MONEY MAKES THE WORLD GO ROUND
OIL AND GAS FINANCING STRUCTURES
MAY 24, 2018
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MANAGING DIRECTOR AND HEAD OF ENGINEERING
EIG GLOBAL ENERGY PARTNERS
OUTLINE

• Public Companies
  ➢ Common Equity
  ➢ Preferred Equity
  ➢ Mezzanine Debt
  ➢ Reserve-Based Lending

• Farmout Agreements

• Drilling Joint-Ventures
  ➢ Cash and Carry
  ➢ Reversionary Interest

• Private Equity Funds

• Production Sharing Agreement
TYPES OF INVESTORS

• Oil and gas companies wanting to acquire interests in assets

• Foreign investors and companies seeking
  ➢ investments in U.S. oil and gas assets
  ➢ Expertise in oil and gas operations

• LNG exporters or petrochemical companies seeking a direct interest in a supply source

• Hedge funds, private equity groups, and financial institutions looking for significant upside with low-cost entry points
**Common Equity**
- Actually own property
- Property is collateral and subject to rules of those lower in the stack
- Get paid last
- Highest risk (could lose principal)
- Highest return (gain from appreciation)

**Debt/Equity Ratio (“Leverage”)**
- Typically 0.4-0.8 for a large oil company
- Higher for smaller companies
- If >3, could be in trouble

https://www.realtymogul.com/resource-center/articles/demystifying-the-capital-stack
COMMON EQUITY

• Money put up and owned by shareholders (owners)

• Direct working interest in a field, lease, facility, or infrastructure

• Most expensive type of capital a company can utilize
  ➢ “Cost” is the return a firm must earn to attract investment

• 1995 – BP and BHP form joint-venture covering the central and western Atwater Foldbelt; Neptune was the first discovery followed by Atlantis and Mad Dog

Atlantis Working Interest
• 56% BP
• 44% BHP

https://www.sec.gov/Archives/edgar/data/811809/000081180900000066/0000811809-00-000066-d1.html
PREFERRED EQUITY (“PREF”)  

• Combines features of  
  ➢ Debt – it pays fixed dividends (but higher than debt)  
  ➢ Equity – has the potential to appreciate in price  
    (participate in upside, but not much)  

• Preferred shares have dividends that are senior to common shares  

• Usually do not carry voting rights  

• Preferred shareholders have a prior claim on company assets if liquidated, but are subordinate to bondholders  

• Preferred shares may be  
  ➢ “callable”; Issuer can buy them back at par value  
  ➢ “convertible” (warrants); can be exchanged for common shares under certain conditions
Senior Debt
- First access to cash flows and collateral
- Lowest risk in the stack
- Lowest return in the stack

Mezzanine Debt (“Mezz”, Second Lien”)
- Another form of debt
- Subordinate to Senior Debt
- Secured by a pledge of ownership interest
- Foreclosure rights exist but are subject to senior debt agreements
- Requires a higher return than senior debt

https://www.realtymogul.com/resource-center/articles/demystifying-the-capital-stack
### TYPES OF DEBT

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<th>Revolver</th>
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<td>Sometimes</td>
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<td>Covenants</td>
<td>Maintenance</td>
<td>Incurrence</td>
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**Maintenance Financial Covenants**
- Tested quarterly, failure to comply is a default
- Debt/EBITDA, Debt/Equity, Interest Coverage Ratio

**Incurrence Financial Covenants**
- May not take certain actions unless certain covenants are met
- Acquisitions, drilling programs, etc.
SENIOR DEBT (RESERVE-BASED LENDING)

- Group of banks (“Bank Group”) lends money to Operator

- Also know as “Borrowing Base” or “Revolver” financing

- Used for assets already in production or expected to produce soon (Proved Reserves)

- Third-Party engineering firm provides a Reserve Report

- Commodity price forecast (“Price Deck”) provided by lead bank
  - When prices drop quickly, loan value also drops quickly, but hedges help
RESERVE-BASED LENDING (RBL, REVOLVER)

- Bank Group will typically loan 50-80% of PDP PV plus some value for PDNP and PUD PV
  - Discount factors in 7-10% range
- Account for value (or liability) of hedge position relative to price forecast
- Loan limit refreshed periodically at Semi-Annual Borrowing Base Reviews (Spring and Fall)
- Loan is collateralized through mortgage of Proved properties
- Cheapest debt around

Example Calculation (indicative only)

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<td>Borrowing Base</td>
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</table>

What Happens in Bankruptcy
- Senior Debt has first claim on assets
- If Senior Debt gets paid, Mezzanine Debt has claim on assets
- Etc.

Fulcrum Security claims assets
FARM-OUT AGREEMENTS

• Prospect area and depths are defined

• Investor (Farmee) carries some or all of Operator (Farmor) share of drilling a well (or wells)
  - Operator for drilling could be the Operator or the Investor (if Investor has expertise)
  - Carry has a defined end (final casing point, commencement of flow, etc.)

• After drilling commitment is satisfied, Investor earns an undivided WI in the prospect
FARM-OUT AGREEMENTS

• Motivation for Operator
  ➢ Cost for Operator is too large (tiger by the tail)
  ➢ Lease expiration while lacking capital
  ➢ No debt on balance sheet
  ➢ Commitment from well-regarded Wall Street Investor may boost share price, where equity raise may dilute share price
  ➢ Diversification (spreading exploration risk)
  ➢ Technical expertise of Investor

• “A third for a quarter” is a traditional ratio (33% for 25%, 66% for 50%, 100% for 75%)
• “3 for 1” has been used for great prospects (pay 90% to earn 30%)
DRILLING JV

• Off balance sheet, so no impact on debt to equity ratio

• Scope of deal area is identified and ring-fenced

• Investor earns in to a specified working interest by over-funding a drilling program

• Operator may need to drill to
  ➢ Avoid acreage expiration
  ➢ Keep a contracted rig busy
  ➢ Deliver minimum volume commitments
  ➢ Fill midstream system

• Two main types:
  ➢ Cash and Carry
  ➢ Reversionary Interest
DRILLING JV – CASH AND CARRY

• Cash Component
  - Is a proxy for PDP PV10
  - Investor uses cash to buy working interest share of production
  - May include credit for infrastructure build (roads, gathering systems, pipeline tie-ins, etc.)

• Carry component
  - Is a proxy for acreage value
  - Investor funds disproportionate share of well costs
  - Amount of money or number of wells is specified

• After carry commitment is executed, Investor earns a working interest in land position

• Investor participates in the upside, Operator gives up some upside
DRILLING JV – CASH AND CARRY EXAMPLE

• 50 for 30 promote (pay 50% to earn 30%), 90,000 Operator net acre position

• PDP PV10 is $100 million, investor pays $30 million to buy in to PDP wells (not leases)
  • Investor immediately realizes a 30% working interest in the wells and receives 30% of cash flow starting at closing

• Investor commits an additional $100 million for carry
  • $10 million gross well cost is funded 50/50 ($5 million each for Investor and Operator)
  • Investor will own 30% of the well, so carry portion is $10 MM x (.5-.3)=$2 MM
  • At this rate, $100 MM / 2 MM = 50 wells will get funded with carry
  • Revenue share is split 70/30 (Operator/Investor)

• After Carry is satisfied, Investor is assigned a 30% working interest in all leases in the ring-fenced area; is a heads-up partner going forward

• Effective acreage price is $100 MM / (0.3 x 90,000 ac) = 3,703 $/acre
DRILLING JV – REVERSIONARY INTEREST

• Investor pays for most or all of well costs, receives most or all of cash flow

• WI assigned to Investor is usually wellbore only (not lease)

• Upon achievement of hurdle IRR, WI reverts back to Operator except for small tail

• Investor has only small exposure to upside, Operator retains upside

• Popular when markets closed in 2015-2016


Working Interest as a Function of IRR LINN/GSO Dec 2014

• GSO funds 100% of development costs
• GSO receives 85% working interest in well (LINN gets 15% WI carry)
• When GSO achieves 15% IRR, LINN gets 95% WI and GSO gets 5% WI
## PRIVATE EQUITY INVESTOR GROUPS

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<th>North American Pension Plans and Retirement Funds</th>
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- Funding new management teams
- Capital provider to existing teams

• General Partner (GP) solicits investment from institutional investors (Limited Partners, LP) to form an Investment Fund

• GP evaluates investment opportunities and invests fund resources
  • Operated WI, non-op WI, preferred equity, mezzanine debt

• GP charges management fees to the fund

• Distributions (including divestment proceeds) flow first to the LP, until a prescribed IRR is achieved

• Subsequent distributions are shared between GP and LP

• Fund money used for acquisition financing (equity or debt), and to fund development activities

PRODUCTION SHARING AGREEMENT

- Often used in International transactions
- Operator pays to develop a field, Government is carried
- Operator receives a large fraction of revenue from “Cost Oil” until payout is achieved
- After payout, Operator receives a small fraction of revenue from “Profit Oil”
- NOC often pays Income Tax on behalf of Operator

If prices go up, Operator reserves go down!
SUMMARY

• Many ways to finance oil and gas operations

• Market conditions change with time

• Financing strategy must be considered, and periodically revised

• If the opportunity to create value is real, we will find a way to fund it
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