The drivers of oil prices and the macro-economic impact of low prices

A presentation at the SPE and EAN networking meeting

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Relevant oil producers - 2013

- OPEC
- North America
- USA
- Latin America
- Eastern Europe & Eurasia
- Western Europe
- Middle East
- Africa
- Angola
- Libya
- Nigeria
- Sudan
- Asia & Pacific
Increase in oil production by country 2009 to 2013
Oil production – some numbers

- Nigeria largest African producer in 2013 slightly ahead of Angola (2.4 vs. 2.3 per cent of total global crude oil production)
- African oil production dropped between 2009 and 2013 from 8.5mb/d to 7.6 mb/d
- USA production increased by 39 per cent from 5.4 mb/d to 7.4 mb/d; almost on par with total production in Africa
- Saudi Arabia 9.63 mb/d
- USA about 1,770 oil rigs compared to 540 in Middle East and 150 in Saudi Arabia
- Marginal costs of most shale producers in USA reportedly between USD10 and USD20 per barrel, similar to Middle East.
- Worldwide, based on survey in Jan 2015 of some 2,222 wells, only 1.6 per cent have negative cash flow below USD40 pb – put it differently their marginal cost is above USD40 pb
  - Total global oil production increased by 5.7 per cent, while OPEC output rose by 9.3 per cent
Oil demand by country / region
Change in oil demand 2009 to 2013

North America - USA Latin America Eastern Europe & Eurasia Western Europe Middle East Africa Asia & Pacific - China OPEC World
Oil demand

Determinants

- Global economic growth and in particular growth in China
- Shift in production structure from primary to tertiary sector
- Technological advance – resource saving technologies
  - 1990: USD5.40 value added per kilogramme of oil
  - 2010: USD7.20
  - 2011: USD7.30 (increase by 35 per cent compared to 1990)

Demand trends

- Increase by 1.5 per cent annually between 2009 and 2013, but only 1.1 per cent between 2013 and 2014
- 1.3 per cent increase expected for 2015 to 92.3 mb/d
Demand & Supply by country / region

- North America
- USA
- Latin America
- Eastern Europe & Eurasia
- Western Europe
- Middle East
- Africa
- Asia & Pacific
- China
- OPEC
World demand & supply 2013 to 2015 in mb/d

World oil demand
Supply - Non-OPEC
Supply - OPEC
World oil supply

2013
2014
2015
OPEC politics

Cartel aimed at maintaining oil price within certain price range by regulating output

• Saudi Arabia used to be swing producer, but no longer willing to lose market shares
• Geopolitical rivalry with Iran (second largest OPEC oil producer)
Strength of USD

- Appreciation of USD (depreciation of local currency) increases revenue in domestic currency
- Somehow mitigates for lower oil prices in USD
- Euro depreciated from some EU1.39 (18 Mar 14) to EUR1.06 (18 Mar 15) against USD [or USD 0.72 to USD 0.95 per EUR]
  - Depreciation by 24 per cent
- GBP1.66 (16 Mar 14) to GBP1.47 against USD
  - Depreciation by 11 per cent
- ‘Currency war’ increases USD attractiveness as well as expected gradual interest rate increase later this year
Macro-economic impact on Namibia - Trade

Improvement in Balance of Trade

- Oil imports accounted for 9.2 per cent of total imports over 2007 to 2013 period
- NAD7 billion in 2013
- Third largest import item behind Transport equipment and Chemicals/rubber/plastic

Improvement in foreign exchange reserves

- International benchmark: 3 month import cover
- SADC benchmark: 6 month import cover
  - Currently below 3 months, but net international investment position strong
  - Relevant to maintain currency peg to ZAR
Macro-economic impact – exports to Angola

Depreciation of Angolan Kwanza

Disposable income of Angolans could decline, depending on

- duration of low oil prices; and
- devaluation of Angolan Kwanza

could result in

- Declining direct exports to Angola since becoming more expensive compared to local products and due to potentially lower demand

- Declining demand of Angolans in Namibia for services (health, education although less likely since investment into future) and goods (shopping tourism – more likely, property etc.)
Macro-economic impact - prices

• Lower input / production costs in particular for energy-intensive operations such as fishing, transport, mining
  ➢ Could increase competitiveness dependent on competitors’ input cost reduction
• Declining inflation rate
  ➢ Increasing disposable income in particular for motorists
  ➢ Non-motorists (often the poorer groups in society) benefit to lower degree
  ➢ Could result in increasing imports despite recent interest rate increase

✓ Monetary policy determined by currency peg rather than inflation rate
Macro-economic impact - Investment

• Mineral exploration increased continuously from NAD 500 million (2007) to NAD 3,153 million (2013)
• Accounting for on average 6.2 per cent of total investment over period 2007 to 2013, but 9.7 per cent in 2013.
• Major exploration activities most likely focusing on minerals rather than oil & gas
  ➢ No oil drilling planned for Namibia in 2015, but for 2016
  ➢ Long-term investment decisions informed by a number of factors, not only by current price levels
Conclusion

No significant output cut expected since:

- quite a number of oil exporters depend heavily on oil revenues
- In particular USA shale oil producers have to maintain output to service their debts
- prices still above marginal production costs
- risk of losing market shares

- However, depleted wells might not immediately be replaced with new wells
- Price fluctuations rather than clear price trend can be expected

Overall positive impact on Namibian consumer and producers

- Whether it can be turned into competitive advantage remains to be seen

Loser could be the environment and the renewable energy industry
Thank you for your attention