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Is growth taking root?

Oil & Gas August 2017

Higher oil prices early in the year helped the OFSE sector recover in Q2 2017, driven by strong growth in North American shale, and the promise of an improvement elsewhere.

Quarterly perspective on oil field services and equipment: August 2017

Higher oil prices early in the year, combined with a lower cost base, helped the oilfield services and equipment (OFSE) sector recover in Q2 2017, especially in the services segment. The US onshore saw continued strong growth building on Q1, and, while the rest of the world has yet to see an upturn, there are signs of improvement here too—despite spells of continued crude weakness over the last few months.

Control of the market slipped further from OPEC's grasp as Q2 got under way, despite continued relatively high compliance to its November 2016 agreement, which, along with Russia, restricted output by 1.8 million barrels per day. This was partly down to rising output from Libya and Nigeria, which were both outside the deal. The OPEC-induced price recovery earlier in the year also proved an opportunity for US producers to lock in prices and continue to drill through Q2, helped by improving technology and reduced costs. The US onshore rig count was up another 60 on the quarter, and the offshore sector saw the first rise in rig numbers since prices began their slide in 2014.

The additional production ate into OPEC's cuts, threatening further price falls, which pushed the group first to extend the deal to April 2018, and most recently to indicate it may be willing to constrain supply for even longer than that, alongside plans to clamp down on overproduction. The recovery in Nigerian output has now been capped and Saudi Arabia has even taken unilateral action to restrict output in August—which together with the other measures helped support prices.

Looking ahead, the OPEC/Russia alliance does seem determined to clamp down on any rise in supply beyond quota limits, with Saudi Arabia particularly motivated to raise prices ahead of its IPO, pencilled in for late 2018. In addition, the next six months are unlikely to see the sort of large volumes added by Nigeria and Libya again. In fact, the major risk is now to the supply downside in Venezuela, where political unrest could eventually threaten oil exports.

Other supportive factors are slowly falling stock levels, and, further forward, the impact of cumulative cuts in capex. Bearish influences on the market include continuing increases in US output, technological advances, rising Libyan output, and questions over longer term demand.

Overall, OFSE revenue was up on the quarter and the year—for the first time since the oil price slide began. The recovery extended to all sectors, although assets were still down on the year. As demand has picked up, margins have also improved for services and equipment, but not for assets, where surplus rig availability, limited offshore activity, and low day rates continue to weigh on the market. The continued crude price volatility means service providers are focusing on increasing operational efficiencies to grow output and lower costs, with US onshore costs still well below pre-collapse levels, despite a recent uptick from higher activity. Returns to shareholders fell early in the year, but, apart from assets, saw some recovery in Q2.

Merger and acquisition activity continued with Schlumberger's planned purchase of a 51 percent stake in Russia's Eurasia Drilling Company, which is Russia's biggest company of its sort—operating more than 650 offshore and onshore rigs, including four of the five rigs in the Caspian Sea. In addition, Altrad Investment Authority (a French equipment maker), bought UK oil services company Cape for around \$430 million, as the sector continued a move toward consolidation. Other recent deals include Wood Group's \$2.84 billion purchase of Amec Foster Wheeler, Halliburton's acquisition of Summit, the Technip–FMC tie-up, and completion of the merger between Baker Hughes and GE's oil and gas group in July.

Despite the prompt weakness, forward prices remained steady, steepening the forward curve and providing a glimmer of encouragement to longer-term projects, helping lead to a batch of major offshore final investment decision (FID) approvals in the quarter—which should help lift the fortunes of OFSE companies with little exposure to the US onshore.

And, in a move that could signal the beginning of a new and expanding market for beleaguered asset companies, plans for the first jack-up rig designed for the emerging offshore wind industry were announced in June by Zentech Inc. and Renewable Resources International.

Oil market development

Prices remain volatile, with supply continuing to surprise on the upside, although further OPEC action and signs of easing US activity are now providing some support.

- The second quarter began with attempted rallies followed by retreat, as stock levels remained stubbornly high, with Brent front month prices slipping to below \$45 per barrel in late June. Since then, OPEC and its Russian ally's July 24 meeting and the resulting commitment to tighten output, as well as some signs that US output may be easing back, have helped prices recover above \$52 per barrel. Saudi Arabia acted unilaterally to limit crude oil exports at 6.6 million barrels per day in August, almost 1 million barrels per day below levels a year ago. US government data showed crude output fell in April for the first

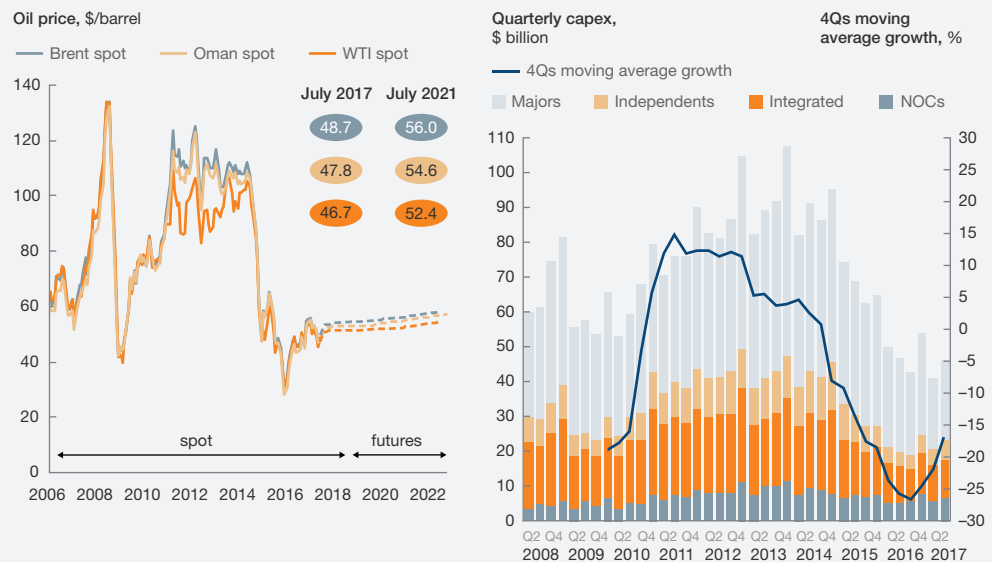
time this year, and global stocks fell by about 90 million barrels over the quarter, but were still about 250 million barrels above the five-year (OECD) average.

- After tight compliance with OPEC's November 2016 agreement earlier in the year, signs of slippage began to appear in Q2, made worse by resurgent supply from Libya and Nigeria (up over 1 million barrels per day between them), which are both recovering from output disruption related to political unrest. The International Energy Agency (IEA) currently puts OPEC compliance at a six-month low, and the group is meeting in August to further address the issue. Nigeria's output will now be capped near current levels of near 1.7 million barrels per day, while Libya's is not capped.
- The lower prices eventually saw US activity ease toward the end of June, and there were significant US crude stock draws, which helped prices rise in late July. Any further price recovery could see shale drillers especially begin to hedge and lock in margins, which could dampen upward movement beyond the mid-50s.
- After their latest meeting, Kuwait said OPEC and Russia could extend existing production curbs—which aim to cut 1.8 million barrels per day of output until the end of Q1 2018—beyond that date if markets failed to rebalance. But the Saudi minister said this may not be necessary as global oil demand was expected to grow by about 1.5 million barrels per day next year, similar to 2017 and so should more than offset further rises in US output.
- New pressure on longer term demand came from announcements in France that all diesel and gasoline vehicle sales would be banned by 2040, and a similar announcement in the United Kingdom. These add to concerns over longer-term demand in developing markets such as China and India, which increasingly appear to be favoring electric vehicles on air-quality grounds. A more immediate slowdown in demand is currently occurring in China, with gasoline demand growth of 95,000 barrels per day expected in 2017, down sharply on gains of 230,000 to 290,000 barrels per day in the previous two years, according to the IEA.
- Société Générale was the latest bank to throw in the towel on its forecasts of a 2017 crude oil recovery, reducing its Brent forecast to \$50 per barrel from \$55 per barrel in June, as well as 2018 to \$50 from \$60 and 2019 to \$52 from \$65 per barrel. Other banks have also cut forecasts, and one leading bank in particular is understood to have made major losses this year, based on an expectation of higher prices that failed to materialize.
- After the focus on US onshore efficiency gains recently, it was the turn of the majors to illustrate how they have been able to save money. BP, for example, said its breakeven point had dropped to \$47 per barrel. Profits were generally up in Q2, and a number of major offshore projects were approved.
- The forward curve steepened during the quarter, with July 2021 at a premium of over \$6 per barrel to prompt prices, compared to just \$2.50 per barrel three months ago. This could

be a sign that the cumulative shortfall in investment over the last few years is finally looking like impacting supply down the line, which may encourage operators to move forward with more major delayed projects.

Exhibit 1

Oil prices dropped in Q2 2017, while capex is on the rise.



Note: Sample includes 5 major, 4 independent, 9 integrated, and 1 natural oil company (NOC).

McKinsey&Company | Source: Bloomberg; S&P Capital IQ; McKinsey analysis

OFSE market activity

EP capex: Capex rises in Q2 as operators slash costs, and on firmer Q1 oil prices (Exhibit 1)

- Operator capex rose slightly in Q2 after a fall in Q1 versus Q4, in line with the seasonal pattern. Q2 saw operators begin to move forward with projects after sharp budget reductions, leaving them able to make money at lower prices. The quarter saw capex of \$46 billion, compared to \$41 billion in Q1 and \$54 billion in Q4 2016. This represented a fall on the year of 1.7 percent, compared to an annualized fall of 18 percent in Q1, with majors accounting for the majority of the growth.
- Average development costs for new conventional oil and gas projects have been cut by about 40 percent since 2014, allowing more to go ahead so far this year than in the whole of 2016. However, investment remains well below the level before prices crashed, and more than 100 delayed projects, containing billions of barrels of oil, are still on hold.

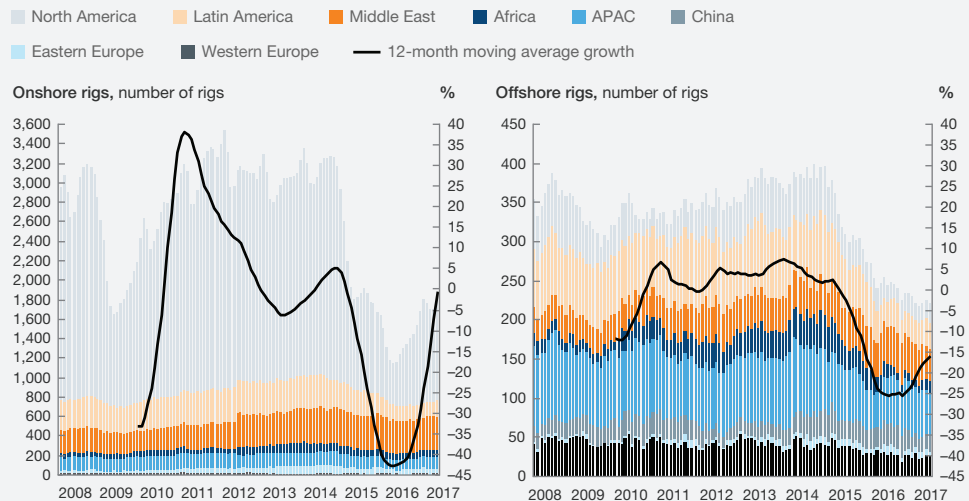
- The first half of 2017 (mostly in Q2) saw 15 projects totaling 8 billion barrels of oil equivalent approved to FID stage, compared to just 12 in 2016. On average, offshore project capex is down to \$11 per barrels of oil equivalent versus \$15 per barrels of oil equivalent in 2015, while IRRs based on \$50 per barrel oil are at 15 percent in 2017 versus 11 percent in 2015, according to Wood Mackenzie. Most projects were less-risky brownfield projects, with cost savings more easily able to make these projects work at lower prices. Brownfield projects also tend to be less capital-intensive and are quicker to bring onstream, offering a quicker payback.
- Majors dominate the FIDs, with eight of the 15 projects, including Exxon's Liza project offshore Guyana, while NOCs have been relatively inactive. However, Shell, Chevron, Total, and BP are reducing or holding flat on 2017 spending overall. Only ExxonMobil is pushing up its budget, planning to spend \$22 billion this year compared to \$19.3 billion last year. ConocoPhillips cut capital spending after a sharp loss in Q2.
- While much of the capex rise is expected to go to the US onshore sector, there are signs of some operators cutting back there now, after sharp growth earlier in the year. In late June, Anadarko became the first major US shale oil producer to cut its capital spending budget as a result of depressed oil prices (by \$300 million from a total 2017 forecast of \$4.6 billion made only in March). Elsewhere, onshore drilling remains subdued, with Kuwait, for example, awarding contracts worth about \$1.9 billion in 2016 and similar levels in 2017, compared to \$10.9 billion in 2015. In Saudi Arabia, shrinkage in the oil sector is now projected at 1.9 percent this year—reflecting the extension of OPEC production cuts, of which Saudi will bear the bulk.

Rig count: US onshore market growth eases; offshore looks to turn corner (Exhibit 2)

- The North American onshore rig count continued to track higher in the second quarter, albeit at a slower rate, according to Baker Hughes, with many drillers continuing to drill based on prices locked in during Q1 at near \$55 per barrel, combined with lower costs. Active rigs rose to 1,128 in July, up over 60 from the recent high of 1,065 in February. However, the rise was not uniform, with a strong performance in the United States which saw numbers rise above 930 in July, disguising a fall to under 200 in Canada. The figures remain well over double the low of 423 seen in May 2016—despite crude prices at similar levels. But rig growth has already moderated and there may be signs of a further slowdown. Halliburton's chairman, Dave Lesar, said he expected the US rig count to rise above 1,000 by year end, but that about 800 to 900 rigs was more sustainable in the medium term. "Today, rig count growth is showing signs of plateauing, and customers are tapping the brakes," he said in July.
- Outside North America the onshore count was mixed, with developing regions—Latin America, Africa, and especially the Middle East—showing a slight rise, with little change elsewhere. Overall, the strong US performance pushed the global onshore rig total up over the quarter, with March's total of 1,768 rising to 1,820 in June, up from a low of 1,150 in May 2016.

Exhibit 2

Onshore rig counts revival persists, while offshore counts start to grow.



McKinsey&Company | Source: Baker Hughes rig count; McKinsey analysis

- The offshore rig market also saw numbers rise over the quarter, but only by 4 from 217 in March to 221, with a few new projects beginning to issue contracts, offsetting projects that continue to reach completion. North America saw the sharpest rise, along with smaller increases in Africa, China, and Western Europe. The longer contract lead times for offshore work means there is a more delayed response to market conditions than in the US onshore.

OFSE market performance

Revenue growth signals beginning of recovery

Overall OFSE revenue was up, gaining 6.4 percentage points compared to the previous quarter, after a slip of 0.4 percentage points last quarter—representing a significant gain after many quarters of decline or stagnation (Exhibit 3). The figure was also 2.5 percentage points up on the same period last year, compared to a 5.0-percentage-point fall last quarter (and a 15.7-percentage-point fall in Q4 2016), confirming that seasonally adjusted revenue is also on the increase for the first time since 2014.

Margins were also up apart from assets and EPC, which were flat (Exhibit 4), with the upturn in US activity starting to reverse the margin squeeze for some. Offshore, however, margins remain under downward pressure, especially in the assets segment. After declines earlier in the year, returns to shareholders across OFSE picked up in the second quarter as they showed they could expand and operate at a profit at far lower oil prices than in earlier good times. The exception, once again, was the asset category, which has now lost 56 percent of its value since January 2015.

Services: Service revenues were up almost 10 percentage points on the quarter, building on a slight rise last quarter, and were up over 11 percentage points on the year, a clear sign of a turnaround based on tough cost cutting and improved offerings. Capex spend in the pipeline from operators should boost revenue further as the year progresses; however, some labor costs have now started to rise in the US onshore. Drilling costs were up by 8 percent in June 2017 compared with their recent low in November 2016, according to the US Bureau of Labor Statistics, compared to a 34 percent decline between March 2014 and November 2016, marking an important turning point in the oilfield services costs cycle. Margins were

Exhibit 3

OFSE revenues show steady increases across all segments.

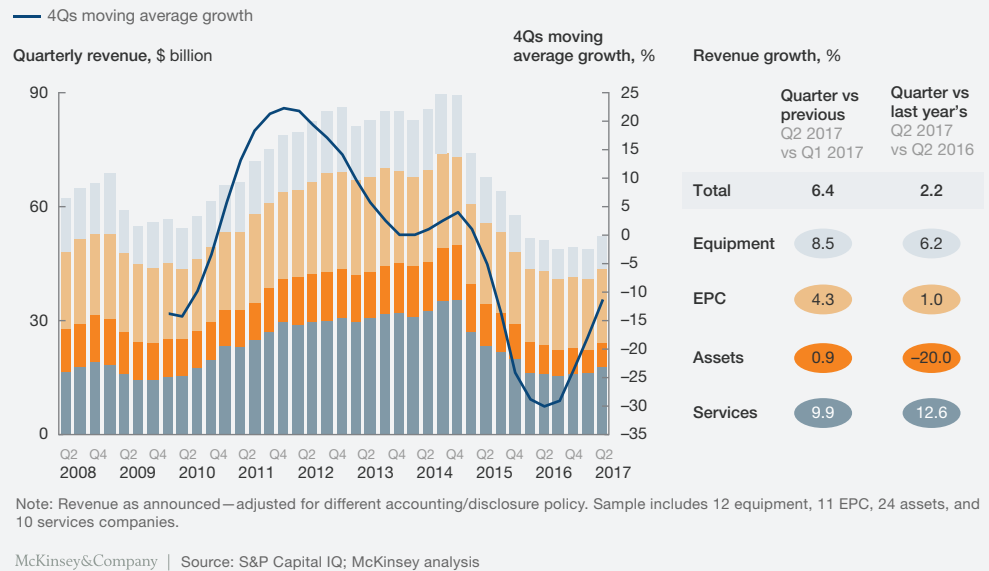
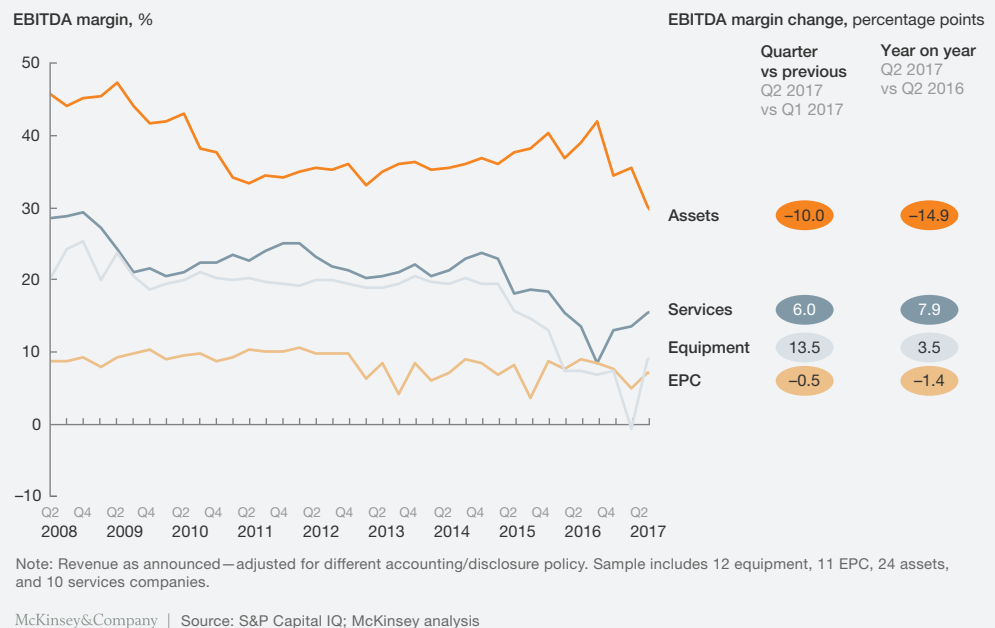


Exhibit 4

Assets margins sustain decline, while services and EPC continue recovery through Q2 2017.



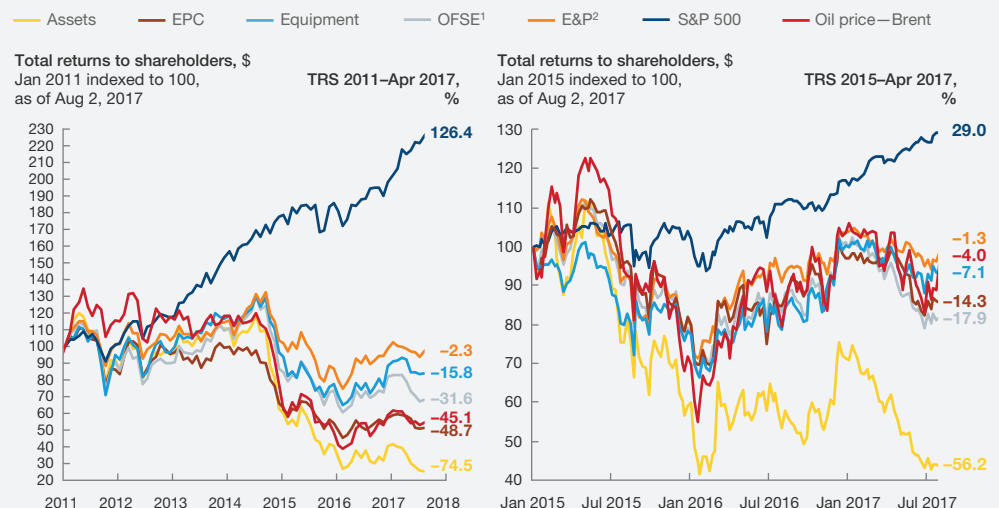
up 4.4 percentage points on the quarter after a 1.9-percentage-point rise in Q1, and up 7.3 percentage points on the year, helped by continued merger activity, and building on the 1.9-percentage-point annualized rise in Q1. However, the rise disguises a mixed picture for individual companies, with positive results remaining heavily dependent on exposure to the US onshore. Schlumberger, for example, managed to improve its revenue, earnings, and margins in Q2 2017, as it quickly deployed surplus capacity in the US onshore.

Equipment: Greater US onshore activity saw revenue for equipment rise 8.4 percentage points on the quarter after a slight rise in Q4, but surplus availability meant there was little upward pressure on prices. The annual change also slipped into positive territory at 6.2 percentage points, after a 7.0-percentage-point fall in Q1 and –17.5 in Q4 2016 showing the market has turned a corner. The book-to-bill ratio was up on the quarter to similar levels seen this time last year. There was a 13-percentage-point plus rise in margins on the quarter, which lifts them to about 10 percent, up from around zero in Q1 2017. To achieve the average 2008–2015 margin of about 19 percent, prices would need to rise significantly. Returns to shareholders from equipment companies rose through the quarter, and the sector remains the best performing among OFSE companies (Exhibit 5).

Assets: Assets are still most mired in the downturn. But, even here, there are now signs of a recovery, with revenue up slightly on the quarter, after a 12-percentage-point fall in Q1, although it remains well below last year's levels. Assets' exposure to offshore, where lucrative contracts awarded in previous years are continuing to expire, continues to hold back growth with only limited additional offshore activity last quarter, much of which had tougher terms and conditions. Stock returns continue to languish at the bottom of the pile, with share prices just stabilizing, rather than gaining ground like other categories (Exhibit 5). Oversupply meant margins also fell, with levels at –10 percentage points on the quarter and –15 percentage points on the year, after a 10-percentage-point fall in Q1 2017 compared to Q1 2016, which has brought them down to new record lows that provide little basis for any investment in new builds.

Exhibit 5

Returns to shareholders show signs of recovery from the decline seen so far in 2017.

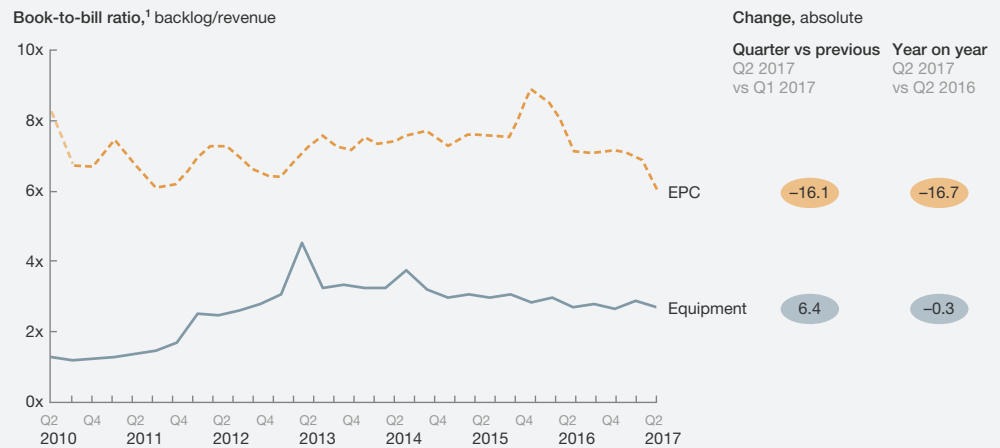


¹Includes assets, EPC, equipment, and services companies.

²Includes majors, NOCs, integrated, and independent.

Exhibit 6

Book-to-bill ratios show EPC's downturn persisting, with equipment remaining steady.



¹Revenue and backlog as announced—adjusted for different accounting/disclosure policy. Sample includes 6 equipment (Aker Solutions, Dover, Drill-Quip, NOV, Oceaneering, Oil States International) and 8 EPC (Fluor, KBR, McDermott, Saipem, Subsea 7, TechnipFMC, Técnicas Reunidas, WorleyParsons) companies.

McKinsey&Company | Source: Capital IQ; company filings; McKinsey analysis

EPC: EPC companies saw quarterly revenue fall slightly, after a 3.4-percentage-point increase in Q1, leaving EPC revenue down 2 percentage points on the year. Margins are flat on the quarter and down just slightly compared to Q2 2016. Order backlog ratios fell sharply in the second quarter, leaving them at less than 6x—lower than anything seen since 2011 (Exhibit 6). □

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