20	urnal or Pa	OR	IGINAL RESEARCH PAPER	Management			
Indian	PARIPET.	Perfo	ormance of Automobile Industry in India	KEY WORDS: Automobile industry, Logistics service providers, Economic growth.			
Manoranjan Nayak			Research Scholar, Faculty of Management, Pacific Academy of Higher Education and, Research University, Udaipur (Rajasthan) India.				
Hit	Hitendra Bargal		Professor, Patel Group of Institutions, Ralamandal, Indore (MP) India.				
TRACT	India is also a substantial auto exporter, with solid export growth expectations for the near future. Various initiatives by the Government of India and the major automobile players in the Indian market is expected to make India a leader in the Two Wheel and Four Wheeler market in the world by 2020 (IBEF, 2015). The study covers the automobile companies of India which a						

dependent on logistics service providers for their efficient supply chain operation. Also selected automobile companies will be

Introduction

The Automotive Industry globally is one of the largest industries and because of its deep forward and backward linkages with the rest of the industry; it has a strong multiplier effect and is one of the major drivers for economic growth. With the gradual liberalization of the automobile sector in India since 1991, the number of manufacturing facilities has grown progressively. The Indian automotive industry produces a wide variety of vehicles: passenger cars, light, medium and heavy commercial vehicles, multi-utility vehicles such as jeeps, two wheelers that include scooters, motorcycles and mopeds, three wheelers, tractors and other agricultural equipments. The Indian automobile industry is dominated by two wheelers, which account for 75% of the total vehicles sold in the country. In the passenger car segment, India is mainly a small car market.

considered for collection and analysis of data.

Today, the automobile sector in India is aptly described as the next sun rise sector of the Indian economy. This sector has been growing at a CAGR, in excess of 15% over the last 5-7 years. In fact, in the last ten years, the volumes, exports and turnover have increased by 3.8, 19.6 and 6 times respectively. The contribution of this sector to the National GDP has risen from 2.77% in 1992-93 to close to 6% now. At present, the installed capacity of the four wheeler industry (comprising passenger vehicles and commercial vehicles) is over 4 million units and two & three wheeler industry is over 15 million units with an investment of over Rs 80,000 crores. The industry has developed in clusters which have large number of companies with their vendor base. The major automotive hubs being in Pune region (Maharashtra), NCR region, Pithampur (MP), Chennai, and Uttaranchal. Gujarat is emerging as the latest major automotive hub.

Literature Review

Morlok, Edward K. (1994) analyzed that high drayage costs (the trucking portion of rail-truck intermodal freight services) decrease the market for which intermodal can compete with intercity trucking. Despite the relatively short distance trucking covers compared to the rail portion, drayage accounts for a large part of the origin/destination service quality as perceived by the shipper. Litman (2005) has evaluated four transport energy conservation strategies (fuel efficiency standards and feebates (a rebate on the purchase of fuel efficient vehicles), alternative fuels, fuel tax increase, mobility management) and their mileage-related costs and benefits. The main conclusion from his research is that energy conservation strategies that reduce mileage (such as fuel tax increases) provide larger total benefits, to society.

Vijayaraghavan (2007) studied the impact of transportation infrastructure on logistics in India. He concluded that the present problems and crises facing the transport sector, to a great extent, are the results of lack of integrated thinking of the government from the beginning. In order to satisfy the upwardly spiraling demand, it is necessary to evolve an organizational format where development of the sector is less dependent upon government funds. Also, investment needs to be financed from the capital markets and internal resources on a self-sustaining basis.

Rationale of the study

The automobile industry accounts for 22 per cent of the country's manufacturing gross domestic product (GDP). An expanding middle class, a young population, and an increasing interest of the companies in exploring the rural markets have made the two wheelers segment (with 80 per cent market share) the leader of the Indian automobile market. The overall passenger vehicle segment has 14 per cent market share. India is also a substantial auto exporter, with solid export growth expectations for the near future. Various initiatives by the Government of India and the major automobile players in the Indian market is expected to make India a leader in the Two Wheeler and Four Wheeler market in the world by 2020 (IBEF, 2015). The study covers the automobile companies of India which are dependent on logistics service providers for their efficient supply chain operation. Also selected automobile companies will be considered for collection and analysis of data.

Objectives

• To study the performance of Automobile industry of India.

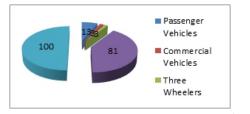
Research Methodology Research Design

The study is descriptive in nature and is based on secondary data. The secondary data was collected from published articles, research papers, business magazines, journals, periodicals, and websites of SIAM, ACMA, ARAI. The current study, on one hand, considers many issues and practices related to surface logistics in automobile companies of Maharashtra

Results & Discussions Industry Composition Domestic Market Share for 2014-15

Passenger Vehicles	13
Commercial Vehicles	3
Three Wheelers	3
Two Wheelers	81
Grand Total	100

Fig. 1.3: Domestic Market Share for 2014-15



PARIPEX - INDIAN JOURNAL OF RESEARCH

At present India has 19 manufacturers of passenger cars & multi utility vehicles, 14 manufacturers of commercial vehicles, 16 of 2/3 wheelers and 12 for tractors besides 5 manufacturers of engines in India. This includes virtually all the major global OEMs (Original Equipment Manufacturers) as well as home grown companies. In 2010-11, India surpassed France, UK and Italy to become the 6th largest vehicle manufacturer globally. Today, it is the largest manufacturer of tractors, second largest manufacturer of two wheelers, 5th largest manufacturer of commercial vehicles and the 4th largest passenger car market in Asia. During 2011-12, India exported 2.9 million vehicles to more than 40 countries which included 0.5 million passenger cars and 1.94 million two wheelers. Today, the automobile industry in India provides direct and indirect employment to 13.1 million people. The production of vehicles, domestic sales trends and exports is given in Table 1.1, 1.2 & 1.3 below.

Automobile Production Trends Table 1.1: Automobile Production Trends

Category	2009-	2010-	2011-	2012-	2013-14	2014-
category	10	11	12	13		15
Passenger	23,57,4	29,82,7	31,46,0	32,31,0	30,87,9	32,20,1
Vehicles	11	72	69	58	73	72
Commercial	5,67,55	7,60,73	9,29,13	8,32,64	6,99,03	6,97,08
Vehicles	6	5	6	9	5	3
Three	6,19,19	7,99,55	8,79,28	8,39,74	8,30,10	9,49,02
Wheelers	4	3	9	8	8	1
Two	1,05,12	1,33,49	1,54,27	1,57,44	1,68,83,	1,84,99
Wheelers	,903	,349	,532	,156	049	,970
C	1,40,57	1,78,92	2,03,82	2,06,47	2,15,00,	2,33,66
Grand Total	,064	,409	,026	,611	165	,246

Source: SIAM data.

The industry produced a total of 23,366,246 vehicles including passenger vehicles, commercial vehicles, three wheelers and two wheelers in April-March 2015 as against 21,500,165 in April-March 2014, registering a growth of 8.68 percent over the same period last year.

Automobile Domestic Sales Trends Table 1.2: Automobile Domestic Sales Trends

Category	2009- 10	2010-11	2011-12	2012- 13	2013- 14	2014- 15
Passenger	19,51,3	25,01,5	26,29,8	26,65,0	25,03,5	26,01,1
Vehicles	33	42	39	15	09	11
Commercial	5,32,72	6,84,90	8,09,49	7,93,21	6,32,85	6,14,96
Vehicles	1	5	9	1	1	1
Three	4,40,39	5,26,02	5,13,28	5,38,29	4,80,08	5,31,92
Wheelers	2	4	1	0	5	7
Two Wheelers	51	.910	1,34,09 ,150	.185	778	.581
Grand Total	1,22,95	1,54,81,	1,73,61,	1,77,93	1,84,23,	1,97,52
	,397	381	769	,701	223	,580

Source: SIAM data.

The sales of Passenger Vehicles grew by 3.90 percent in April-March 2015 over the same period last year. Within the Passenger Vehicles segment, Passenger Cars and Utility Vehicles grew by 4.99 percent and 5.30 percent respectively, while Vans declined by (-) 10.19 percent in April-March 2015 over the same period last year.

The overall Commercial Vehicles segment registered a de-growth of (-) 2.83 percent in April-March 2015 as compared to same period last year. Medium & Heavy Commercial Vehicles (M&HCVs) grew by 16.02 percent and Light Commercial Vehicles declined by (-) 11.57 percent.

Three Wheelers sales grew by 10.80 percent in April-March 2015 over the same period last year. Passenger Carriers and Goods Carriers grew by 12.16 percent and 5.27 percent respectively in April-March 2015 over April-March 2014.

VOLUME-6 | ISSUE-6 | JUNE-2017 | ISSN - 2250-1991 | IF : 5.761 | IC Value : 79.96

Two Wheelers sales registered growth of 8.09 percent in April-March 2015 over April-March 2014. Within the Two Wheelers segment, Scooters, Motorcycles and Mopeds grew by 25.06 percent, 2.50 percent and 4.51 percent respectively in April-March 2015 over April-March 2014.

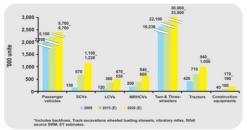
Automobile Exports Trends Table 1.3: Automobile Exports Trends

5	6	3	5,59,41 4 80,027	2	0
	6 74,043	3 92,258	4 80,027	2 77,050	0 85,782
	74,043	92,258	80,027	77,050	85.782
				-	
73,21	2,69,96	3,61,75	3,03,08	3,53,39	4,07,95
4	8	3	8	2	7
,40,0	15,31,6	19,75,1	19,56,3	20,84,0	24,57,5
58	19	11	78	00	97
,04,4	23,19,9	29,37,9	28,98,9	31,10,5	35,73,8
26	56	05	07	84	06
	58 , 04,4	58 19 , 04,4 23,19,9	58 19 11 ,04,4 23,19,9 29,37,9	58 19 11 78 04,4 23,19,9 29,37,9 28,98,9	,04,4 23,19,9 29,37,9 28,98,9 31,10,5

Source: SIAM data

In 2010-11, the total global demand of passenger vehicles was 73 million units, of which the volume in India was 2.4 million units (4%). It is estimated that by 2020, Asia, Pacific and Africa region will witness a demand of 54 million passenger vehicles out of a total global demand of 108 million units (50%), of which the demand from India will be 10 million units (8%) (J D Power, E&Y). Further, in 2020, the market /production for commercial vehicle, tractors and two wheelers in India is expected to reach 2.7 million, 1 million and 34 million units respectively, thereby making India the third largest vehicle market in the world (Fig 1.4) This will translate to an overall industry turnover of USD 162 billion, with the component industry attaining a turnover of USD 113 billion. However, for this potential to be fully realized, a lot of effort, both by the industry and the Government, will be required.

Fig. 1.4: Vehicle production - 2020 projections



Indian Automobile Industry was third-largest automobile industry by 2016. By 2020, India's share in the global passenger vehicle market to touch 8 per cent from 4.68 per cent in 2014. India is World's second-largest two wheeler manufacturer and two wheeler productions to rise from 18.5 million in FY15 to 34 million by FY20. The passenger vehicle sales will expect to be nearly triple by 2020 and passenger vehicle production to increase from 3.2 million in FY15 to 10 million in FY20.

Findings

- The automatic approval of up to 51 percent for foreign investment in priority sectors also included the automotive industry.
- Freeing the industry from restrictive environments has helped it to restructure, absorb newer technologies, align itself to global developments and realize its potential.
- It has also significantly increased the sector's contribution to overall industrial growth in the country.

Conclusion

The auto industry is one of the key sectors of the Indian economy. The Industry comprises of automobile and the auto components sectors and encompasses commercial vehicles, multi-utility vehicles, passenger cars, two wheelers, three wheelers and related auto components. The industry has been growing since the

158

PARIPEX - INDIAN JOURNAL OF RESEARCH

opening up of the sector to foreign direct investment (FDI) in 1993. It has deep forward and backward linkages with the rest of the economy, and hence, has a strong multiplier effect. This results in the auto industry being the driver of economic growth and India is keen to use it as a level of accelerated growth in the country.

References

- Jorkenbrock, David. 2001. Comparison of External Costs of Rail and Truck Freight Transportation. Transportation Research: An International Journal 35 (4): 321-337. 1.
- Kachru, U (2010). Inventory Control Management, 1st Ed.; Anurag Jain for Excel 2. Books, New Delhi
- Larson and Halldorsson (2004) Logistics Versus Supply Chain Management: An International Survey. International Journal of Logistics: Research and Applications 3. Vol.7, No.1.
- Uitran, T. (2005) 'Efficient Vehicles Versus Efficient Transportation. Comparing Transportation Energy Conservation Strategies', Transport Policy, 4
- 5. Manunen Outi (2000) An activity-based costing model for logistics operations of manufacturers and wholesalers. International Journal of Logistics Research and Applications, Vol.3, No.1.
- 6. Markus and Jean-Paul (2004) Transportation: Dossier on freight transport and
- Idgistics. Royal Dutch Geographical Society KNAG. Vol.95, No.2, pp. 133-134 Morlok, Edward K. 1994. Redesigning Rail-Truck Intermodal Drayage Operation for Enhanced Service and Cost Performance. Journal of the Transportation 7. Research Forum: 31 (7): 16-31.