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INDUSTRY OUTLOOK

AUTOMOBILE INDUSTRY: EMERGING CONTOURS

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Introduction

The automobile industry was severely hit by the COVID 19 pandemic. But with receding pandemic, macroeconomic factors and resurging economic growth, the industry is gaining traction and with the year-end incentives in pipeline, the industry is upbeat about sustained growth. The Omicron virus could, however, throw a spanner in the works.

The Indian automobile industry is of more than ₹8 lakh crore and its turnover contributes approximately 7.1 per cent of overall GDP, 27 per cent of industrial GDP and 49 per cent of manufacturing GDP. [1] Two-wheeler is the largest contributor to the automobile sector contributing about four-fifth to the overall industry followed by passenger vehicles contributing approximately 13 per cent to the industry. The production and sales for past few years are given below (Table 1).



Table 1: Domestic Production and Sales Trend (in crore)

	2015-16		2016-17		2017-18		2018-19		2019-20		2020-21	
	Prod.	Sales	Prod.	Sales	Prod.	Sales	Prod.	Sales	Prod.	Sales	Prod.	Sales
Passenger Vehicles	0.35	0.28	0.38	0.30	0.40	0.33	0.40	0.34	0.34	0.28	0.31	0.27
Commercial Vehicles	0.08	0.07	0.08	0.07	0.09	0.09	0.11	0.10	0.08	0.07	0.06	0.06
Three Wheelers	0.09	0.05	0.08	0.05	0.10	0.06	0.13	0.07	0.11	0.06	0.06	0.02
Two Wheelers	1.88	1.65	1.99	1.76	2.32	2.02	2.45	2.12	2.10	1.74	1.83	1.51

Source: Society of Indian Automobile Manufacturers (SIAM) Statistics. Available at <https://www.siam.in/statistics.aspx?mpgid=8&pgidtrail=9>

The Table 1 brings out the devastation wrought by the pandemic in the automobile industry. The numbers plummeted in FY21 for both production and sales as compared to FY20 due to globally synchronized economic slowdown and its devastating impact both on the global and the domestic automobile industry. There has, however, been some improvement in FY22 compared to FY21. This can be seen from the table (Table 2) below, where we see that production has been relatively better as compared to the previous financial year. FY22 production crossed 1.1 crore mark within 6 months (FY21 production was over 2.2 crore) and is expected to cross FY21 levels given the relative revival of demand and launching of institutional initiatives. [2]

Table 2: Domestic Production and Sales (FY22)

	Apr-June 2021		July-Sept 2021	
	<i>Prod.</i>	<i>Sales</i>	<i>Prod.</i>	<i>Sales</i>
Passenger Vehicles	4583510	646272	6474793	741300
Commercial Vehicles		105800		166251
Three Wheelers		24376		70899
Two Wheelers		2403591		4113915

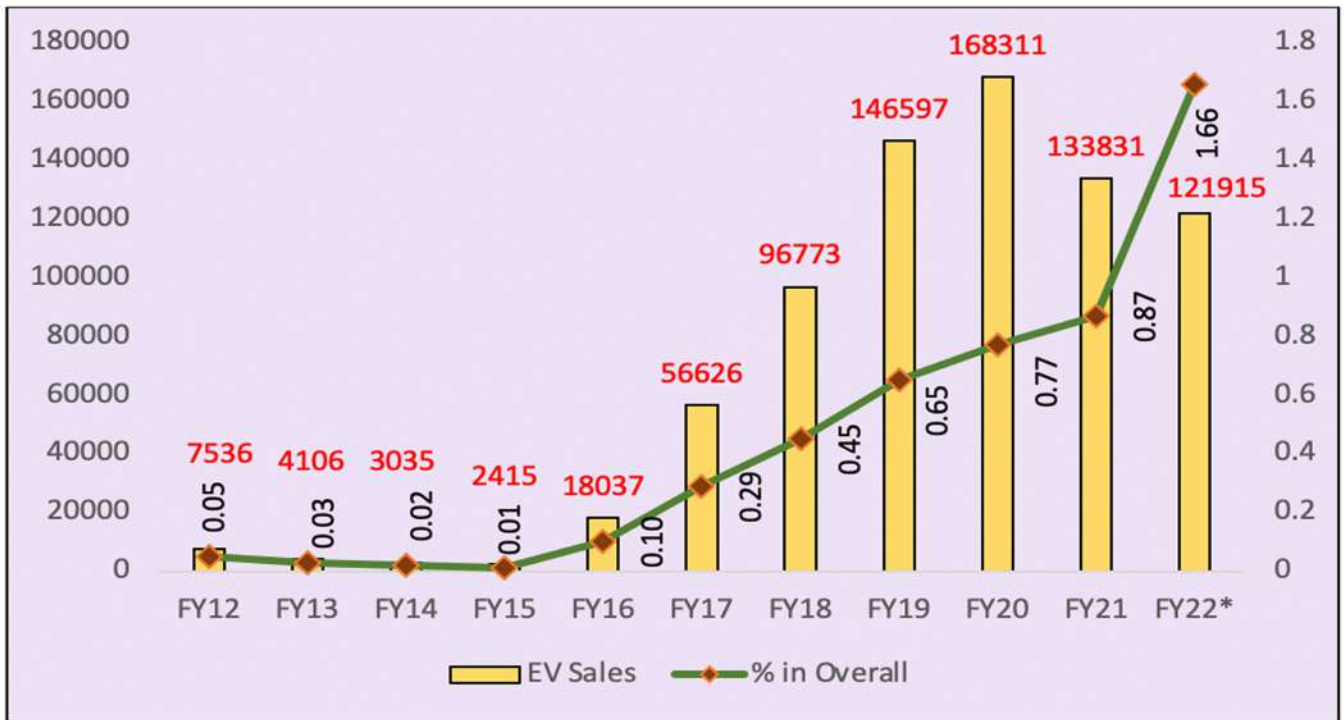
Source: Society of Indian Automobile Manufacturers (SIAM) Statistics. Available at <https://www.siam.in/statistics.aspx?mpgid=8&pgidtrail=9>

Electric Vehicles

With electric vehicles (EV) making their way in the automobile sector globally and in India, it is crucial to understand the dynamics that it brings in its wake. Low cost of ownership, easier maintenance, and environment-friendly features make the EV an important asset. In the present setting, where the world is confronted with the problem of cataclysmic climate change, EVs become one of most viable options in relation to the traditional internal combustion engines (ICEs) with a significant carbon footprint.

In the Indian context, EVs have gained importance due to various measures and public convenience. The EV sales for the past decade are given below (Figure 1). It can be observed that EVs have picked up in the past quinquennium. While it slumped in FY21 due to pandemic, it resurged in FY22 and at the current pace, it is expected to cross FY20 level. Moreover, its share in the overall sale has crossed 1.5 per cent.

Figure 1: EV Sales in India



* Note – Till October 2021.

Source: Council on Energy, Environment and Water (CEEW), Centre for Energy Finance (CEF).
Available at <https://cef.ceew.in/solutions-factory/tool/electric-mobility>

Additionally, the government is exploring a switch to electric vehicles (EVs) in the next three years in all central government ministries and its field offices. [3] The government has also chosen nine expressways, where 6000 charging stations have been sanctioned and about 3000 will be installed soon. [4] Moreover, there is a scope of developing native capacities since advanced chemical cell (ACC), which is the main component of the EV battery, is currently imported and the cost of the battery itself constitutes about 30 per cent of the cost of the EV. This can be reduced if it is locally produced. This is possible because about 70 per cent of the material used in the manufacturing of lithium-ion batteries is already available in India.

A conducive environment for the EV would lead to greater investment in the sector. This view can be substantiated by the fact that recent announcement by two and three-wheeler maker TVS Motor that it would invest ₹1200 crore in future technologies and electric vehicles over the next four years. [5] The investment would be mainly for the design, development and manufacturing of new products and capacity expansion in the electric vehicle spaces. Moreover, the market is expected to see new entrants like OPPO, Realme, and OnePlus (owned by BBK-Electronics) who are planning to develop EVs in India by early 2024. [6] Globally, companies like Apple, Google, Huawei, and Xiaomi are at varying stages of developing electric vehicles of their own. Some of the limitations [7] of the EV, however, warrant attention.

- Lack of Public Charging Infrastructure – Unlike petrol pumps, where vehicles can be refuelled in minutes, charging E-Cars can take anywhere from 30 minutes (if charged with fast DC chargers) to as high as 6-12 hours (if charged with AC chargers). This factor becomes extremely important, when designing such infrastructures, especially for tier-1 cities, such as, Delhi, Mumbai, Chennai, Bangalore, etc., where most of the population resides in Multi-Unit Residential Blocks or high rises.

Incidentally, these cities also represent the region’s highest growth potential for E-Cars. Existing buildings in these cities however lack space even for parking facilities. Arranging for charging stations or charging points in such complexes is therefore a huge challenge. New complexes can be designed favourably but altering the existing ones would require a lot of investment and building plan alteration. A mitigation technique of integrating petrol pumps with charging infrastructure can, therefore, be deployed.

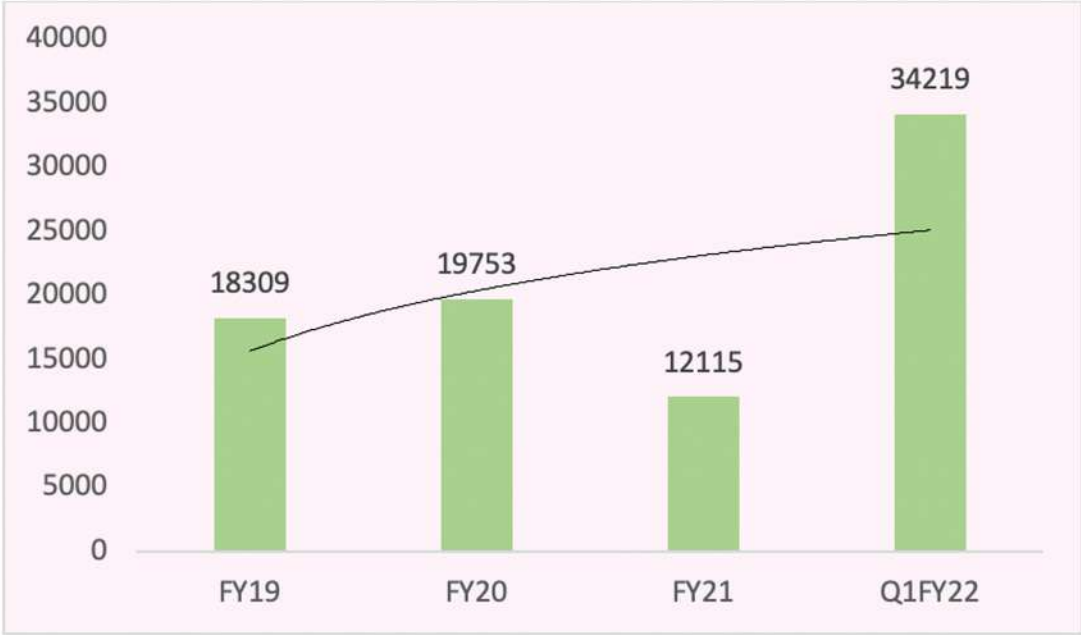
- Lack of Options and High Interest Rates – One of the biggest hurdles in the proliferation of EV segment in India is lack of options available. As of now, there are very few options in the 4-wheeler segment and the 2-wheeler segment is waiting for existing companies like Hero, Honda, TVS, Bajaj, etc. to come out with proper variants making the market more competitive. This is likely to happen in the span of 2-4 years since many companies have announced plans to expand in the EV segment. This would help to reduce the existing high prices of EV and might also slash the interest rates for easy financing of the same since currently the interest rates vary from 12 to 18 per cent.

Institutional Initiatives

Foreign Direct Investment (FDI)

The automobile industry has emerged as the top sector during the first four months of FY2021-22 with 23 per cent share of the total FDI Equity inflow. [8] FDI equity inflow for past few years is given below (Figure 2).

Figure 2: FDI Equity Inflows (₹ crore)



Source: <https://dpiit.gov.in/publications/fdi-statistics>

FDI has increased significantly if we compare the Q1FY22 figures with that of the previous financial years. With figures crossing more than ₹34000 crore in just one quarter, it would be safe to say that it would cross ₹100000 crore in FY22. The reforms by the government in FDI policy, investment facilitation and improving ease of doing business are some of the reasons for the increased FDI inflow.

Production Linked Incentive (PLI)

The government has cleared ₹25938 crore worth new production-linked incentive (PLI) scheme for the auto sector. This is done primarily to boost the production of electric vehicles and hydrogen fuel cell vehicles.

In addition, the government has also announced ₹120 crore for the drone industry. The PLI Scheme for the auto sector envisages overcoming the cost disabilities of the industry for manufacture of “Advanced Automotive Technology Products” in India. The incentive structure will encourage industry to make fresh investments for indigenous global supply chain of Advanced Automotive Technology products. It is estimated that over a period of five years, the PLI Scheme for Automobile and Auto Components Industry will lead to fresh investment of over ₹42500 crore, incremental production of over ₹2.3 lakh crore and will create additional employment opportunities of over 7.5 lakh jobs. The scheme has two components, viz., Champion OEM Incentive Scheme and Component Champion Incentive Scheme.

The Champion OEM Incentive scheme is applicable on Battery Electric Vehicles and Hydrogen Fuel Cell Vehicles of all segments. The other one, Component Champion Incentive scheme is applicable on Advanced Automotive Technology components of vehicles, Completely Knocked Down (CKD)/ Semi Knocked Down (SKD) kits, Vehicle aggregates of 2-Wheelers, 3-Wheelers, passenger vehicles, commercial vehicles, and tractors, etc. [9]

Faster Adoption and Manufacturing of Hybrid and Electric Vehicle (FAME)

The Union government has decided to extend the second phase of the Faster Adoption and Manufacturing of Hybrid and Electric vehicle (FAME) scheme by two years to 31st March 2024. At present (until 8th November 2021) 811 electric buses have been deployed under FAME India and total number of electrical & hybrid vehicles (2-wheeler, 3-wheeler, and 4-wheeler) sold under FAME has reached 280141. [10]

Cabinet approves ₹76,000 crore push for semiconductor makers

The Union Cabinet has approved ₹76,000 crore scheme to boost semiconductor and display manufacturing which will help incentivise semiconductor manufacturers amid shortages of crucial inputs. The central government will work with state governments in setting up high-tech clusters with the needed infrastructure such as land and semiconductor-grade water.



Industry Risk

The Indian automobile sector is characterised by the classic situation of a battle outside and a war within. At the international level, there are issues of globalization, individualizations, digitization, big data analytics, connectivity and the paradigm shift from service and quality to a globalized environment. There are also issues of stringent safety norms and voluntary environmental sectoral commitments. These and other forces and factors have exacerbated the competition in the industry necessitating a much greater degree of cooperation and collaboration between the producers and the suppliers as partners in development to upscale value and profitability. Tough times necessitate an equally tough response with a stress on an austerity drive, risk sharing, information acquisition, use resources reciprocally, slash the cost of product development and streamline their technology capabilities.

At the industry level, there are several issues of considerable contemporary significance-the issues of reduction of tariffs on imports, relaxation of the foreign exchange and equity regulations, and the catalytic role of the banking and the financial sector in driving the growth and structural transformation of the industry. In the emerging world of intensified competition and increased business complexities, there has to be a renewed thrust on value creation all along the line by innovative, out of box measures and replication of success stories over the world to leverage the advantages of India's cheap labor, easy availability and low cost of raw materials and weak currency and achieve a steady growth.

Withdrawal of Subsidies

There have been speculations about whether the Delhi Government will extend the subsidies provided in 4-wheeler EV. According to reports, the government has no plans to extend the subsidy system any further. The government is now exploring other vehicle segments like 2-wheelers (which makes about a three-fourth of the total vehicles) and public transport given their footfall on Delhi roads. The government will induct at least 2300 e-buses into its fleet by the end of 2022 and upgrade all existing bus depots with EV charging infrastructure. [11] It is, however, suggested that the government should not roll-back the existing scheme and should rather extend it to other segments. It would have been prudent to roll-back the 4-wheeler subsidy only when the market would have become more competitive with reduced prices.

As for the Union government, it has only disbursed about 10 per cent (about ₹820 crore) of the total subsidies out of ₹8596 crore earmarked under the FAME-II scheme. EV makers pointed out that the aggressive localisation criteria for qualifying for FAME-II hampered disbursement under the scheme so far. Manufacturers had to comply with a phased manufacturing plan with defined timelines for moving the sourcing of various components to domestic suppliers from imports which was way costlier than those imports. [12] The move would have placed better after a fair amount of EV market would have been in place to augment the industry further.

Global Semiconductor Shortage

The semiconductor shortage, which has been bedeviling the industry for quite some time, could continue for some more time now. Most of the manufacturing is being carried out by two companies in East Asia – Taiwan's TSMC and South Korea's Samsung. These giants manufacture as much as 70 per cent of the world's semiconductors. Large upfront investments (US\$10-\$12 billion) and long learning curve constitute the key barriers to entry. [13] The humungous demand and paucity of supplies are likely to exert pressure until one of these two factors ease. The shortage has reflected globally where countries' sales have plummeted. United States, for example, saw sales decline by varying margins last month vis-a-vis figures from the same month in 2020. The forecast was for overall car sales to reduce by 20 per cent; China Automobile Dealers Association (CADA) estimated auto sales in the month of October to be down by nearly 12 per cent. Similar has also been the case with many European countries. [14]

The table below (Table 3) compares the vehicle registration data (India) for various time periods. The year on year (YoY) change, taken 2019 as the base year (BY) [15] shows a decline across all vehicle categories except for passenger vehicles and tractors. Looked at another way, this showed that the registration decreased between Jul'21 and Sep'21 across all segments, except 3-wheelers and commercial vehicles.

Table 3: Comparative Analysis of Vehicles Registration Data

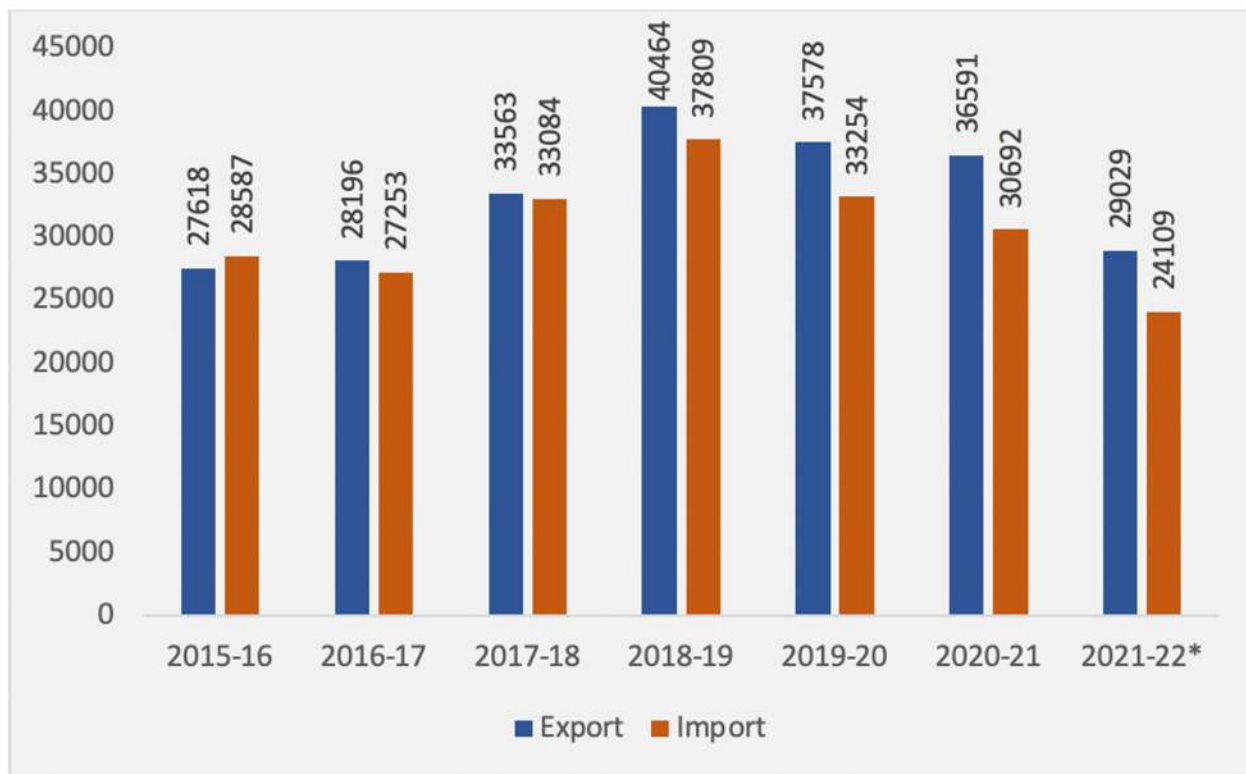
	JUL'21	JUL'20	YoY (BY 20)	JUL'19	YoY (BY 19)
2W	11,32,611	8,87,937	27.56%	13,99,409	-19.07%
3W	27,904	15,244	83.05%	58,943	-52.66%
PV	2,61,744	1,60,681	62.90%	2,10,626	24.27%
TRAC	82,388	77,257	6.64%	55,543	48.33%
CV	52,130	19,602	165.94%	69,361	-24.84%
	AUG'21	AUG'20	YoY (BY 20)	AUG'19	YoY (BY 19)
2W	9,76,051	9,15,126	6.66%	12,61,432	-22.62%
3W	30,410	16,923	79.70%	55,292	-45.00%
PV	2,53,363	1,82,651	38.71%	1,92,417	31.67%
TRAC	71,737	67,999	5.50%	52,757	35.98%
CV	53,150	26,851	97.94%	62,319	-14.71%
	SEP'21	SEP'20	YoY (BY 20)	SEP'19	YoY (BY 19)
2W	9,14,621	10,33,895	-11.54%	11,64,135	-21.43%
3W	36,612	24,262	50.90%	58,485	-37.40%
PV	2,33,308	2,00,576	16.32%	1,78,228	30.90%
TRAC	52,896	69,462	-23.85%	38,019	39.13%
CV	58,820	40,112	46.64%	59,718	-1.50%

Source: Federation of Automobile Dealers Associations (FADA).

Sluggish Automotive Component Industry

The turnover of the automotive component industry stood at ₹3.40 lakh crore (USD 45.9 billion) for the period April 2020 to March 2021, registering a contraction (i.e., de-growth) of 3 per cent over the previous year. [16] The trade component also declined for the automobile industry as can be seen from the figure below (Figure 3), whereby auto component/parts exports and imports have declined. As can be seen, after peaking in 2018-19, both imports and exports have been on a decline.

Figure 3: Import and Export of Auto Components/Parts



* Note – till October 2021.

Source: <https://dashboard.commerce.gov.in/commercedashboard.aspx>

Automobile Dealers Protection

The recent restructuring of Ford’s Indian operations caused massive anxiety for dealers and customers alike. Consequently, the future of about 170 Ford dealers with a combined investment of about ₹2000 crore and about 40000 employees is uncertain. However, the situation faced is not novel. Abrupt exits by foreign original equipment manufacturers (OEMs) over the last four years including General Motors (GM) in 2017, MAN Trucks in 2018, United Motor Cycles in 2019 and Harley Davidson in 2020 are some such examples. Accordingly, the FADA sought the introduction of legislation, viz., Automobile Dealers Protection Act, to create an enabling environment for automobile dealers. [17] This will benefit dealers and consumers and also will be vital for the health of the industry at large by making contracts more balanced and equitable between OEMs and Dealers.

Languishing Recovery

The industry has been struggling to make up for the loss caused by the pandemic and the global semiconductor shortage. This is reflected in the all India vehicle registration data, whereby the industry body FADA has brought out that it witnessed the worst festive season of the decade. SIAM has also flagged concerns whereby it reported that the sales in the month of November 2021, were lowest in 7 years for Passenger Vehicles, lowest in 11 years for Two-Wheelers and lowest in 19 years for Three-Wheelers. [18] This is highlighted in the table below (Table 4) where in comparison to festive season 2019, [19] festive season 2021 has performed exceedingly poor across all categories except for tractors. The overall registrations saw almost 21 per cent dip in festive season 2021 as compared to festive season 2019. Even a comparison with the festive season of 2020 shows a dip of about 18 per cent.

Table 4: All India Vehicle Registration Data for Festive Seasons

	Festive Season 2021	Festive Season 2020	Festive Season 2019	YoY (BY 20)	YoY (BY 19)
2W	1579642	1938066	2035341	-18.49%	-22.39%
3W	52802	34419	86390	53.41%	-38.88%
CV	77066	70361	89922	9.53%	-14.30%
PV	324542	439564	379988	-26.17%	-14.59%
TRAC	56841	73925	49107	-23.11%	15.75%
Total	2090893	2556335	2640748	-18.21%	-20.82%

Source: Federation of Automobile Dealers Associations (FADA). Available at <https://fada.in/images/press-release/16195c82d4d9b4FADA%20releases%20October%202021%20and%2042%20Days%20Festive%20Period%20Vehicle%20Retail%20Data.pdf>

The Way Forward

With the receding pandemic and higher economic activity, we are positive about the EV segment. The sector is also likely to get an impetus by the government's series of incentives both at the production and the consumption levels. However, in the light of the semi-conductor shortage and infrastructure challenges on the EV front, there are issues of concern about the overall industry in the short-term. Coupled with other factors like triple digit fuel prices and sudden exit of big companies of the market, the industry is not as strong as it was some years ago. This concern has also been expressed by the industry body FADA, where it witnessed the worst festive season of the decade. The industry needs to work on semi-conductor issue and try to develop native capacities; the government needs to work in tandem with the industry and should consider reducing fuel prices [20] given that the purchasing power of the consumers have been severely eroded in the wake of the pandemic and exacerbated inflationary pressures.

Where do we go from here? Moving into a new and higher orbit requires the formulation of a meticulous strategy and its careful execution. Some of the important elements of this strategy require an accent on branding, technological leadership, particularly in fuel efficiency, safety norms, good supply relations and quick and "just-in-time" movement of components of the final product. These and other factors will distinguish the leaders from the also-rans in this highly competitive industry in the evolving order.

With the issues of sustainable development in general and climate change in particular acquiring the centre-stage all over the world, there has to be a greater thrust on fuel-efficient technology because of binding legislation focusing on controlling carbon dioxide emission and emissions from internal combustion engines. No wonder, therefore, that in this overarching environment, the development, cost-effectiveness and commercial viability of new technologies, such as, hybrids and fuel cells has acquired paramount significance. In view thereof, the companies need not just to adopt but also adapt to changing needs and circumstances with focus, responsiveness, variability and resilience.

In industries across the development spectrum, a clear divide can easily be discerned. The rising skew in distribution of income and wealth in the country increases the demand for high-end, top of the line models, viz., compact SUVs, sedans, and luxury vehicles. Together with this aspect, shifting demographics, rising urbanization with India expected to house over 500 million people living in cities by 2030—1.5 times the current US population, and greater participation of women and youth in the job market provide tail-winds to this industry.

Further, the increasing ascendancy of the middle class facilitated by higher disposable income, the revolution of rising expectations, the Automotive Mission Plan 2026, the National Electric Mobility Mission Plan (NEMMP), 'Make in India' and 'Atmanirbhar Bharat' initiatives and supportive regulations and policies have significantly enhanced the market for low-cost vehicles. The rising popularity of shared mobility, albeit from a low and insignificant base, also augurs well for the automobile sector in India. Formulation of end-of-life or scrappage policies, adoption of alternative fuels through FAME2, which is an extension of the original FAME initiative are also positive for this industry. Contrary to popular perception, there is no inherent contradiction in these two discernible trends of production for the masses and the classes and, therefore, both these trends are likely to persist in the foreseeable future. This is why the business model of the automobile industry cannot be oblivious to these apparently contradictory trends and tendencies for a comprehensive strategy and perspective.

ENDNOTES

1. "Levelling the playing field: Protecting the Interests of Automobile Dealers in India", Federation of Automobile Dealers Associations (FADA) (October 2021). Available at https://www.fada.in/images/press-release/16178ff773def8FADA%20Policy%20Brief_Final.pdf
2. This is explained in details in a later Section of this Report.
3. "All government Vehicles May go Electric in 3 Years", LiveMint (23rd November 2021). Available at <https://www.livemint.com/industry/energy/all-govt-vehicles-may-go-electric-in-3-years-11637608417022.html>
4. "6000 EV charging stations to be installed on 9 expressways: Union Minister Mahendra Pandey", The Economic Times (22nd November 2021). Available at <https://economictimes.indiatimes.com/industry/renewables/6000-ev-charging-stations-to-be-installed-on-9-expressways-union-minister-mahendra-pandey/articleshow/87849335>
5. "TVS Motor to invest ₹1,200 crore in Future Technologies and EV; Signs MoU with TN Government", The Economic Times (23rd November 2021). Available at https://economictimes.indiatimes.com/industry/renewables/tvs-motor-to-invest-rs-1200-cr-in-future-technologies-and-ev-signs-mou-with-tn-govt/articleshow/87867625.cms?utm_source=contentofinterest&utm_medium=text&utm_campaign=cppst
6. "Oppo may enter EV space in India, launch likely 2024: Report", Hindustan Times (22nd November 2021). Available at <https://auto.hindustantimes.com/auto/news/oppo-may-enter-ev-space-in-india-launch-likely-2024-report-41637577538288.html>
7. "E-Cars Market in India", October 2021. Available at <https://jmkresearch.com/electric-vehicles-published-reports/e-cars-market-in-india-october-2021/>
8. "FDI Inflows grow 62% during first four months of current Financial Year over corresponding period last year", Department for Promotion of Industry and Internal Trade (DPIIT), Press Release (22nd September 2021). Available at https://dpiit.gov.in/sites/default/files/pressRelease_FDI_22September2021.pdf
9. <https://www.pib.gov.in/PressReleasePage.aspx?PRID=1755062>
10. <https://dash.heavyindustries.gov.in/dhiev>
11. "Subsidies for Electric Cars in Delhi, India to be Withdrawn", Techwire Asia (5th November 2021). Available at <https://techwireasia.com/2021/11/subsidies-for-electric-cars-in-delhi-india-to-be-withdrawn/>
12. "EV Push: FAME-II Scheme Achieves Just 10% Target with 4 Months Left in Original Deadline", ET Auto (29th November 2021). Available at <https://auto.economictimes.indiatimes.com/news/industry/ev-push-fame-ii-scheme-achieves-just-10-target-with-4-months-left-in-original-deadline/87989478>
13. "Here's What the 2021 Global Chip Shortage is all About", Techwire Asia (3rd November 2021). Available at <https://techwireasia.com/2021/11/heres-what-the-2021-global-chip-shortage-is-all-about/>
14. "Black 2021: Car Sales Plunge; US, China, Europe and India Report Decline", HT Auto (4th November 2021). Available at <https://auto.hindustantimes.com/auto/news/black-2021-car-sales-plunge-us-china-europe-and-india-report-decline-41636007484798.html>
15. To avoid low base effect of 2020.
16. "The Automotive Component Manufacturers Association (ACMA)", Press Release (August 2021). Available at <https://www.acma.in/press-release.php>
17. "Levelling the playing field: Protecting the Interests of Automobile Dealers in India", Federation of Automobile Dealers Associations (FADA) (October 2021). Available at https://www.fada.in/images/press-release/16178ff773def8FADA%20Policy%20Brief_Final.pdf
18. "Auto Industry Sales Performance of November 2021", SIAM Press Release (10th December 2021). Available at <https://www.siam.in/pressrelease-details.aspx?mpgid=48&pgidtrail=50&pid=496>
19. Comparing with 2019 helps to avoid the low base effect of 2020.
20. Although the union government has recently reduced the prices which was followed suit by the state governments, there is a further scope of relaxation to the rejoice of people and improved market sentiments.

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