

Will International Oil Companies still be relevant in 2030?

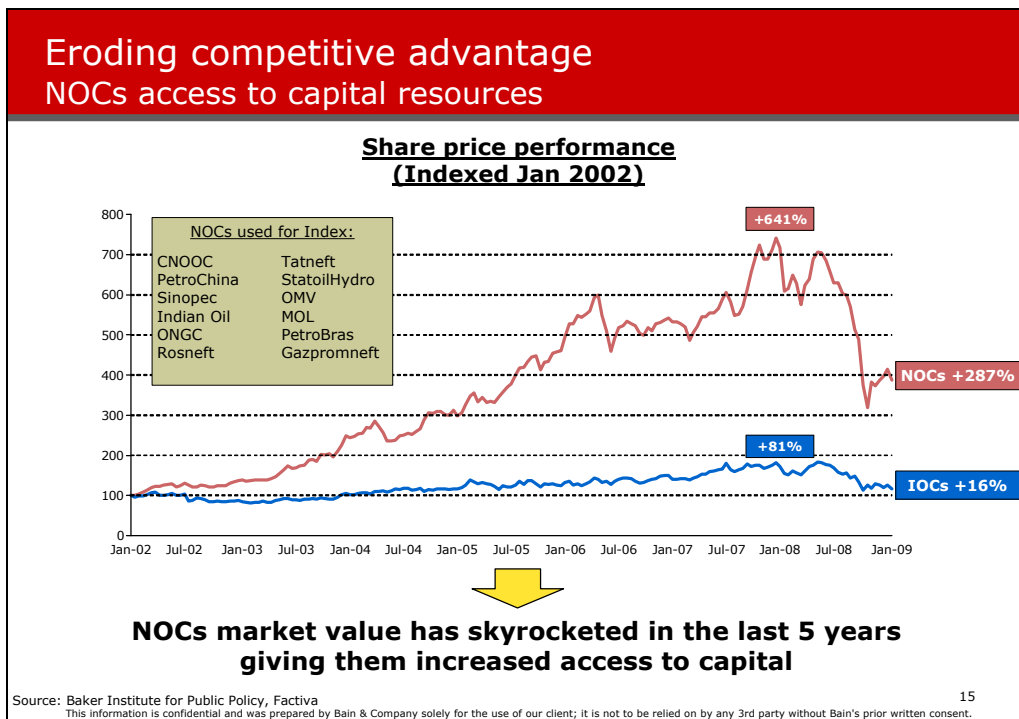
1. Introduction

Traditional IOCs¹ have dominated the global industrial landscape for decades, but all indications are that they could be shadows of themselves in twenty to thirty years. The glory days of shaping the global oil and gas industry could be gone; and for some their very existence could be a distant memory by then. That is unless the IOC model is radically re-invented. Below we outline the root causes of the 'IOC crisis' and potential remedies to change the tide of history in the making.

2. Relevance lost

On the face of it, the world looks in order: key IOCs' business indicators, like reserve replacement ratios, share of reserves controlled vs. total reserves and production growth show either a positive or slight deteriorating performance in the past 8-10 years.

However, the fact that IOCs' market value growth lags that of NOCs' (albeit a limited selection that excludes e.g. Saudi Aramco, Sonatrach) by a factor of 4 indicates that the capital markets have greater faith in the future of the latter; despite a precipitous fall in NOC share prices since the middle of 2008.



Other facts also point to a business model under pressure:

In the 1970s IOCs controlled 70% of reserves vs. 4% today;

The Top 10 IOCs have an average reserve life of 13 years vs. 78 years for the Top 10 NOCs;

Overall production is shifting to NOCs-controlled areas, like the Middle East and FSU²; and

Global production will increasingly move to costly development and production environments (Arctic, Oil Sands, Oil Shales, EOR) and IOCs will find it difficult to

¹ IOCs refers to International oil companies. Oil and gas could be used interchangeably.

² Former Soviet Union.

access a substantial part of potential global reserves as evidenced by lower RRRs of IOCs relative to NOCs.

The reasons for the decline in influence of the IOCs are also fairly well-recognized:

Loss of value-added: IOCs were traditionally invited to operate inside hydrocarbon rich countries to compensate for the lack of skills, technology and capital. These enablers have become commoditized and readily accessible through global O&G service companies and specialized financial service providers;

Dissatisfaction with model of wealth distribution: There is increasing resistance to economic models previously imposed by IOCs on resource rich countries³. Moreover, the broader economic benefits of IOC participation in host countries have not always and/or visibly trickled down to the broad population, serving as a major argument against continuing to invite IOCs;

Growing NOC capabilities: Hydrocarbon rich countries have come to realize that the industry is not that complex and have upgraded their own capabilities to become players on the world-stage with scale and reputations to match IOCs. When they lack the necessary skills they buy in capabilities⁴. Increasingly NOCs launch major projects without or with significantly contained IOC participation;

Growing political rift: New geo-political factors are shaping the world and the impact is starting to become evident in the industry⁵.

The end result in future is what matters. We predict that the value trend outlined earlier will continue as IOCs are exposed to even more expensive reserve access, reduced production growth rates and resultant declining returns on capital employed. In the medium term, market access to end consumers and aggressive cost management may mask the real issue that IOCs' have to address - diminished relevance.

³ An example is the Russian Federation Government's actions to counter PSA's perceived as unfair, which were signed when the country was vulnerable during the early 1990's.

⁴ This is done through acquisitions, JV's or by tapping the experience of service companies

⁵ Examples include Venezuela's move to force IOCs to concentrate on hard to extract marginal reserves, Russia's efforts to indigenize the oil and gas industry etc.

3. Levers of influence

IOCs have a number of obvious levers to increase their value-added or relevance.

Traditional Levers to retain influence for IOCs		
Lever	Potential Actions	Feasibility
<ul style="list-style-type: none"> Re-establish Value added through innovation <ul style="list-style-type: none"> - Technology - Governance 	<ul style="list-style-type: none"> Re-establish in-house technological edge – e.g. engineering, oil field services and project management outsourced to service providers Codify and offer best practices in corporate governance and management (project control, investment control, risk management, HSE, trading, etc) as major contributor to value creation in the industry 	●
<ul style="list-style-type: none"> Increase control on end-markets 	<ul style="list-style-type: none"> Increase presence in downstream in most relevant consumption markets to offer hydrocarbon rich countries the much needed "security of demand" Expand into a high growth regions, e.g. China 	◐
<ul style="list-style-type: none"> Re-define economic interest 	<ul style="list-style-type: none"> Be ready to share a larger part of value added (enhanced royalties, adjusted PSAs, direct profit sharing, commitment to invest) in the interest of long-term value creation as opposed to short term profits 	◑
<ul style="list-style-type: none"> IOCs lead industry consolidation 	<ul style="list-style-type: none"> Continue to pursue mega mergers amongst traditional players in the industry to enhance scale, balance long and short reserve positions and extract significant market and cost synergies 	◒

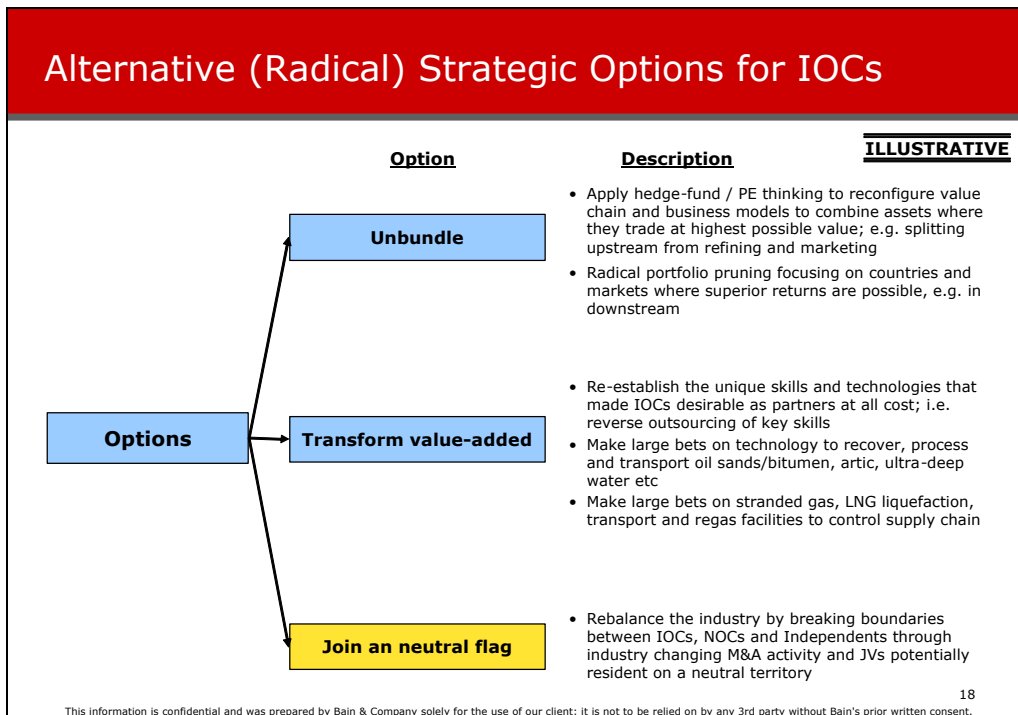
16

This information is confidential and was prepared by Bain & Company solely for the use of our client; it is not to be relied on by any 3rd party without Bain's prior written consent.

On balance, these levers appear to be relatively weak mechanisms to reverse the trend. In our view a much more fundamental rethink is required.

4. Fundamental Strategic Options for IOCs

Managing for long term shareholder value necessitates that IOCs' top management consider more radical alternatives to the current model:

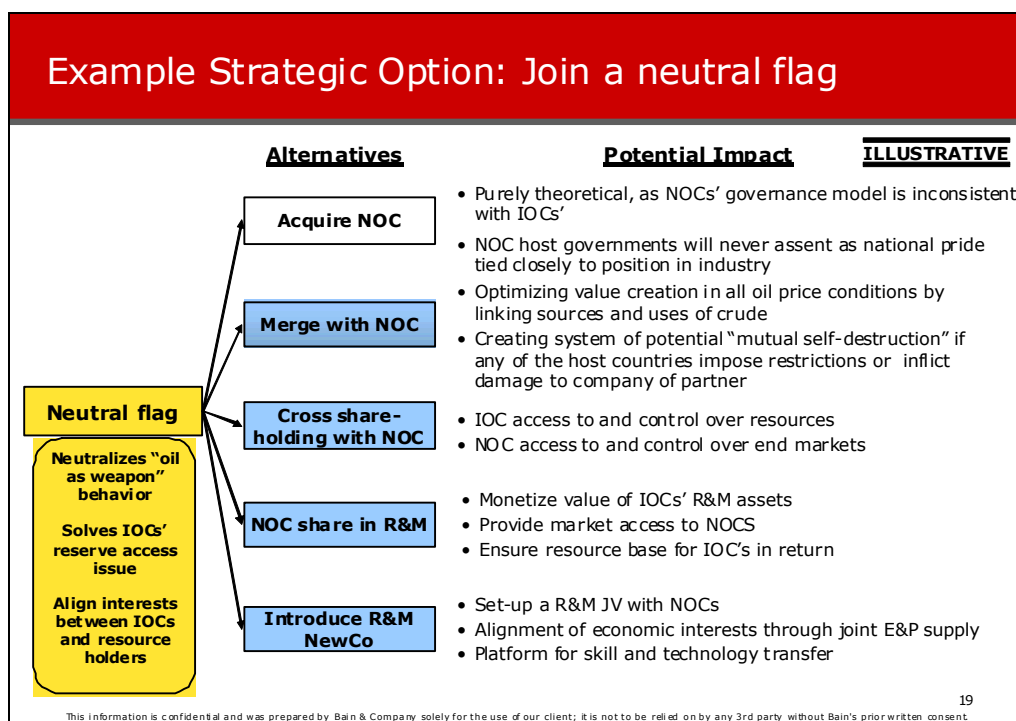


Pursuing traditional ways to get and retain access can be a sound decision for an IOC as long as one recognizes that high-yielding investment opportunities will gradually disappear. As such share buybacks and high dividend yields will rule until such time as the company is (inevitably?) taken over or merged. Or one can accelerate the process through Hedge-Fund/PE-like asset portfolio management. Disposing the piece parts of the business to the highest bidder may realize the best returns to shareholders⁶. However, we realize that this statement is not true for all IOCs.

In a world where there is no perceived need to radically reshape the industry, IOCs would still be well-served to take a hard, objective look at their value-add to resource rich countries. Here we refer to ways to transform the contribution of IOCs. Are there ways that they can re-establish their traditional (in-house) technological superiority or the unique skills dominance that they used to enjoy? Can one of the large service companies be 'brought back into the fold'? Can the IOCs build and jointly control the distribution network for LNG? Can IOCs help crack the problem of stranded gas in Siberia or make Shtokman a reality for example? Can they make the breakthrough technological leaps required to process oil sands at sub-50 USD prices? Or is it already too late for any of these measures?

If there is no way to turn back the clock by bolstering their unique value-added, it may make sense to reconsider wealth-sharing or proactively changing the rules of the game. Is there a way that IOCs' governments could encourage faster introduction of renewables? Are there ways to make it more profitable for resource rich countries to do business with IOCs rather than doing it alone? Is it not time to develop royalty and profit sharing models that compensate for the weaknesses of the models introduced when IOCs were still operating from a position of power? Can IOCs find a way to substantially increase the 'trickle-down' impact of their presence - for example by visibly contributing to boost the skills base of these countries?

A more radical approach could be to steer towards 'neutral flags' as a means to ensure the world enjoys energy security independent of political conflicts.



⁶ Due to consistent undervaluation of refining and marketing assets and recoverable reserves beyond a 20-30 year period by the capital markets

The alternative outlined may look deceptively like the strategy already followed by IOCs in oil rich countries. But it is not. The framing is different. The alternatives outlined here move from a mindset of maximum possible control to one where interests are balanced. Balancing interests implies giving up something and refraining from imposing outside approaches. The asset swaps between E.ON and Gazprom and the partnership between Lukoil and Conoco are recent examples of this balanced approach. Both agreements addressed the mutual interest of NOCs and IOCs and neither imposes control.

Wouldn't similar efforts towards economic and infrastructural integration between IOCs and NOCs or Independents located in hydrocarbon rich nations restore a healthy ratio between reserves and production whilst at the same time ensuring end-product access for NOCs? Would not such integration address concerns that NOCs or their governments could hold traditional markets hostage politically or economically by providing a counterweight to NOC control over supply? The alignment of interests could take various forms ranging from a full merger to creating an independent joint Refining and Marketing entity with a neutral, but global brand. Some options, like "Merge with NOC" or "Acquire NOC" are mentioned for completeness' sake, although we see little prospect of that materializing on a large scale. The benefits and end objectives of such global integration are clear:

- Re-establish IOC access to scale projects in hydrocarbon-rich provinces
- Depoliticize the industry by shifting corporate centre to neutral territories, allowing players to make decisions that deliver highest economic valued-added
- Increase the mutual dependency of resource rich and resource poor countries
- Provide uplift in valuation of NOCs due to improved governance, management talent and access to cheaper capital

If nothing is done to reposition IOCs, the time may also come when the capital market will solve the "performing below full potential problem" by unbundling and breaking up IOCs. Until recently it was deemed improbable that major national telecoms companies could become targets for hedge- or PE funds. That has fundamentally changed. Private equity controls trillions of dollars of capital in search of high returns; these funds know how to play the 'sum of the parts game', however they are stifled by the current global liquidity crisis. And will be for quite some time. Why is it not plausible that someone may get the idea to break up an IOC (probably a smaller one at first) and sell off the Refining and Marketing assets to the highest bidding NOCs in search of attractive end markets for higher value added products? The returns could be enormous given that capital markets consistently undervalue refining and marketing assets. Why should integrated oil companies trade at a discount to the sum of the parts? Until now size and 'political air cover' have prevented break-ups of IOCs, but that could change, at least partially, over time. Or couldn't it?

5. Conclusion

The window of opportunity to transform the global position of IOCs is fairly narrow – if measured in oil industry tome. If (or when) oil prices return to levels above say 70 USD the NOC's could again feel in control. And the willingness to do any industry-transforming deal with IOCs will diminish. One can hear the more independent-minded say "Why should we have to do a deal with weak and struggling competitors? Time and history is on our side!" Others may be more open. It is the task of IOCs to find common ground with those NOCs that aim to maximize shareholder value whilst preserving the host nation's national interests.

The time may be right to prepare IOC constituencies for abdicating some of the significant powers they have traditionally enjoyed. All forces work against maintaining the status quo. Survival in the new world requires different mindsets and concerted action to pre-empt

competitors in reshaping global oil & gas. Those IOCs that are unwilling to acknowledge the need to change do so at their own peril.