CHAPTER III

Structure and Pattern of Auto Component Industry in India

The auto component segment of the Indian automotive industry plays an important role in the transportation sector. It also supports the country’s economic infrastructure. It manufactures a large number of components for the main automobile industry which are sold both as Original Equipment (OE) and spares or replacement parts. With the advent of liberalisation, the auto component industry has been integrated with the international industry. The manufacturing base of the Indian component industry shows excellent strength in technology, a skilled work force, highly qualified management and other equally qualified personnel. Government policy also plays a vital role in determining the industrial structure, growth and performance of auto component industry in India. The component industry has been promoting export and earning foreign exchange.

The Structure of the Auto Component Industry in the Early Fifties

In the early fifties there was only a nucleus of ancillary industry associated with the vehicle assemblers and the few
manufacturers setting up manufacturing facilities in the initial years. Auto ancillary units catered primarily to the replacement market. The automobile components are generally classified by the different subsystems that constitute a vehicle: engine parts, drive transmission and steering, suspension and braking parts, electrical parts, equipment such as head lights, wiper motors, arms, electric horns, speedometers, pressure and fuel gauge ammeter, flasher units and so on. The main ancillary parts produced in the early fifties related mostly to the engine namely, pistons, piston rings, cylinder liners, radiator hose and thin-wall bearings, some electrical parts such as cables, wires and wire hardness, certain rubber components, gaskets, and ball bearings, certain proprietary items such as batteries, tyres and tubes.

Most of the ancillary units tended to be set up in the vicinity of the main vehicle manufacturers. Among the vehicle manufacturers, both HM and PAL were manufacturing a large number of components, about 70 by PAL and 180 by HM. In the case of the components manufactured by HM about 137 components needed imported forgings and castings and only machining was carried out in the HM workshop (Narayana D., 1989). The castings and forgings obtained indigenously were for making parts which were not only critical, like caps and covers of various components. This brought out another major problem faced by the automotive industry in its early development and which to
a large extent still persists, namely the availability of the special type of raw materials necessary for the industry. The non-availability of the specific type of a required raw material significantly affects the quality of the product which in turn strengthens the vehicle manufacturer's resistance to the use of local components.

One of the most important considerations for stimulating domestic investment on ancillary development was the saving of foreign exchange. India spent during the five years ending 1951-52 foreign exchange equivalent to more than Rs. 37 crore on motor vehicles and parts respectively (Government of India, 1973). Great stress was laid on indigenisation of ancillary manufacture which was to be done in stages. Apart from the components mentioned earlier which were being manufactured to some extent, some components were about to be produced for which the manufacturing facilities were being set up.

Other than the brake drums, rear axles parts, spark plugs, electric horns, brake linings and clutch facings were being considered for manufacture by various units. Among the components or parts thereof being imported around the early 50s were certain engine components namely, crank shafts, cam shafts, cylinder blocks and heads, manifolds, valves, valve springs, valve tappers and radiators suspension and transmission equipments such as front and rear
springs other than coil springs, shock absorbers, transmission gear and gear box, clutch housing rear axle assembly etc. Initially automotive ancillaries were not granted protective rates of duty since it was felt that it would raise the cost and therefore price of the vehicle manufactured indigenously, which was heavily dependent on imported components. Protective rates of duties were permitted on few components. Some of them were deprecated subsequently. For, the basic problem facing the auto component industry was the lack of orders from the main industry, the main reason for which was the low volume of demand for automobiles and unwillingness of the assemblers to place orders with indigenous producers.

Auto Component Industry in the Early Sixties

The component industry's production was divided into three categories by the Jha committee in 1960. According to the Committee's Report, components in which India was self-sufficient (In 1960, these components included spark plugs, brake parts, mufflers, car and truck bodies as well as non-mechanical components such as paints, upholstery and rubber components). Components whose production had begun in India but whose demand was not completely met, (these categories of automobile ancillaries included mechanical items such as shock absorbers, brake lining, piston and clutch parts, fuel injection equipments and various filters) and components whose
production had been licensed (these components included electrical equipment and key mechanical parts such as wheels, steering machinery). Further, the Jha committee argued that frequent and steep rise in the price of automobiles, particularly cars, was a consequence of the lack of competition in the ancillary segment and of the high degree of vertical integration in the industry as a whole (Vibha Pingle, 1999). This industrial structure was, of course, a direct result of the 1950s, emphasis on the adoption of a phased manufacturing programme by all the automobile manufacturers and the simultaneous lack of encouragement of the ancillary segment. The Government accepted the recommendations of the Jha Committee and ancillary segments development has begun during this period.

A review of the development of the ancillary industry shows that there was a fourfold increase in ancillary production in an eight year period (1961-68) and growth in ancillary output was spread across all varieties of components (Kruger, 1989). The rapid growth was possible partly because of growth in final demand for the ancillary’s output (both O.E. and replacement) but mostly because the industry was able to increase its share of the Indian market as it replaced imports. The strategy towards the automobile industry through the 1950s and the early 1960s thus emphasised indigenous manufacture of automobiles and the development of small scale units
for the manufacture of components. Political rhetoric did not actively promote the development of the automobile industry. The automobile policy framework developed during the 1950s continued with the few modifications, throughout the 1960s. The emphasis on indigenous production and regulated private sector involvement was retained. The modification was primarily, in terms of the relative importance given to the various segments of the automobile industry.

In the 1960s, there were 190 units in the organized sector and of about 1000 units in the small scale sector with the production ranging from very simple components to highly sophisticated ones. As compared to a dozen sophisticated components manufactured in the early 1950s, the production capacity of the organized sector itself had grown to the extent of manufacturing about 80 components. This implied very significant progress in the indigenisation of vehicle industry.

In all cases, the import content of vehicle went down considerably and was replaced by purchase from ancillary manufacturers and the rest through self-manufacture. These proportions varied widely across firms. While HM was the leader in respect of indigenisation, Standard Motors had made the slowest progress, import content for the latter being the highest. However, HM was the vertically integrated firm, 59 per cent of its components being
self-manufactured. Telco was even more so with the proportion of components manufactured within it being as high as 64 per cent. Next to Ashok Leyland, Standard Motors had the largest percentage of bought out components. It can be seen that of the import substitution effected in each case, a large proportion was on account of purchase from an ancillary unit, the balance being contributed by the vehicle manufacturers. Hence, on an average, the value of components purchased from ancillary units expressed as a percentage of the total material cost of a vehicle had increased from an average of about 22 to 25 per cent in 1961-62 to over 50 per cent in 1965-66 (Government of India, 1973).

Hence an encouraging trend is found towards import substitution in respect of auto components and also an increasing tendency towards the use of bought out components by vehicle manufacturers. But in the early 1950s, the ancillary industry was primarily dependent on the replacement market. The chief incentive for the growth of the industry in the 1960s was the opportunity to supply original equipment as also replacement parts for the automobile industry. Not only that, a wide variety of components and parts manufacturing capacity had been developed and efforts were made at exporting a certain proportion of the manufactured components.
Structure of the Industry in the Early Seventies

The structures of the industry in the early 70s was oligopolistic in nature. There were a few products for which the number of producers were five or more (11 per cent to be exact). For about 17 per cent of the products, there was only one producer each, for 33 per cent of the products 2 producers each, and for 19 per cent of the products 3 producers each (ACMA, 2001). The product for which a number of producers was more than one did not show much of a dispensation in market shares. Even when the total number of producers was 2 or 3, the share of the top producers did not go below 50 per cent. When the total number of producers was 2, except for 2 products, the share of the top producers was between 67 and 74 per cent. Most often, such dominance continued even when the total number of producers was 5 or more. Along with such dominance by firms, in individual product markets, there was found the dominance of business houses, or groups in particular product groups. The house of TVS was dominating the electrical parts, braking and suspension parts. The House of Rane was dominating sections of dry transmission and engine parts. Escorts and Shrirams were dominating in some segment or the other.
Growth of Auto Component Industry in the Eighties

Though the 80s was a period of rapid growth in the production of vehicles of all types, the percentage of components reporting above 100 per cent growth was just 10. Another 20 per cent reported growth between 50 and 100 per cent. Significantly, the percentage of component manufacturing firms showing decline in output increased to 22. Obviously, the rapid growth of production of vehicles had not benefited the indigenous component producers during this period. The rapid growth of output of vehicles, during the 80s, was basically in respect of the new vehicles. The vehicles which produced in 1980's used the indigenous components to a lesser extent. This is borne out by the slow growth of production in the engine parts, equipment and certain components in the drive transmission group. But a few components such as starter motors, fuel pumps, (petrol), tie-rod ends were not affected.

Between 1974 and 75, and 1986-87, the number of producers of components increased by a fairly high percentage. The increase was high for components such as pistons, piston rings, cylinder liners in the engine parts, clutch assembly, clutch plates and tie-rod ends in the drive transmission and steering parts. New entrants were few for most of the other components. Compared to 1974-75, the market shares of the top producers had come down for many components in
1986-87. The exceptions were air brakes, wheels, fuel injection equipment and engine valves, where the same firms had maintained their market shares. In the case of a few other components, the share of the top producers had remained the same. But the top producers were not the same (for instance, there was one for flywheel ring gears and other for thin wall bearings). The number of components with a single producer had come down to five and those with two producers to 13. Fifty per cent of the components had one or two producers in 1974-75 and the percentage dropped to 30 by 1986-87. Also the components which had five or more producers had increased from 11 to 26 per cent. Clearly the period had witnessed wide dispersion of numbers.

The change that had come about by eighties was not uniform across components. For about 25 per cent of the components, the dominance of a single producer was visible upto 1980s. For the rest of the components, however, such dominance was eroded by the increase in number of producers. This diverse pattern calls for an explanation which may be found in the technological capability of the ancillary sector. During the eighties, most of the component manufacturers were not able to meet the requirements of the newly established automobile manufacturers in the passenger car, light
commercial vehicle and two-wheeler industry (The Hindu Survey of Indian Industry, 1988)

Trends and growth of Indian Auto Components Production

The Indian auto component industry was a sequel to the need for industrialisation and import substitution, encouraged in the late fifties and up to the eighties. It had grown as a somewhat retarded child with uneconomic volumes and complete isolation from world trends. In the eighties, a series of joint ventures were forged to meet Maruti and Japanese LCV technology requirements. However, no further substantial upgradation of technology in the car segment took place. Hence auto component manufacturers were unable to introduce state-of-art technology being offered in the rest of the world.

Interestingly, while policies regarding most industries were liberalised in 1991, the automobile policy for passenger cars was left untouched. But in 1993, car industry was delicensed. The entry of new automobile companies and establishment of joint ventures in the nineties have helped to spur component industry. Foreign car manufacturers who entered the Indian market have set up joint ventures with component manufacturing firms. The industry is thus in the midst of establishing a large number of joint ventures. The auto
<table>
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<tr>
<th>Year</th>
<th>Engine Parts</th>
<th>Electrical Parts</th>
<th>Transmission &amp; Steering Parts</th>
<th>Suspension</th>
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<td>1961-62</td>
<td>80,879</td>
<td>6,602</td>
<td>9,423</td>
<td>36,854</td>
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<td>412,853</td>
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<td>2,268,997</td>
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<td>1981-82</td>
<td>2,529,901</td>
<td>597,026</td>
<td>1,680,888</td>
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<td>2,401,132</td>
<td>515,381</td>
<td>1,181,902</td>
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<td>2,695,991</td>
<td>569,932</td>
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<td>381,447</td>
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<td>3,780,973</td>
<td>733,687</td>
<td>2,284,528</td>
<td>1,580,937</td>
<td>334,817</td>
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<td>4,528,234</td>
<td>947,447</td>
<td>2,881,677</td>
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<td>4,507,248</td>
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<td>8,527,388</td>
<td>1,975,771</td>
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<td>10,491,733</td>
<td>2,212,171</td>
<td>6,782,523</td>
<td>3,896,550</td>
<td>1,116,698</td>
<td>1,775,737</td>
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<td>1992-93</td>
<td>12,688,870</td>
<td>2,552,422</td>
<td>7,354,727</td>
<td>5,297,188</td>
<td>1,337,707</td>
<td>2,781,724</td>
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<td>15,221,304</td>
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<td>8,537,463</td>
<td>6,322,473</td>
<td>2,278,329</td>
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<td>1994-95</td>
<td>19,145,572</td>
<td>4,209,227</td>
<td>11,075,127</td>
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<td>2,818,813</td>
<td>4,671,365</td>
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<td>1995-96</td>
<td>23,902,615</td>
<td>5,421,866</td>
<td>15,243,610</td>
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<td>4,396,642</td>
<td>7,562,959</td>
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<td>1996-97</td>
<td>31,393,401</td>
<td>5,859,827</td>
<td>19,842,736</td>
<td>16,603,184</td>
<td>5,871,651</td>
<td>9,701,313</td>
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<td>1997-98</td>
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<td>6,546,795</td>
<td>18,808,038</td>
<td>15,965,206</td>
<td>5,810,165</td>
<td>13,785,806</td>
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<td>1999-00</td>
<td>42,265,783</td>
<td>10,340,908</td>
<td>21,943,063</td>
<td>20,014,583</td>
<td>8,341,343</td>
<td>24,648,339</td>
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<td>120,19,467</td>
<td>21,416,782</td>
<td>187,12,847</td>
<td>97,50,637</td>
<td>342,50,896</td>
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Source: Compiled from various issues of ACMA Year Book.

Note: The above data on components pertain to only organised sector and does not include SSI sector production.
component industry had grown by 25 per cent in 1995-96 and by 14 per cent the following year. Component exports grew by almost 25 per cent in 1996-97, maintaining a trend that began in the late 1980s (Mahesh K., 1997).

An automobile can only be as good as its parts. The growth of auto component sector largely depends upon the performance of vehicle manufacturers. Automobile component industrial production started slowly from 1950s, when in 1965 the Government demarcated the items that could be developed by the ancillary sector alone. Table 3.1 shows that the industrial automotive component production rose from Rs. 17.8 crore in 1961-62 to Rs. 133.2 crore in 1970-71 and Rs. 6,967.77 crore in 1995-96. In the year 2000-2001 it further rose to Rs. 13,266 crore. Among the total components production, engine parts occupied the first place, transmission & steering parts the second place from 1961-2001.

An analysis of Table 3.1 shows that the automobile components industry slow and steady growth throughout the period 1961-2001 and witnessed an average annual growth rate of 2.13 per cent in the pre-liberalisation period. But it had high growth in the period immediately before policy liberalisation because of the whopping
growth in 1981-82 caused by the introduction of LCVs and Maruti Car. In all the other years, the average annual growth rate ranged between a minimum of 0.9 per cent and maximum of 1.3 per cent. It may be noted that the growth of the automobile components has not been influenced by the internal and external recession in the automobile industry.

The significant growth in the automobile industry from 1991 to 1996 prompted auto manufacturers to invest in fresh capacity. As a result, the component manufacturers invested approximately Rs.1200 crore per annum from 1996 to keep pace with the projected demand for components from the new players in the automobile industry (The Financial Express, 2001). Many new joint ventures with the global suppliers of the foreign vehicles were set up as Greenfield sites thus adding to the capacity already available with the existing component manufacturers. Component manufacturers continued to invest in fresh capacities with the hope of better prospects for this sector and expansion of demand in the future. However, this has not materialised and it resulted in a 30 to 40 per cent under-utilisation of capacity in the auto component industry. Most of the component manufacturers have their locations distributed in North, South and Western parts of the country, while a few firms are located in the Eastern parts.
Growth of Auto Components Exports

Traditionally, the auto components industry looked for the development of a strong domestic vehicle base and large domestic volumes to improve its performance in export markets. It was felt that such a base would bring in adequate technology to make products exportable. This occurred during the late 80s and 90s leading to a substantial export of components like fuel injection parts, motorcycle parts, engine parts, gears, leaf springs, brake linings and brake systems, auto lighting equipment, spark plugs and parts and accessories.

It is recognized worldwide that development of an industry's manufacturing base would be determined by how well its exports perform against global competition. Hence, if the Indian auto component industry wants to ensure the progress of the mainstay, the domestic base, it would have to tie with the best internationally reputed firms for larger parts of the export business. Now with the new breed of components being developed by the Indian auto component industry, prospects for increasing exports are very promising. In view of India’s competitive advantages, the new vehicle manufacturers are developing Indian component vendors for global sourcing. International component
manufacturers setting up manufacturing bases in India with local partners have found it more economical to enter into buy back arrangements to further increase the exports of auto components, to meet their export obligations under Government's MoU scheme. These developments and others may well result in a sustained annual export growth.

The automotive component industry has always been a leader in exports and net foreign exchange earner. This industry is exporting more than 12 per cent of its total exports. Even during the period of recession, the industry continued the growth in exports by posting 20 per cent annually. It is significant to note that Rs.1400 crore of components had been exported in 1998-99 to meet the demand of the replacement market abroad. Along with replacement market, exports have been the mainstay of the industry whenever there has been a domestic recession. Component exports registered a compounded annual growth of 20.5 per cent in the six year period (1991-92 to 1997-98). About 33 per cent of exports were accounted for by engine parts which is the industry's strength, and 15 per cent by transmission and steering parts. The industry is expected to increase the share of exports in total production to nearly 20 per cent by 2010 (Autoindia, 2000).
Performance of SSI Units in Component Sector

Since liberalisation in 1991, several auto component products reserved for small scale Industries have been de-reserved. It may improve the quality of the products, but at the same time it will affect most of the protected small scale industries. The auto component industry comprises 600 units in the organized large and medium scale units and roughly 8000 units in the SSI sector. Only 300 firms have a licence to produce components. In 1998-99, the value of production of the industry was at Rs. 12,680 crore, of which about 22 per cent was contributed by the SSI sector. Now there are about 250 key players in the market (Motorindia, 2001). While the governments’ aim of encouraging this sector is undoubtedly noble, small scale industry can only succeed where it enjoys a natural advantage by the very nature of being small.

The only criterion at present for reservation is to assess whether a unit is able to function within the investment limit for small scale industry. In the automobile industry, items like filter, oil seals, radiators, leaf springs, bulbs for automotive applications, etc, are reserved for small scale industry. This is not good in the long term national interest as it prevents technology stronger units from entering
this field and providing the more advanced high quality parts required by the automobile industry. The life of the engine and the vehicle, their proper performance and indeed safety often depend on these small parts. To prevent well organised companies from manufacturing these parts will be negation of the critical aspects of safety and quality.

Technological Development

The global auto component manufacturers have come with the state-of-art technology and strict quality control norms and measures. They have also come with the capability to produce complete automotive systems. Most Indian auto component manufacturing units are owned and managed by families. Producing single components like axles, brakes, engine parts and other ancillaries is their forte. Few are in a position to design complete modules, vital in today’s business environment. The component industry across the world is being restructured into a three tier supply chain, with Tier 1 manufacturers producing systems to be supplied directly to the assembly line, and Tier-II and III companies supplying parts to the Tier 1 player. In this scenario, and with large foreign companies entering the market, most Indian manufacturers may get categorised under Tier II and III in their existing form. This should in no way spell doom for domestic component manufacturing. In fact, it is an extremely positive development.
Global players bring in their wake fresh resources, which infuse new life into the industry. They also introduce stable and developed international manufacturing practices. It is imperative that the products they develop here meet world class quality standards, and to ensure this, they are prepared to provide a very high level of training and support for their suppliers. These multinationals are equipped with the state-of-art manufacturing technology and a strong research and development base. Domestic players as a part of the entire support chain, benefit from these.

It is in the interests of the Tier I company to bring the suppliers quickly up to international standards. The existing automobile policy based on the memorandum of understanding route encourages localisation of component base for new vehicles. It lays down that all foreign investors must attain a localisation level of 50 per cent within three years of commencing production and 70 per cent within five years. Technology is a key factor. In 1980s, automotive industry in India witnessed a quantum jump on the technology front. The 1990s had brought about sea change in the component manufacturing segment in both product and process technology. This was addressed through new joint ventures or through in-house R&D.

The spending on in-house R&D has to go up substantially to at least three per cent or better still upto 5 per cent of sales, if the
industry were to become self-reliant and offer leading edge technology products to both domestic and international customers. After liberalisation, the automotive industry in India is undergoing a tremendous transformation. The emphasis of the Government and the industry are increasingly on the manufacture of these vehicles, in collaboration with the international leaders in the respective fields. This will lead to increasing demand for the skills and capabilities of the auto manufactures. Some of the emerging technological trends in the specific areas of fuel conversion, performance efficiency, safety and comfort are given below:

(i) Fuel Conservation

- High performance and turbo-charged engines.
- Diesel fuel injection equipment for small multi - cylinder diesel engines.
- Automotive pistons for disk engines.
- Improved carburation.
- Aerodynamic styling.
- Electronic engine control.

(ii) Performance Efficiency

- 5-8 speed synchromesh-transmission for commercial vehicle.
- Two speed rear axle for commercial vehicles.
- Precision forging of gears and other components.
- Ceramics for engine valves.
- Aluminum for radiators.
- C.V. Joints for steering.
(iii) Safety

- Disk Brakes.
- Dual line braking systems.
- Reinforced gear box construction.
- Collapsible steering columns.

(iv) Comfort

- Power steering for commercial vehicles.
- Semi-automatic transmissions.
- In-cab noise reduction in commercial vehicles.
- Hydro pneumatic suspension.

These technological trends will, inevitably, have a major impact on the auto ancillary industry. The demands for increasingly sophisticated products and technologies necessitate constant upgradation and innovation. The vehicle manufacturers and the Government have to decide on the nature and level of technology that the country wants and is prepared to embark upon its automotive industry during the next 5 to 10 years.

Research and Development

As a part of building and developing a new technology culture in the auto component industry, it is necessary to give representation to the auto component industry on the councils of national laboratories
undertaking industrial research and also on various official committees and councils on R & D. The main objectives of an R & D plan for the component industry should be:

➢ Achievement of fuel efficiency;
➢ Improvement of safety and acceptability in environment,
➢ Material conservation,
➢ Modernisation,

The auto-component industry has to undertake extensive R & D to absorb and adopt imported technology. To stimulate such in-house R&D, special fiscal incentives, such as tax rebates should be introduced. The task before the Indian component industry today, therefore, is to make major improvements in their manufacturing processes, systems and shop floor operations to achieve these international levels of quality measured in parts per million (PPM). In addition, the constant pressure on the components industry is to reduce prices year after year. This can be achieved only through productivity improvement, new tools and techniques which can be introduced only by encouraging internationally renowned experts.

On the industry front, the industry is required to invest considerable resources in developing new designs of components. This entails heavy investments in terms of tools, dies, cost of designing
and development, field trial costs etc. These activities are today the basics for surviving in the automotive supply chain. The new designs being developed are usually for non-viable volumes and hence uneconomical in price compared to imports. If the domestic component industry has to provide a high degree of local value-addition and create a strong base for world-wide exports of components, then the basic disadvantage will need to be addressed through a policy of R & D based incentives.

Fiscal Measures

There is no doubt that the automotive industry in India now stands at the threshold of a major change. The Government has committed itself to improve the level of technology. The government policy emphasises its determination to develop internationally competitive technologies with the minimum capital outlay and the maximum utilisation of existing capabilities and resources. Towards this end, the following objectives have been identified for the auto-ancillary sector.

* Technologies upgradation of products to suit new requirements,
* Modernisation of plants to promote efficient manufacture,
* Creation of new capacities to fill identified gaps,
* Keeping its product cost to the minimum
To achieve these objectives, component manufacturers are taking several steps on their own initiative. There are, some impediments which are likely to come in the way of these efforts. In this contest, fiscal support to the auto component industry is vital.

Problems of Components Industry in India

The growth of auto components sector largely depends upon the performance of vehicle manufacturers. In the current scenario, component manufacturers in India are under tremendous pressure, not only with a reduced volume of production, but also arbitrary price fixation by OEMs. This has led the component manufacturers for restructuring plans, including, cut in labour force, VRS, etc. Even the country's first ISO acquired firm, Sundaram Fasteners, has reported a 14 per cent fall in the net profit in the first quarter in the year 2000-2001, in spite of its export sales going up by 10 per cent (Motorindia, 2001). One of the leading auto component manufacturers, as also a leader in the field based in Delhi, is planning to sell one of its manufacturing locations in order to cut expenditure. Major players like MICO have reduced their working days because of the huge pile-up of stocks in their manufacturing units.

Besides, the duplicate auto parts enjoy a parallel market with their OE brands owing to the non-application of the provision of
cognizable offence on these duplicate items. This fact is brought out by the dimension of the market computed on the basis of inputs available from the field investigation in respect of 12 fast moving components. There are a number of factors which boost the presence of spurious components. Higher latent profit margins in the duplicate trade have lured an ever increasing number of traders to the trade. To maximise their profitability, a good number of garages and machine workshops have opted to deal with the spurious components.

The profit margin on spurious components ranges from 17 per cent to 26 per cent as against 3 to 5 per cent in respect of OE brands at the retail outlets. Spurious components are produced at one-third or one-fourth of the cost of production of OE components. Though having the price tag of OE components, the latent price is of the order of half of the market price of OE. The replacement market is highly price sensitive. Because of similar packaging and physical appearance, it is very difficult to distinguish between duplicate and OE components. Duplicate auto components, being at lower quality fail to perform the allotted functions. High fuel consumption, addition to pollution due to lower fuel efficiency, damage to the vehicle and higher maintenance cost are the consequences of the duplicate component market. Road accidents also occur due to poor performance of safety
sensitive auto components. This will also affect the income of genuine manufacturers leading to loss of revenue to both national and state exchequer.

Global Competition and its impact on Indian Auto Component Industry

The domestic automotive component industry is trying to avert the threat of closure posed by growing international competition by improving productivity, efficiency and quality levels. Existing small and medium companies are scrambling to cope with the standards now being demanded from vehicle manufacturers. The entry of multinationals into the Brazil and Mexican markets had led to closure of numerous indigenous units in these countries. But in India, component manufacturers are trying to ensure that liberalisation and entry of foreign players do not adversely affect the domestic industry.

The manufacturing base of the Indian auto component industry shows excellent strength in technology, a skilled work force, a highly qualified management and other equally qualified personnel. The capacity of the industry, in the production of nationally competitive products, is further strengthened through collaborations with several leading foreign companies or their subsidiaries. These partnerships have brought in the latest product and process technology to the Indian auto component sector, along with globally acceptable
benchmark of quality and productivity. Experts from Germany and Japan have been brought to advise companies on ways to improve performance. The leading multinational auto component producers like Delphi and Denso have combined to have a turnover of 22 billion dollars.

The global giants like Delphi are largely seeking to make India an export base to supply components to the ASEAN countries or China. These companies would prefer to focus on producing selected components in large volumes for export to the neighbouring regions. Despite the competition, Indian auto components are rapidly making a dent in the export market. At present, exports are now about 400 million dollars annually but expert studies have forecast that these will rise to 1 billion dollar over the years. "According to the ACMA Vice-president Mr. Deep Kapuria, improving technology levels was critical to achieving these targets" (The Hindu, 2001). As it is, most producers here are "tier two" suppliers. In other words, they supply small parts to the other large component part producers who in turn, sell sub-assemblies and assemblies to the original vehicle companies. But with the entry of most sophisticated technology, automobile manufacturers are now seeking to purchase "systems" rather than assembled components from the ancillary suppliers. For instance, engine management systems are now being sought rather than merely
engines. ACMA is making strenuous efforts to ensure that domestic industry is able to improve technologies to meet this new demand. An entry has also been made into e-commerce by selling components in the internet through auctions. Though this has begun in a small way, it will help e-business expand globally.

The structure of the auto component industry in India was oligopolistic in the early seventies. However, over the last 30 years, with the steady growth of outputs and especially with the economic liberalisation of the early eighties and nineties, the oligopolistic structure was making way for competitive conditions. This had happened because of the design specificities of the parts and components involved and multiple collaborations called for by the requirements of the several new kind of vehicles. Still a small segment of the auto component industry was able to maintain the oligopolistic hold owing to a certain degree of independence of the designs and the continuing upgradation of technology. The competitive conditions have, in turn, resulted in the lowering of the profit margins of the firm in the component industry.