

strategy&

***Consolidation
in the global
automotive supply
industry***



2016 report



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Executive summary



Mergers and acquisitions among automotive suppliers are running hot, according to the ninth annual “Consolidation in the global automotive supply industry” report by Strategy&, PwC’s strategy consulting business. Based on year-to-date data, we expect deals worth US\$32 billion to close this year, the second-highest annual tally since 2007. This year’s projected total trails only the extraordinary \$50 billion logged in 2015, a record number that included the largest-ever U.S. automotive supplier acquisition.

Such megadeals represent a growing share of auto supplier M&A. The number of transactions valued at \$500 million or more has risen more than fivefold since 2013. Driving deals of all sizes are powerful forces — global vehicle production growth, auto technology shifts, automakers’ platform globalization, and supplier profitability — that show no signs of abating.

In part, strong M&A activity reflects an underappreciated fact: Automotive supply is a growth industry. Global vehicle production is expected to grow at a compound annual rate of 3.5 percent over the next seven years, with annual light vehicle assembly in North America on track to hit a record of nearly 20 million units by 2022, according to PwC Autofacts.

At the same time, suppliers are chasing the technological capabilities they need to stay relevant. Acquisitions offer quick access to new powertrain and chassis technologies required to meet stricter government fuel efficiency standards, as well as to software and electronics for autonomous driving and connected car systems.

Globalization continues to foster deal making among suppliers positioning themselves to serve automakers that are consolidating their nameplates into a smaller number of flexible global platforms. These platforms require suppliers with worldwide capabilities, leaving regional suppliers vulnerable and spurring consolidation.

Finally, the 815 suppliers in our study are reaching record profitability levels as painful cost cutting during the recession has paid off over the last few years. Rebounding production has leveraged the lower cost base to produce record margins in earnings before interest, taxes, depreciation, and amortization (EBITDA), giving suppliers extra cash for acquisitions.

Add to these factors the rise of Asian consolidators — most notably the Chinese — and increased interest from private equity firms, at a time when traditional M&A powers in North America and Europe are still going strong, and you have a recipe for sustained consolidation in the years ahead.

Growth and innovation spark record M&A

Auto suppliers are in an era of unprecedented M&A activity, with no end in sight. The industry is on track to close about 180 deals worth a combined US\$32 billion this year. Add that to last year's \$50 billion, and the two-year total is a record \$82 billion. On an annualized basis, deal making is humming along at more than twice the \$20 billion yearly pace between 2009 and 2014 (*see Exhibit 1, next page*).

Headline-grabbing deals from the last two years include ZF's \$12.4 billion acquisition of TRW in 2015, a record-setting transaction that gave ZF access to radar and vision equipment used in autonomous vehicles. More recently, Jianguang's \$2.75 billion agreement to buy the standard products unit of NXP Semiconductors illustrated both the ascendance of Chinese consolidators and the increasing importance of software and electronics to auto suppliers.

Deal makers finally seem to recognize that vehicle production is an expanding industry, with a global compound annual growth rate projected at 3.5 percent through 2022. China, already the largest market in the world for light vehicle production, is forecast to add 9.5 million units. And European and North American vehicle assembly is expected to grow by more than 2 million units each over the next seven years. These production trends, not the cyclical ups and downs of vehicle sales in mature markets, are the true barometer of a healthy and growing automotive supply industry.

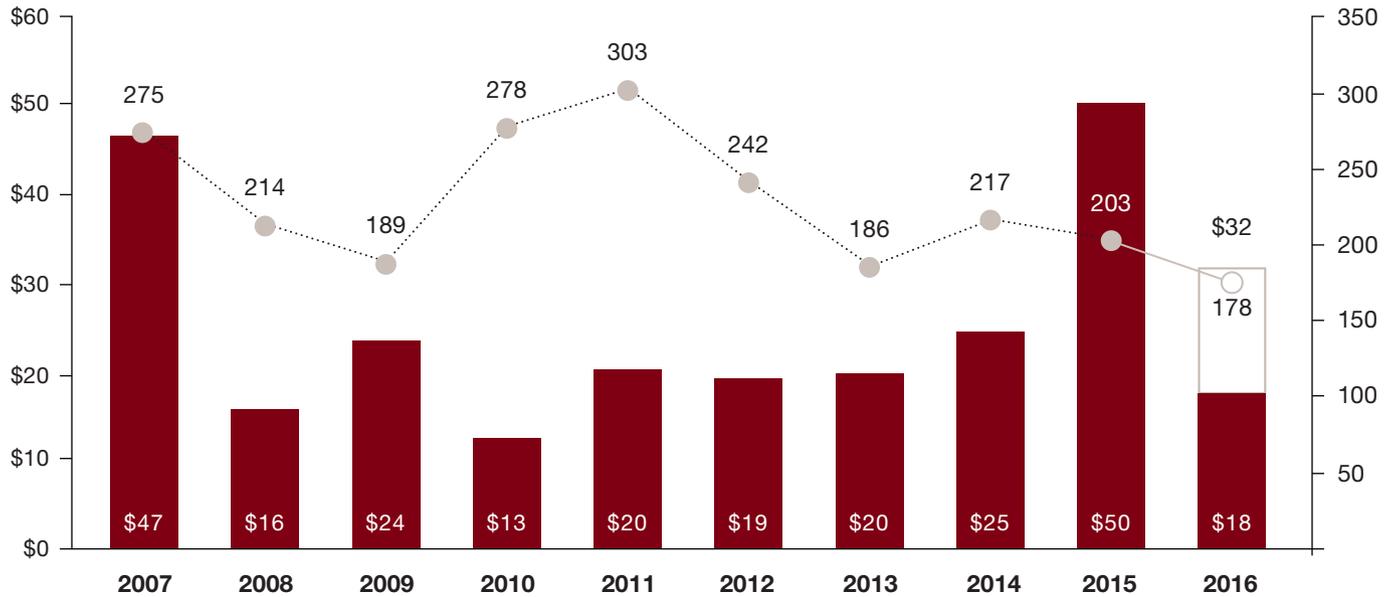
Along with growth, auto suppliers are riding an innovation wave. New technologies ranging from lightweight materials and alternative powertrains to autonomous driving and connected car systems are revolutionizing the automobile and opening up opportunities for established suppliers and industry newcomers alike.

The combination of growth and innovation has even turned the heads of private equity investors, many of which have historically shunned the auto sector as a mature, cyclical business that doesn't produce the big returns they demand. That's changing fast: Private equity was involved in 24 percent of all auto supplier transactions this year, more than twice

Vehicle production is an expanding industry, with a global CAGR projected at 3.5 percent through 2022.

Exhibit 1
Auto supplier M&A activity, 2007–16

**Closed deals,
 2007–16 (YTD),
 in US\$ billions**



- Disclosed deal value (US\$ billions)
- Number of deals (r-axis)
- Forecast for second half 2016

Source: Thomson Reuters; CapIQ; other publicly available sources; Strategy& analysis

its long-term average of about 10 percent. Most active in the sector are Bain Capital, which paid \$2.4 billion last year for TI Automotive, the world's largest fuel systems supplier; Blackstone, which bought Gates Corporation in 2014 for \$5.4 billion in the largest private equity buyout of an auto supplier; Partners Group, which acquired Dynacast International for \$1.1 billion in 2015 in the most significant deal in automotive casting; and Clearlake Capital, a smaller firm that has purchased three suppliers since 2013. These firms and others see clearly that automobile production offers two key attractions for private equity: growth and technological change that will reward investors that back the right players.

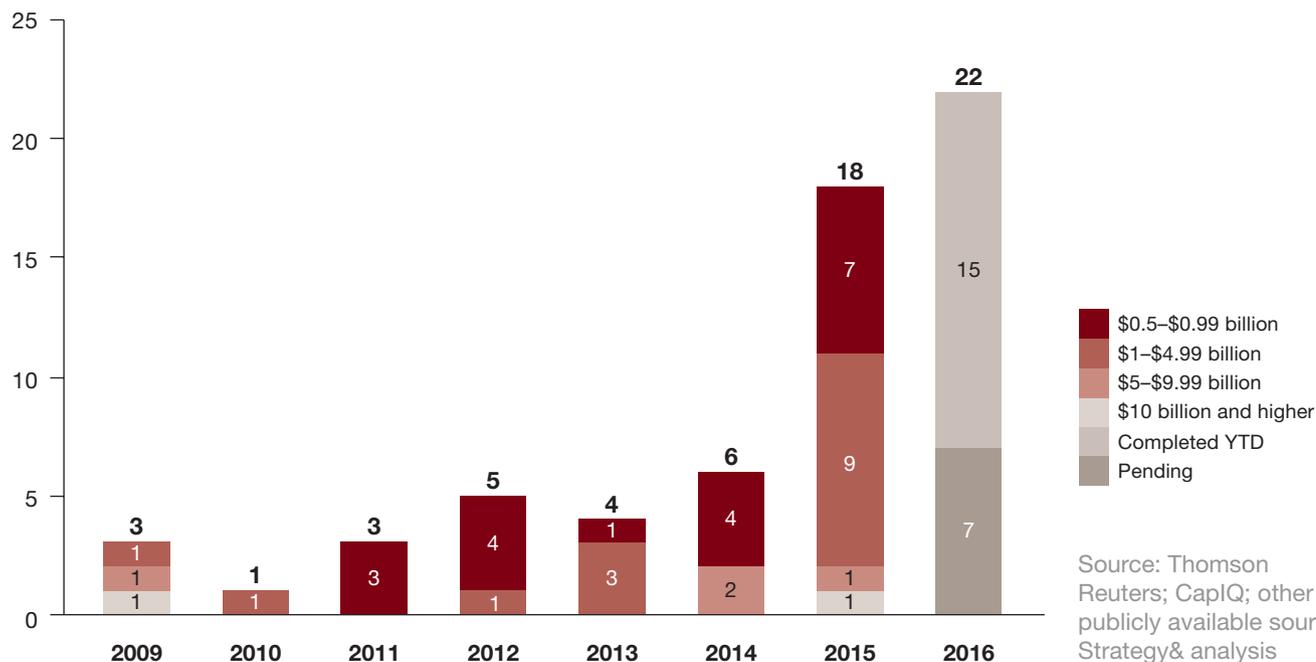
Then there's the China factor. During the past 12 months, Chinese firms have been the third most active buyers of auto suppliers. Although many focus on consolidating a fragmented domestic supply base made up of thousands of small companies, some Chinese acquirers are thinking bigger and reaching farther from home. In addition to Jianguang's NXP acquisition, China National Chemical bought Italian tire maker Pirelli for \$6 billion in late 2015, and Yanfeng paid nearly \$1 billion for U.S.-based Johnson Controls's automotive interiors business. Eager to diversify, add capabilities, and meet vehicle production demand, Chinese companies are likely to seek out still more global automotive suppliers.

Megadeals proliferate as technology chase heats up

Powering the surge in deal values is a skyrocketing number of megadeals. Auto suppliers are on track to ink a record 22 transactions worth \$500 million or more each this year, up from 18 in 2015 and more than quintuple the annual average for the previous five years (see Exhibit 2).

Exhibit 2
Megadeals are headed for an eight-year high in 2016

Number of deals
valued at or above
US\$500 million



Most megadeals target powertrain and chassis systems suppliers. As stricter emissions rules take effect in many countries, suppliers are scrambling to acquire the technologies needed to build smaller, lighter vehicles that burn less fuel and emit fewer pollutants. They're after turbocharging systems, gas direct injection technologies, and alternative powertrains. BorgWarner, for example, paid \$1.3 billion for electric motor specialist Remy International in 2015.

We're also seeing more megadeals in electrical and electronics systems, the hunting ground for autonomous driving and connected car technologies. Buyers are seeking software, sensors, cameras, and other components of the advanced driver assistance systems (ADAS) that original equipment manufacturers (OEMs) are rolling out around the world. In 2015, German automotive supply giant Continental paid \$680 million for the ADAS business of Finland's Elektrobit.

The race toward fully autonomous vehicles will fuel more megadeals for ADAS suppliers. Already valued at \$31 billion, the market for ADAS technology is likely to triple in size by 2025, as OEMs move beyond function-specific capabilities such as adaptive cruise control to engage in full vehicle automation.

China plays a growing, if less noted, role in megadeals. Although media reports extol the country as a land of opportunity for established automotive superpowers, Chinese suppliers are pursuing their own global ambitions. Chinese acquirers pulled off six of the 30 megadeals that were completed in the last 12 months; five of the six were acquisitions of non-Chinese companies. Megadeals like Yanfeng's Johnson Controls transaction and China National Chemical's Pirelli acquisition advance a worldwide expansion strategy by giving Chinese suppliers instant access to global OEMs, market-leading positions in various sectors, and important new technical competencies.

North American consolidators hold shrinking lead over emerging Chinese rivals

Once again, North American and European suppliers dominate our list of top global consolidators. Of the 24 companies we expect to drive consolidation in coming years, 10 are North American and eight are European. But the gap is closing as Asian consolidators come into their own. Four of the top 24 are Japanese, one is Indian, and one is South Korean.

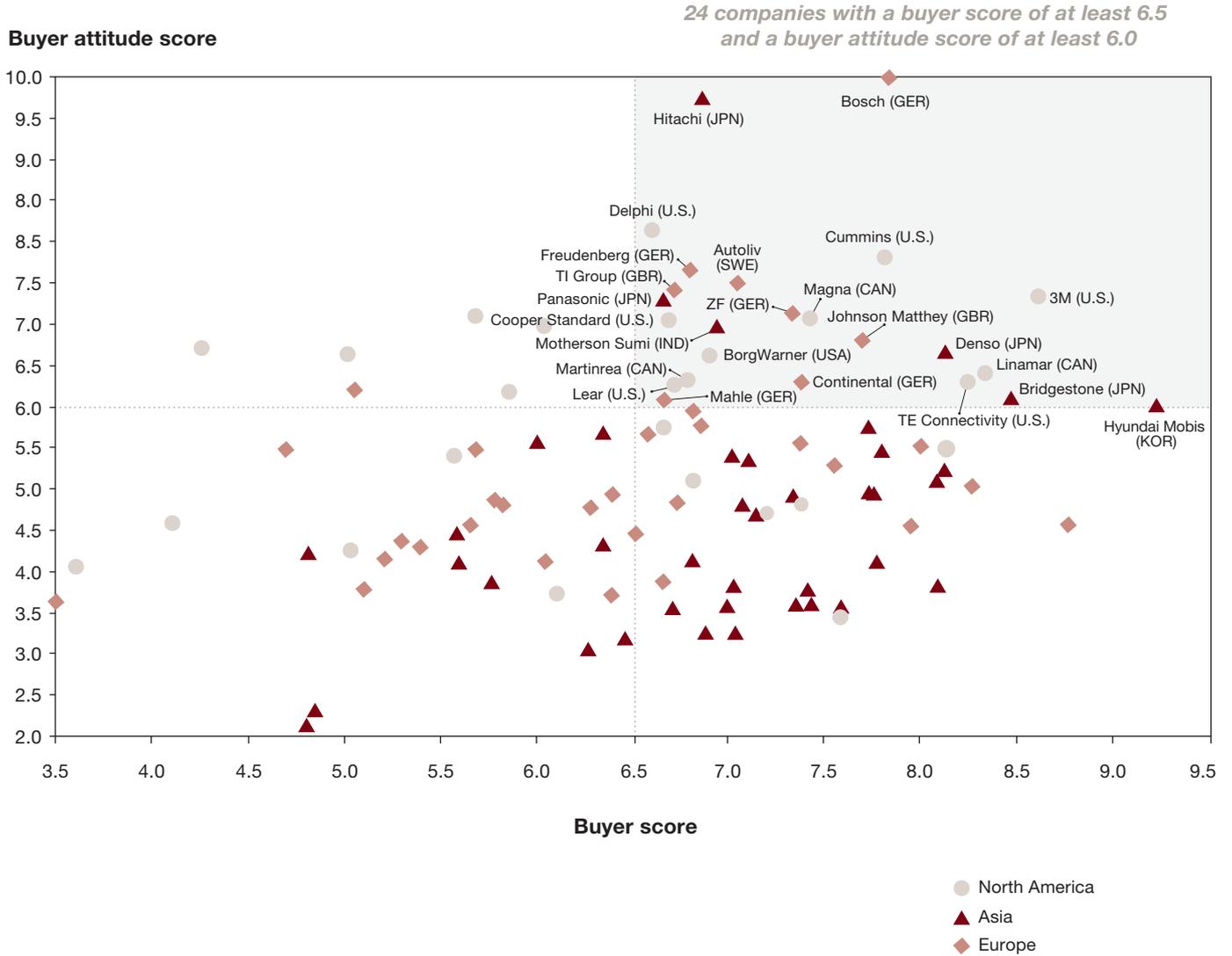
Our list ranks 815 suppliers based on their capacity and propensity for deal making. Each company gets a buyer score measuring its financial and operational wherewithal and a buyer attitude score based on its acquisition record and publicly announced acquisition intentions (*see Exhibit 3, next page*). The top 24 scored very high on both measures, completing an average of eight transactions apiece over the past five years. Although the vast majority of consolidators are in powertrain or chassis systems businesses, some are diversified players offering a broader portfolio of vehicle subsystems.

The 199 North American suppliers covered in our study posted an average buyer score of 7.0 on a 10-point scale, up from 6.9 in 2015 and the highest of any region for the fifth straight year (*see Exhibit 4, page 13*). This measure of financial and operational strength underscores the deal-making prowess of North American suppliers, along with the overall health of the continent's automotive supply industry.

Close on their heels are Asian suppliers, led by the Chinese. For the first time in the nine-year history of our study, Chinese suppliers have emerged as strong global consolidators. Their average buyer score leapt to 6.9 this year from 4.3 in 2015, putting them in second place, just behind the North Americans. Chinese suppliers also posted the lowest average divestor and distress scores, which measure a company's likelihood of divesting automotive assets and encountering financial distress. Various factors are driving the rise of Chinese consolidators, including healthy balance sheets, a growing appetite for acquisitions, a maturing regional supply industry, and world-leading growth in local auto production.

For the first time in the nine-year history of the study, Chinese suppliers have emerged as strong global consolidators.

Exhibit 3
The top global consolidators of 2016



Source: Strategy& analysis

Exhibit 4
Average buyer and distress scores by country/region

	# of companies	Buyer score	Divestor score	Potential distress score
China	107	6.9	3.8	3.3
Europe	202	6.3	5.6	4.6
India	66	4.6	6.0	5.2
Japan	142	6.6	4.4	3.8
North America	199	7.0	5.3	3.9
South America	20	3.8	6.2	6.2
South Korea	59	6.1	4.5	4.4
Rest of Asia	20	6.5	4.3	4.1
Global 100*	100	6.8	5.3	4.4
Global 100 Japan	28	7.0	4.7	3.8
Global 100 Europe	35	6.6	5.8	4.9
Global 100 North America	26	6.5	5.6	4.6
Total (average of all)*	815	6.3	4.9	4.2

 Strongest buyers
 Most likely divestors
 Most likely distressed

*Manual adjustment made to the Global 100 to account for incomings and outgoings year-over-year.

Source: Strategy& analysis

Japanese suppliers are getting stronger too. They ranked third this year, as their average buyer score rose to 6.6 from 5.3, while their divestor and distress scores remained low. With industry heavyweights such as Bridgestone looking to expand, and tech firms such as Hitachi, Panasonic, and Denso likely eyeing autonomous driving and electronics assets, we expect Japanese firms to ramp up acquisitions in the near future.

These aren't isolated pockets of strength; deal-making capacity is expanding almost everywhere. The average buyer score for the 100 largest passenger car and commercial vehicle suppliers by revenue — a group encompassing North America, Europe, and Asia — rose to 6.8 this year, nearly matching the top regions' scores.

Expanding profits boost buyers

With growth has come increasing profitability. Over the past six years, automotive suppliers have reaped the benefits of deep capacity cuts made during the 2008–09 crisis. Higher production volumes on a lower cost base generate powerful leverage, catapulting average EBITDA to 11.5 percent, the highest level since demand collapsed in 2008 (*see Exhibit 5, next page*). At the same time, supplier margins are benefiting from the high-value technology content in today's vehicles.

Although average EBITDA margins exceeded 10 percent in every region, European suppliers led the way with 13.6 percent average EBITDA. The relatively lush margins of European suppliers reflect their focus on lucrative technologies, which also makes them attractive buyout targets.

More significant than regional profitability variations are disparities across different vehicle systems. Raw material and exterior suppliers lead the industry with average EBITDA of 13.1 and 13.0 percent, respectively. Close behind are chassis, electrical/electronics, and powertrain suppliers, with EBITDA margins between 12.4 and 12.8 percent. Even the traditionally low-margin interiors sector showed some improvement this year, as average EBITDA climbed to 8.5 from 7.8 percent.

What are the connections between profitability and consolidation? There are several. Expanding profit margins leave suppliers with more cash for acquisitions, and boost returns on those investments. Suppliers of highly profitable software and cutting-edge electronics often attract overtures from larger companies looking to diversify beyond commoditized sectors where profits are under pressure. Conversely, low profitability in interiors — where OEMs are taking over more high-value design and engineering responsibility from suppliers — has led some suppliers to sell out to consolidators seeking to bolster margins by building scale, as Magna's divestiture of its interiors business to Grupo Antolin shows.

Exhibit 5

Global sales and EBITDA performance by automotive system, 2014 and 2015

	Count	Sales				EBITDA				EBITDA as % of sales 2014	EBITDA as % of sales 2015
		Total 2014 (US\$B)	Total 2015 (US\$B)	% change 2014 to 2015 (US\$)	% change 2014 to 2015 (local currency)	Total 2014 (US\$B)	Total 2015 (US\$B)	% change 2014 to 2015 (US\$)	% change 2014 to 2015 (local currency)		
Body	29	49	48	-2.4%	8.1%	3.6	3.4	-6.1%	7.6%	9.9%	9.8%
Chassis	128	330	307	-7.1%	2.4%	38.6	37.0	-4.1%	7.1%	12.4%	12.8%
Diversified	96	305	303	-0.8%	11.9%	29.6	29.8	0.8%	13.4%	10.0%	10.1%
Electrical/ electronics	81	128	122	-4.7%	3.3%	12.1	12.1	0.1%	5.9%	12.1%	12.6%
Exterior	48	68	66	-2.8%	8.7%	6.8	7.0	2.9%	14.2%	12.0%	13.0%
Interiors	53	145	135	-7.3%	-0.2%	10.9	11.1	1.3%	8.1%	7.8%	8.5%
Powertrain/ electric vehicle	137	233	222	-4.9%	4.9%	24.7	24.0	-3.3%	6.1%	12.2%	12.4%
Raw material	27	68	58	-14.1%	-7.9%	8.3	7.4	-11.3%	-4.6%	12.7%	13.1%
Total	599	1,326	1,261	-5.0%	4.8%	\$134.7	\$131.7	-2.2%	7.8%	11.2%	11.5%

Note: Financial figures include revenue resulting from automotive sales only; local currencies converted to US\$.

Source: CapIQ; publicly available financial data; Strategy& analysis

No time for waiting

We're still in the middle of a consolidation boom among automotive suppliers. With more buyers emerging, M&A transaction values are likely to remain at or near their current record levels. Acquisition prices are climbing amid intensifying competition for deals, another trend we expect to continue for the foreseeable future. Should you sit back and wait for prices to come down? Not if you aim to capitalize on the trends and technologies reshaping the industry.

Advances in fuel efficiency, alternative powertrains, autonomous driving, and connected car systems require new capabilities that many suppliers lack. Building these capabilities internally may take longer than regulators and OEMs are willing to wait. At the same time, OEMs keep purging regional suppliers in favor of global players that can support simultaneous vehicle launches on several continents. Acquisitions can be a quick, efficient response to these challenges.

Not every supplier needs to launch an aggressive buyout campaign or post a "for sale" sign. The right approach for each company will depend on its industry segment and individual circumstances. But few can afford to rely on the status quo or wait to see how technology shifts play out. Change is coming to many auto supply sectors, with major implications for suppliers globally. New technologies create opportunities for suppliers of chassis, powertrains, and electronics. But over time they'll also eliminate or greatly reduce entire vehicle subsystems, such as gasoline engine components or light truck frames.

Successful suppliers will determine how the changes affect their strategic growth priorities, and identify the capabilities they'll need in a rapidly evolving industry. We recommend a broad review of strategic priorities and capabilities, starting with some basic questions:

How well does our product portfolio align with technology trends and the long-term strategies of our customers?

What strategies are our competitors pursuing?

How do we define our right to win in the marketplace, and do we have the differentiating capabilities to deliver on that value proposition now and in the future?

The answers will help suppliers prepare their organizations for change and build the right capabilities. Acquisitions may or may not play a role. But companies that need deals won't win by waiting.

Methodology

The ninth annual “Consolidation in the global automotive supply industry” report is based on financial, operational, and strategic data collected by a global team of PwC’s Strategy& and management consulting automotive specialists, representing all of the major automotive markets.

We looked in depth at the top 100 global automotive suppliers as well as 715 additional suppliers from key regions such as Brazil, China, Europe, India, Japan, North America, Southeast Asia, and South Korea. Those included in the study are Tier One through Tier Three suppliers, as well as raw material suppliers. We cover both passenger car and commercial vehicle suppliers. Relying on data from publicly available sources and proprietary research — including interviews with industry observers, select suppliers, and

OEMs — our team applied a model that utilizes more than 30 variables, weighted appropriately for each category. The variables assess suppliers’ strategic positioning, financial performance, and operational capabilities across eight categories: size and criticality, capital structure and health, segment commodity structure, business health, business flexibility, customer base, ownership structure and management, and acquisition history.

Scores were then developed to reflect each supplier’s vulnerability to acquisition or breakup (divestor and distress scores) and likelihood of acquiring part or all of other companies (buyer and buyer attitude scores). Although many of the companies covered as part of the study are privately held, we gathered sufficient data to score 80 percent of all suppliers in the study.

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