Rating Methodology for Oilfield Services Companies*

Background

The oil and gas industry has witnessed dramatic changes both in domestic as well as international markets. Internationally, the industry experienced a surge in investments when crude oil prices began to increase in 2008 and peaked at USD 145/barrel in the middle of the year. With the onset of global slowdown, the prices had subsequently gone down to USD 40/barrel by the end of the same year. The prices then recovered gradually and reached USD 105/barrel around mid 2014, before commencing to decline again to USD 44/barrel in January 2015. Domestically, the changes/removal of fuel subsidies towards the end of 2014, while is not expected to give major blow to the consumer over the immediate term on account of low international prices, the impact would be felt when the international prices increase.

All the above factors are critical from the point of view of oilfield services industry because the demand for this industry is directly proportional to the level of investment in oil and gas sector, which in turn is directly proportional to the oil prices. Thus presently, on account of lower oil prices, the international investment in the oilfield services industry is expected to be impacted adversely. In case of Indonesia, however, some exception could be expected, since the government has been encouraging oilfield investment by introducing measures such as tax concessions via Peraturan Menteri Keuangan (PMK 70 year 2013). The government's policy of actively promoting exploration and drilling activities is on account of declining crude oil production over last decade (currently at 798,000 boepd), attributed to the concentration of the production in matured oil fields. The oil and gas as well as oilfield services industry is thus going through dynamic times.

Oilfield services encompass a wide range of products and services that are used in exploration, extraction, transportation and development of oil and natural gas, including the manufacturing of equipment used by oilfield services companies. These can broadly be divided into four categories:

- Drilling companies: Companies engaged in drilling – penetrating through the surface of the earth – found below the surface of land (onshore) and below the seabed (offshore) to reach oil and gas reservoirs.
- Drilling service providers: Companies providing seismic services such as surveying, interpreting and ascertaining the reservoir geology and other drilling-related services such as directional drilling and mud logging; onsite engineering, operational & maintenance services, manpower supply services; and those providing drilling mud, etc.
- Transportation and logistics services: Transporting oil/gas from the reservoirs to the refinery.
- Oilfield equipment manufacturing: Providing the necessary infrastructure and equipments (such as oil drilling and production tools) required for oil and gas exploration.

The global oilfield services industry, and in particular the drilling business, is characterised by higher capital and technical intensity. Drilling is amongst the larger components of the cost of exploration and production. Other related services and equipments are lower in the value chain due to relatively lower

technical and capital intensity, although the service and product quality required in the oil & gas industry are generally of a higher order as the costs of failure of an equipment might be high for the upstream company. Besides, the industry is characterised by cyclicality as demand for these services is determined by upstream capital spending, which is highly influenced by prevailing and expected oil & gas prices.

The domestic oilfield services industry has a long established history. Indonesia has been an active player in oil and gas sector for nearly 130 years after the discovery of first oilfield in Sumatra in 1885. Further, as per regulations, a majority of onshore oilfield support services are mandated to be carried out by domestic companies. As a result, the oilfield services industry is well developed with integrated and non-integrated players offering services across a wide spectrum of the oil and gas upstream value chain. In addition, a number of multinational players also operate through their entities domiciled in Indonesia. With presence of numerous domestic players as well as major international players, Indonesia has adequate technological capability and economies of scale to manufacture offshore/onshore drilling equipment, such as drilling rigs, though they are imported as well.

With exploration moving into deepwater areas, Indonesian players are gradually looking at building/acquiring assets that can operate in these regions. Operating margins for rig-owning companies tend to be high in case of highly capital and technically intensive segments such as drilling, but net margins vary depending on capital-related charges. Drilling companies also employ the in-chartering model to reduce the financial risks associated with asset ownership. These players have significantly lower operating margins compared to rig-owning companies, but capital employed in the business is correspondingly lower and hence, they may even have higher returns on capital employed at times. On the other hand, operating margins for other oilfield services vary depending largely on the technical intensity of operations and criticality of equipment to the exploration and production process.

In ICRA Indonesia's opinion, the key determinants of the business risk profile of oilfield services companies are their scale of operations and diversity of fleet/products/services offered, technical sophistication of products/services, market position, geographic and customer diversity, operating track record and utilisation levels. ICRA Indonesia's assessment also factors in the company's financial position and cost structure, asset acquisition policies, debt maturity profile, forex risk management systems, ability to generate retained cash flows to fund capital expenditure and off-balance sheet exposures. ICRA Indonesia also assesses the issuer company's management for its growth plans, risk appetite and financial policies.

Business Risk Profile Assessment

Scale of Operations & Fleet Profile

The scale of operations of an oilfield services company depends on the size, profile and vintage of the rig fleet. For oilfield equipment manufacturing companies, it depends on the diversity of product profile, economies of scale and ability to sell the products in the international market. With a large fleet and a diversified asset base encompassing rigs for onshore, offshore (shallow water, deepwater), etc., a company is able to provide drilling services in a variety of geologies. Hence, a large asset base in the contract drilling industry generally implies a larger and sustainable revenue base, profitability and cash flows. Given that the demand-supply and pricing scenarios for different segments in the oilfield services industry are not perfectly correlated, diversity of the fleet profile leads to a more competitive market position due to increased presence across the drilling value chain and technical expertise in different areas of operations. A diverse product/asset profile also offsets the vulnerability of demand and price competition in individual industry segments. Service companies that have effectively diversified their product profiles across the lifecycle of an oil & gas well would generally exhibit more stable revenues and operating profile, which generally lead to higher profit margins.

Day rates also depend on the vintage, with new generation rigs of better technical capability earning a premium over the other rigs. Newer rigs also generally suffer from lower breakdowns, and the rig-owning company generally earns no revenues during periods of breakdowns. Nevertheless, since newer rigs command premium rates, older rigs which have been refurbished and have reasonable technical capabilities continue to remain in operation, particularly in easier geographies. Diversity of asset base is also positive from the point of view of ability of the company to compete in terms of cost structure and its ability to obtain financing to undertake capital projects.

Technical Capability

Prospecting and drilling activities are highly technical fields requiring deep knowledge of geology, oil and gas reservoir behavioural characteristic, data interpretation, etc. In the initial phase of exploration, 2D and 3D seismic surveys are conducted over vast areas of the block to identify prospects, post which exploration drilling is undertaken. Besides the significant technical capability involved in conducting 2D and 3D seismic surveys and data interpretation thereof, drilling activity is characterised by extremely high technical intensity and hence, significant technical expertise is required for operating a rig. As exploration enters deeper waters, the drilling becomes more complex, costly and time consuming (ranging from months to years compared to days for onshore drilling). Offshore drilling bears greater risks and hazards (marine, weather, pollution) and is accordingly more expensive. Recent developments in the technologies of drilling have led to advanced techniques such as directional drilling and horizontal drilling for which specific expertise is required. These techniques are also used for extraction of non-conventional hydrocarbons (such as coal-bed methane).

A company's technical capability is generally reflected in its product offerings, operating track record and its ability to generate sustainable operating margins. Players operating more technically sophisticated rigs (mainly deepwater) earn higher day rates and have better profitability margins. On the downside, more technically sophisticated rigs warrant higher operational and maintenance expenditure. Technical capability also implies having on board the qualified technical personnel for smooth operation of the equipment.

Market Position

A company's market position is determined relative to the segments within the oilfield services value chain that it caters to and the geographies that it serves. Strong presence in a particular product or service or in a particular geography may lead to a highly competitive business position. Indonesian oilfield services providers generally have a limited strength, when compared with International players, with respect to geography as they mainly operate within Indonesia and on western side in particular, since the oil fields in the eastern part as yet remain less explored.

High customer concentration: About 75% of the exploration and production activity takes place in western Indonesia. Most of the production is carried out by the foreign contractors under production sharing contracts (PSC). The largest producer was Chevron Pacific, with a share of 47% in the production (as of January 2013 – Price Waterhouse Coopers report on Oil and Gas Industry 2014). State-owned PT Pertamina (Persero) had only 18% share. Overall there are around 9-10 producers. Day rates at which these producers hire the rigs move largely in tandem with the global day rates and hence, are exposed to cyclicality. With just 9-10 producers, customer concentration is high and competition is tight so that some of the rig owners could be exposed to the risk of low fleet utilisation rates and financial distress, especially under current scenario when the low crude oil prices are expected to adversely impact the upstream activities. Under this scenario, the ability of a rig owning company to operate internationally will be viewed favourably.

Extent of regulatory protection: Oil and gas contained within Indonesia's jurisdiction is controlled by the government (through PSCs usually), through its special task force for upstream oil and gas business activities (SKK Migas) and downstream regulatory agency for oil and gas (BPH Migas). The regulations have been favorable to the domestic players in case of onshore oilfield activities in that they stipulate most of the onshore activities to be executed by the domestic players only. This shields

the players from additional international competition, though the domestic competition remains intense. However, similar stipulations do not exist for offshore players, who can comprise foreign players operating through their domestic subsidiaries. Overall, since the regulatory framework has been changing to cater to the developments within the oil and gas sector, the players within oilfield services industry too are susceptible to the dynamic regulatory environment.

Geographic diversity: Geographic diversity reduces vulnerability of revenues and profits to drilling activity in a particular region. Drilling activity varies across geographies based on presence of exploitable reserves, economic viability, regulatory and environmental factors. Majority of producers being foreign players, do have a presence in international markets. However, majority of oilfield support services have their operations concentrated within western Indonesia, where the production activity mainly exists. Given the relatively high regulatory risk associated with the upstream drilling business in Indonesia and concentrated demand (within western Indonesia for oilfield service providers), geographic presence outside Indonesia can reduce volatility of revenues. Further, greater geographical presence is also positive for the company's competitive positioning. Besides, presence in diverse regions leads to higher exposure to different geological conditions from the drilling perspective. From the point of view of oilfield equipment manufacturers, greater geographic diversity leads to more stability of revenues and access to bigger markets leading to a higher scale of operations, improved economies of scale and improved profitability. Production of many of these products is concentrated with certain globally reputed players charge a premium for their products. Hence, domestic players who are able to produce these products at lower cost can gain through entry into international markets.

Day Rates & Utilisation

The drilling industry inherently is capital intensive in nature. Drilling rigs can cost from several million dollars (onshore) to several hundred million dollars (offshore). The high capital intensity of the business is, in fact, the biggest risk faced by the drilling companies as asset acquisition entails a significant amount of debt funding. Deployment of rigs at low day rates leads to pressure on the returns and liquidity position of these entities. On the other hand, lack of deployment of a rig is also a significant risk. Globally, there have been examples of the companies that acquired rigs during the up cycle at a high capital investment but were unable to contract the rigs with exploration and production (E&P) players in a timely manner faced pressures on cash flows and profitability. The profitability of a drilling company is dependent upon the utilisation levels of the rigs, which are, in turn, dependent upon the global crude prices and the demand of rigs. Further, the operational performance of the rigs also attains importance due to the high capital intensity of the business and the fact that day rates for a rig are of the order of thousands of dollars. Hence, each day that a rig passes without being contracted or utilised has significant opportunity costs.

Asset Acquisition/Chartering Philosophy

There are two types of business models in the drilling industry: (i) Asset ownership model, where the operator owns and operates the asset (ii) In-charter model, akin to that prevalent in the shipping industry, wherein the operator does not own the asset on its books, but acts as the operator or an agent, while the operations are handled by either the charterer or the asset-owning company or a combination of the two. Though rig ownership entails large capex, day-to-day expenses are of a lower order and comprise largely employee costs, fuel costs, insurance costs, etc. Due to lower day-to-day expenses, operating margins in the business are moderately high. For asset-owning company, a large portion of the cash flows of the contract constitute its operating profitability, with the major costs being the capital-related costs (depreciation, interest on debt, etc.). On the other hand, in the in-charter model, the operator earns only a small spread from the overall contribution of the contract, with the rest of the contribution being the cost of chartering the rig, which goes to the asset-owning company. Companies may charter rigs and earn a spread for managing day-to-day activities, operations, liaisoning with domestic E&P companies, etc. Though the latter model leads to lower profitability vis-a-vis asset ownership, it also involves low capital intensity and funding risks and moderate returns depending on the spread between in-charter and out-charter rates. On the other hand, the former

model leads to high profitability but returns may be lower at times due to high capital intensity and high funding risks, particularly in the initial years. However, once the debt is repaid, the profitability and cash flows for the asset-owning company improve manifold.

ICRA Indonesia assesses the philosophy of the company's management with regard to its asset acquisition policies and the nature of its cash outflow vis-a-vis its revenues. For asset owning companies, cash outflows which correlate closely to their earnings profile for an extended period of time are favourable. For companies operating using the in-chartering model, established relationships with global players leading to access to a diverse rig base is favourable.

Cyclicality

Demand for oil field services is determined by upstream capital spending, with the latter influenced by prevailing and expected oil and gas prices. Though energy prices have been elevated for the past few years leading to increase in E&P activity, the capacity additions in the industry have also been aggressive exposing the industry to cyclicality. Additionally, as E&P activities around the world moves to frontier and difficult geologies such as deepwater from the more well-explored and exploited onshore and shallow water, the oil field services industry catering to the latter segments experiences the change in demand dynamics. Consequently, the industry's performance is prone to cyclicality of demand, with various products and services experiencing different levels of cyclicality. Movement in day rates is a function of demand-supply level for the drilling rigs, which are influenced by the availability of rigs (rig count), capacity utilisation and prevailing oil/gas prices. Consequently, rigs contracted longer during a period of low prevalent day rates earn lower returns for a prolonged period.

Management Quality

All debt ratings necessarily incorporate an assessment of the quality of the issuer's management as well as the strengths/weaknesses arising from the issuer's being a part of an established group of companies. Also of importance are the issuer's likely cash outflows arising from the possible need to support other group entities, in case the issuer is among the stronger entities within the group. Usually, a detailed discussion is held with the management of the issuer to understand its business objectives, plans and strategies, and views on past performance, besides the outlook on the issuer's industry. Some of the other points assessed are:

- Experience of the promoter/management in the line of business concerned
- Commitment of the promoter/management to the line of business concerned
- Attitude of the promoter/management to risk taking and containment
- The issuer's policies on leveraging, interest risks and currency risks
- The issuer's plans on new projects, acquisitions, expansion, etc.
- Strength of the other companies belonging to the same group as the issuer
- The ability and willingness of the group to support the issuer through measures such as capital infusion, if required.

Financial Risk Profile Assessment

The objective here is to determine the issuer's current financial position, its financial risk profile and financial flexibility. Some of the aspects analysed in detail in this context are:

Cost structure: Operating charges and capital servicing charges would largely constitute the cost structure of a drilling service provider, which contracts assets to an upstream company. Operating charges mainly comprise technical personnel and crew expenses, repair and maintenance expenditure, insurance for equipment breakdown and administrative expenses. Capital costs comprise interest, depreciation and in-charter expenses (in case the asset has been in-chartered from another player). Insurance for breakdown is important as a company can lose significant revenues if a rig is non-operational for a longer period of time. Further, dry docking expenditure is also incurred at periodic intervals (typically every 3-5 years).

Operating charges and dry docking expenditure are largely a function of the age of the asset and regulations. Capital servicing charges are influenced by the acquisition cost, funding strategy adopted for fleet acquisitions and residual life of the fleet. Highly debt-funded new rigs will entail higher capital servicing charges. The operating day rate bid by the drilling services provider will generally account for both the operating charges and capital costs, while non-operating day rates will account for fixed operating charges and capital costs.

Higher the cost of the rig, lower will be the ability to weather the cyclical downturn in day rates. A key metric to capture this risk is to compute the effective day rate (EDR) – the weighted average day rate based on the expected operating, non-operating, moving and breakdown hours being earned by each rig and compare it with the current day rates and anticipated day rates during the next few years based on forecasted demand-supply for the region. Higher the contribution between the EDR/anticipated day-rates and operating and capital costs, better it would be from the rating perspective.

Operating profitability and returns: The analysis here focuses on determining the trend in the issuer's operating profitability based on the business models (in-chartering/owned assets) and how the same appears by peer comparison. The returns that a company generates on the capital employed/assets are critical to its credit strength. If a rig-owning company overpays for asset acquisition, its returns will suffer unless in case of synergies with existing fleet. Ability to generate returns across the cycle is also critical to its credit strength.

Financial policies to acquire assets: Generally, drilling rigs are funded with a high leverage because of relatively high comfort of the lenders with such a funding strategy arising from the liquid nature of the collateral. However, from the rating point of view, which aims to capture the timeliness of debt service rather than the ultimate recovery by the lenders, it may not really be a source of primary comfort as there can be marginal time delays (largely procedural in nature) in taking possession and disposing the same. Hence, higher leverage does translate to higher financial risk profile, albeit may not be of the order of manufacturing companies (including oilfield services manufacturing companies). ICRA Indonesia thus assesses the financial policies of the issuing management with regard to its overall capital structure, keeping adequate cash balances to act as a cushion during downturn and maintaining certain level of coverage indicators (Total Debt/OPBDITA, OPBDITA/Interest, DSCR, etc) and gearing ratios.

Debt maturity profile: Long maturity profile of the loans can partially offset the risk associated with high financial leverage, as the payback period for rig acquisitions can be long. In this context, the ability of the issuer to access long-term loans from foreign lenders is assessed as the appetite of the Indonesian lenders for long-term foreign currency loans is limited. Besides, funding of the loan in a currency where most of the revenues are generated could translate to competitive interest costs, thereby lowering the cost of capital. As oilfield services business is global in nature, access to long maturity loans at competitive rates is considered a key competitive advantage.

Financial flexibility: ICRA Indonesia also assesses the financial flexibility enjoyed by the issuers such as refinancing ability, access to unencumbered fleet, liquid investments etc., which can also partly offset the high financial risk profile.

Retained cash flows through the business cycle: An oilfield services company's cash generation is significantly impacted by the inherent volatility of day rates, resulting in volatile operating cash flows. Given the capital intensity of the industry, most companies have significant cash needs to re-invest in new assets. A stable and strong retained cash flow (RCF) helps liquidity and provides flexibility to invest in new rigs. Besides, positive retained cash flow is an indicator of an issuer's ability to service the debt in a timely manner. Debt protection indicators such as RCF/Total Debt and RCF/Interest are also analysed to see how long it would take for the issuer to repay its debt and cushion available for servicing interest.

Other areas which are analysed include the following:

- **Trends in receivables**: Considering the high customer concentration in the domestic oilfield services industry, cash flow issues may sometimes arise due to delays in clearing receivables from the key customers. Cash flows in one contract may sometimes get affected by dispute in another contract, although not necessarily. ICRA Indonesia analyses the trends in receivables, contingent liabilities arising out of disputes with customers and suppliers and operating track record of the players to evaluate risks to cash flows and its impact on debt servicing.

- **Working capital intensity**: The analysis here evaluates the trends in the issuer's key working capital indicators like Receivables, Inventory and Creditors, with respect to industry peers.

- **Foreign currency related risks**: Such risks arise if an issuer's major costs and revenues are denominated in different currencies. Examples in the oilfield services industry would include revenue receipts in dollar terms and debt repayment in rupiah terms, rendering the payments vulnerable to any sustained appreciation of the rupiah. The foreign currency risk can also arise from unhedged liabilities for companies earning most of their revenues in local currency. The focus here is on assessing the hedging policy of the issuer concerned in the context of the tenure and nature of its contracts with clients (short term/long term, fixed price/variable price).

- **Tenure mismatches and risks relating to interest rates and refinancing**: Large dependence on short-term borrowings to fund long-term investments can expose an issuer to significant re-financing risks, especially during periods of tight liquidity. The existence of adequate buffers of liquid assets/bank lines to meet short-term obligations is viewed positively. Similarly, the extent to which an issuer would be impacted by movements in interest rates is also evaluated.

- **Accounting quality**: Here, the Accounting Policies, Notes to Accounts, and Auditor's Comments are reviewed. Any deviation from the Generally Accepted Accounting Practices is noted and the financial statements of the issuer are adjusted to reflect the impact of such deviations.

- **Contingent liabilities/Off-balance sheet exposures**: Off-balance sheet exposures in the drilling industry may be high as rig acquisitions are sometimes funded through overseas associates, which may require corporate guarantees from the Indonesian entity. In this case, the likelihood of devolvement of contingent liabilities/off-balance sheet exposures and the financial implications of the same are evaluated.

Summing up

As in other manufacturing sector ratings, rating of oilfield services companies involves an assessment of business risk, management risk and financial risk profile. The cyclicality of the oil & gas sector exposes the oilfield services sector to a high business risk profile, although it can be partly or almost fully offset by adoption of prudent business and financial risk mitigants discussed above. The final rating judgment is based on both quantitative and qualitative factors, with more emphasis on future cash flow generation and debt servicing ability.

* Adopted and modified from ICRA Limited's Rating Methodology for Oilfield Services Companies