ISBN: 978-623-92201-0-5

VALUATION FOR AN ACQUISITION OF AN OIL & GAS SERVICE COMPANY IN INDONESIA

Muhammad Iqbal and Kin Tjendrasa
School of Business and Management, Institut Teknologi Bandung, Indonesia
*Email: m.iqbal@sbm-itb.ac.id

When global crude oil price faced a significant downturn from 2015 – 2017, many oilfield service companies were struggling to survive. This condition is an excellent opportunity for more prominent oil & gas service companies to consolidate the market by having horizontal acquisitions, taking over the smaller oil & gas service companies, which may lead to a more profitable market with fewer competitors. This horizontal acquisition is one of the strategies that is commonly being incorporated as a growth plan for a company. National Petroleum Services (NPS), a Middle Eastern regional oil & gas service company, is trying to acquire another oil & gas service company which operates in Indonesia as part of its inorganic expansion strategy to Far East Asia region. Although several discussions have been conducted between the executives from both companies, unfortunately, there has not been any agreement was made on the expected transaction value. From the acquirer point of view, it is imperative to resolve the different point of views from both parties to proceed with the acquisition transaction within the specified time frame this year to swiftly enter the market and not missing out the ongoing project opportunities.

COMPANY BACKGROUND

National Petroleum Services (NPS), which is now under National Energy Services Reunited (NASDAQ: NESR), is the largest regionally-owned oil, gas and petrochemical service provider in the Middle East delivering customized well services, drilling and technical support to customers in the Middle East, North Africa (MENA) and Far East Asia region. It also becomes the first and the only regional oilfield service company in MENA region which is publicly listed on the NASDAQ stock exchange. NPS began its operation three decades ago in Qatar, providing well services to Qatar Petroleum. Today NPS provides services to operations spanning across Bahrain, Brunei, India, Indonesia, Iraq, Libya, Malaysia, Oman, Saudi Arabia, Algeria, and the United Arab Emirates, with approximately 1500 employees comprises of 45 different nationalities. NPS is growing strongly through inorganic growth by having strategic alliances, well-planned mergers and acquisitions, key agent selection, and by building long-term service relationships with all of their existing and potential clients.

NPS has established a business entity in Indonesia, which is registered under PT. NPS Energy Indonesia in 2016 to penetrate the Far East Asia market. In 2017 NPS acquired a wireline logging company, PT. Tiger Energy Services ROI, as an entry point to the Indonesian market; and in 2018 NESR acquired NPS along with Gulf Energy SAOC (GES) in a USD 1.1B deal. To develop its footprint and service offerings in Indonesia, NPS is planning to acquire a cementing service company which has been operating in Indonesia. Due to the confidentiality of its status, this company will be called as Company X. This acquisition will provide NPS with an existing infrastructure to enter the cementing market directly, also gives access to local customers base as well as local experience and technical expertise which will help to extend its track record in the oilfield services industry in Indonesia.

MARKET OUTLOOK

Cementing service is one of the core business for NPS in the MENA region. Expanding its cementing service market outside the MENA region is one of the aggressive expansion plans for NPS. The cementing market outlook in Indonesia still looks promising despite the downturn in global crude oil price recently happened. Current oil production in Indonesia is unable to fulfill the increasing domestic demand. The gap between supply and demand so far has to be fulfilled with imports, which become one of the causes of the deficit in the national trade balance. While for gas, the current production is still able to fulfill domestic demand. The domestic demand forecast is still going to increase towards 2050 for both oil and gas, but the government is pushing hard to reduce the dependency from imports and focusing more on boosting internal production to fulfill the gap. Also, to attract new investors to carry out more exploration wells in the area.

ISBN: 978-623-92201-0-5

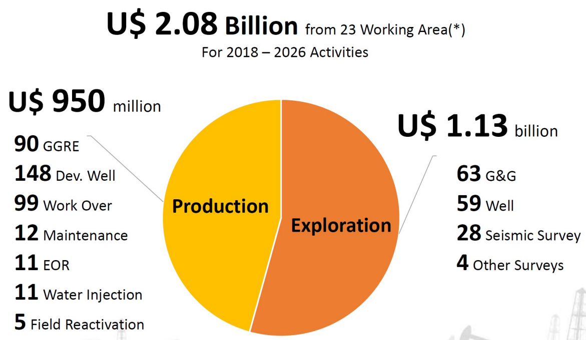

Figure 1. Firm Work Commitment to Drill O&G Wells in Indonesia
(Source: National Seminar, Indonesia's Energy Balance in O&G, SKK Migas, 19 Feb 2019)

The oil and gas operators have confirmed firm work commitments including well-cementing operation from 23 working areas towards 2026. This value is a minimum commitment, and it could be increased with the contribution from other oil and gas operators as well. This commitment shows a supporting fact to the forecast that drilling activity in Indonesia is picking up to boost the national oil and gas production.

The following steps could be used to estimate the market value for well cementing service:
- All new wells will require cementing service as part of its drilling process, it relates to the number of wells that are going to be drilled
- Calculate the average cost per well
- Estimate the percentage of the well cost for cementing service to get the estimated total market value

Luiz Amado from his book titled *Reservoir Exploration and Appraisal* chapter 12.1.5 Drilling Costs (Gulf Professional Publishing, 2013), states that drilling costs will depend on the depth of the well and the daily rig rate. The daily rig rate will vary according to the rig type, water depth, distance from shore, and drilling depth. In Indonesia, several types of well site location exist such as onshore, swamp, offshore shallow-water, and offshore deep-water, which gives variation in the drilling cost involved. Cementing operation is contributing to a range from 3% to 5% of the drilling cost, which gives an estimated market value of USD 111M in 2019, and it grows up to USD 228M in 2023.

Company X has been operating in Indonesia since 2014, and it has a specific line of business, which is well-cementing service and cementing chemical provider. Considered as a new entrant, Company X serves the low tier market with mostly local clients, while the high tier market is still dominated by the major oil service companies which have been operating in Indonesia since many years ago. It was established right by the beginning of the global crude oil price downturn, and it always has negative earnings since then.

Table 1. Financial Overview of the Target Firm

(in USD)	2014	(%)	2015	(%)	2016	(%)	2017	(%)	2018	(%)
Revenue	138,632.00		457,409.00		1,924,770.00		455,026.93		871,228.00	
Direct Cost	(83,018.00)		(36,156.00)		(1,240,473.00)		(16,790.15)		(77,118.00)	
Gross Profit	55,614.00	40%	421,253.00	92%	684,297.00	36%	438,236.78	96%	794,110.00	91%
General and admin expenses	(779,396.00)		(868,625.00)		(889,578.00)		(257,771.19)		(555,658.04)	
Other income/(expenses) net	21,059.00		(51,746.00)		(241,142.00)		(227,501.81)		(356,823.96)	
Operating Expenses	(758,337.00)		(920,371.00)		(1,130,720.00)		(485,273.00)		(912,482.00)	
Operating Profit/Loss	(702,723.00)		(499,118.00)		(446,423.00)		(47,036.22)		(118,372.00)	
EBITDA	(568,699.00)	-410%	(160,232.00)	-35%	(46,054.00)	-2%	213,996.78	47%	131,256.00	15%
Depreciation and Amortizatio	(134,024.00)		(338,886.00)		(400,369.00)		(261,033.00)		(249,628.00)	
Income tax	170,020.00		116,844.00		102,845.00		-		-	
Net Income	(532,703.00)	-384%	(382,274.00)	-84%	(343,578.00)	-18%	(47,036.22)	-10%	(118,372.00)	-14%
Receivable	-		153,547.00		200,328.00		732,958.00		945,680.00	
Total Current Assets	1,547,500.00		510,621.00		651,714.00		1,174,137.91		1,454,099.19	
Total Assets	4,837,158.00		3,610,298.00		3,086,482.00		2,868,291.00		2,935,717.00	
Long Term Liability	1,688,772.00		2,821,982.00		2,887,449.00		3,023,689.00		3,030,985.00	
Current Liability	2,581,089.00		603,914.00		357,588.00		123,712.00		277,007.00	
Net Working Capital	(1,033,589.00)		(93,293.00)		294,126.00		1,050,425.91		1,177,092.19	12%
Net Asset	567,297.00		184,402.00		(158,555.00)		(279,110.00)		(372,275.00)	

From the analysis of the detailed financial report, some of the highlights in the financial overview can be explained as below:

ISBN: 978-623-92201-0-5

- Long term liability has a zero-interest loan from the shareholder, and there is no bank debt involved
- The shareholder had to give loan every year to help to finance the operation of the company which is affecting the debt to equity ratio of the company
- Cementing service is a capital-intensive operation, thus rental costs and depreciation as the majority component in the operating costs
- There are issues with the collection of account receivables due to the type of client (bad debt)
- Increase in 2016 revenue due to selling transaction of several fixed assets (USD 1.5M)

Despite the promising market outlook for well cementing service in Indonesia, unfortunately, Company X has a financial issue that needs to be addressed immediately by considering an exit strategy. NPS sees this as an opportunity for a horizontal acquisition as its expansion strategy.

FIRM VALUATION

One of the challenges of a firm acquisition process is having the right business valuation to estimate the fair market value of the target firm. If it is not assessed correctly, it is prevalent that the process would fail during the negotiation. Aswath Damodaran explains in detail several methods commonly used in business valuation through his book titled *Applied Corporate Finance, 3rd edition* (John Wiley & Sons, 2014). Income-based approach calculates the value of an asset as the present value of its expected return. Market-based approach calculates the value based on prices at which stocks of similar companies are trading in the public market while the asset-based approach calculates the value by restating all of the assets and liabilities of the target form from the historical cost basis to the current value as of the valuation date. Even though in the end, the actual price is ultimately determined by what the company is willing to pay. Discounted Cash Flow is the fundamental methodology used to compute the present value of free cash flows for the target firm over five years period. These five years are called the forecasting period. After the forecasting period, there is also terminal value assuming the business will have infinite life. To estimate the present value of the target firm, it needs a weighted average cost of capital as the discount rate, which is a blend of the cost of equity and the after-tax cost of debt. In other words, it is the average cost of raising the financing for the firm, which already incorporates the business risk, expected inflation, and currency of the cash flows to be discounted. After adding the present value of free cash flows during the forecasting period and the present value of terminal value, then subtract the value of the company by its liabilities to get the fair market value of the target firm.

Before the DCF method was utilized, several negotiation meetings have been conducted, and both parties had their expectation of the acquisition price should be. NPS expressed its aspiration price to be at USD 1.29 M, which is resembling the price of used or refurbished assets if it has to purchase similar to what belongs to Company X. It also has reservation price at maximum USD 1.5 M, which is resembling the asset NBV of Company X. It did not consider the intangible values or goodwill to be included in the pricing. In this case, NPS was more towards the asset-based approach for the business valuation. While for Company X, it has its aspiration price at USD 3.51 M, which is resembling the price of replacement cost with brand new equipment. Moreover, it has its reservation price at anything above USD 1.5M, which is resembling their asset NBV and taking into account their intangible value or goodwill on top of that.

Table 2. DCF calculation

		Year					
		2018	2019	2020	2021	2022	2023
Forecasted revenue growth (YoY)				16.40%	16.40%	16.40%	16.40%
Sales revenue (a)		**871,228**	**1,110,000**	**1,292,040**	**1,503,935**	**1,750,580**	**2,037,675**
Operating cost margin (% from revenue)		84.93%	69.00%	70.42%	71.50%	72.26%	72.69%
Operating cost (excluding DD&A) (b)		**739,972**	**765,900**	**909,827**	**1,075,327**	**1,264,936**	**1,481,282**
DD&A		249,628	262,109	275,215	288,976	303,424	318,596
Operating profit (EBITDA)		131,256	344,100	382,213	428,608	485,644	556,392
Taxes (c)			**20,498**	**26,749**	**34,908**	**45,555**	**59,449**
After tax profit (net income)			61,493	80,248	104,724	136,665	178,348
Net investment (% of revenue)			11.24%	10.14%	9.15%	8.25%	7.45%
Net investment (d)		**114,050**	**124,814**	**131,055**	**137,607**	**144,488**	**151,712**
Working capital		1,177,092	1,235,947	-	-	-	-
Change in working capital (e)		**126,666**	**58,855**	-	-	-	-
Free cash flow (= a-b-c-d-e)			**139,934**	**224,408**	**256,092**	**295,601**	**345,231**
WACC	12.00%						
FCF	$\frac{CF_n}{(1+WACC)^n}$		124,941	178,897	182,281	187,860	195,893
FCF (NPV)	$\sum \frac{CF_n}{(1+WACC)^n}$		**869,873**				
FCF growth ∞	5%						
TV	$\frac{FCF_5\ x\ (1+FCF\infty)}{(WACC-FCF\infty)}$		5,178,466				
TV (NPV)	$\frac{TV}{(1+WACC)^n}$		**2,938,401**				
FMV	$(FCF(NPV)+TV(NPV))-net\ debt$		**1,954,381**				

ISBN: 978-623-92201-0-5

The fair market value result from DCF calculation is 1.95 MUSD. This recommendation value is already taking into account the market risk and expected investment return compared to the risk-free rate, which is incorporated in the WACC discount applied in the calculation of cash flow NPV. This value also has taken into account the on-going concerns of Company X, including the on-going contract value. However, from its financial performance, Company X has a downside in this negotiation because the firm is currently on distressed with negative earnings so the decision has to be correctly made before it could get worse and lead to bankruptcy. While for NPS, if this deal is off, they can still easily switch to work on another acquisition opportunity with other potential oil & gas service companies to align with its inorganic growth strategy, or at least they could also purchase the refurbished equipment available in the market to build their own equipment sets. As a rule of thumb, firms should go ahead with horizontal integration (i.e., acquiring a competitor) if the target firm is more valuable inside the acquiring firm than as a continued standalone company. This integration implies that the net value creation of a horizontal acquisition must be positive to aid in gaining and sustaining a competitive advantage. An industry-wide trend toward horizontal integration leads to industry consolidation. We can see below the illustration for the aspiration price, reservation price, and also the zone of possible agreement (ZOPA) value.

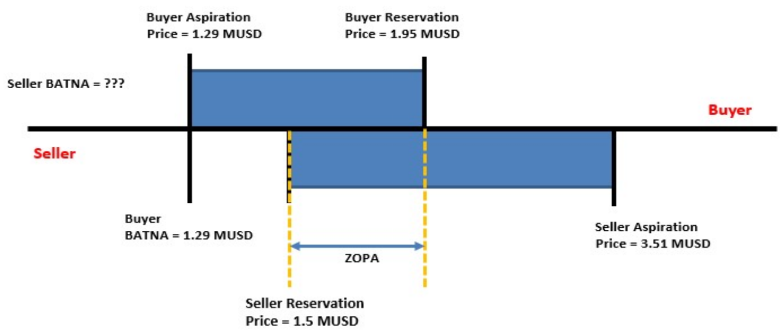

Figure 2. AP, RP, and ZOPA for Acquisition Negotiation

ALTERNATIVES

As an alternative, the aspiration price also can be the best alternative to a negotiated agreement (BATNA) value for NPS if the deal is off. This value is the least cost required for expansion by purchasing the similar used assets available in the market. However, with this BATNA, it might lose the leverage of the intangible values available from Company X, such as experienced personnel, ongoing contract value, and existing client engagement. It can also use the market-based approach on firm valuation based on how the market is valuing similar or other comparable firms to the target firm, which is also called relative valuation. In relative valuation, the value of an asset is derived from the pricing of comparable assets, standardized using a common variable such as earnings, cash flows, book value, or revenues. There are some important criteria as a guideline to find the similar or comparable firms to the target firm, i.e., it has to be the same or similar business, capital structure, credit status, nature of competition, the position of the company, product, markets, management, earnings. If any of these factors are not fulfilled, then the valuation becoming less accurate. The author did not proceed with the market-based approach because other similar companies in Indonesia with similar business size to Company X are also not publicly listed; thus, the data for stock price multiple is not available for the calculation.

REFERENCES

Amado, Luiz, 2013, *Reservoir Exploration and Appraisal, Chapter 12.1.5. Drilling Cost*, Gulf Professional Publishing

Damodaran, Aswath, 2012, Investment Valuation 3rd edition, *Chapter 2 – Approaches to Valuation: 21-31*, New York, John Wiley

National Energy Services Reunited, 2019, *Financial Document Library*. Available from https://investors.nesr.com/websites/nationalenergy/English/3100/financial-document-library.html [Accessed on 5 April 2019]

National Petroleum Services, 2019, *Corporate Profile*. Available from https://www.npsintl.com/Company-Profile/NPS_Profile.pdf [Accessed on 3 April 2019]

NS Energy, 13 Nov 2017, News, *NESR to merge oilfield services providers GES and NPS in USD 1.1B deal*. Available from https://www.nsenergybusiness.com/news/newsnesr-to-merge-oilfield-services-providers-ges-and-nps-in-11bn-deal-141117-5971259/ [Accessed on 27 Jun 2019]

Petroleum Services Association of Canada (PSAC), 30 April 2015, *2015 Well Cost Study*. Available from https://www.psac.ca/wp-content/uploads/wcs_sample.pdf [Accessed on 30 Jun 2019]