

Pushing Down on the Pedal: Indian Passenger Vehicles to Accelerate

MIRAE ASSET LENS

April 2018

Mirae Asset Global Investments (India)

Ankit Jain, Fund Manager

Passenger Vehicle (PV) penetration in India has reached an inflection point, with key drivers such as gross domestic product (GDP) growth, premiumization and increased safety standards all pointing to further industry growth.

India currently has a PV penetration rate of nearly 28 four-wheeled vehicles per 1,000 people, a level that has coincided with a sales inflection point in other economies. In countries such as South Korea, Japan and China, compound annual

growth rate (CAGR) of car sales was in excess of 20% over the following five years once this level of penetration was achieved, supported by strong growth in GDP per capita. In the case of all these countries, GDP per capita growth was in excess of 8% in consecutive years. In the way of India, even assuming a relatively modest GDP per capita CAGR of 6-7%, we expect that car sales could keep growing at a CAGR of 12-14%.¹ If GDP growth rates pick up beyond this threshold, there could be an even sharper acceleration as seen in other global markets.

Automobile Revenues Against Economic Growth of Select Countries

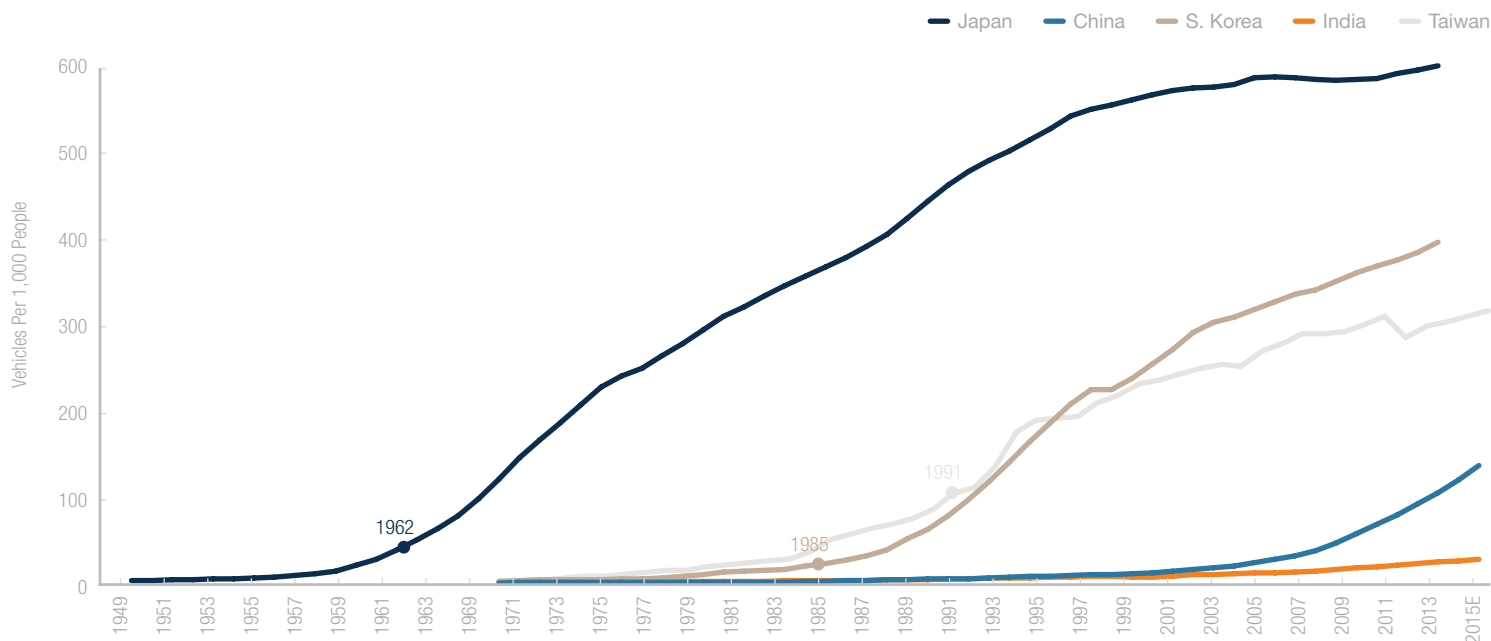
Source: Nomura, "India autos: PVs set for a multi-year growth cycle" (March 24, 2017)

Country	Base Year	4W Sales	Passenger Vehicle Sales CAGR			GDP per capita CAGR		
			2 Yr	5Yr	10 Yr	2 Yr	5Yr	10 Yr
S. Korea	1985	369,392	61.7%	28.6%	15.5%	11.1%	9.4%	8.1%
Penetration (%)	27%		39%	79%	188%			
Japan	1962	932,991	26.6%	23.8%	16.7%	8.9%	8.5%	7.3%
Penetration (%)	28%		51%	99%	209%			
China	2006	7,183,558	14.2%	20.9%	14.5%	11.4%	10.1%	8.5%
Penetration (%)	28%		38%	69%	138%			
India	2017	3,749,937						
Penetration (%)	28%							

¹ Nomura, "India autos: PVs set for a multi-year growth cycle" (March 24, 2017)

Charting Passenger Vehicle Penetration Over Time

Source: Nomura, "India autos: PVs set for a multi-year growth cycle" (March 24, 2017)



Single Digit per Capita GDP for Double Digit Industry Growth

Even assuming a 6% CAGR growth, India's GDP per capita in purchasing power parity (PPP) terms could hit US\$ 14,400 by FY30F, similar to what China recorded in FY16. However, we expect annual Indian PV industry sales reaching only ~15mn units by FY30F under such a scenario, which is lower than China's 24.3mn sales in FY17 (at a similar GDP per capita in PPP terms). Essentially, absolute car volumes vary per country based on the number of households, infrastructure, regional access, and other factors. Nonetheless, this upward directionality still implies decent potential for India's PV industry, especially if the economic growth is higher than our estimate.

Automobile Industries: India and China Compared

Source: Nomura, "India autos: PVs set for a multi-year growth cycle" (March 24, 2017)

India	FY17	FY30F	% CAGR
Annual PV Sales (mn)	3.0	14.9	12.8%
GDP / Capita PPP (USD)	6,773	14,446	6.0%

China	FY17	FY30F	% CAGR
Annual PV Sales (mn)	24.3		
GDP / Capita PPP (USD)	14,704		

Premiumization to Boost Average Selling Prices (ASPs)

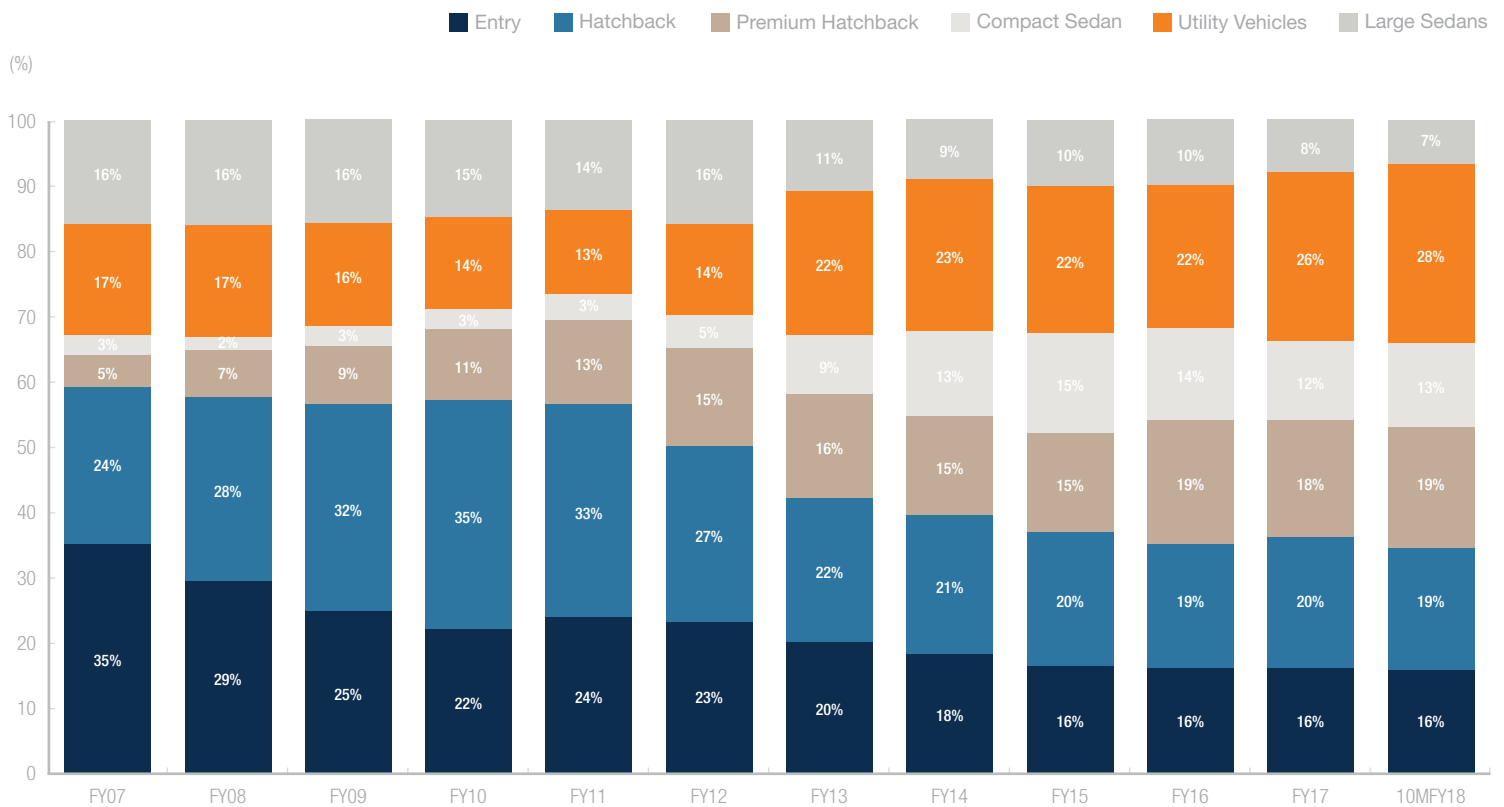
The PV industry mix has been steadily improving with more utility vehicles (UVs) at approximately 30% market share, while the share of the entry/hatchback/compact sedan segments have been declining marginally.

Customers are also willing to pay a premium for features. Blue-tooth connectivity, reverse parking cameras, navigation

systems, projector headlamps and automatic transmissions are leading to a sharp improvement in ASPs, benefiting original equipment manufacturers (OEMs). For example, the largest industry player, as seen a 5% CAGR jump in its realization over the past two years following new model launches in the UV segments, though its absolute sales realization is still lowest among the OEMs in India.

Segmental Market Share

Source: Nomura, "India autos: PVs set for a multi-year growth cycle" (March 24, 2017)





Higher Safety and Emissions Standards

Safety regulations are becoming stricter in India and features such as airbags, ABS (anti-lock braking system) and reverse parking sensors are likely to become mandatory in the next several years. Incorporating these features across the entire portfolio will lead to a 5-10% increase in ASPs over a two-year period.

Emission regulations are also likely to become tighter with the Ministry of Road Transport and Highways (MORTH) proposing a direct shift from the current BS-4 emission standard to BS-6 by April 2020. The transition for petrol vehicles is relatively simple and entails additional costs of only INR10,000-15,000 but upgrading diesel standards will be more costly. Diesels must have exhaust treatment (Selective Catalytic Reduction) and sensors to monitor the emissions, which leads to additional costs of about INR50,000 per car.

The introduction of BS-6 emission standards would increase the cost difference between diesel and petrol cars, making diesel cars less attractive for personal driving while they might still be favored commercially.

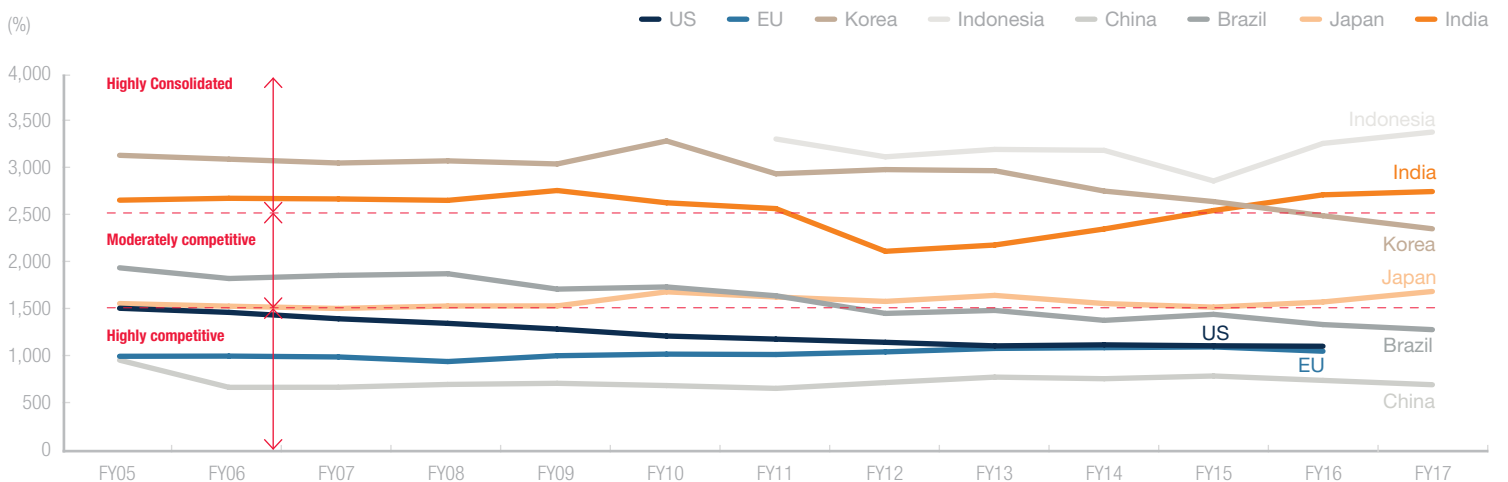
The government plans to promote green transport with a greater focus on bio-fuels, compressed natural gas (CNG) and electric/hybrid solutions. Thus, cars with CO2 emissions of less than 155 g/km (which will progressively get stricter) and length of less than 4m will attract the lowest tax of 1% in 2018, while it will remain at 15% and 27% for other categories. There are also plans to monitor this on a company average basis and major deviation could attract penalties. Hence, it becomes imperative for OEMs to offer greener solutions and this will attract most of the investment in our view.

Competitive Intensity Remains Subdued in PVs

The Herfindahl-Hirschman Index (HHI) indicates that consolidation is significantly higher in India than in other countries. Consolidation has been increasing while other countries in the region (except for Indonesia) are becoming more competitive. Consolidation is likely to remain high in India due to the dominant position of the top competitor and weak performance by global players.

Benchmarking Degree of Consolidation

Source: Nomura, "India autos: PVs set for a multi-year growth cycle" (March 24, 2017)





Most global OEMs have been unable to materially improve their market share or profitability despite having been in India for quite some time. Indian exposure is nominal for most OEMs, except for the ones at the forefront. Due to the differential tax between small and large cars, about 75% of volume consists of small cars. Global OEMs have limited products in this space. Given their low exposure to India, they find it difficult to fund research and development and address India-specific requirements to successfully challenge market incumbents. General Motors India (GM) has decided to stop selling vehicles in the Indian market from the end of 2018 after nearly 21 years of existence. Many other OEMs are also struggling with losses. This situation is likely to persist in the near future.

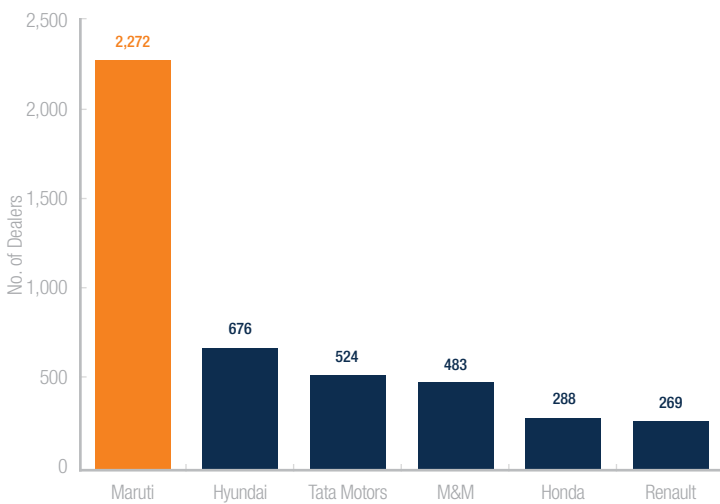
Distribution Reach is a Key Differentiator

New entrants have a smaller distribution presence than the larger OEMs. With sustained market leadership, both of the leaders have increased their reach into semi-urban/rural areas, which makes their volumes less dependent on the traditional urban market. This is also one of the reasons why new launches from these companies tend to find a wider addressable market than smaller OEMs with limited distribution networks.

Larger players have also set up a parallel network that allows customers to trade in older cars for new ones. This helps boost resale prices and further strengthens customer relationships with the company. Smaller players need to improve their dealer networks to become more competitive.

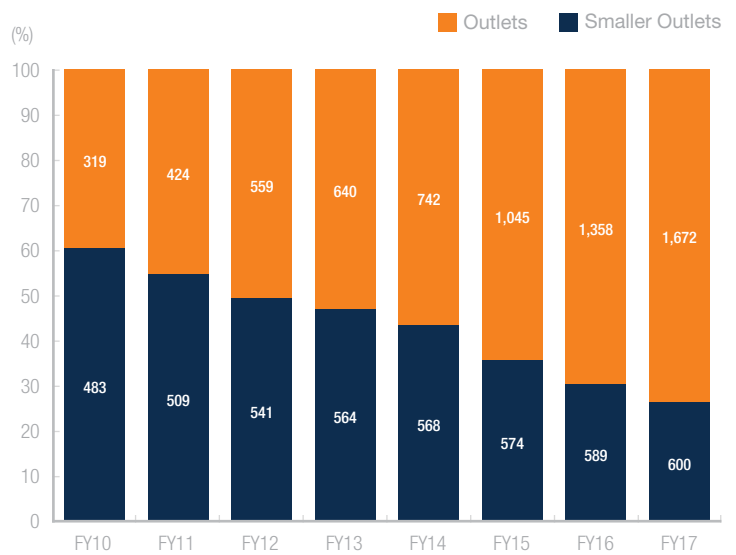
Dealership Networks of Automobile Manufacturers

Source: Company Disclosures, Jefferies



Maruti Has Increased its Smaller Dealers Rapidly to Expand into Smaller Semi-Urban Areas

Source: Company Disclosures, Jefferies





Two Ahead of the Rest

The scale built by the two largest players is difficult to replicate for numerous reasons. Firstly, as discussed, their wider sales and service distribution network creates a business moat while serving the hinterland. Their higher degree of localization is also driving down the cost of ownership as spare parts and other components become cheaper. They have also made larger investments in developing efficient engines and powertrain solutions and, lastly, their increased exposure to premium products is supporting margins.

We expect further market share consolidation in favor of these two players (market share has already increased from 54% in FY12 to 73% in FY18). The front runner will be at an even more advantageous position given Hyundai's capacity constraints in the medium-term.

Green Lights Ahead

The Indian passenger vehicle industry is on a highway to success and growth. Economic growth rates in mid-single digits are linked to car sale uptakes of over 10%. India is starting from a modest base of penetration and the experience of countries such as Korea and Japan indicate sales should rise for the foreseeable future. Increased regulations will result in vehicle premiumization while consolidation narrows the field of OEMs. Those companies with the right reach and distribution stand to build market share in cities and semi-urban areas. In our view, this sector is an engine for growth for investors who seek exposure to India.

“ The Indian passenger vehicle industry is on a highway to success and growth. In our view, this sector is an engine for growth for investors who seek exposure to India. ”



Disclaimer

This document has been prepared for presentation, illustration and discussion purpose only and is not legally binding. Whilst compiled from sources Mirae Asset Global Investments believes to be accurate, no representation, warranty, assurance or implication to the accuracy, completeness or adequacy from defect of any kind is made. The division, group, subsidiary or affiliate of Mirae Asset Global Investments which produced this document shall not be liable to the recipient or controlling shareholders of the recipient resulting from its use. The views and information discussed or referred in this report are as of the date of publication, are subject to change and may not reflect the current views of the writer(s). The views expressed represent an assessment of market conditions at a specific point in time, are to be treated as opinions only and should not be relied upon as investment advice regarding a particular investment or markets in general. In addition, the opinions expressed are those of the writer(s) and may differ from those of other Mirae Asset Global Investments' investment professionals.

The provision of this document shall not be deemed as constituting any offer, acceptance, or promise of any further contract or amendment to any contract which may exist between the parties. It should not be distributed to any other party except with the written consent of Mirae Asset Global Investments. Nothing herein contained shall be construed as granting the recipient whether directly or indirectly or by implication, any license or right, under any copy right or intellectual property rights to use the information herein. This document may include reference data from third-party sources and Mirae Asset Global Investments has not conducted any audit, validation, or verification of such data. Mirae Asset Global Investments accepts no liability for any loss or damage of any kind resulting out of the unauthorized use of this document. Investment involves risk. Past performance figures are not indicative of future performance. Forward-looking statements are not guarantees of performance. The information presented is not intended to provide specific investment advice. Please carefully read through the offering documents and seek independent professional advice before you make any investment decision. Products, services, and information may not be available in your jurisdiction and may be offered by affiliates, subsidiaries, and/or distributors of Mirae Asset Global Investments as stipulated by local laws and regulations. Please consult with your professional adviser for further information on the availability of products and services within your jurisdiction.

Australia: Mirae Asset Global Investments (HK) Limited is exempt from the requirement to hold an Australian financial services license in respect of the financial services it provides in Australia. Mirae Asset Global Investments (HK) Limited is authorised and regulated by the Securities and Futures Commission of Hong Kong under Hong Kong laws, which differ from Australian laws. For Wholesale Clients only.

Hong Kong: Before making any investment decision to invest in the Fund, investors should read the Fund's Prospectus and the Information for Hong Kong Investors of the Fund for details and the risk factors. Investors should ensure they fully understand the risks associated with the Fund and should also consider their own investment objective and risk tolerance level. Investors are also advised to seek independent professional advice before making any investment. This document is issued by Mirae Asset Global Investments and has not been reviewed by the Hong Kong Securities and Futures Commission.

United Kingdom: This document does not explain all the risks involved in investing in the Fund and therefore you should ensure that you read the Prospectus and the Key Investor Information Documents ("KIID") which contain further information including the applicable risk warnings. The taxation position affecting UK investors is outlined in the Prospectus. The Prospectus and KIID for the Fund are available free of charge from <http://investments.miraeasset.eu>, or from Mirae Asset Global Investments (UK) Ltd., 4th Floor, 4-6 Royal Exchange Buildings, London EC3V 3NL, United Kingdom, telephone +44 (0)20 7715 9900.

This document has been approved for issue in the United Kingdom by Mirae Asset Global Investments (UK) Ltd, a company incorporated in England & Wales with registered number 06044802, and having its registered office at 4th Floor, 4-6 Royal Exchange Buildings, London EC3V 3NL, United Kingdom. Mirae Asset Global Investments (UK) Ltd. is authorised and regulated by the Financial Conduct Authority with firm reference number 467535.

United States: An investor should consider the Fund's investment objectives, risks, charges and expenses carefully before investing. This and other important information about the investment company can be found in the Fund's prospectus. To obtain a prospectus, contact your financial advisor or call (888) 335-3417. Please read the prospectus carefully before investing.

India: Mutual Fund investments are subject to market risks, read all scheme related documents carefully.