Engineering growth

Fourth-quarter 2015 engineering and construction industry mergers and acquisitions analysis

Highlights

To our Engineering growth *readers*

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Welcome to *Engineering growth*, PwC's quarterly analysis of M&A activity in the global chemicals industry. We're pleased to present our fourth-quarter report as part of our ongoing commitment to provide you with a deeper understanding of M&A trends and prospects in the industry. In this edition, we include a more detailed examination of deal activity for the full year.

In brief

On an annual basis, deal volume remained steady, with 227 deals in both 2014 and 2015. Thus, activity remains strong. Average deal value declines, an indication that while activity remained robust, deals tended to be smaller than in 2014. This was driven in part by the acquisition of a number of smaller players in the E&C landscape. These deals tend to be consummated to enhance product offerings or to expand geographic coverage.

Key issues and trends

PwC analysts identified several key issues and trends impacting the engineering and construction deal environment in 2015, including the following:

- Construction firms primarily continued to remain focused on enhancement of their core competencies. These deals were driven by companies' intention to strengthen business capabilities, expand geographically, enhance profitability, and strengthen competitive position.
- In the fourth quarter of 2015, building material companies were active in M&A activity to strengthen their market position and business operations.
- With stronger demand in the housing segment and a growing population, homebuilders continued to remain focused on tapping opportunities within the homebuilding segment and building land inventory, with an aim to expand into the luxury home segment and expand market share within the key regions.
- Construction companies continued acquiring engineering based firms that add complimentary services or product offerings to one's product portfolio, building integrated capabilities. Portfolio expansion and business diversification was a major driver for acquisitions by the companies to mitigate risks and secure revenue.

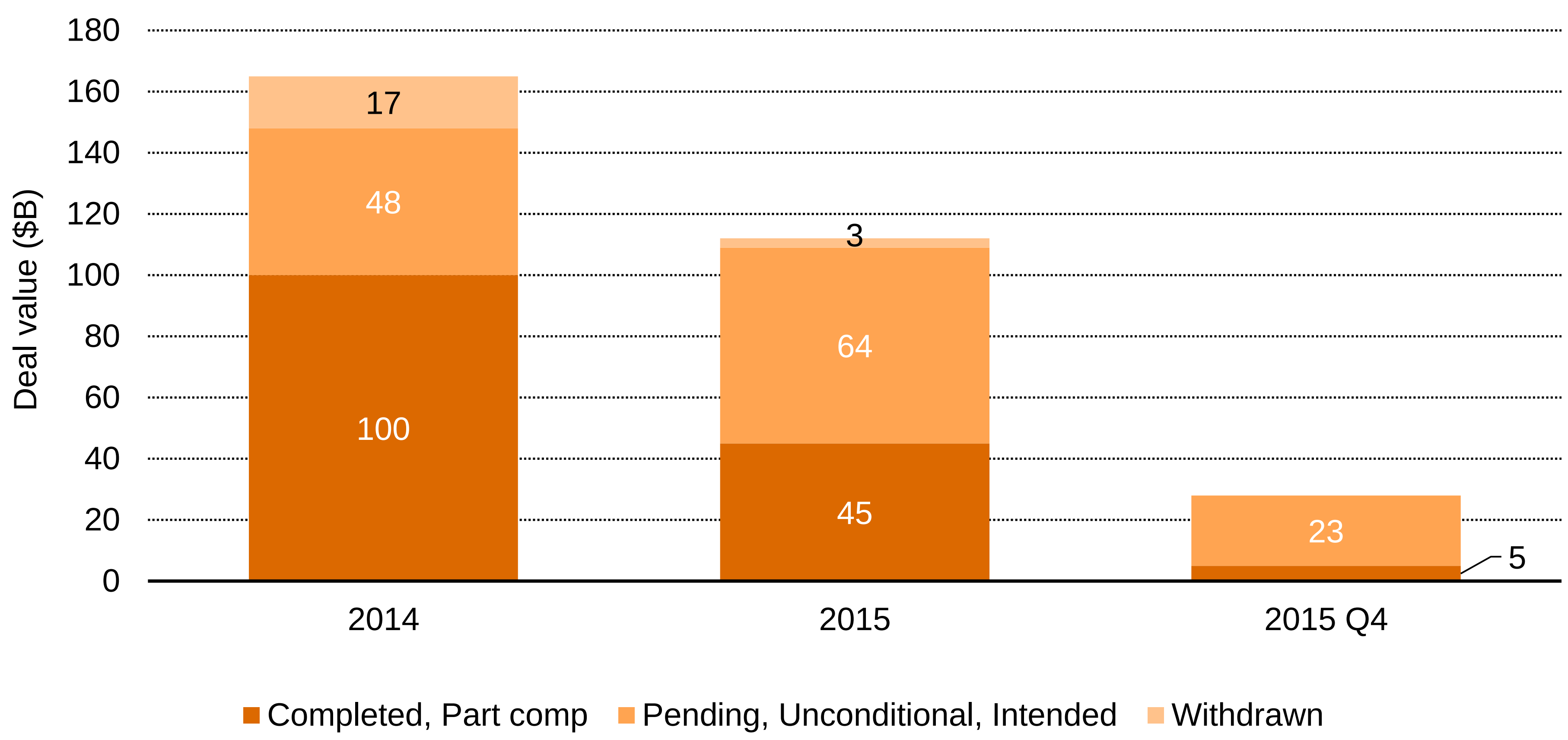
- Non-core businesses were shed as companies focused on core business operations either for strategic alignment or as a result of government pressure.
- While financial investors found the construction industry attractive due to the expected economic recovery, particularly in Europe and Latin America, construction companies continued to seek after the financial investor to strengthen their financial position. Companies also divested their existing business to focus on high-growth markets.
- Despite a rocky start in the beginning of the year resulting from harsh winter weather conditions, construction output in 2015 was expected to increase by 6%. Upbeat housing fundamentals, low mortgage rates, reduced home price inflation, strong wage growth, and increased consumer spending are just a few of the factors that helped the industry rebound. With this robust growth, employment in the construction industry also increased, with 128,000 new jobs in the fourth quarter alone.
- The non-residential segment is booming, mainly driven by demand from industrial, office, and commercial construction. The manufacturing and e-retail sector are fueling the demand for more outlets, factories, and warehouses, at strategic and tactical locations near consumers, driving much of this construction.
- We remain optimistic that as construction demand rebounds, we will see additional activity in the deal environment. With unemployment down and construction on the upswing, companies may see an uptick in margins, allowing them to allocate additional funds to CapEx and inorganic growth.

We hope this analysis will serve as a useful tool for monitoring trends. Launch the data explorer at **http://www.pwc.com/us/engineeringgrowth** for a deeper dive into the data, or contact us to further discuss our insights.

Deal activity

In 2015, E&C deal value declined by 32 percent, driven by smaller announced deals.

Announced deals with disclosed deal value of $50 million or more
Total deal value, by status (2014, 2015, 4Q15)



On an annualized basis, deal value declined by 32 percent – from $164.3 billion in 2014 to $111.8 billion in 2015. This decline was driven by the fact that smaller deals were announced, as acquirers worked to purchase smaller rivals and gain entry into new markets.

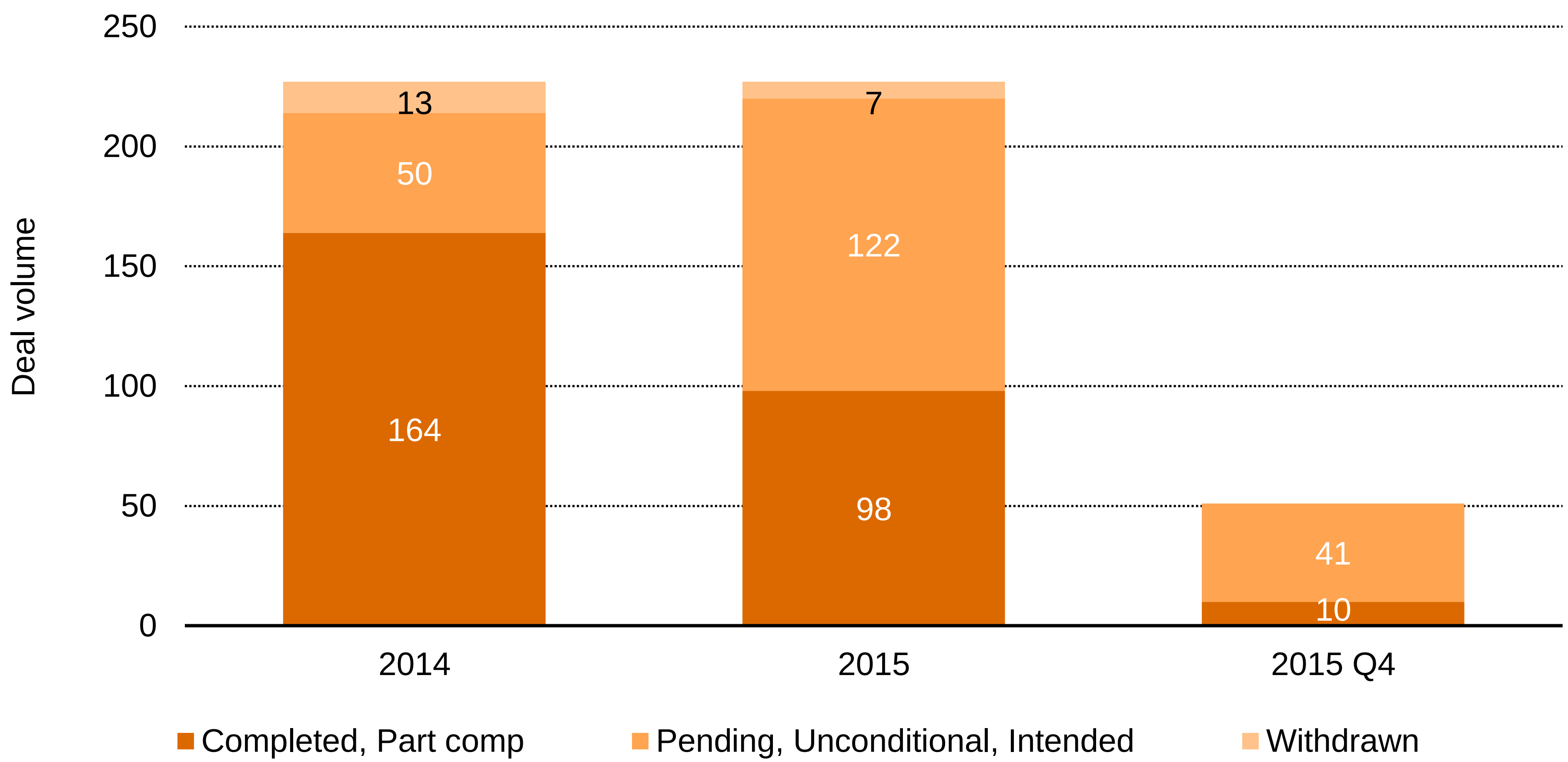
Completed/partially completed deals constituted 40 percent of total deal value in 2015 as compared to 61 percent in 2014. The proportion of pending, unconditional, and intended deals increased substantially, to 57 percent in 2015 from 29 percent in the previous year. Finally, the proportion of withdrawn deals reduced to 3 percent in 2015 from 10 percent in 2014.

In the fourth quarter, deal value declined by more than 50 percent, to $27.4 billion on a year-over-year basis. Pending, unconditional, and intended deals formed 83 percent of total deal value while completed/partially completed deals constituted the balance of 17 percent of total deal value in the fourth quarter, when compared to the same quarter in the previous year.

Deal activity

E&C deal volume remained flat in 2015.

Announced deals with disclosed deal volume of deals valued at $50 million or more
Total deal value, by status (2014, 2015, 4Q15)



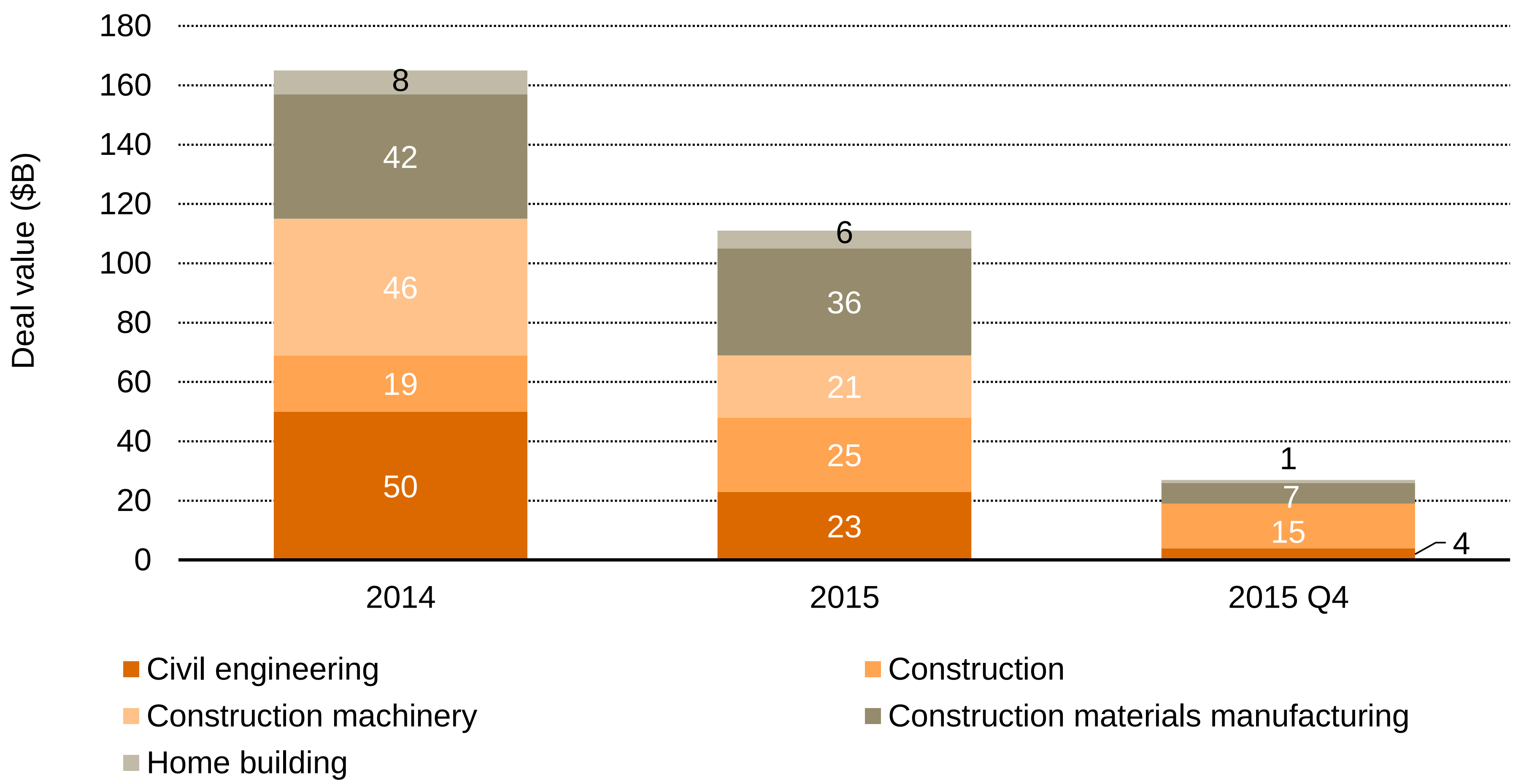
Deal volume remained flat on an annualized basis – with 227 deals in both 2015 and 2014. The pending, unconditional, and intended deals more than doubled from 50 deals in 2014 to 122 deals in 2015 (this constituted 54 percent of total deal volume). However, completed/partially completed deals declined by 40 percent – from 164 deals in 2014 to 98 deals in 2015. Withdrawn deals saw a 46 percent decline in 2015.

During the fourth quarter of 2015, deal volume decreased by 28 percent to 51 deals on a year-over-year basis. The pending, unconditional, and intended deals more than doubled to 41 deals in 2015 Q4 compared to 18 deals in 2014 Q4. Completed/partially completed deals constituted 20 percent but declined significantly in number of deals (10 deals in 2015 Q4). Finally, there were no withdrawn deals in the last quarter of either 2015 or 2014.

Deal activity

In 2015, construction materials manufacturing led other segments, but was flat compared to prior year.

Total deal value, by target category
Deals valued at $50 million or more (2014, 2015, 4Q15)



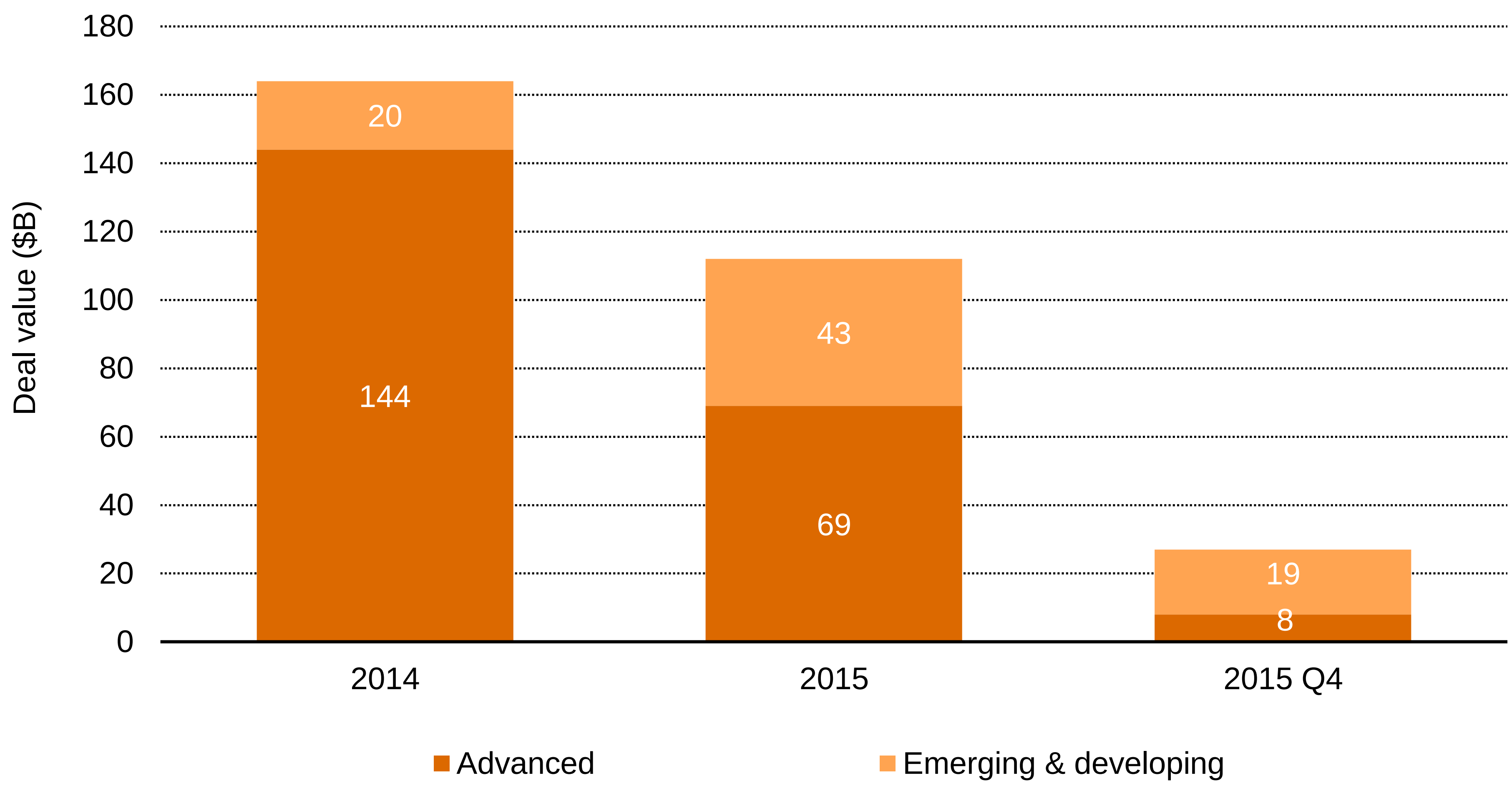
In 2015, the deal value of civil engineering and construction machinery categories declined by more than half, to \$23.1 billion (from \$49.9 billion in 2014) and \$20.9 billion (from \$45.7 billion in 2014), respectively. Deal value in the construction materials manufacturing category declined by 14 percent to \$36.4 billion while it increased by 33 percent in construction category to \$25.1 billion. Finally, the home building category witnessed a decline of approximately 18 percent from \$7.5 billion in 2014 to \$6.2 billion in 2015.

In the fourth quarter of 2015, deal value in the construction category increased by more than 450 percent, from \$3.2 billion to \$14.8 billion on a year-over-year basis. However, the construction machinery and home building categories experienced substantial value declines of 99 percent and 76 percent, respectively. Deal values in construction materials manufacturing also declined by 22 percent, to \$7.2 billion, while the civil engineering segment showed a slight increase of 3 percent to \$4.1 billion.

Deal activity

The E&C industry saw a marked increase in number of deals based in advanced economies.

Total deal value, by target economy
Deals valued at $50 million or more (2014, 2015, 4Q15)



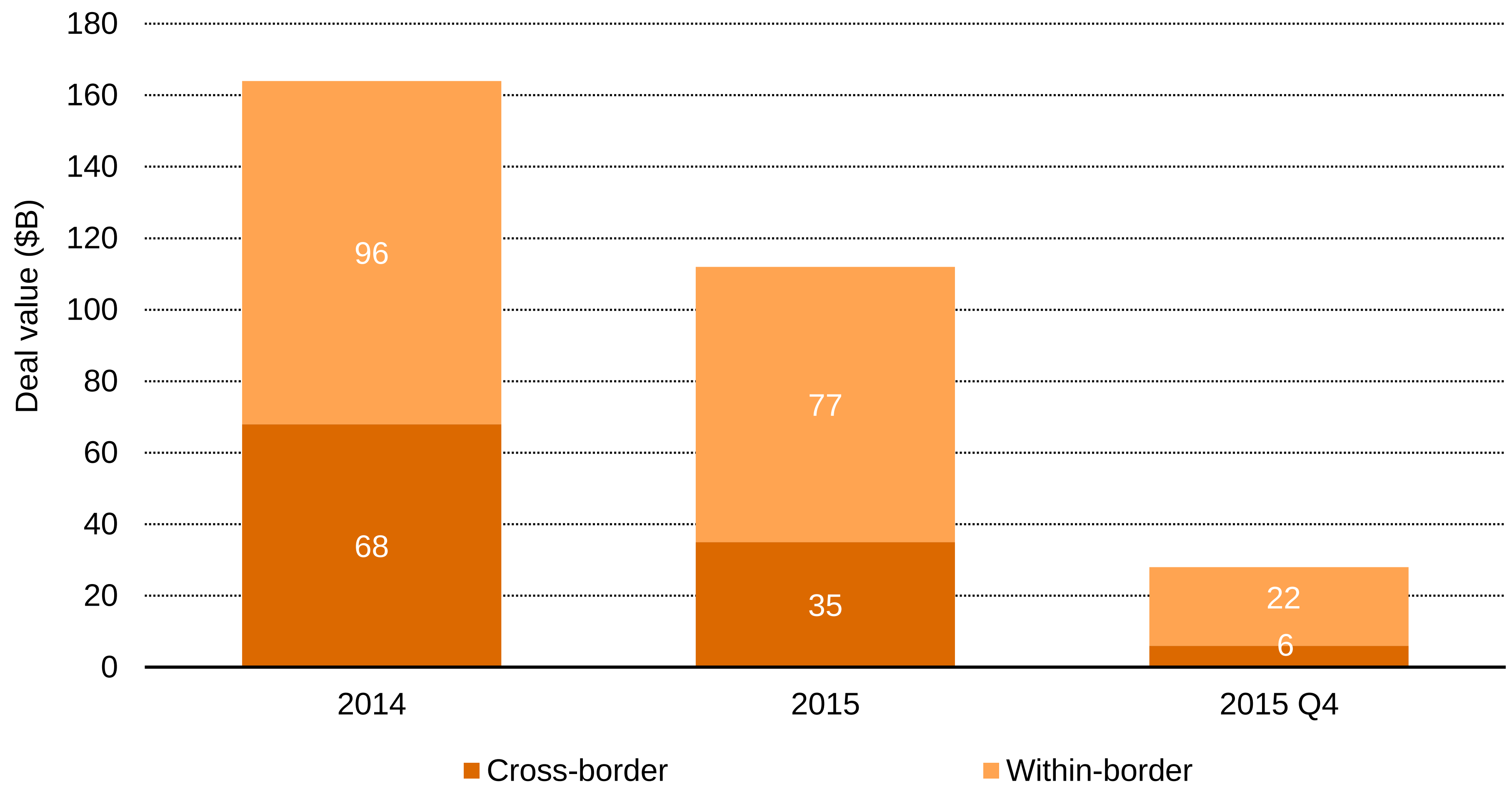
Deals based in advanced economies constituted a higher proportion of activity (61 percent), and emerging and developing economies deals accounted for the balance of total deal value in 2015. Advanced economies deal value reduced substantially by 52.3 percent – from $143.9 billion in 2014 to $68.6 billion in 2015. In contrast, emerging and developing economies deal value more than doubled to $43.2 billion (from $20.4 billion) in 2015 compared to the previous year.

On a quarterly basis, the value of advanced economies deals declined considerably (83 percent), down from $48.8 billion in 4Q14 to $8.4 billion in 4Q15. However, the deal value of emerging and developing economies increased by approximately 2.5 times to reach $19.0 billion (from $7.9 billion) on a year-over-year basis.

Deal activity

E&C saw declines in both cross-border and local deals in 2015.

Total deal value, by cross border versus local deals
Deals valued at $50 million or more (2014, 2015, 4Q15)



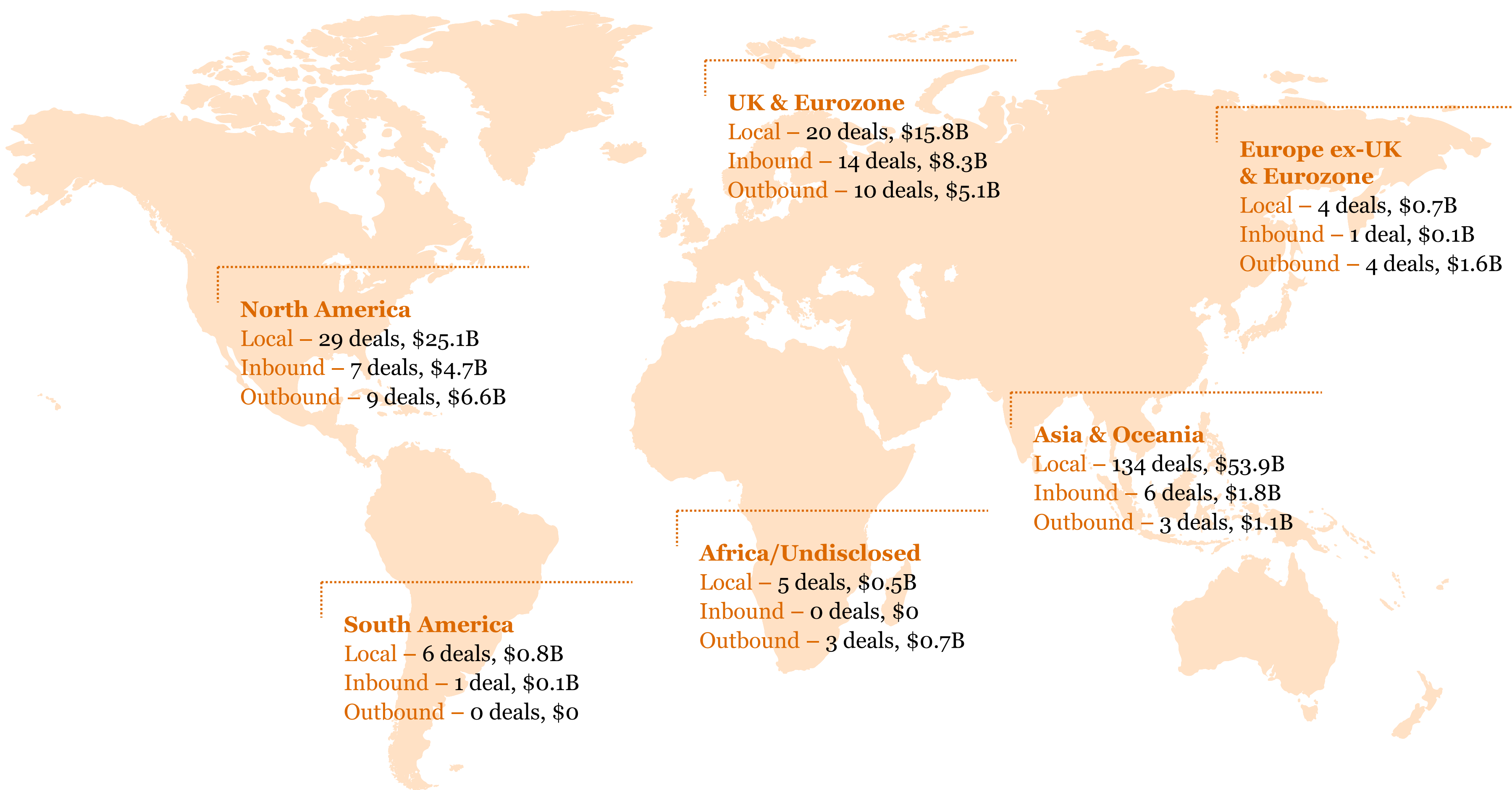
On an annualized basis, cross-border and local deals constituted 31 percent and 69 percent, respectively, of total deal value. Both cross-border and within-border deals saw declines in 2015 when compared to the previous year. While cross-border deals declined almost 50 percent to $34.6 billion (from $68.3 billion in 2014), local deal value saw a decline of approximately 20 percent to $77.2 billion (from $96.0 billion in 2014). This was driven by the overall decline in deal value from 2014 to 2015.

In the fourth quarter of 2015, cross-border and within-border deal values experienced decline of 35 percent and 55 percent, respectively, on a year-over-year basis. While cross-border deal value fell to $5.8 billion (from $8.9 billion in 4Q15), local deal value fell to $21.6 billion (from $47.8 billion in 4Q14).

Deal market characteristics

For 2015, Asia and Oceania targets captured the most deal value and volume. While North America saw a decline in deal value, the region had the highest average deal value.

Total deal value and volume, by deal geography (2015)



Globally, local deals increased slightly as a proportion of deal volume, accounting for 77.3 percent of activity, compared to 73.8 percent in 2014.

In 2015, Asia and Oceania witnessed the largest deal activity in both value and volume terms – 49.8 percent of global deal value and 55.9 percent of global deal volume. The region announced 143 deals worth $56.8 billion, and approximately 95 percent of the deals were local deals. North America ranked second, with 45 deals valued at $36.4 billion. This activity includes the largest megadeal which is worth $13.2 billion (20 percent of total megadeal value). Finally, the UK & Eurozone recorded 44 deals valued at $29.1billion.

In the fourth quarter, total deal value and volume declined by 47 percent and 29 percent, respectively, on a year-over-year basis. Deal value more than doubled in Asia and Oceania while deal volume remained flat in 4Q15 compared to 4Q14.

Top deals

E&C megadeal value declined substantially in 2015, with the United States witnessing a significant decline.

Top deals announced in 2015

Date announced	Target name	Target nation	Acquirer name	Acquirer nation	Status	Deal value ($M)	Category
08/26/15	Cameron International Corp.	United States	Schlunberger Ltd.	United States	Pending	13,186	Construction machinery
12/24/15	PetroChina United Pipelines Co. Ltd.	China	PetroChina Pipelines Co. Ltd.	China	Pending	10,873	Construction
05/26/15	Samsung C&T Corp.	South Korea	Cheil Industries Inc	South Korea	Completed	8,083	Civil engineering
02/02/15	Lafarge SA & Holcim Ltd-Certain Assets	France	CRH PLC	Ireland-Rep	Completed	7,370	Construction materials manufacturing
10/29/15	Verallia SA	France	Investor Group	United States	Completed	3,220	Construction materials manufacturing
08/11/15	Terex Corp.	United States	Konecranes Abp	Finland	Pending	2,762	Construction machinery
07/28/15	Italcementi Fabbriche Riunite Cemento SpA Bergamo	Italy	HeidelbergCement AG	Germany	Intended	2,228	Construction materials manufacturing
06/03/15	Areva NP SAS	France	Electricite de France SA	France	Pending	2,197	Construction
05/13/15	Vitro SAB de CV-Food & Beverage Glass Container Business	Mexico	Owens-Illinois Inc.	United States	Completed	2,150	Construction materials manufacturing
06/14/15	Ryland Group Inc.	United States	Standard Pacific Corp.	United States	Completed	2,011	Home building
07/28/15	Italcementi Fabbriche Riunite Cemento SpA Bergamo	Italy	HeidelbergCement AG	Germany	Pending	1,823	Construction materials manufacturing
06/15/15	Environmental Resources Management Ltd.	United Kingdom	Investor Group	Canada	Pending	1,700	Civil engineering
04/13/15	Probuild Holdings Inc.	United States	Builders FirstSource Inc.	United States	Completed	1,630	Construction materials manufacturing
11/24/15	AirportlinkM7 Brisbane Toll Road	Australia	Transurban Queensland	Australia	Pending	1,439	Construction
12/05/15	Ganghai (Tianjin) Construction Co. Ltd.	China	Chang Jiang Shipping Group Phoenix Co. Ltd.	China	Pending	1,252	Civil engineering
07/27/15	Roofing Supply Group LLC	United States	Beacon Roofing Supply Inc.	United States	Completed	1,142	Construction materials manufacturing
04/11/15	Sound Environmental Resources Co. Ltd.	China	Investor Group	China	Pending	1,126	Civil engineering
01/22/15	Xishui Strong Year Co. Ltd. Inner Mongolia	China	Investor Group	China	Withdrawn	1,124	Construction materials manufacturing
06/02l/15	Posco Engineering & Construction Co. Ltd.	South Korea	Public Investment Fund	Saudi Arabia	Completed	1,110	Home building
10/14/15	Taishan Gypsum Co. Ltd.	China	Beijing New Building Materials Public Co Ltd	China	Pending	1,094	Construction materials manufacturing

Megadeal value declined substantially in 2015 (42 percent – from $117 billion in 2014 to $67.5 billion). The United States witnessed a significant decline (73 percent and 54 percent, respectively) in megadeal values. The United States was the primary deal target by geography and accounted for 38.7 percent of 2015 total megadeal value.

The largest deal of the year is the announced merger of Cameron International with Schlumberger Ltd (both in United States) for $13.2 billion. The consideration for the transaction formed 19.5% of the total value of large deals. After the transaction is completed, Schlumberger and Cameron shareholders will own 90 percent and 10 percent of the merged entity, respectively. Schlumberger expects to realize pretax synergies of approximately $300 million in the first year and $600 million in the second year.

The second largest deal is the announced acquisition of PetroChina United Pipelines Co Ltd by PetroChina Pipelines Co Ltd (both in China) for $10.8 billion in an internal reorganization. PetroChina Pipelines Co is consolidating its pipeline assets, which are currently operated by PetroChina Eastern Pipelines Co., PetroChina Northwest United Pipelines Co., and PetroChina United Pipelines Co. The reorganization is expected to streamline operations and improve efficiency.

Methodology

Engineering growth is an analysis of deals in the global engineering and construction sector. Deal information was gathered from Thomson Reuters and includes deals for which targets have primary SIC codes that fall into one of the following SIC industry groups: single-family housing construction; residential construction; operative builders; industrial buildings and warehouses; non-residential building construction; highway and street construction; bridge, tunnel, and elevated highway construction; water, sewer, pipeline, and utility line construction; heavy construction; plumbing, heating, and air conditioning; electrical work; carpentry work; roofing, siding, and sheet metal work; concrete work; water well drilling; structural steel erection; excavation work; installation or erection of building equipment; special trade contractors; asphalt paving mixtures and blocks; asphalt felts and coatings; flat glass; glass containers; pressed and blown glass and glassware; glass products made of purchased glass; cement, hydraulic; brick and structural clay tile; ceramic wall and floor tile; clay refractories; vitreous plumbing fixtures and bathroom accessories; fine earthenware (white ware) kitchen articles; pottery products; concrete block and brick; concrete products, except block and brick; ready-mixed concrete; gypsum products; cut stone and stone products; abrasive products; minerals and earths, ground or otherwise treated; mineral wool; non-clay refractories; non-metallic mineral products; construction machinery and equipment; mining machinery and equipment, except oil and gas; oil and gas field machinery and equipment; elevators and moving stairways; conveyors and conveying equipment; hoists, cranes, and monorail systems; industrial trucks, tractors, trailers, and stackers; lumber, plywood, millwork, and wood panels; brick, stone, and related construction materials; roofing, siding, and insulation materials; construction materials; lumber and other building materials dealers; engineering services; architectural services; surveying services; and air and water resource and solid waste management. Balance sheet data was sourced from public company reports.

This analysis includes all individual mergers and acquisitions for disclosed or undisclosed values, leveraged buyouts, privatizations, minority-stake purchases, and acquisitions of remaining interest announced between January 1, 2006, and December 31, 2015, with a deal status of completed, intended, partially completed, pending, pending regulatory approval, unconditional (i.e., initial conditions set forth by the buyer have been met but the deal has not been completed), or withdrawn.

Regional categories used in this report approximate United Nations regional groups, as determined by the UN Statistics Division, with the exception of the North America region (includes North America, Latin America, and the Caribbean UN groups), the Asia and Oceania region (includes Asia and Oceania UN groups), and Europe (divided into UK and Eurozone and Europe ex-UK and Eurozone regions). The Eurozone includes Austria, Belgium, Cyprus, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, Malta, Netherlands, Portugal, Slovenia, and Spain. Oceania includes Australia, New Zealand, Melanesia, Micronesia, and Polynesia. Overseas territories were included in the region of the parent country, and China, when referenced separately, includes Hong Kong. The term deal, when referenced herein, refers to deals with a disclosed value of at least $50 million unless otherwise noted.

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