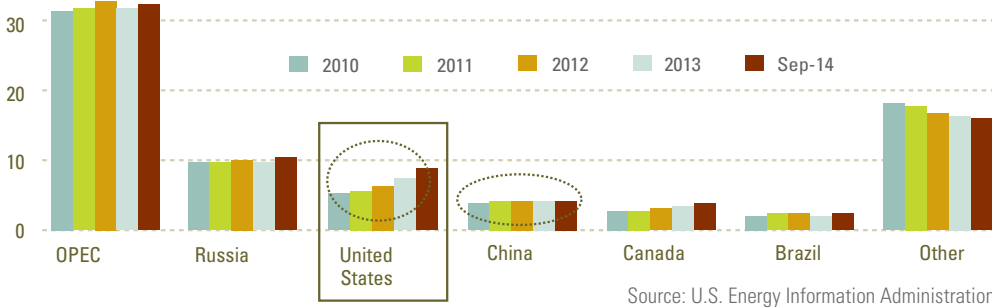


# Global High Yield Energy Outlook

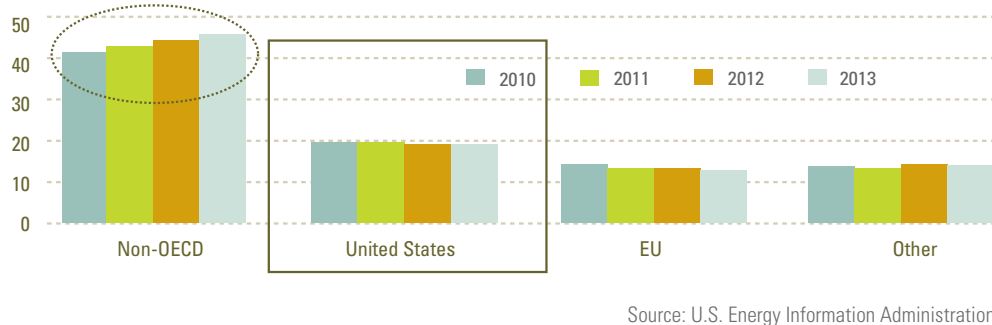
U.S. oil producers are projected to pump more oil in 2015 than in any other year, surpassing a previous peak of 9.6 million barrels extracted per day in 1970. After a long lull in U.S. production during the 80s and 90s, a new oil boom has emerged. That boom is the result of elevated oil prices since the mid-2000s and increasingly productive techniques for recovering unconventional sources of oil, specifically advances in shale oil extraction and processing.

But just as U.S. production is reaching record levels this year (Figure 1), a tidal wave of uncertainty has negatively impacted the global oil supply and demand dynamics. Emerging market demand slowed much more quickly than markets expected after providing nearly all of the world's growth in oil demand since 2010 (Figure 2). Europe, a large consumer of oil if not a significant source of demand growth, also experienced a slowdown in 2014. Then in late 2014, the Organization of Petroleum Exporting Countries—really, its de facto leader, Saudi Arabia—announced no cuts in supply to counteract the impact of economic slowdown in China and Europe. Both the demand and supply dynamics for oil have not yet stabilized, leaving unclear the likely fate of the U.S. shale oil industry.

**Figure 1** Daily Oil Output of Largest Producers  
 Mmbbl/d



**Figure 2** Daily Oil Consumption by Region  
 Mmbbl/d



**Gerhardt (Gary) Herbert, CFA**  
 Portfolio Manager

**Brian L. Kloss, JD, CPA**  
 Portfolio Manager

**Regina G. Borromeo\***  
 Portfolio Manager

**Tracy Chen, CFA, CAIA**  
 Sr. Research Analyst – PM Mortgage Backed Securities



Brandywine Global Investment Management, LLC  
 2929 Arch Street, 8th Floor / Philadelphia, PA 19104

North America 800 348 2499 / 215 609 3500  
 Asia 65 6536 6213  
 Europe 44 (0) 207 786 6360

[brandywineglobal.com](http://brandywineglobal.com)

\* Employee of Brandywine Global Investment Management (Europe) Limited. In rendering portfolio management services, Brandywine Global Investment Management, LLC may use the portfolio management services, research, and other resources of its affiliates.

For Institutional Investors Only

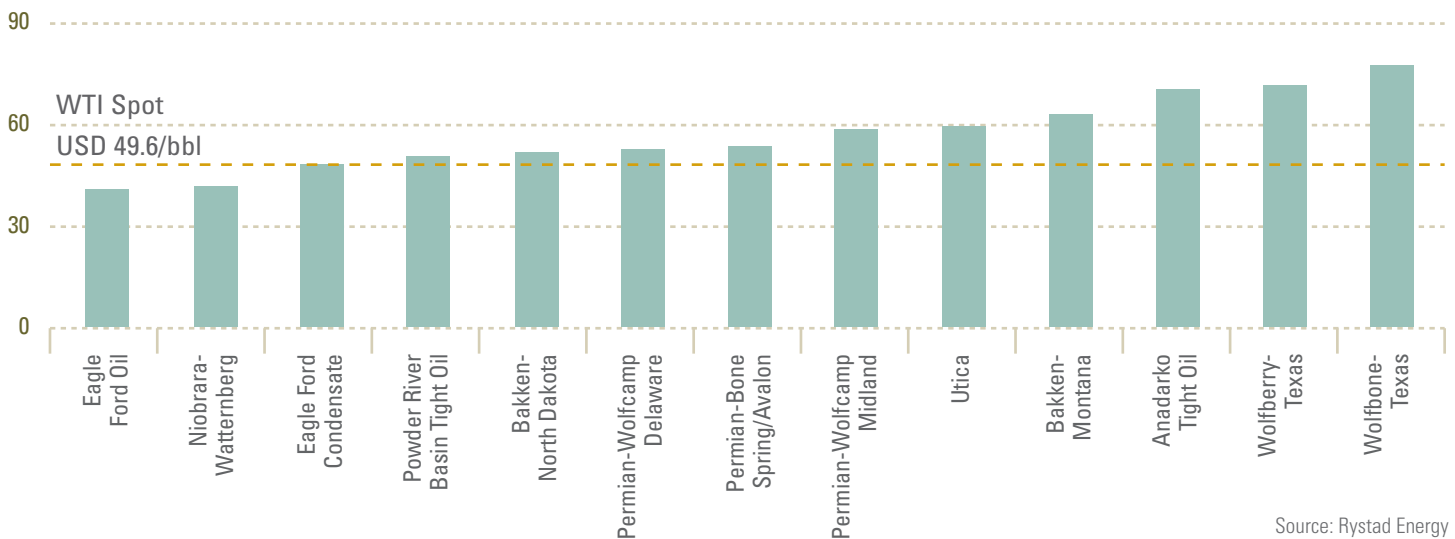
Past performance is no guarantee of future results.

Representing almost 20% of U.S. high yield issuance, the energy industry, comprised mostly of unconventional independent oil and gas explorations and production companies, is a large portion of the investible U.S. high yield universe. Correctly handicapping the evolution of high yield energy company defaults and the potential subordination of current debt holders will play a significant role in determining excess returns for high yield managers in 2015, 2016, and 2017.

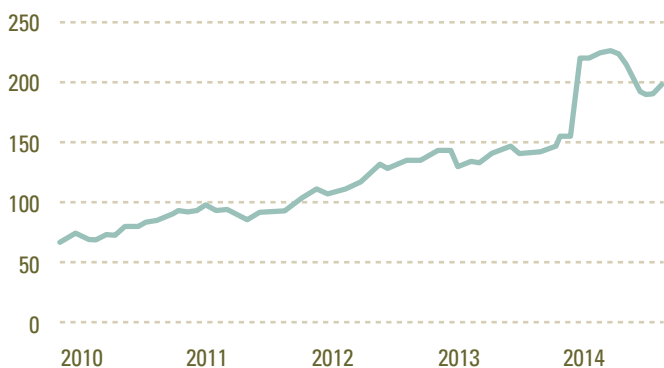
The Kingdom of Saudi Arabia has explained that maintaining a supply glut in the face of slow global economic growth is a policy designed to erode market share of upstart unconventional U.S. producers. As we show below, that goal will likely take at least a few years to realize; will OPEC have the fortitude to wait such a long time to win back market share?

At current U.S. onshore oil prices, many onshore unconventional projects remain uneconomical, but still close to profitability at current prices (Figure 3). However, U.S. unconventional producers are quickly gaining production efficiencies that dramatically lower breakeven costs. Cost efficiency is partly a function of the industry maturing, seen in better work-force productivity, and partly a function of the industry adapting to different economics to collectively stay afloat. Independent drillers are pressing suppliers for cost savings and suppliers are adjusting, realizing that competing on price is a more important factor for producers in the current low oil-price environment. And while cost efficiencies increase, much of the production coming out of the ground in 2015 was sold (hedged) at higher prices through forward markets in 2014. Therefore, we believe the fall-out of U.S. energy defaults and a decrease in global market share has yet to take shape. Defaults will likely increase, but not for a while.

**Figure 3** Average WTI Breakeven Oil Prices by Shale Play  
 USD/bbl; As of 3/27/2015

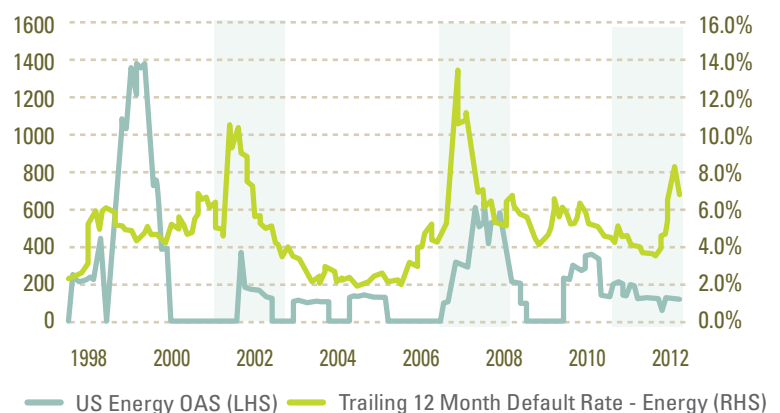


**Figure 4** Market Value of High Yield Energy Sector  
 in Millions; As of 12/31/2014



Source: Bank of America Merrill Lynch (BAML)

**Figure 5** Defaults Lag Credit Spread Widening  
 Shows through mid-2012



Source: BAML

The rapid increase in energy issuance since 2010 (Figure 4 on the previous page) shows that the U.S. energy industry tapped high yield markets for significant funding in the last five years. Such a large increase in issuance can end poorly for investors and illustrates the increased potential for market stress in the upcoming future. Although high yield energy spreads are rising, defaults historically materialize with a lag of a few years (Figure 5 on the previous page).

We don't think this cycle will be different, especially because producers in the current cycle have broadly hedged production revenue over longer time frames than in past cycles. Moreover, U.S. shale assets are incredibly flexible in terms of ratcheting investment and production up and down incrementally. This environment could create a stalemate between Saudi Arabia and U.S. producers that lasts longer than markets currently expect.

In light of these facts, markets don't expect defaults to pick up until 2016 or 2017 (Figure 6). We think this year remains critical, however, because spreads will remain elevated until the default picture becomes clearer. Patience will be critical, but when moving into the energy exposure, managers will need to be careful to avoid the issuance that will ultimately be subjected to permanent capital impairment, either through default or forced subordination.

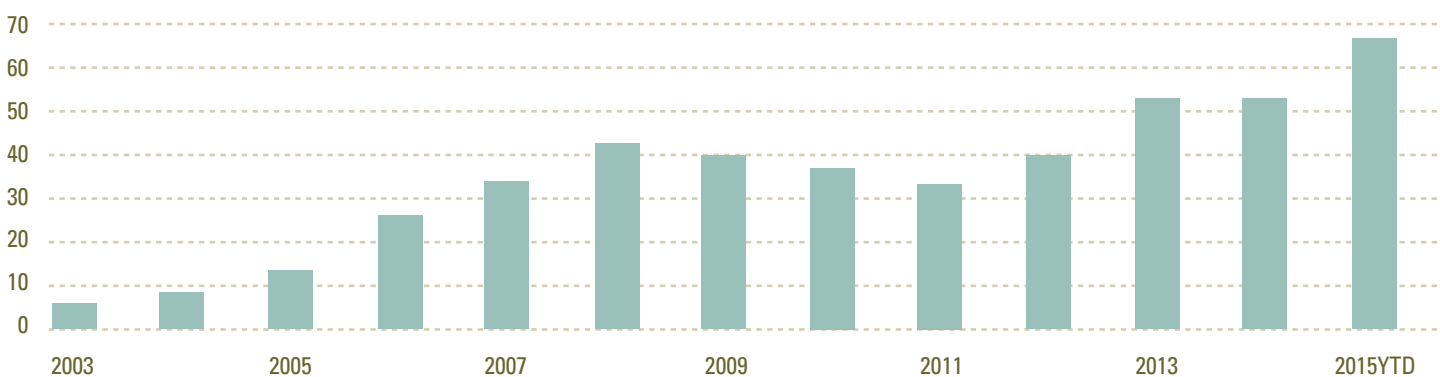
**Figure 6** Default Scenario Analysis  
 As of 3/31/2015

		ORIGINAL CASE "IRRATIONAL BEHAVIOR"					CURRENT CASE "RATIONAL BEHAVIOR"				
		ANNUAL DEFAULT RATE					ANNUAL DEFAULT RATE				
CASE	SCENARIO	2015	2016	2017	AVERAGE	CUMULATIVE	2015	2016	2017	AVERAGE	CUMULATION
Downside	\$75 oil, \$3.50 gas	3.9%	4.8%	3.0%	3.9%	11.6%	1.2%	1.2%	6.9%	3.1%	9.4%
Really Bad	\$65 oil, \$3.00 gas	3.9%	20.5%	15.5%	13.3%	39.9%	2.6%	8.1%	12.6%	7.8%	23.3%
Horror Show	\$50 oil, \$3.00 gas	3.9%	21.8%	21.0%	15.6%	46.7%	3.9%	4.3%	19.7%	9.3%	27.9%

Source: J.P. Morgan

One last front of uncertainty for high yield investors will come from private-equity investors. Prequin, a collector and analyzer of private-equity data, reports a large amount of private-equity money waiting on the sidelines to take advantage of distressed U.S. energy debt, equity, and specific assets. In our opinion, this large amount of investment dollars could initially be a negative force for current debt holders, as the risk of privately placed deals subordinating current bond holders could happen without significant warning. Our view is that new capital structures put in place by private-equity firms will seek to subordinate existing bondholders.

**Figure 7** Dry Power Natural Resources PE funds  
 As of 3/23/2015



Source: Prequin

When oil markets begin to stabilize, however, the large amount of private-equity assets on the sidelines could ignite a rush for distressed assets that raises financial asset prices and curbs excess costs to improve overall industry health. The timing for private-equity funds to start employing funds will be an important question for high yield investors to answer. On the other side of the coin, the potential for oil majors to buy-out energy assets would be a benefit for high yield investors, since majors tend to have high investment-grade ratings.

We remain cautious with regard to buying U.S. energy high yield names in the current environment—although we believe the next two years will likely bring attractive opportunities. A top-down perspective on global growth and oil demand is important, but proprietary credit research will be the most important factor for handicapping the turn in U.S. energy high yield assets. In our view, understanding the private-equity cycle, avoiding credit impairment through subordination and default, and maintaining patience will all be crucial factors in generating excess return in high yield strategies moving forward.

The views expressed represent the opinions of Brandywine Global Investment Management, LLC and are not intended as a forecast or guarantee of future results. All information obtained from sources believed to be accurate and reliable. Fixed income securities are subject to credit risk and interest-rate risk. High yield, lower-rated, fixed income securities involve greater risk than investment-grade fixed income securities. There may be additional risks associated with international investments. International securities may be subject to market/currency fluctuations, investment risks, and other risks involving foreign economic, political, monetary, taxation, auditing and/or legal factors. These risks may be magnified in emerging markets. International investing may not be suitable for everyone. Derivatives transactions may increase liquidity risk and introduce other significant risk factors of a complex character. All securities trading, whether in stocks, options or other investment vehicles, is speculative in nature and involves substantial risk of loss. Characteristics, holdings and sector weightings are subject to change and should not be considered as investment recommendations. Indices are unmanaged and not available for direct investment. All data as of the date at the top of the page unless otherwise noted. This information should not be considered a solicitation or an offer to provide any Brandywine Global service in any jurisdiction where it would be unlawful to do so under the laws of that jurisdiction. **Past performance is no guarantee of future results.**