REPORT

Global Automotive Supplier Study 2023

Opportunities for growth amid the challenge of change

Roland Berger

LAZARD

Management summary

After three consecutive years of crisis, the nascent recovery in the automotive market is proving to be a slow and inconsistent one. Suppliers continue to struggle with a broad set of challenges, from lackluster growth to cost-driving regulatory frameworks, from expensive raw materials to increasing labor rates, from worsening capital constraints and financing costs to subsequently declining margins. Traditional players in particular are having a hard time dealing with global disruptions and finding their place in a seemingly unstoppable technological transformation. This new study – conducted by Roland Berger in collaboration with Lazard in late 2023 – takes a deep dive into where the automotive supplier industry is at today and what key challenges it faces. Though the situation is unquestionably sobering overall, the study also identifies opportunities and strategies that can help suppliers adapt to and successfully master these testing times.

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Cover: Artur Debat | Getty Images

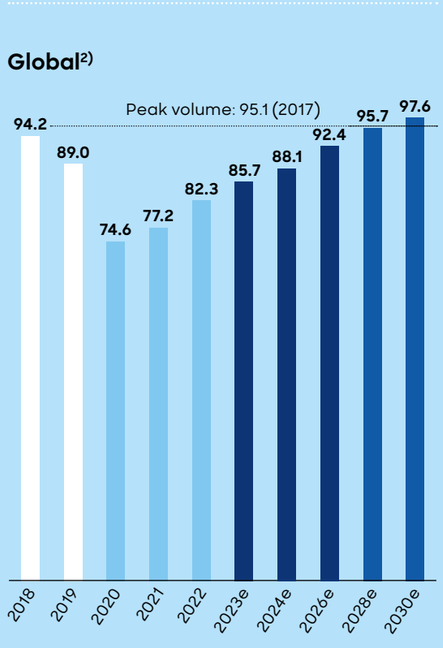
1 Taking stock

Slower growth is here to stay

The coronavirus pandemic destroyed a decade of growth in the automotive industry. And that was only the beginning. Supply chain disruptions followed even ahead of the war in Ukraine, which in turn accelerated surging commodity prices and general inflationary pressures. Add in labor shortages, massive inflation and rising interest rates, the threat to trade emanating from resurgent nationalist tendencies – all alongside a groundbreaking and ongoing shift in the powertrain and digitalization technologies at the very heart of automotive engineering – and it is easy to see why large swaths of the industry were in rough shape even before the latest geopolitical conflict flared up in the Middle East. Permacrisis, it seems, is the new normal. ▶ A

A While China and South Asia are expected to be the growth drivers of global vehicle production, Europe and NA will likely not return to peak volumes by the end of the decade

Production volume of passenger cars[1] by region, 2018-2030e [m units]



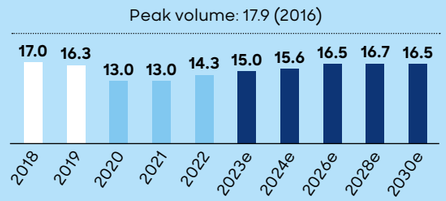
Volume below historic peak volume

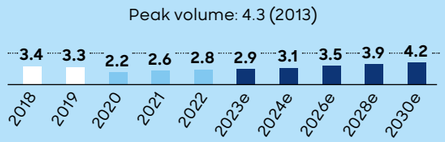
Volume above historic peak volume

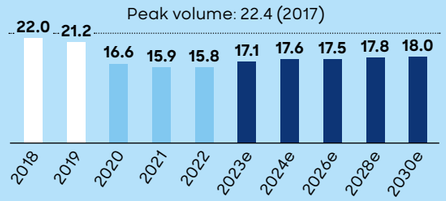
[1] Incl. LCV; excl. CIS

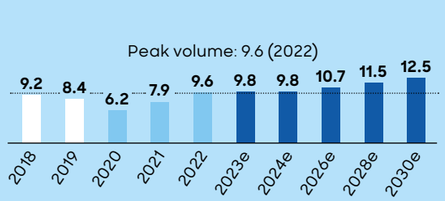
[2] Incl. RoW

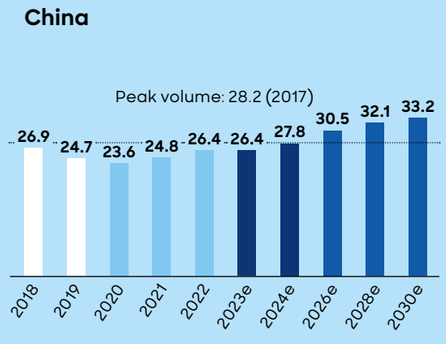
Source: IHS, Roland Berger/Lazard

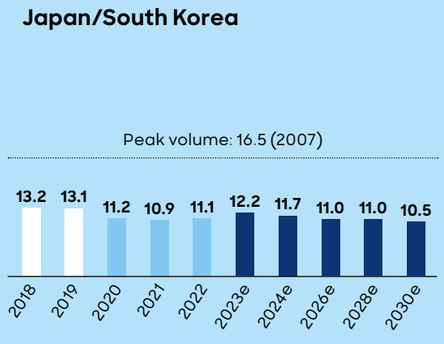












Growth has nevertheless returned to automotive vehicle production volumes, which have been recovering slowly since bottoming out early in the pandemic. However, this volume growth is generally taking place only in China, India and Southeast Asia. Also, it is largely being driven by new components (for battery electric vehicles, for example) made by new players – in some cases for new OEMs. By contrast, volumes are effectively flatlining in Japan and South Korea. Worse, production volumes in Europe and North America are not likely to return to the peaks witnessed in 2017/2018 until around the end of the decade. This is a serious issue for traditional European suppliers, whose financial health – as discussed below – is already suffering badly as they effectively sit on the sidelines watching other players participate in growth in other markets.

As growing uncertainty surrounds the economic future and the industry still faces geopolitical uncertainties, India too is putting in a notable appearance on the world's automotive stage. The subcontinent rebounded swiftly in the wake of Covid and is projected to see forceful growth through 2030. The same seems to apply for Southeast Asia, too, which is plotting a trajectory similar to that of India. Unlike in China, however, the potential for Western suppliers to play a significant role in these markets currently appears limited, and neither market can keep up with China in terms of overall volumes.

To summarize: global automotive production volume growth will not surpass pre-Covid levels until 2028 at the earliest. Moreover, even the growth that is taking place will be driven mainly by new technologies surrounding the transition from internal combustion engines to electric powertrains. And as this growth gravitates eastward, Europe and North America are in real danger of simply losing relevance. In particular, European suppliers that have hitherto done the vast majority of their business on their domestic market need to realize that they will most likely never see a return to the volumes they enjoyed in the past.

The market "as is" clearly raises a lot of very serious strategic questions for automotive suppliers who want to stay successful in today's rapidly changing environment.

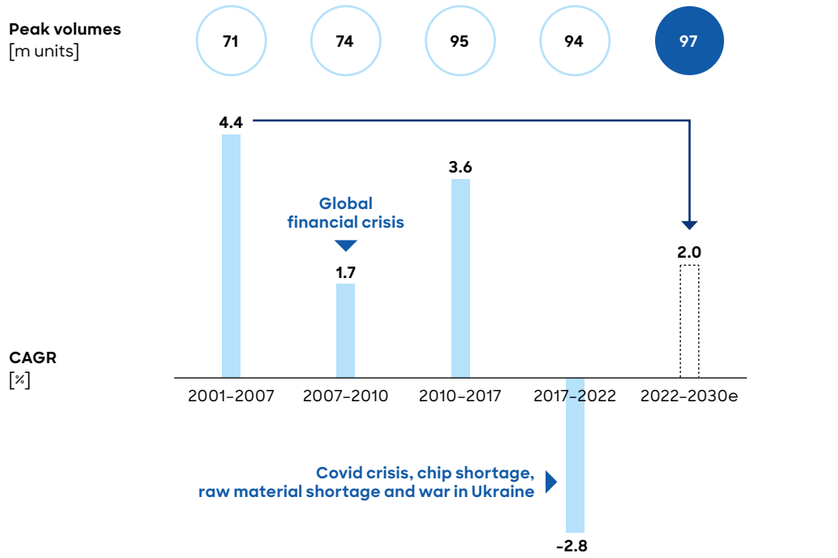
> **"Many suppliers need dedicated performance programs to stabilize their margins and secure the company against future uncertainties. They should reconsider all activities, specifically in terms of product portfolio, production locations and supply chain structures."**
>
> **Felix Mogge, Partner, Roland Berger**

2 Automotive suppliers' financial health

Coping with structurally thinner margins

Many of the pain points touched on above are having a very tangible impact on automotive suppliers' profitability. Lower volumes have eroded their ability to reap the efficiency benefits of scale effects, for example. Market volumes remain distinctly volatile because of supply chain frictions and program shifts on the OEMs' side, making it difficult for all market players to draft reliable plans. A chronic shortage of suitably skilled labor has been worsened by the need for new skill sets to cope with digital transformation and the transition to new powertrains. This fact in turn has conspired with other inflationary pressures – such as steep wage rises in Europe and the still-growing expectation levels of unions going forward – to sharply drive up labor costs, alongside higher prices for utilities and materials. At the same time, OEMs are increasingly limiting their contribution to suppliers to compensate for such impacts, for instance. All these developments have unfolded against the backdrop of higher interest rates and a deteriorating perception of the sector on the capital markets, leading to a commensurately higher cost of capital. ▶B, ▶C, ▶D

B Although a recovery in global auto production is expected, the growth dynamics of the past will not be achieved anymore
Production volume development 2001–2030



Source: IHS, Roland Berger/Lazard

C Labor costs increased significantly because of high inflation in 2022/2023 but also due to a lack of skilled workforce

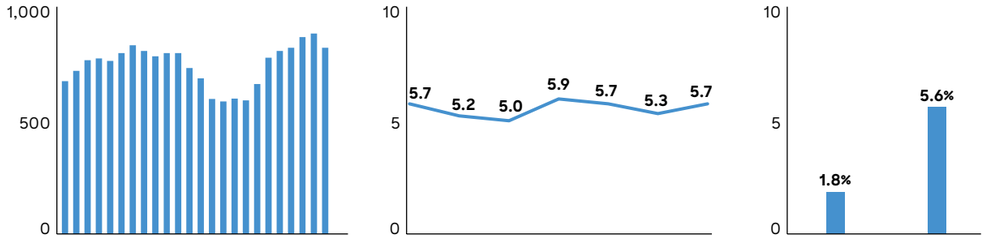
Labor market parameters

Vacancy development [#k]

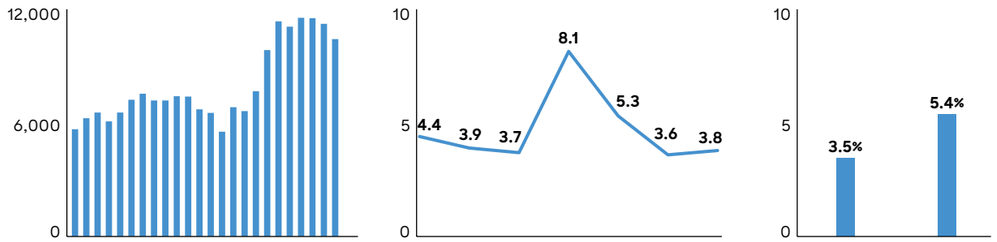
Unemployment rate [%]

Hourly labor wage YoY growth

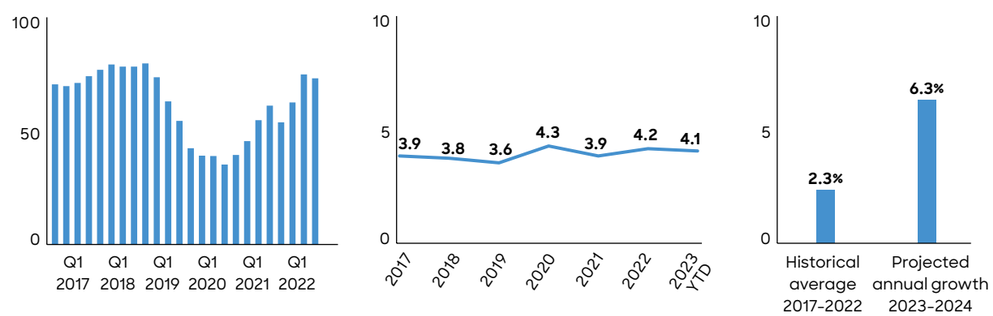
Germany



USA



China

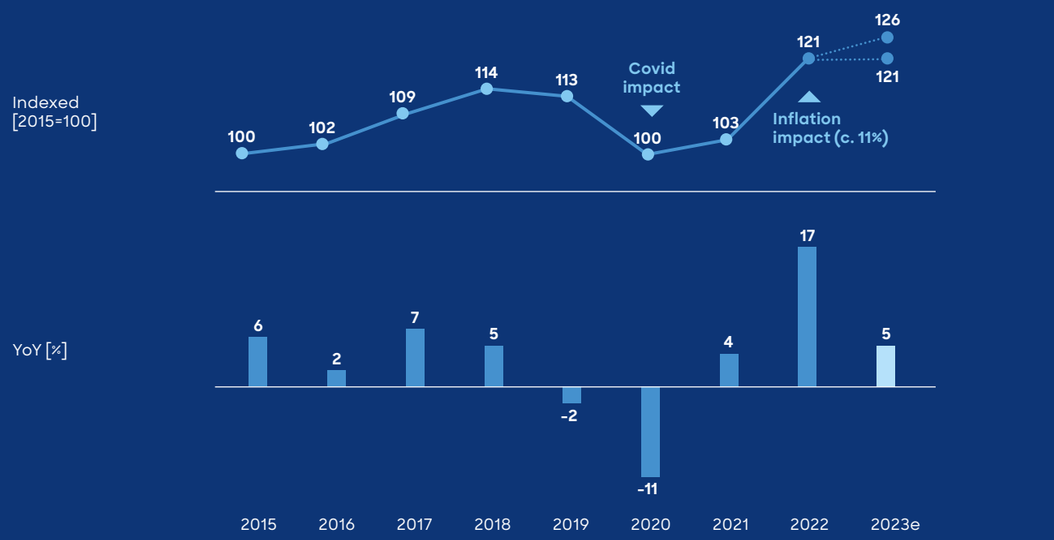


Source: Center for Automotive Research, IMF, Roland Berger/Lazard

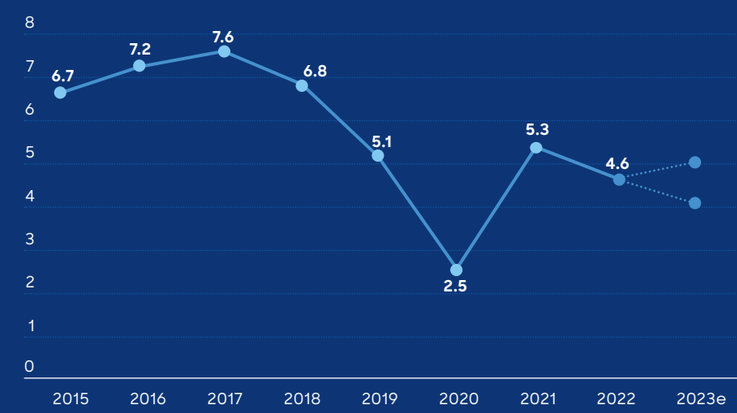
D Compared with pre-crisis levels, the automotive supplier industry has structurally lost three percentage points on EBIT margin

Key supplier performance indicators, 2015-2023e (n=~600 suppliers)

Revenue development globally



EBIT margin [%]



Source: Company information, Roland Berger/Lazard

Taken together, these and other factors have structurally shaved 3% points off suppliers' EBIT margins, which have fallen from around 7.5% to under 5%. Digging deeper into this profit squeeze, a number of further interesting points add revealing detail to the reasons for this decline.

The first is that after years of rampant returns, profitability in China appears to be "normalizing" to the kind of levels more familiar in Western markets. This began with the Covid lockdowns in 2021/2022, but has continued as the Chinese auto industry increasingly aligns with Western-style standards. EBIT margins in this market thus seem to be stabilizing at more modest levels (currently about 5.4%) than in the past – even though these are still better than returns in South Korea and Japan, and far superior to EBIT in Europe, which has been hit hard by material shortages and price increases exacerbated by the war in Ukraine.

Following a trend observable in recent years, another key factor is that larger suppliers are evidently better able to absorb crisis impacts and still stay on an even keel. Small suppliers are often highly dependent on specific products or markets and suffer the most when markets are disrupted and/or financial challenges arise. After riding the wave of extraordinarily strong performance (with margins upward of 10% in some cases) from Asian process specialists for the past decade, even mid-sized players are now seeing EBIT erode. In contrast, larger suppliers are generally more capable of recovering costs from OEMs – although this may not be the case for the very largest players, whose volume can significantly affect OEMs' profits too. ▶ E

> **"In an environment where lower returns and higher risk meet more limited and more expensive funding, suppliers have to pursue strategic portfolio adjustments and explore new ways to remain competitive."**
>
> **Dr. Christian Kames, Co-Head DACH, Lazard**

A third important factor in the structural margin decline is that higher profits are now coming from different activities. While margins are visibly deteriorating across all aspects of supply, tires are perhaps the only traditional automotive discipline where returns remain stable. And even this is mostly because of their large share of aftermarket business. On the other hand,

E While conventional suppliers are hit, many of the tech players are far less impacted by the current short-term developments and challenges

Positioning of automotive supplier cluster

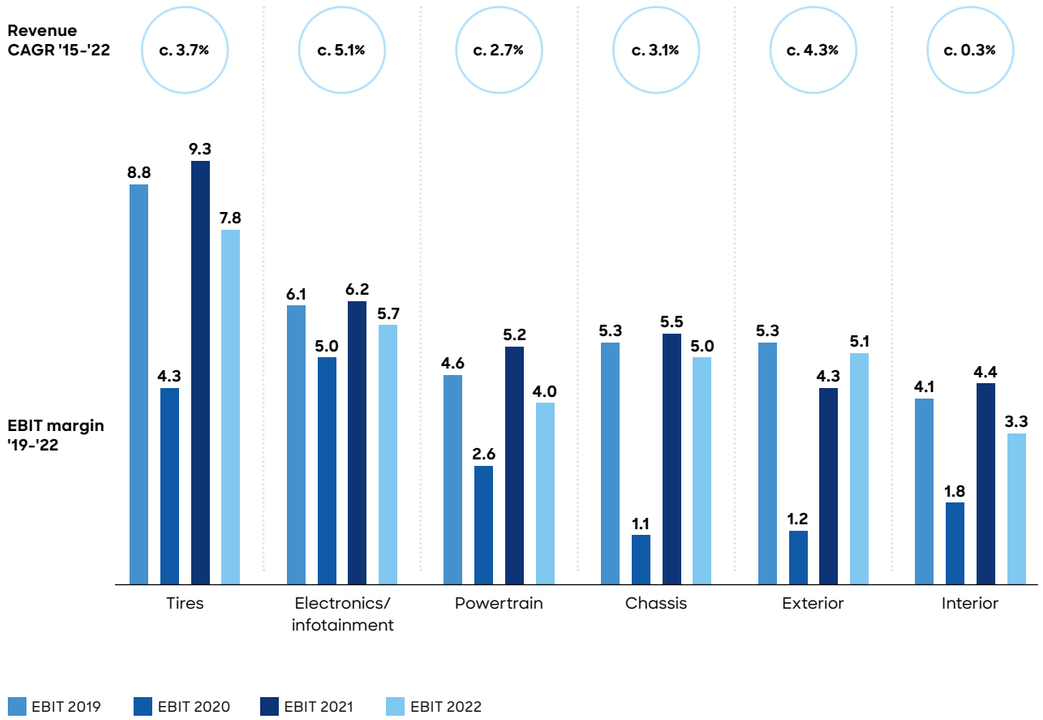
Impact over the next years:
−− strongly negative | − negative | 0 no impact | ++ strongly positive | + positive

		EU commodity players	ICE-focused suppliers	Large-scale cost leaders	China-based OES	Battery leaders	Software/ tech giants	Battery followers	Software boutiques
A	Lack of volume and scale effects	−−	−−	0	+	0	0	0	0
B	Volume volatility	−−	−−	−	+	0	+	0	+
C	Above-average raw material prices	−−	−−	0	0	+	0	−	0
D	High energy prices	−−	−−	−	+	+	0	0	0
E	Limited claim success	−−	−−	++	−	0	+	0	0
F	Labor scarcity and salary increases	−−	−−	0	0	+	+	−	−−
G	Rising interest and unfavorable equity capital markets	−−	−−	0	+	++	++	−	−−

Source: Roland Berger/Lazard

F **The margin deterioration is visible across all domains, with tires and electronics/infotainment being the most stable**

Key supplier performance indicators by product focus [%]

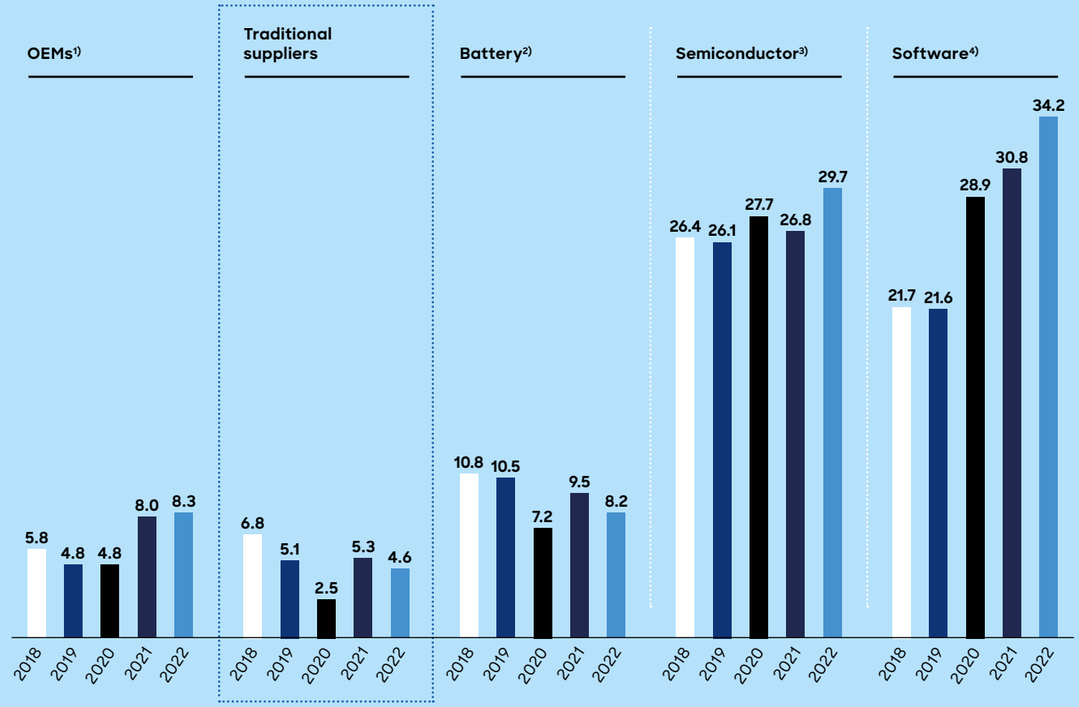


Source: Company information, Roland Berger/Lazard

the trends toward digitalization and new functions such as connectivity and automated driving have enabled electronics and infotainment suppliers to defend their margins fairly well. That said, the shift toward electrified vehicles is creating significant margin issues for almost all types of powertrain suppliers: for players focused solely on ICE, volumes are slowly starting to come under pressure as the last generations of current products come to an end. For ICE players who are actively managing the transition toward electrified powertrain products, R&D spending on e-mobility continues to eat into profitability. Moreover, new EV products – many of them acquired through hard-fought competition – are still far from profitable, either from a price perspective or because BEV model sales still lack the scale needed to offset these effects. ▶ F

G **Contrary to traditional components, suppliers in the new vehicle domains can achieve much higher EBIT margins**

Supplier EBIT margin comparison, old vs. new tech [%]



Source: Consensus, Roland Berger/Lazard

1) Volkswagen, BMW, Mercedes-Benz, Toyota, Hyundai, Tesla, Ford, GM, BYD, SAIC 2) CATL, Farasis Energy, GS Yuasa, Samsung SDI 3) AMD, Wolfspeed, Elmos, Infineon, Intel, Nvidia, NXP, ON, Qualcomm, Renesas, Rohm, ST, Texas Instruments 4) Microsoft, Google, Apple, Qualcomm

Perhaps most critically of all for traditional OES, the transition in powertrains away from ICE technology is bringing completely new, powerful and much more profitable players into the automotive space in precisely those areas with high profit pools. A glance at the chart above illustrates the point: while battery players have on average double the margins of traditional suppliers, the margins of non-automotive semiconductor and software suppliers are more than four times as high (and significantly higher than those of OEMs). ▶ G

Deep pockets are key when it comes to reaping handsome rewards in automotive growth segments. The new tech players entering the market – together with successful Asian-based suppliers and some large traditional OES of systemic importance – have these resources and are thus better able to fund the R&D that will let them capture lucrative market shares going forward.

3 Outlook for the supplier industry

Growth in new places and new technologies

Even if the rate of expansion overall has slackened, we have seen that automotive supply is still an expanding industry. Growth is slated to average roughly 4% per annum from 2022 through 2030. And where there is growth, there are opportunities. The principal challenge facing existing suppliers, however, is aptly summarized in the chart shown below. ▶H

Simply put, the bulk of automotive supply growth for the remainder of this decade will come from different components than in the past. It will come in response to demand from different customers than in the past. And all the signs suggest that it will be realized by different competitors than in the past. As traditional combustion engine technologies continue their decline and mechanical components in general slide even further toward commoditization, it will be software, electronics and battery technology that primarily deliver growth. New BEV OEMs from Asia will be the main source of demand. And with the exception of Tesla, whose growth is literally off the charts, Chinese OEMs such as BYD are the only ones currently fueling constant growth. Critically, traditional North American and European suppliers in the powertrain segment have virtually no chance of participating in this growth to any significant degree if they stay with their existing portfolios . ▶I

It is also important to note that Chinese OEMs are substantially enlarging their share of their home market. In 2024, local OEMs are – for the first time – expected to account for more than 50% of vehicle production in China. Even in the attractive premium segment, which has

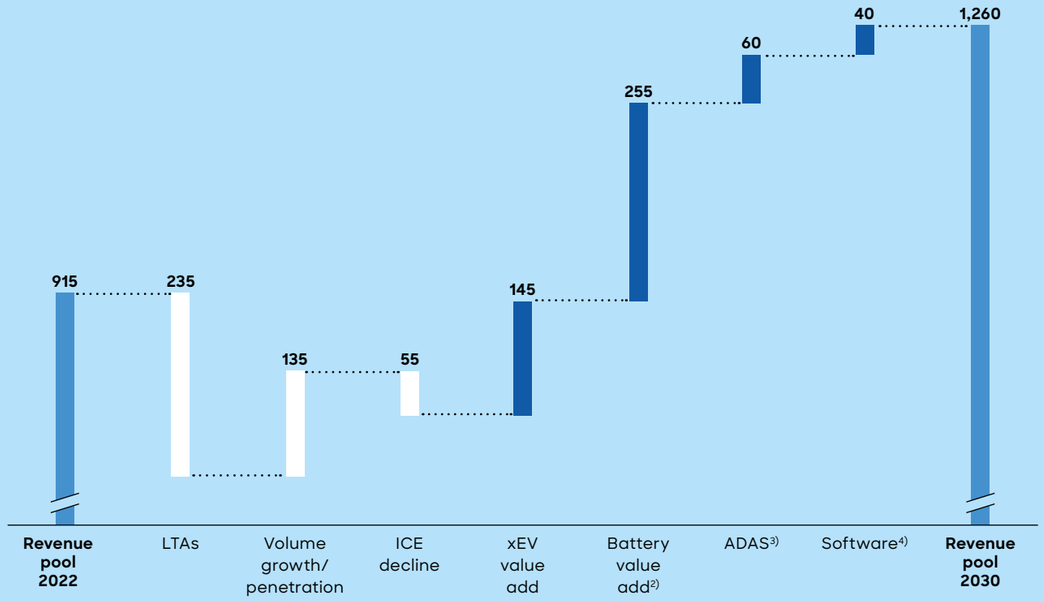
H The automotive supplier industry offers growth but with different components, customers and competitors

Global automotive supplier market development 2022-2030e[1] [EUR bn]

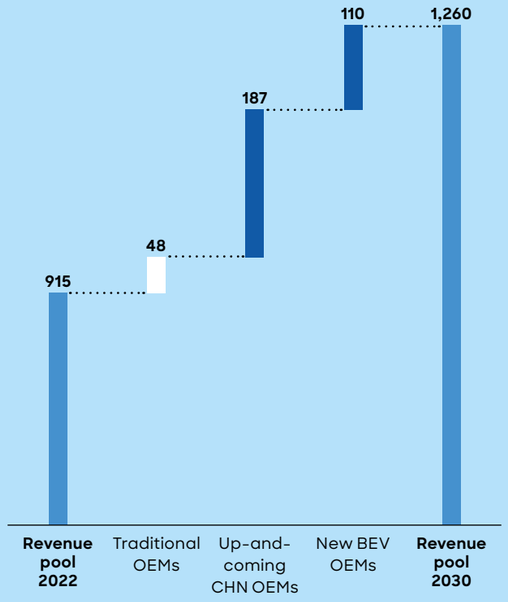
[1] Assuming constant material prices
[2] Incl. cells
[3] Incl. autonomous driving
[4] Incl. E/E architecture

LTAs: long-term agreements
ICE: internal combustion engine
ADAS: advanced driver-assistance systems

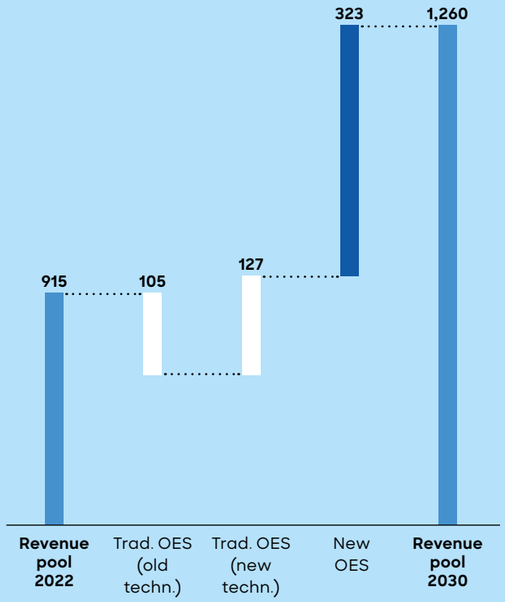
By components A



By customer B



By competitor C



Source: Roland Berger/Lazard

historically been dominated by European OEMs in particular, two of the top five best-selling models in 2022 already came from Chinese manufacturer BYD. As the Chinese government persists in incentivizing local players, but also because of the growing loyalty of Chinese customers to domestic players, this trend is set to continue: it is no coincidence that nine of the country's top ten pure electric vehicle manufacturers are home-grown. The logical consequence of this trajectory is that, of the 30 million or so cars soon to be made for the Chinese market, perhaps less than 15 million will even theoretically be accessible to Western players. Paradoxically, a market growing fast in absolute terms could thus become a flattening or even shrinking playing field for Western companies.

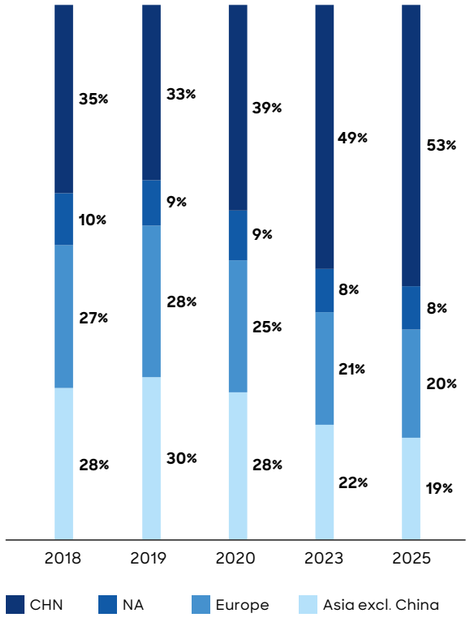
For traditional suppliers, the writing is on the wall. It is high time for them to see Chinese OEMs as serious customers and Chinese suppliers as very professional competitors. Nor does this apply only to the domestic Chinese market: as leaders in the advanced technologies surrounding battery electric vehicles, these players are also looking to ramp up their market shares in other regions as well. Moreover, their impressive command of scale effects helps them keep overall costs down even when, like Western suppliers, they are faced with rising input costs. The realistic nature of their expansion ambitions is reflected in Chinese suppliers' upward surge in global ranking tables. ▶ J

When we distill this industry outlook into the simple categories of winners and losers, a sobering picture emerges for traditional Western OES. ▶ K

Large numbers of traditional suppliers are becoming increasingly irrelevant as newcomers – many of which are established and well-resourced technology players from other industries – assume strong market positions and capture attractive areas of future growth. The series of crises enumerated at the beginning of this study has accelerated this paradigmatic shift in the automotive supply industry. Perhaps the only trump cards large traditional suppliers still possess are their scale and their financial strength. Going forward, however, their market success will depend on how they play these cards – which leads us into concrete recommendations for players in the automotive supply space.

I **Chinese OEMs continuously gain market share in their home market and have a leading position in BEV production**
Role of Chinese OEMs

Sales development in China by OEM region



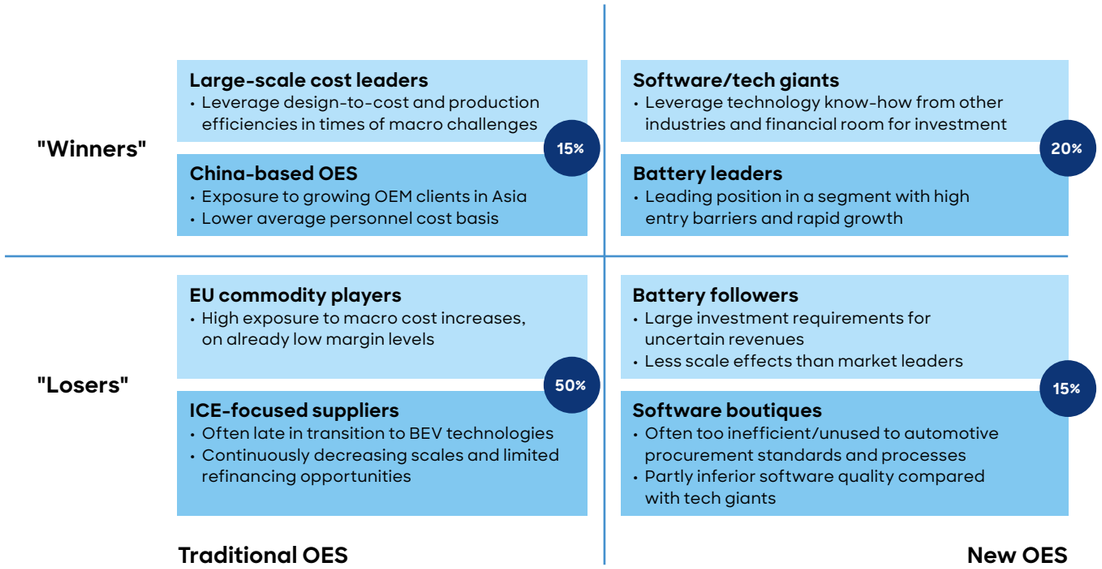
Source: IHS, Roland Berger/Lazard

> **"Automotive suppliers have lost nearly 3%-points of EBIT margin since 2017/18 – current profitability level is not sufficient to match the average cost of capital"**
>
> **Christof Söndermann, Managing Director, Lazard**

J **Chinese players are professionalizing and are active in growing segments, as reflected in their presence in the global top-100**
Role of Chinese automotive suppliers

Source: Consensus, Roland Berger/Lazard

K **While new suppliers mostly see the automotive industry as an attractive growth opportunity, traditional OES often suffer**
Automotive supplier cluster



Source: Roland Berger/Lazard

4 Recommendations

Selective strategies and radical repositioning

There is no stopping the transition from internal combustion to electric powertrains, nor can the industry's eastward drift be halted. Also, the fresh flare-up of conflicts in Israel and the Middle East could yet have another serious set of implications for more than just the automotive industry. However, as this study constantly reiterates, growth opportunities are still very much there, so there will definitely be winners as the current transitions and transformations play out. Suppliers and OEMs alike must face up to these new realities. And, especially in the case of traditional suppliers, they must radically rethink their strategy and find their place in the new-look automotive space of the future.

"Overall, the supplier market remains a growth business, albeit with different components, for different customers, and for other suppliers than today."

Florian Daniel, Partner, Roland Berger

There is never a one-size-fits-all solution, and this is all the more true in the complex and changing constellation we have described. Nevertheless, five basic principles and approaches must underpin every supplier's strategy to adapt and advance in the current climate:

PERFORMANCE

As global economic and political disruptions continue and OEMs exert ever greater pressure for lower costs and greater efficiency, it is crucial for suppliers to launch dedicated performance programs that can stabilize margins, increase cash flow and hedge their business against future uncertainties. Rising interest expenses in upcoming refinancing rounds will further increase the need for such actions. In the short term, the after-effects of the various crises make this a good time to implement unpopular measures (such as resizing or relocating the workforce) in order to slash overheads and boost performance.

PIVOT TO ASIA

Those suppliers that have not already done so must accept that the global focus of the automotive industry is shifting away from Europe and toward the Asian market. As Asian OEMs in general and Chinese OEMs in particular grow in importance and increasingly set market trends, incumbent (Western) suppliers must realign the regional focus of their own activities - especially with regard to product portfolios, production sites and supply chain structures. Doing so will also help them mitigate risks in case of geopolitical conflicts.

PLAYERS' FUTURE SKILL SETS

The dramatic changes being driven by new technology players will give a definite advantage to players with strong skills in software and the development of batteries and new powertrain technologies, but also in the wider connectivity and digital space. Of central importance will be suppliers' ability to onboard and retain the necessary expertise beyond their traditional strengths.

PARTNERSHIPS

Potential M&A buyers willing to make cash acquisitions are in short supply, financing has become more expensive and the cost of capital is higher. Accordingly, mergers, joint ventures and other forms of collaboration with both OEMs and other suppliers will be essential to properly master the capex-intensive industry transformation.

PORTFOLIO AND POSITIONING

Given the above requirements, it almost goes without saying that scale and a top-three leadership position are critical. Suppliers must clearly define a focused strategic course, which primarily means deciding where to invest and capture growth on the one hand, but also where to consolidate and which activities to exit on the other.

There is a way forward!

Perhaps the most encouraging aspect of the challenges currently facing automotive suppliers is that they are staked out very clearly. In terms of both geographic market trends and ascendent technologies, industry players know where they stand and what needs to be done. This clear-cut knowledge gives an advantage even to those suppliers for whom the most radical realignments are necessary.
The important thing is for each supplier to carefully choose the cluster it wants to occupy and develop the corresponding focus, which will obviously vary from company to company. Large-scale cost leaders will have a very different focus than software and tech players, for example, as will battery leaders and what we call battery followers.
Asian-based suppliers must also get themselves in shape to tackle established competitors as they expand into Europe, but without compromising their market position at home.
For many different players, committing to R&D partnerships will be a must, both to keep up with (or stay ahead of) the technological transformation and to keep a cap on costs.
The rewards for those who do choose the right partners, target the right markets and niches, and apply the right strategies promise to be handsome. Even – and especially – as far-reaching transformation unfolds, it is well worth fighting for a lucrative position in the automotive market of tomorrow.

We welcome your feedback, questions and suggestions and would be happy to talk to you about your company's road to the automotive future.

Disclaimer

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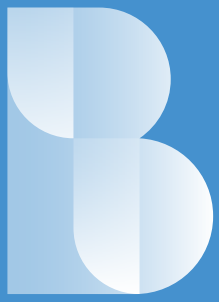

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