CRISIL

An S&P Global Company

ViewCube

October 2019

Auto components

Slow drive

Revenue to decline 4-6%, margins to be under pressure in fiscal 2020

Companies will have to realign product strategy to deal with regulatory changes

ViewCube is a compilation of sector views expressed during CRISIL's webinars. These include CRISIL's own views, that of stakeholders, and those emanating from a poll done during the webinar.

Note: Views expressed during the webinar have been overtaken by sectoral developments. Consequently, Our View and Their View have been adjusted to account for the changes in the landscape after the webinar discussions.

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Our view

Shifting to lower gear

A slowdown in demand across vehicle categories, has led to production cuts by leading automobile original equipment manufacturers (OEMs) over the last 12 months. The slowing vehicle demand and the consequent piling up of inventory with dealers have meant moderation in orders for the automobile components sector. CRISIL Research sees the auto components sector's revenue declining 4-6% in fiscal 2020 as against 15% growth in fiscal 2019. Despite the fall in raw material prices, which are typically passed on with a lag, players are also seeing pressure on their operating margins as utilisation rates are on the decline.

The health of the domestic automobile sector is a key factor in the growth of the auto components sector. This is because about 65% of the revenue of auto component firms come from domestic OEMs. The remaining 19% come from export and about 16% from replacement. So any sales decline or production cut in the automobile sector is bound to impact the components makers. Within the OEM segment, passenger vehicles (PVs comprising cars and utility vehicles) account for about 51% of auto component demand, two-wheelers around 26%, commercial vehicles (CVs) around 16% and tractors about 5%.

We believe credit quality of the auto components sector would be stable to moderately negative in fiscal 2020. The good thing is that component firms' balance sheets had been strengthening over the past decade, and capital spending will be curbed until demand revives. Having said that, we believe, the companies with higher concentration either by product, especially CVs, or by client may face pressure on credit quality.

Steep rise in ownership cost of vehicles

The automobile industry was in good shape until the first half of fiscal 2019. The sales slowdown started from the third quarter of the fiscal after the Insurance Regulatory and Development Authority (IRDA) revised the insurance norms by the end of September 2018. The move pushed up the insurance cost for two key sub-segments – two-wheelers and PVs. This coincided with a surge in petrol and diesel prices. As a result of these, the cost of ownership of two-wheelers rose 13%, of which 8% in absolute terms was the insurance cost. Similarly, PVs saw a cost increase of around 7% – attributable to both insurance and fuel price hike. In fiscal 2018, the cost had already increased 7% for two-wheelers and 6% for cars after a rise in fuel prices. On a compounded basis, the cost of two-wheelers increased 20% and that of cars 12-13%, much higher than the 2-4% increase usually seen in a year. In addition to this, PV OEMs had been focusing more on facelifts than new model launches. This strategy did not pay off. While in fiscal 2017 about 18% of sales was through new models such as the Brezza and Baleno, in fiscal 2019, the corresponding figure was only 3%. This further impacted retail demand.

Meanwhile, demand for CVs also took a hit due to two reasons: 1) The new axle norms; and 2) liquidity crunch for non-banking finance companies (NBFCs). The new axle norms, which became effective in August 2018, increased the freight carrying capacity of the trucks by 20%. As a result of this, lesser trucks were required to move the same amount of load and hence fleet operators' demand for new vehicles came down. NBFCs, which have traditionally provided funding to dealers and smaller component firms, witnessed higher costs, and curtailed lending, impacting fund availability for their customers.

Fiscal 2020 starts with high inventories

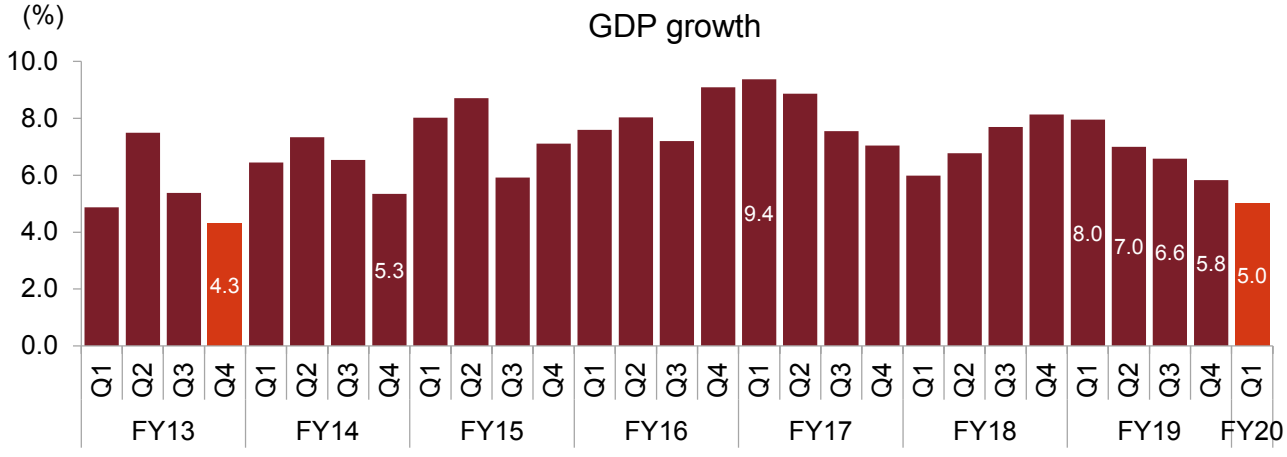
Despite the fall in demand, car makers continued to push sales in the third quarter of fiscal 2019. While the average inventory typically stands at around 45 days for two-wheelers, it increased to as high as 65 days during the quarter. For PVs, it was around 50 days. Despite the production cuts introduced in the fourth quarter, the inventory was around 55 days and 42 days for two-wheelers and PVs, respectively. Thus, fiscal 2020 began with a higher-than-normal inventory which would get liquidated to near or below normal levels by the end of the fiscal 2020 before the BS-VI norm become effective.

Slowdown blues dents consumption, vehicle sales

India's gross domestic product in the first quarter of fiscal 2020 grew 5% – the slowest in 25 quarters, according to the government estimates. A plunge in domestic private consumption demand, slump in manufacturing, halving of merchandise exports growth, and a high-base effect from last year were the reasons for the decline.

Private consumption growth – the bulwark of India's growth story in recent years – was at a four-year low

Growth at 25-quarter low



Source: MOSPI, CRISIL Research

of 3.1%. The last couple of times private consumption fell this sharply was in the first quarter of fiscal 2013 (-0.9%) and third quarter of fiscal 2015 (2.1%), as per the new GDP series. Given the double whammy of slack private consumption and manufacturing in the first quarter of the fiscal, automobile sales tanked in the second quarter too owing to feeble retail demand.

Sluggishness in private consumption is reflected in limited income growth, cost increases, slowing real estate demand and an overall dent to consumer sentiment. In fact, much of this cyclical slowdown has affected sectors that are large employment generators, suggesting that incomes and/or employment growth in these are expected to have suffered. As households have been dipping into their savings while also leveraging themselves, their ability to spend could be constrained.

In addition to the consumption slowdown, automobile demand was further impacted by continued tightening of liquidity conditions and negative sentiments in the rural market on account of delayed monsoons and inaction during the election months.

Dampened festival spirits in Maharashtra and Kerala due to uneven and heavy rainfall coupled with deferment of purchases under expectations of GST cut in the second half of the fiscal 2020 have further hindered demand across vehicle categories in the second quarter.

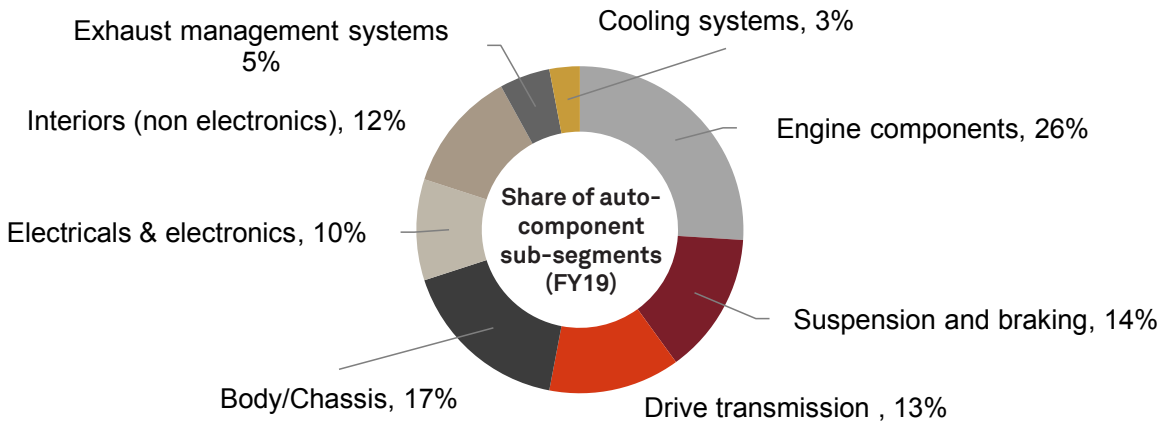
Medium and heavy CV (MHCV) sales also fell mainly due to two reasons: i) weak freight demand due to lower industrial output; ii) the government has not been able to push infrastructure demand, adversely impacting transporters' fleet utilisation and profitability, which in turn inhibits their fleet addition and replacement. Light CV (LCV) demand, too, suffered due to lower redistribution freight (lower MHCV freight demand) and continued weak rural demand.

BS-VI norms add to the uncertainty

The transition to BS-VI norms, to be implemented from April 1, 2020, is the next big change that is going to impact the automobile and automotive components sectors. The BS-VI norms mandate a reduction in carbon monoxide, hydrocarbons, particulate matter and nitrogen oxide levels in automobile emission. In order to comply with the norms, automakers will have to add new components to the vehicles, which will, in turn, push up prices across all sub-segments. The price increase for PVs is seen around 5%, two-wheelers around 7% and CVs around 10%. Among CVs, LCVs are likely to see 10-12% price increase and MHCVs 8-10%. The subdued price increase for PVs is on account of higher share of petrol vehicles. About 80% of the cars sold in India runs on less-polluting petrol. On the other hand, CVs largely ply on diesel. In the case of two-wheelers, we see a shift from carburettor to fuel injector technology with the addition of electronics, leading to a 7% increase in cost.

While BS-VI norms will lead to cost increase, it will also lead to higher demand for exhaust management system, engine components and also for electrical and electronics parts required for monitoring the efficacy of the additional components.

Select auto-component segments to benefit from BS-VI norms



Source: CRISIL Research

Safety norms increases vehicle cost

In an attempt to improve the vehicle safety conditions, the government has made safety features such as anti-braking system (ABS), combined braking system (CBS), air bags, seat belts, speed limit trackers and rear parking sensor mandatory for various vehicle segments. These rules will boost the interiors and non-electronics segments of the automotive components sector. Safety norms have increased cost of two-wheelers and PVs by 1-3%.

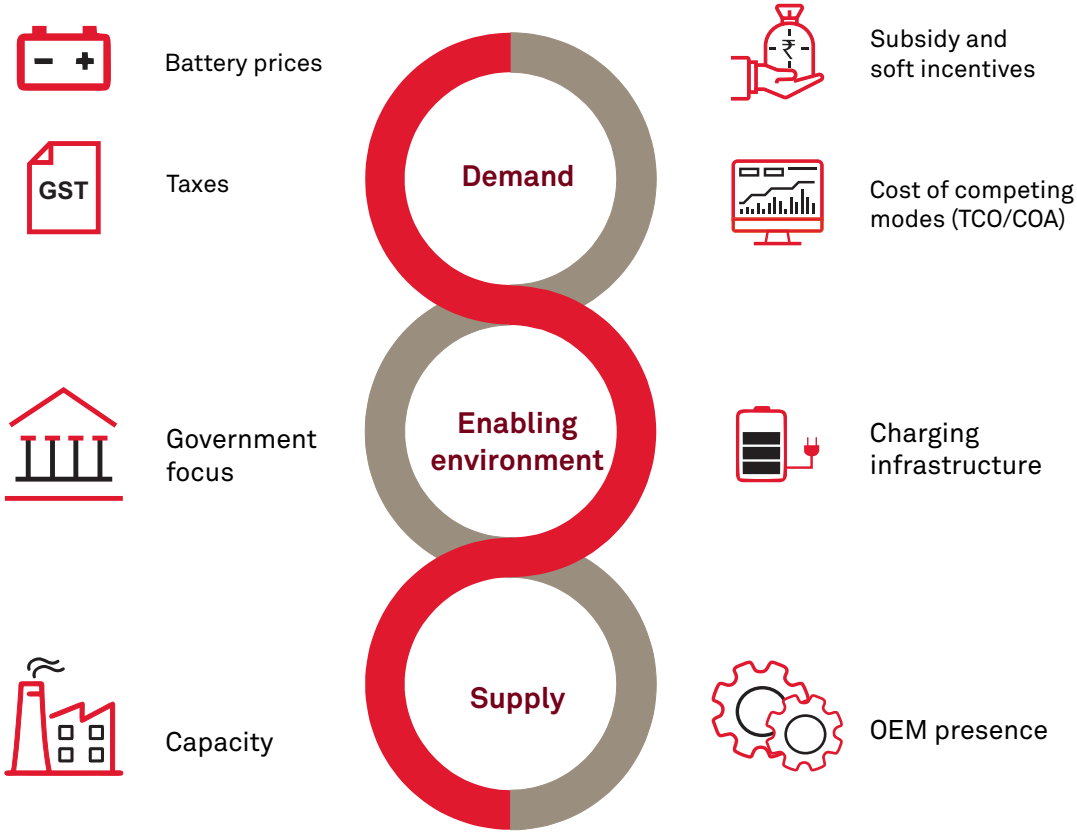
CAFE norms are corporate average fuel efficiency guidelines that are applicable for PVs. Most of the automakers complied with the first phase of CAFE norms in fiscal 2018 itself. In fact, by fiscal 2023 (the second phase of CAFE), major OEMs will be only 5% away from the required fuel efficiency. This will be achieved through the regenerative braking process, reduction in rolling resistance and light weighting. We believe the norm will not have a significant impact on the automotive components industry.

Govt pushes for EVs but adoption likely to be gradual

There has been a lot of discussion around electric vehicles (EVs) of late. However, CRISIL Research believes a pick-up in EV adoption will be gradual and may not impact the automotive component sector substantially over the next five years.

We have analysed electric vehicle demand considering three factors – demand assessment, supply availability and enabling environment.

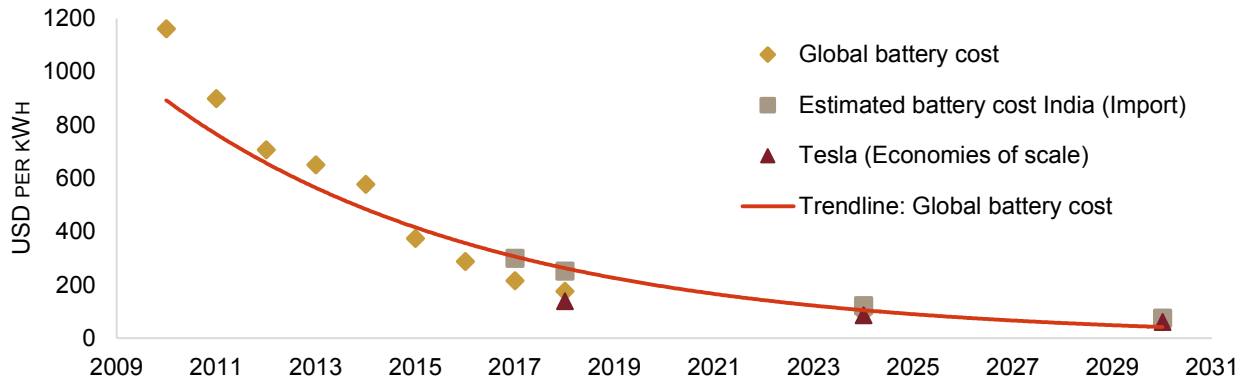
EV assessment framework



Source: CRISIL Research

Prices of batteries have been falling sharply over the last 10 years – at a rate of ~20% annually. The fall will continue at a rate of around 10% annually over the next five years. For instance, at present a battery is priced at around $260 per kWh. This is expected to fall to around $143 per kWh in the next five years. Moreover, going forward, we believe battery production will take place in India although cell manufacturing will still be done outside India. This will also further reduce the battery prices.

Battery cost in India at ~$260/kWh as of FY19



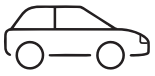
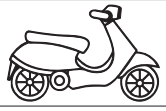
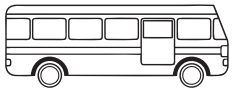
Source: Bloomberg NEF, SIAM, Tesla, CRISIL Research

The lower battery cost, reduced GST rate of 5% and FAME-II demand incentive are expected to improve the cost of ownership and hence viability of EVs. The subsidy provided by the Indian government is lower compared with other countries such as Norway and China. In these countries, demand subsidy is nearly twice as that of the cumulative incentive given in India (FAME-II subsidy and lower GST). Our interactions with various stakeholders and government bodies indicate EV subsidy is not a priority item, and the government would rather prioritise other social subsidies instead.

Availability of charging infrastructure remains a key determinant in EV adoption. In countries where EVs have seen better adoption, most personal PVs and two-wheelers are charged at home. In fact, about 90% of the electric cars in Europe are charged at home. In India, this may not be possible and may prove to be a constraint. For two-wheelers and three-wheelers, the lack of public charging infrastructure can be overcome with detachable batteries and battery swapping mechanism, as batteries employed are smaller in size. However, demand for EVs from cab aggregators, small CV segment and buses will hinge on availability of public charging infrastructure. The industry would need to set up sufficient capacity and come up with products to cater to the demand expected over the next five years. Presence of large OEMs also aids in adoption. Product availability, large OEM presence and production capacity remains a concern for EV adoption in segment such as two-wheelers and three wheelers.

EVs: Two-wheelers, three-wheelers to drive adoption

Battery cost in India at ~$260/kWh as of FY19

Vehicle segment	EV penetration	
	FY19	FY24 P
	0.10% (~3,600)	3-5% -1,76,000
	0.60% (~126,000)	12-17% -35,00,000
	0.50% (~500)	2-4% (~4,500)
	0% (~100)	3-5% (~24,000)
	0.01% (~700)	43-48% -3,70,000

Source: CRISIL Research

Electric vehicle adoption in India over the next five years is going to be largely driven by two-wheelers and three-wheelers. Electric two-wheelers are seen to have lower cost of ownership and acquisition compared with scooters which account for 34% of the two-wheeler industry. This segment is expected to migrate to the electric platform first. Electric three-wheelers too have a lower cost of ownership and acquisition compared with CNG and diesel vehicles. The lower cost for electric three-wheelers along with government push for this segment is expected to aid in a healthy ~45% adoption of EVs by 2024. The EV adoption in the car segment will be led by cab aggregators. The reason for this that taxis are better placed to reap the benefits of lower cost of operations as they run about 50,000-70,000 km a year, much higher than personal cars that run only ~10,000 km a year. In the bus segment, intra-city buses of state transport undertakings are likely to be the early adopters.

EVs: Impact on auto components industry

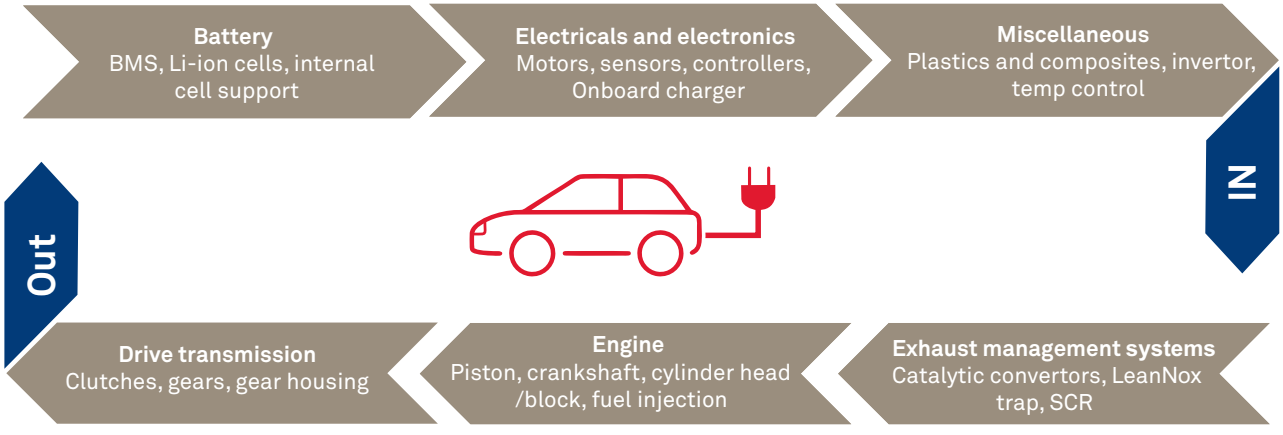
Overall, we believe only about less than 5% of revenue from traditional auto components stand to get impacted, especially in the, engine components, drive transmission and exhaust management segments. But that will be offset by new components such as battery, motor and controller.

Outlook: Automobile sales likely to remain muted in second half of fiscal 2020

The compounding impact of slowing economic growth, higher cost of ownership, lingering liquidity crunch and lower income growth in urban and rural India is affecting automobile sales across asset classes in fiscal 2020. With the expected plunge in demand in fiscal 2020, we expect pre-buying (preponement or advancement of purchases) ahead of the implementation of the BS-VI norms to be limited. As mentioned earlier, fiscal 2020 began with much higher-than-normal inventory. At the end of the fiscal, most dealers would not want to have any BS-IV inventory and will thus focus on liquidating BS-IV stock. Further, the expected price increase from April 2020 will aid in inventory liquidation. However, the impact of inventory liquidation will only be partially offset by pre-buying and as a result, we expect PVs, two-wheelers and CVs' sales to decline by 7%, 12% and 21% respectively in fiscal 2020.

In fiscal 2021, we expect automobile production growth to bounce back over a low base. Given the sharp decline in fiscal 2020, the overall automobile production growth over fiscals 2019-2024 is expected to be muted at 2-4%.

<5% of the automotive component revenue to get impacted in FY24 due to EV adoption



Sub-segments that account for ~45% of auto-component sector value, under threat from EVs

Source: CRISIL Research

Revenue outlook for auto components sector OEMs: Revenue of auto components makers from the OEM segment will decline by ~8-10% in fiscal 2020 owing to multiple production cuts by auto makers due to the weak retail sentiments and inventory liquidation. The growth of revenue from OEMs is expected to bounce back to 12% after the implementation of the BS-VI norms. This is owing to the higher production over a low base and increased component intensity.

Replacement segment: The replacement segment, which had a growth of around 8-9% historically, is likely to see a marginal slowdown and we expect the growth to be about 7% over the next five years. This is on account of the increase in service intervals, improving road conditions and superior quality of products. For example, the number of kilometres after which brake and air filter need to be replaced has gone up leading to lower replacement demand . In short, replacement demand on account of preventive maintenance is expected to go down in the medium term.

Exports: Indian automotive components sector has had a good run-up over the last five years as the players looked beyond the European Union and North America by focusing on the Asian market and various other countries. In fiscal 2019, we saw about 22% growth in exports. About 3-4% of that was on account of the rupee's depreciation against the dollar. However, weak demand from Europe and North America is expected to stifle demand growth to ~4% in the current fiscal. Over the next five years, we expect around 9% growth in this segment, supported by currency gains and demand from emerging geographies. Further, the BS-VI norms will help them increase the number of geographies they reach out to.

Imports: India has been able to reduce imports to a significant extent both on account of localisation norms and the efforts taken by the OEMs. We believe that imports should grow by about 6% over the next five years compared with 8-10% growth in the last five years.

Realigning products strategy key in medium-to-long term

The auto components makers will have to realign their product strategy in order to adjust with the regulatory changes in the short term. In the case of EVs, the realignment will have to happen in the medium to long term. The players in the sub-segments with higher OEM share, higher export share and higher components intensity on account of the new norms stand to outperform the industry. For instance, the makers of the exhaust management system and electrical, electronics and engine components will do better in the short term as demand for products such as selective catalytic reducers, diesel particulate filters, sensors and others is likely to increase due to the BS-VI norms. In the medium to long term, the demand for these very components may be threatened as EVs gain prominence. In such a situation, the opportunities would be in lithium ion cell, battery manufacturing and battery management solutions. However, as explained earlier, EV adoption is going to be gradual and hence component makers have the opportunity to realign their product strategy.

Outlook on margins

Automotive components players seem to have an ability to largely sustain their margins even during downcycles. Over the last 10-11 years, when the sector witnessed two such downcycles, the average margin moved in a narrow band of 11-13%. The only outlier is fiscal 2009 when the demand contraction was sudden and sharp leading to a slightly higher impact on profitability. Also margin volatility is more pronounced for OEMs, especially for CV manufacturers, than component manufacturers. The stability is mainly attributed to the component players' ability to pass on input prices increases

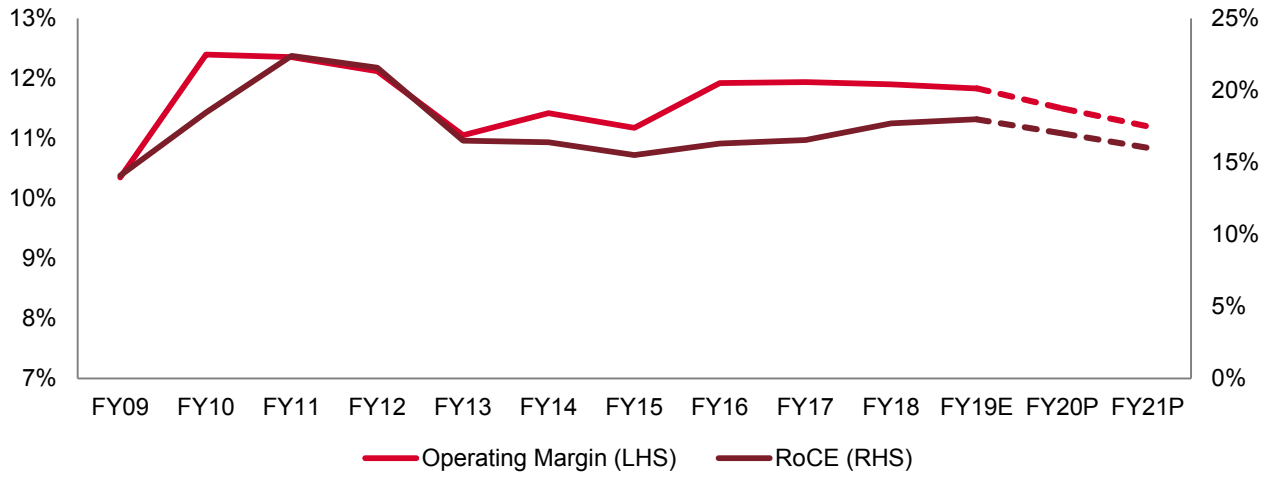
Summary of automotive-component industry forecast

Growth (in value terms, Rs billion)	FY14-19 CAGR	FY19	FY20 P	FY21 P	FY19-24 CAGR
OEM	9%	15%	-10%	12%	7%
Replacement	8%	9%	7%	7%	7%
Exports	10%	22%	4%	7%	9%
Total production	9%	15%	-5%	10%	7%

Source: CRISIL Research

with a lag of one-two quarters as they work closely with the OEMs . Over the years, the players have also improved their operating efficiency leading to further cost saving which helps them during slowdowns. Over the near term, the deceleration in OEM demand will slow revenue growth for automotive components players leading to a 100-150 bps moderation in their margins. Sustained lower volume offtake, especially in the capital-intensive segments will have a bearing on profitability.

Summary of automotive-component industry forecast



Source: CRISIL Ratings

Outlook on capex and return on investments

We expect return on capital employed (ROCE) to decline too. This is because most players incurred sizeable capital expenditure (capex) over fiscals 2018 and 2019. Given the expected slowdown in domestic demand, ramping up of new capacities may take longer which, in turn, will have a bearing on the returns in the near term.

We believe investments will taper over the medium term. Capex was on the rise from fiscal 2018 and peaked in fiscal 2019. Players invested in capacities as the utilisations peaked and the outlook was buoyant. Besides, investments were also made for a host of regulations such as the BS-VI norms and safety guidelines. Going forward, the pace of investments will ease as players turn cautious. This has happened in the past too. For instance, during the prolonged demand slowdown between fiscals 2014 and 2016, the players cut capex and opted to sweat the existing capacities.

In the present downturn, the players are expected to reduce capex across all product categories. The cut by engine and transmission parts manufacturers will be sharper as most of them have made substantial investments for capacities and for BS-VI compliance in fiscal 2019 itself. Over the medium term, growing prominence of electrical and electronic components such as sensors and connectors in the new models will prompt investments.

Outlook on financial risk profile

Notwithstanding the demand cyclicality, leverage levels of components makers have consistently improved over the years. Today, the sector has the strongest balance sheet in over a decade due to stable margins, diversity in revenue and prudent financial practices. Going forward, we believe the tapering capex and steady cash flows should enable components manufacturers to broadly sustain the financial risk profile.

Outlook on credit quality

The sector's credit ratio – the ratio of the number of upgrades to the number of downgrades – has been mostly over 1x over the last 10 years and peaked at 6.3x in fiscal 2019. The improvement in credit ratio

during 2019 can be attributed to the strengthening of the players' business risk profile over the years and a sustained improvement in debt protection metrics and liquidity.

In past we have seen the rating downgrades outpacing rating upgrades. For instance, in fiscal 2010, when the balance sheets were not as strong, and in fiscal 2014, due to the prolonged slowdown in CV demand.

Going forward, we expect the credit outlook for the sector to be 'stable to moderately negative'. The supporting factors for this are the strong balance sheet and moderating capex that will partly offset the slower revenue growth. Diversified players will be more resilient. However, credit profiles of firms with limited segmental and geographical diversification, or those highly dependent on single customer segments, are likely to be vulnerable, more so if they have recently undertaken large debt-funded capex.

Their view

Views excerpted from a panel discussion during the CRISIL webinar on the Auto components sector. The webinar was attended by 263 external participants representing 147 organisations.

The panelists were:

Ramesh Gehaney
Director & COO
Endurance Technologies Pvt Ltd

S Ravi
Chairman & MD
Craftsman Automation Ltd

C Rajagopalan
Vice President - Marketing
Sundram Fasteners Ltd

Configuration change to offer value proposition

Two-wheeler demand has been slowing down due to regulatory changes, which have cumulatively increased the cost of ownership by almost 20% during fiscals 2018 and 2019. The price increase is likely to be even higher in fiscal 2020, due to the introduction of ABS in two-wheelers with engines above 125cc and ahead of the implementation of the BS VI emission norms in April 2020. However, auto-component OEMs are responding to the configuration change by implementing parallel production with BS VI compliance in fiscal 2021. The end-users will absorb the cost increase, as the configuration change is not a bad move, as they will be getting higher value for money in terms of better environmental-emission norms. The market will absorb this cost spike, as the change will happen across the industry value chain.

Capex spending adequate for 2-3 years in commercial vehicles and tractors

Capital expenditure (capex) in the commercial vehicle and tractor segments is more than adequate for the next 2-3 years, and capex is likely to decline next year. Unlike in passenger vehicles – where consumers are sensitive to emission norms – the commercial vehicles segment is driven by cost economics and is not particular about BS VI compliance. Moreover, as trucks have become better and powerful with enhanced load-carrying capacity (after the enforcement of the revised

axle norm), a pre-buy situation is unlikely. There is a clear sign that this segment has spare capacity. In the tractor segment, exuberant manufacturers have piled up too much inventory – just like car manufacturers. As a result, capex absorption is more related to the monsoon, government support and farm loans.

Partial recovery should begin in second half

During a downturn in the auto sector, the commercial vehicle segment is hurt first, followed by passenger cars and two-wheelers, as sales of big-ticket items are impacted first. However, a recovery happens in the reverse, i.e., two-wheeler segment should see a pick-up first, followed by passenger vehicles and commercial vehicles. In two-wheelers, we may see a recovery in second half. With the excess inventory in the passenger vehicles segment, the recovery is going to be slightly delayed closer to the festive season. With the stable government at the Centre, any good news in the Budget can advance the recovery. However, the last four months of this fiscal can be uncertain in terms of sustenance of the recovery in some segments, because of the implementation of BS norms. So, the third quarter of this fiscal should be benign, while the fourth quarter might prove to be a little dull.

Castings carry good growth potential

India's opportunity in the exports market for casting components is very strong. Light-weighting (which is shredding of material weights in vehicles for better fuel efficiency and handling) is a constant exercise that manufacturers implement while engaging with their customers, and they do not wait for challenges to hit. Light-weighting optimises the design and helps the auto industry in bringing the cost down in the long run and improving efficiency of vehicles.

External markets (the US and Europe) to throw policy challenges and offer opportunities

The first challenge is the US removing India from the GSP (Generalized System of Preferences). However, that should not be a deep worry, because many customers absorb the policy change and the key lies in a manufacturer's relationship and value proposition with its customers. The GSP should not be seen as a big threat, but as a minor irritant.

The US policy of higher tariffs on Chinese products, however, is good for India, as some US customers are already engaging more with manufacturers as a Plan B. The second opportunity is Euro VI norms. India's BS VI norms are almost similar to Euro VI norms, and, hence, all vehicles produced in India will be saleable in Europe, yielding a good opportunity to the domestic components industry. Additionally, as European OEMs are under cost pressure and are no more making diesel vehicles, they can diversify production to India or depend more on imports from India. Given these opportunities, the Indian auto industry can focus and grow more in the exports markets, mainly the US and Europe. Besides, the Indian automotive industry's penetration into the export market is minuscule, leaving a huge headroom.

Margin dynamics during demand slowdown

A demand slowdown is not the only reason for margin pressure. There could be a plethora of reasons, including competition, commodity price volatility, higher-value stock getting into play during changes in consumption patterns, configuration changes in vehicles, and lower sales of higher-premium products fetching lower margins. During a demand slowdown, a component manufacturer feels the pinch, because it does not have the volume base to spread the fixed costs. So, in times like these, it is the manufacturer's readiness and how it faces the market situation that determine the extent of margin pressure. Moreover, during past slowdowns, margins in general have not gone down significantly for component players. However, there are specific cases, such as the 2009 demand contraction, which was very sharp. These are one-off situations that catch manufacturers by surprise, as they cannot be foreseen and the wiggle-room to react is rather small. Demand slowdowns such as the current one are foreseen by manufacturers, as the impact of change points (or speed breakers), such as BS IV norms and ABS regulation, is realised well in advance. In such cases, the readiness of the supplier to quickly adopt to the changing dynamics is important. Finally, every change point is an opportunity to improve, because a supplier gets an opportunity to course-correct during slowdowns in terms of operational efficiency and set its business in sync with the latest consumption patterns.

Margin pressure to test players' adaptability

When fixed-cost absorption of the auto sector is not proper, component suppliers are under pressure, as they cannot ask for a turnover discount during volume declines. OEMs may have multiple suppliers for the same part to take advantage from the lowest-cost supplier or whichever supplier is amicable to reduce prices or give a discount. Additionally, every component supplier will be looking for ways to internally correct costs, improve operational efficiency and reduce waste to improve their cost economics or operating leverage. So, the pressure on margins remains always, but is magnified during tough times, leaving little room to negotiate and testing the player's capability.

EV adoption to be gradual

Manufacturers have clearly shown their resistance to EVs, saying it is too early to get into this business. While the government is issuing occasional policy announcements about EVs, the segment is likely to develop gradually. If the segment's growth picks up pace, penetration of two- and three wheeler EVs will be relatively faster compared with passenger vehicles and buses. However, this is not a change point that will come in to play in the immediate future. It can be an evolution, unlike a change in the ABS and BS IV regulations, for which there is a hard stop.

Infrastructure speed bumps remain for EVs

Being a large nation, India needs to set up proper infrastructure, charging stations and service points for a full-blown EV kickoff. Most issues are not ticked so far, and a lot depends on how fast the government policy is moving in the right direction to address these issues. Until then, EVs have a long way to go. Additionally, unlike in conventional vehicles, a proper education and training is necessary for service dealers and mechanics, and training a large population will be a challenge in itself.

Light-weighting a key focus area for EVs

Apart from electrical-related components, such as batteries, starters and other electric components, there is quite a lot that goes into EVs. The major focus and effort is going to be on light-weighting, composite materials and higher-engineered plastics. For example, suspension systems is one area that could go through a drastic change; EVs have lower speed and need less-advanced suspensions.

EV adoption to disrupt the battery segment

Technological advancements bring in industry changes, leading to disruption. The introduction of EVs is going to be an evolution from IC (internal combustion) engines to plug-in hybrids and pure-battery vehicles. We believe a third of the two-wheelers and passenger cars in the country will be either EVs or plug-in hybrids by 2035. A major disruption from this change could be seen in the battery segment, where size, cost and recycling are issues. These will bring disruption to the battery segment. The next disruption could happen with IC engine manufacturers, which could focus on tiny engine sizes because of their battle with EV players.

Powder-metal components offer huge scope

Powder-metal components offer good scope for central metal parts. There is a lot of headroom and technological scope in this area to make it viable. With powder-metal components, there is a huge potential to add and develop more components and convert some of the traditional components – such as castings or forgings – into powder-metal components. With the onset of EVs, there could be more opportunities due to light-weighting; while forgings have been traditionally meeting this requirement, powder-metal components can do it in a refined way. Light-weighting is one of the key benefits that powder-metal parts can potentially offer by replacing forged parts and some of the small-casting parts.

Lighter configurations in EV transmission and suspensions

EV engines are different. They do not require oil, castings and head covers, and hence some parts go off. But some parts, such as battery covers, transmission and the part of transmission with covers, will remain. In terms of suspensions, we believe vehicle speed will slow down. So, the current high configuration may not be required at a later stage, as the end-user will not overuse the vehicle as much as now. A case in point is the three-wheelers loaded with up to six persons on Indian roads. In a similar EV, this may not be possible, as passenger weight will impact the range and speed. Additionally, there will be a lighter configuration of brakes and suspensions.

Export demand to stay afloat in near term

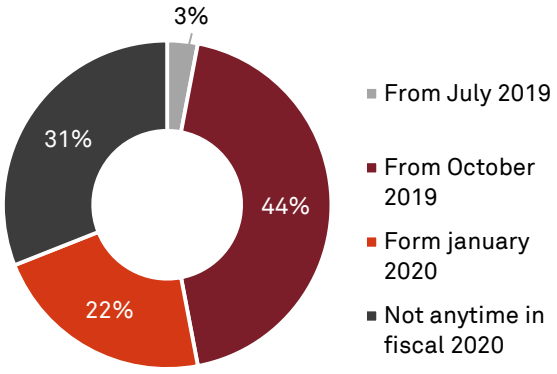
Truck demand is slowing down, according to major OEMs. Their order books are more or less full for the next nine months, and we believe export demand will stay buoyant in the near term. However, there could be some pressure, if the freight demand in the US does not pick up.

Poll view

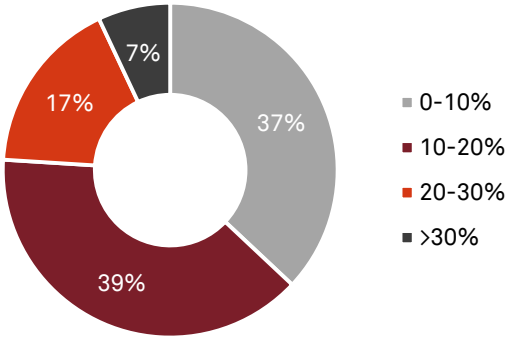
Results of the survey held during the CRISIL webinar on the Auto components sector

Based on responses from over 59 participants

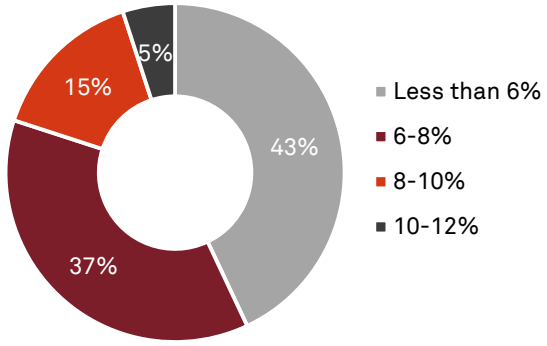
When do you feel the automobile industry would see a revival?



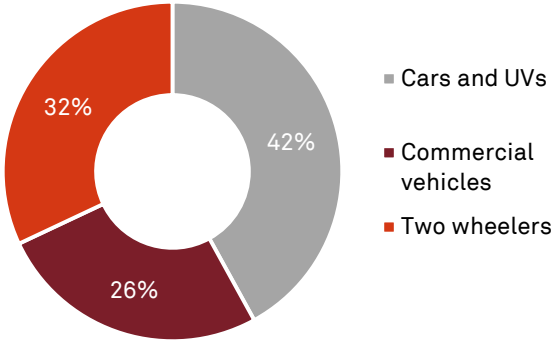
What according to you would be the electric vehicle penetration (% of new sales) in two wheelers by FY24?



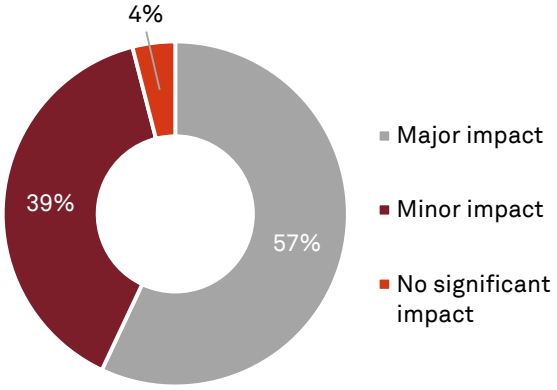
What growth do you expect the auto component industry to clock in fiscal 2020?



Which automobile segment is expected to drive autocomponent industry growth in the next five years?



What kind of impact will the upcoming regulations like BSVI,safety norms and CAFE norms to have on the autocomponent industry?



CRISIL-rated Auto components service providers

Company name
Brakes India Private Limited
Lucas-TVS Limited
Motherson Sumi Systems Limited
Endurance Technologies Limited
Fleetguard Filters Private Limited
Gabriel India Limited
HMC MM Auto Limited
Jaya Hind Industries Limited
Munjal Showa Limited
Suprajit Engineering Limited
A.A. Autotech Private Limited
ASK Automotive Private Limited
Echjay Industries Private Limited
Motherson Molds and Diecasting Limited
NRB Bearings Limited
Sharda Motor Industries Limited
SMRC Automotive Products India Private Limited
Sunbeam Lightweighting Solutions Private Limited
Sundaram-Clayton Limited
Tata Autocomp Systems Limited
Tata Toyo Radiator Limited
Sundram Fasteners Limited
Samvardhana Motherson International Limited
Aurangabad Electricals Limited
Continental Automotive Components (India) Private Limited
Lumax Auto Technologies Limited
Mahle Anand Thermal Systems Private Limited
Minda Corporation Limited
Minda SAI Limited
Mutual Automotive Private Limited
Orbit Bearings India Private Limited
PPAP Automotive Limited
Samvardhana Motherson Auto Component Private Limited
TATA AutoComp Hendrickson Suspensions Private Limited
Alicon Castalloy Limited
Autotech Industries India Private Limited
Filtrum Fibretechnologies Private Limited

Company name
Happy Forgings Limited
Highway Industries Limited
Imperial Auto Industries Limited
JBM Auto Limited
Madras Engineering Industries Private Limited
Maruichi KUMA Steel Tube Private Limited
Nippon Audiotronix Private Limited
Paranjape Autocast Private Limited
Rajsriya Automotive Industries Private Limited
Rane (Madras) Limited
Roop Automotives Limited
SNL Bearings Limited
Studds Accessories Limited
Allied Nippon Limited
ALP Nishikawa Company Private Limited
Ashok Iron Works Private Limited
Bhavani Industries India LLP
Ghaziabad Precision Products Private Limited
IM Gears Private Limited
Indo Autotech Limited
JBM Auto System Private Limited
Kiswok Industries Private Limited
Metalman Auto Private Limited
Minda VAST Access Systems Private Limited
Neel Industries Private Limited
Polyhose India Private Limited
Pooja Forge Limited
Punch Ratna Fasteners Private Limited
SAMKRG Pistons and Rings Limited
San Engineering and Locomotive Company Limited
Sekisui DLJM Molding Private Limited
Supreme Nonwoven Industries Private Limited
Tata Ficosa Automotive Systems Private Limited
Texspin Bearings Limited
Vega Auto Accessories Private Limited
Viney Corporation Limited
Yazaki India Private Limited
Aditya Auto Products and Engineering India Private Limited

Company name
ALP Overseas Private Limited
Arora Iron and Steel Rolling Mills Private Limited
Auto Ignition Limited
Badve Autocomps Private Limited
Bajaj Sons Limited
Continental Engines Private Limited
Craftsman Automation Limited
Dellorto India Private Limited
Dighvijay Plastics And Allied Plastics Products Private Limited
Gestamp Automotive Chennai Private Limited
Global Autotech Limited
IAC International Automotive India Private Limited
India Japan Lighting Private Limited.
Injectoplast Private Limited
Kalyani Forge Limited
Lumax Cornaglia Auto Technologies Private Limited
Lumax FAE Technologies Private Limited
Machino Polymers Limited
Magnum Mi Steel Private Limited
Mahle Engine Components India Private Limited
Meenakshi Polymers Private Limited
Mega Rubber Technologies Private Limited
Menon Bearings Limited
Metlonics Industries Private Limited
Nelson Global Products India Private Limited
Novares India Automotive Private Limited
Poona Forge Private Limited
Rane Engine Valve Limited
The Hi-Tech Gears Limited
Triton Valves Limited
TVS Sensing Solutions Private Limited
VeeGee Industrial Enterprises Private Limited
Accurate Products Corporation Private Limited
Automotive Stampings and Assemblies Limited
Badve Autotech Private Limited
Bellsonica Auto Component India Private Limited
BSL Castings Private Limited
Chamundi Die Cast Private Limited
Cogeme Precision Parts India Private Limited
Duhee Alloy Steel Processors

Company name
Globe Steels Private Limited
Goldy Precision Stampings Private Limited
Integra Automation Private Limited
Jai Parvati Forge Limited
Jaya Hind Montupet Private Limited
JM Frictech India Private Limited
Lumax Gill-Austem Auto Technologies Private Limited
Machino Plastics Limited
Marathwada Auto Compo Private Limited
Mascot Forge Private Limited
Masu Brakes Private Limited
Mekins Industries Limited
OMR Bagla Automotive Systems India Limited
Polyrub Extrusions India Private Limited
S M Auto Engineering Private Limited
S.D. Auto Engineering Works Private Limited
Sakthi Auto Ancillary Private Limited
Sebros Industries Private Limited
Simmonds Marshall Limited
Sintercom India Limited
Sridevi Tool Engineers Private Limited
Standard Radiators Private Limited
Swastid Engineering Private Limited
Syndicate Wiper Systems Private Limited
TATA Autocomp GY Batteries Private Limited
Technovision Auto Components Private Limited
Ukay Metal Industries Private Limited
Uniproducts India Limited
Universal Precision Screws
Amar Autotech Private Limited
Amar Udyog - Faridabad
Anandji Haridas and Co. Private Limited
ASK Fras-le Friction Private Limited
Auto International India Private Limited
Autocop India Private Limited
Bhagwati Autocast Limited
Bharat Gears Limited
Blue Stampings and Forgings Limited
BMC Ferrocast Private Limited
Cikautxo India Private Limited

Company name
Gautam Technocast
Hodek Vibration Technologies Private Limited
I-MAC India Coach Builders Private Limited
JS Auto Cast Foundry India Private Limited
KMS Coach Builders Private Limited
Laxmi Agni Components and Forgings Private Limited
Logwell Forge Limited
Mahavir Die Casters Private Limited
Multitech Auto Private Limited
Netplast Private Limited
SM Exhaust Technology Private Limited
Soni Auto and Allied Industries Limited
Special Engineering Services Limited
Suja Shoei Industries Private Limited
Sujan Cooper Standard AVS Private Limited
Sujan Industries
Tech-Force Composites Private Limited
Techno Springs India Private Limited
VEE GEE Auto Components Private Limited
Admach Auto Industries India Private Limited
Atlas Castalloy Limited
Dyna-K Automotive Stampings Private Limited
Emkay Forgings Private Limited
Jai Gears Private Limited
Jay Ushin Limited
Jumps Auto Industries Limited
Makino Automotive
Mal Metalliks Private Limited
Nirmiti Precision Private Limited
Pavna Industries Limited
Piano Presitel
Pradip Plastic Moulders Private Limited
Spark Engineering Private Limited
Speciality Sintered Products Private Limited
Sree Sumangala Metals and Industries Private Limited
Takshi Auto Components Private Limited
Umashakti Steels Private Limited
Umasons Auto Compo Private Limited
Venus Industrial Corporation Private Limited.

Company name
Walter Pack Automotive Products India Private Limited
Accrete Electromech Private Limited
Accurate Steel Forgings India Limited
Ambar Auto Engineers Private Limited
Antony Garages Private Limited
Austin Engineering Company Limited
Elan Auto India Limited
Electrica Engineers (India) Private Limited
Elite Plast Autosystems Private Limited
Elta Tools & Dies
Goyal International
Jain Electroplast Private Limited
Komos Automotive India Private Limited
Madras Radiators and Pressings Limited
New Engineering Works
Opel Auto Products Private Limited
Progressive Surface Systems Private Limited
Proto D Engineering
Rivoltech Auto Engineering Private Limited
Shivani Locks Private Limited
Siddhi Forge Private Limited
SOM Autotech Private Limited
STS Manufacturing Private Limited
Sun Forge Private Limited
T K Precision Private Limited
Unimech Industries Private Limited
United Industries Plastic Private Limited
Varun Metacraft Private Limited
Aastha International
Adinath Forging Private Limited
Ambar Forge Private Limited
Associated Manufacturing LLP
Awachat Industries Limited
Belgaum Ferrocast India Private Limited
Bhosale Industries
Biloree Cast India Private Limited
Devendra Autocom Private Limited
Hindustan Hardy Limited
JMP Manufacturing Company
Khandelwal Industries

Company name
M&M Fasteners India
M-Tech Equipments
M-Tek Engineers
Naveen Filters Private Limited
Saratha Electro Plater
Shantdeep Metals Private Limited
Sujay Industries
Super Seals India Limited
United Composheets Private Limited
Wyan Industries Private Limited
Sree Sun Shine Industries
Shriram Automotive Products Limited
A. R. Auto
Jiteen Engineering Works
Kansara Forge And Wires Private Limited

Company name
Maco Private Limited
Micro Supreme Auto Industries India Private Limited
Navdip Forge Private Limited
Sagar Auto Parts Private Limited
Seva Engineering -Talwade
Sheel Auto Industries Private Limited
Sigma Cnc Products
Silver Metal Cast
Trinity Engineers Private Limited
Varun Casting Co.
Vishwakarma Automotive Private Limited
Elve Corporation
Karnataka Turned Components Private Limited
Sharda Auto Industries Limited
Sri Bhavani Castings Limited

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