Petrobras in Nigeria: Valuation of the Agbami Oil Field

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Agenda

1. Brief overview of current situation
2. Petrobras
3. Oil Industry key statistics
4. The Agbami Project
5. Oil Industry in Nigeria
6. Nigeria Politics and Economy
7. The current situation
Brief overview of current situation

June 2008: Petrobras has been in Agbami, deep oil field project for 10 years (invested $500mn thus far)

Received an offer from Statoil for $1 billion for their stake

David Passami, Petrobras VP of Strategy, must decide what to do
Petrobras, short for Petróleo Brasileiro, founded in 1953 by Brazil’s president Getulio Vargas

56% owned by Brazilian Government; 8th largest oil & gas company in the world

Begins its move internationally during the 1980’s—enters Iraq and Gulf of Mexico
Petrobras

Begins developing expertise in deepwater at home in late 1980’s

1997 – Law N.9.478 ceases PB’s monopolist position in Brazilian oil industry

Makes more concerted effort abroad in deepwater

1998: Enters Nigeria, because of:
- Deepwater oil resources
- High quality “sweet” oil in Nigeria
- Lower transportation cost to Brazil
Fast forward—2007 Petrobras has earnings of $13 billion USD

Nearly 60% of its revenues come from exploration and production

By 2008 it is the 8th largest oil and gas company in the world and a leader in deepwater

Still, it leverages the scale of major commercial partnerships to enter large fields
# Proved Oil Reserves

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Source: [http://tonto.eia.doe.gov/country/index.cfm](http://tonto.eia.doe.gov/country/index.cfm)
# Major Oil Producing countries

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<th>Top Oil Producers in 2008</th>
<th>Production Capacity ('000 barrels/day)</th>
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Source: [http://tonto.eia.doc.gov/country/index.cfm](http://tonto.eia.doc.gov/country/index.cfm)
**Oil Production Stages:**

**Upstream**
1. **Exploration** – geologists and scientists search for hydrocarbon deposits using sophisticated technologies to determine the extent of deposits beneath earth.
2. **Extraction** – wells are drilled and usable oil is extracted

**Downstream**
3. **Refining** – the extracted oil is refined in large industrial processing plants into useful petroleum products, such as gasoline, diesel, heating oil, kerosene, asphalt base and liquefied petroleum gas.
4. **Transportation** – the petroleum products are transported through trucks, pipelines and oil tankers to consumers.

Source: [http://tonto.eia.doc.gov/country/index.cfm](http://tonto.eia.doc.gov/country/index.cfm)
Nigeria in Africa
Nigeria: Politics

1960
• Gained independence from British

1999
• Under Military rule since 1966; re-achieved democratic status in 1999

Current
• Joins OPEC during oil boom of 1970’s
• Current President Umaru Musa Yar'Adua elected in 2007

Source: http://tonto.eia.doc.gov/country/index.cfm

Agarwal, Anjilivelil, Damodaran, Schwarz
Nigeria: Economy

- $55 bn in oil earnings in 2007; $76 bn expected in 2008
- Government implementing market-oriented reforms urged by the IMF
- Nigeria written off its sizable external debt
- Foreign reserves expanded more than 10 times in recent years

Source: [http://tonto.eia.doc.gov/country/index.cfm](http://tonto.eia.doc.gov/country/index.cfm)
Nigeria: Current situation

Growing resentment due to regional imbalances and inequality

Speculation about the health of the President & legality of his election

Competition for oil wealth fueled violence between innumerable ethnic groups
Overview: Oil Industry in Nigeria

Proven estimates in 1997: 16.8BB barrels

Proven Estimates in 2008: 40BB barrels

Majority reserves: Niger River Delta

65% of Nigeria’s crude oil production is light and sweet (low sulphur content)

Oil Production: 2.6mmbd in 2007

Accounts for 95% of foreign exchange earnings and 80% of budgetary revenue
Key Highlights

Nigerian National Petroleum Corporation (NNPC): created to conduct oil exploration and development with foreign companies

Major foreign players include Shell Petroleum, Exxon Mobil, Chevron, Agip and Petrobras

NNPC holds at least a 60% share in all joint ventures
Key risks within the oil industry
Agbami Field

- Location – 70 miles off the coast, 5000 feet in depth
- Partners:
  - 68.15% - ChevronTexaco
  - 18.85% - Statoil
  - 13% - Petrobras

Other party involved: NNPC
(Nigerian National Petroleum Company)
FPSO
FPSO

Chevron Image Bank

The Agbami FPSO
June 2008: Petrobras been in Agbami, deep oil field project for 10 years

Oil prices are at an all-time high of $134

Received an offer from Statoil for $1 billion for their stake

David Passami, Petrobras VP of Strategy, must decide what to do

Source: http://tonto.eia.doc.gov/country/index.cfm
Current - Key uncertainties

- Taxes & Royalties
- Oil Price Projections
- Production Capacity
- Political Risk
- Drilling Costs

Relationships
Cost of capital analysis

Sovereign
- Currency
- Expropriation
- Commercial International Partners
- Involvement of Multilateral Agencies
- Sensitivity of projects to war, strikes & terrorism
- Sensitivity of project to natural disasters

Operating
- Resource
- Technology

Financial
- Probability of default
- Political risk insurance
Recommendations

Petrobras should not sell its stake to Statoil. This is supported by the results of the valuation as well as strategic reasons.

Valuation:
• High valuation—$1.8 billion
• Base case—$1.0 billion
• Low valuation—$0.4 billion

Strategic reasons:
• Value of relationships and reputation—worldwide deepwater potential, necessary to partner with large players
• Despite political and economic instability in Nigeria, the country is in line with its strategic objectives