

Petrobras in Nigeria: Valuation of the Agbami Oil Field

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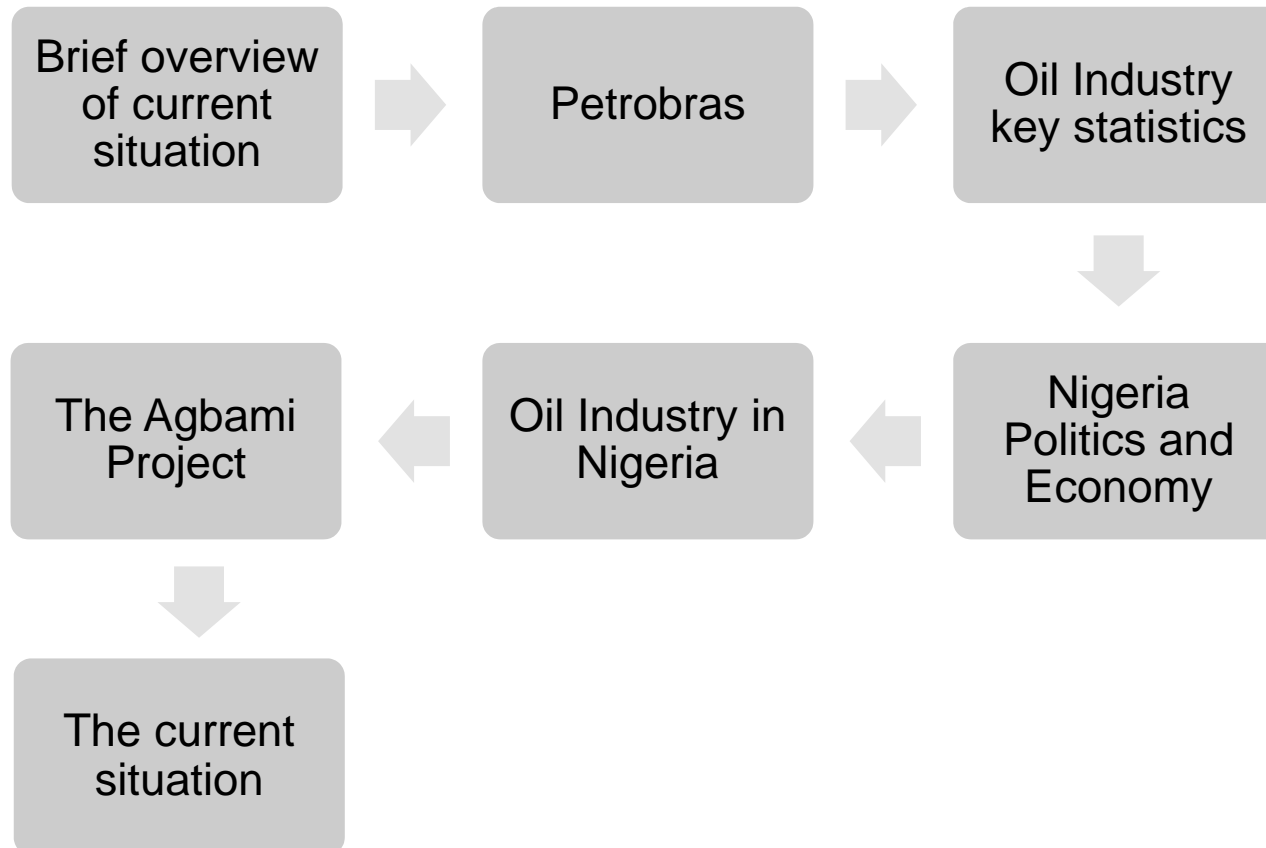
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Agenda

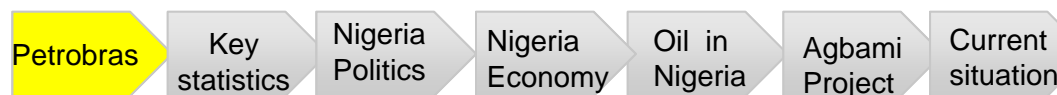


Brief overview of current situation

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

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

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



Petrobras

Petrobras, short for Petr leo 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

Petrobras

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

Petrobras

Key statistics

Nigeria Politics

Nigeria Economy

Oil in Nigeria

Agbami Project

Current situation



Proved Oil Reserves

Country	Proved Reserves in 2008 (billions of barrels)
Saudi Arabia	267
Canada	179
Iran	138
Iraq	115
Kuwait	104
United Arab Emirates	98
Venezuela	87
Russia	60
Libya	41
Nigeria	36
Kazakhstan	30
United States	21
China	16
Qatar	15
Europe	14

Country	Proved Reserves in 1998 (billions of barrels)
Saudi Arabia	262
Iraq	113
United Arab Emirates	98
Kuwait	97
Iran	93
Venezuela	72
Russia	49
Mexico	40
Libya	30
China	24
United States	23
Nigeria	17
Norway	10
Algeria	9
Kazakhstan	5

Source: <http://tonto.eia.doe.gov/country/index.cfm>

Major Oil Producing countries

Top Oil Producers in 2008	Production Capacity ('000 barrels/day)
Saudi Arabia	10782
Russia	9790
United States	8514
Iran	4174
China	3973
Canada	3350
Mexico	3186
United Arab Emirates	3046
Kuwait	2741
Venezuela	2643
Norway	2486
Brazil	2402
Iraq	2385
Algeria	2180
Nigeria	2169

Top Oil Producers in 1998	Production Capacity ('000 barrels/day)
Saudi Arabia	9472
United States	9278
Russia	6070
Iran	3703
Mexico	3501
Venezuela	3409
China	3302
Norway	3147
United Kingdom	2918
Canada	2700
United Arab Emirates	2519
Kuwait	2206
Iraq	2162
Nigeria	2160
Indonesia	1616

Source: <http://tonto.eia.doe.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.doe.gov/country/index.cfm>

Nigeria in Africa



Nigeria: Politics

1960

- Gained independence from British

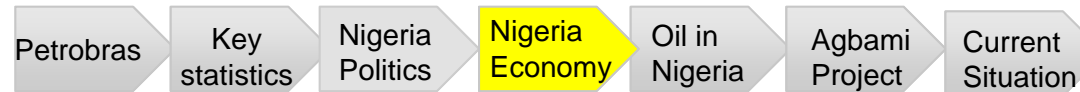
1999

- 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.doe.gov/country/index.cfm>



Nigeria: Economy



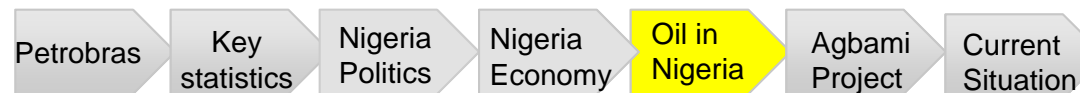
Source: <http://tonto.eia.doe.gov/country/index.cfm>

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

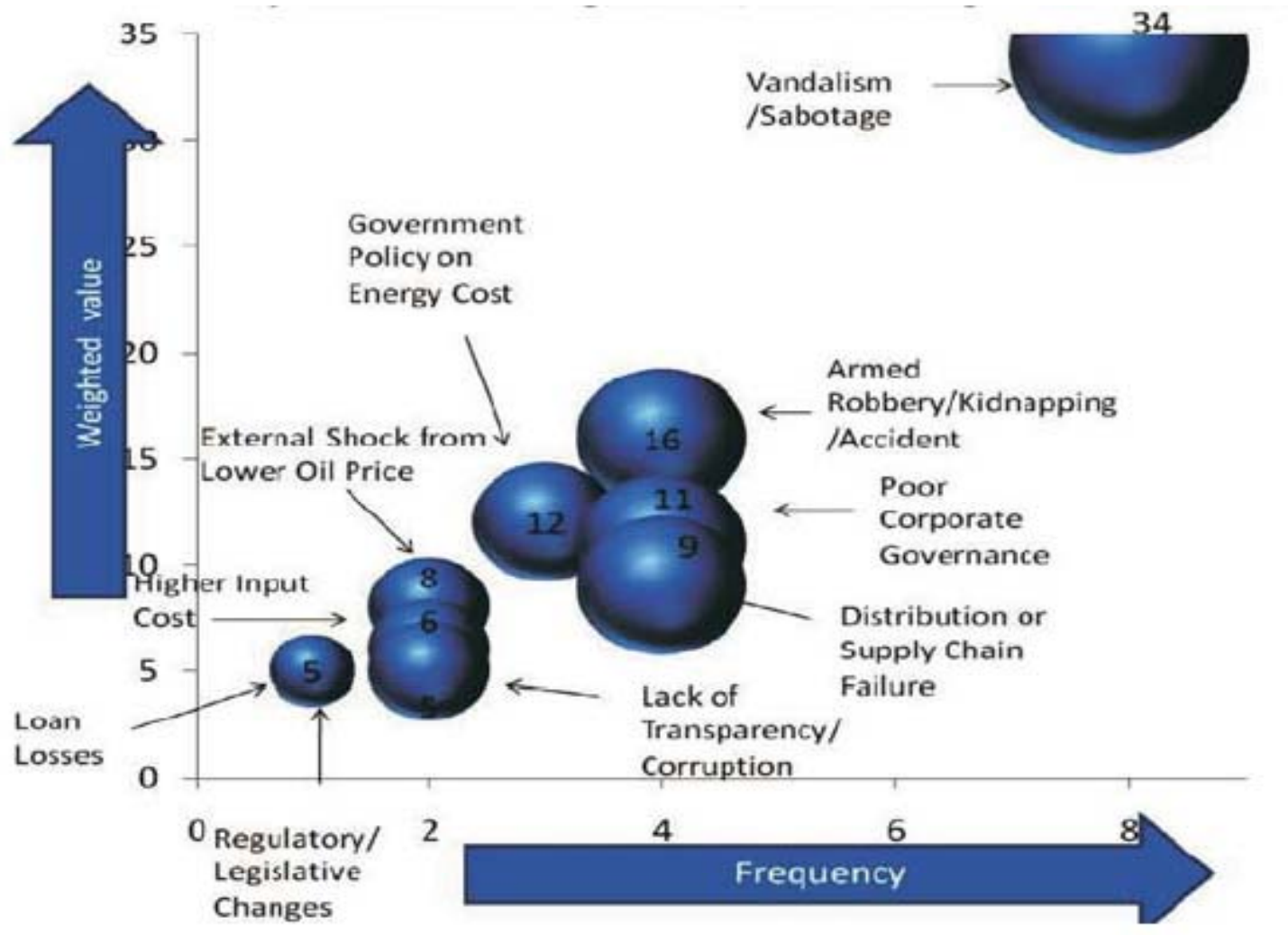
Key Highlights

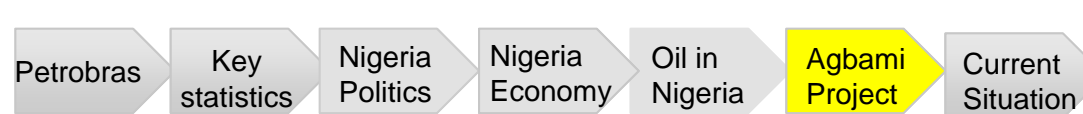
Nigerian National Petroleum Corporation (NNPC): created to conduct oil exploration and development with foreign companies

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



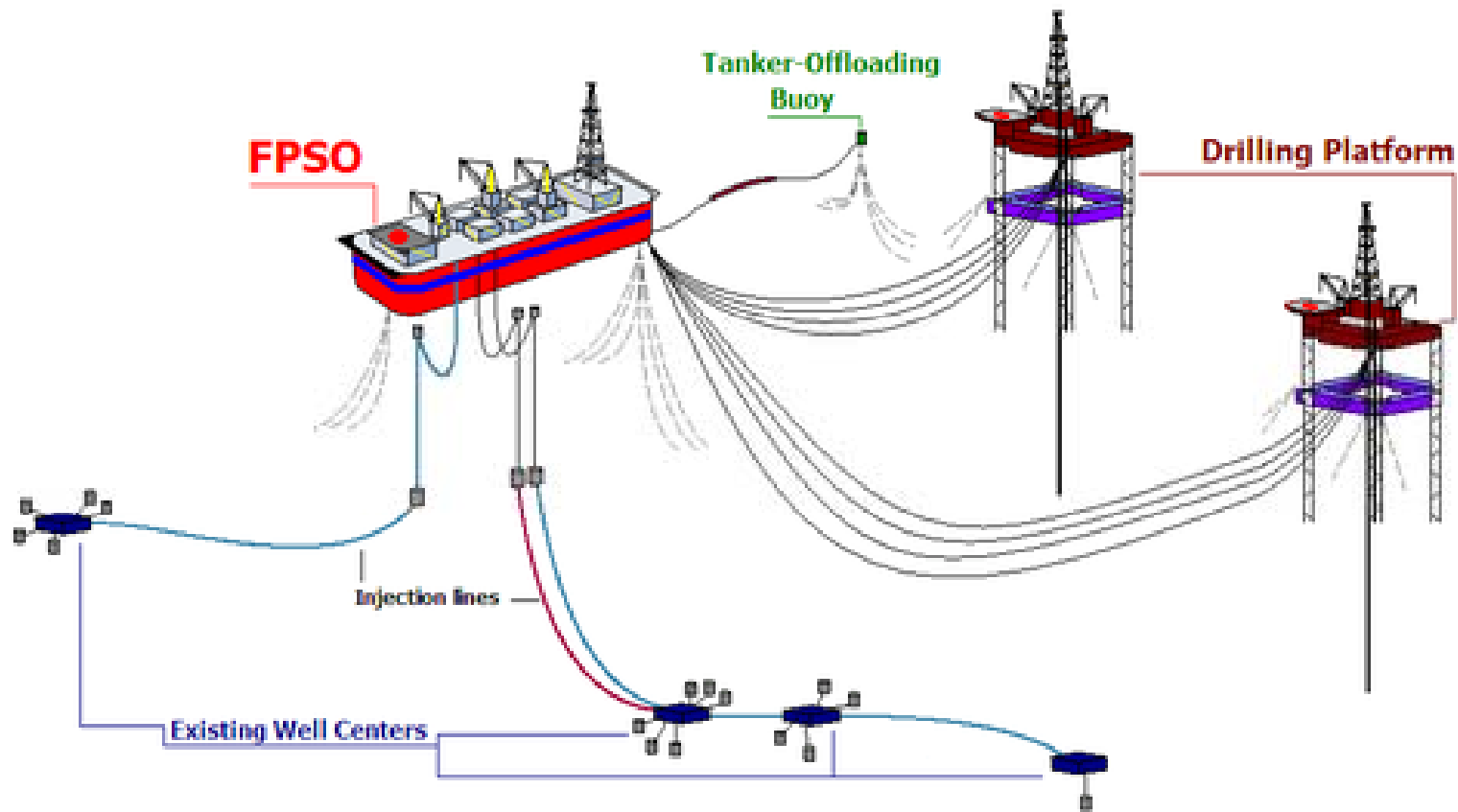


Agbami Field

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

Other party involved: NNPC
(Nigerian National Petroleum Company)

FPSO

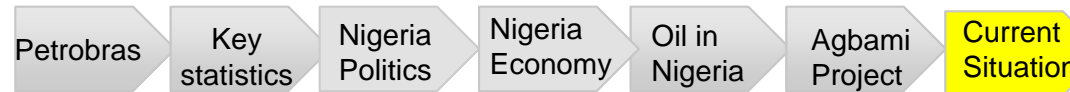


FPSO

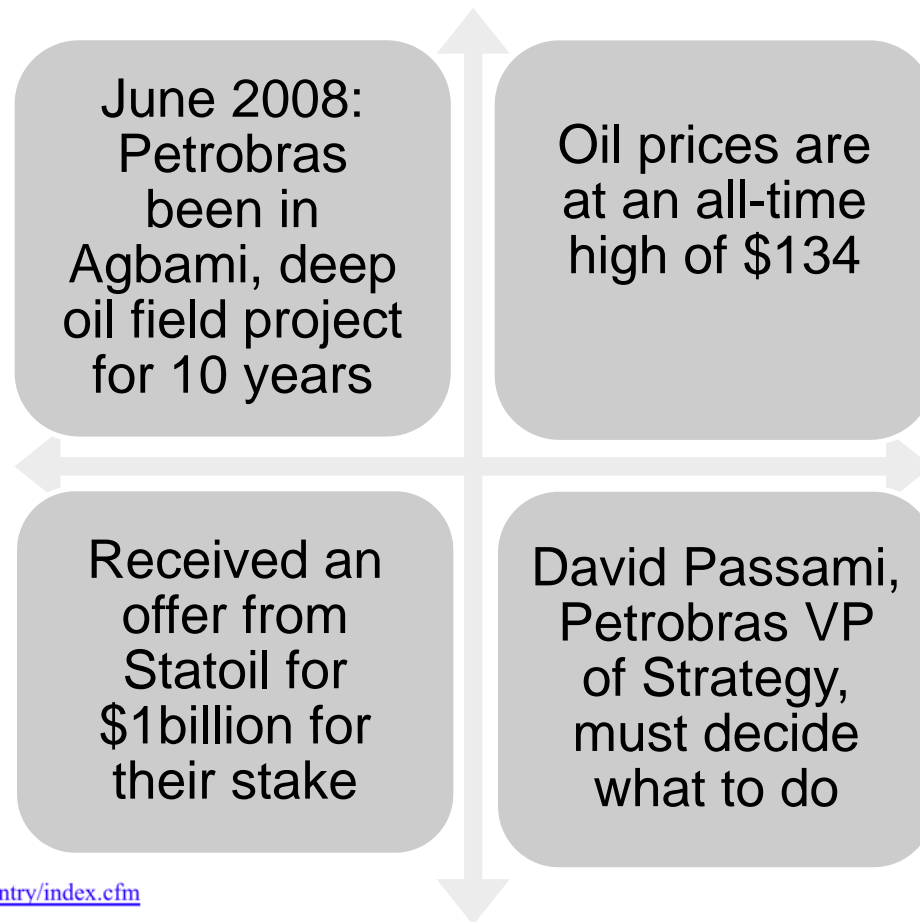
Chevron Image Bank



The Agbami FPSO

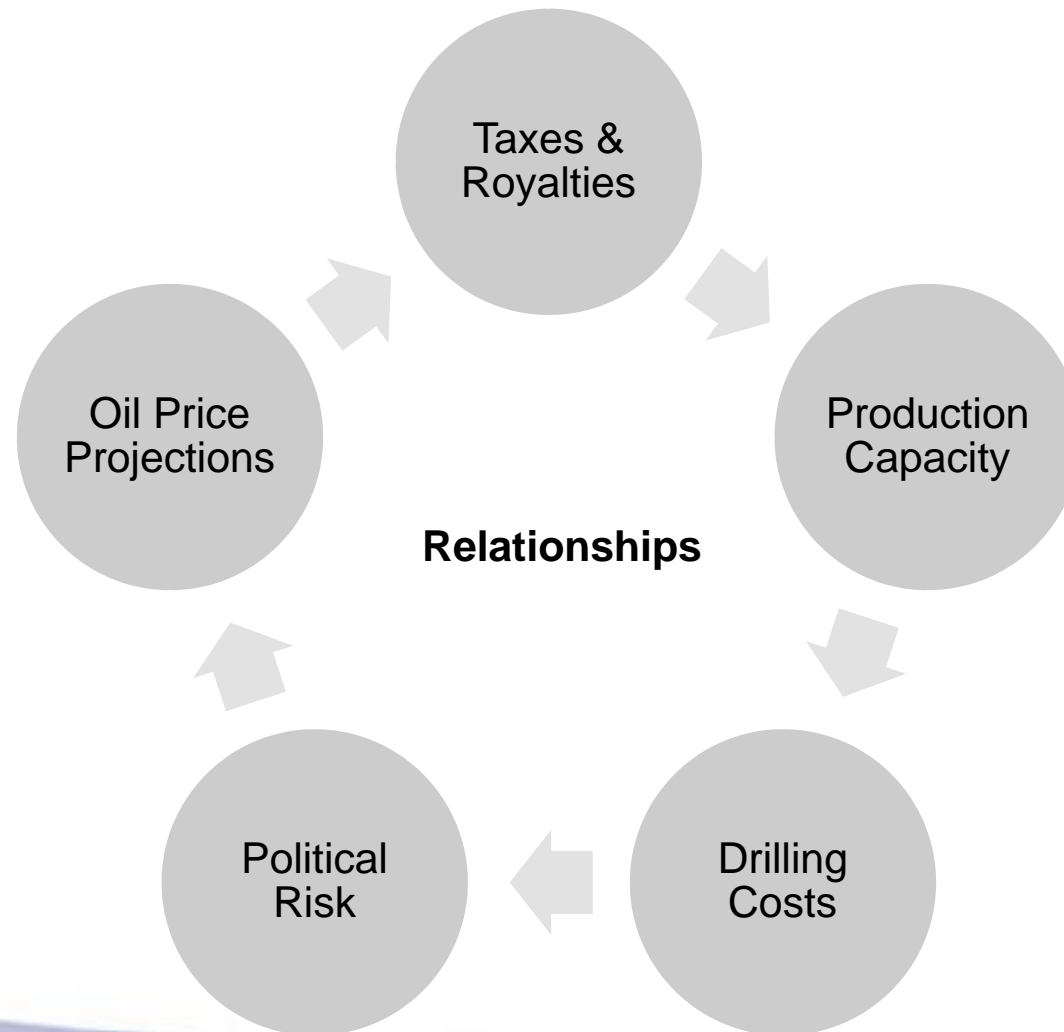


Current Situation



Source: <http://tonto.eia.doe.gov/country/index.cfm>

Current - Key uncertainties



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