Do international oil companies need to re-think their business models?

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Presentation outline

- The old business model
  - What was the ‘old business model’?
  - Why has it been dying?
  - What solutions are possible?

- One option = Diversification
  - A brief history of IOC diversification
  - What has been happening recently?
  - Problems with diversification: Why renewables are different from oil?

- Conclusions

Research Paper

Paul Stevens
Energy, Environment and Resources | May 2016

International Oil Companies
The Death of the Old Business Model

https://www.chathamhouse.org/publication/international-oil-companies-death-old-business-model

The IOCs and the death of the old business model

- Four characteristics of ‘the old business model’?
  - Maximizing shareholder value
  - Maximizing bookable reserves
  - Minimizing cost based on ‘outsourcing’
  - Using discount rates based on Capital Asset Pricing Model (CAPM)
- Why has it been dying?
  - **1990s**
    - Limited access to low cost reserves plus increasingly progressive upstream fiscal systems
    - Outsourcing meant giving up much of their technological edge
    - The drag of the downstream
    - Attitudes to risk derived from CAPM
  - **Then compounded over the last 10 years**
    - Financial markets disillusioned with large, long-term, high risk projects
    - Issues to do with ‘unburnable carbon’ and ‘divest campaign’
    - Much lower oil prices – but beware “low” oil prices 1986-2004 Brent $33

What solutions are possible?

- They simply die!
- Mega mergers? – Competition authorities
- Cut costs? – Already trying since 2014
- Slim down the balance sheets? –Who will buy?
- Hope that, as part of a cycle, oil prices will recover?
- Change the business model? Repsol…
- Diversification?

A Brief History of IOC diversification

- Post the second oil shock 1979-81: the IOCs developed the same view – the oil industry was mature plus resource nationalism meant limited profitable opportunities

- Began to diversify
  - Initially into other form of energy
    - Gas, Coal, Nuclear..
  - Petrochemicals
  - Then into minerals
  - Then … supermarkets, hotels, typewriters (Exxon) and circuses (Gulf)!

- BUT in the 1990s: back to the "core business" because-
  - Major cultural differences e.g. Gas versus oil
  - Lacked the necessary technical/managerial skill sets
  - Little economic rent compared to oil:
    - "Producers' surplus" because of wide variation in production costs
    - "Super normal profit" because of lack of competition - 'the Seven Sisters" Achnacarry/"As Is" agreement followed by OPEC

What has been happening recently?

- Initial tentative steps by some
  - BP 1997: Acknowledges climate change + 2001: 'Beyond Petroleum'
  - Shell early 2000s: increased investment in 'alternative energy'

- Then backing off e.g. Shell 2008 withdraws from 'the London Array'
  - Opposition from within the companies
  - Growing concern over regulatory risks

- Recent resurgence?
  - Trying to cut operating emissions: This is not diversification
  - Total ($500 mn per year in renewables)
  - Statoil/Equinor ($200 mn in 2016 for CVC)
  - Shell ($2 bn on clean energy via its New Energy Division)
  - BP $200 mn in solar
  - Etc….

- But still quite small
  - Shell total capex in 2016 $80 bn
  - But early days: "…mixed success in their efforts thus far …the models IOCs chose are still emerging" Zhong & Bazilian, The Electricity Journal vole. 31 issue 1 2018

Challenges to diversification into renewables given the differences from oil?

But remember all generalizations are wrong!

Oil	Renewables
Different 'Business Cultures'	***Different 'Business Cultures'***
Projects large scale, long term, long lead times and highly centralized	Deployment involves mostly small scale, short term, short lead times and decentralized
Oil prices highly volatile	Electricity prices stable on long term contracts
Projects are standalone	Projects are system dependent
Different Economics	***Different Economics***
Much economic rent derived from 1. and 2.	Little economic rent
1. Producers' surplus with large differential in costs of production	1. Small potential producers' surplus given costs are fairly similar
2. Super normal profit because of a lack of competition – oligopoly/ cartelization with high barriers to entry	2. Normal profit because of much competition
Projects very high risk – prospect risk; commercial risk; contract risk = higher return	High regulatory risk not reflected in returns
Selling into an international market unlimited distances	Selling into national regulated markets distance limited by T&D losses
To convert useable to useful oil needs processing	Useable electricity is immediately useful

Conclusions

- The IOCs must change their business model
- BUT their options are limited
- Diversification into renewables sounds obvious but will be very difficult
- All good things come to an end. What is the viable life of any commercial enterprise?
  - Kongo Gumi: 578 - 2006
  - The Catholic Church: 6th Century A.D. - present
  - East India Company: 1600 -1874
  - Hudson's Bay Company: 1670 - present
  - Jardine, Matheson & Co.: 1782 - present

Thank you

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