

Private Equity and Private Debt Investing in the Oil & Gas Sector

Section I: The Energy Sector in Private Equity 

Section II: Fundraising and Investor Interest

Section III: Key Factors for Oil & Gas Linked Investing

Private Equity Investing In Energy

A broad sector with a number of strategic options

- *Diversified Private Equity Energy*
 - Broad focus covering oil & gas upstream and midstream, services, and pipelines
 - Includes a few funds strictly focused on midstream oil & gas
 - Some firms include power generation and distribution as well as renewable production
 - Diversified strategy tends to lessen direct correlation to short term movements in commodity prices
 - At the fund level, focused on standard buyout returns
- *Oil & Gas Funds*
 - More focused on upstream exploration and production, though usually more on production than exploration
 - Increased interest over the last decade in North America driven by fracking and other alternative production technologies
- *Energy Mezzanine/Debt Funds*
 - Newer sector developing more interest since the financial crisis affected lending markets
 - Return profile akin to private equity mezzanine or senior debt – but concentrated on a single industry unlike other debt funds
- *Distressed Debt Energy Funds*
 - A product of this particular cycle, with the first funds raised in 2014

Private Equity Investing In Energy

Fund types related to more classic energy funds

- *Infrastructure Energy Funds*
 - Sub-sector of infrastructure focused mainly on electricity production and energy transmission (oil or gas pipelines, electricity transmission)
 - In response to the Kyoto Protocols, renewable energy infrastructure funds also developed with heavy focus on wind farms and solar farms
 - Fund return profiles are usually lower than for private equity funds, with lower exposure to short term commodity changes

- *Cleantech Funds*
 - Specialist venture capital/growth equity vehicles focused on cutting edge energy technology, with high risk/return profile
 - A number of investors consider this sector strictly venture capital and not energy *per se*
 - Were more popular a decade ago but financial returns have not, as of yet, lived up to expectations

Private Equity and Private Debt Investing in the Oil & Gas Sector

Section I: The Energy Sector in Private Equity

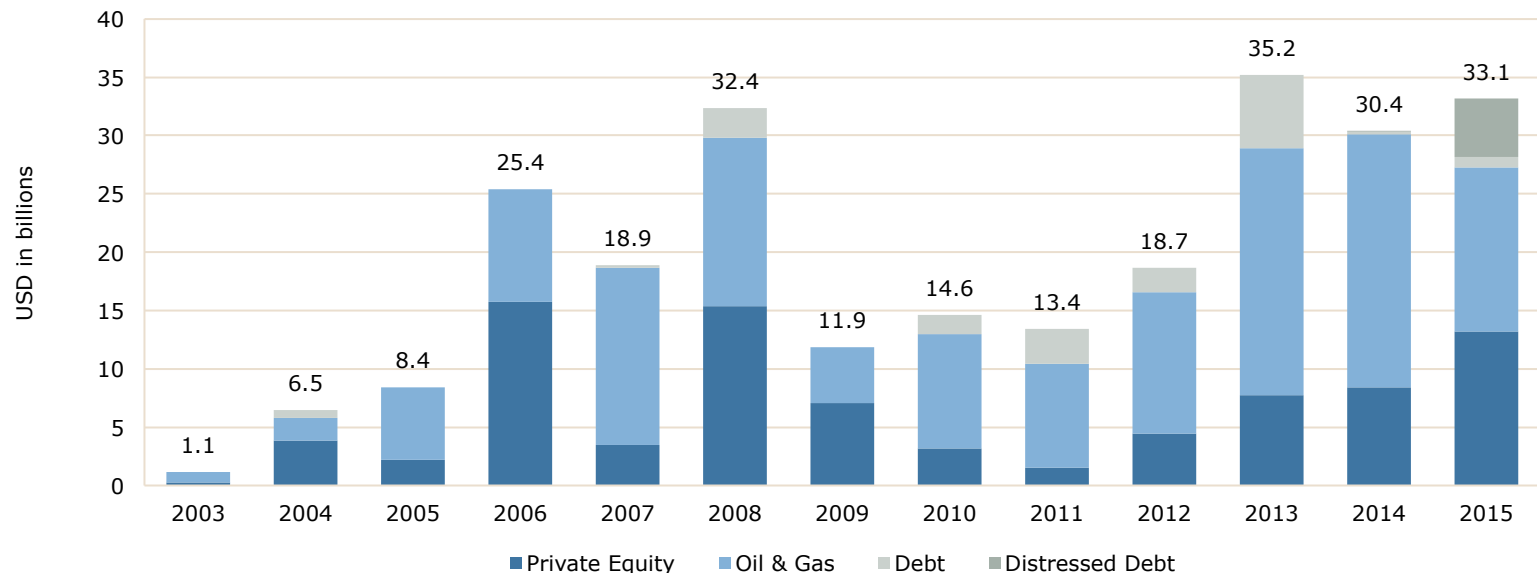
Section II: Fundraising and Investor Interest 

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Historical Fundraising

- As a niche sector, annual variations in fundraising are heavily driven by large funds in the market
- Most of the funds have a strong focus on North America, where fracking has taken hold over the last decade
- Fundraising remained strong in 2015 as investors looked to back managers pursuing companies under stress
- Increased interest in energy debt funds that began in 2008 flipped in 2015 to a focus on energy distressed debt funds

Capital Raised for Energy-Focused Funds, 2003-2015



Source: Probitas Partners

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Largest Funds in the Sector

- As far as the largest funds, there is interest in the 3 major types of funds – though interest in debt is the weakest
- All of these funds are headquartered in the U.S.
- A number of large mega funds besides Blackstone and Warburg Pincus (on the list) have raised or are raising targeted energy focused funds

Largest Energy Funds, February 2016

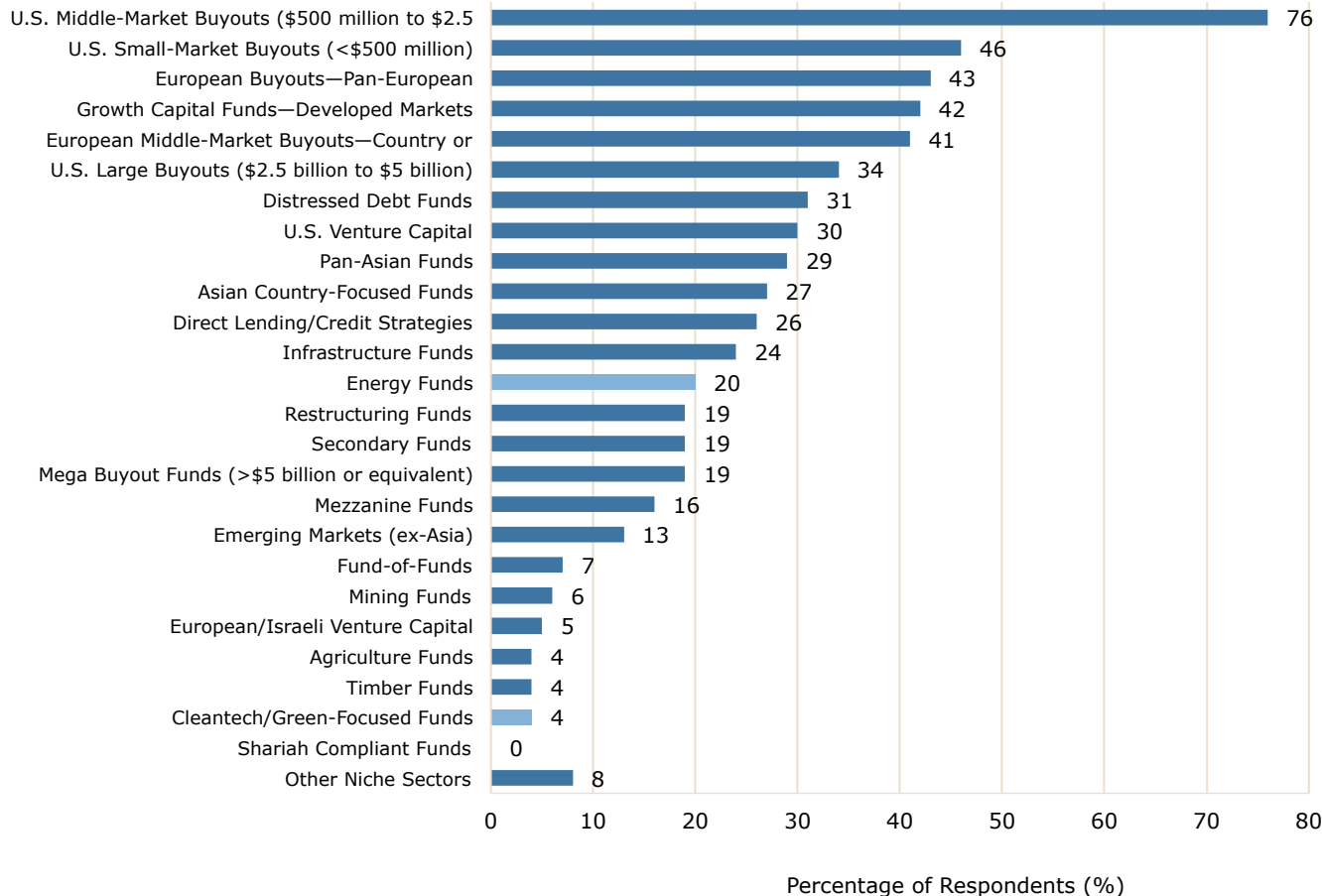
Rank	Firm Name	Largest Fund	Strategy	Year	Amount (MM)
1	First Reserve Corporation	First Reserve Fund XII	Diversified Energy PE	2008	USD 8,821
2	Riverstone Holdings	Riverstone Global Energy & Power Fund V	Diversified Energy PE	2012	USD 7,713
3	EnCap Investments	EnCap Energy Capital Fund X	Oil & Gas	2015	USD 6,500
4	Riverstone Holdings	Riverstone/Carlyle Global Energy and Power Fund IV	Diversified Energy PE	2008	USD 6,000
5	EIG Global Energy Partners	EIG Energy Fund XVI	Energy Debt	2013	USD 6,000
6	NGP Energy Capital Management	NGP Natural Resources XI	Oil & Gas	2014	USD 5,325
7	EnCap Investments	EnCap Energy Capital Fund IX	Oil & Gas	2013	USD 5,000
8	Blackstone Group	Blackstone Energy Partners II	Diversified Energy PE	2016	USD 4,500
9	Quantum Energy Partners	Quantum Energy Partners VI	Oil & Gas	2015	USD 4,450
10	Warburg Pincus	Warburg Pincus Energy Fund	Diversified Energy PE	2014	USD 4,030

Source: Probitas Partners

Energy Interest Versus Other Areas of PE

Private Equity Sectors of Interest

During 2016, my firm or my clients plan to focus most of our attention on investing in the following sectors (choose no more than seven):



- Strongest areas of focus globally are on MMBOs, both in the U.S. and Europe
- Amongst niche strategies, private equity energy funds score well, with cleantech trailing significantly
- Much more interest in energy funds from North American investors than European or Asian, in part because of FIRPTA
- Infrastructure funds are of middling interest but the category on this chart includes all infrastructure funds, not just those focused on energy

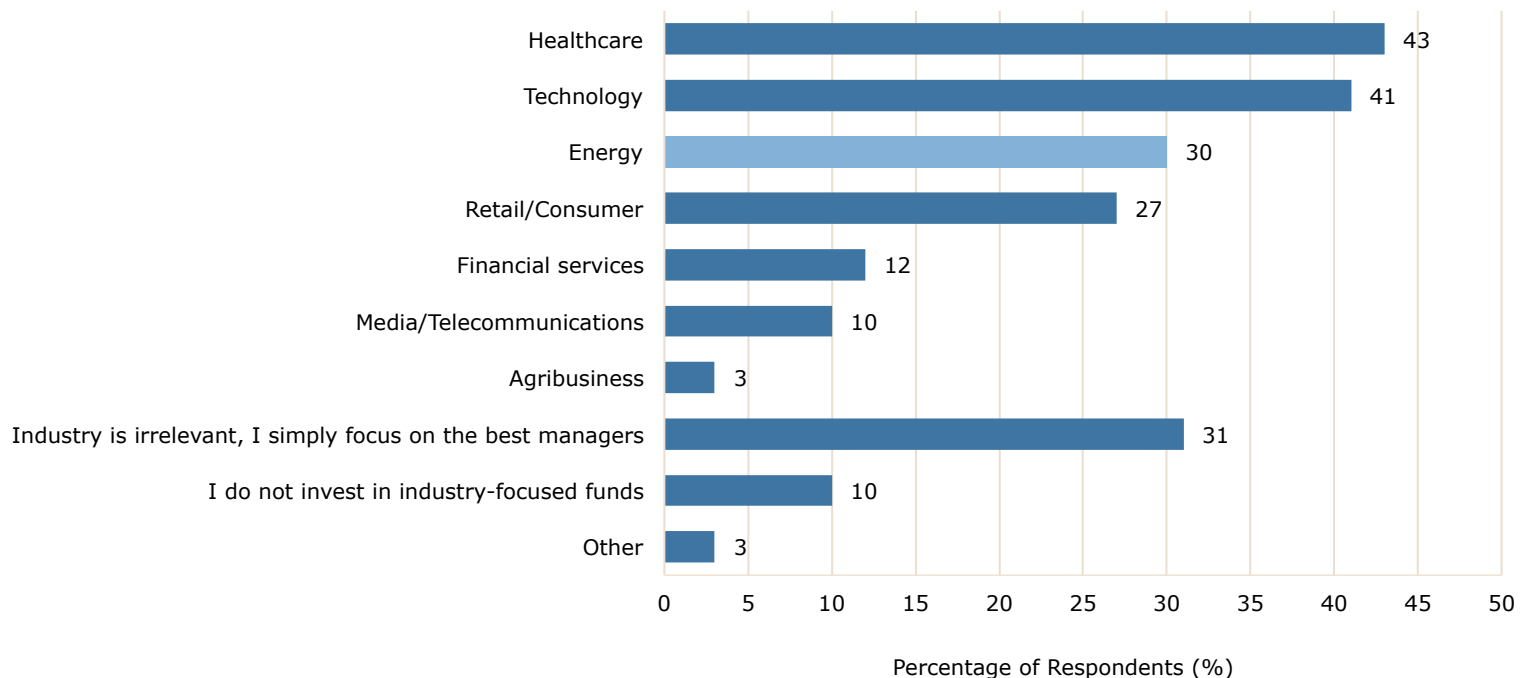
Source: Probitas Partners' Private Equity Institutional Investor Trends Survey for 2016

Energy Interest Compared to Other Sector Focused Funds

- Within the buyout market there are a number of funds narrowly focused on particular industries
- Going in to 2016, energy ranked third behind healthcare and technology, though it would have ranked higher in previous years

Interest in Industry Focused Funds

As far as funds focused on single industries, I am most interested in (choose no more than three):



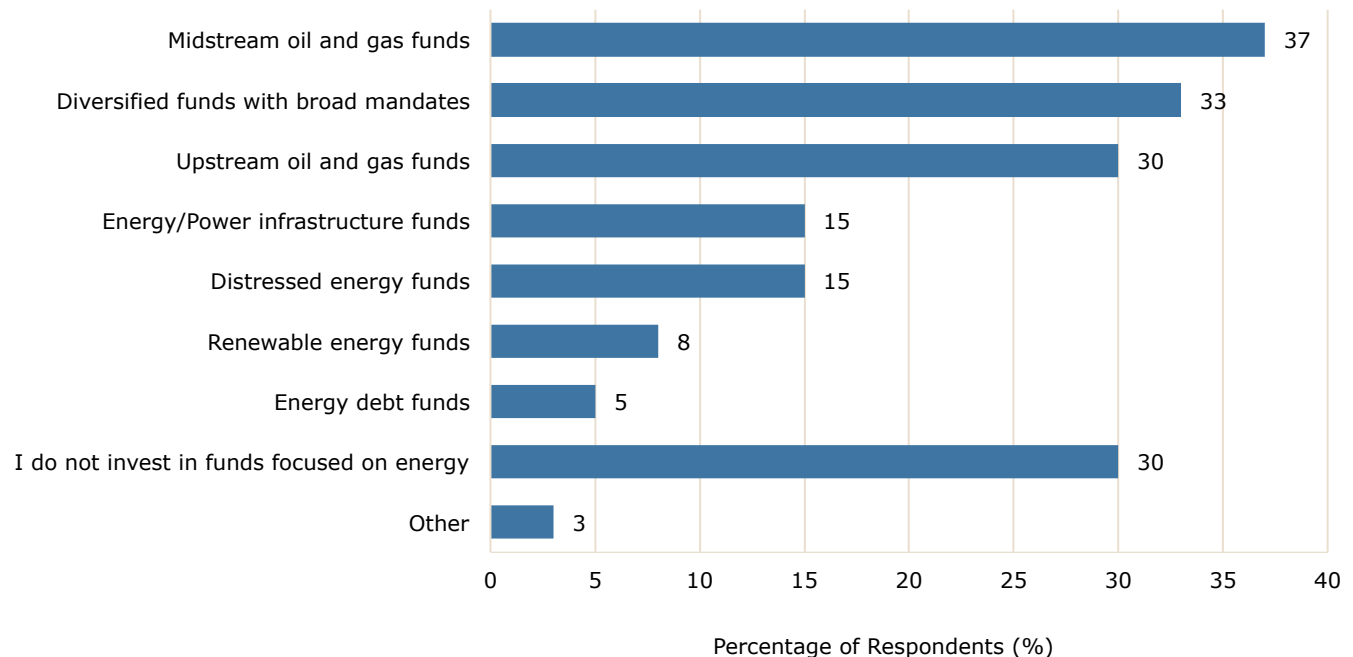
Source: Probitas Partners' Private Equity Institutional Investor Trends for 2016 Survey

Interest in Sub-Sectors of Energy

- Among private equity investors, there is more interest at this point in diversified and midstream funds, and less on upstream
- Even with the stress in the sector, there is less interest in pure distressed funds; many funds are already pursuing stressed opportunities within their investment mandates

Interest in Sectors within Energy

In the energy sector, I am most interested in (choose no more than three):



Source: Probitas Partners' Private Equity Institutional Investor Trends for 2016 Survey

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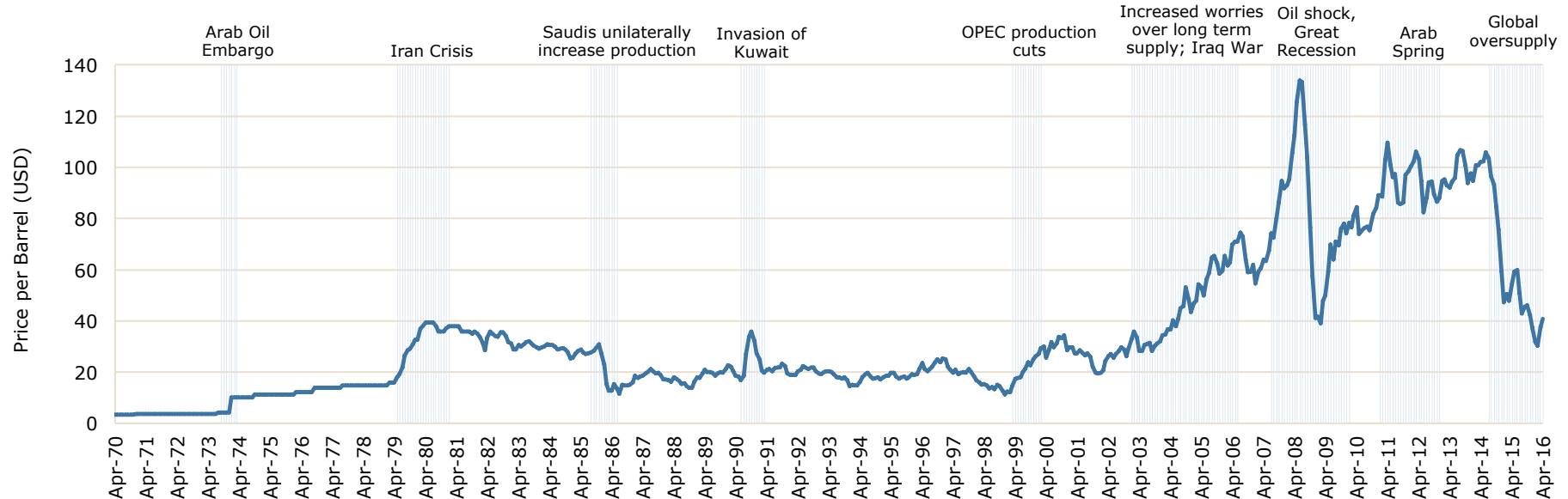
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Historical Oil Prices and Trends

- Oil prices have tended to go through a series of shocks – some political, some economic – followed by a period of stabilization
- From the late 1990s through 2007, oil prices steadily increased over concerns about long term supply issues
- Over the last 8 years the market has been much more volatile
- The current situation is driven by not only new production from the U.S. and anticipated production from Iran, but political decisions made by OPEC to maintain production, all in the face of slack demand

Crude Oil Prices, West Texas Intermediate, 1970 - April 2016

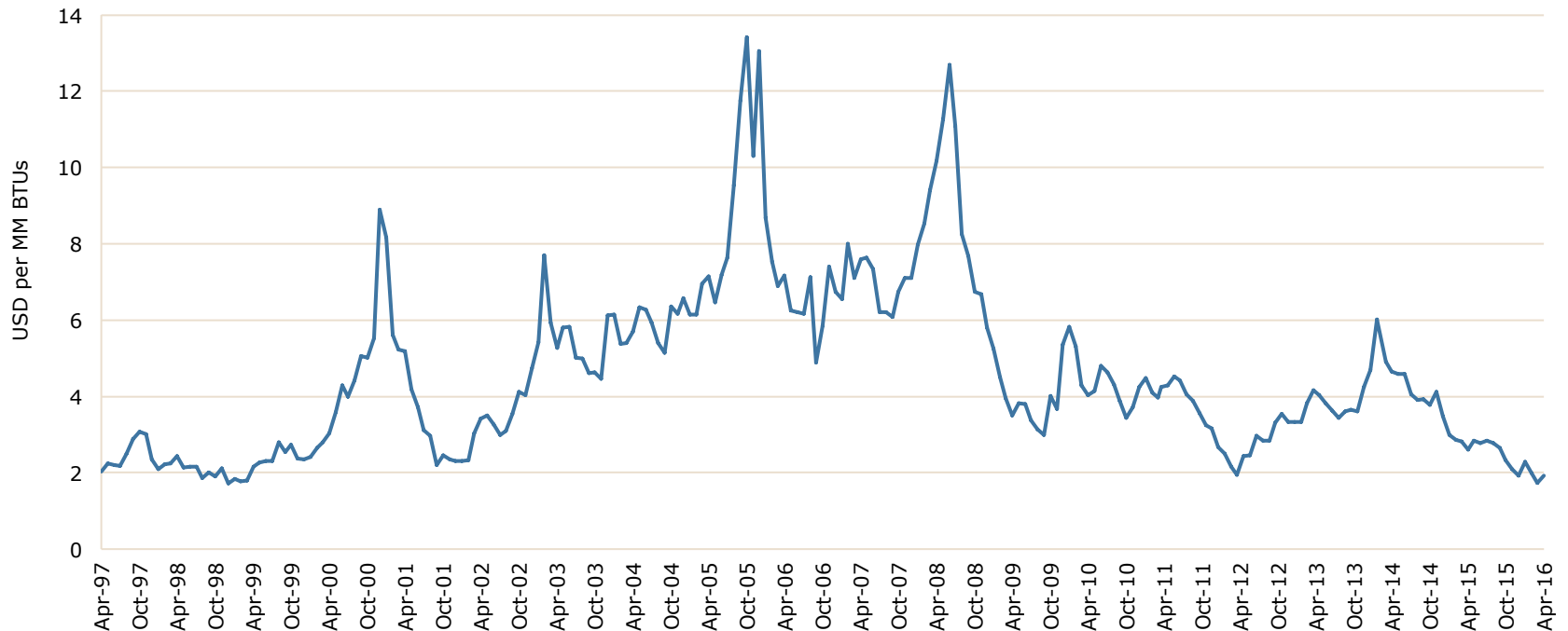


Source: Federal Reserve Bank of St. Louis, current dollar basis

Gas Prices: The Henry Hub Example

- Natural gas is more difficult to transport overseas than oil, so its price is more impacted by local issues than is oil
- U.S. prices for natural gas show different trends than for oil, with the largest impact over the last 8 years being increased supply driven by fracking

Natural Gas Prices (Henry Hub), 1997- April 2016

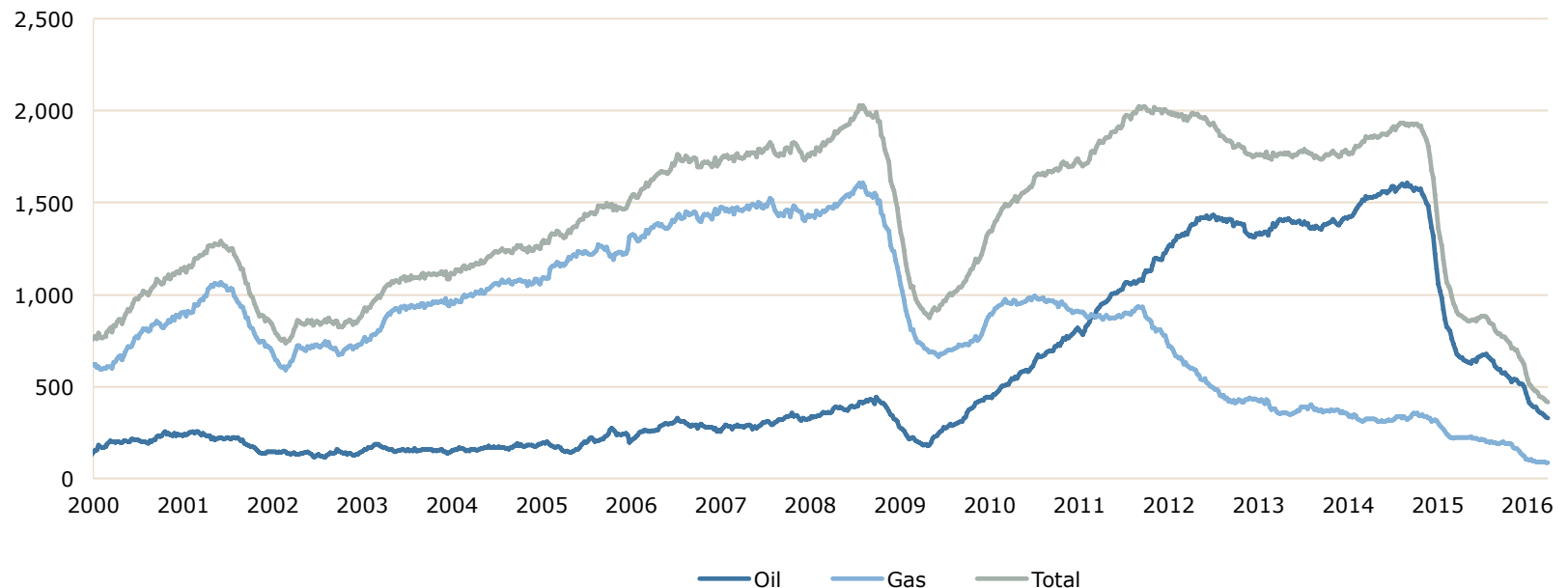


Source: Energy Information Administration (EIA)

U.S. Oil and Gas Rig Counts

- Oil rig counts – the number of rigs currently being used at producing wells – gives an indication of activity in the services sector
- Data from the U.S. shows how these numbers react to oil and natural gas prices, with the sustained decline in U.S. natural gas prices beginning in 2009 hammering that sector longer
- The oil numbers for this last cycle also show a lag between the commodity price drop in 2014 and the rig count drop in 2015

US Rotary Rig Count Oil/Gas Split - YTD May 2016



Source: Baker Hughes

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