Distressed Investing Opportunities and Dangers in the North American Oil and Gas Sector

April 7, 2015
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Executive Summary

- Since June 2014, the price of oil has decreased approximately 50%, from a WTI price of over $100/bbl to $40-$50/bbl today.
- As of April 3, 2015, the price of oil ranged between $49.14 (WTI) and $54.95 (Brent).
- The current pricing environment presents serious challenges for North American exploration and production (“E&P”) companies, with additional ramifications in the oil field services sector and other related industry segments.
Executive Summary

- Most E&P companies are projected to be considerably overlevered in 2015.

- Companies with debt maturities scheduled to ripen in 2016 may have difficulty refinancing their debt.

- Tightened liquidity and capital expenditure reductions will cause further damage, as the shale-driven North American oil & gas industry cannot sustain earnings without continued drilling.

- These distressed conditions present significant opportunities for investors to offer E&P companies creative solutions to address liquidity needs.
Oil & Gas Market Update (cont’d)

- The downward trend in commodity pricing has been precipitated by a global supply/demand imbalance, which widened in 2014 and which some have predicted may persist for an extended period.

- This trend was compounded by OPEC’s November 2014 decision not to implement a production decrease that would have moderated falling oil prices.

- While some E&P companies have hedges in place to protect cash flows through the end of 2015, fewer have the same protection into 2016.
E&P Sector Background

- The North American oil and gas industry recently has been driven by the shale boom.
  - A typical shale well has steep production declines of over 50% in the first year.
  - Earnings naturally decline unless E&P companies continue to drill new wells.
- Therefore, the North American shale revolution requires constant injections of new capital in order to grow or even maintain revenue.
Oil and Gas Fund Raising and Capital Structure

Source: ThomsonONE
Most E&P companies are financed with a combination of common stock and debt. However, capital structures vary widely, depending upon the company’s maturity.

In the start-up stages, pure-play E&P companies often rely on equity raises as their primary financing method.

Historically, additional capital raises often have included the use of IPOs.
Later, E&P companies supplement their equity financing with credit facilities linked to the value of their proved reserves.

Through reserve-based lending, lenders determine credit lines based on the discounted present value of existing proved oil & gas reserves.

Present value is calculated based on factors such as production levels, taxes, capital costs, and expected oil prices.

The “borrowing base” of reserve-based lending credit facilities is typically redetermined twice a year, in the spring and fall.
## E&P Sector Background (cont’d)

### Principal sources of oil and gas funding

<table>
<thead>
<tr>
<th>Exploration and appraisal</th>
<th>Development and production</th>
<th>Portfolio expansion</th>
</tr>
</thead>
<tbody>
<tr>
<td>▶ Private equity</td>
<td>▶ Reserve based lending</td>
<td>▶ Cash flow from operations</td>
</tr>
<tr>
<td>▶ Further equity issuances</td>
<td>▶ Public bonds</td>
<td>▶ Reserve based lending</td>
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<td></td>
<td>▶ Project finance</td>
<td>▶ Public bonds</td>
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<td></td>
<td>▶ Private placement</td>
<td>▶ Infrastructure funds</td>
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<td></td>
<td>▶ Multilateral development banks</td>
<td>▶ Proceeds from divestments</td>
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<td>▶ Mezzanine finance</td>
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**Increased predictability of cash flows and business maturity**
E&P Sector Background (cont’d)

- Increasingly in recent years, E&P companies of sufficient scale have turned to public bond markets, attracted by the financial flexibility (e.g., “covenant lite”, longer maturities) and ability to be utilized to refinance bank debt.

- E&P companies also use private transactions to place second-lien, unsecured, or subordinated notes with select investors.

- Between 2010 to 2013, the majority of E&P financing stemmed from bank loans and bonds.

- Much of the debt issued during this period is scheduled to mature in the short-term, starting in 2016.
E&P Sector Background (cont’d)

Energy companies make up a rising share of the high yield bond market

Source: Barclays
E&P Sector Background (cont’d)

- E&P companies represent, by far, the largest issuers of high-yield debt in the energy industry, accounting for approximately half of all energy-related high-yield debt issuances by index weight.

- As of February 2015, energy-related issuances accounted for almost 15% of the total $1.4 trillion junk-bond market, comprising roughly $210 billion in high-risk debt.

  - E&P companies borrowed about $163 billion in high yield debt between 2000 and 2014, according to figures from Dealogic.

  - Junk-rated energy borrowers have sold about $9.4 billion in bonds in 2015.
E&P Sector Background (cont’d)

- Due to tumbling commodity prices, however, at least one-third of E&P high-yield bonds have been trading at distressed levels since December 2014, according to Forbes.
  
  - During March, falling commodity prices wiped out an estimated $7 billion of market value of high-yield debt.¹
  
  - Bonds are considered to be trading at distressed levels if they are trading at yield spreads of more than 10% over U.S. Treasury bonds.

¹ Source: Bloomberg
“Yield to Worst” is the lowest potential yield that can be received on a bond without the issuer actually defaulting, and is calculated by making worst-case scenario assumptions (such as the issuer invoking prepayment provisions) when calculating the returns on the bond issuance.
E&P Sector Challenges

- At $47/bbl WTI and $3.00 gas (per Morgan Stanley projections as of February 2015), many E&P companies are projected to be significantly overlevered in 2015.

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<tbody>
<tr>
<td>Occidental Premium</td>
<td>71</td>
<td>0.62</td>
<td>26%</td>
<td>57.5</td>
</tr>
<tr>
<td>EOG Resources</td>
<td>52</td>
<td>0.97</td>
<td>22%</td>
<td>50.5</td>
</tr>
<tr>
<td>Anadarko Petroleum</td>
<td>35</td>
<td>0.99</td>
<td>26%</td>
<td>43.8</td>
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<tr>
<td>Marathon Oil</td>
<td>36</td>
<td>1.23</td>
<td>35%</td>
<td>18.2</td>
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<tr>
<td>Exco Resources</td>
<td>8</td>
<td>5.20</td>
<td>71%</td>
<td>.5</td>
</tr>
<tr>
<td>Halcon Resources</td>
<td>5</td>
<td>5.34</td>
<td>79%</td>
<td>.7</td>
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<tr>
<td>Goodrich Petroleum</td>
<td>4</td>
<td>5.96</td>
<td>88%</td>
<td>.2</td>
</tr>
</tbody>
</table>

Source: Financial Times
E&P Sector Challenges (cont’d)

- **Reduced Borrowing Base**: In light of depressed pricing, E&P companies that undergo a borrowing base redetermination in spring 2015 are expected to experience a reduction in borrowing capacity, thus reducing liquidity.

  - If oil prices remain below $60/bbl, E&P companies may see reductions as high as 10-15%, according to Reuters.

  - Consequently, many E&P companies may lose material to substantial access to their primary sources of liquidity for capital expenditures and the expansion of their reserve base.
E&P Sector Challenges (cont’d)

- *Reduced Borrowing Base (cont’d).*
  - The effects of the spring borrowing base redetermination may be mitigated by production growth from wells brought online in the second half of 2014 and increased hedging.
  - These offsets are unlikely to be available by the scheduled Fall 2015 borrowing base redetermination, which could result in more severe reductions in liquidity.
E&P Sector Challenges (cont’d)

- **Limited Cash Flow:** Below $60-$70/bbl and $4 gas, many E&P companies’ drilling costs exceed their projected earnings, causing cash flow challenges.
  
  - Related rig shut downs may further reduce earnings.
  
  - As of April 2, 2015:
    
    - The number of U.S. oil and gas rigs was 1,028.
    
    - That figure represents a decrease of 790 rigs (43.5%) from the previous year’s figure of 1818.¹

¹ Source: Baker Hughes
E&P Sector Challenges (cont’d)

- **Hedging Strategy**: E&P companies that are either not hedged or insufficiently hedged may exhibit near-term volatility in returns due to commodity pricing volatility.
U.S. Rig Count Reduction

U.S. Crude Oil Rigs and Oil Price Relationship

Source: Baker Hughes and EIA
E&P Restructuring Drivers

- **Liquidity and Capital Expenditure Needs**: E&P companies may seek alternative financing to offset the impact of reduced reserve-based borrowing capacity.
  
  - Reduced liquidity will shrink overall drilling and production activities, impact acquisition opportunities, and place pressure on service provider revenues.
E&P Restructuring Drivers

- **Covenant Violations:** Many revolving credit agreements contain financial maintenance covenants that may be strained by lower earnings as a result of declining commodity prices and rig shutdowns.

- E&P companies that are forced to cut back on capital expenditures (i.e. drilling new wells) in the commodity price downturn may struggle to grow earnings, potentially resulting in covenant violations.
### Alternatives / Opportunities

<table>
<thead>
<tr>
<th></th>
<th>Over-levered Balance Sheet</th>
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<tbody>
<tr>
<td><strong>Debt</strong></td>
<td>▪ Debt-for-debt exchanges to capture discount</td>
</tr>
<tr>
<td></td>
<td>▪ New money secured financings to tender for junior debt at a discount</td>
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<tr>
<td><strong>Equity</strong></td>
<td>▪ PIPE</td>
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<tr>
<td></td>
<td>▪ Preferred equity</td>
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<td></td>
<td>▪ Private or public debt-for-equity exchange</td>
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<tr>
<td><strong>Hybrid</strong></td>
<td>▪ Secured convert</td>
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<td></td>
<td>▪ Debt &amp; rights offering</td>
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<tr>
<td><strong>Strategic and Asset Level Financings</strong></td>
<td>▪ Discrete asset sales (in-or-out of court)</td>
</tr>
<tr>
<td>Alternatives / Opportunities</td>
<td>Liquidity Need (Borrowing Base Reductions / Capex Funding)</td>
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<tr>
<td>Debt</td>
<td>• 2(^{nd}) Lien debt (bonds or loans)</td>
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<tr>
<td></td>
<td>• “Replacement” revolvers</td>
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<td></td>
<td>• DIP financings</td>
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<td>Strategic and Other Asset Level</td>
<td>• Discrete asset sales (in-or-out of court)</td>
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<tr>
<td>Financings</td>
<td>• Mezzanine debt</td>
</tr>
<tr>
<td></td>
<td>• Volumetric production payments, overriding royalty</td>
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<td>interests, net profits interest</td>
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<td>• Joint ventures</td>
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Source: Goldman Sachs (modified)
Investment Strategies (cont’d)

- **Corporate Level Investment**: Investments in and restructurings of E&P companies heavily financed by debt may hinge on properly identifying the fulcrum security in each company’s capital structure.
  - Most E&P companies have few unencumbered assets (limiting opportunities for first-lien lending).
  - Many existing high-yield E&P indentures contain flexible “permitted lien” baskets.
  - These baskets may allow for additional lending on a junior-lien basis.
Investment Strategies (cont’d)

- **Asset Level Investment**: At the asset level, there are many creative ways to invest in E&P companies, including:
  - production payment,
  - net profit interest,
  - overriding royalty interest transactions, and
  - outright purchase of a stake in the working interests.

- To protect recoveries in the event of a restructuring, investors may wish to characterize an asset-level investment as a sale free and clear of existing liens.
Investment Strategies (cont’d)

- **Asset Level Investment (cont’d).**

  - In certain scenarios, an asset-level interest may not be considered property of a bankruptcy estate in a subsequent bankruptcy filing by the E&P company, thereby insulating the investor’s risk of a haircut.

  - In contrast, a corporate-level financing structure could leave the investor holding an under-secured claim against the debtor E&P company in a subsequent bankruptcy proceeding.
Recent Examples: Energy XXI Gulf Coast, Inc.

- For the quarter ended December 31, 2014, Energy XXI Gulf Coast, Inc. ("Energy XXI") experienced a 33% liquidity drop to $434 million, following a draw on the company’s revolving credit facility.
  - Due to depressed oil prices, Energy XXI subsequently reported that its discounted valuation of estimated future oil and gas revenues had fallen from $5.1 billion to $2.8 billion in the six months ended December 31, 2014.
  - Energy XXI pursued non-core asset sales to boost liquidity, but ultimately determined that additional financing was necessary.
Recent Examples: Energy XXI Gulf Coast, Inc.

- To incur additional debt, Energy XXI first had to negotiate an amendment to its revolving credit facility.
  - The amendment ultimately included new debt ratio covenants and a springing maturity to ensure payment prior to the maturity of existing notes or other permitted second lien debt.
Recent Examples: Energy XXI Gulf Coast, Inc.

- In early March 2015, Energy XXI announced that it had commenced a private offering to qualified institutional buyers of $1.45 billion principal amount of 11% Senior Secured Second Lien Notes due 2020.

- This financing will be used to pay down $325 million of the company’s revolving credit facility and fund a portion of the company’s projected $680 million in capital expenditures for fiscal year 2015.
Recent Examples: Breitburn Energy Partners LP

- In the fourth quarter of 2014, Breitburn Energy Partners LP (“Breitburn”) announced several strategic acquisitions of proved and non-proved acreage in Ark-La-Tex, the Mid-Continent and the Permian Basin.

- In connection with these acquisitions, Breitburn refinanced its existing reserve-based facility with a reserve-based facility having an initial borrowing base of $2.5 billion.
Recent Examples: Breitburn Energy Partners LP

- The precipitous fall in oil prices in late November and early December 2014 contributed to a market belief that reserve-based facilities would be significantly reduced in the then-upcoming April redeterminations.

- To preempt such market pressures, Breitburn announced on March 29, 2014 that it had entered into a definitive purchase agreement for the issuance and sale of $650 million 9.25% Second Lien Notes due 2020 and $350 million of perpetual convertible preferred units.
Recent Examples: Breitburn Energy Partners LP

- The proceeds of the issuance are to be used to pay down outstanding loans under Breitburn’s reserve-based facility, and the new Second Lien Notes will mature six months further out than the reserve-based facility would have.

- A condition to closing is obtaining consent from Breitburn’s reserve-based lenders that the borrowing base will not fall below $1.8 billion until the April 2016 redetermination, subject to limited exceptions.

- The deal is expected to close in the second week of April.
Recent Examples: Goodrich Petroleum Corp.

- In January 2015, Goodrich Petroleum Corp. ("Goodrich") announced several initiatives designed to curb the impact of downward trends in oil and gas prices on the company, including asset divestitures and significant capital expenditure reductions.

- Goodrich’s existing debt facilities placed meaningful restrictions on its ability to incur additional debt, providing further impetus for these measures.
Recent Examples: Goodrich Petroleum Corp.

- When depressed market conditions undermined the anticipated sales, Goodrich negotiated amendments to its existing first lien credit facility.
  - The amendments altered covenants to provide additional flexibility to incur additional debt, in addition to a maturity extension and borrowing base reduction following a sale.
Recent Examples: Goodrich Petroleum Corp.

- Goodrich then entered into a definitive purchase agreement with Franklin Advisors for the issuance and sale of $100 million aggregate principal amount of 8% Second Lien Notes due 2018.

- Goodrich also issued to Franklin warrants to purchase up to 4.88 million shares of its common stock at a 10% premium.
Recent Examples: GSO Capital Partners LP & LINN Energy LLC

- On January 2, 2015, LINN Energy LLC (“LINN”) and GSO Capital Partners LP (“GSO”) announced a non-binding letter of intent to fund oil and natural gas development through a “DrillCo Agreement”.

- The DrillCo Agreement creates a framework for the development of multiple basins with the specific asset package to be agreed by the parties.

- Subject to final documentation, funds managed by GSO will commit up to $500MM with 5-year availability to fund annual drilling programs on locations provided by LINN.
Recent Examples: GSO Capital Partners LP & LINN Energy LLC

- Depending on asset characteristics and return expectations, GSO will fund 100% of the costs associated with new wells drilled under the DrillCo Agreement and will receive an 85% working interest until it achieves a 15% IRR on annual groupings of wells.

- Upon reaching the IRR target, GSO’s working interest will be reduced to 5%.

- The deal has not yet closed as this time.
Recent Case Studies: GSO Capital Partners LP & LINN Energy LLC (cont’d)

- **Benefits to LINN:**
  - DrillCo structure is off-balance sheet.
  - Provides for continued asset development and production growth without upfront capital spend.
  - Since LINN will be entitled to a larger percentage of future well proceeds, may provide LINN with steady cash flows during a well’s decline curve.
Benefits to GSO:

- DrillCo structure is an acquisition of real property, which mitigates bankruptcy risks associated with investing in other parts of the capital structure.
- Allows GSO to target investment dollars to assets it believes are most likely to generate the agreed returns.
- Provides for additional control over development operations than traditional financing.
Recent Chapter 11 Filings

- **Dune Energy, Inc.**, filed for bankruptcy in the Western District of Texas on March 8, 2015, listing assets of $229.5 million and liabilities of $144.2 million. Dune is seeking court approval to sell its assets at an auction set for summer 2015.

- **BPZ Resources, Inc.**, filed for bankruptcy in the Southern District of Texas on March 9, 2015, listing assets of $364.3 million and liabilities of $275.2 million (both as of Sept. 30, 2014). BPZ filed for bankruptcy without a prenegotiated deal.

- **Quicksilver Resources, Inc.** filed for bankruptcy in Delaware on March 17, 2015, listing assets of $1.21 billion and liabilities of $1.35 billion. Quicksilver also filed for bankruptcy without a prenegotiated deal.
Conclusion

- There are approximately 500 publicly traded E&P companies, along with thousands of privately held companies.
- Signs indicate this may be just the beginning of the cycle.
- Last week several E&P companies, including Samson Resources and Sabine, made 10-K filings raising doubts about their ability to continue as a going concern.
- While there has been a significant reduction in rigs already in 2015, the lag in production will not be fully felt until early 2016.
- Distressed investors should remain mindful of the inherent benefits and risks of investing in the E&P space as they evaluate opportunities resulting from this downturn.
Benefits and Risks

**Pros:**
- Significant need for capital
- Many E&P companies *potentially* are undervalued, assuming commodity prices eventually rebound
- Creative deal structures

**Cons:**
- Lots of money and players already targeting the sector
- Long-term commodity price uncertainty
- Distressed companies may not be willing to sell their best assets
- Complex assets governed by energy-specific state laws