ADNOC and Baker Hughes
The Transformation of ADNOC Drilling
(Part 1)

Ayman Khattab had assumed the position as Baker Hughes GE (BHGE) President for the Gulf and North Africa region in March 2017. Six months later, he was looking at a letter he had received from Moelis & Company (Moelis), the investment bank representing Abu Dhabi National Oil Company (ADNOC). It was a letter with an invitation to a unique opportunity, to participate in a process both to acquire a minority interest and partner with ADNOC Drilling. Sitting in his office overlooking a busy street in downtown Abu Dhabi, he felt cautiously excited. After all, these were untested waters and very different from what he had experienced in the industry. This combined both an opportunity for a vertical M&A deal between an international oilfield services provider and a national drilling company, as well as a privatisation of a tightly-held ADNOC and thus Abu Dhabi asset. There were several 'firsts' in this prospect.

Ayman immediately called for a meeting with his senior executives to discuss the letter and prepare a response to present to the Board of BHGE that would decide further course of action.

Setting the Scene

October 2017 marked a little over three years since crude oil prices began to fall from their average high of around $110 per barrel. Although the price had somewhat recovered from its low point of just below $27 per barrel to around $55, the industry was still reeling from the effects of the fall in price. Even more remarkable than the drop in the price was the increase in price volatility. Exhibit 1 on the next page shows the variation in world oil prices and the increase in price volatility.

Three crucial parameters characterised that downturn:

1. The scale of the drop in the oil price – nearly 76%. Only the downturn of 2008 matched it in scale.
2. The duration of low oil prices following the initial drop – 55 months and counting. The previous longest run from 2008 lasted for only 12 months.
3. Volatility in oil prices had been the highest since 1987 and had for the first time continued for over a decade.

Until the growth in shale oil production from the US took off in 2005-06, the Organisation of Petroleum Exporting Countries (OPEC) controlled world crude oil prices effectively. With the shale oil producers acting as 'swing producers', the volatility in crude oil prices is predicted to continue for the foreseeable future before oil prices could gain some stability.

Oil and gas producers, as well as various other service providers to the industry, had been riding on the wave of high oil prices from 2010 until 2014, the most extended period of sustained high prices in history. The sudden and steep fall in the oil price in late 2014 resulted in a drop in upstream

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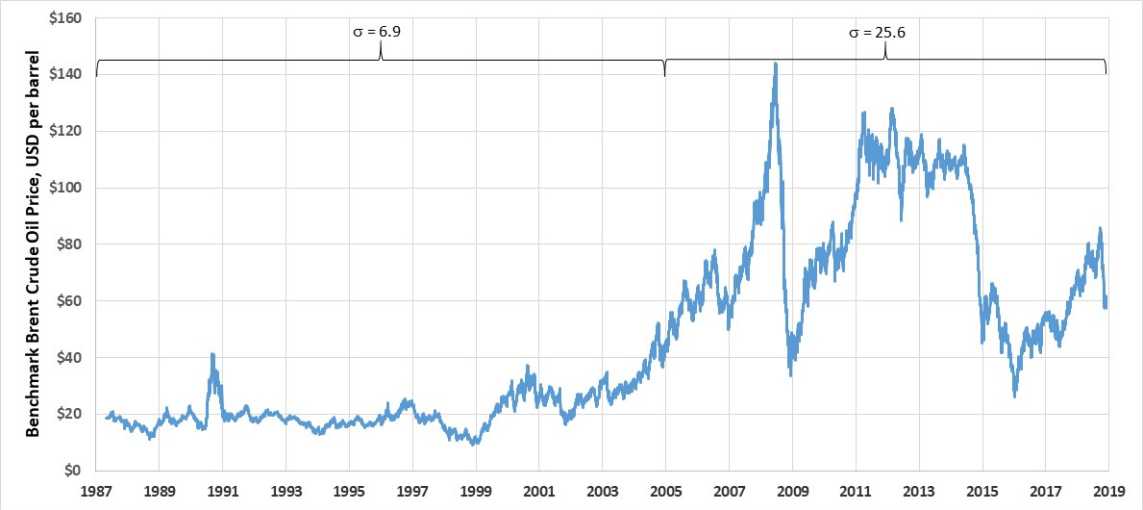
This case study has been written by Professor Scott Moeller and case writer Madhav Desai of Bayes Business School, City, University of London as a basis for classroom discussion rather than to illustrate effective or ineffective handling of an administrative situation. The authors are grateful to Khalid Hussain of Moelis & Company for his help throughout the process of developing this case study and facilitation of interviews with senior executives of ADNOC, ADNOC Drilling and BHGE. We would like to give thanks to Mohamed Al Aryani of ADNOC, Emri Zeineldin of ADNOC Drilling, Ayman Khattab and Hatem Haidar of BHGE and Rami Touma and Youssef Salem of Moelis & Company for granting interviews and providing valuable insights into this deal. All information contained in the case has been obtained from the public domain or sources approved by the parties involved in the deal.

investment by nearly a quarter in 2015 and then again in 2016. At the same time, the price volatility had become nearly four times as high compared with the pre-2004 period making economic assessments of projects more complicated. These factors caused companies to be more conservative with their investment plans.

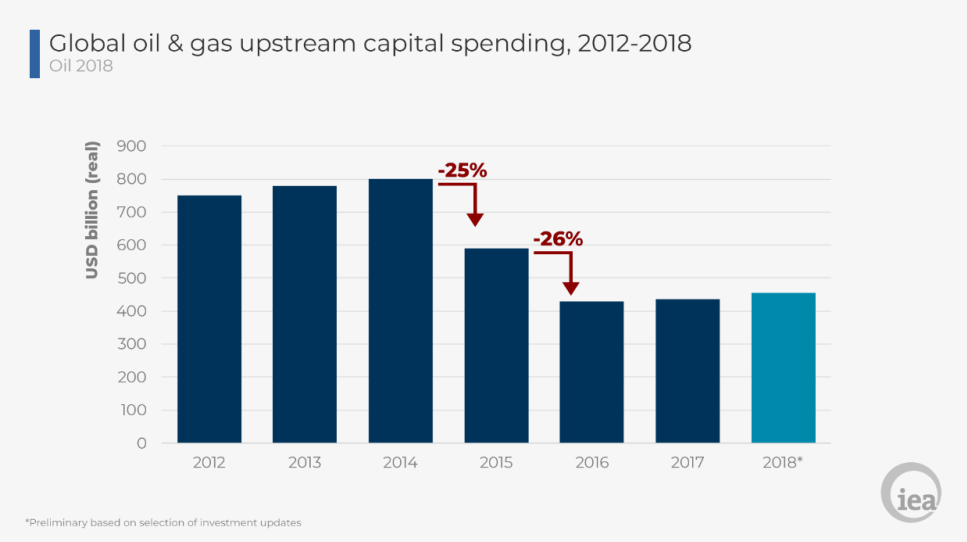
Exhibit 1
World Crude Oil Prices (Brent Benchmark) 1987-2018 and Price Volatility



Source: United States Energy Information Administration (www.eia.gov).

Exhibit 2 shows the effect the drop in the oil prices had had on global oil and gas upstream capital spending.

Exhibit 2
Global Oil and Gas Upstream Capital Spending 2012-2018



Source: International Energy Agency (www.iea.org).

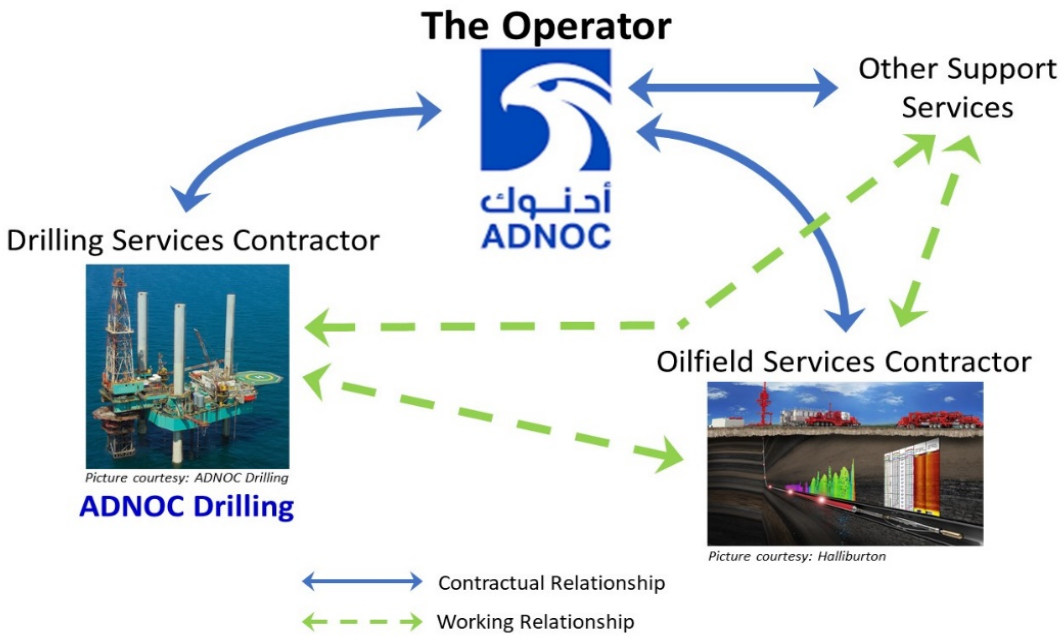
Upstream Drilling and Oil field Services Industry

Oil and gas field development projects typically comprise four major cost elements, namely, drilling operations, processing facilities, pipelines and infrastructure. Drilling of oil and gas wells is perhaps the most expensive part of petroleum operations according to the International Energy Agency. As such, a significant emphasis is given on reducing these costs in any project. The following are the most relevant participants in the oilfield drilling activities.

- An Operator owns the mineral rights, leases and permits within a specific area (known as a 'Block' or a 'Field').
- A Drilling Services Contractor is a company which has been contracted by the Operator to drill wells within a Block or a Field.
- An Oilfield Services (OFS) Contractor provides specialist tools, equipment and services directly related to the drilling operations.

Historically, the operator would award several separate contracts to specialist service providers. This practice made managing several contracts and maintaining close coordination among all contractors a challenging task, often resulting in delays and higher costs. Exhibit 3 illustrates this working relationship between the Operator and various contractors.

Exhibit 3
Conventional Working Relationships Within Petroleum Drilling Operations

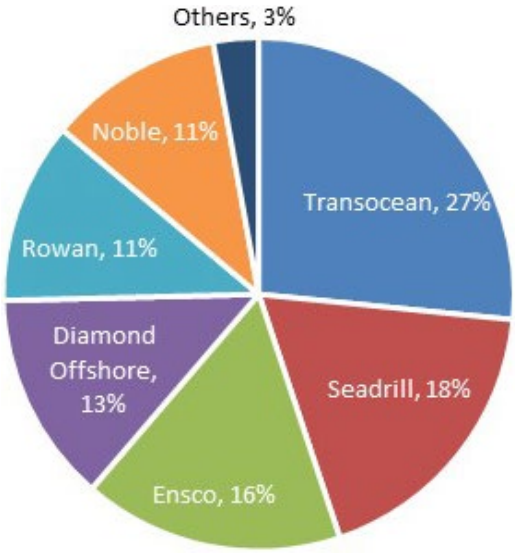


Source: Author.

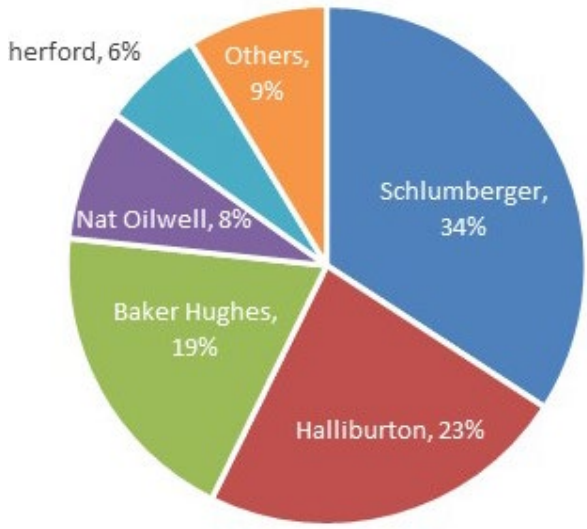
Both the Drilling and OFS industries are oligopolistic with the top four companies (by revenue) in each sector enjoying combined market shares of 75% and 85% respectively (see Exhibit 4). When the upstream investment is reduced, it directly impacts the revenues of these contractors.

Exhibit 4

Market shares of Major Drilling and OFS Companies in 2017.



Market shares of drilling companies



Market shares of OFS companies

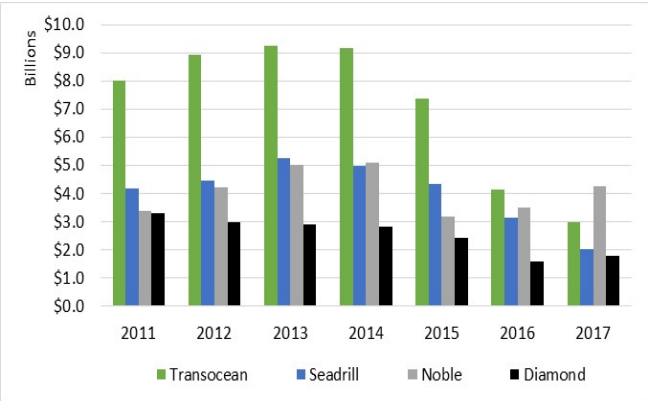
Source: Bloomberg, Nov. 2018.

Exhibits 5 and 6 show the revenues and year-on-year change in revenues for the top four Drilling and OFS companies, respectively, highlighting both the volatility of the revenues and the challenging period of the prior several years.

Exhibit 5

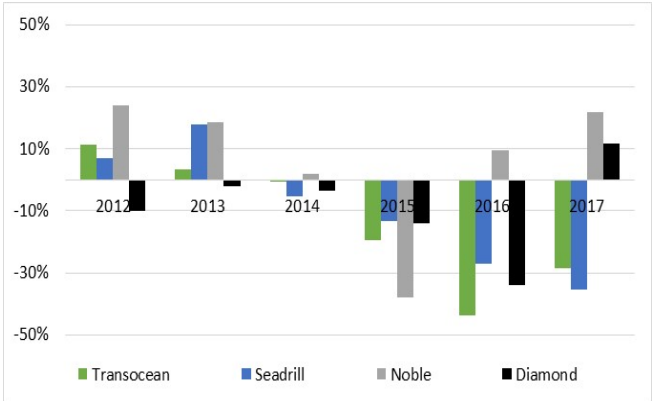
Revenue profiles for the top four Drilling Services companies worldwide

Annual Revenues



Total Revenues for Drilling companies 2011-17

Year on Year Change in Revenues



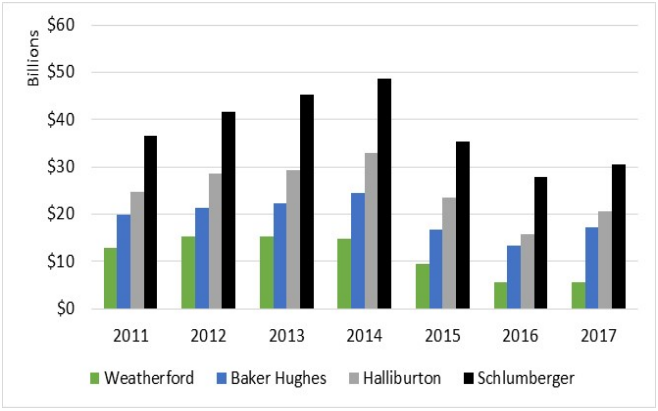
YoY change in revenues for Drilling companies 2011-17

Source: Annual Reports of Transocean, Seadrill, Noble and Diamond Offshore.

Exhibit 6

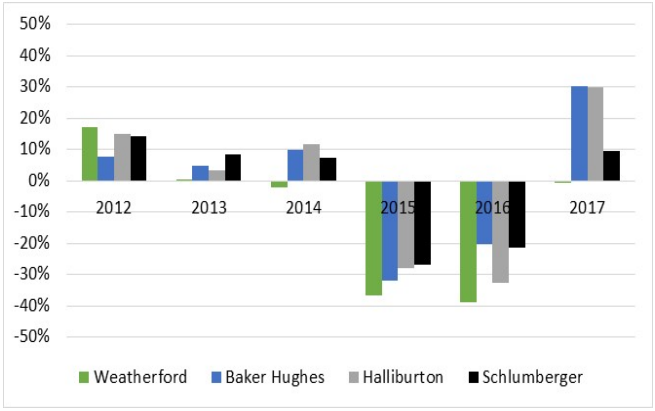
Revenue profiles for the top four Oilfield Services (OFS) companies worldwide

Annual Revenues



Total Revenues for OFS companies 2011-17

Year on Year Change in Revenues



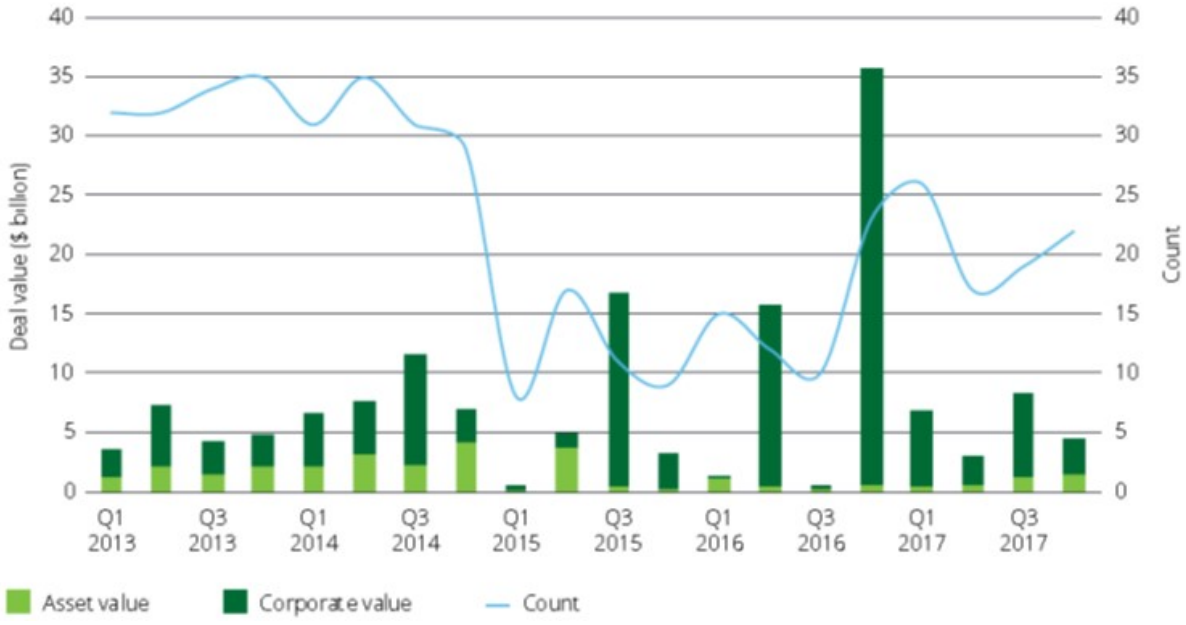
YoY change in revenues for OFS companies 2011-17

Source: Annual Reports of Weatherford, Baker Hughes, Halliburton and Schlumberger.

This new environment led to a flurry of M&A activity in the sector in 2016. Exhibit 7 shows a plot of M&A deals by value and count in the OFS sector while Exhibit 8 shows the nature of these deals. Most of these deals were driven by consolidation and therefore horizontal integration efforts with significant revenue overlap.

Exhibit 7

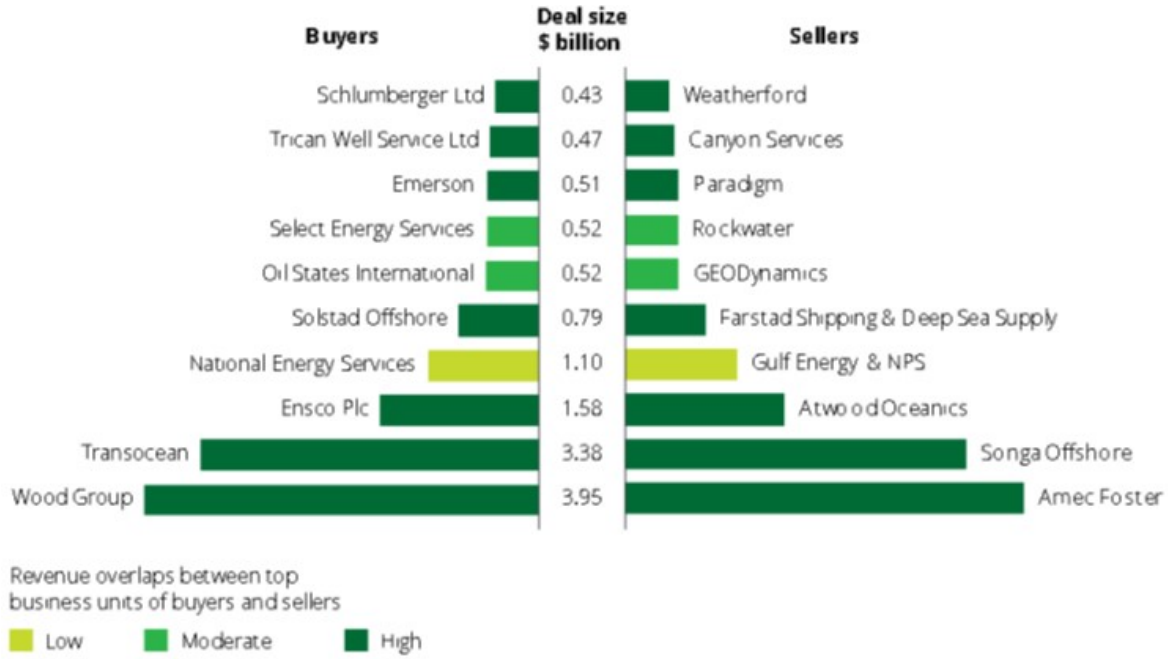
Oilfield Services M&A deals by value and count



Source: Oil & Gas Mergers and Acquisitions Report – Yearend 2017, Working under pressure, Deloitte Centre for Energy Solutions, Deloitte Development LLC (2018).

Exhibit 8

OFS M&A deals in 2017 focused on consolidating existing product lines



Source: Oil & Gas Mergers and Acquisitions Report – Yearend 2017, Working under pressure, Deloitte Centre for Energy Solutions, Deloitte Development LLC (2018).

OFS Companies

OFS contractors provide a range of complementary services to the oil and gas industry covering products and services for drilling, formation evaluation, well completion, production and reservoir consulting. Such services include data gathering during and after drilling a well, providing specialist tools for precise control for complex wells as well as tools and equipment for completion of wells.

Controlling a well until it is prepared for production is also a critical part of the oilfield services. Failure to do so effectively can result in a 'blow-out', which can lead to a significant loss of containment of oil and gas, causing significant environmental damage and even fire and explosion.

Baker Hughes, a GE Company (BHGE) – The OFS Company

Baker Hughes was formed in 1987 with the merger of Baker International and Hughes Tool Company – both founded over 100 years ago. In 1907, Reuben C. Baker developed a casing shoe that modernised cable tool drilling. In 1909, Howard R. Hughes, Sr. introduced the first roller cutter bit that dramatically improved the rotary drilling process. Over the ensuing eight decades, Baker International and Hughes Tool Company continued to bring to the industry innovative products in well completions, drilling tools and related services.

Both Baker International and Hughes Tools were listed on the New York Stock Exchange and in 1987, when facing continued low oil prices, agreed to merge in a stock transaction valued at $460 million. The merged company, which would be known as Baker Hughes Inc., would be the second-largest oilfield-services operation in the world with annual revenues projected at about $2.4 billion.

Since 1987, Baker Hughes acquired and integrated numerous oilfield services pioneers, acquiring specialist capabilities in twenty business lines servicing the oil and gas industry.

In 2014, Halliburton, a rival, agreed to merge with Baker Hughes in a stock and cash transaction valued at $34.6 billion. The companies cited highly complementary product lines, global presence and significant synergies. A deal was agreed between the two companies, but subsequently fell afoul of anti-trust regulations and was eventually scrapped in 2016.

In 2017, General Electric, already an established player in the oil and gas sector and a leader in specialized equipment and data was looking to focus more on the sector, announced it would acquire 62.5% of Baker Hughes. GE consolidated all its oil and gas related businesses into a new company to be called “Baker Hughes, a GE company” with annual revenue of $32 billion.

BHGE has grown to become an influential player in the global Oil & Gas sector. It has been strategically very active particularly in the oil rich Middle East region with key offices in Dhahran, Saudi Arabia and Abu Dhabi in the United Arab Emirates.

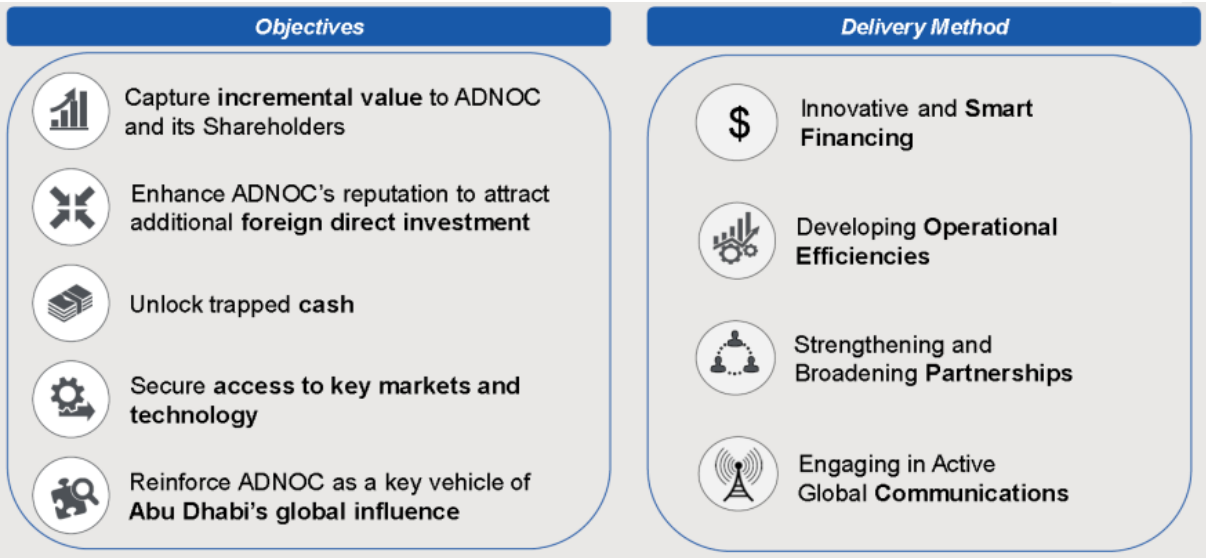
ADNOC Group

Oil was first discovered in the UAE in 1958 after a thirty-year search. The first well was completed in 1960 and produced 3,674 barrels of oil per day. Since that discovery, the economies of the countries in the Gulf Cooperation Council (GCC) region have relied heavily on hydrocarbon revenues as a source of national income. About 65% of the UAE government’s revenue and a third of the country’s GDP comes directly from the production of oil and natural gas. Today, the UAE ranks seventh in the world by proven oil reserves and twelfth by annual oil production, producing approximately 3 million barrels of oil (four per cent of global crude production) and 10 billion cubic feet of natural gas per day.

Over 90% of the country’s petroleum reserves are located in the Emirate of Abu Dhabi of which ADNOC Group is the steward, having been established by the government of Abu Dhabi in 1971. The influence of the petroleum industry and ADNOC on the economy of the UAE and that of the Emirate of Abu Dhabi is highly significant.

In February 2016, His Excellency Dr Sultan Al Jaber was appointed as ADNOC Group CEO. Shortly after his appointment, Dr Al Jaber embarked upon a fast-paced and comprehensive transformation program, leveraging the country’s premier status in competitiveness and as a regional hub for foreign direct investment. On July 10, 2017, ADNOC announced the next step of its 2030 strategy with an expansion of its partnership model and a more proactive approach to managing and optimising its portfolio of companies and assets as it responds to increasing global energy demand and growing market competition. The stated goal was to generate significant value for the company and the Emirate of Abu Dhabi. Exhibit 9 shows ADNOC’s transformation program objectives and the preferred delivery methods.

Exhibit 9
ADNOC Transformation Program



Source: Moelis and Co.

Speaking at the 38th annual Oil and Money Conference in Abu Dhabi in October 2017, Dr Al Jaber said:

> *"By working together in smarter, more cohesive ways, the global oil and gas industry can weather any challenge the future brings, reinforce our resilience and create enduring value. To deliver the next wave of growth we are actively seeking fast-acting partners who can deliver access to high growth economies; forward-looking partners, who can apply the latest technology to our upstream, midstream and downstream operations and financially savvy partners, including private equity and institutional investors, who can deploy long-term capital for attractive, sustainable returns."*

To this effect, ADNOC announced a series of deals across the oil and gas value chain, setting out a challenging vision and environment from the outset.

Exhibit 10 provides a list of deals completed by ADNOC to unlock value from its assets. In total, ADNOC raised over $14.0 billion in two years between 2017 and 2019. ADNOC Group is particularly unique in the upstream space as it had the role of both the operator through its various subsidiaries, and the driller through what was formerly known as the National Drilling Company, one of the key assets under review for ADNOC as part of the program.

Exhibit 10

ADNOC – Unlocking Trapped Value

Date	Description	Amount	Type of divestment
Oct-17	Bond issue backed by the Abu Dhabi Crude Oil Pipeline	$ 3.00 billion	Local and international investors
Dec-17	IPO of ADNOC Distribution on the Abu Dhabi Stock Exchange	$ 0.85 billion	Local and international investors
Oct-18	ADNOC Drilling – BHGE deal	$ 0.55 billion	Strategic partnership
Jan-19	ADNOC Refining, OMV and ENI form strategic partnerships and a new JV	$ 5.80 billion	Strategic partnerships and JV
Feb-19	KKR and Blackrock invest in ADNOC Oil Pipelines	$ 4.00 billion	International investors
Apr-19	Abu Dhabi Pension Fund invests in ADNOC Pipelines	$ 0.30 billion	Local investment fund
Total		**$14.50 billion**	

Source: ADNOC Press Releases

ADNOC Drilling

Established in 1972, ADNOC Drilling was a wholly-owned subsidiary of ADNOC and provides drilling rigs and associated services to ADNOC Group companies as the sole rig provider in Abu Dhabi. ADNOC Drilling has grown to be the largest drilling company in the Middle East, operating a fleet of over 90 rigs that have drilled over 7,200 wells to date.

Drilling of petroleum wells usually contributes to over half the total cost of oilfield development projects. The establishment of ADNOC Drilling represented a significant horizontal diversification, which allowed ADNOC Group to internalise a significant cost centre, in addition to developing in-house capabilities and expanding its operations along the value chain. This diversification also provided a perfect fit with ADNOC's social objectives of creating value through developing in-country skills and capabilities.

Deal Rationale

ADNOC Drilling only provided the drilling scope of a well, leaving the critical and high-value scope of drilling services to the international OFS providers. ADNOC wanted to transform its drilling business into an integrated drilling and OFS provider so that they could deliver a well from start to finish.

Internalising such skills would mark a significant improvement in ADNOC Drilling's range of services and capabilities. Operating as an Integrated Drilling Services (IDS) company was expected to be more efficient when compared with the conventional model of procuring the rig and the services via

separate contracts which would bring with them significant duplication of systems. Through a single, integrated team, wells could be completed in reduced time. Removal of additional contract interfaces would allow seamless operations and cut operational costs, delivering additional value to ADNOC.

Deal Structuring

ADNOC intended to transform ADNOC Drilling into a leading 'best-practice' IDS provider. This transformation had to achieve all the three aims, namely value creation and realisation, partnership and efficiency improvement. Transforming it from a rig-only contractor to an IDS provider was a concept that started with a blank sheet of paper and required:

- Evaluation of the strategic, industrial and financial objectives of the transaction.
- Mapping out all the strategic options ranging from organic growth, stake sale, JV, commercial partnership and acquisitions.
- Assessment of the pros and cons and value creation for each alternative and testing them with various stakeholders, e.g., an organic build-up of capabilities would not achieve partnership and acquiring an OFS provider would not deliver value realisation.
- Formulation of the transaction structure to ensure that the partner is incentivised to enable ADNOC Drilling to become self-sustainable and a best-in-class IDS company.

ADNOC decided the optimal structure would be to form a strategic partnership with a leading world-class partner conditional on acquiring a minority stake in ADNOC Drilling. This structure would incentivise the partner to align with ADNOC in all the risks and rewards and grow the business together.

The oil price drop had depressed drilling day-rates globally, leading to widespread concern in the drilling industry. Several reputable drilling businesses had gone bankrupt. These conditions meant that for ADNOC, deal achievability and valuation expectations were ambitious. Furthermore, both, ADNOC and ADNOC Drilling had never been involved in such a transformative transaction previously, which made deal preparation and execution a challenging endeavour.

Moelis, who were advising ADNOC on the overall transformation project, were retained as exclusive financial advisor to ADNOC on this strategic transaction.

Deal Preparation

To prepare for the deal, ADNOC Drilling needed a strong equity story to be built, the existing commercial arrangements with its clients required refinement and codification, and a plan needed to be developed to optimise the capital structure in order to enhance its attractiveness for potential investors/partners. The company had both an existing stable business as well as significant upside potential. However, the frameworks (including contractual agreements) to support these distinguishing features had never been fully formalised and had to be strengthened given the primarily related-party driven business model.

The preparatory work required ensuring that all business dealings were captured in legal agreements to quantify their value and provide comfort to potential investors. Furthermore, the company had negligible debt (through a shareholder loan) and, as such, the capital structure had potential for optimisation.

The equity story was drafted to showcase the compelling features of the business:

- A robust and stable business as the sole drilling contractor in Abu Dhabi with a young fleet that was being utilised and contracted in its entirety.
- Upside potential for the existing business as it planned to grow its conventional drilling activity by 40% by 2025 as well as introducing a new stream of revenue through the drilling of high-value unconventional resources.
- The ability to leverage the business for additional liquidity in future.

- A favourable return model for investment providing through-cycle stability for both its shareholders and clients.
- Ability to value the business contained within Abu Dhabi in addition to the option and opportunity for future international expansion.

These features justified the addition of 'premia' to ADNOC Drilling's valuation vis-à-vis that of its international peers as well as to develop a business case to secure support from ADNOC and its group companies.

Deal Marketing

ADNOC decided that the priority was transforming and upskilling the business and therefore a number of potential partners were identified with the capabilities ADNOC was seeking to integrate and embed within ADNOC Drilling. In the words of Mohamed Al Aryani, Director of ADNOC Drilling,

> *"Our Group CEO, Dr Al Jaber, is a firm believer in strategic partnerships and the great value they can bring to ADNOC Group companies. Our intention is to internalise new capabilities that the partner will bring in an accelerated manner and to support the building of local capabilities and talents in new key segments."*

A strategic partner could bring significantly more value than a financial sponsor could; particularly if the partner were a top tier OFS company with a global network, experience in Abu Dhabi, extensive R&D strength and transferable human capital. This approach helped to narrow down the number of preferred partners to only a select few.

As is customary in a competitive M&A process, Moelis, as the sell side advisor, contacted these potential partners through a Process Letter and brief marketing materials to initiate discussions and engagement. The Process Letter invited offers from the selected OFS companies wherein they would be required to provide a valuation and non-binding offer for a minority equity stake alongside demonstration of their value proposition for working together as an integrated company. In the words of Al Aryani,

> *"This was a ground-breaking deal. It would be the first time in the industry that a service company would see significant value in a drilling company to invest in it."*

A partnership would allow ADNOC Drilling to offer integrated services (rig and services) as one company. The chosen strategic partner would have exclusivity to supply ADNOC, at affiliate pricing, with high-value specialist technology, tools and equipment (subject to remaining competitive), but would compete with other providers for other equipment. The deal would not offer any guarantees for minimum business to the partner. The deal rationale was to allow ADNOC Drilling to be more competitive and efficient when considering the sum of the parts, and the benefits the partner could enjoy were entirely based on this efficiency improvement.

However, the deal didn't come without its strategic concerns. ADNOC was concerned that:

- Integration between drilling and services was "not the industry norm", and OFS companies, being service providers, may not want to become a drilling company.
- Uncertainties over the capabilities of potential partners – who could offer the most of what ADNOC sought, if not everything.

The OFS providers were reluctant to expose their primary competitive edge, that is, their intellectual property (IP). Any deal with ADNOC would require integrating their knowledge, IP, skills as well as highly-trained specialist personnel with ADNOC Drilling to deliver on ADNOC's requirement of building internal capabilities. However, the ADNOC Group companies retained the right of awarding separate drilling and OFS contracts to anyone. This created a risk of exposing their IP to their competitors through ADNOC Drilling. They were concerned that:

- Building internal capabilities of ADNOC Drilling to transform into an IDS provider could create a future competitor for themselves
- Sharing IP with a potential future competitor could expose the OFS providers to the risks of losing IP control

- Transferring key personnel with significant experience to ADNOC Drilling could weaken their competitive edge in the country and potentially the region to other clients.

A common ground and a shared vision were critical in order to overcome and mitigate these concerns.

The Present

2017 was a challenging year and the international drilling and oilfield services markets were firmly depressed, as noted above. Offshore rig utilisation had dropped from 80% in 2014 to below 50% by mid-2016. In the prior two years, BHGE's revenues had dropped by 32% and 20% respectively (see the financial statements in the Appendix).

Baker Hughes was still recovering from the 2014-2016 failed merger with Halliburton. However, there were some important messages from that failed deal. It was increasingly difficult to monetise the 'deal synergies' and economies of scale in an extraordinarily challenging and shrinking market. Investment in the industry had fallen by ca. 25% for two consecutive years. Furthermore, in order to identify and maximise synergies, it had to be structured as an M&A transaction between two large companies; something that had already fallen afoul of the regulators. Opportunities and options were scarce, and the industry was still cutting costs to the bare bones and waiting to weather the downturn.

It was in this context that BHGE received the Process Letter from Moelis and ADNOC.

Ayman and his team were excited to see the invitation to participate in the process and immediately realised that this was one opportunity BHGE could not let go. In his words at the time:

> *"The downturn meant that we needed to think and do something different, more creative, in order to recover. This deal is a great idea. The credit goes to ADNOC and Dr Sultan Al Jaber for bringing this opportunity to the table. I had a gut feeling that if we win this, it has the potential to become a great success."*

From Ayman's perspective, the Middle East as a region was the perfect place to enter into a deal of this nature. GDP growth in the region had been steady. Population growth and demographics were favourable as a young and well-educated workforce was available. The government was also adopting policies to create an environment attractive for FDI.

Specifically, for BHGE's business, drilling activity in the region had continued almost unchanged and had in fact, increased in Abu Dhabi despite having come to a screeching halt elsewhere in the world. BHGE continued to serve ADNOC and other regional National Oil Companies (NOCs). Horizontal M&A deals were unlikely after the failure of Halliburton deal. These considerations left the uncharted territory of a vertical deal a desirable proposition for BHGE.

Both Baker Hughes and its parent, General Electric, had a long history and experience in M&A deals, which they had used to grow their respective businesses in the past. As such, the required expertise lay within their organisation to manage the process of the deal offered by ADNOC.

For Ayman, the decision to engage with ADNOC in further discussions was easy, but convincing executive management was less so.

> *"Many people thought that it would not work. However, we had a total conviction within our team that we should go after this deal."*

Once the decision was made to engage with ADNOC, Ayman set about assembling a team of experts. Some familiar faces to ADNOC from other business dealings, and they understood the requirements of ADNOC. He believed that this would make discussions and negotiations with ADNOC friendlier.

Ayman believed that adopting a strategy based on finding a fit with ADNOC's vision (and balancing its goals and objectives against ADNOC's) would be the best way to approach the negotiations. He focused early on with developing the concept of this deal rather than merely quantifying potential synergies. He realised that for meaningful synergies to materialise and be monetised, the underlying concept of the deal must first be successful.

As these discussions continued, BHGE ultimately agreed to build and develop ADNOC Drilling's internal capabilities as desired by ADNOC, which would require a transfer of knowledge and skills from BHGE over to ADNOC.

Hatem Haidar, Global Operations Director for Business Development, BHGE said,

> *"The backbone of our business is to make current technology obsolete through innovation and research. BHGE owns over 15,000 patents and has a well-established global supply chain, specialised manufacturing facilities and software development centres. As such, the transfer of our execution capabilities to ADNOC Drilling is complementary to our capabilities and does not change who we are."*

For BHGE, the valuation of ADNOC Drilling was quite challenging, as it was a privately-held company with material customer concentration (almost entirely related party). ADNOC demanded a valuation premium for ADNOC Drilling based on its sole access to a secure market, drilling program visibility and the differentiating business model between ADNOC Drilling and ADNOC's operating companies which ADNOC believed offered protection for ADNOC Drilling's revenues.

To generate a base valuation of ADNOC Drilling, BHGE adopted multiple valuation methods, such as EV/EBITDA multiples, discounted cash flow (DCF) and industry comparables approaches.

- The deal was structured to align with the rig- and well-activity projections. Future revenues were based on the new business capturing at least 30% share of the total market over the first three years of the deal and growing gradually thereafter.
- The process, based on past performance and future cash flows projected by ADNOC, returned a valuation that was close to the final figure of $11 billion (equivalent to $550 million for the offered 5% equity stake).
- To mitigate future revenue risks and in order to bridge the valuation gap, a deal structure was agreed with ADNOC that included an activity and milestone-based deferred consideration mechanism, beginning in 2023, and linked to the development of ADNOC's new conventional and unconventional energy programme.

The valuation, along with BHGE's free cash flow for 2018 would influence BHGE's bid for ADNOC Drilling's equity. The financial statements provided in the Appendix show BHGE's income and cash flow statements for the 2015-18 period. Exhibit 11 provides valuations of ADNOC Drilling's international peers, produced by Bloomberg.

Exhibit 11

Valuation of Large International Drilling Companies (2018)

Drilling Company	Size (No. of rigs)	Valuation	EV/EBITDA	Source
ADNOC Drilling	91	$11.0 billion	Not available	Deal announcement, October 2018
Ensco-Rowan	82	$6.0 billion	20.6	Bloomberg, 2018
Transocean	48	$12.1 billion	10.4	Bloomberg, 2018
Seadrill	35	$ 6.4 billion	25.5	Bloomberg, 2018
Diamond Offshore	17	$2.8 billion	10.5	Bloomberg, 2018
Noble	12	$4.6 billion	13.3	Bloomberg, 2018

Source: Bloomberg.

Despite the unique market position that ADNOC Drilling enjoyed, some risk factors had to be addressed:

- Risk of ADNOC Drilling losing its exclusivity due to changes to the laws and regulations
- Changes to ADNOC's field development programme and success or failure of new exploration activities could significantly change the future work program which was therefore outside ADNOC Drilling's control.

In order to cover the risks to future business growth, various structure mechanisms were put in place to ensure protection for both parties.

- ADNOC Drilling would support the working capital requirements for building the required tools and inventory while BHGE would continue to support ADNOC Drilling's personnel training as well as transfer of skills and technology.
- BHGE perceived the risk of reverse engineering of its capabilities by ADNOC to be very low due to its reputation and the long-established history of partnering with multinational companies. Legal risks were being addressed in carefully drafted Terms and Conditions to the deal.
- As ADNOC was only offering BHGE a 5% stake in ADNOC Drilling, BHGE insisted on the inclusion of structuring to provide adequate protection as a minority shareholder in ADNOC Drilling.
- It is often difficult to mitigate geopolitical risks in corporate deals. However, BHGE's presence in the region (and the UAE specifically) allowed for managing this risk.

Further questions needed answering, and each had the potential to have a significant impact on the proceedings. BHGE had to decide:

- Is this the right deal for BHGE? Should it enter the drilling business as an investor?
- How much equity in ADNOC Drilling should BHGE offer to purchase?
- How can the valuation premium that ADNOC was seeking for ADNOC Drilling be assessed? How can BHGE be protected against the risk of overpaying?
- What would it mean for BHGE and its positioning in the Abu Dhabi market should it not partner with ADNOC? What about the impact on BHGE of a competitor doing this deal instead of BHGE?

Both Ayman and Hatem analysed, deliberated and weighed the answers to these questions as they put finishing touches to their proposal to be presented to the Board of BHGE.

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Appendix

BAKER HUGHES, A GE COMPANY
CONSOLIDATED AND COMBINED STATEMENTS OF CASH FLOWS

(In million USD)	2015	2016	2017	2018
Cash flows from operating activities:				
Net income	(631)	334	(242)	283
Adjustments to reconcile net income to net cash flows from operating activities:				
Depreciation and amortization	530	550	1,103	1,486
Benefit for deferred income taxes	(96)	39	(304)	(249)
Impairment of trade names / Goodwill	2,080	-	-	-
Gain on disposal of assets		-	-	(171)
Stock-based compensation cost		-	-	139
Accounts receivable	469	278	(1,190)	(204)
Inventories	442	345	392	(339)
Accounts payable	(450)	(256)	303	794
Progress collections	(867)	-	-	(27)
Deferred charges	(87)	-	-	129
Accrued employee compensation and other accrued liabilities	-	(714)	(232)	-
Income taxes payable	-	(292)	(570)	-
Other operating items, net	(113)	(22)	(59)	(79)
Net cash flows from operating activities	**1,277**	**262**	**(799)**	**1,762**
Cash flows from investing activities:				
Expenditures for capital assets	(607)	(424)	(665)	(995)
Proceeds from disposal of assets	30	20	172	458
Proceeds from business dispositions	181	-	20	453
Acquisition of businesses, net of cash acquired	(86)	(1)	(3,365)	(89)
Net cash paid for business interests	-	-	(10)	(505)
Other investing items, net	16	(67)	(275)	100
Net cash flows from investing activities	**(466)**	**(472)**	**(4,123)**	**(578)**
Cash flows from financing activities:				
Net proceeds (payments) of commercial paper and other short-term debt	177	(156)	(663)	(376)
Net proceeds from issuance of long-term debt	-	-	3,928	-
Repayment of long-term debt	-	-	(177)	(684)
Net contribution from parent	(708)	191	1,498	-
Contribution received from GE	-	-	7,400	-
Repurchase of common stock	-	-	(174)	(387)
Dividends paid	-	-	(155)	(810)
Purchase of noncontrolling interest	-	-	(251)	-
Repurchase of GE common units by BHGE LLC	-	-	(303)	(2,099)
Other financing items, net	16	(137)	(184)	(7)
Net cash flows from financing activities	**(515)**	**(102)**	**10,919**	**(4,363)**
Effect of foreign exchange rate changes on cash	(254)	(139)	52	(128)
Increase (Decrease) in cash and cash equivalents	42	(451)	6,049	(3,307)
Cash and cash equivalents, beginning of year	1,390	1,432	981	7,030
Cash and cash equivalents, end of year	1,432	981	7,030	3,723

Source: BHGE Annual Reports 2015-2018.

BAKER HUGHES, A GE COMPANY

CONSOLIDATED AND COMBINED STATEMENTS OF INCOME (LOSS)

(In million USD, except per share amounts)	**2015**	**2016**	**2017**	**2018**
Revenue				
Sales of goods	12,353	9,488	10,898	13,113
Sales of services	4,335	3,781	6,361	9,764
Total revenue	**16,688**	**13,269**	**17,259**	**22,877**
Costs and expenses:				
Cost of goods sold	9,271	7,816	9,402	11,524
Cost of services sold	2,922	2,307	4,644	7,367
Selling, general and administrative expenses	2,115	1,938	2,535	2,699
Restructuring, impairment and other	411	516	412	433
Goodwill impairment	2,080	-	-	-
Merger and related costs	27	33	373	153
Total costs and expenses	**16,826**	**12,610**	**17,366**	**22,176**
Operating income (loss)	(138)	659	(107)	701
Other non operating income, net	100	27	78	202
Interest expense, net	(120)	(102)	(131)	(223)
Income (loss) before income taxes and equity in loss of affiliate	(158)	584	(160)	680
Equity in loss of affiliate	-	-	(11)	(139)
Provision for income taxes	(473)	(250)	(71)	(258)
Net income (loss)	**(631)**	**334**	**(242)**	**283**
Less: Net income (loss) attributable to GE O&G pre-merger	(606)	403	109	
Less: Net loss attributable to noncontrolling interests	(25)	(69)	(278)	88
Net loss attributable to Baker Hughes, a GE company	**-**	**-**	**(73)**	**195**
Per share amounts:				
Basic income (loss) per Class A common share			-$0.24	$0.46
Diluted income (loss) per Class A common share			-$0.24	$0.45
Cash dividend per Class A common share			$0.35	$0.72
Special dividend per Class A common share			$17.50	

Note: 'Baker Hughes' became 'Baker Hughes, a GE Company' in 2017. Therefore, no net income (loss) is attributed to it during 2015 and 2016.

Source: BHGE Annual Reports 2015-2018.