Mergers & Acquisitions in the Oil & Gas Sector

HURC 302
November 12, 2018

Maheen Khizar, Sanket Mehta

Today

Get the lay of the land

- *What are mergers and acquisitions?*
- *How are they different in oil and gas?*

Drill deeper

- *What are the incentives and regulations specific to oil and gas mergers and acquisitions?*

Evaluate prospects

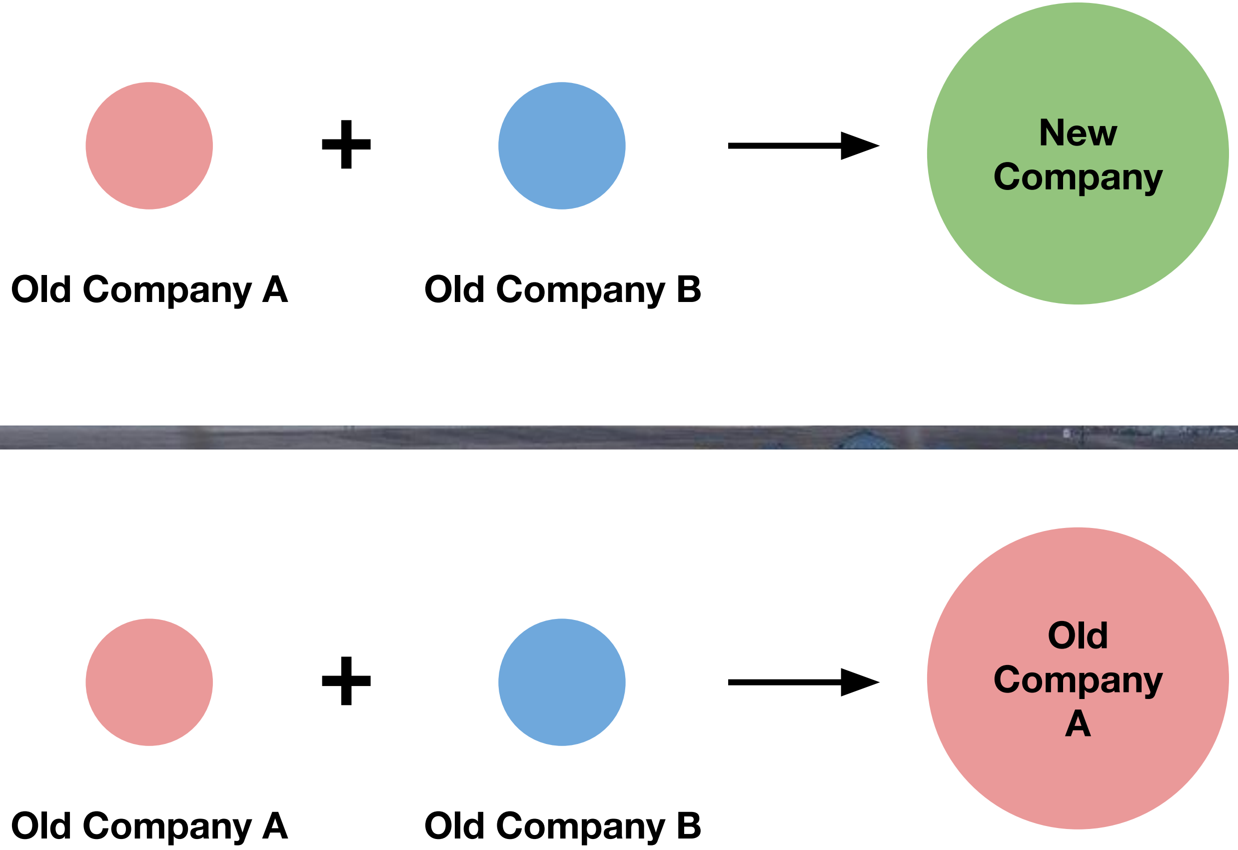
- *Can one accurately forecast success/failure?*


Get the lay of the land
- What are mergers and acquisitions?
- How are they different in oil and gas?

M
(Merger)

&

A
(Acquisition)



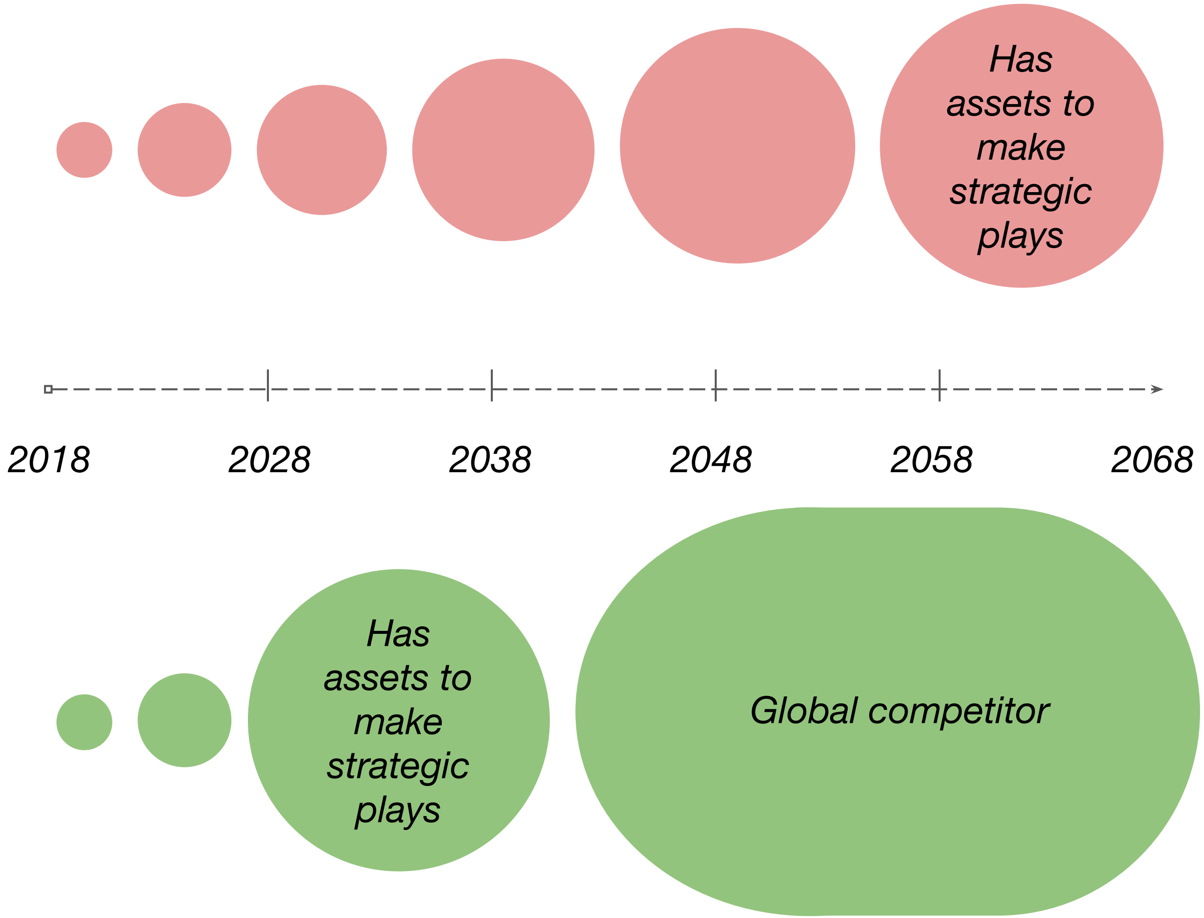
M&A in O&G vs Other Industries (1985-2016)

Industry	Number	Value (bil. USD)
Banks	27932	5072.24
Oil & Gas	32903	4891.34
Metals & Mining	48963	3060.03
Pharmaceuticals	11509	2719.03
Telecommunications Services	10277	2538.91
Power	13687	2666.72
Food and Beverage	34577	2326.47

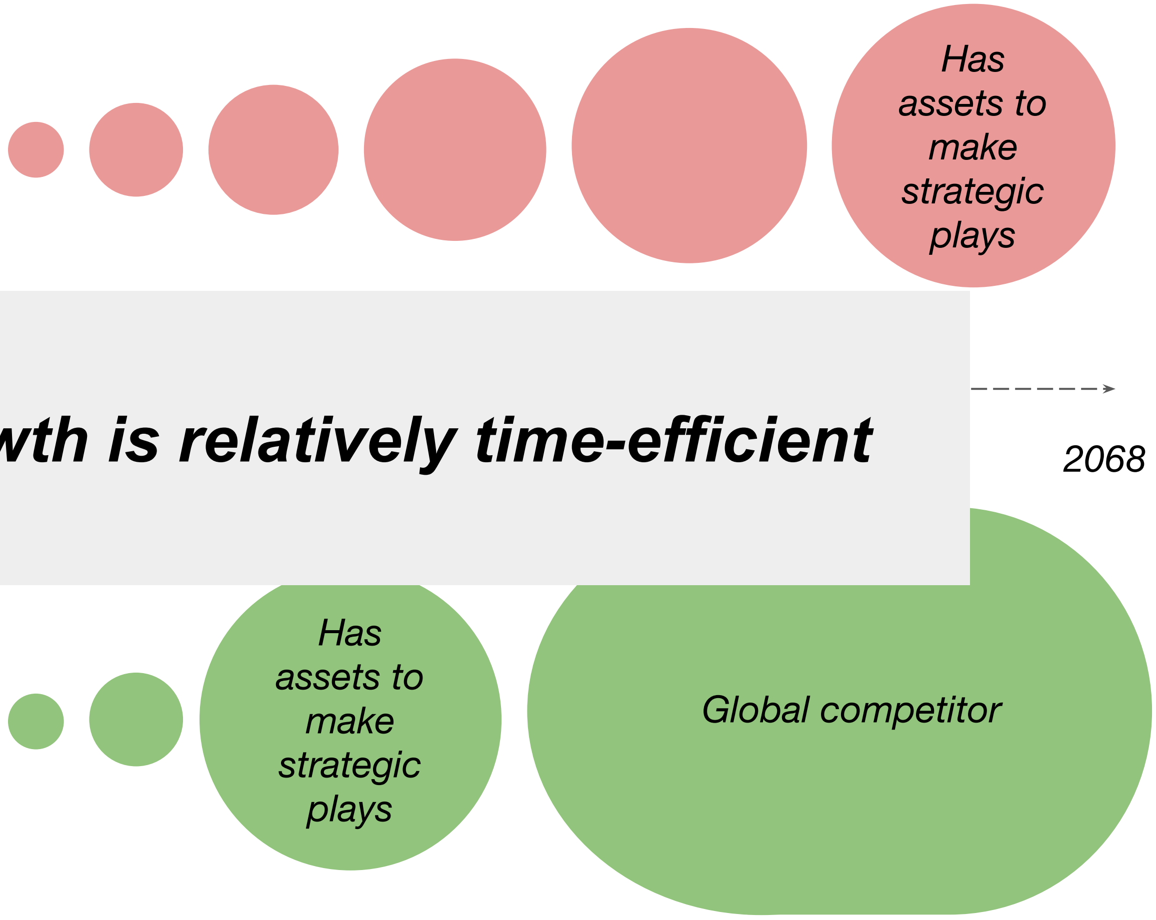
JPMorgan Chase & Co.

Non-M&A growth

M&A growth



Non-M&A growth



M&A growth is relatively time-efficient

M&A growth

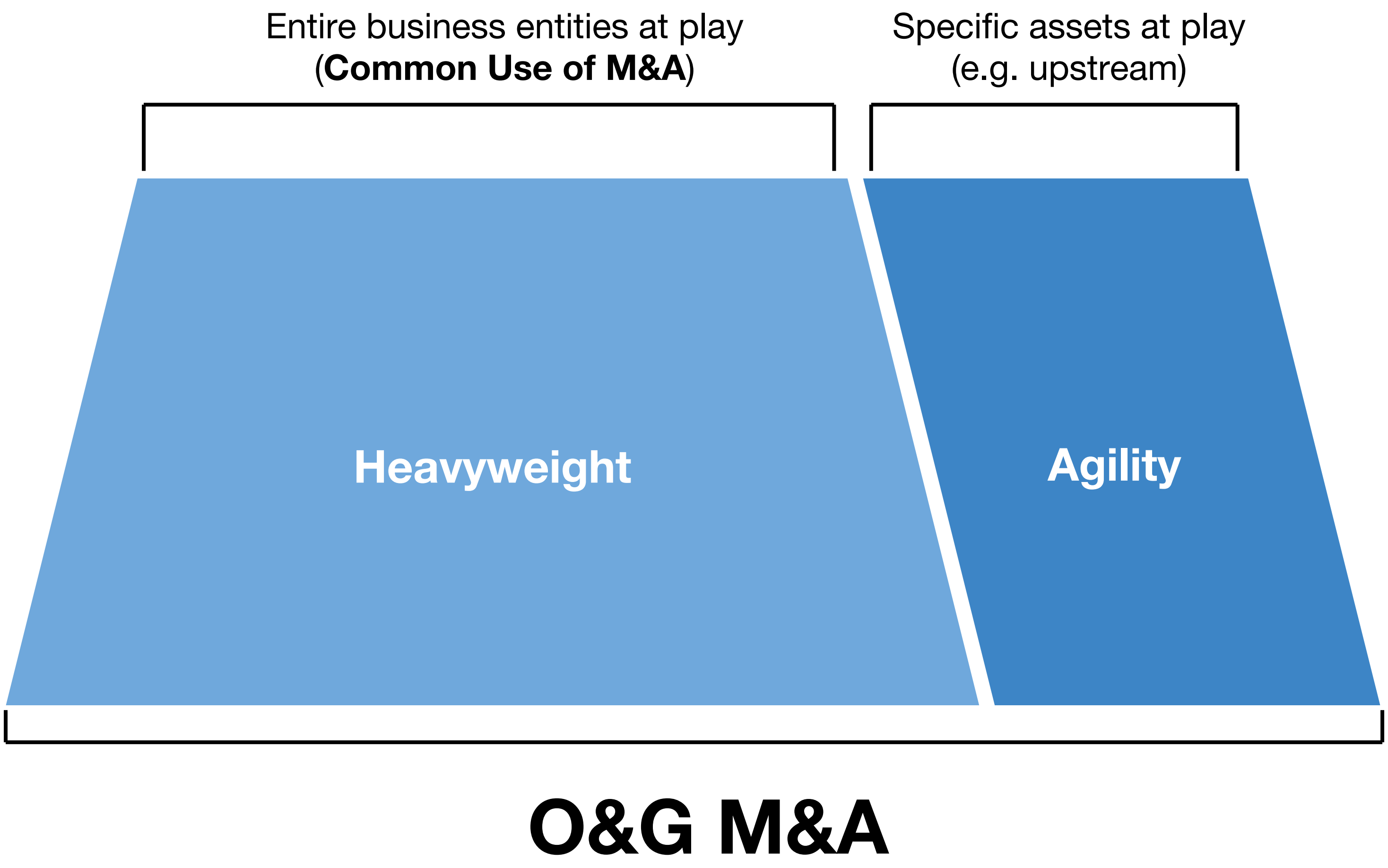
Heavyweight ↑ power

Featherweight ↑ agility

Heavyweight ↑ power

Featherweight ↑ agility

O&G is a unique industry, as heavyweight players are the most agile


Entire business entities at play
(**Common Use of M&A**)
Specific assets at play
(e.g. upstream)
Heavyweight
Agility
O&G M&A

Drill deeper

- *What are the incentives and regulations specific to oil and gas mergers and acquisitions?*

Specific Incentives for O&G M&A

- Economies-of-scale and synergies
- Specific asset acquisition
- Vertical integration
- External ventures and diversification

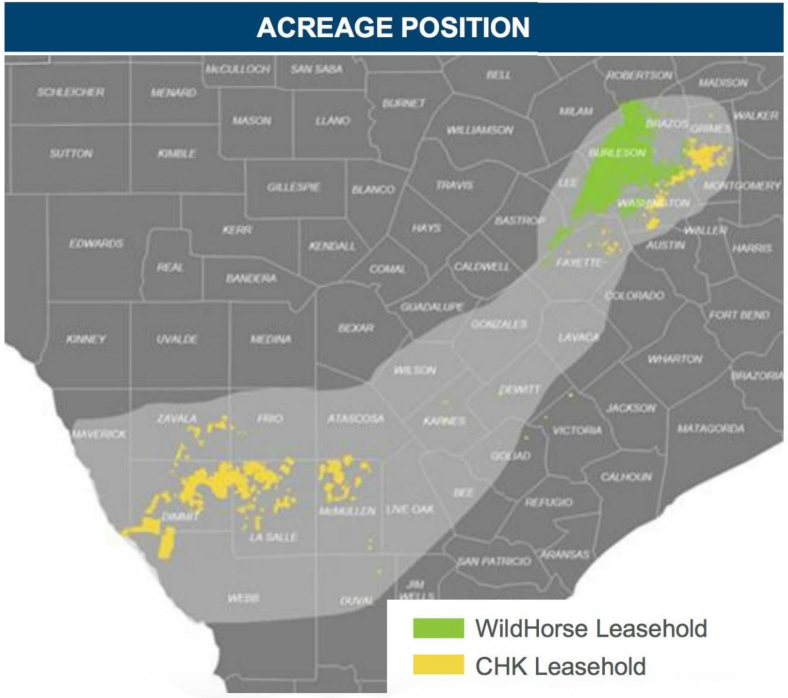
Synergies

- Cost savings = depend on similarity between the merged processes and product lines
- Scaling-up supply chains for volume discounts
  - changes in rig availability, rig rates, permit approvals, site access, availability of consumables and services
- Facilitates restructuring and allows an optimization of the investments
- Benefits are more obvious in downstream and petrochemistry than in upstream
- Merger of Exxon and Mobil in 1998
  - In terms of downstream, the combined entity increased its worldwide refining capacity by about 60% (greater than sum of individual parts)
  - In terms of distribution, it has doubled its weight in the United States (peak 15% market share) yielding greater negotiation power due to market share

Specific asset acquisition

- Driven by seeking specific valuable assets that might be already owned by another entity
- Asset acquisitions in energy due to resource sites or established market competitor or regulatory reasons
- Merger of Exxon and Mobil in 1998
  - Mobil known for its petroleum production in Africa (Nigeria) and in the Caspian Sea
  - Exxon largely not a force in these regions
- Chesapeake Energy Acquisition of WildHorse in 2018
  - Access to underdeveloped new acreage with strategic access to premium Gulf Coast markets
  - Leverage existing profitable positions to tap into other high-margin oil opportunities

Specific asset acquisition

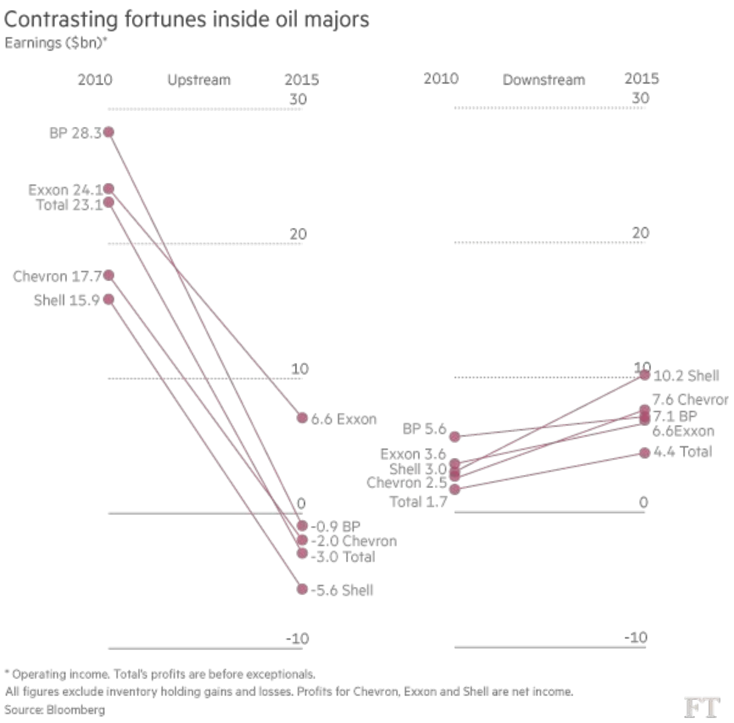


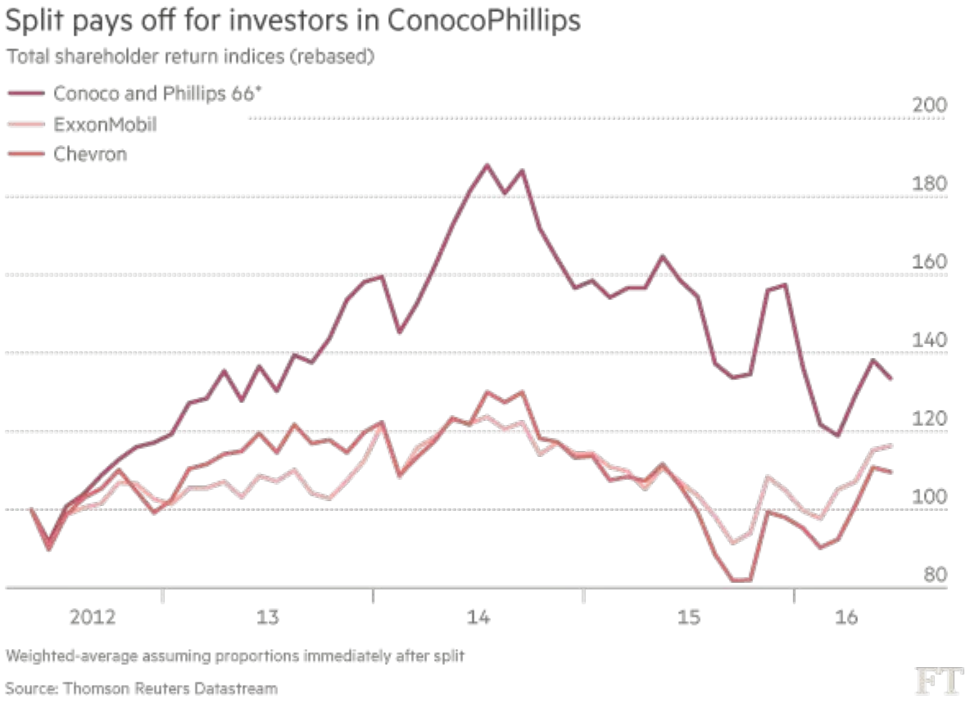
CHESAPEAKE ENERGY WildHorse Acquisition – October 2018

Vertical integration

- Traditional reasons to vertically integrate:
    - Market is too risky and/or unreliable - too few suppliers or consumers, etc.
    - Adjacent stages of industry have more market power than the stage of company in question
    - Integration would create power in barriers to entry, customer price discrimination, etc.
    - Market is underdeveloped, requiring forward integration to reach the consumer
- More difficult to integrate in the upstream than in midstream and downstream
- Standard Oil in 1870s - dominated the refining and transport industries, which provided leverage over the fragmented production companies
- Contrasting philosophies in present
    - ExxonMobil: “captures the highest value for every molecule that flows through our facilities”
    - ConocoPhillips spins off its downstream operations in 2012

Vertical integration





External Ventures and Diversification

- Opportunity to diversify portfolio (given an attractive return rate to shareholders/owners), providing protection against changing political winds or opportunity-filled economic trends
- Increasingly seen in terms of renewable energy ventures
- Allows companies to take advantage of strategic expertise areas
- Shell acquisition of majority stakes in Silicon Ranch, MP2 Energy
    - Silicon Ranch is a solar developer
    - MP2 Energy owns natural gas distribution infrastructure and develops tools and projects for distributed solar
- BP acquisition of Lightsource

Valuation & Regulation

- "O&G companies' valuation is heavily tied to **commodity prices**"
  - Baseline assumption: Buyer wants lowest price, seller wants highest price
- Breadth of strategic plays adds variable complexity to valuation
  - Acquire reported reserves that have recently become economically available (**only first movers** can buy low because of heavyweight agility)
  - Sell assets to maintain contracts obligations and finance capital intensive spending (**seller wants to survive**, not just highest price)
  - When prices are high, sell assets to increase return on long-term investments (**balancing** ROI and risk exposure)
- **Antitrust** regulation
  - Interplay between heavyweight agility and issues of competitiveness
  - Heavy FTC oversight, O&G as an industry has relatively low concentration

Evaluate prospects

- *Can one accurately forecast success/failure?*

O&G M&A retrospectives are complex entanglements, forecasts are lucky strikes

- Large number of variables = difficulty in deriving causal relationships
  - Price changes - especially extreme shifts
  - Regulatory changes
  - Irrational human behaviour
- Granular aspect of future are obscured by information asymmetries (both controllable and non-controllable)
- Marathon Oil’s contrasting billion-dollar acquisitions in Permian Basin vs. oil sands in Canada
- Retrospectives and post-mortems still offer valuable insight, especially in such a crucial industry
  - E.g. Counter-intuitive finding of heavyweight agility, of O&G ‘competitiveness’

Thank you!

References

Energy sector M&A. (2016, January). Retrieved from https://www.financierworldwide.com/energy-sector-ma/#.W-jZGFMnigQ

Fina, T. D. (2016). The Intersection of Energy and Competition Law in the USA. The Journal of World Energy Law & Business, 9(6), 411-423. doi:10.1093/jwelb/jww031

Handscomb, C., Sheeren, E., & Woxholth, J. (2016, July). Capturing value from M&A in upstream oil & gas. Retrieved from https://www.mckinsey.com/industries/oil-and-gas/our-insights/capturing-value-from-m-and-a-in-upstream-oil-and-gas

Hsu, K., Wright, M., & Zhu, Z. (2017). What motivates merger and acquisition activities in the upstream oil & gas sectors in the U.S.? Energy Economics, 65, 240-250. doi:10.1016/j.eneco.2017.04.028

Muris, T. J., & Parker, R. G. (2007, June). A Dozen Facts You Should Know About Antitrust and the Oil Industry.