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2017 Engineering and Construction Trends

Survival of the biggest

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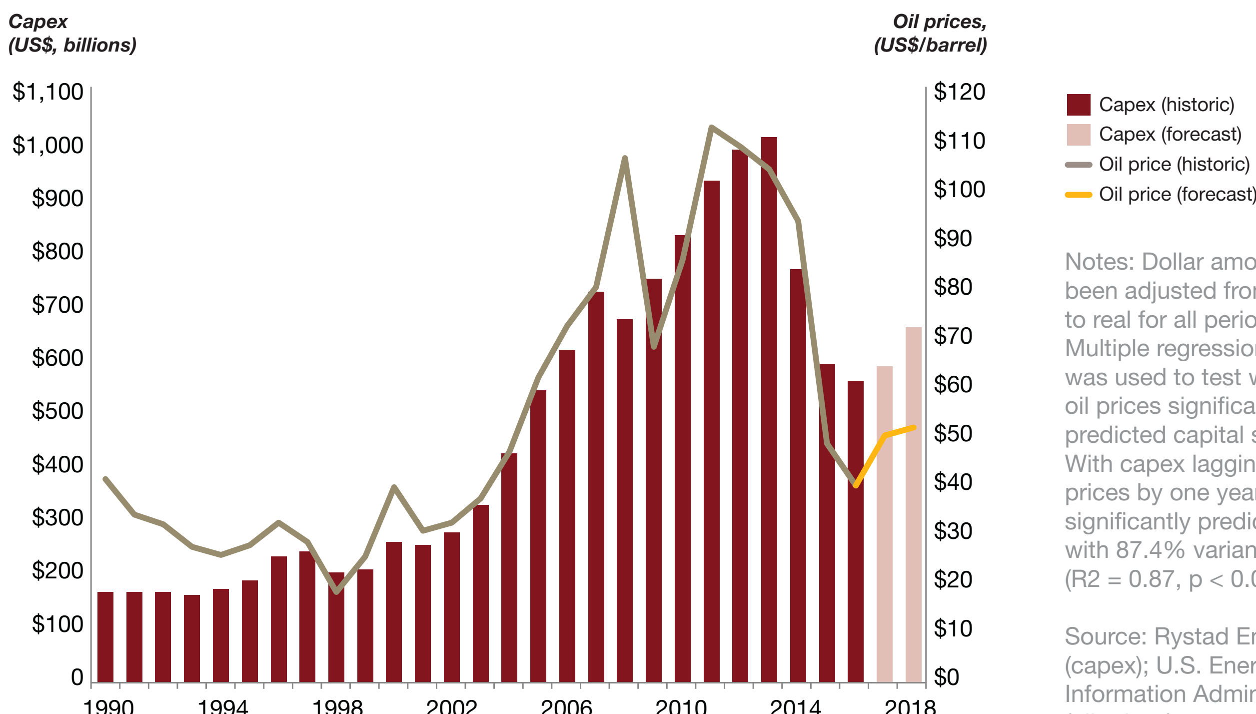
Introduction

Companies in the engineering and construction (E&C) industry have had few safe havens during the past several years. In the oil and gas sector, persistently low oil prices hindered — or stopped — work on most large energy projects. Even though prices have slowly begun to recover, most oil giants are still cautious about new initiatives with major capital expenditures. Investments are projected to increase through 2018, in line with a projected rise in oil prices, but overall spending levels will remain far below the historic highs of 2012 and

Exhibit 1

Oil prices versus capital expenditures in the energy sector



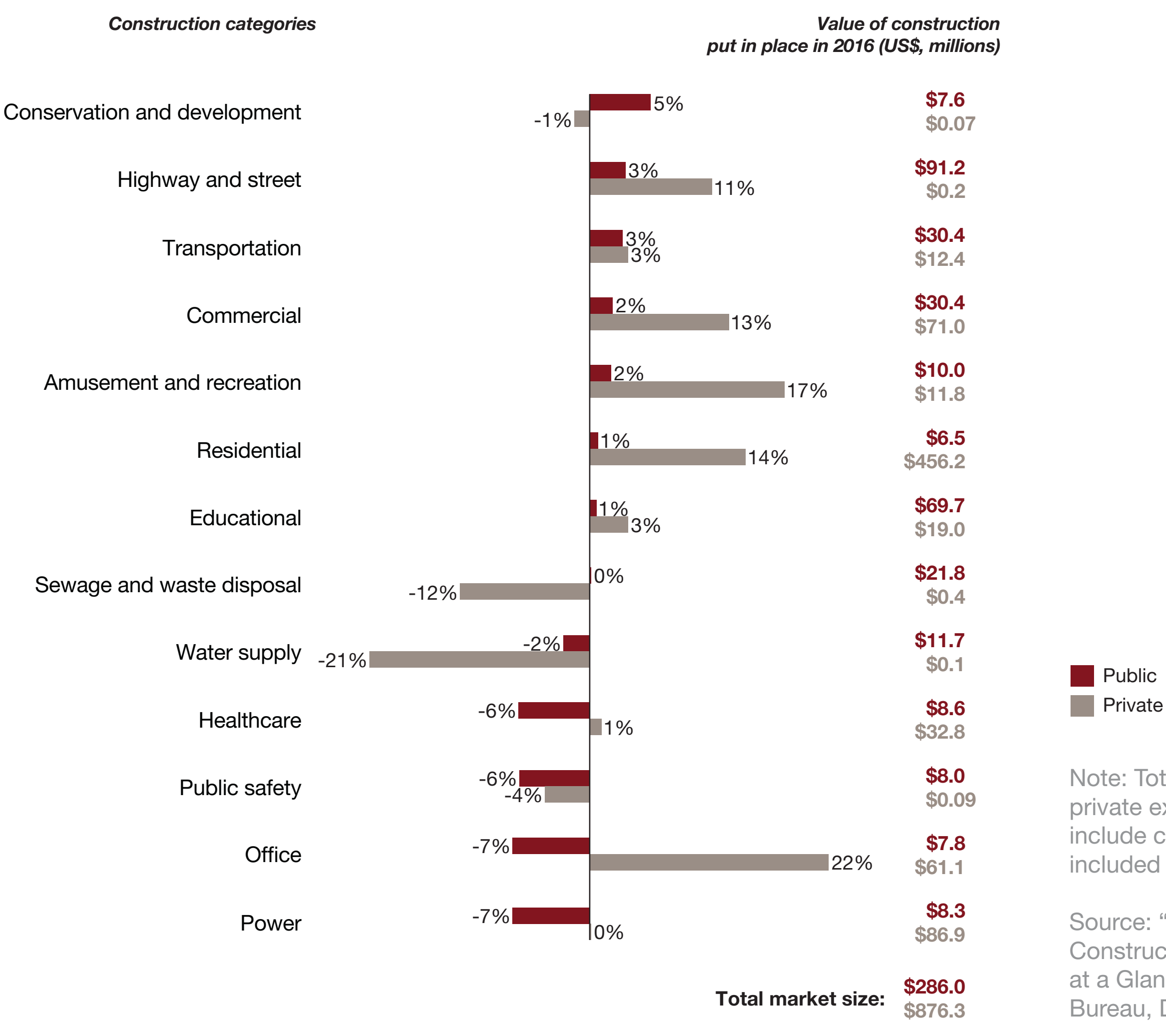
Notes: Dollar amounts have been adjusted from nominal to real for all periods. Multiple regression analysis was used to test whether oil prices significantly predicted capital spending. With capex lagging oil prices by one year, oil price significantly predicts capex with 87.4% variance ($R2 = 0.87$, $p < 0.01$).

Source: Rystad Energy (capex); U.S. Energy Information Administration (oil prices)

2013. The caution is understandable: Having suffered through a brutal two-year stretch in the industry, management teams are retaining some "dry powder" in case prices drop again.

In the construction sector, the story is more mixed. Private investment has grown in some U.S. segments, such as commercial and highway projects, even as investment in less visible sectors generally supported by local or federal government funds, such as water, sewage, and public safety, has declined. Meanwhile, most E&C firms are trying to interpret mixed messages from the new administration regarding its proposed mega-infrastructure spending program.

Exhibit 2
Growth in U.S. infrastructure spending, 2013–16



Note: Total public and private expenditures include categories not included here.

Source: "Value of Construction Put in Place at a Glance," U.S. Census Bureau, Dec. 2016

Three trends reshaping the market in 2017

In this environment, E&C companies face three major trends that will affect their prospects in 2017 and beyond.

1. Contracting will get tougher

E&C contracting is changing in multiple ways, creating new challenges for management teams. One clear shift is the migration to lump-sum, turnkey (LSTK) contracts — in which E&C firms bear the project and cost risk (lump sum) and guarantee operational readiness (turnkey). Clients in both the private and public sectors are becoming far savvier about what projects should actually cost, and they are benefiting from greater competition for bids. As a result, they can demand LSTK contracts. We expect this trend to continue and accelerate over the next year.

Some top-performing E&C firms are getting better at working with LSTK contracts, but many others haven't yet fully adapted. For example, some firms are absorbing the risk but not effectively factoring the additional contingency costs into their bids.

Another challenge is the new approach to project definition: Clients are breaking up larger initiatives into smaller, discrete elements. This tactic garners the client a better price, with a trade-off: Clients must take on a greater share of responsibility for project management and controls. These unbundled contracts also prevent E&C players from subsidizing weaker and less cost-effective areas of their operation with the profits from stronger areas. (Buyers will cherry-pick work from those with the best cost positions.)

Yet another factor making contracting tougher is the industry's shift to public–private partnerships (PPPs). Government agencies need to make upgrades and repairs to infrastructure — particularly in developed markets — yet they don't have the capital to fund these projects using traditional deal structures. E&C firms are now being asked to invest their own capital simply to participate, in exchange for a share of operational revenue or some other enticement.

In other parts of the world, the migration to PPPs is old news. However, in the U.S. it is still in the early stages. Several toll roads in the U.S. have been built with contractor funding. Meanwhile, the Trump administration has indicated that it will push harder for PPP projects.

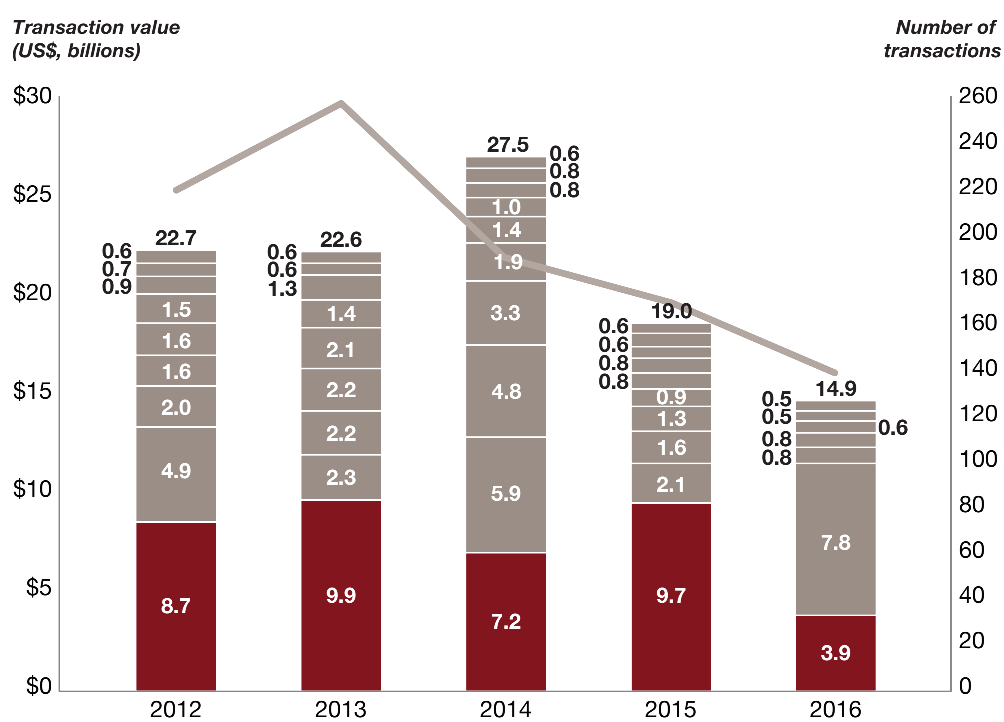
These changes add up to a different way of working, in which firms assume greater financial risks but also gain access to new potential opportunities. Success requires partnering directly with public-sector entities on an ongoing basis, rather than simply for the construction phase of a project's life cycle.

2. Market consolidation will continue

The second trend has to do with M&A. In recent years, the volume of mergers and acquisitions in E&C has dropped, owing to uncertainty among both buyers and sellers. Buyers are watching oil prices and infrastructure spending, hoping to "buy at the bottom." Sellers are

Exhibit 3

M&A deals in engineering and construction: Slowing since 2014



Note: Due to rounding, numbers shown here may not add up precisely to the totals provided.

Source: Capital IQ

trying to hold on until the market rebounds. In the longer term, however, market consolidation will bounce back, for two reasons.

First, the recent downturn has hurt smaller firms (those with less than US$6 billion in revenue) much more than their larger and more diversified peers. Most of these smaller E&C firms have already taken multiple steps to reduce overhead and transform their cost structure, leaving little fat left to cut. And although oil prices appear to have stabilized (for now), many E&C companies will not benefit for several years, until that capital can work its way through energy companies' planning cycles and show up as planned capital expenditures.

As a result, some smaller companies may struggle to meet their debt covenants through 2020. This squeeze will force management teams to ask some hard questions about their viability as stand-alone entities. Those that want to remain independent simply may not have the resources needed to grow. They may need to position themselves for an acquisition.

The other reason we are convinced market consolidation will rebound is that larger firms that survived the last few years now face pressure from shareholders, analysts, and other stakeholders to continue creating value. In a flat market, consolidation is an appealing solution. It will be seen as helping companies diversify and stabilizing their revenue stream. E&C firms will expand their criteria and begin to make acquisitions in new geographic areas and service offerings.

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This dynamic is already playing out in the market for on-site construction of projects such as transportation systems, dams, and bridges. Small regional players have dominated this market in the past. Yet as large multinational players continue to reduce their cost structure and as municipalities become more comfortable working with them, they compete for these smaller projects. That introduces additional pressure on small players, taking away some of their planned workload, and reducing the margins on projects they retain — in turn rewarding large companies and further fueling consolidation.

3. Competition will grow from E&C players in China, Korea, and India

The third major trend is more global. Firms in rapidly growing economies have spent the past decade focusing on their home markets, steadily building up cash positions and internal expertise. Now, as growth eases in their home markets, they are expanding outward and seeking to compete against established global players.

These firms' expansion efforts could require them to buy assets and build up critical capabilities — and these companies have the financial means to do just that. They will begin to compete more often for large projects in developed markets, adding another layer of competition and pressure for established E&C firms.

For some mega-projects — particularly those for which companies can build modular elements at home and ship them to the job site for assembly — Chinese and Korean companies can capitalize on lower costs, making their bids more attractive to buyers. Yet they can also bring scale and labor benefits to traditional, on-site construction projects. Even if established players continue to win contracts, the margins are likely to be lower than what they have captured in the past.

How companies should respond

In response to these three trends, E&C firms should emphasize three strategic priorities.

Focus on the capabilities needed to succeed in the new market dynamic

As the shift to LSTK contracts continues, firms need to build stronger capabilities in areas such as estimation, cost controls, and procurement. Rather than simply tracking costs and passing them along to clients, they need to become proactive about identifying bloated costs and reducing them.

Similarly, in marketing and sales functions, firms need to adapt to changes in how their clients handle RFPs. This may seem like a difficult challenge, but firms that change their internal processes and become more flexible in how they deal with clients will give themselves an edge.

For firms that need to make deals, sensing the market is critical.

Understand their market position — and identify opportunities to build scale

Management teams need to understand their position in the market, and specifically whether they have the scale needed to keep costs down and remain competitive. For those that need to make deals, sensing the market is critical. The oil and gas sector is likely to be dynamic over the next few years, and the most promising segments in construction will shift as well. The ability to assess and accurately value potential targets faster than the competition will be critical. For example, some E&C firms are considering buying operations and maintenance (O&M) companies as a means of stabilizing their revenue. However, now that a few high-profile O&M deals have closed in the last several years, prices for those companies are significantly higher, skewing the potential advantages of such an acquisition.

Take a close look at their cost structure

The last — and most important — strategic priority for E&C firms is to continue to scrutinize their costs. In our experience, many legacy, monolithic E&C firms still struggle to understand the importance of the cost issue. Executives who have worked in the industry for a long time may be too accustomed to the old ways. They need to recognize that technology is changing the design, procurement, and construction of projects to make processes more efficient and less expensive.

Similarly, it may be hard for some leadership teams to assess the very real threat from new competition, be it from Asian players or nimble firms in developed markets that are adept at navigating today's more challenging bidding procedures and risk-sharing arrangements. The sooner E&C leaders realize that the industry has dramatically changed — and thus requires corresponding changes in their organizations — the better equipped they will be to compete.

Conclusion

For most E&C firms, the dramatic shifts in contracting and competition are not what they had hoped for as they emerge from a period of infrastructure neglect and reduced activity in oil development. Having to take on more risk and revisiting approaches to cash flow in an environment that is not all that hospitable can be problematic. But given the boom-and-bust history of this sector, new avenues for growth, no matter how challenging, may be more likely to create sustainable success than what companies in the industry have gotten used to.

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