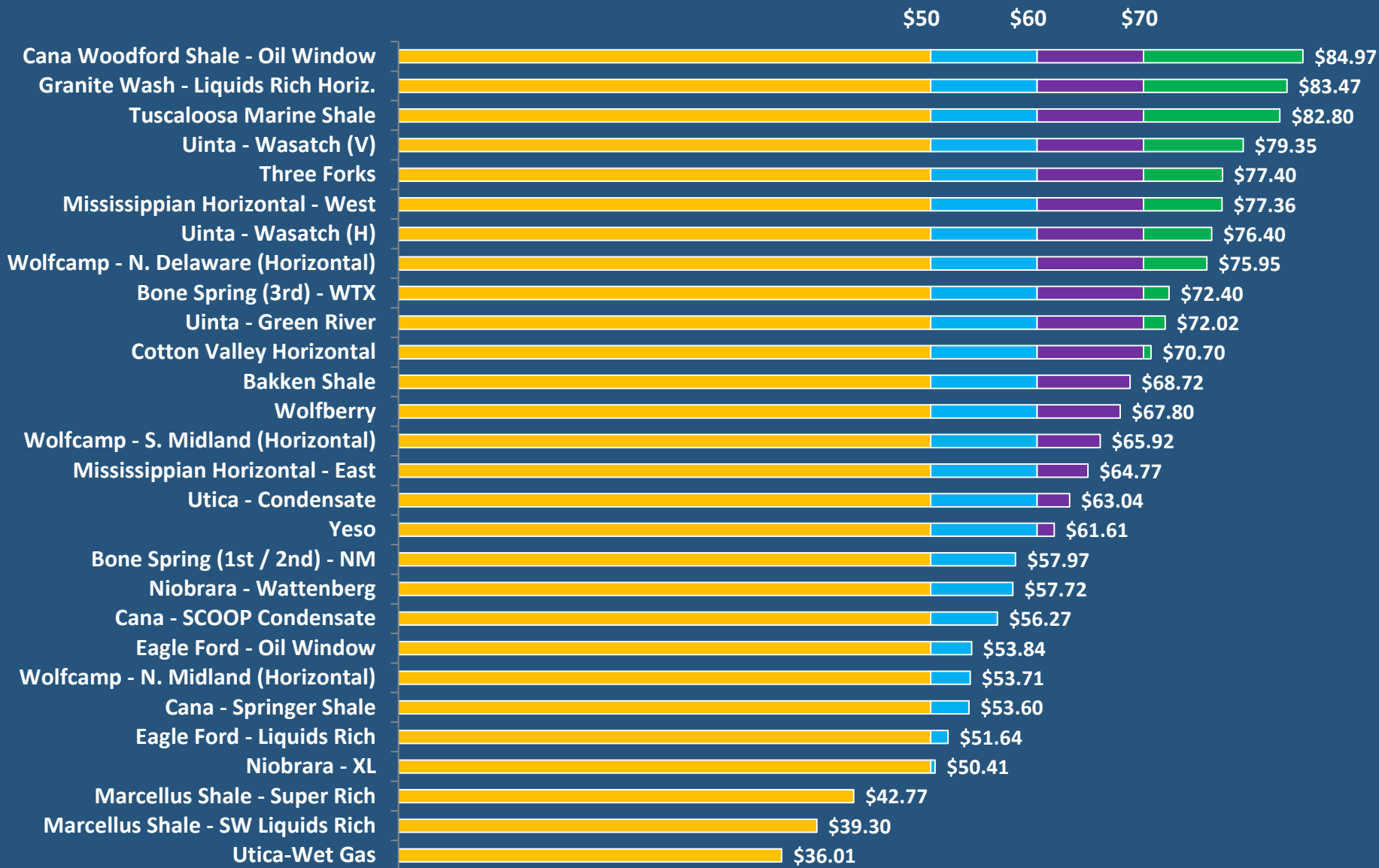
Source: Bloomberg, Capital IQ and Jefferies internal estimates.

(1) Analysis assumes current pricing as of 12/31/2014 and historical pricing as of 12/31/2013.

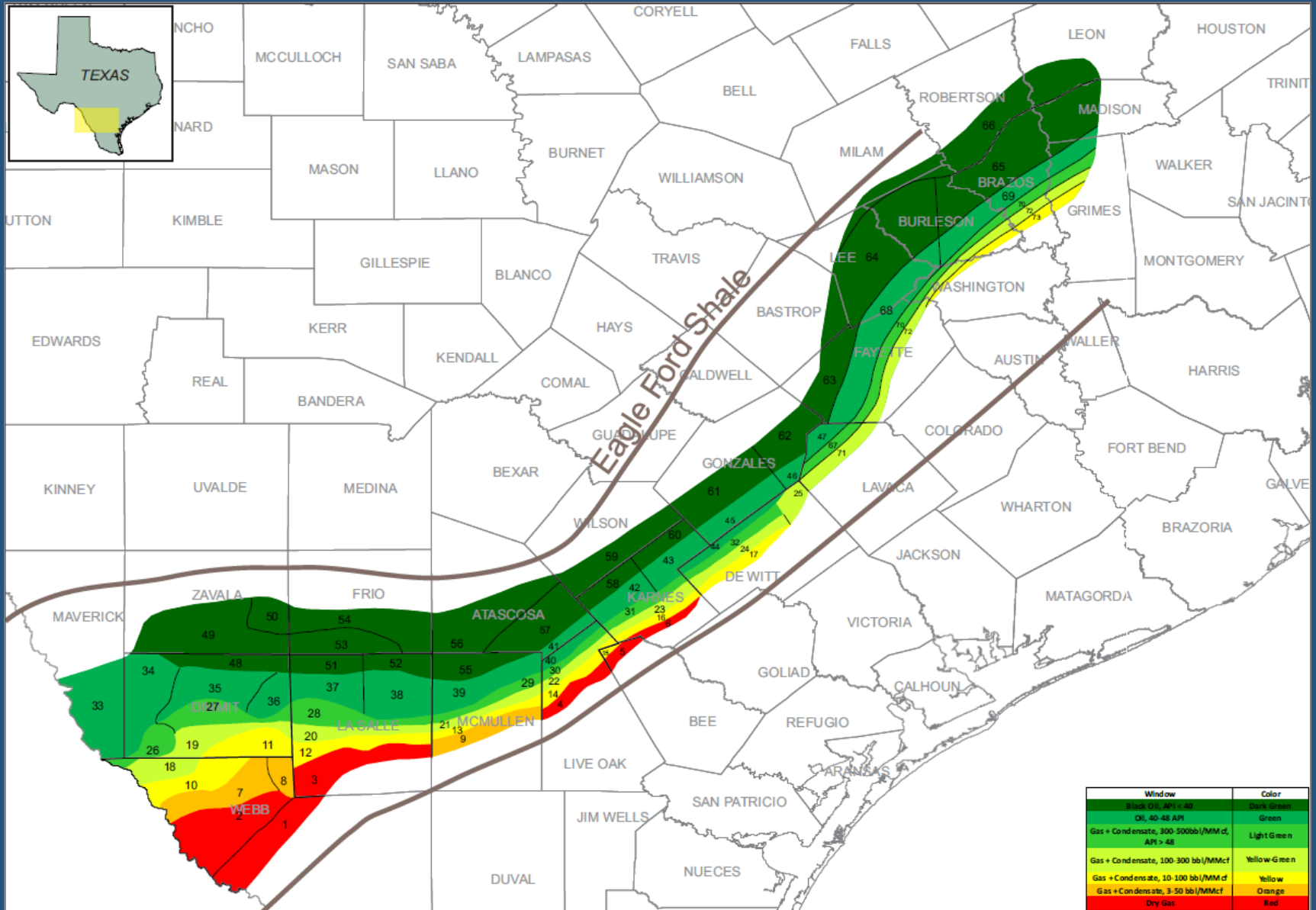
# 2015 E&P Capital Spending Outlook

Company	2014	2015E	Change
Atlas Resource Partners	\$ 190	\$ 200	5%
Clayton Williams Energy	389	400	3%
Energy XXI	705	680	(4%)
Energen Resources	1,350	1,300	(4%)
Total SA	26,000	25,000	(4%)
PDC Energy	637	557	(13%)
ConocoPhillips	16,875	13,500	(20%)
Rosetta Resources	1,200	950	(21%)
Stone Energy	895	700	(22%)
Concho Resources	2,600	2,000	(23%)
Sanchez Energy	1,150	875	(24%)
Apache	5,440	4,000	(26%)
Halcón Resources	1,100	775	(30%)
Antero Resources	3,700	2,400	(35%)
Swift Energy	395	250	(41%)
Continental Resources	4,550	2,700	(44%)
Oasis Petroleum	1,425	800	(47%)
Breitburn Energy	375	200	(50%)
Denbury Resources	1,100	550	(50%)
Goodrich Petroleum	350	175	(50%)
LINN Energy	1,550	730	(53%)

# WTI Oil Breakeven Price @ \$3.60 / MMBtu Natural Gas (\$ / Bbl)



# Eagle Ford Type Curve Map



# High Disparities in Eagle Ford Costs

Execution is the Paramount Consideration, Especially Today

## Eagle Ford Well Costs By Operator



Source: Publicly available information.

# Most Recent Permitting Data Suggests a Structural Downward Shift in Activity

## Total 2014 U.S. Lower 48 Permit Issuance

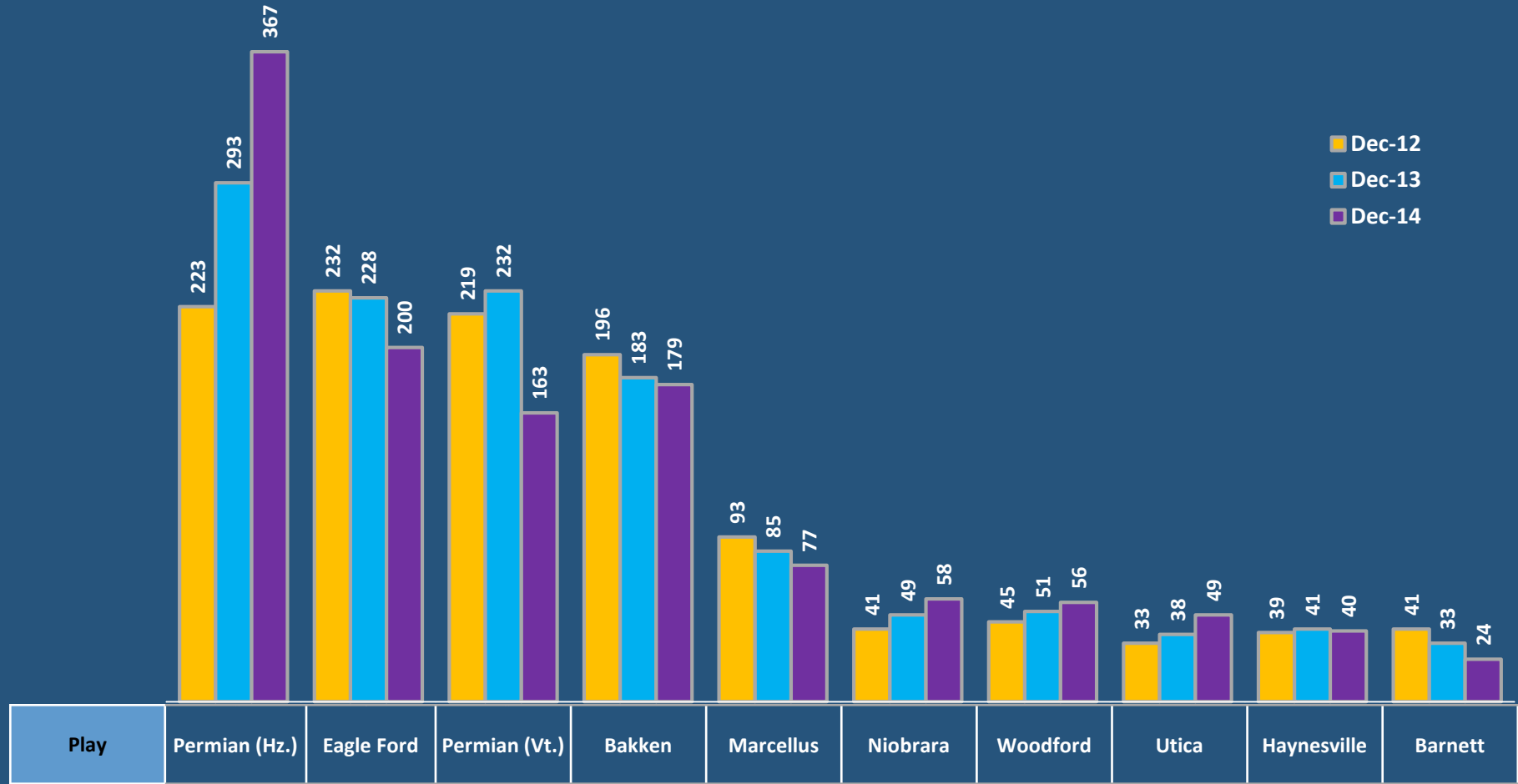


Source: HPDI as of December 31, 2014.



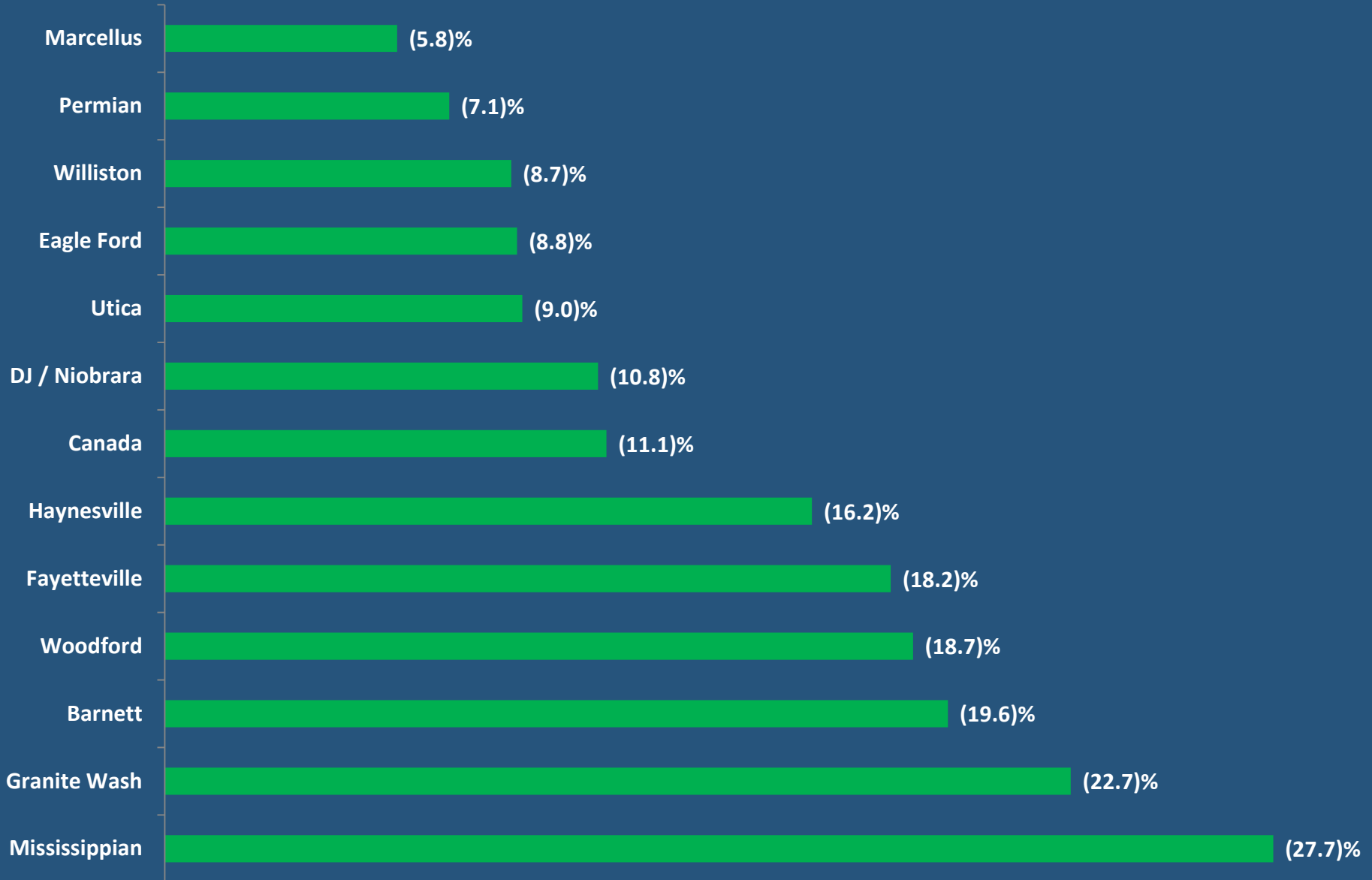
# Impact of New Oil Pricing Environment Not Fully Reflected in Current Rig Counts

Year End Active Rigs by Play



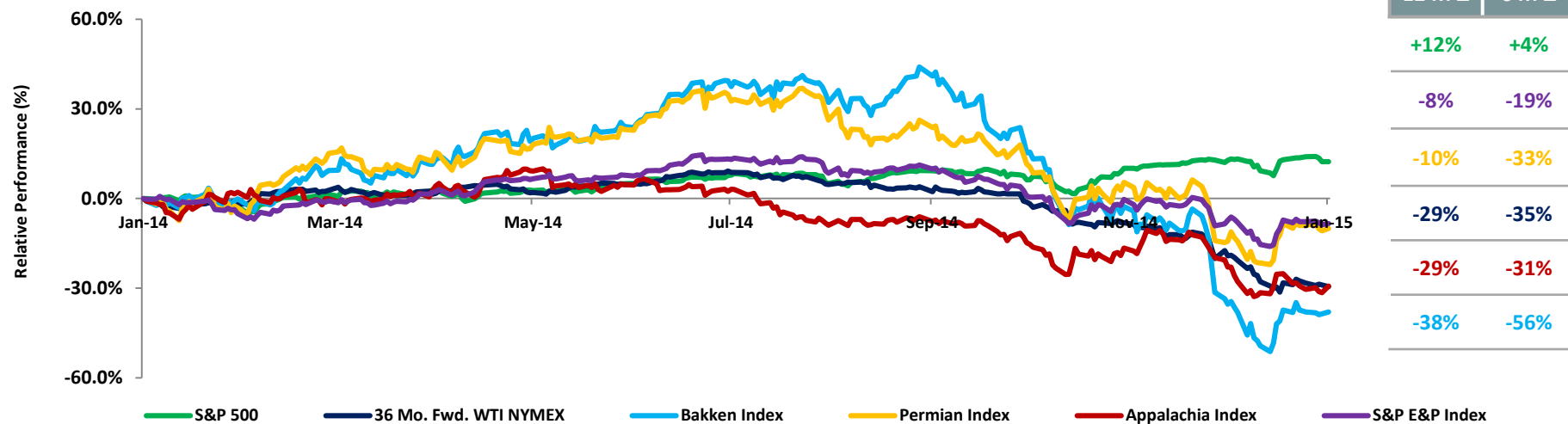
Source: Wall Street Research; Baker Hughes North America Rotary Rig Count as of January 2, 2015.

## 2015E vs. 2014 Rig Count by Basin

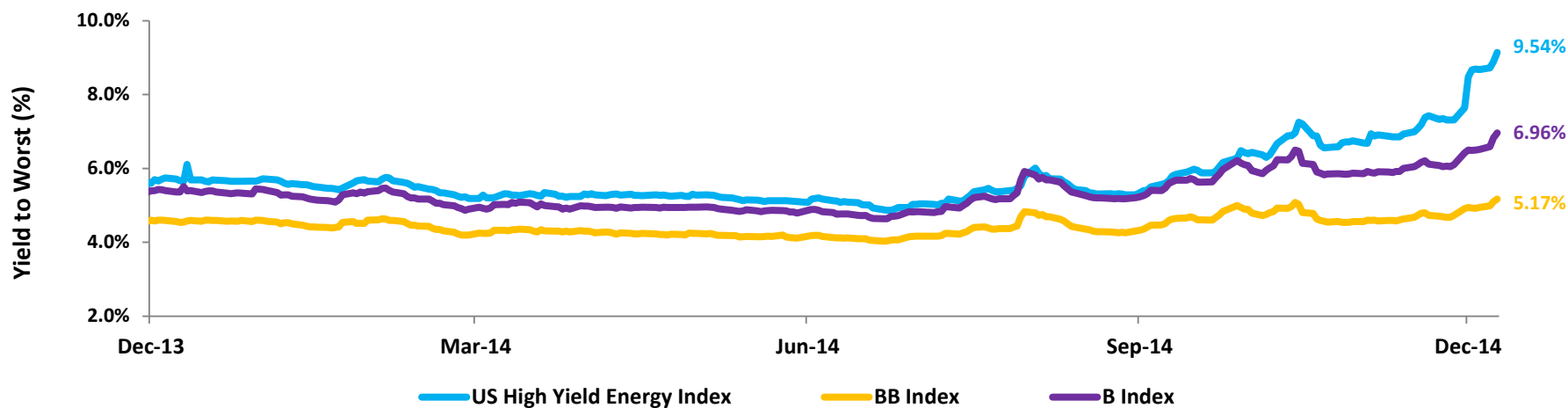


# 2014 E&P Capital Markets Environment

## 2014 Equity Market Performance <sup>(1)</sup>



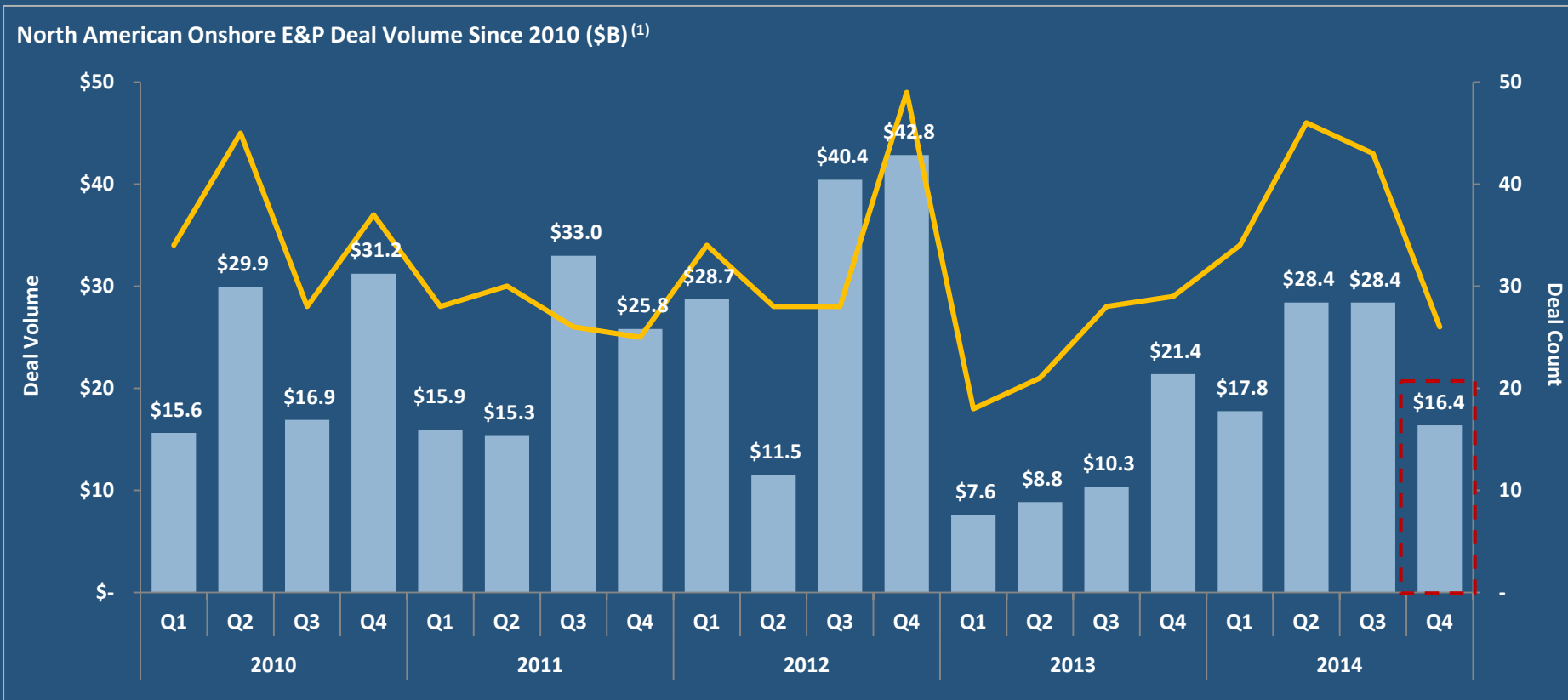
## 2014 High Yield Market Performance



Source: Bloomberg Financial as of 1/2/2015.

(1) Bakken index: CLR, EOX, NOG, OAS, TPLM, WLL; Permian Index: AREX, CPE, CXO, FANG, EGN, LPI, PXD, RSPP, XEC; Appalachia Index: AR, COG, ECR, GPOR, RRC, RICE.

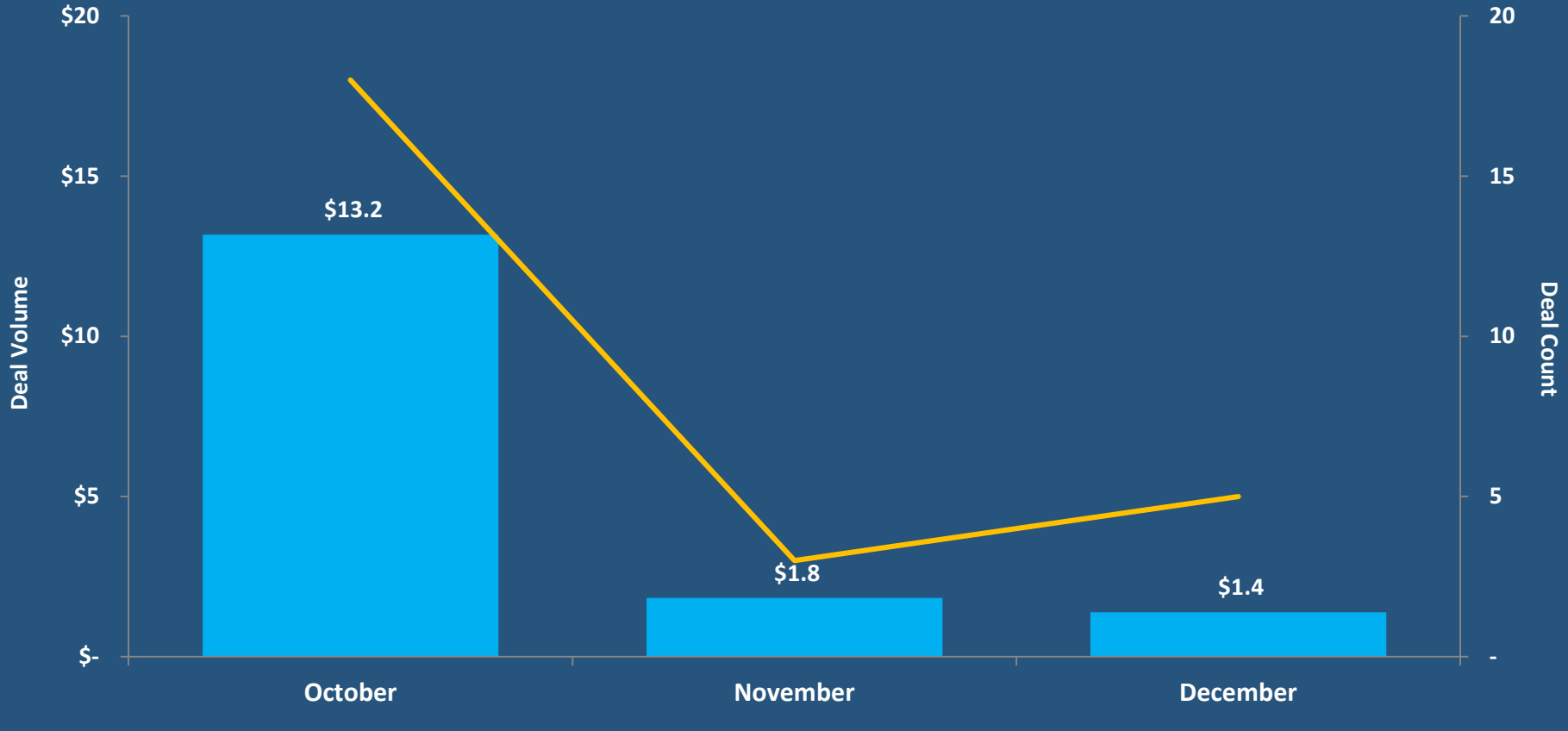
# E&P M&A Market Review



- Prior to recent downturn, M&A set for full rebound in 2014, but oil price collapse has halted activity
- M&A activity driven by portfolio reshaping
- Focus had also shifted to transactions with more production and less drilling risk
- Current M&A market “frozen” by volatility in commodity prices and cost of capital
- Buyers less affected by current weakness likely to take advantage of “buyers” market

# E&P M&A Market Review

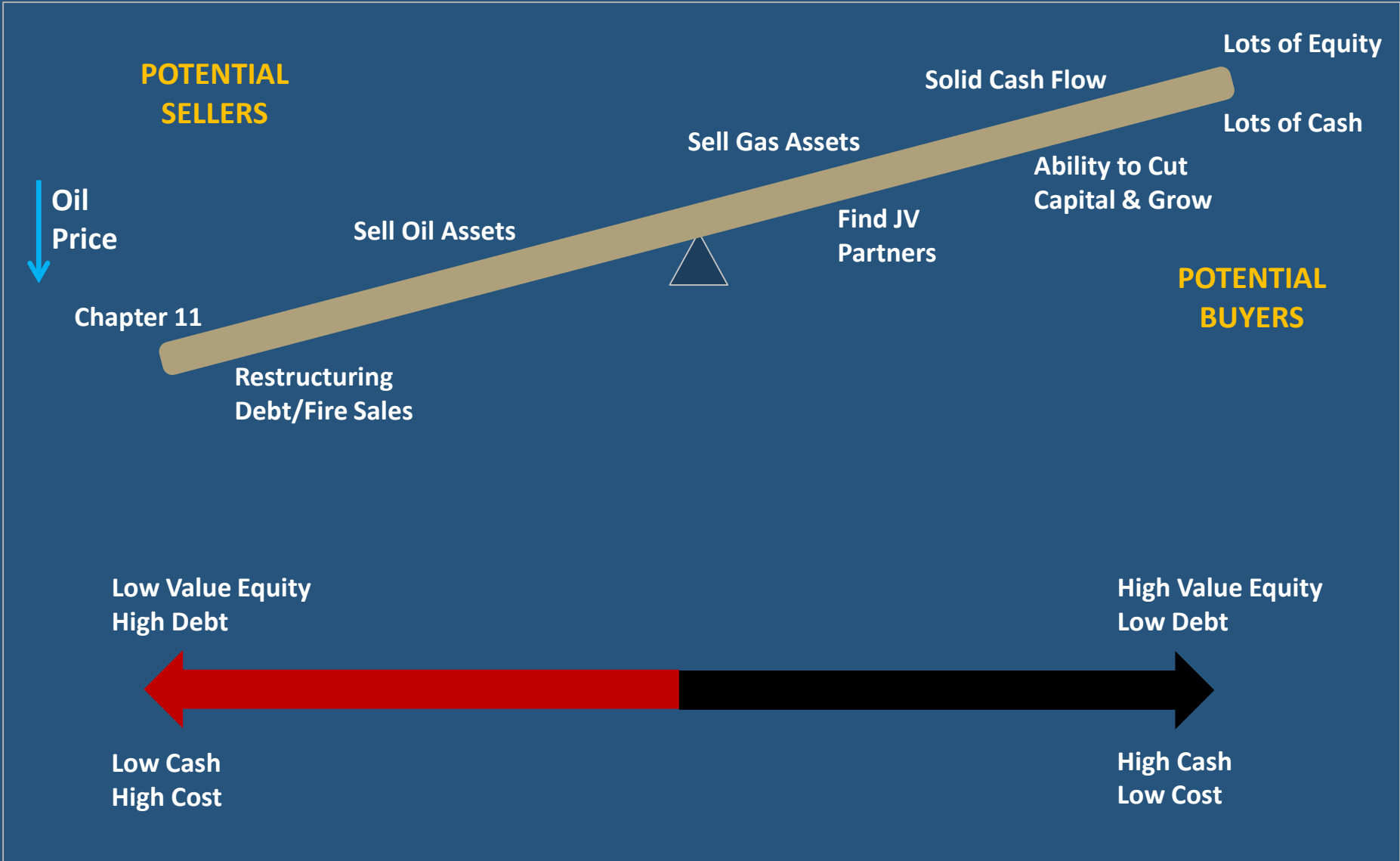
## North American Onshore E&P Deal Volume in Q4 2014 (\$B) <sup>(1)</sup>



Source: IHS Herold and Jefferies estimates as of 12/31/2014.

(1) Includes North American onshore corporate and asset-level transactions greater than \$100 MM USD.

# Deal Flow Hunters and Prey



## What Does All This Mean for U.S. Upstream Deal Flow?

- **Big private equity are geared up to hunt for opportunities**
  - More than \$50 B in equity raised
  - Combined with leverage this provides more than \$100 B in purchasing power
- **Could be an opportune time for the majors for mergers or major acquisitions**
  - Generally have lots of cash
  - Historically have completed mergers in low price environments
  - They are wrestling with execution of what they already own, and they will focus on costs
- **Most companies will need to live within available cash flows**
  - Large capital program reductions
  - Pressure on how to manage big portfolios
- **Internationals renewing interest in North America**
  - Seeking acquisitions that come with people (corporate or asset)
  - Some still interested in JVs with top tier operators
  - Many have said they are looking for "bargains"

## What Does All This Mean for U.S. Upstream Deal Flow? (Cont'd)

- **Watch for capitulation by sellers**
  - Most desperate may need to sell oil properties at the bottom
  - Sellers will hold out as long as possible while considering uses of asset sale funds (service debt, reinvest capital)
  - If natural gas price does not remain too weak, could be a good time to sell natural gas assets
- **Buyers will need to be very disciplined and focused in order to most effectively screen and evaluate deals**
  - Know the strengths and weaknesses and areas of most competitiveness
  - Move fast in a briskly changing environment
  - Be able to sort through a seemingly endless number of opportunities to clearly identify the most attractive
- **Companies should be prepared for an “open window” in M&A markets**
- **Private capital markets are least impacted by recent events especially longer hold periods – don't have to live quarter to quarter**