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# Shaping the new normal

India's auto component industry



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# Shaping the new normal

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Automotive Component Manufacturers Association of India

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# Contents

Executive summary	5
Global trends impacting the automotive sector	9
Actions to shape the new normal	15
How the ecosystem could enable growth	25



# Executive summary

The year 2020 has been full of unwelcome surprises and inescapable new realities. What started out as a health challenge escalated rapidly into an economic and humanitarian crisis. Businesses and individuals alike have had to adapt rapidly to cope with uncertainty and anxiety in a seemingly unending ordeal. And yet, the world endures. The perseverance of businesses and people has led to the emergence of a new landscape – a “next normal” in which to survive and thrive.

For the automotive industry – already under a shadow cast by the sales slowdown in 2019 – COVID-19 darkened the outlook further. The pandemic came with fluctuating supply chain scenarios, reshaped people’s relationship with mobility and sparked off new growth areas such as the aftermarket.

As auto component manufacturers set their course for the future, strategizing to build locally to meet local and global demand, expanding to complementary sectors and optimizing costs could help regain growth momentum and shape the next normal.

## Global trends impacting the automotive sector

The rapidly changing world scenario has created unprecedented times. Five trends stand out that could define the landscape for the automotive sector:

- 1. Global supply chain disruption:** Shifting trade patterns, propelled by geopolitical shifts and (of late) COVID-19, have been impacting the industry – operating margins dropped by 1.2 percentage points between 2017 and 2019, while margins for auto-part makers fell by 2 percentage points.<sup>1</sup>
- 2. Cautious demand outlook, with some green shoots:** Global light vehicle sales were down by 4 percent between 2017 and 2019. The 2020 outlook remains cautious with over a 20 percent fall expected in yearly sales.<sup>2</sup> The trajectory of automotive sales in India is similar. Sales in April and May 2020 were around 90 percent lower than the previous year.<sup>3</sup> As the country opens up, these figures have started to improve with some green shoots emerging in the small car, two-wheeler, and tractor segments. However, industry experts are still cautious on FY 2021 sales on the whole, with COVID-19 cases rising rapidly across the country.
- 3. Shift in mobility trends:** Globally, the pandemic has enforced a massive change in attitudes towards mobility, with health and safety taking utmost precedence. The newer preference could be for micro-mobility or small-format mobility. While the electric vehicle (EV) segment was also hit by the global slowdown, and by the pandemic,<sup>4</sup> adoption could rise again 2021 onwards in key geographies like EU and China, aided by regulation, technology and monetary incentives.
- 4. A resilient aftermarket:** As more people postpone buying new vehicles and use less public transport in the present scenario, repairs on current and second-hand vehicles could provide a window of opportunity for the automotive aftermarket.

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<sup>1</sup> McKinsey analysis of top 100 global players in the industry between 2017 and 2019; Capital IQ

<sup>2</sup> IHS Markit light vehicle sales data as of August 2020

<sup>3</sup> Society of Indian Automobile Manufacturers vehicle sales data, April 2020 and May 2020

<sup>4</sup> EV sales grew only 9 percent in 2019, and COVID-19 caused a 25 percent decline in first quarter 2020 (<https://www.mckinsey.com/industries/automotive-and-assembly/our-insights/mckinsey-electric-vehicle-index-europe-cushions-a-global-plunge-in-ev-sales>)

**5. Potential for auto investment and deal activity to grow:** In past financial crises, the automotive industry saw increased deal activity,<sup>5</sup> and the story is not very different in the present scenario. Auto deal activity shot up in the first half of 2020, with the total investment climbing 57 percent to USD 11 bn compared to the previous year.<sup>6</sup>

### **Actions to shape the new normal**

As this new landscape emerges with its cautious outlook and green shoots, auto component manufacturers could explore new avenues of growth, while strategically using and investing in the relevant resources. The following four themes characterize possible actions for them:

- **Localize to grow:** As supply chains shift, India could expand its share in the global auto component trade to 4 to 5 percent by 2026,<sup>7</sup> emphasizing a targeted export expansion and import substitution program for key components. Tier 1 suppliers could work closely with Tier 2 suppliers to build the necessary technological and manufacturing capabilities.
- **Step into adjacencies:** Auto component manufacturers could seek growth through collaborations that help to deepen their aftermarket presence across growth clusters in micro-markets.<sup>8</sup> They could also address demand for overlapping products in non-automotive adjacent spaces, such as consumer electronics, communication equipment and power. Augmenting manufacturing capacity for these sectors could go a long way towards import substitution and a greater emphasis on Atmanirbhar Bharat (self-reliant India).
- **Optimize to become competitive:** Consistent margin pressures have ensured that cost is a critical focus area for auto component manufacturers. Optimizing product design, especially in the expensive manufacturing processes for BS-VI components, could cut down a quarter of total costs. Similarly, a granular analysis of various hidden cost segments could help them to cut between 15 to 25 percent of costs.
- **Enable a winning mindset:** With the next normal, success could also lie in the mindset as companies explore growth opportunities and optimize resources. Institutionalizing the power of digital tools and technologies, and investing in the best talent of the future and research and development could be avenues to ensure future-readiness. The adoption of analytics in supply chain optimization could cut inventory costs anywhere between 20 to 40 percent.

### **How the ecosystem could enable growth**

The role of industry bodies and the government could be a critical differentiator in the recovery of the automotive sector. For instance, the government could enhance cost effectiveness in automotive manufacturing by reducing logistics and energy costs. Meanwhile, industry bodies could build on scale by working with Export Promotion Councils to expand India's share in global exports. Sustaining the momentum on the ongoing policy shifts and investing in innovation could assure growth for the entire sector.

While these have been testing times, the auto component industry could rebuild by catering to shifting mobility needs and consumer sentiment. Focusing on local manufacturing, investing in innovation and collaboration with the government and automotive industry bodies could ensure that the segment emerges stronger and more resilient, ready to flourish in the next normal.

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<sup>5</sup> M&A investments jumped 80 percent to USD 51 billion in 2008, compared to 2006, Capital IQ

<sup>6</sup> M&A investments deals in H1 2019 vs H1 2020, Capital IQ

<sup>7</sup> Automotive Component Manufacturers Association

<sup>8</sup> McKinsey Micro-Market Planner analysis







# 1. Global trends impacting the automotive sector

The automotive industry landscape has been changing over the past few years. The supply chain shifts and sales slowdown that had already hurt margins were further aggravated by the COVID-19 pandemic. The precautions to contain the pandemic, while necessary, continue to impact economies, businesses and individuals, reshaping the landscape and consumers' mobility preferences.

As countries unlock and businesses slowly recover, strategies to survive and thrive in the post-COVID world are the need of the hour. In the new normal, five broad trends could shape the automotive industry.

## 1. Global supply chain disruption

In 2019, the shifting US-China trade relationship led to a 13 percent drop in Chinese exports to the US. Brexit triggered a similar ambiguity around trade between the United Kingdom and Europe. Business uncertainty increased after the referendum. Various factors indicate that a restructuring of value chains is taking place: for example, in 2019 imports from Germany to the UK fell 7 percent, while those from the EU-27 dropped 4 percent.<sup>9</sup>

The sudden move to new suppliers has brought the pressure of establishing brand new logistics networks as well as higher costs. These shifts, along with falling vehicle sales, are having a domino effect on the automotive industry's operating margins – overall margins dropped by 1.2 percentage points between 2017 and 2019, while those of auto-part makers fell by 2 percentage points.<sup>10</sup>

At this critical juncture, companies have little choice but to reevaluate their supply chains. A May 2020 global survey with responses from senior executives across multiple industries found that companies were increasingly facing complex supply chain issues,<sup>11</sup> while several firms were looking for new supply geographies.<sup>12</sup>

## 2. A few green shoots brightening the cautious outlook

In the first half of 2020, the pandemic made matters worse for the global automotive industry with lockdowns impacting vehicle demand as well as customer purchasing power (Exhibit 1).

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<sup>9</sup> Analysis from ITC Trade Map

<sup>10</sup> Analysis of top 100 global players in the industry between 2017 and 2019

<sup>11</sup> Based on McKinsey survey of 60 senior executives across industries (May 2020)

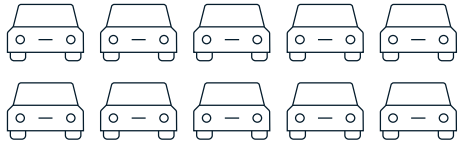
<sup>12</sup> Based on a survey of 150 global businesses across industries by QIMA

## Demand for vehicles has slowed in the last few years; 2020 outlook to remain cautious

### Global light vehicle sales<sup>1</sup>

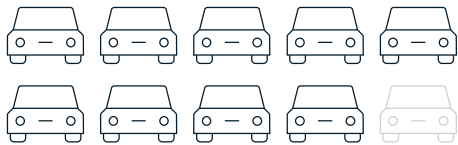
Million units

2017



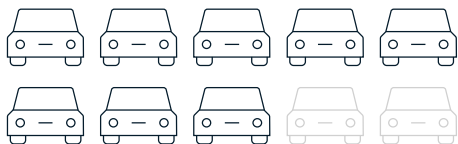
94

2019



90

2020E



71

-4%

-21%

#### Key trends

Cautious sales outlook as most consumers **delay vehicle purchase by 4-6 months**

Aftermarket sales are expected to grow due to adoption of **online sales channels and catch-up work on aging vehicles**

Mega trends like **electrification and shared mobility** are expected to regain momentum by 2022

<sup>1</sup> Light vehicle sales include passenger cars and light commercial vehicles

Source: IHS Markit

In India, automotive sales had been slowing down since the third quarter of 2018 due to a liquidity crunch at the non-banking financial companies (NBFCs, that usually lend to consumers and small businesses), higher acquisition costs and weak consumer sentiment.<sup>13</sup> The nationwide lockdown in March 2020 caused domestic automotive sales to further drop by 45 percent,<sup>14</sup> while sales for April and May were 90 percent lower across all vehicle segments.

As India gradually unlocks, the demand for vehicles is picking up with green shoots emerging in the two-wheeler and small car segments. Major carmakers reported a near 20 percent jump in August domestic passenger vehicle sales compared to last year.<sup>15</sup> While the upcoming festive season could continue to buoy sales in the short-term, it remains unclear whether this momentum can be sustained throughout FY 2021 due to rising COVID-19 cases across the country. Industry experts' outlook for sales in FY 2021 remains cautious (Exhibit 2).









<sup>13</sup> Society of Indian Automobile Manufacturers

<sup>14</sup> Society of Indian Automobile Manufacturers vehicle sales data, May 2020

<sup>15</sup> <https://auto.economicstimes.indiatimes.com/news/industry/august-2020-sales-analysis-sequential-growth-continues-domestic-sales-improve/77877026>

## Muted outlook for India in the current fiscal year; last mile delivery, downtrading and reverse migration to drive recovery in small-format mobility

FY21 vs FY20 sales

Segment view	Expected decline in FY21, %	Green shoots for small format mobility	
		Growth levers	Segments that could benefit
 <b>Passenger vehicles</b>	<b>20-25%</b>	<b>Last-mile delivery</b>	 <125cc
 <b>2-Wheelers</b>	<b>16-18%</b>	<b>Down-trading</b>	 Entry level cars  <125cc scooters
 <b>Commercial vehicles</b>	<b>25-28%</b>	<b>Reverse migration</b>	 <125cc Motorcycle  Tractor

Source: SIAM; Expert interviews; IHS Markit; CRISIL research ; ICRA

### 3. Shift in mobility trends shaping new transport mix

Globally, the pandemic has enforced a massive change in attitudes towards mobility, with health and safety taking utmost precedence. A recent global survey<sup>16</sup> (Exhibit 3) indicates shifting consumer preferences – as people seek to limit possible exposure to the virus, the preference for private vehicles is expected to rise in the short term, and demand for shared and public transport to fall. These trends could dominate until a vaccine is available at scale.

The micro-mobility segment, which comprises electric bikes, bicycles, skateboards, mini-scooters, among others, could gain more popularity in key international markets as a low-cost private vehicle option. In India, while infrastructure gaps limit the uptake of such options, rental start-ups have started offering long-term rental options on electric bikes. This could in turn transform last-mile delivery in the country amid the pandemic and in the future.<sup>17</sup>

While micro-mobility has an opportunity to thrive, the electric vehicle (EV) segment could not evade the global slowdown in the automotive sector. Sales grew only 9 percent in 2019, and COVID-19 caused a 25 percent decline in sales in the first quarter of 2020.<sup>18</sup> However, 2021 onwards, adoption could increase in key geographies, helped by regulation and monetary incentives. China's decision in 2020 to extend subsidies on plug-in electric vehicles (PEV) through 2022, combined with investment in new charging infrastructure is likely to put sales back on a growth trajectory by 2021. In Europe, strong regulatory tailwinds may buoy the segment even during a harsh second quarter while the region faces the full-blown impact of the pandemic. However, in the US, where sales had already slowed 2019 onwards, revised fuel economy standards, falling oil prices and COVID-19 related effects could cause EV sales to stagnate in 2020 and 2021.<sup>19</sup>

<sup>16</sup> Survey by McKinsey Center for Future Mobility

<sup>17</sup> [https://www.business-standard.com/article/companies/bike-sharing-start-ups-now-help-e-commerce-firms-to-deliver-essentials-120041400659\\_1.html](https://www.business-standard.com/article/companies/bike-sharing-start-ups-now-help-e-commerce-firms-to-deliver-essentials-120041400659_1.html)

<sup>18</sup> <https://www.mckinsey.com/industries/automotive-and-assembly/our-insights/mckinsey-electric-vehicle-index-europe-cushions-a-global-plunge-in-ev-sales>

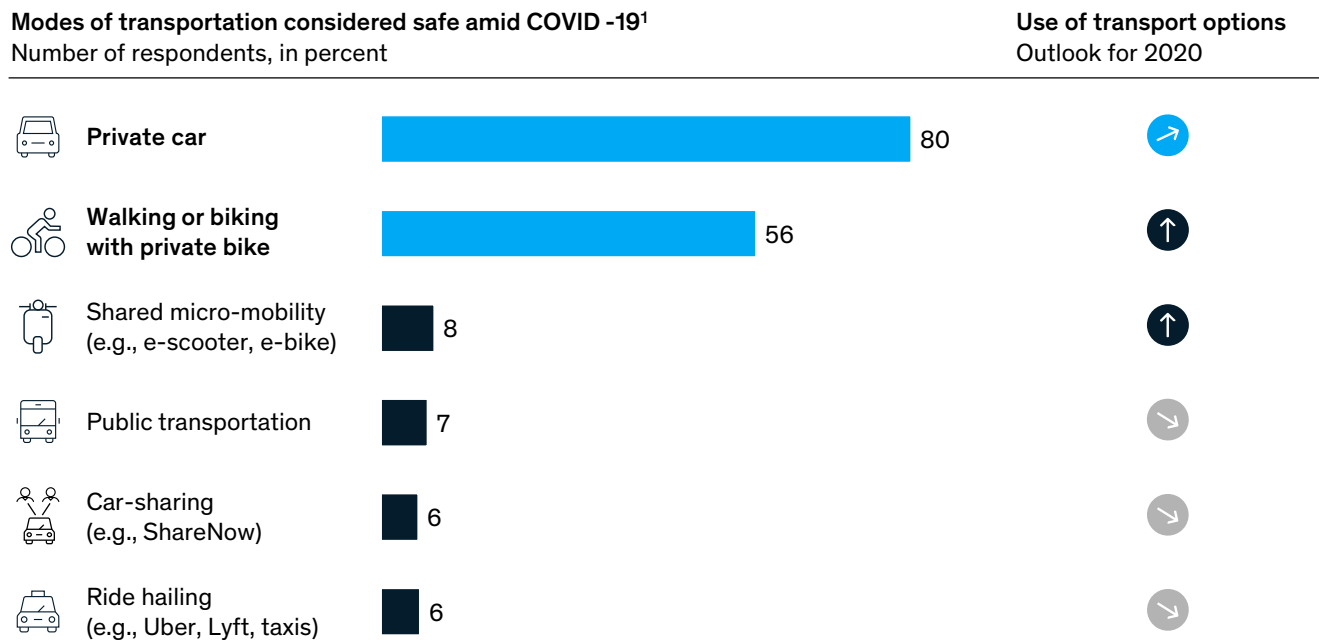
<sup>19</sup> McKinsey Centre for Future Mobility

Helped by incentives, EV growth is expected to return to key markets by 2022 with market penetration estimated to grow to 12 to 14 percent from the current 5 percent in China, and to 12 to 15 percent from the current 3 percent in Europe.<sup>20</sup>

In India, small-format e-mobility, comprising electric two-wheelers and three-wheelers, has the potential to see 10 to 20 percent penetration by FY 2022.<sup>21</sup>

Exhibit 3

## The next normal globally could have a new transport mix; micro-mobility could gain more popularity with shared or public transport seen as unsafe



<sup>1</sup> Aggregated results from the US, UK, Germany, Italy, France, China and Japan; respondents were asked "Which of the following modes of transportation do you consider safe for your health concerning a COVID-19 infection?"

Source: McKinsey Center for Future Mobility; Results of wave 1 (May 9-18) and wave 2 (May 27-29)

### 4. A resilient aftermarket

As more people postpone buying new vehicles in the present scenario, repairs on current and second-hand vehicles could provide a window of opportunity for the automotive aftermarket. Historically, the light vehicle aftermarket has been the most resilient during periods of economic distress. During the last financial crisis, for example, US car sales fell by nearly 17 percent whereas aftermarket spending declined by just 1 percent.<sup>22</sup>

The current downturn, too, could give aftermarket spending a push. As more auto parts retailers adopt e-commerce and digital channels, end-users have begun shopping for replacement parts online. Reduced usage of public transport is increasing the reliance on personal vehicles. This could up the demand for aftermarket service.

Aftermarket spending could be flat in the short-term, given that mobility restrictions have reduced vehicle miles travelled, collisions as well as traffic jams, cutting down the wear and tear of vehicles. This means that fewer cars will visit garages to get serviced or obtain new auto parts.

<sup>20</sup> McKinsey Centre for Future Mobility, IHS Markit

<sup>21</sup> McKinsey Centre for Future Mobility

<sup>22</sup> IHS Automotive, Edmunds, Auto Care/AASA

However, as restrictions ease, people gradually begin to venture out using private vehicles and traffic resumes, workshops will see greater business, and the segment could help the overall automotive industry weather challenging times.

## 5. Scope for greater auto investment and deal activity

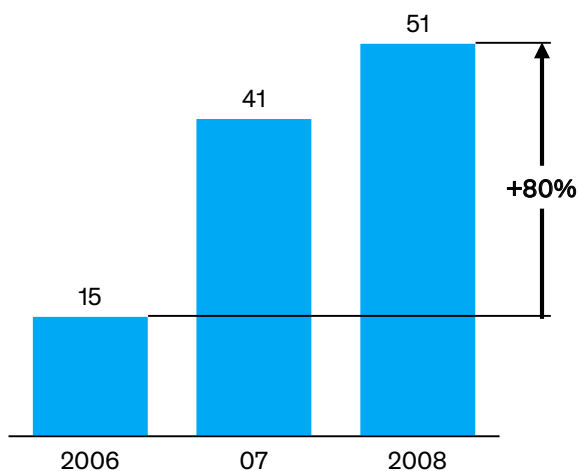
In past financial crises, the automotive industry has seen increased deal activity, with investments in mergers and acquisitions (M&A) jumping 80 percent to USD 51 bn in 2008, compared to 2006. Factors such as lower yields on debt, falling valuations and increased liquidity stress attract well-capitalized companies to actively explore M&A options. The story is not very different in the present economic downturn, with auto deal activity climbing 57 percent to USD 11 bn in the first half of 2020, compared to the previous year (Exhibit 4).<sup>23</sup>

Private equity investment in the auto sector has increased in the first half of 2020 compared to last year. Many global firms are reportedly looking to invest in the Indian auto component industry with a focus on companies that make parts for internal combustion engine vehicles, and electric mobility.<sup>24</sup> If these investment opportunities materialize, the automotive sector could be infused with greater liquidity.

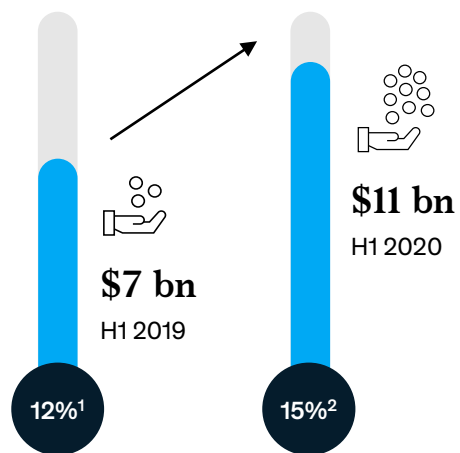
Exhibit 4

### Investment in automotive sector shot up during the last economic downturn; similar trend observed in H1 2020

Auto M&A investments during the 2008 financial crisis...



M&A investments in the sector in H1 2020; PE/VC activity up



<sup>1</sup> Of the total 164 deals (announced and closed) in H1 2019

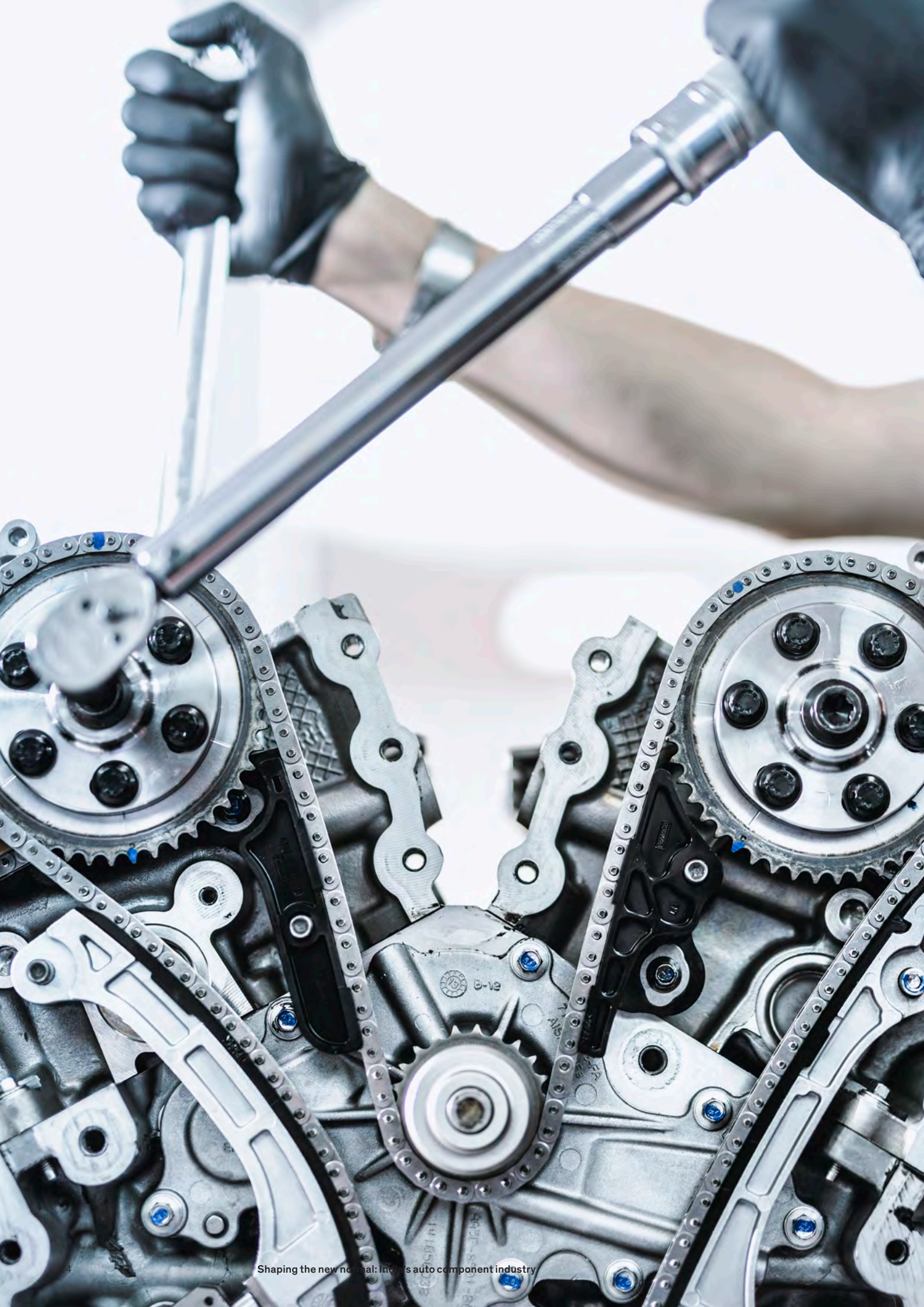
<sup>2</sup> Of the total 147 deals (announced and closed) in H1 2020

Source: Capital IQ

This landscape determines the next normal for the automotive industry. How auto component manufacturers respond to these trends could determine their growth trajectory.

<sup>23</sup> M&A Deals data, Capital IQ

<sup>24</sup> Livemint article on Global PE firms eye India's auto components sector (<https://www.livemint.com/companies/news/global-pe-firms-eye-india-s-auto-components-sector-11593566652128.html>)







# 2. Actions to shape the new normal

In this emerging landscape, with its cautious outlook and green shoots, auto suppliers could prioritize four themes (Exhibit 5). These build on the industry's strengths to explore new avenues of growth, while also strategically using and investing in the relevant resources:

1. Localize to grow
2. Collaborate and step into adjacencies
3. Optimize to become competitive
4. Enable a winning mindset

Exhibit 5

## Auto suppliers could take four key actions to shape the new normal

			
<p><b>Localize to grow</b></p> <p>Capture the <b>import substitution opportunity</b> in an import basket worth <b>USD 12 bn</b></p> <p>Achieve <b>3x increase</b> in exports (<b>USD 45 bn</b>) by 2026 on the back of supply chain disruption</p>	<p><b>Collaborate &amp; step into adjacencies</b></p> <p>Focus on <b>aftermarket</b> as a growth area with <b>distinctive go-to-market strategies</b></p> <p><b>Collaborate</b> to open up growth opportunities in <b>adjacent sectors</b></p>	<p><b>Optimize to become competitive</b></p> <p>Focus on <b>product design optimization to become competitive</b> – a 10-15% cost saving opportunity</p> <p><b>Minimize hidden costs</b> – a 15-25% cost saving opportunity</p>	<p><b>Enable a winning mindset</b></p> <p>Make <b>digital, analytics, and automation</b> a way of working</p>

### Localize to grow

As supply chains shift, India could expand its share in the global auto component trade. The country contributes only a small percentage of the total imports for its biggest buyers – 2.2 percent in the US, 1 percent in Europe and 0.6 percent in China.<sup>25</sup> To grow trade, India could benefit from a targeted export expansion and import substitution program.

<sup>25</sup> Analysis of 127 HS Codes from ITC Trade Map, Automotive Component Manufacturers Association

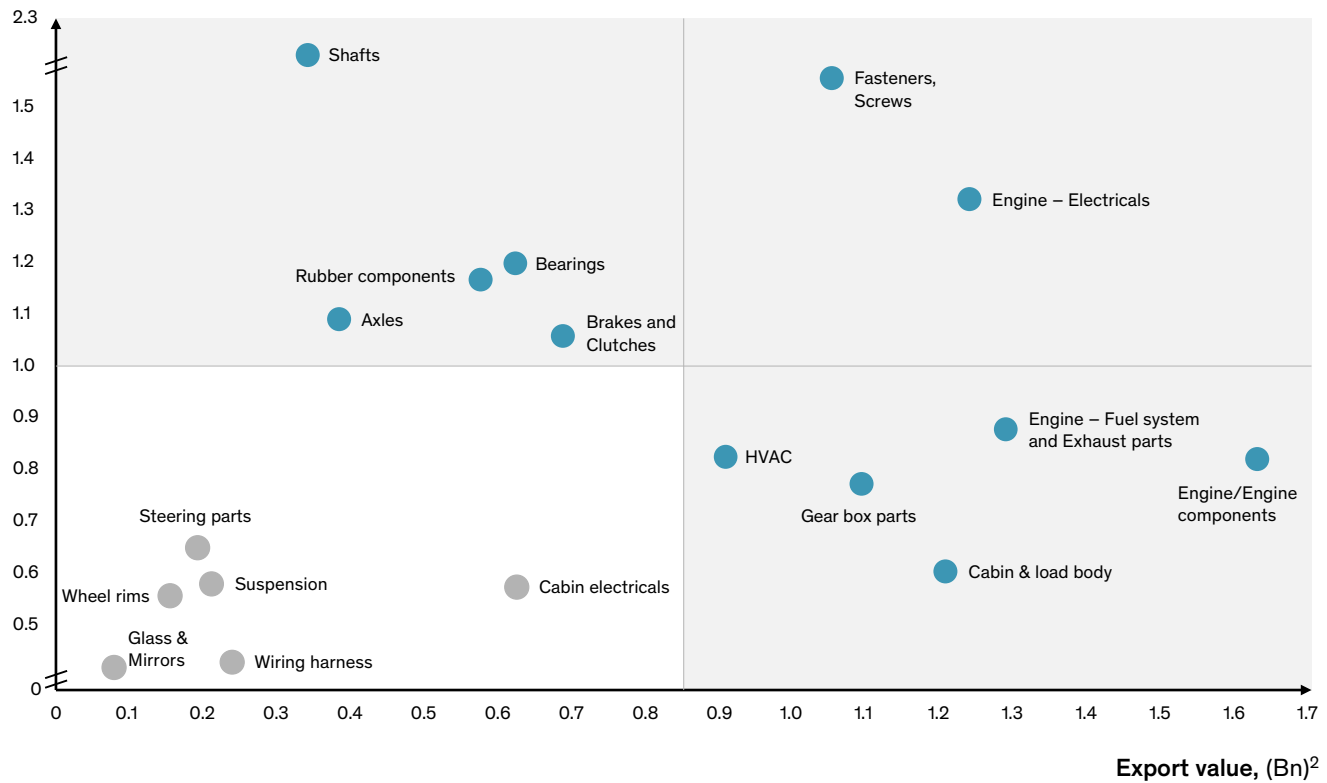
For export expansion, India could learn from a number of countries that are major exporters of auto components. Germany, for example, has a 15 percent share in the global export market for auto components. China's share is 11 percent, with Japan and Korea following at 7 and 6 percent respectively.<sup>26</sup> These countries also have a trade surplus in auto components. They have achieved this market position due to advantages such as the presence of large original equipment manufacturers in the domestic market, greater ease of doing business, a significant spend on research and development – between 2 and 5 percent of GDP,<sup>27</sup> and these countries' top-25 rank in transport infrastructure.<sup>28</sup>

India could pursue higher exports in product categories where the country has a competitive edge, such as shafts, bearings and fasteners (Exhibit 6). At the same time, component manufacturers could continue to broaden their global export presence by building capabilities for high-value products such as gear-box parts, heating, ventilation and air-conditioning (HVAC) products.

Exhibit 6

### A targeted approach could achieve critical growth in exports of product categories where India has a competitive advantage

#### Competitive advantage<sup>1</sup>



<sup>1</sup> Ratio of component's share in India's auto component exports to its share in global auto components exports; <0.8 low; 0.8-1.2 Med ; >1.2high.

<sup>2</sup> Analysis of 127 HS codes at 6 digit level (CY19)

Source: ACMA, ITC Trade Map

<sup>26</sup> Analysis of 127 HS Codes from ITC Trade Map

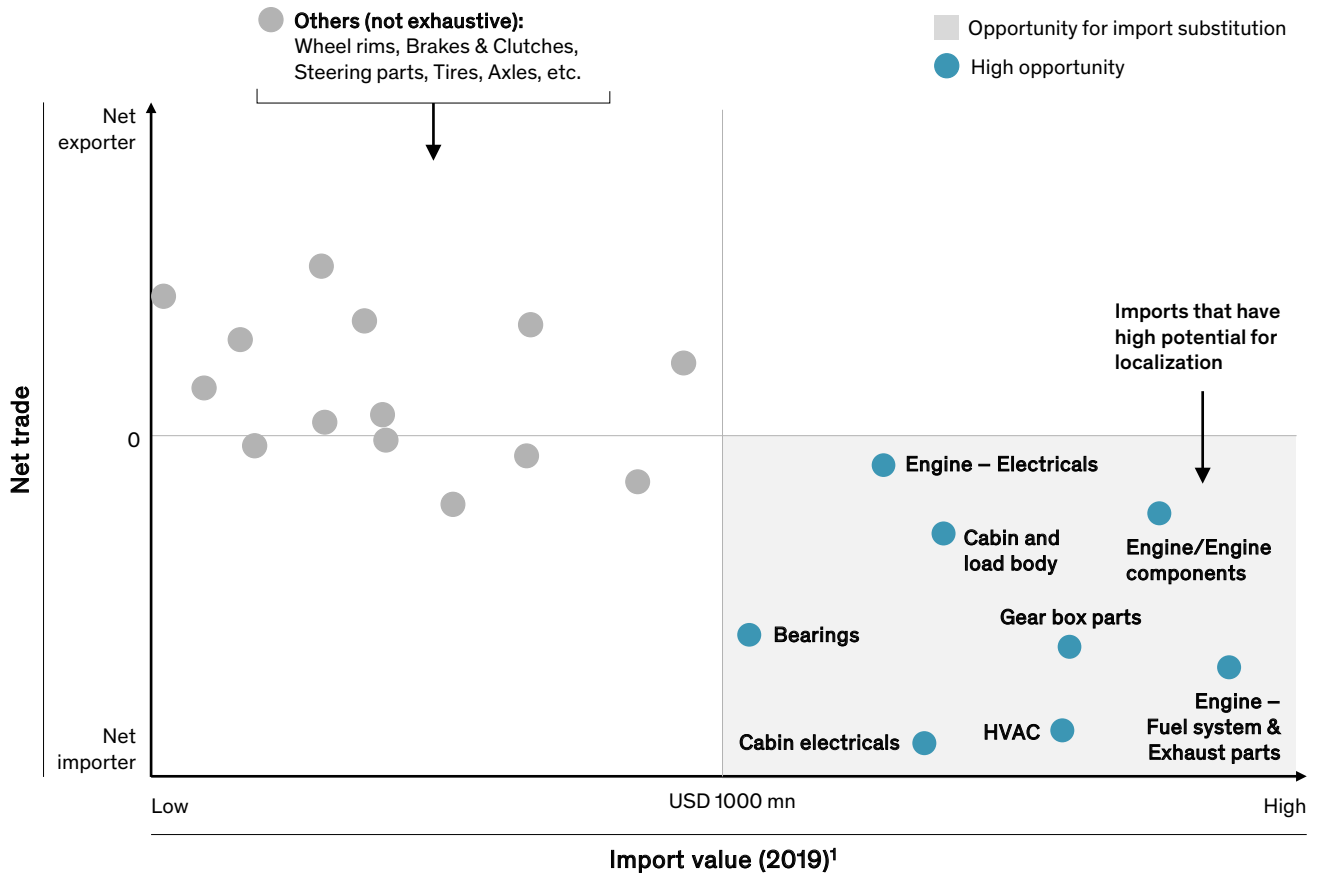
<sup>27</sup> World Bank

<sup>28</sup> World Economic Forum Global Competitiveness Report 2019

An analysis to see what automotive parts add to India's import bill while also featuring as major exports indicates scope to localize and substitute imports of up to USD 12 bn (Exhibit 7). One option could be to expand the focus on manufacturing high-value parts such as engine/ engine components, engine electricals, fuel systems and exhaust parts, and gear box parts. India could also ramp up capabilities through recent innovations (such as those made to match BS-VI standards) that could help replace those imports with components made in India. Possible collaborations with global suppliers who are relocating manufacturing operations to India could further reinforce these efforts and help build new capabilities.

Exhibit 7

## USD 12 bn opportunity exists for import substitution



~60%

dependency on 4 countries for the components which can potentially be substituted



China

25%



Korea

13%



Germany

12%



Japan

9%

<sup>1</sup> Analysis of 127 HS codes at 6 digit level (CY19)

Source: ACMA, ITC Trade Map

## Collaborate and step into adjacencies

Auto component companies could seek growth through collaborations that help them deepen their aftermarket presence and address demand for overlapping products in adjacent sectors.

### Pursue aftermarket opportunities

The aftermarket represents a growth avenue in a pandemic-struck world, where consumers make do with what they have, preferring to repair rather than replace. This also turns the lens to the micro-markets, with the nearest repair service centre gaining importance over a distant service provider. Growth opportunities lie in specific micro-market clusters (Exhibit 8).<sup>29</sup>

Exhibit 8

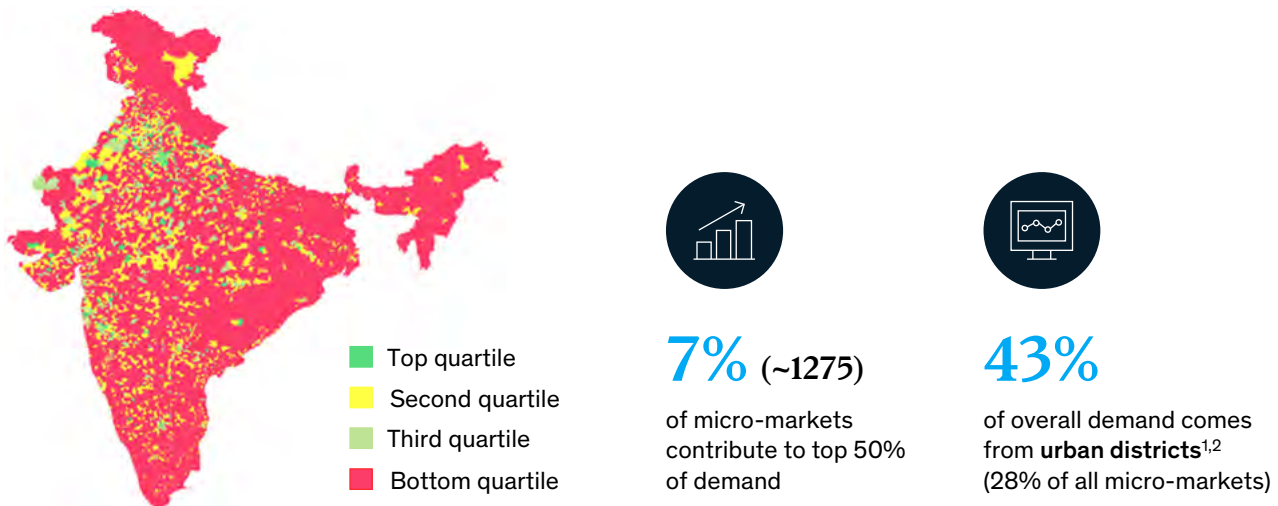
## Aftermarket could be a growth engine during the lockdown period; micro-market clusters to drive the bulk of demand

### Move from planning at state/city level to focus on micro-markets

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#### Vehicle parc (2009-2018)

~30 mn passenger cars across ~19,500 micro-markets



<sup>1</sup> 30% of districts have been classified as urban districts

<sup>2</sup> Urban districts comprise more than 50% of micro-markets that have a population of over 7500 and population density of 750 per sq km

Source: McKinsey Micro-Market Planner analysis

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<sup>29</sup> McKinsey Micro-Market Planner analysis

Auto component manufacturers could tap into this opportunity in four ways:

- Go granular: Concentrate the aftermarket go-to market strategy in specific areas, for example, the 7 percent of micro-market that contribute to top 50 percent of demand.
- Get agile: Encourage greater agility in the sales force by shifting the emphasis to virtual sales.
- Re-balance portfolio: Re-plan the stock-keeping unit (SKU) mix by deprioritizing the negative or low-margin/low-volume stocks.
- Expand partnerships: Innovate on channels by partnering with influencers (such as neighbourhood mechanics) who determine consumers' choices while repairing or replacing parts.

### **Explore non-automotive adjacent spaces**

Auto component manufacturers could expand into adjacent areas through partnerships to synergize their existing capabilities. The manufacturing capability for several automotive components overlaps with those capabilities required for products in other sectors where demand remains high. For example, the production process for a vehicle motor could be adapted to produce motors for household appliances such as refrigerators, fans or AC compressors.

Some of the most promising overlaps are with sectors such as consumer electronics, communication equipment and power (Exhibit 9). Augmenting the manufacturing capacity for these could go a long way towards import substitution and a greater emphasis to make in India. In imports – 88 percent of mobile phone components are imported.<sup>30</sup>











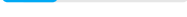

India could cut down imports if these were being made within the country. This could be a win-win for manufacturers, as it would amplify the emphasis on Make in India and unlock the government's production incentives – such as over USD 5 bn for the domestic manufacture of mobile phones.<sup>31</sup>

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<sup>30</sup> <https://indianexpress.com/article/explained/self-reliant-india-which-are-the-sectors-dependent-on-imports-which-are-not-6408407/>

<sup>31</sup> <https://www.businessinsider.in/policy/economy/news/inside-indias-50000-crore-scheme-to-woo-electronics-manufacturing-including-smartphones/articleshow/76207462.cms>

## Collaboration with multiple sectors could help enter non-automotive adjacencies

Product segment	Market size, 2019 <sup>1</sup>	Growth outlook, 2020-23 <sup>1</sup>	Capability overlaps
 Bearings, gears, driving elements	~USD 4.5 bn <sup>1</sup> 	15% 	70-75% forging Up-to 50% sintering ~10% machining
 Motors, generators and transformers	~USD 13 bn <sup>2</sup> 	13% 	15-20% casting 10-15% sheet metal 25-35% injection moldings
 Power generation - engines and turbines	~USD 9 bn <sup>3</sup> 	15% 	30-35% casting 20-25% forging 5-10% sheet metal
 Electronic components, boards	~USD 4.5 bn <sup>4</sup> 	8% 	Surface Mount Soldering process Proprietary electronic parts

### Proposed actions:

- Map the existing capabilities and identify adjacencies
- Create product prototypes
- Identify the target customer and design a reach-out strategy

### Opportunity

"Pull factors" - Import substitution	~88%	mobile phone components are imported	
"Push factors" through 'Make in India'	>USD 5 bn	production incentives for domestic manufacturing of mobile phones	10% Import duties on PCBs and camera modules Restrictions on import of color TVs

<sup>1</sup> As reported by IHS Markit Global Insights

<sup>2</sup> Sales of ISIC 271 - manufacture of electric motors, generators, transformers and electricity distribution and control apparatus taken as representative as reported by IHS Markit.

<sup>3</sup> Sales of engines and turbines (excl. ones used in automobiles and aero) taken as representative as reported by IHS Markit.

<sup>4</sup> Total sales of ISIC 261 - Manufacture of electronic component and boards taken as representative as reported by IHS

Source: Expert interviews, company websites, IHS Markit, press search

## Optimize to be competitive

With margins squeezed, cost has been a critical focus area for auto component manufacturers. Optimizing product design and cutting down hidden costs could help manage expenditure.

### Rethink product design

Indian auto component manufacturers have scope to optimize the design of their products to be more competitive. For example, over the past few years, the industry invested heavily in new technologies to produce BS-VI compliant parts for cars and two-wheelers. In the absence of a prior blueprint and time pressure to get the product to market, these products were benchmarked against the gold standard. This transition pushed up overall manufacturing costs.

Now, this technology and product design can be optimized for the Indian market to cut down that cost. Component manufacturers could save up to 25 percent of the incremental cost across six categories that make up around 85 percent of the total manufacturing cost increase in the BS-VI transition.<sup>32</sup> For example, the catalytic converter alone offers a 3 to 6 percent saving opportunity.

### **Minimize hidden costs**

A granular analysis of various hidden cost segments could help component manufacturers to cut between 15 to 25 percent of costs.<sup>33</sup> These include categories such as real estate, IT, insurance, logistics, packaging, etc. which are traditionally de-prioritized with the focus being on material cost. The post-pandemic world gives an opportunity to fundamentally re-imagine costs in these segments. For example, companies could reduce freight costs to a level of 25 percent by using a mix of simple, short-term levers. This could be operationalized through full freight tender with best PTPK rates, reducing less-than-load shipments and ensuring freight cost chargebacks, among other moves. Organizations could also think about a 'Phy-Digital' model for aftermarket sales with a combination of on-ground salespersons as well as a centralized call centre to fulfil the orders from smaller dealers.

### **Enable a winning mindset**

For the auto component industry, success could also lie in the mindset with which companies approach the next normal. As they explore growth opportunities and optimize resources, they might also embed new ways of working that help them to be future ready.

### **Make digital, analytics and automation a way of working**

Institutionalizing the power of digital tools and technologies could make a difference to manufacturing companies. While "digital" has been a buzzword for some time now, many organizations have approached it as optional, making minor tweaks in basic processes but not embracing it as a way of life. The lockdown saw companies having to adapt to various digital tools and technologies for business continuity. Hopefully the agility and efficiency these have enabled will compel companies to integrate digital, analytics and automation into their everyday operations.

Advanced analytics, process digitization, as well as robotics and automation could accelerate transformations necessary to evolve for the future. From improved labour productivity to lower machine downtimes and design engineering costs, many different levers across the value chain can contribute to the manufacturing transformation (Exhibit 10). For example, product design optimization using virtual tear-down labs for cost of quality improvement or using feature benchmarking to cut design engineering costs could yield returns of between 10 to 30 percent over a 12- to 18-month period.<sup>34</sup> An early and potentially high savings opportunity could lie in real-time batch sizing and scientific dynamic inventory norms, reducing inventory cost by 20 to 40 percent in six months' time.





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<sup>32</sup> McKinsey clean-sheet analysis

<sup>33</sup> McKinsey Product Development and Procurement database

<sup>34</sup> McKinsey Design to Insights: Digital DtV

## Embracing digital, analytics and automation could optimize costs across the value chain

RoI	 Product design	 Procurement	 Manufacturing and supply chain	 Sales and aftermarket
6 months		<p><b>45-55%;</b> higher productivity</p> <p><b>5-10%;</b> lower cost reduction</p>	<p><b>20-40%;</b> lower inventory cost</p> <p><b>30-50%;</b> less machine downtime</p>	<p><b>~2-3x;</b> improvement lead generation and conversion</p>
12 months	<p><b>10-30%;</b> drop in design engineering costs</p>		<p><b>15-30%;</b> improvement in labour productivity</p>	
18 months	<p><b>10-30%;</b> cost of quality improvement</p>		<p><b>10-20%;</b> greater throughput</p>	

### Key action: Run a quick diagnostic to identify high RoI areas

Source: McKinsey Digital

The first step of this journey is to run a diagnostic across the organization to see what areas might offer the greatest return on investment, on-ground impact and best time to market.







# 3. How the ecosystem could enable growth

The role of industry bodies and the government could be a critical differentiator in the recovery of the automotive industry. The most recent challenge – COVID-19 – has proven debilitating, but not insurmountable. The automotive industry in some countries has shown signs of recovery and strength when these differentiators have ensured robust macro-levers.

Turkey's decision to offer low-cost vehicle loans, for instance, was one of the initiatives that helped the country's auto sales grow by nearly 400 percent in July 2020.<sup>35</sup> Meanwhile, South Korea's extension on passenger car tax cuts has helped domestic vehicle sales surge 40 percent in June and 10 percent in July 2020 compared to the previous year.<sup>36</sup>

With timely intervention, India, too, could see a sustainable recovery in auto sales and outperform its peers and closest competitors. A shift in policies and investment in innovation could assure growth for the entire sector, contributing significantly to overall manufacturing turnover.

## The possibilities for India

India's automobile sales already saw an uptick in July 2020 compared to previous months in the year.<sup>37</sup> The country's mission – Atmanirbhar Bharat (self-reliant India) – first announced amid the early months of the COVID-19 crisis, calls for a renewed focus on localization on every business front – a measure that could help the auto industry overcome its current supply chain issues.

India's auto component sector witnessed a 6 percent compounded growth in turnover between FY 2016 and FY 2020.<sup>38</sup> To meet the aspirations of capturing 4 to 5 percent of the global auto parts trade by 2026,<sup>39</sup> the government could focus on the 5Ls – Labour, Law, Logistics, Liquidity and Leading innovation (Exhibit 11), where India's Asian peers outperform. Vietnam's auto component industry, for instance, is the fastest growing among its peers due to tax incentives, growth-oriented trade and investment policies as well as pro-development labour laws.<sup>40</sup>

Accelerating trade reforms could help India's auto components sector become a vital part of the overall automotive sector revival story in the country.

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<sup>35</sup> <https://www.dailysabah.com/business/automotive/turkeys-auto-sales-surge-by-387-in-july-fueled-by-cheap-loans>

<sup>36</sup> <https://en.yna.co.kr/view/AEN20200803009700320>

<sup>37</sup> <https://www.autocarindia.com/car-news/passenger-vehicle-sales-return-to-normal-in-july-2020-418188>









<sup>38</sup> As per Automotive Component Manufacturers Association

<sup>39</sup> As per Automotive Component Manufacturers Association






<sup>40</sup> IHS Markit; Expert interviews

## India is showing strong promise; structural intervention could raise its position among Asian peers

India's auto component sector is among the fastest growing but lags in contribution to manufacturing turnover...

	 India <sup>1</sup>	 China	 Korea	 Thailand	 Vietnam
 Auto-comp turnover USD bn <sup>2</sup>	49	850	110	70	9
 Growth in auto-comp turnover 2015-19 <sup>2</sup>	6%	5%	4%	5%	14%
 Contribution to manufacturing turnover <sup>3</sup>	3%	4%	7%	14%	4%

...Asian peers outperform India in most of the macro -levers

 Labour Manufacturing labour cost (USD/hr)	2.1	6.5	25	3.1	2.6
 Law Tax policy risk <sup>4</sup> (100=high risk)	69	44	31	25	44
 Logistics LPI Ranking <sup>5</sup>	42	27	23	34	45
 Liquidity Lending interest rate %	9.5%	4.4%	3.4%	4.1%	7.7%
 Leading innovation (R&D spend) % of GDP	0.7%	2.2%	4.8%	1.0%	0.5%

<sup>1</sup> Turnover and growth of auto component industry as reported by ACMA (FY20); manufacturing turnover as reported by IHS Markit

<sup>2</sup> Turnover and growth as reported by IHS Markit – total sales of Auto component industry (GICS)

<sup>3</sup> Share of turnover of auto parts industry in the total turnover of the manufacturing sector as reported by IHS Markit

<sup>4</sup> Tax policy risk examines if taxes are low, predictable and transparent; reported by EIU Risk Briefing, 100 = High risk

<sup>5</sup> Logistics performance index reported by the World Bank - timeliness, competence, customs, and international shipments

Source: ACMA, IHS Markit Global Insights

## The role of the government

There are different ways in which the Indian government could spur development within the auto components industry:

- 1. Offer a second home to companies relocating operations:** As the global supply chain shifts for many auto companies across the world, India could swiftly emerge as the world's next auto manufacturing hub. To ensure this happens, the government could create a conducive business environment for companies looking to relocate their operations. Helped by initiatives such as Make in India and Atmanirbhar Bharat, the industry is already seeing an uptick in orders from global OEMs in the current scenario.<sup>41</sup> An increased focus on improving the 5Ls in the form of trade reforms, tax incentives and workforce training initiatives could help sustain this growth.
- 2. Appoint trade representatives at consulates:** Exports represented 30 percent of the total Indian auto component market in FY 2020 and the industry aspires to increase this three-fold by 2026.<sup>42</sup> While manufacturers invest resources in building capabilities to address global demand, the government could facilitate expansion of exports by appointing trade representatives at consulates - this could help to get to the goal sooner than expected.
- 3. Make manufacturing more cost-effective by cutting logistics and energy expenses:** It may be possible to manage end-to-end logistics and cut operating costs in various ways, e.g., improving connectivity to and from industrial sectors by accelerating projects like the Delhi–Mumbai Industrial Corridor; identifying underserved clusters like the Sriperumbudur auto hub; launching data infrastructure and digital marketplaces at a national level. Meanwhile, standardizing and streamlining the open-access approvals process with a 30-day clearance across state transmission utilities could reduce energy costs.
- 4. Develop EV ecosystem:** As the world's largest two-wheeler and three-wheeler market, India has a scale advantage that represents a big opportunity to shape the e-mobility story within the country, and also across the world. Continued support from the government in the form of manufacturing incentives, focus on fulfillment of battery factory targets, creation of EV hubs to encourage innovation, along with sustained demand and scale, could enable India to build a profitable EV business that could cater to OEMs and suppliers worldwide.

## The role of industry bodies

Industry bodies could help highlight the demands and priorities of the entire automotive sector to the government. They may also consider partnering with government authorities to help achieve goals that are most urgent and focus on areas that could create most impact.

- 1. Work with Export Promotion Councils (EPCs) to add scale:** Like in Turkey, Indian automotive bodies could actively work with EPCs to identify target markets and conduct roadshows to expand exports to these regions. Such a partnership could help tailor a persuasive export strategy.
- 2. Cooperative supply chains in high-potential export markets:** By collaborating with numerous auto component manufacturers, Indian industry bodies can smoothen supply chain bottlenecks, enable cooperation as well as guide these players to enter and succeed in high-potential export markets such as the US, Germany and Thailand.

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<sup>41</sup> Times of India article on Indian parts makers gain as auto cos look outside China (<https://timesofindia.indiatimes.com/business/india-business/indian-parts-makers-gain-as-auto-cos-look-outside-china/articleshow/77323630.cms>)

<sup>42</sup> As per Automotive Component Manufacturers' Association

- 3. Incubation centres to promote ACES disruption:** Autonomous vehicles, Connectivity, Electric vehicles and Shared Mobility (ACES) technology is anticipated to be the future of automotive innovation. To encourage more auto component players to ideate and think of disruption in these areas, industry bodies could establish dedicated incubation centres in key metropolitan zones.
- 4. Training sessions on the impact of digital interventions:** The lockdowns ensured some level of adaptation to digital tools and technologies during the pandemic. The time is therefore ripe for the industry to use this disruption to encourage adoption of digital strategies by conducting training sessions for early adopters. Doing this will allow the Indian auto component industry to compete at the global level.

Ultimately, the picture is not that bleak for auto component manufacturers and the overall automotive industry. Making the most of shifts in supply chains, mobility and consumer sentiment, playing to their strengths in electrification and aftermarket segments while investing in changing mindsets could pave the path to recovery as the pandemic abates. Meanwhile, focusing on local manufacturing, investing in innovation and collaboration with the government and auto industry bodies could help transform this dynamic industry into the future auto component manufacturing hub of the world.



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