RATING METHODOLOGY

OIL & GAS COMPANIES/ SERVICE PROVIDERS

MARC

OVERVIEW

For the purposes of analysing ratees in the oil and gas (O&G) industry, MARC Ratings divides the ratees into two groups: O&G companies and oilfield service companies. The O&G companies are further subdivided into three groups: the independent exploration and production (E&P) companies, independent refiners/marketers and the integrated O&G companies. Engaged primarily in the exploration, development and sale of crude oil and natural gas reserves, independent E&P companies are the most susceptible of the three groups to commodity price swings and exhibit significant earnings and cash flow volatility. The search for new reserves at competitive prices is a major ongoing challenge for E&P players given the upward pressure on the cost of acquiring, finding and developing acreage and reserves. MARC Ratings remains ever mindful of the event/execution risk that is associated with investments and acquisitions to replace reserves and its potential consequences on the company's financial and business risk profile.

Of the three groups, the integrated companies tend to have the strongest credit profile by virtue of their breadth of operations (upstream and downstream), geographic diversification and higher earnings stability. In a high oil price environment, margins for refined products decline as the cost of crude oil and other feedstocks increase more rapidly than the prices of gasoline and other products, such as asphalt,

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fuel oils, petroleum coke, and petrochemical feedstock. The higher E&P earnings will help dampen the effect of the weaker refining margins, thus helping to stabilise cash flow.

The link between O&G companies, in particular the E&P companies and integrated companies, with the oilfield service companies gives rise to a significant number of shared industry and business risk drivers. Oilfield service companies provide a myriad of support services to the O&G sector which include contract drilling, platform construction, operation of numerous types of offshore drilling rigs, seismic studies and analysis, and other specialty services including marine engineering and transportation. The business outlook for oilfield service companies is significantly affected by the level of energy industry spending by the E&P companies to replenish its oil and natural gas reserves. A key indicator for this type of spending is the rig count because when drilling and workover rigs are active, many of the other products and services provided by the oilfield services industry become necessary. E&P spending by O&G companies in turn is strongly influenced by expectations about the supply and demand for O&G products and the current and expected future prices for oil and gas.

Factors influencing industry and operating environment of O&G players:

- Government regulations, including environmental regulations, which affect production cost and may limit the quantity of oil and natural gas that may be economically produced.
- Industry regulations that entail licensing and parameters within which the industry operates, which may dictate entry barriers.
- Market growth prospects and/or emergence of new competition (including accessibility of prospects or untapped reserves).
- Outlook for global economic growth.
- The balance between supply and demand as indicated by global inventory levels.
- Potential supply disruptions, including geopolitical developments.
- The degree to which individual OPEC nations and other large oil and natural gas producing countries are willing and able to control production and export of oil.
- Technological advancements that improve total recovery and productivity.
- Prospects for alternative energy and/or substitutes.
- Ability of oil and natural gas companies to gain access to funds necessary to carry out their E&P plans.

The finite supply of global oil resources and increasing finding and development costs are factors supporting long-term oil prices, while short-term oil prices are significantly influenced by changes in global economic growth and OPEC production. This was clearly seen in oil price movements in 2008 where in the first half of the year, prices and global oil consumption moved up together, and then moved down together in the second half because of the shrinking global economy. When oil prices are high, oilfield services investments benefit from an increase in the demand for equipment (e.g. rigs) and services that are needed to extract the resources, which then leads to higher day rates as well as increased utilisation rate of equipment and facilities. When oil prices are low, the highly capital-intensive oilfield service providers face the prospect of low utilisation rates, downward pressure on contract price margins and even idling of capacity.

The landscape of the O&G industry is characterised by high barriers to entry which mainly revolve around high capital requirements and technical expertise. Contracts from major oil companies are only given to companies that have proven their capability in delivering quality works while complying with very strict safety requirements. In Malaysia, companies owned and controlled by Malaysians are preferred over foreign companies, to meet national aspirations in developing the capability and capacity of local O&G companies.

Our rated O&G companies are mainly support service providers to the integrated majors such as ExxonMobil and Shell and the national oil company, PETRONAS. As such, this methodology will generally focus on the support service companies which are involved drilling and drilling waste management services; fabrication or process equipment manufacturing; oil platform maintenance services; engineering, procurement, construction and commissioning (EPCC) of facilities; marine engineering and transportation services. Depending on the terms and conditions of an issuance, our rating approach on O&G issues could fall under corporate credit ratings, corporate debt ratings, project finance or structured finance.

ANALYTICAL FRAMEWORK

MARC Ratings considers the market position of an oilfield service provider in its core oilfield service markets and segments, the defensibility of its competitive position, its geographic diversity, the intensity of competition as well as the barriers to entry for its primary business lines. The customer base of an oilfield service provider typically comprises a state–owned national oil company (or companies where its operations are geographically diversified) as well as multinational oil majors.

MARC Ratings also regards the length of the ratee's relationships with its customers, its success in securing contract renewals from existing customers, the proportion of business secured through competitive bidding, order backlog and new order intake as important indicators of its competitive standing. One way to assess a ratee's strength is to identify its market share relative to its peers locally and, to a certain extent, internationally. MARC Ratings' analysts will also want to know if the products/services are easily replicated and/or substituted, and will simultaneously gauge the competitive strength of other similar players in the same category.

Assessment of Competitive Position	Analytical Focus
Track record	This would attest to the rated entity's level of experience in a particular segment and the ability of the company to deliver its products/services within the stipulated time and budget. A strong track record acts as an entry barrier to other prospective players. Although pricing is a major factor when awarding contracts, many oil majors prefer to work with O&G service providers that have proven track records in terms of ability to deliver on time. For example, efficient service providers usually result in savings, both in terms of time and costs of the project/contract, and would be in a better position to demand higher margins when negotiating for future contracts. How contracts are structured and negotiated, whether fixed price or cost-plus, and the tenure of the contracts are determinants of potential earnings variability and earnings visibility. MARC Ratings looks at the trends in backlog of commitments for future revenue and the expected timeframe for the completion of written orders or firm commitments. MARC Ratings would analyse whether the contracts for services are subject to modification by mutual consent or whether they are cancelable by the customer on short notice without any reason or penalty. MARC Ratings recognises that because of these factors, a ratee's backlog as of any particular date may not be indicative of its actual operating results for any succeeding periods. An exceptionally large increase in the order backlog figure may signal an aggressive competitive stance that could constrict profit margins and limit the ratee's ability to pass on any rising input costs on fixed-price type contracts.
Technical ability	Unique engineering expertise and technical ability usually differentiate a high-end product manufacturer from a low-end manufacturer. However, companies that have tie-ups or collaborations with technically renowned O&G specialists, especially in the international arena, have the opportunity to leverage on the reputation of that party when tendering for new contracts. Acquisitions of new technologies are also viewed favourably if it leads to improvement in the company's competitive position in the industry.

Market diversity	Market diversity helps to mitigate cyclical risks in the core markets. A continued strategy of maintaining a good balance across its entire business portfolio permits the oilfield service provider to focus on its more stable business markets while also remaining ready to develop its cyclical markets when they are strong. This allows the company to weather any downturns in a specific market(s). A ratee which derives a substantial portion of its revenue from foreign activities faces risks associated with their foreign revenue-generating activities. Foreign revenue is subject to certain risks, including those related to foreign exchange movements, border disputes, war, terrorism, civil disturbances, embargo and government policies such as unpredictable or radical changes in tax regulations or investment laws. For instances where the oilfield service provider generates significant revenue or has large local investments in a politically and legally less stable environment than its home country, its exposure in the market could be material to its business operations and financial conditions. Additionally, foreign operations result in accounts receivables or accounts payables that are denominated in foreign currencies and thus subject to fluctuations in foreign currency exchange rates.
Customer concentration	MARC Ratings will assess the company's reliance on order flow either from individual customers or a single contract on hand, and the collectability of receivables from significant customers. MARC Ratings considers any customer who accounts for 10% or more of the ratee's total revenue as significant.
Licensing	The role and importance of licensing, especially in local jurisdictions where the PETRONAS licence is a requisite. It is acknowledged that PETRONAS has preference for locally-based companies with the necessary capabilities, in order to develop expertise and move up local players in the O&G value chain. In Malaysian waters, a vessel operator with Malaysian flagged vessels is likely to have an edge over non-Malaysian flagged operators.
Supply risk	When sourcing raw materials that are exposed to price volatility (e.g. steel), the presence of back-to-back arrangements with suppliers and/or pass-through contract mechanisms with clients are viewed favourably. The former enables the company to lock

	in raw material prices at the start of the contract while the latter enables the company to pass on any price increase to the clients.

MARC Ratings seeks to identify the ratee's competitive advantages as well as challenges or weaknesses in its chosen business lines. The ability of an oilfield services provider to compete in the oilfield services market is a function of its ability to differentiate its product and service offerings by technology, service delivery and the price paid for the value delivered. Success in marketing geophysical services in the O&G industry, for instance, is based on several factors, such as price, crew experience, equipment availability, technological expertise, reputation for quality and dependability, and safety record. Where project-oriented oilfield service providers such as EPCC companies are concerned, MARC Ratings believes the key determinants of competitiveness include its proven track record for project completion while meeting customers' performance requirements and budgetary needs.

Assessment of Operation Risk	Analytical Focus
Track record	In addition to safety track record and international industry certifications, the success of oilfield service providers depends on attracting and retaining highly skilled professionals and technical personnel. Failure to continue to attracting and retaining such individuals could adversely affect the ability of the oilfield service provider to compete in its particular segment. The company may face significant and potentially adverse competition for key personnel, particularly during periods of increased demand for oilfield services. When dealing with O&G entities involved in manufacturing or fabrication capabilities, apart from the normal maintenance and shutdowns, MARC Ratings' analyst will look for instances in which there were any unexpected interruptions to the operations of the plant and how the problem was addressed. Other considerations include determining the capacity utilisation of the plant against its historical performance. For a marine engineering company, other factors that may be considered are the costs of dry-docking and number of dry-docking days.

Insurance arrangement	MARC Ratings will also determine whether the company is sufficiently insured to mitigate risks associated with business interruptions and operations. Apart from the usual insurance policies, the analysts need to identify whether there are particular insurance policies which are able to insure the ratee's operations, products and/or services. Additionally, government regulation/licensing would often involve some sort of incentives for domestic-based companies granted by the government such as reinvestment allowances and exemption on taxes (corporate, import, export) which may be applicable in either the local or export countries.

FINANCIAL RISK ANALYSIS

Financial strength is a function of market share, geographical scope of operations, breadth of products and services, technological capabilities, acquisition trails and financial policy (leverage, target rate of return, forex management, dividends, etc). Where possible, these are usually examined on a comparative peer group basis.

Financial Risk Parameters	Main Indicators/Ratios
Business line segment revenue and profitability	• Revenue (RM mil) • Profit before tax (RM mil) • Profit after tax (RM mil) • OPBIT margin (%)
Diversity of contribution of revenue and profitability	• Net operating margin (%) • OPBIT interest coverage (x) • Segmental information
Working capital, capital expenditure requirement and cash flow/liquidity management	• Free cash flow • Liquidity • Financial flexibility

Assessment	Analytical Focus
Profitability/Earnings performance	A sharp drop in O&G prices results in rapid and substantial reductions in E&P expenditure. Offshore exploration will also be somewhat curtailed but commitments already planned are likely to be carried through. MARC Ratings considers the ratee's performance over a longer term, the impact of cyclical highs and lows on its earnings and margins, and its resilience in past down cycles as well as its ability to adjust its operating cost base in response to a weak revenue environment. The evaluation of the company's profitability and earnings analysis can be determined through the historical and current operating profit margins as well as its growth pattern.
Profitability/Earnings performance	Besides the pace of growth, MARC Ratings also assesses the ratee's performance by evaluating return of profit on assets, permanent capital and equity. These provide an indication of a ratee's ability to generate sufficient returns to enable continuous access to equity and debt funding.
Leverage position and financial flexibility	Evaluation of the company's capital structure and financial policies is an indication of its risk orientation. Other than benchmarking, the extent to which a ratee decides to finance its operations and growth expansion with debt rather than equity will influence the analysts' rating recommendation.
Cash flow protection	MARC Ratings' analysis of cash flow focusses on the company's cash flow from operations and free cash flow. The company's needs with respect to working capital and capital expenditure are taken into consideration in MARC Ratings' assessment of its debt servicing capability. Cash flow protection is viewed from the standpoint of adequacy and sustainability. Accordingly, MARC Ratings considers the variability of future cash flow under various adverse scenarios, including weaker corporate earnings, delinquent trade receivables, as well as changes in interest rates and exchange rates.

MANAGEMENT AND OTHER QUALITATIVE FACTORS

Management is assessed for its role in developing and implementing long-term strategies, and how the company has been able to compete successfully under challenging economic and operating conditions.

Common parameters when assessing the ratee's management and other qualitative factors include:

- Organisational structure, management breadth, historical track record and experience.
- Competence – ability to adjust and cope with changes in product dynamics, business climate and economic environment.
- Quality of middle management.
- Depth – good support in areas of planning, marketing, engineering, production, finance, control, etc.
- Financial risk tolerance/policies.
- Corporate governance.
- Reputation and integrity.
- Independence – professionals or owners.
- Decision-making process.
- Management policies, practices and control.
- Business outlook and strategy.
- Stage of capital investment cycle.
- Analytical adjustments for operating leases (especially for vessel operators).

This methodology should be read in conjunction with MARC Ratings' "Non-Financial Corporates" methodology which is available on our website at www.marc.com.my.

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