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Impact of Wood Review on the future of UKCS Oil and Gas

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Insight in Economics™

The Wood Review on the UKCS

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- Problem
  - Which problems did the Wood Review try to solve?
- Solution
  - What did the Wood Review propose?
- Call to (in)-action
  - Are the solutions fit for purpose?

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Problem?

Production on the UKCS is in long-term decline

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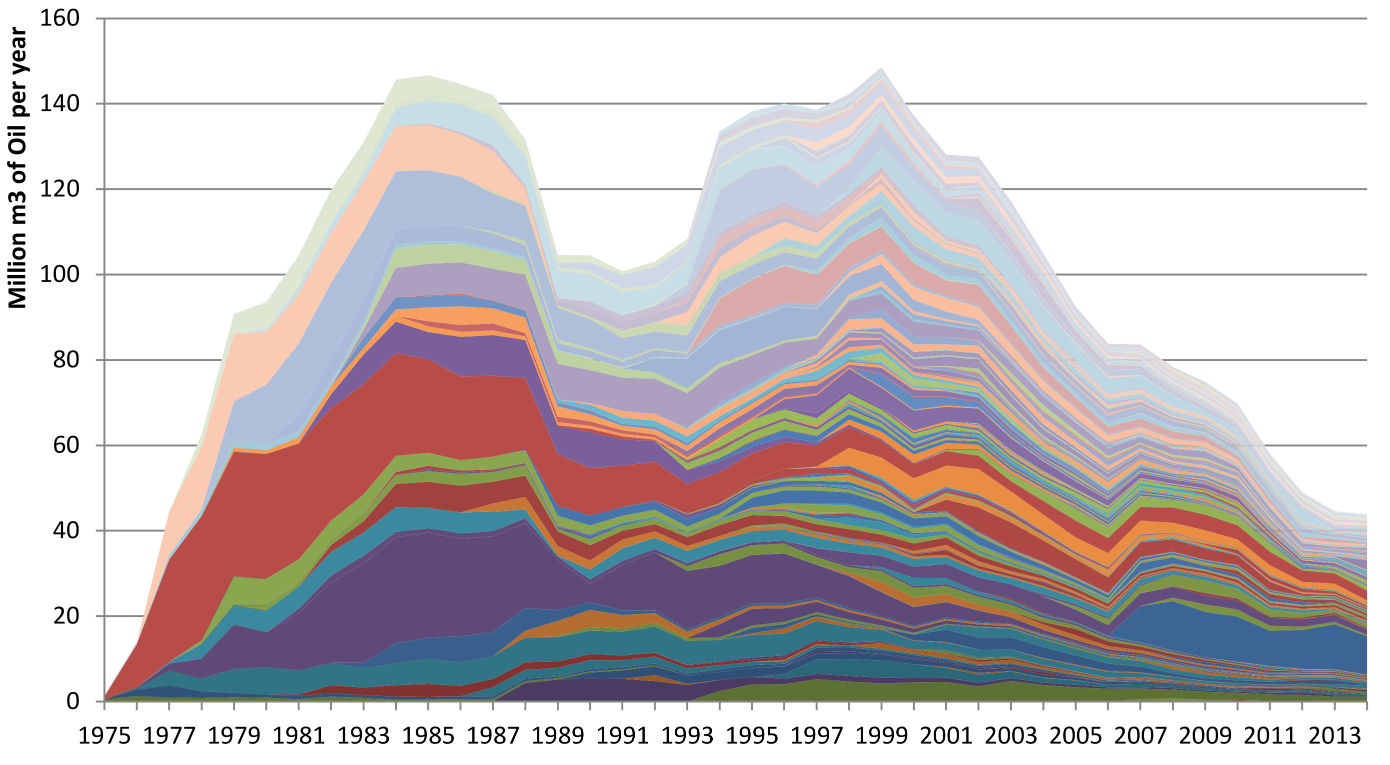

Newer fields are ever smaller making the hydrocarbons more costly to extract

The UKCS is becoming an increasingly high-cost jurisdiction

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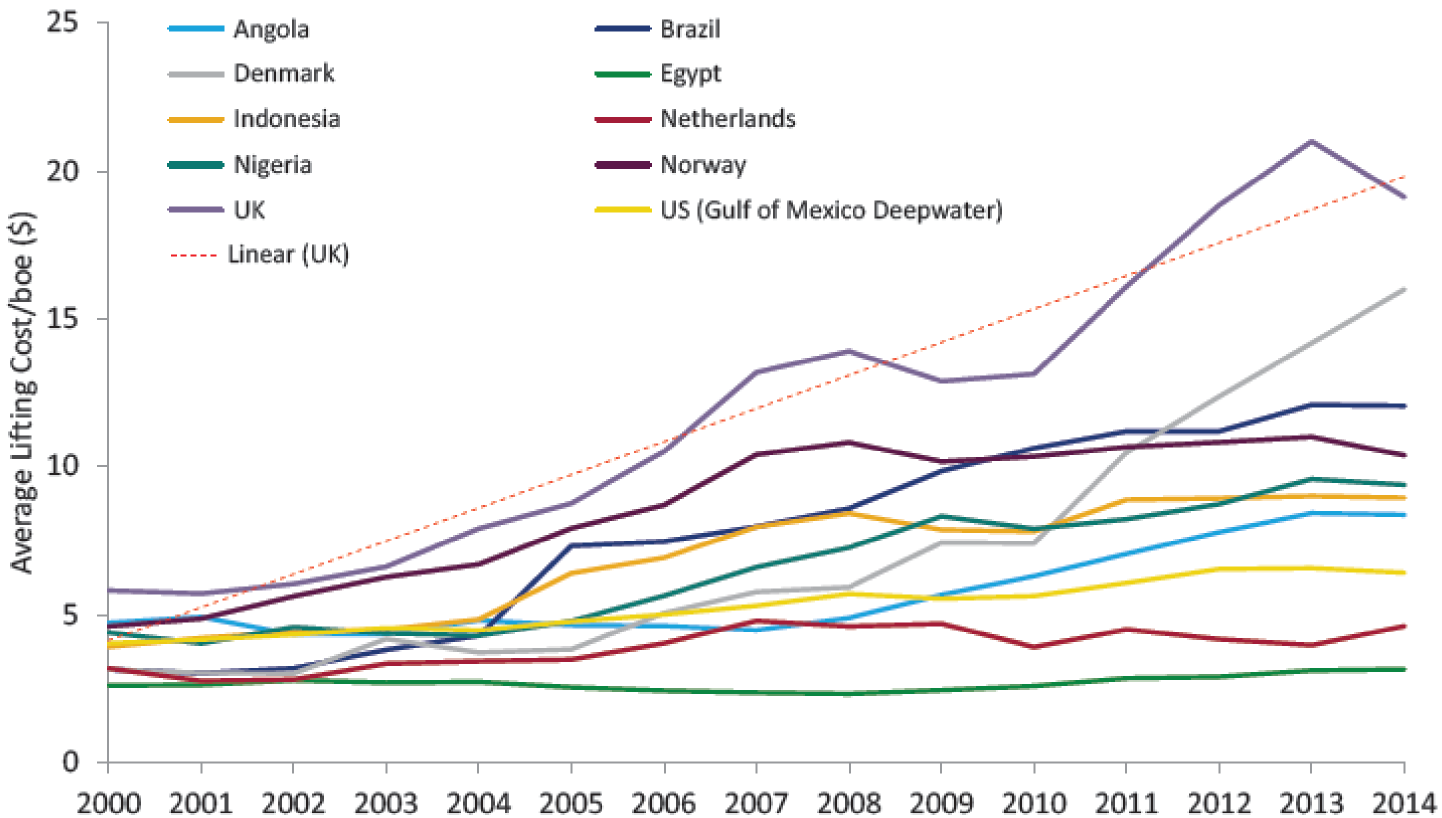
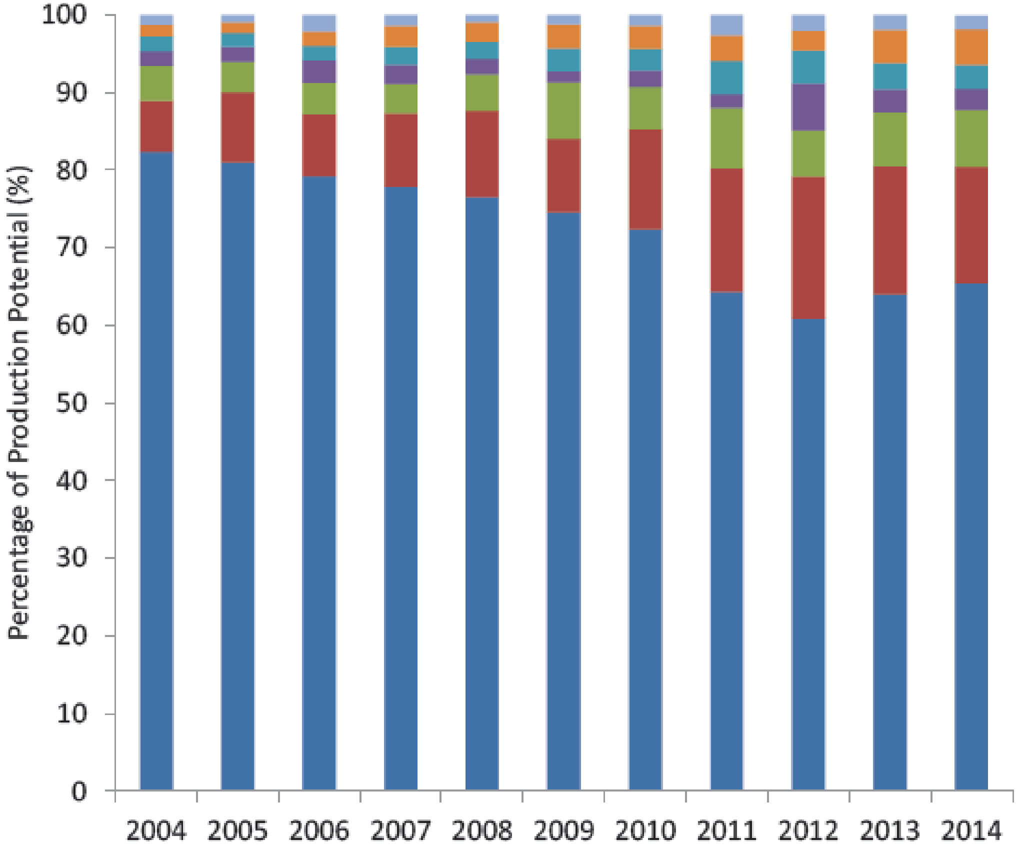


Source: Oil and Gas UK, *Economic Report*, 2015

Standard contracting forms can create perverse disincentives to reduce infrastructure utilisation

As the fields mature, production efficiency declines...



Source: Oil and Gas UK, *Economic Report*, 2015

... although that is to some extent inevitable

Volatile and (recently) low energy prices threaten the future of production

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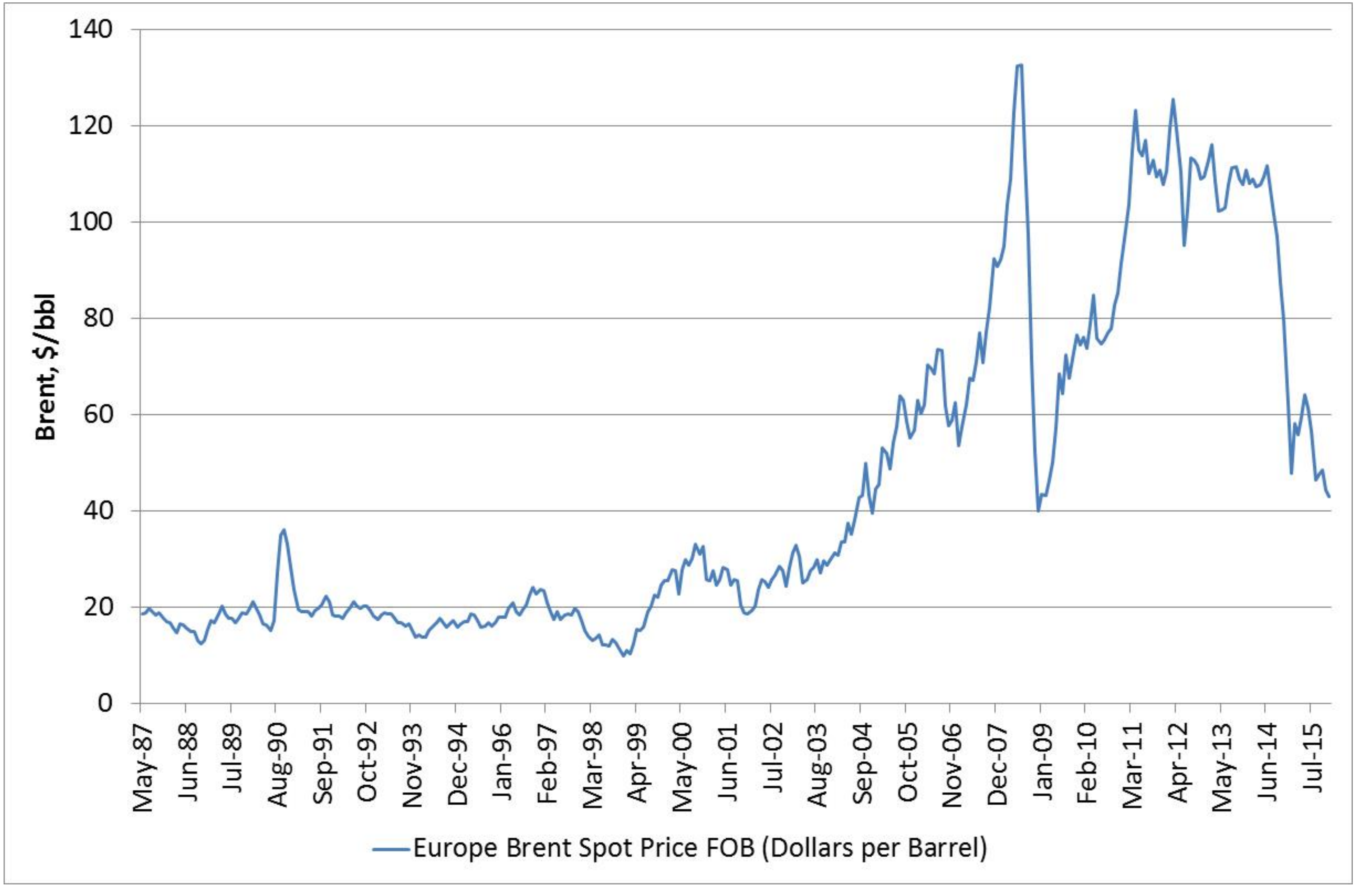
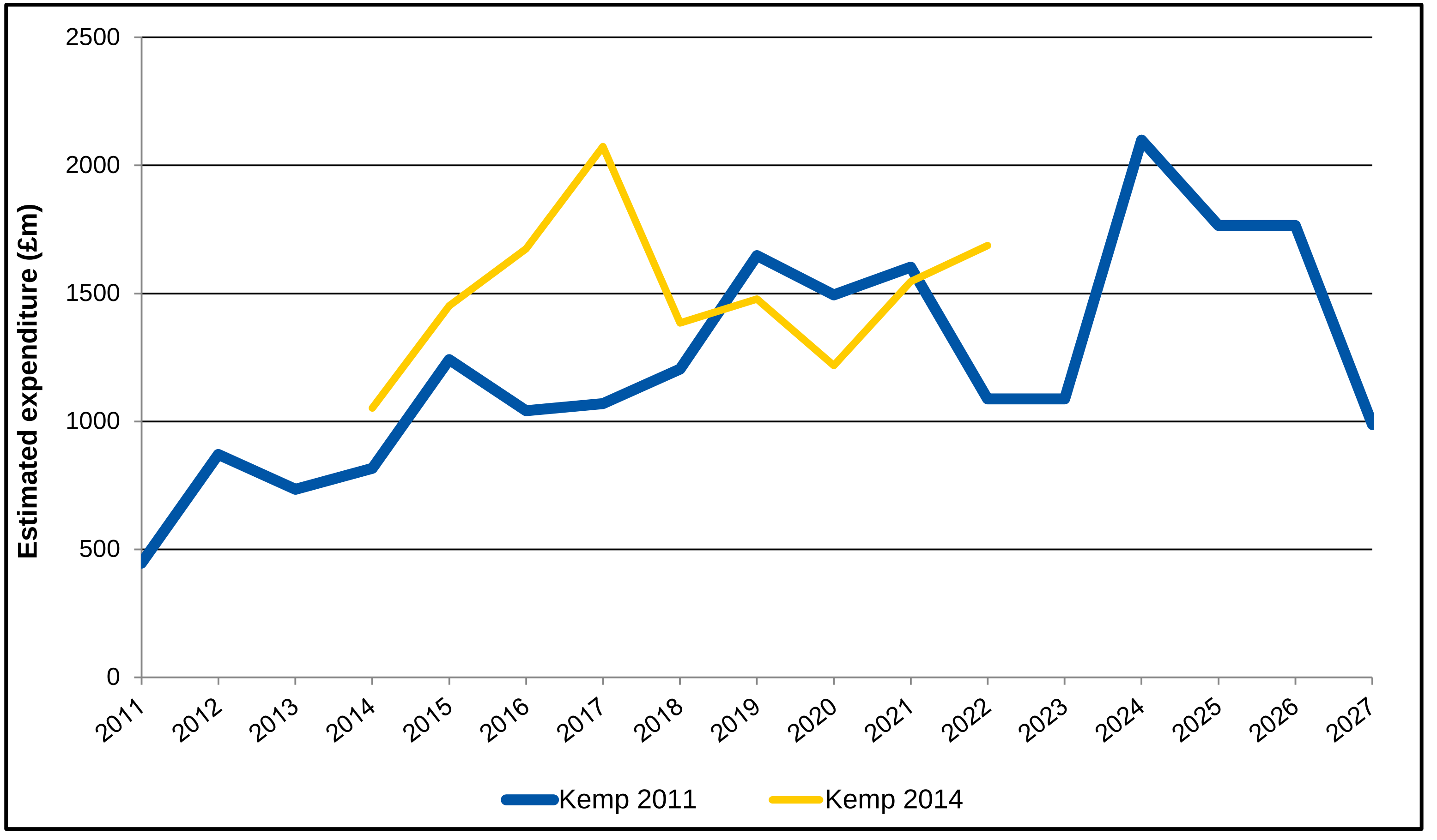


Decommissioning costs are looming



Sources: Kemp (2011) and (2014). *Prospective Decommissioning Activity and Infrastructure Availability in the UKCS*

Cumulative decommissioning costs may comprise £10bn+ by 2022

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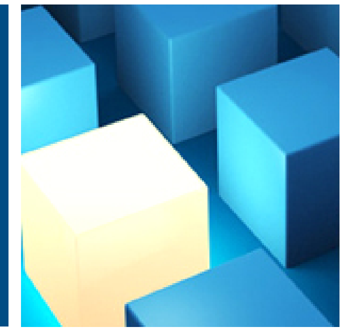

Solution?

Historically, the UKCS has been an arena of light-touch regulation

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- Beauty parades to allocate licences to vertically-integrated companies.
- Infrastructure code of practice, established in 2002, sets ou terms for infrastructure access, including:
  - Infrastructure owners provide transparent and non-discriminatory access
  - Infrastructure owners provide tariffs and terms for unbundled services, where requested and practicable
  - Parties seek to agree fair and reasonable tariffs and terms, where risks taken are reflected by rewards
  - Parties undertake to ultimately settle disputes through a referral to the Secretary of State
- Secretary of State has the power to make a determination (its guidance sets out the principles for access)
  - Starting point is incremental cost, with some provisions for capital costs in specific circumstances.

Challenging circumstances for the upstream industry prompted a review of the regulatory regime

The Wood Review was a call to action for centralised intervention

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Four principal recommendations

- Government and industry to commit to a new strategy for Maximising Economic Recovery
- Create a new arm's length regulatory body charged with effective stewardship and regulation of the UKCS hydrocarbon recovery
- Regulator should take additional powers to implement MER UK
- Regulator should work with industry to develop and implement important Sector Strategies

The Wood Review in a word cloud

Fundamental problem is that the Wood Review is not grounded in an economic analysis of incentives

Some of the more concrete (economic rather than institutional) recommendations relate to infrastructure tariffs

Not quite "57" Varieties

- The Regulator should work closely with Industry and HM Treasury to provide an economic environment which prolongs the life of existing infrastructure and promotes investment in key new infrastructure
- Stewardship of infrastructure should be included within the existing asset stewardship process, and regional development plans should be used to promote collaborative infrastructure initiatives to provide additional capacity, prolong life and maximise recovery around key production hubs
- The new regulator must make full use of the current legal powers to resolve disputes and facilitate access to infrastructure
- The new Regulator, in conjunction with HMT should consider measures to encourage infrastructure owners to offer more competitive tariffs in order to improve marginal field economics and reduce tie-back costs

Calls to improve marginal field economics reflect concerns that incumbent tariffs are deterring development

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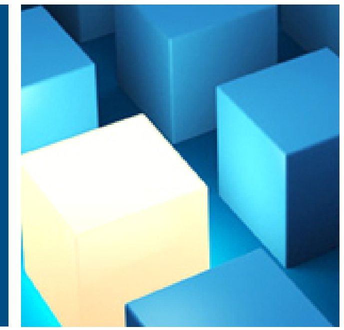

Call to (in-)action?

It is not clear that infrastructure tariffs are too high in the first place

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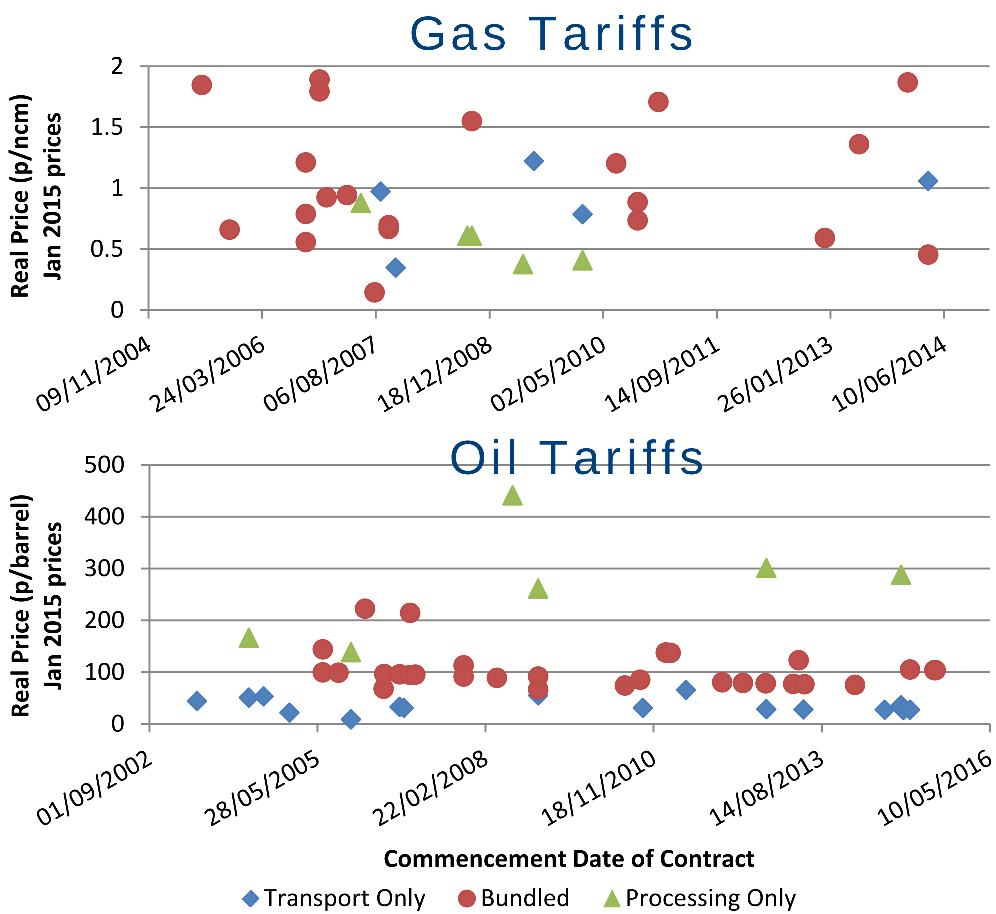

Similar pressures are appearing in other North Sea markets (e.g. Norwegian tariff cut)

The marginal tax rates are (relatively) high and variable over time

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Petroleum Revenue Tax	75%	50%/0%*		35%
Supplementary Charge	10%	20%	32%	20%
Ring Fenced Corporation Tax	30%			

Varying Tax Rates between fields and high marginal tax rates may dissuade incumbents from offering capacity

The ICOP and threatened OGA interventions may reduce incentives to maintain infrastructure

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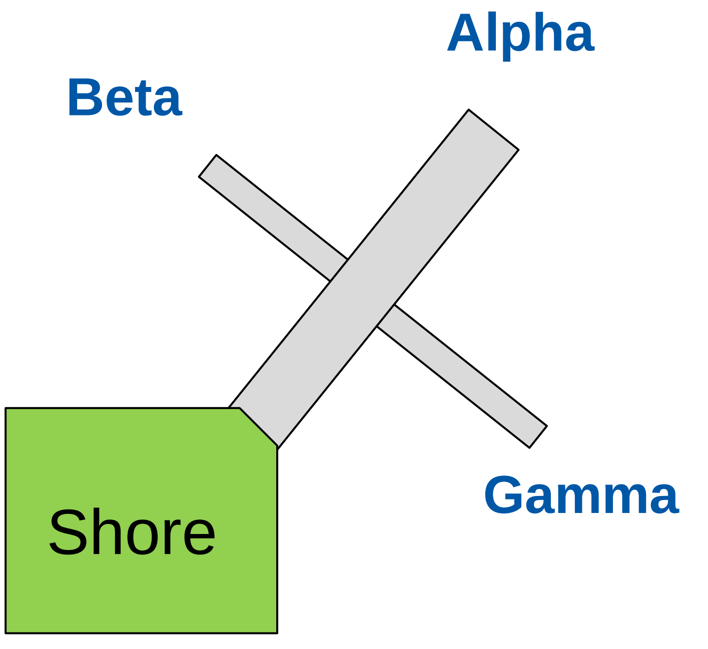
- ICOP prohibition on price discrimination is not necessarily efficient
  - Imagine a vertically integrated operator, Alpha, operating an offshore pipeline with spare capacity;
  - Alpha can only keep the pipe operational if it earns a revenue of X from two new fields, Beta and Gamma.
  - Beta can afford to pay more than X/2, but Gamma cannot.
- Forcing pipeline owners to make capacity available at incremental cost may cause early decommissioning.



Infrastructure owners would need firm protections to invest in and maintain efficient infrastructure

Ian Wood's own report recognises that reducing infrastructure tariffs may be counter-productive

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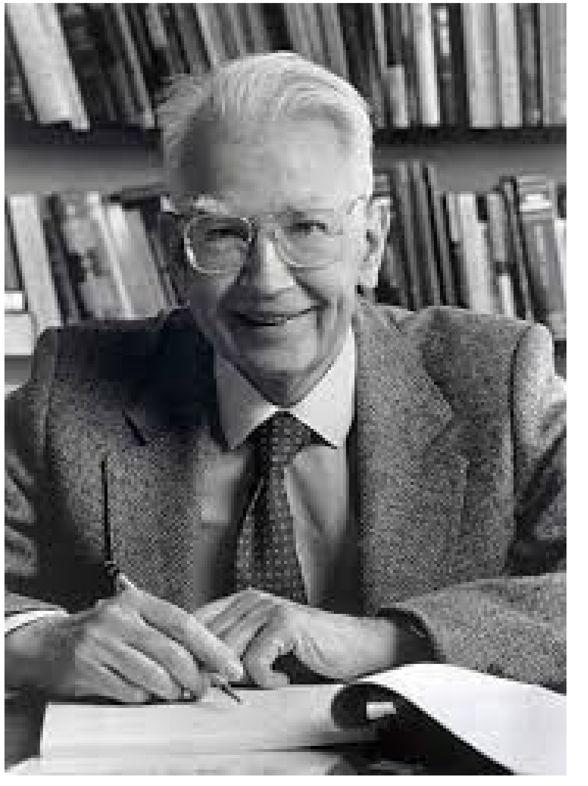
"Fundamental to the problem is a misalignment of commercial and technical interests between the owner of the hub platform and infrastructure and the party seeking access to process and transport their well stream. The hub owner typically views the provision of processing and transportation to a third party as a low value opportunity, particularly when they have no equity interest. As a result there is little incentive for the hub owner to take on business which could add risks to their own operations and use up capacity in their facilities. In contrast the small operator seeking access has little bargaining power and often suffers interminable delays in trying to counter the risk issues" – Wood, I., (2014), p 43

Ronald Coase



Concluding thoughts

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- Merely establishing a regulator is unlikely to have a positive impact on market outcomes, unless it has the tools to provide the right incentives to private firms;
- Regulation has the best chance of solving a market failure where those market failures are clearly identified;
- To date, it is not clear that the OGA’s remit is tightly defined enough that it meets that standard; and
- Offshore oil and gas may be falling foul of a general trend in energy policy – assuming that governments achieve more efficient outcomes than markets.

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