BOK Financial: Commodity Hedging

Energy Hedging / A Trader’s View
Energy Finance
Overview and expertise

- Offices in Dallas, Denver, Houston, Oklahoma City and Tulsa
- 100+ years in Energy Banking
- Energy related commitments exceeding $5B

- Traditional secured reserve-based lending for small private to public oil and gas exploration and production companies
  - Transactions ranging from $1MM single bank deals to participating up to $100MM+ in syndicated transactions that are over $1B
  - Bank of Oklahoma has history of leading / agenting club deals and syndications
- 300+ Relationships
- Highly experienced team members
  - 20 Bankers / Account Managers
  - 9 Petroleum Engineers
  - 5 Engineering Techs

From the Midcontinent, Texas and the Gulf Coast, to the Rockies, California and Appalachia, BOKF bankers focus primarily on serving the privately held and mid-cap independent segment of the energy market.
Energy Finance

Public company experience across the continental United States

COLORADO / UTAH / WYOMING
- WHITING
- SM Energy
- ENERGEN
- Bill Barrett Corporation

BAKKEN
- OASIS Petroleum
- WHITING
- WPXENERGY
- Triangle Petroleum Corporation

APPALACHIA
- Williams
- US ENERGY
- RANGE RESOURCES
- CONSOL ENERGY
- PDC ENERGY

CALIFORNIA
- Crestwood
- LINN Energy
- Berry Petroleum Company
- Warren

TEXAS
- CIMAREX
- LONESTAR RESOURCES
- PARSLEY ENERGY
- LAREDO PETROLEUM
- RSP PERMIAN
- COMSTOCK RESOURCES

MIDCON
- carbon
- ENABLE MIDSTREAM PARTNERS
- SANCHÉZ PRODUCTION PARTNERS
- SANDRIDGE
Energy Finance

Unaffiliated equity sponsor partners

Kayne Anderson Capital Advisors, L.P.
YorKtown Partners
River Stone
State Farm
GSO Capital Partners
Och-Ziff Capital Management
AlpPoint Capital
Morgan Stanley

NGP Energy Capital Management
First Reserve Corporation
Chambers Energy Capital
KKR
Fidelity Investments
Devonshire Capital
Whittier Trust

Denham Capital
Encap Investments L.P.
ArcLight
Crestview
Tudor, Pickering, Holt & Co.
Atinum Energy Investments
Jefferies Capital Partners

Liberty Mutual
Prudential
Market Past and Present
WTI Crude Oil: Weekly

Prices – past and present
World Oil Production and US Rig Count

Rig count response to production

Sources: Bloomberg, Department of Energy (DOE) International Petroleum Monthly, and Baker Hughes.
Henry Hub Natural Gas: Weekly

Prices – past and present
US Natural Gas in Storage

A look at supply

Source: Energy Information Administration (EIA).
US LNG Exports and Henry Hub Natural Gas Price

New demand possibilities

Source: Department of Energy (DOE).
Market Forecasting
WTI Crude Oil: Seasonality

Timing a hedge

Source: Moore Research Center, Inc.
Henry Hub Natural Gas: Seasonality

Timing a hedge
WTI Crude Oil: Trend

Technically discerning a price direction
Henry Hub Natural Gas: Trend

Technically discerning a price direction
WTI Crude Oil: Weekly

Longer term price direction
WTI Crude Oil: Volatility
Overpriced / Underpriced option valuation
Henry Hub Natural Gas: Volatility

Overpriced / Underpriced option valuation
Market Psychology and Need
Market Psychology and Need

- **Psychology** says rig count, funds or OPEC have to move the market higher (these facts are already in the market)

- **Market Need**: Where are the producer’s breakeven/profit levels?

- Utilize producer’s need of the market, don’t let the market psych you out of the business
Price Discovery Best Practices
Price Discovery Best Practices

What to do and what not to do

• **DO:**
  - Use major industry market makers
  - Always ask for both sides of the market (bid and ask)
  - Be aware of market volatility – it is one of the three primary drivers of valuations (high volatility collars, low outright)

• **DON’T:**
  - Trade bullet expirations or knockouts – these tailored products often have extremely high mark-ups
  - Calendar average versus NYMEX look-alike settlements – if the premium is over 30c per barrel, use calendar average, otherwise, use NYMEX look-alike settlement
  - Using outside consultants, especially for the small producer, adds unnecessary expense – paying a dime to save a nickel
Bank v. Non-Bank Hedge Providers
Bank v. Non-Bank Hedge Providers

The Bank’s interest is aligned with the client, providing the best overall hedging experience

- Bank has a parallel interest with the loan customer – both benefit from a strong financial position (no over-trading, no high sales pitch to maneuver in and out of the market)
- Bank takes no market exposure/risk – maintains a balanced trade book
- Bank takes limited counterparty risk; the client’s credit exposure is limited to the bank itself
- Bank stands in front of clearing firm
- Bank welcomes smaller producers
- Bank provides $0 requirements for both initial and maintenance margin – allows producers to concentrate on core business
- Bank matches settlements with production – when a hedge position is liquidated or expires, the payment terms can be matched to the cash flows of the producer’s physical production

Note: Margin and credit arrangements may vary by customer and their associated credit metrics.
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