CHAPTER - V

OPERATIONAL PROBLEMS
AUTO FINANCE
(TWO/THREE WHEELER SEGMENT)

In India, reportedly only about 25.30 percent of two wheeler sales are made on credit, compared to about 70 percent of car sales and about 90 percent of commercial vehicle sales. Although at present the percentage of two wheelers sold through auto finance is low, with increasing reach, auto finance will be a key demand driver for two wheelers in the future. Most two wheeler manufacturers have promoted their own finance companies and also have financing arrangements through other finance companies.

CV FINANCING (COMMERCIAL VEHICLES)

In India, availability of credit for purchase of a CV plays a significant role in determining demand with about 90 percent of all CV sales being credit purchases. Most CV manufacturers have promoted their own finance companies and also have financing arrangements through other finance companies.

AVAILABILITY OF CONSUMER FINANCE

In the last few years, the availability of consumer finance for two wheeler purchases has increased although at present only about 20.25 percent of the two wheelers are financed by credit, with vehicle manufactures and the larger dealers beginning to establish their own
finance companies the percentage share of two wheelers purchased through consumer finance is expected to increase significantly.

Finance companies floated by the major two wheeler manufacturers -

**Table No. 69**

<table>
<thead>
<tr>
<th>Two Wheelers Company</th>
<th>Finance Subsidiary</th>
</tr>
</thead>
<tbody>
<tr>
<td>BAL</td>
<td>Bajaj Auto Finance</td>
</tr>
<tr>
<td>Escort</td>
<td>Escorts Finance Investment &amp; Leasing</td>
</tr>
<tr>
<td>HHML</td>
<td>Hero Honda finlease</td>
</tr>
<tr>
<td>KHML &amp; KEL</td>
<td>Integrated Kinetic Finance</td>
</tr>
<tr>
<td></td>
<td>Kinetic Capital Finance</td>
</tr>
<tr>
<td></td>
<td>20th Century Kinetic Finance</td>
</tr>
<tr>
<td>TVS</td>
<td>Sundaram Finanace</td>
</tr>
<tr>
<td>MAL</td>
<td>Hero Financial Services</td>
</tr>
<tr>
<td></td>
<td>Hero Investments</td>
</tr>
</tbody>
</table>

Apart from these finance companies floated by the major two wheeler manufacturers there are a lost of other non-banking finance companies which promote two wheeler demand by offering attractive installments schemes. At present auto finance companies mainly service the urban.
ATUO FINANCING MARKET

A busy road in the metropolis with snazzy care of different hues zipping along. If this brings memories of the autobahns of Europe and the free ways of the USA, you are in for a real surprise! The scene in India and what has been described can be witnessed in most busy metros today.

In the last couple of years, the scenario in the once sluggish automobile market has changed dramatically. Today there is dazzling explosion of car models, and every major global player (like Ford, GM, Daewoo, Peugeot, Fiat and Mercedes) is in the fray.

Other international giants like Toyta, Honda, Hundai, Charycler and Mistubishi are also expected to launch their models shortly.

As, we know the percapita income of Indians is very low. Not many can afford to purchase a car simply out of their own saving. So, auto financing is a big and fast growing in India. The Indian corporate sector has already witnessed many a tabloid war between financing companies be it to wincide with the launch of Esteem or the opening of advance booking for the Cielo.

The role of vehicle financing in accelerating the sale of scooters and cars can be judged from the following figures. The total sales of three wheelers, cars, two wheelers, utility vehicles and
commercial vehicles shot up to 3,498,846 units during the period between April 1995 and March 1996 from 2,852,601 in the previous year. The cumulative sales of cars from April 1995 to March 1996 rose to 3,45,355 an increase of 80,552 units.

The explosion is not entirely due to the efforts of the manufacturers and dealers. Nearly 60 percent of the sales are attributed to the bargaining market of automobile financing through the wild growth of private financing companies, NBFC and banking institutions.

Banks like Citibank and Bank of America offers loyalty incentives to their customers. But more importantly, the emphasis is an speed. Quick processing of application is followed by immediate disbursements quick, deliveries, easy repayment schemes in installments, and of course the simplification of documentation.

The hire purchase schemes are an offer for all individuals who are either earning a net annual salary of at least twice the installment amount, are practicing professionals self employed individuals or, partners in a business or firms in existence of at least 6 months and have a net annual income of Rs. 75,000. The offer is also open to limited companies, partnership firms, societies or institutions.

However, the major players maintain that they are very strict about their requirements and many even turn down request that do not
satisfy their requirements. But due to stiff competition in the field, attitude of the financiers is gradually changing.

In present car financing market, you have big companies like Kotak Mahindra, Applo Finance, Lloyd finance, TCKF, GLF, TCFC, Sundram, Tata finance. Apart from these companies, one can enlist the services of banks like City Bank, State bank of India, Bank of Baroda which are planning to enter the field in a big way.

All the companies broadly offer 3 types of schemes security deposit, margin money and Advance installment.

Tenure of repayment period, Banks offer maximum tenure of five years and so do major companies. Most NBFC and some private financing offer a loan for 3 to 4 years.

**Financing**

The present price range of four wheeler is Rs. 1.8 to 2.5 lakh respectively. Many prospective buyers do not have ready money for this heavy investment. Bank and finance companies then come to their rescue by financing the purchase to the extent of 75-100 percent. They charge interest on this amount at the rate of 16-20 percent per annum. The interest is calculated on the original amount financed by bank, they charge on reducing balance.
The financiers ensure the repaying capacity of the borrowers before financing the purchase. The vehicle remains hypothecated to the former till repayment of the last installment.

In addition, to the payment of monthly equated installments, the buyers has to pay form his own resources the difference between the cost of vehicle and the amount got from the financing agency. Also he has to pay the cost of the legal document connected with the financing road tax, registration cost and insurance charges. Also, the vehicle can be sized in case of default.

**Documentation**

Is mainly required for proof of income, residence and identity. A salaried person is required to show his salary slip. Certificate and proof of other sources of income. Proprietorship or partnership firms need to show their balance sheets, the latest profit and loss amount, copy of partnership deed, advance tax challans etc.

**Method**

The entire financing of vehicle is done through two methods. The first is the leases method in which the vehicle is registered in the name of the financing company. The other is the hypothecation under which the vehicle is registered in the name of the customers.

In case of non payment of installment, the company can take possession of vehicle. The customers also has to pay the entire amount
incurred by the company for the recovery of vehicle. It is only after the payment of loan the registration certificates is handed over the customers.

With increasing competition in the financing market, there is a near unanimity that Indian buyers will actually find themself in a strong bargaining position vis-à-vis the auto financiers. They will find wide choice available off the self, and because auto financier will be under pressure to finance, buyers are likely to find themselves enticed with all kinds of compelling deals.

**Schemes**

Hire purchase schemes can be categorised broadly into three types, full finance schemes, margin money schemes and deposit schemes.

**Full Finance Schemes**

Here the financier provides finance for 100 percent of the value of the car. The loan has to be repaid in EMIs spread over the loan tenure.

**Margin Money Schemes**

The financier provides finance for upto, say 90 percent of the value of the car. The balance ten percent of the value will have to repay the loan in EMIs spread over three to five years.

In certain cases the financier could be willing to provide 100 percent finance provided he gets between one to five EMIs in advance. By giving the EMIs in advance what you are effectively doing is reducing
your loan amount or in effect providing time with the margin money. The financier is liable to tempt you by saying that by giving a few advance EMIs you will reduce the interest out go and will have a lower EMIs. Beware of this as he will conveniently forget to tell you that the loan you seek is lower to the extent of the EMI you are playing in advance and hence logically your interest out go and EMIs should be lower.

**Deposit Scheme**

The financier provides finance upto 100 percent of the value of the car while the borrower will have to provide him with a deposit of a certain amount. The deposit will lie with the financiers till the time the loan is repaid and will continue to earn interest while the borrower continues to pay the EMIs for the term of the loan.

The financier is likely to tell you that he will pay interest on the deposit and also reduce the EMI and the interest rate. Here the financier is effectively borrowing from you the amount equivalent to the deposit and lending the same to you. If he pays 14 percent interest on the deposit and provides you the loan at 20 percent interest you end up paying six percent interest on your own money instead of earning 14 percent interest on it. It is better not to pay the deposit but use it as margin money and reduce the loan amount, hence the EMI and total interest out go.
Financial System & Evolution Of NBFC In India

The financial system comprises financial institution, financial instruments and financial markets which provides an effective payment and credit system and thereby facilitates the channelising of funds form the savers to the investors in the economy. The institutional structure of the organised Indian financial system is strewn with a plethora of organisation of various sizes, functions, shapes and structures. These can broadly classified as under.

I Commercial banks in public and private sector, including Indian branches of foreign banks.

II The three tiered structure of co-operative banks catering to the need of rural credit and agricultural sector.

III Urban Co-operative banks functioning in urban/Metropolitan areas and providing credit for non agricultural sectors.

IV Regional rural banks sponsored by the commercial banks in public sector in participation with Central/State government for meeting the rural credit need in an intensive manner as supplement to credit through co-operative agencies and commercial banks.

V Development financial institution providing term lending facilities at all India levels such as Industrial Development Bank of India (IDBI), Industrial Financial Corporations of India (IFCI), ICICI, IRBI, NABARD, NHB, SIDBI and the 18 state level financial
corporations and a specialised corporation set up by various state Government, for promotion and development of small scale industrial sector.

VI NBFC's in private sector as well as in public sector incorporated as subsidiaries of certain public sector bank engaged in multifarious para banking activities. Such as hire purchase/lease financing, merchant banking, under writing, floatation of mutual funds, venture capital funds besides running chits/kuries, and dealing in shares/stocks.

**Non Banking Financial Companies**

Non banking financial companies have emerged as integral part of the Indian financial system. The scope and activities of the NBFC's have significantly expanded over the years especially during the last one and half decade. The number of NBFC's which stood at 7,063 in 1981 increased to 25,085 in 1991 and further to 39,454 in 1995. The distribution however, is highly skewed in terms of their deposits as well as net owned funds. Among the major types of NBFC's leasing companies are of a recent origin and have strengthened their position in a short period of time. Services provided by NBFC's-(Non Banking Financial Companies) constitute an important segment of the capital market in India. Traditionally they concentrate on hire purchase business. In the 1980 they inducted leasing business into their portfolio. The
activities of NBFC's can be fund based as well as for based activities for the former activities the companies require funds. However, there is a limit on the deposits which the NBFC's can raise.

**Table No. 70**

<table>
<thead>
<tr>
<th>Fund Based Activities</th>
<th>Fee Based Activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Equipment leasing</td>
<td>1. Issue Management</td>
</tr>
<tr>
<td>2. Hire purchase</td>
<td>2. Portfolio Management</td>
</tr>
<tr>
<td>3. Bill discounting</td>
<td>3. Corporate Counselling</td>
</tr>
<tr>
<td>4. Loans/ Investments</td>
<td>4. Project Counselling</td>
</tr>
<tr>
<td>5. Venture capital</td>
<td>5. Loan/ Lease Syndication</td>
</tr>
<tr>
<td>7. Factory</td>
<td>7. Advising on Acquisition and Merger</td>
</tr>
<tr>
<td>8. Equity participation</td>
<td>8. Helping in Placement Service</td>
</tr>
<tr>
<td>10. Inter Corporate Loans</td>
<td></td>
</tr>
</tbody>
</table>

Based on the recommendation of the Dr.A.C.Shah committee report, RBI introduced its stringent norms in June 1994.

NBFC's are now prevented from lending more than 15 percent of the owned funds to single party or more than 25 percent to a group.
NBFC's were given less than the year to meet the capital adequacy of six percent, whereas banks have been given a three-year period to attain a capital adequacy of 8 percent by the end of March 1996.

In July 1996, the reserve bank took policy measures freeing the interest rate ceiling on the deposits and removing/increasing the ceiling on the quantum of deposits for registered NBFC subject to the condition that they fully comply with the bank's directives and guidelines. With the entry of banks into leasing, competition has stiffened but at the same time, it has opened up new opportunities of syndication with banks.

Every NBFC gets a portion of its income from leasing. Hire purchase, consumers finance, merchant banking corporate finance, corporate advisory service and even banking.

NBFC's be required to maintain liquidity ratio of 10 percent of their total liabilities.

In India, several factors have contributed to the growth of NBFC's, Like they provide tailor made service, lower degree of regulation, speed of their service.

**HIRE PURCHASE**

Purchase and sale of good under a hire purchase agreement is governed by the hire purchase Act of 1972 which came into force from September 1, 1973. The Act applies to the whole of India except the state of Jammu and Kashmir. According to the Sec. 2(c) of the Act defines the
hire purchase agreement as "an agreement under which good, are let on hire and under which the hires has an option to purchase them in accordance with the terms of the agreement". The agreement includes the following terms.

(1) Possession of goods is delivered by the owner there of to a person an condition that such person pays the agreed amount in periodical installments.

(2) The property in the goods is to pass to such a person on payment of the last of such installments.

(3) Such a person has a right to terminate the agreement at any time before the property so passes.

As per the hire purchase agreement, the hire gets the possession of the goods and the ownership in retained by the vendor till all the installments are received by him. But under the installment system the purchaser not only gets the possession of the goods but also the ownership of the goods on the date of signing the contract.

In the event of the hire purchaser of failure to pay any installment the hire vendor has the right to seize the goods and adjust the money paid by the hire purchaser against the hire changes for use of goods.
However, as per sec, 17 of the hire purchase Act, if the amount paid by the hire till the date of the hire purchase price, the excess is repayable to the hire by the hire vendor.

**Hire Purchaser or Hirer [Sec. 2(c)]**: A person who obtains or has obtained possession of the goods from an owner under hire purchase agreement is known hire purchaser or hirer.

**Hire Vendor**: A person who sells the goods on the basis of hire purchase agreement is called hire vendor.

**Case Price [Sec. 4(1) (b)]**: Cash price means price at which the goods may be purchased by the hirer for cash

**Hire Purchase Price [Sec. 2(d)]**: Hire purchase price means the total sum payable by the hirer under a hire purchase agreement in order to complete the purchase of acquisition of property in the goods to which the agreement relates. It includes any sum so payable by the hirer under the hire purchase agreement by way of deposit or other initial payment.

**Hire Purchase Charges [Sec. 9(2)]**: Hire purchase charges means the difference between the hire purchase price and the cash price as stated in the hire purchase agreement.

The difference between hire purchase price and the cost price is known by different names. Some people call it hire purchase charges, while other call it finance charges, still others simply as interest.
**Hire Purchase Transaction:** Hire purchase transactions entirely different from ordinary transaction (cash or credit) in a hire purchase, the price include two elements, namely, cash price and hire purchase charges (interest). A price distinction is to be made between the cash price and the hire purchase charges since the former payment is of capital mature and the latter of revenue nature.

**Termination of hire purchase Agreement:** The hire purchase may, at any time, terminate the hire purchase agreements after giving the owner at least 14 days notice in writing. He has to redeliver the goods to the owner and pay any installment of hire which might have become due before the termination. In order to protect the hire purchaser from requiring to pay unreasonable amount which may be named by the hire vendor in the hire purchase agreement, in case of termination of the hire purchase agreement, the following provisions have been made in the hire purchase Act.

(a) Where the sum total of the amounts paid and the amount due in respect of the hire purchase price immediately before the termination. Exceeds on half of the hire purchase price, the hirer shall be liable to pay the sum so.

(b) When the sum total of the amount paid and the amount due to in respect of the hire purchase price immediately before the termination does not exceed one half of the hire purchase price, the hire shall be
liable to pay the difference between the said sum total the said one half, or sum named in the agreed, which even is low.

**Default and Repossession:** In case the hire purchaser fails to make payment of any installment, the hire vendor may seize the goods and forfeit all amounts paid by the hire purchaser so for.

Seizer of the goods may be partial or full depending on the circumstances and the agreement between the parties, of course, in case of partial seizure, only a part of the amount paid by the hire purchaser will be forfeited by the hire vendor. The hire vendor may after seizing the goods, spend some money on the goods for getting them repaired or reconditioned and later on sell them.

**LEASE FINANCING**

Leasing may be defined as a contractual agreement where the owner of an asset, called the lessor transfers the right to use the asset to another party, called the lessee for a fixed period, in return for a financial consideration, called the lease rentals. At the end of the agreed period, the asset reverts back to the lessor, unless there is a provision for transfer of ownership of the asset to the lessee.

**Classification Of Leases:** Leases are classified on the vacation of the dimension of the lease contract like extend to which risks and rewards are transferred number of parties to the lease domicile of the supplier, maintain requirements etc.
Financial And Operating Leases: This is a distinction made on the basis of the extent to which the risks and rewards are transferred in the lease transaction.

Financial Lease: In which a substantial part of the risk and rewards are transferred from the lessor to the lessee. Lease is non-cancelable for a fixed period, the less or receives an amount, earn interest and make profit.

Operating Lease: Does not provide for the cost of the leased asset being recovered by the lessor out of rentals received from one lessee alone. The lessee can terminate the lease at a short notice, term of lease is short.

Wet and Dry Lease: If the maintenance and insurable costs are borne by the lessor it is Wet lease.

If the lease, on the other hand provides for the lessee to bear the insurance and maintenance costs, It is Dry lease.

Bipartite and Tripartite lease: In a bipartite lease, the equipment supplier and the lessor are the same entity. Where as the lessor is the second entity.

In a tripartite lease there are three entities involved. The equipment supplier, lessor and the lessee.

Single Investor And Leveraged Lease: In single investor lessor, who funds the entire investment and the lessee are involved.
**In Leverage**: Lessor to the equity participant while the lender of funds in the loan participant. It has first mortgage on the leased asset. The entire transaction is routed through a trustee who looks after the interest of the lender and lessor.

**Domestic And Cross-Border Lease**

**Domestic Lease**: If all the parties to the lease are domiciled in the same country.

**A Cross-Border Lease**: If the parties are domiciled in different countries.

**AUTO ANCILLARIES (TWO/THREE WHEELER)**

The numerous components required for the manufacture of 2/3 wheelers are supplied by a large network of auto ancillaries (Vendors). The out-sourced components could vary from 60 to 90 percent of a 2/3 wheeler company's raw material cost. The relationship between the vender and the 2/3 wheeler product is one of interdependence. However, the 2/3 wheeler manufactures has a better bargaining position due to its large size as well as the higher degree of flexibility as most components are sourced from more than one vendor.

**COMMERCIAL VEHICLES SEGMENT**

More than 10,000 components are required for CV manufacture and these are supplied by a large network of auto ancillaries (vendors). The out-sourced components could vary from 70-80 percent of a CV company's raw material costs. The relationship between the vendor and the CV producer is between the vendor and the CV producer is one of
inter dependence with the CV manufactures in a better bar gaining position due to their large size as well as the higher degree of flexibility as most components are sourced from more than one vendor and the semi urban markes other means of finance available in the Indian two wheeler segment are finance offered by the co-operative banks (especially in the rural markes).

Co-operative societies, inorganised small finance companies and the finance proviced by large organisations for their employers.

**BRIMMING WITH CHALLENGES**

The scenario of the Indian auto component industry, which was doing well in 1993-96, has changed in the last two years consequent to the recession in the economy and the resultant slide in sales of commercial vehicles and the depression in the road transport sector.

The downturn has come at a time when many component units have created additional capacity to cater to the needs of existing manufactures and the multinationals which have put up plants for producing passenger cars.

The global giants such as Ford Motor, Daewoo and Hyundai, which have implemented their projects in India, procure their requirements from component units promoted by them either on their own or as joint ventures with Indian companies. Some arrangements have of course been made for securing components from Indian establishments which too have foreign collaboration. Some global companies even
source their requirements is a peculiar way. They enter into a contract with local component suppliers who import the components from abroad. This procedure helps the vehicle producers attain the required indigenisation level without actual production though it is adopted on the plea of ensuring quality.

Traditionally the auto component units were catering to the needs of established vehicle makers such as Ashok Leyland, Telco and Hindustan Motors. Following the poor offtake of commercial vehicles and passenger cars, the manufactures concerned have clamped down their production resulting in reduced demand for components.

**Widening Range**

There are 360 players in the components sector and many of them produce engine components. The industry which has an investment of over Rs. 13,000 crores made over the years, manufactures a comprehensive range of components with engine parts constituting 34 percent, transmission and steering parts (21 percent), suspension and brake components (17 percent), electrical items (7 percent), and other equipment and parts (21 percent).

Most manufacturers have their locations distributed in north, south and western parts of the country while a few companies are located in the eastern part. The producers is Tamil Nadu of course account for over 30 percent of the all India output. They have been expanding their
capacities and also starting new units in a big way. The problem now relates to the use of the new facilities created at heavy cost. While Mahindra Ford has already established its associated unit for producing components, Hyundai and Hindustan Motors are thinking on similar lines.

Though there is a slump in local demand for components, some established companies like Engine valves, Rane Madras, Rane Brake Linings, Lakshmi Auto components, Ucal fuel systems, Premier Instruments and controls and Indian Nippon Electricals have managed to achieve sustained growth in their performance. These companies are catering to the needs of vehicle producers as joint ventures with multinationals through constant upgradation of quality and technology.

**Upgradation Of Technology**

The industry over the past five decades has gradually acquired and assimilated state of the art technologies depending on the requirements of vehicle manufacturers of India. Latterly a conscious effort has been made for upgrading technology and entering also into new collaboration arrangements for catering to the sophisticated needs of new entrants.

The advent of Maruti cars has brought about a sea change in terms of technology and a number of new component units come up in the country to supply the requirements of Maruti Udyog (MUL). Besides,
MUL has promoted many ancillary units for exclusive supply of its requirements.

Some component producers concentrate on the export market as there is a good demand in the replacement market abroad. On an average 10 percent of the total production has been exported in the last few years. In 1997-98 out of the total production value of Rs. 12,032 crores components and parts worth Rs. 1,032 crores have been exported.

It is expected that the growth in exports will be 20 percent annually as the nature of customers for the export market is undergoing considerable change with a growing demand from the OEM Sector which is looking for quality products. Recognising this many Indian companies lay emphasis on quality. Some of them which have secured quality certification such as ISO 9000 and QS. 9000, will be able to win contracts for supply to major OEMs in the global market against stiff international competition.

With a view to maintaining quality many component units have entered into technical tie-ups with Foreign majors and invested considerably in quality upgradation through even joint ventures.

According to the Automotive component manufacturers Association of India (ACMA) there are already 356 collaborations in the components sector with Japan accounting for as many as 98 collaborations followed by Germany (64), the U.S. (40), the U.K. (37),
Korea (25), France (20) and Italy (18). In 1997-98 alone 34 new tie ups have taken place.

There is thus no need for proliferation of capacity under new auspices as it is generally acknowledged that the existing producers can adjust themselves to the new situation and meet the exacting requirements of the new auto majors.

As the volumes will increase only over a period, the Central Government also should ensure that redundant capacity is not created and new ventures are promoted only for turning out components which are unavailable from indigenous sources. The demand for components may not increase on the targeted basis and there will necessarily have to be greater emphasis on exports.

PROBLEMS IN AUTO COMPONENTS INDUSTRIES

The Indian auto components industry was a sequel to the need for industrialisation and import substitution, encouraged in the late fifties and up to the eighties. It grew as a somewhat retarded child with uneconomic volumes and complete isolation from world trends in technology. Then in the eighties with advent of Maruti Udyog, the component industry made a quantum leap in terms of quality and capacities.

However, due to a small market fragmented customers and because of the high cost of capital, productivity remained quite low,
never realising its full potential. At the same time, the overall report card of the auto component industry is definitely far better than many other industry segments.

In exports although the overall share in sales may be only 10 percent this must be viewed in the background of almost non-existent vehicle exports. In the field of quality the industry can be proud of the highest cluster of ISO-9000 certifications.

Among the 366 member companies of the Automobile Components Manufacturers Association (ACMA) the ISO-9000 certification has been obtained by 164 and the QS-9000 by 21.

In engineering capabilities there are several success stories of local design and adaptation to local requirements.

**Table No. 71**

<table>
<thead>
<tr>
<th><strong>Indian Auto Components Industry</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Production</td>
</tr>
<tr>
<td>Export</td>
</tr>
<tr>
<td>Investments</td>
</tr>
<tr>
<td>Employment</td>
</tr>
</tbody>
</table>

[Source: ACMA.]

It is a common sight to see Indian Engineers/Managers holding key positions in multinational auto component companies. There is the example of Sundram Fasteners which has become a global supplier...
to General Motors. Robert Bosch GmbH sources a sizeable quantity of fuel injection products from MICO, India. But the Government of India comes out with an auto policy which assumes that Indian products are useless and if you want quality import is the answer.

**World Scenario**

The global automotive industry is today characterised by excess capacity, disguised subsidies non tariff barriers, strong lobby, strong unions and stagnant markets.

In this scenario it is only natural that the automotive lobby which is a major form in countries like the US and Japan influences its Government and dominates the thinking of so called multilateral agencies like the World Trade Organisation. I do not wish to go into the unfairness of WTO were the development level of a country is not duly recognised in envolving so called fair practices. China has prudently not joined the WTO while India has.

However, this lobby in the developed world is able to convince the Indian Government to open up indiscriminately to give a chance to one percent of Indians to choose from 16 different models of passenger cars.

It is time to recognise and accept that several initiatives to improve the functioning of the economy are needed to make Indian industry competitive. A recent study by the Institute of Management,
Switzerland ranks India No. 47 in global competitiveness with very few countries below it.

Foreign direct investment is not that be all and end all of economic progress. As one can see in the current recession, there are several other obstacles to the continuing growth of the Indian economy and the auto industry.

**Tie-Ups Help Upgradation**

During the last few years, the two wheeler industry has been main tailing a phenomena growth rate and in 1995-96, its output was 2.6 million vehicles. India has emerged as the second largest two wheeler producer next to China. This growth can be attributed to the rising need for personalized transport.

The public transport system is inadequate to meet the requirements of the office going middle class people with the availability of easy finance and the increase in the standard of living of an average Indian consequent to the liberalised economies policies.

Taking into account the various plans of the leading two wheeler manufacturers, the expand growth of the industry till 2000 is given below in Table.
Table No. 72

<table>
<thead>
<tr>
<th>Year</th>
<th>Production</th>
<th>% Growth</th>
</tr>
</thead>
<tbody>
<tr>
<td>1996-97</td>
<td>32.50 lakhs</td>
<td>24.0</td>
</tr>
<tr>
<td>1997-98</td>
<td>36.52 lakhs</td>
<td>9.0</td>
</tr>
<tr>
<td>1998-99</td>
<td>40.70 lakhs</td>
<td>11.0</td>
</tr>
<tr>
<td>1999-2000</td>
<td>45.00 lakhs</td>
<td>10.5</td>
</tr>
</tbody>
</table>

The performance of the components industry which has geared up to meet both the demand and technology requirements of the vehicle producers has been extremely good and it achieved a growth rate of 22 percent in 1993-94 30 percent in 1994-95 and 25 percent in 1995-96. This pertains only to the organised sector and does not include the small scale sector which constitutes almost 30 percent of the value in the two wheeler ancillaries.

The major segments of two wheeler component sector are engine parts (37 percent), electrical parts (8 percent), drive transmission and steering parts (21 percent), suspension and breaking parts (19 percent), and other (15 percent).

The main engine parts are pistons, piston pins and piston rings, there has been growth of 21 percent in 1994-95 in this segment and efforts are being made by the component manufacturers to upgrade technology in tune with the requirements of vehicle manufacturers.
Carburettors segment has grown by 25 percent in 1994-95, this product has a direct bearing on the performance of the cringes and also on fuel efficiency improvement/pollution control. Indian producers are improving it with the technical support of the collaborators.

The electrical parts segment-achieved a 24 percent growth in 1993-94 and 33 percent in 1994-95 terms of value of production, the major parts falling under this category are ignition system, ignition coils, spark plugs, relays, flashers, headlamps, horns and regulators.

A growth of 40 percent in 1993-94 and 41 percent in 1994-95 was achieved by the above auto ancillary units. As there are only three players in this segment and significant growth is anticipated by the two, three and the four wheeler units to which this segment caters, major expansion plans are being taken up.

Thus the two wheeler component manufactures have become totally independent and hardly depend on the original equipment (OE) customers to lend support in terms of technology and finance. In tune with the expectation of the two wheeler manufactures. The ancillary units have grown in number and size and have tied up with international giants for technology, and finance closely monitoring the changing needs of the (OE) customers.
India has already emerged as one of the largest producers of two wheelers and also started exports in a big way. Almost all the two wheeler manufacturers with Japanese tie-ups have reached high levels of indigenisation proving that ancillary units are not lacking in terms of quantity, quality and technology.

Apart from meting domestic demand the Japanese collaborators are looking at the possibility of using India as base for export due to its low wage levels. Hence tremendous opportunity exists for the two wheeler ancillary units. At the same time there is severe competition as many manufactures have entered the field with technical support from international giants. And no doubt, India will become a leader in two wheelers and two wheeler ancillaries will soon match world standards in volume and technology.

The Indian automobile and components industry is undergoing a metamorphosis. This is one of the high profile industries which have come into the limelight during the economic liberalization of Mr. Narasimha Rao's Government. Assuming that this period is not just a freak phenomenon as some people believe and that the liberalization will continue, the auto industry and in particular the auto components segment will face some interesting challenges.
If the automobile industry is to grow by about 20 percent per year and the components segment is to keep pace, the first factor that comes to mind is the capacities that are to be created to meet such demands. This industry has to reckon with raising adequate capital, changing technologies for higher volume production, availability and culture of management. Some key issues concern here would be dilution of equity and management control of existing companies. These should be addressed by the companies in their long term strategic plans.

**Low Labour Productivity**

There are advantages as well as disadvantages for Indian manufactures in the present structure of costs, the cost of finance which is high by international standards will mean that capital productivity becomes even more important to Indian manufacturers than to their global competitors. Indian producers have to reckon with and overcome probably the lowest productivity anywhere in the world and this is being compounded by increasing expectation and unrealistic labour laws which would mean that the salaries and wages graph will go up steeply in the coming decade. It will be necessary to charge labour laws in India if Indian industry is to change a mere perception that India is a low cost manufacturing base into a reality.
A recent study of the internationally known consulting group, found even the best Indian auto components companies in phase I of a four point global rating of phase I to IV. In quality there are three major challenges, first, India needs to cope with new international standards like ISO-9000/QS-9000. Secondly, Indians are used to a very low level of reliability and repeatability in their production. The use of SPC (Statistical Process Control) must be far more vigorous and widespread than it is today. This needs urgent attention last but not the least, even those who produce an acceptable final quality are doing so at a very high cost of poor quality (COPQ). Total quality management is a complete change in mindset from the (CEO) to every operator which means essentially the organisation structure, product, process, leadership and commitment. (The five pillars of TQM by bill Creech). All these involve total employee involvement and skills and techniques in that order.

Almost all constituents of this industry will have to upgrade their product or process technology or both. This will lead to strategic alliances with global leaders in their respective fields. From a feudalistic management style in a protected environment, India has to change to professional management of these strategic alliances large trans national companies will not be willing to share technology without control on its use and exportability and Indian companies will have to deal with this issue.
FUEL PROBLEM

PRICES

Fuel prices are more likely to have an impact on two wheelers than other vehicles because of a higher proportion of fuel cost to the total cost of ownership and maintenance.

Cost of ownership of a two wheeler: From an end-users point of views the cost of ownership of a two wheeler includes the following:

♦ The opportunity cost (the initial investment)
♦ Depreciation on the vehicle
♦ Fuel costs

The buying decision for a vehicle in influenced mainly by its cost of ownership, and fuel cost forms a substantial portion of the total cost of ownership, from 43 percent in case of a motorcycle to 67 percent in case of a scooter or moped. Hence a 10 percent charge in fuel prices would result in a 4.7 percent change in the annual cost of ownership.

Thus sudden increase in fuel prices would lead to a postponement of the buying decisions and adversely affect the demand for two wheelers in the short term. However, given other important demand drives like growth in household income, low penetration levels, and lack of adequate mass transport system, typical fuel price increases are not expected to affect medium to long term demand for two wheelers.

[Refer Exhibit-5 for detail calculations of impact of fuel prices on cost of ownership]
**Fuel's Paradise Lost**

Conservatism at all costs could well have been the corporate slogan of Hindustan Petroleum Corporation Ltd. Now the staunchly traditional oil major's lexicon is changing the customer has replaced conservatism who for the past two years, Andersen consulting has been working with HPCL's top brass to overhaul the oil major.

Hardly any area of the public sector organization will be left untouched by the changes-management structures, decision-making, information technology, distribution, even finance, even if almost in slow motion, HPCL is tentatively taking the first steps in a business reengineering exercise which will eventually change its future, transforming it from a monopoly to a market player.

It has only five years to do so. The government has set a five year time table for deregulation, beginning this year. The industry will be totally free by end 2002, when marketing of products like petrol and diesel will be thrown open to the private sector. Changes have already begun and heavy products like Naphtha, Bitumen and Furnace oil have been decontrolled.

Internationally, most counties have had controlled industries which have been deregulated later. Despite differences in the pace and extent of deregulation, there is a lot of commonality in the process, who
is working on the HPCL project Profitability trends differ depending on the action taken by the oil companies after competition emerges. The usual knee jerk response of a national oil company when faced with competitions is to experiment with change, enter into high risk ventures, start price cutting and slashing costs.

However, this approach can only compound the problem. The actual action needs to be a greater focus on basic business to identify customer wants and needs and to reshape the organisation. These are key factors underlying the remaking of HPCL.

The primary change will be in the organisation's structure. HPCL is being split into four strategic Business units (SBUs). The company is to be divided into four business units, based on a direct correlation with the customer. These are LPG, lubricants, retail sales and industrial and government (I&G) sales.

Each SBU will be independent. In the present system, responsibilities are not clearly defined, since several department are involved in servicing one consumer. Today, a Zonal officer caters to the LPG, lube, petrol and diesel dealers in his geographic area. The new structure will create specialists in each area.

Each SBU will have individual targets based on the return on capital employed. Along with independent business units comes
decentralisation. One major hindrance to speedy decision making was the bureaucratic practice of sending every small proposal right to the top for clearance.

With its new structure in shape, there is a shift in the emphasis from a volumes-oriented to a value-oriented products profile. The petroleum business is primarily a commodity business with bulk sales of petrol, diesel and kerosene constituting almost 60 percent of the business.

The interface with the customer was another problem. For a bulk of its products, be it petrol, diesel or even LPG, the oil companies have dealers, who do the actual sale and dispensation. The customer, be it the motorist or the housewife booking her LPG cylinder, interfaces only with the dealer. This makes it very important for us to have dealer education and training programmes. Customer service levels can be increased only getting dealer enthused about working towards the goal of customer satisfaction keeping tabs on dealers and being proactive to their needs is also an important part.

The changes will begin with the selection of an Enterprise Resource planning (ERP) package. The project will make a sea-change in information availability for decision makers in the company. HPCL may be planning its strategic change, for the past two years, but actual implementation is crawling along. So for only the LPG SBU has been
formed and even here the implementation is not complete. Compare this with rival company Bharat Petroleum, which has a similar BPR, exercise and has already, put in place its five SBUs. At HPCL, two pilot projects have been operating and the company is still studying the result.

So far, HPCL's slow and conservative mindset has worked well only because of the nature of the oil industry in India. The sector is one of the most tightly controlled and regulated areas of the economy with the government deciding the price at which petroleum product should be sold, and more, the quantity and the customer as well. There was little. Competition between the oil companies (Primarily, Indian oil, Bharat) Petroleum and Hindustan Petroleum). The government 'allofted' fuel linkages for power and other projects to different oil companies.

Slow and steady may not work so well in the future the tortoise may have to pick up speed, after all.

**Needs Of The Hour**

Recent years of the Indian auto industry have seen the entry of some serious players and others. While the former should be encouraged others should be weeded out and prevented from wasting the country's foreign exchange.

The Government has to decide whether it wants an automobile industry in India or just import these products. If it wants an auto industry is India then the following steps need to be taken urgently.
The country has already permitted too many companies to come here for the limited market of passenger cars. If it is serious about local manufacture and employment being retained in India no more car projects should be approved at least till car sales reach a figure of two million a year. China has followed this principle to make localisation viable.

Local content policy of 95 percent in two years for any model must be insisted on irrespective of the size of investment. No import licence to be given for any new model unless the previous model is 95 percent local. There is no logic is bringing an investment of $50 millions and then spending another $100 millions in the next say five years on imports of components to make these cars. Net exchange flow here is minus $50 millions. Moreover, assembly does not create employment compared to the component industry. If is 1984 the Indian auto component industry could localise 95 percent of Maruti in less than two years, then one fails to understand the logic of 30 percent import in 1998.

The inverted duty structure of customs duty on raw materials, components and finished goods needs to be corrected. This is pending for more than five years.

The import of tier 1 suppliers should be reckoned as import by the car company and close scrutiny of subsidiaries and joint ventures of these car companies is needed.

The Government should grant certain funds to leading Indian automobile companies for R&D so that Indian vehicles can really
become world class in five years time. Vehicles with 100% local content should be given a concessional excise duty of 50 percent of the normal rate.

♦ All local constraints like the outdated Industrial Disputed, Act, Factories Act, and the Like, which make local manufacturing far more difficult, should be modified without further delay.

♦ Exports must be accepted strictly based on minimum value addition. Export can be just on eye wash if all components are imported for assembly in India. Annual audit at value addition must be done by the Government.

♦ Audit of the JVs to ensure strict compliance on terms of MOU. (Memorandum Of Understanding)

♦ Take road building seriously. A massive project for roads in the next 20 years is imperative. The automobile market will stagnate soon if this is not done. The Government must assess the strengths of this industry and encourage building on these so that it could probably become the sixth largest automobile industry in the world after south Korea.

In conclusion one must understand that continuously importing is not going to be the cure for all the ills of the economy. This was the fatal assumption of the previous Government. Internal competition car improve quality and external competition should be in the form of companies really establishing manufacturing facilities in India.
NEW TRANSPARENT POLICY ESSENTIAL

If the country does not address this issue it might have a lot of choice for the consumers but very few consumers who can afford to buy these products. It is ironic that as more and more fancy models of cars are imported, more and more layoffs and plant closures are happening in the Indian industry. And while major bus/truck manufacturers are struggling to pay salaries and wages, bankrupt state transport undertakings issue global tenders for buses. Only India can do this and help to get away with it. There must be an Indian policy and India should not keep on reacting to the pulls and pushes of foreign lobbies most of whom are here to sell their ware and not to create employment here or solve our problems.

If urgent steps are not taken by this government, demonstrating it avowed policy of a strong Indian industry, it will be too late. The government should from a committee with the Association of Indian Automobile Manufacturers (ACMA) and Government officials to debate this and come out with a transparent new policy in India's interests.

Retrograde Govt. Policies

A policy without a vision leads to drifting. The story of India and its automobile industry is a classic example. The country is watching helplessly as the Government dances to the tunes of various lobbies, probably killing a good industry nurtured over four decades.
In 1991, India embarked on an economic reform process more by compulsion and chance then by conviction and a well thought out strategy. After the initial euphoria and nudging by foreigners for whom reform is equal to free imports, the country went through a period of progress which addressed less than five percent of its population.

The real ills of the economy like poor infrastructure, illogical labours laws, inspector raj, corruption and the like, were conveniently ignored while everyone chanted one mantra namely foreign investment.

The automobile policy is part of this problem, one that two successive governments patriciarly the last one, of the united front, have created. Inviting more capital is only one issue. Making existing and new capital productive is the imperative.

If the country does not wake up to the fact that in addition to consumer choice for one percent of the population a reasonable level of employment for the remaining 99 percent is equally important it will be too late to retrieve the situation.

The economy can grow only if employment and purchasing power grow. More imports will give choices, no doubt, to the one percent of the population which enjoys these products and services. The social problem of unemployment will, however, make this privilege short lived as is happening in Indonesia.

[The Hinds Survey of Indian Industry 1998]
CURRENT PROBLEMS

The commercial vehicle industry recorded an unprecedented growth of over 25 percent during 1994-95 to 1996-97. The reasons are:

- General economic growth in the post liberalisation scenario, the industry recorded a growth of 8-10 percent and agriculture 1-3 percent. This led to an increase in the demand for commercial vehicles and the pent-up demand was satisfied by manufacturers increasing their capacity and production.

- The financial service sector has registered tremendous growth in the last two decades and played an increasingly supportive role to vehicle sales promotion. A large number of finance companies were promoted to finance through leasing and hire purchase, industrial equipment commercial vehicles and cars.

Quite a few other companies started offering various other financial products like portfolio investment, promoter funding and the like. In the last 10 years the financial service industry realised that commercial vehicle and cars offered the safest deployment of funds, and there was a discernible diversion of funds to the auto sector. This led to increased funding availability at affordable prices terms for purchase of vehicles.
♦ The growth of the tertiary sector notably among them courier and parcel services and agri-product movements of poultry, eggs, vegetable products and the like, led to an increase in demand.

♦ Higher depreciation rate for commercial vehicles made it an attractive tax saving instrument. This even led to the emergence of a new customer profile. One could see even professionals in urban and semi-urban centres buying vehicles and offering them to fleet operators.

♦ Capacity creation and high pressure selling to exploit these opportunities enabled the industry to achieve an annual growth of over 25 percent in production and sales, at levels which had on correlation to the GDP/industrial growth of 8-9 percent p.a. It is clear, in retrospect, that this pace of growth was unsustainable.

The steep fall in demand and slowdown of this industry can be traced to these factors.

♦ The excess supply of vehicles available in the market for reasons stated above. This problem is compounded by operators deferring new purchases/replacements due to low freight allow ability.

♦ The general slowdown in the economy and more particularly drop in agriculture production in the 1997-98. It is common knowledge that agri-products are moved by road and are an important driver of the freight market. The Railways have not increased their network significantly over the last five years but had concentrated on
unigauging. Through this process and improved efficiency. The Railways carried a higher tonnage in last two years which has again cut into the road sector.

The current slowdown is also characterized by two distinct features not witnessed during the previous recessionary spells.

➤ Customers have become increasingly price sensitive,

➤ Liquidity is not a constraint nor is cost. Credit is still available at relatively low rates compared to the past but operators shy away from purchases due to lack of opportunities for viable transport operation.

**EXCESS CAPACITY-PROBLEMS**

Production of the Indian commercial vehicle industry in 1997-98 was over 1.56 lakh units. In monetary terms this translates to roughly two percent of the country's GDP, as against the 4.55 percent that is contributed by auto industry as a whole.

The industry is the lifeline of the country's economy as it, along with the Railways, provide the vital link between the production and consumption centres for all product categories. It also supplements the Railways in mass transportation of people. Road transport scores over rail transport (both freight and passenger) primarily on the cost/flexibility trade-off.

With the Indian industry maturing and the Indian customers becoming more demanding, there has been a shift towards flexible and
end consumer friendly transportation solutions. This has resulted in a consistent increase in both passenger and freight movement by road as compared to that by rail. Between 1951 and 1995 surface transport has increased its share from 37 percent to 90 percent in passenger handling and from 21 percent to 71 percent in goods transportation.

**Constraints To Growth.**

Another major factor in favour of road transport (especially of goods) is the Railways long standing policy of cross subsidizing passenger travel at the expense of freight movement. This makes industry opt for road transport for their freight movement as it turns out to be more economical. However, the growth of road transport and consequently that of the commercial vehicle industry is impeded by the poor state of the road infrastructure in the country. But for this, the penetration level of commercial vehicles in India would have been much above its current level of 3 vehicle per 1,000 persons which is very low even when compared with the penetration level in Thailand which stands at about 30 vehicle per 1,000 persons. This latent potential is not translating into actual demand primarily on account of poor growth in infrastructure vis-à-vis growth in the population. Another factor impeding growth of commercial vehicles is the non-existence of vehicle scrapping norms in India. The Motor vehicle Act, 1986 attempted to implement scrapping of vehicles that were more than 20 years old. This was,
however, strongly resisted by the transport operators and had to be withdrawn. It is estimated that enforcement of scrapping norms would result in a growth of 30 percent per annum in the commercial vehicle industry. The same act introduced regulations to prohibit overloading of vehicles above their rated payload to prevent excessive wear and tear of both vehicles and roads. This is now being enforced quite stringently in many states at their check posts.

The poor state of road infrastructure is manifest in the fact that the National and State highways which constitute 8 percent of the total road length in our country carry 80 percent of the total road freight traffic. The length of the National Highways (which is only two percent of the total road length and carries 40 percent of the freight traffic) since Independence has grown by only two times. This is compounded by the fact that 50 percent of the total road length is unsurfaced and only 1 percent of the National Highway length has four lane carriage way. The loss by way of higher operating costs on account of bad road conditions has been estimated at Rs. 15,000 crores per annum.

**Main User Pattern**

The end use deployments of heavy and light commercial vehicles are quite distinct. HCVs are used to transport bulk cargo over long hauls (over 500km on an average). Typical end use industries are
steel (secondary transport), cement (both primary and secondary transport), fast moving consumer goods (Primary transport), Pharmaceuticals (primary transport), containerised transport and general goods transport, the last being the most dominant segment in the form of fleet operators.

Light commercial vehicles find application in transportation of goods over, short distances and within city limits. These are deployed in large number in transporting agricultural produce (primary transport), fast moving consumer goods (secondary transport), pharmaceuticals (secondary transport), and cement (secondary transport within city limits) while the end use does make a difference in deployment of heavy versus light vehicles the distance to be covered is the most overpowering factor while determines whether an HCV or an LCV is used to cater to a particular transportation need.

The commercial vehicle industry has been witnessing troubled times for the last two years. While its actual size and its performance are detailed is the Table, they perhaps do not reflect the correct situation.
### Table No. 73

<table>
<thead>
<tr>
<th>Year</th>
<th>Turnover of auto sector (Rs.000 cr.)</th>
<th>GDP (Rs.000 cr.)</th>
<th>Turnover of auto sector as % of GDP</th>
</tr>
</thead>
<tbody>
<tr>
<td>1992-93</td>
<td>17.4</td>
<td>630.2</td>
<td>2.77</td>
</tr>
<tr>
<td>1993-94</td>
<td>21.5</td>
<td>731.9</td>
<td>2.94</td>
</tr>
<tr>
<td>1994-95</td>
<td>28.9</td>
<td>858.3</td>
<td>3.36</td>
</tr>
<tr>
<td>1995-96</td>
<td>40.5</td>
<td>985.8</td>
<td>4.10</td>
</tr>
<tr>
<td>1996-97</td>
<td>47.9</td>
<td>1052.9</td>
<td>4.55</td>
</tr>
</tbody>
</table>

[Source: AIAM, GDP :- (Gross Domestic Product)]

With the advent of economic liberalisation in the Nineties, spearheaded by the then Finance Minister, Mr. Manmohan Singh, there started a sudden spurt in growth of economy in general and the industrial sector in particular. This trend was sustained till 1996 with increasing doses of liberalization fuelling growth.

However, despite a good budget in 1997-98, the economy started derailing from the growth path primarily on account of changing priorities in liberalization and the measures initiated not matching the real internal needs to encourage industry especially in sectors like infrastructure development. This was capped by an unstable political
scenario. Even since the phenomenon of minority government became a reality, there has been lack of consistency in economic policies. All these have resulted in near stagnancy or recession in various sector of the economy.

**Excess Capacity Creation**

Even during the growth period (1992-96), the impact of economic growth was more than anticipated in the commercial vehicle industry. This resulted in user industries adding capacity in a big way anticipating a boom and vehicle manufacturers increasing capacity and pushing more vehicles in the market. With the change of guard at the centre and political instability the bubble of optimism suddenly burst and economic and industrial growth practically skidded to a halt.

The CV industry took 18 months to correct the excessive stock in the pipeline and the customers even a little longer to firm up their plans. This led to a step drop of over 35 percent in the CV industry in 1997-98 compared to the previous year. This trend continues even now. Even though the excess capacity situation in trucking has got corrected, since the economic recovery is poor, customers are extending the replacement cycles of trucks, putting on hold additions of capacity while waiting for firm and clear signals of economic growth to happen. This cautious approach is primarily the fallout of the over-estimation in the past.
Emerging Rural Demand

The heavy commercial vehicle segment also witnessed drop in sales by 35-37 percent reflecting poor growth of the core sectors. LCVs have fared relatively well though marginally thanks to the emerging needs of the rural markets. It is worth mentioning that the rural and urban customers are exhibiting divergent behaviours. The buying pattern of the urban customers traditionally has been not based on savings on hand but his confidence over future earnings. An ample example is the consumer durable sector which witnessed major growth backed by innovative finance schemes.

With the poor outlook of the economy and industry which is possibly reflective of industrial growth and earning, this sector is still performing badly. However, the agriculture sector by and large has stayed intact ensuring continuous and increased earnings for the rural customers. This has resulted in a revolution of sorts and consumer product are clearly reaching out to rural areas in the process expanding the market as a whole. This has a positive impact on transportation of goods by smaller capacity trucks, mainly LCVs.

However, within the economy, it is not a uniformly gloomy scenario. The food sector including processed foods, soft drinks, milk and milk products, continue to display healthy growth. This also has a positive impact on the requirement for commercial vehicles.
Another factor which impacts the CV industry, though negatively, is the wide gap, between promised investment and development in infrastructure and the reality. Starting from incentives to companies to invest in infrastructure, especially ports and roads and super highways with technological consultations from abroad and the spirit in investments in the power sector, promising a scenario of plentiful availability by and large remained a pipe dream. Development of such basic infrastructure could have certainly facilitated in faster and more efficient movement of goods across markets, thereby leading to increased requirement of commercial vehicles currently efficiency, of movement of long distance Cargo in our country is at least a decade behind that of other growing economies.

**Initiatives To Boost Sales**

While a pick up in the economy, when it happens, would fuel demand for CVs, this may be reflected first in LCVs and subsequently in HCVs primarily on account of values of investment.

A positive fall out under such a scenario is for customers. while every manufacture of CVs offered sops of different kinds trying to improve sales, customers have a wide choice and more information while evaluating competing brands. It is not uncommon to see customers seeking sufficient information on various vehicles in the market, say, on fuel efficiency. Life of the vehicles and their parts, their suitability for
specific news, the instead of being carried away by past sales/brand names. There are manufacturers who have taken the initiative to offer specially designed vehicles for use by various segments, there by making it an effective transportation solution.

Eicher Motors Ltd. (EML) has been taking this approach for the last few years and currently the range includes over 80 specially built-up vehicles. It is also taking a step further in developing and offering logistic solutions. As part of these, EML has also developed a special safe School bus in consultation with the IRTE (Institute of Road Traffic Education) which has been very well received across the county.

While this may only be a small measure in the CV industry as a whole, it is indicative of the shape of things to come where customers do not get carried away by brand names or reputations of a part monopolistic era, but take a cautious approach and analyst all aspects before taking a final buying decision. In a sense, that clearly indicates that Indian customers are maturing and can no longer be taken for granted panted. As the saying goes, in any scenario there are never only losers. In the current scenario CV manufactures may have pegged down, customers are the clear gainers.
PROBLEM OF BAD ROADS

The nation's road system is woefully inadequate today to even support present levels of vehicle traffic—leave alone the much higher levels of traffic envisaged by the end of this decade. Furthermore, the distribution of goods and Services in India will call for a greatly enhanced and more efficient transportation network in the country. The major need will be in road and rail transport. The road development as a necessary infrastructure foundation for the country. Regrettable there has been no appreciable attention given to this important subject by the authorities until recent times, when the present surface. Transport Ministry undertook it current initiatives. A Massive public works program me to enhance the road network in the country could indeed provide millions of jobs throughout the country thus spreading the benefits of the new economies reforms to the hinterland of India. For the growth potential in the automotive sector to become a reality there will need to be significant improvement in supporting infrastructure like a strong component base and most importantly a modern road system.

Without proper roads, however, the rapid demand growth will result in traffic snarls as in Bangkok. Thailand as also Malaysia, Indonesia, Philippines and even Iran have taken serious action to increase the number and quality of roads and fly-overs to accommodate
growing vehicle population. The population of all motorized vehicles in India is estimated to be 19.1 millions (mostly two-wheelers) A small country like UK has 23 percent millions vehicles on the roads while Japan has 34.5 millions, Italy has 26.3 millions and Germany 30.6 millions.

The expansion supervision of their road networks has however, kept pace with vehicle traffic.

The growing density of cars in India and the lack of public concern will therefore, pose a serious problem. The growth of highway construction actually declined from 5.8 percent per annum in the sixties to 3.2 percent in the Eighties. The building of roads and highways will need much higher priorities if the car boom is to be sustained. Unfortunately, road and highway building activity that this industry needs is not considered a priority by the state Governments and municipalities which build most of the roads. The construction of large private highway and toll way projects must get very high priority.

For all auto majors, India is ideally positioned to become a major production base for the. ASEAN region, Toyota and Mitsubishi have their biggest plants outside Japan in Thailand but Thailand has no steel. The auto industry needs large quantities of labour intensive castings, forging, gears shafts and machined parts. These are regarded as
polluting and hazardous industries in developed countries making the costs of technically skilled labour phenomenal.

Most of these projects will, therefore, complement their production of complete-cars with quantities of spares and high value gearbox, transmissions, axle and engine subassemblies for export to their units in other countries. Indian projects can also economically operate at scales of production much lower than most other countries because of India's well developed ancillary industry and the low current cost of skilled technical labour.

Foreign companies like operating in India where there is an acceptable rule of low a large pool of technical and manageable skills conversant in English necessary for international communication. The archaic labour and labour laws may, however, be a constraint. There is already a shortage of really skilled labour needed by increasingly sophisticated production processes and institutions as their training is inadequate labour legislation needs to also get out of the confrontationist mould of past decades into the co-operative patterns of global business.

**A Rocky Road**

The automobile industry signifies more visibly Indian businesses record of success in dealing with Japanese corporations as partners. From two to four and even six wheelers, Japanese designed
vehicles have been traversing Indian roads conveying goods and passengers at a rate that belies the slow pace of change in this economy transforming sector. Yet strong as this example would appear to be overall Japanese investment in this country has been pathetically low, lagging behind its interest in neighbouring economies that would appear to share for less potential.

Among the many signs of enduring interest in India's market is the presence of Japanese auto makers such as Honda, Suzuki and Mitsubishi Motor corporation, three of the increasing number of key players in India's car industry. Since 1996, Honda has been producing the kinetic Honda scooter, 51 percent Honda owned, using over 90 percent locally made parts since not long after this very smooth going operation began.

The Hero Honda motorcycle (125cc) made in New Delhi in a tie-up with the Hero group also enjoys "very good sales" said sho Minckawa, a manager in Honda's auto division for southeast/southwest Asia, as does Shreram Honda power equipment, Power generators, water pumps, etc-made in a joint venture tie-up with the siel group in Delhi. All of these projects have gone extremely will "In India were not particularly about anything "he said" In a number of different situation we've benefited greatly from our experience as a maker"
Most recently, in August of last year Honda began construction of a new plant on 600,000 sq. Mts. of land on the outskirts of New Delhi, and by October of this year the factory is scheduled to make an Indian version of the midsize so called Asia car (1.3 to 1.5 litre engine).

Mitsubishi Motor Corporation (MMC) got off the ground in India in 1982, with on integrated technical assistance agreement with Eicher Motors in the central India city of Indoor. By this agreement Eicher acquired MMC's canter truck and parts technology the end of March 1994, when the joint venture contract ended and Eicher had the ability to produce 95 percent of its truck parts using Honda technology. Scheduled for production in July is its Delica L300, 9 passenger mini bus a vary popular model first introduced in Japan in 1983. In a technical acceptance license tie-up with Mahindra & Mahindra Ltd, the initial production of 1,000 units will go on sale in September, followed by 3,000 in 1998. The target is 8,000 units by the year 2000.

Starting in the spring of 1998, Hindustan Motors will begin production of the MMC lancer passenger sedan in a technical license agreement-12000 units per year-near channai. Hindustan will build a new factory for the purpose and will initially use 40 percent localized parts, expecting 90 percent localized parts production within three to five years. An MMC spokesman noted that India is still a market only for low-
priced cars but that it has great potential in this category. Localization is difficult because Indian parts makers although a cut above those in southeast Asia, are "not yet high level".

Suzuki, the global leader in the design and production of small cars has been around since 1983 and MMC is planning to designate its plant location within 1998. Until 1995, India's passenger-car market remained rather dormant. Nearly monopolies by a joint venture begun in 1983 with Maruti Udyog Ltd, India's largest auto maker, and the Indian government. Between 1991 and 1995, India's passenger car sales doubled to 330,000 Units, three quarters of which were Maruti's and demand is expected to double again by 2000, Sumo Suzuki president of Suzuki motor co-ordination is among those who think most positively about India.

"Many people say that per-capita income is still small despite the large populations" said Suzuki at the panel discussion following Chidambaram's 25, November speech in Tokyo. But my view is that 15 percent of India's population are potential customers (i.e, 140 million) more-than the entire population of Japan."

Car makers in general acknowledge that strict localization of car parts production to halt down costs is imperative especially with imported parts subjects to tariffs as high as 50 percent and with the rupee weakening against other currencies. In India, clearly expeditious
localization of parts production is vital to success. Japanese car markers like others are having home country suppliers with established relationships come to India and are encouraging domestic suppliers to meet quality requirements by investing more and increasing research and development.

The fact is, though Japanese corporations are leading investors in most Asian countries except India. Where they have lagged far behind in 1995, for example, Japanese investment in China was almost 30 times greater than in India. If Japanese money and technology were to continue to flow into, China much faster than they enter India, it could lead to an unhealthy imbalance of economic development between China and India. Similarly, although the Japanese have made heavy investments in many southeast Asian countries, in India they trail the Americans, the Germans and the British.

The Indian perspective is that the Japanese are far too cautious in their investment policy towards India, proceeding with extremely great circumspection and making fastidiously detailed plans. "India has pressing needs to improve the quantity, quality and reliability of its infrastructure if it is to continue its overall economic growth and development". Specialists in corporate related business in India, "According to a representative of a major Japanese bank with a presence in India, the major problem with infrastructure investments in India is
'Political Risk' immediately cited the enron case, stating that this recent on again off again near fiasco demonstrated to Japanese investors that it is uncertain who is in control and how fixed a deal is. The conflict between the control and state governments, it seems, was partially responsible for the confusion.

Though state governments and others have endorsed the reforms irreversible: Kijima continued. "The lack of ability to obtain quick decisions some what gainsays the true pervasive diffused commitment to the reforms policy. When problems with major projects receive publicity, not only do Japanese investors slow down, but the politically sensitive Indians themselves seem to become aware and timid. Even with the election an accomplished fact and a new plan in place. In India, it is highly unlikely that uncertainties will be cleared up. India's democratic system is extremely complex and political risk from the Japanese investors perspective cannot be resolved simply by counting votes."

There were echoed by another lawyer in Japan involved in Indian infrastructure projects. Who stated that the biggest issue facing foreign investors was 'Bankability' i.e., the ability of project organisers to achieve a level of security and to eliminate risks to make proposals acceptable to banks and thus encourage them to finance the project.

"Obtaining security over the physical and real assets is not sufficient or satisfactory in India." "Since enforcement involves long
litigious procedures. The terms, therefore, means the security of obtaining sufficient cash flow for repayment of investment and profits. The conditions provided for the fast track projects were intended to provide Bankability. It is debatable whether this bankability issue is an insurmountable impediment to infrastructure investment. It is naturally a concern for all foreign investments."

Conspicuous among India's infrastructure shortages is power supply, and to cope with the situation international institutions such as the world Bank have been offering their assistance in infrastructure development through private initiatives. Assistance from the government of Japan and its private sector also are being sought. The government of Japan has a policy of assisting this development through private initiatives in Asian countries and at the same time Japan's private sector has shown an interest in the power sector business.

Economic expansion has aggravated the shortage of power supply, and shortages today are estimated at about 10 percent of total electrical energy and 20 of peak capacity requirements. About 70 percent of the power is generated at the state level, problems stem from political intervention in the power tariff structure, managerial/organisational matters involving state electricity boards. Technological problems such as plant load factor, delays establishing the legal legislative framework, and inefficiency in legislative procedures.
How Can Indians Get Roads

Road development has been carried out primarily through budgetary resources. The emphasis in the earlier years has been on providing accessibility to village population which has been achieved to a large extent as nearly 90 percent of the villages having population of more than 1500 are connected by road. The planning authorities realized the importance of growth of infrastructure in the early stages of planning. As a result, budgetary allocation for roads was of the order of 1.4 percent of the total plan outlay during the first plan. In the subsequent plans, came priority to roads was not maintained and other competing sectors of economy accounted for the larger share of budgetary resources. Thus by the 8th plan the level of budgetary funding dropped to 0.6 percent of the total plan outlay unfortunately, the road sector does not earn any revenue and create any surplus for investment as in the case with power and telecommunication sectors. Road user taxation in India (mainly taxes on fuels and vehicles) contributes 2.1 percent of the Gross Domestic product to the exchequer. The expenditure on taxes as a percent of road user tours, however, is only to 48 percent. In this scenario, it has become imperative not only to make efforts to increase the budget resources but also look for funding from the private sector. This policy has been accepted and necessary legal and regulatory framework have been created to permit private sector to develop roads and collect tolls there on. The
privatization policy approved by the government of India in June, 1995 and further improved in June, 1995 sweeteners like income tax concessions, project subsidy, traffic guarantee, right for urban development and import of sophisticated equipment etc. as shown promising results. So far, as many as 11 projects on National Highways valued at Rs.580 crores have been awarded under private sector participation scheme.

Road taxes are presently being charged under the motor vehicles Act and the funds generated are going to the consolidated fund of the state then used as per priorities decided by the state government. These funds are not necessarily ploughed back to the roads. For National Highways, such road taxes do not come in the picture. It has therefore, been deemed that wherever improved facilities are being offered to road users, it would be appropriate to charge tolls. Accordingly the government of India policy for National Highway permits private sector to change tolls on improved 4 laned sections by passes, bridges, expressways, etc.

It would be arguable that where road taxes are not being ploughed in the Highways, should the users pay tolls? This aspect needs to be viewed from the overall policy for of economic development and funds required is meet the cost of social sectors which are not fund generating. The world over concept of creating a dedicated fund by car
making, a part of the leviable duties on Petroleum products is an accepted method for creation of such fund. This concept had been accepted by both houses of parliament in approving the augmented central Road fund. However, this is yet to be incorporated. As and when such dedicated funds ore created, the availability of assured resources for road development would become a reality yet the fact remains that the road users who gain from improved highways should share these gains with the provider of such highways are paying tolls. The question of roads as an essential service provided to the public is not disputable. The issue is the availability of resources for road development. These are grossly inadequate today. In this context every effort must be made to create the dedicated fund for roads.

**Skidding Off The Roads**

It is slipping real quick and only purring-not revving any more. If the last three months figures are to be believed, two wheeler manufactures are facing a slowdown in demand resulting in declining sales. With December itself a lean month traditionally, two wheeler producers would be liberally in a soup-soon. Which is also a pointer to the fact that sales promotion scheme haven't held good and will not have much impact either.

The scooter segment is the worst hit with a meager 1.2 percent growth between April and November '98 over the previous
corresponding period. The Japanese motorcycle majors, however, have
done exceedingly well in this period with their combined sales improving
by 31.6 percent on a period-on-period basis. On the other hand, sales of
Indian motorcycle brands improved by just 7.5 percent.

The moped segment continues to grow at modest 6.1 percent
while three wheelers suffered a negative 12 percent growth despite
government's directive to replace 15-year old commercial vehicles
including three wheelers.

And these hard facts can be an interesting study of changing
consumer preferences too. Which is borne out by the fact while Japanese
mobike brands have grown at a scorching pace, Indian motorcycles have
witnessed first-gear growth rates. Scooters, which had seen a huge
capacity build-up even when growth was elusive, is now witnessing cut-
throat competition leading to consolidation in the industry and bowing
out of wark players. With the entry of TVS Suzuki in 4-stroke scooters,
the competitive pressures have increased further.

We bring before you the November '98 sales figures,
available to Investor's Guide exclusively for a quick insings into the
happening of the two-wheeler industry.

**Bajaj Auto**

Things seem to be pretty bad at Bajaj Auto. The scooter
major recorded sales of 54,192 scooters in November '98 against 65,264
scooters in November '97, a whopping decline of 17 percent. The cumulative sales for April-November '98 present a modest three per cent growth while industry grew by an even modest 1.2 percent. Mr. Rahul Bajaj's target of selling 1.44 million vehicles, implying an average of 1.10 lakh vehicles per month before the current fiscal closes may be a ambitious task, given these disappointing trends. The total vehicles sales show a 3.8 percent growth and total sales growth is projected at 10 percent for the entire fiscal.

But for a major decline of 20 percent in the sales of Kinetic Honda's scooters, the performance of Bajaj Auto's scooter brands could have been worse still. However, Bajaj Auto has been to keep its neck above the industry's average growth. However, a continuous decline in sales, despite zero-interest finance schemes, is indeed a worrying trend.

The performances was much impressive though in the Japanese motorcycle segment where it grew 35 percent against the sub-segment growth of 31 percent. In the Indian motorcycle segment, its growth rate slipped to 2.3 percent while the sub-segment as a whole posted a 7.5 percent growth. The numbers here have been dwindling too, if last three months' figures are analysed. Overall, Bajaj's motorcycles posted a 16.3 percent growth while the segment posted a 25.8 percent sales growth.
Bajaj's moped posted a negative 1.6 percent growth although the segment grew by 6.1 percent on a period-on-period basis. Here too, the last three months figures have revealed a declining trend.

Bajaj Auto's combined two wheeler sales growth in the period considered was a very modest 6.3 percent while the industry posted a 11.1 percent growth. The three wheelers, though forming only a fraction of the total turnover, posted a 11.1 percent negative growth while industry posted a negative 12.1 percent growth.

**LML**

On the contrary, things were pretty stable at LML with sales in the range of 27,000 scooters. While sales for November '98 was steady at November '97 levels, the cumulative figures reveal a 6.10 percent growth in April-November '98 over the corresponding previous period. LML is likely to continue to do well in the scooter segment. However, its entry into motorcycles is seen with scepticism by analysts as to whether it would be able to repeat its performance here as well.

**TVS Suzuki**

Market men are eagerly awaiting customer response to TVS Spectra-TV'S Suzuki's recently launched four-stroke scooter. The company sold 85 units of the brand in November '98, much higher than figures bandied in the market. Given its limited launch in the Northern region right now, and its premium pricing at Rs 49,000, TVS Suzuki needs to be given some time before its performance can be judged.
Motorcycle sales, however, continue to be sluggish. Figures for last three months show a marginal decline. Cumulative figures for April-November reflect a 23.6 percent increase against industry growth of 31.6 percent. November '98 sales have been 23.8 percent higher than November '97 sales for motorcycles.

Scooty continues to post negative growth with sales declining consistently over last three months. However, November '98 figures show a 30 percent growth over November '97 sales. Mopeds too reveal the same trend; while sales have shown consistent decline over the last three months, November '98 sales show 10 percent growth over November '97 sales.

**Hero Honda Motors**

Hero Honda Motors continues to be the lone star performer, showing exceptional growth in sales. Sales have remained steady over the last three months, except for a blip in October '98 on account of a decline in export sales. Hero Honda's Street has shown declining sales while November 98 showing a 25 percent fall against November '97 levels.

However, the cumulative sales show a 9.3 percent growth. The company's other motorcycle brands have shown a good performance- a 33 percent cumulative growth in April-November 1998. On an overall basis while November '98 sales reveal 34.71 percent growth, the cumulative sales show 30.61 percent growth in April November '98.
PROBLEMS OF COSTING IN VENDOR SUPPLIES

Maruti Udyog Ltd. (MUL) to cut supplier strength by 100, MUL is set to Pune its auto components supplier strength to 275 from the present figure of 375. In a bid to cut costs and improve operational efficiency.

The rationalisation of the vendor strength at MUL is an ongoing process as a higher number of suppliers would be brought down to.

Maruti Udyog, which triggered off-active ancilliariisation in the country when it set shop in 1984, plans a three pronged strategy to narrow its vendor base. It plans to remove almost all dormant/inactive vendors, retain only quality vendors and finally adopt the emerging international trend of sourcing sub-systems.

There are no inactive vendors as of now with MUL, the fact remains that due to sheer low availability of component suppliers in India, at the time of MUL'S Gurgaon plantgoing on stream in 1984, the company couldn’t be too selective in deciding the vendors.

The company will benefit mainly through a reduction in the variable cost per unit. The logistics cost would be the first one to get rationalised as also the employee cost, once the number of vendors
become lower and the sourcing process simpler reducing the number of vendors to MUL is being done in order to ensure better quality and cut costs.

At the same time, sourcing of sub-system of components as well as concentrating the components outsourcing from fewer vendors, would mean larger production volumes for the existing vendors. This would bring economies of scale to MUL's component manufacturers, as also lower production cost, which would essentially get shared with Maruti, as is the trend in the auto industry.

However, only around 60 vendors supplying to components to MUL have achieved ISO 9000 until now. This is surprising considering the long innings they've had with MUL. MUL expects all its vendors to achieve ISO-9000 in the next two years. A Look at the vendor development Programmes of the new car joint ventures, however, reveals, that they insist on their vendors having the ISO-9000 certification at the selection stage itself.

General Motors India, for example, has its vendors moving, towards attaining QS-9000.

While the total inventory level for raw materials (Including imported steel as well as components) is around 20 days at MUL, that for only components ranges. Between 2 days to a week. A lower
components inventory level emerges from the fact that almost 70 percent (by value of components) vendors are situated in the northern regions including Gurgaon, Chandigarh, Ludhiana etc. itself.

Also a lot of MUL's Suppliers for bulk/heavy components are situated in the vicinity of the Gurgaon plant and supply on the assembly lines itself, at an hourly basis.

This reduces not only warehousing costs, but also helps introduce IIT concept, at least for these components.

The installed capacity of MUL has risen to 2.5lakh vehicles per annum in October 95 from the earlier level of 2 lakh vehicles. The plan to narrow the vendor base comes even as the company is targeting a production of 2.75lakh vehicles for 1995-96 a capacity utilisation of around 120 percent.

**EMISSION CONTROL GAINS URGENCY**

Automobile pollution is one of the socially most sensitive subjects and at the same time prone to dis-information, miscalculations and tendency for wrong directions, hasty actions and some times irksome inactions. People had once been thinking of only the exhaust of the automobiles to be polluting but soon realized that there were other areas which were far easier to control.
India too had missed controlling easily controllable pollutants and concentrated on the exhaust. There was also a tendency to follow the advanced countries and generating statistics without paying attention to the creation of infrastructure. A knowledge base was created to a limited extent and extrapolation done to a large extent without adequate understanding of the implications. Long term planning was never attempted and the time lost due to inaction was made up by snap decisions, and hence half hearted implementations. Here an attempt is made to analyse the problem of automobile pollution and the steps taken to reduce it.

**Main Pollutants.**

Vehicles powered by international and combustion engines are of many kinds and are classified as petrol or diesel engine driven, two stoke or four stroke engine powered two wheelers (mopeds, scooters, motorcycles, etc.) three wheelers, passenger cars, light commercial vehicles passenger or goods vehicles, and heavy commercial vehicles and so on.

The major pollutants from automobiles are Carbon Monoxide (CO), Hydro Carbons (HC), Oxides of Nitrogen (NO), Lead compounds, Sulphur compounds and particulars.
Large engines emit large quantities of pollutants compared to smaller engines and the quantity of pollutants dumped into the atmosphere depends on the vehicle population.

Crank case and evaporative emissions: Blow-by gases, that is gases which escape from the top side of the pistons, past the piston rings into the crank case, consist of carbureted air fuel mixture that escapes past the rings during the compression stroke and have the combustion products in the ratio of 85 percent to 95 percent. The blow by and some engine oil vapour are termed as crank case emissions and contain mostly hydrocarbons. It has been estimated that about two percent of the fuel supplied is lost through crank case emissions.

Crank case mission control can be achieved by recycling the blow by gases from the sump to the air intake system, upstream side of the air cleaner and through a valve - positive crank case ventilation valve (PCV) into the intake manifold. This will ensure less flow of blow by gases during idling in order not to hamper idling quality and high flow at higher loads as required to handle large blow-by quantity. In cars equipped with PCV system, crank case emissions are virtually absent. Areas under hot climatic conditions and when a vehicle is stationary following hot running. The mass of the fuel evaporated from the fuel tank depends on the fuel volatility, fuel temperature, area of liquid vapour
surface, volume of tank not filled with fuel, presence of vapour release cap and degree of agitation and duration near the maximum temperature. Evaporation emission control is achieved by an absorption-regeneration system in which is canister of activated chancel collects the Hydro Carbon vapours and retains them until they can be fed back to the engine, to be burnt into harmless gases.

World over, the limit for evaporative emissions has been brought down to the level of 2.0g/tests by SHED (Sealed Housing Evaporative Determination) method. In the US further reductions are planned for the future.

It has been noted that evaporative emissions also occur during filling of the fuel tank at the petrol station. These are defined as "refueling emissions" and steps are being taken in advanced countries to limit these also. Other countries may initiate steps in this direction in the future.

**Exhaust Emission**

The mechanism of pollutant formation is well known. In the conventional gasoline engine, emission reductions were achieved in the early stages by measures to improve the engine such as lean tuning, delayed ignition in part-load delayed throttle closure on deceleration and exhaust gas recirculation (for NO reductions) EGR, of course, results in
deterioration in derivability but this is still the most cost effective means of reducing NO, catalytic after treatment. After the engine related steps were tried and best result in terms of emission reduction were achieved the next best step was to adopt the method of after treatment CO and HC need to be Oxidized and Oxides of Nitrogen need to be reduced (Oxygen to be removed).

The oxidation reactions occur in excess air which may be provided by air pump, reed valve or lean calibration. The reactions are made possible by noble metal catalysts.

The reduction reaction will take place in an atmosphere of air deficiency achieved by rich calibration of the fuel systems.

**Dual Bed Catalyst**

In the early days of emission control only CO and HC Limits were prescribed and these were achieved by lean calibration and oxidation catalyst. Subsequently when NO, limits were also enforced, two separate catalyst beds were used. The engine was run with a rich mixture and the exhaust was first passed over the reduction catalyst bed to reduce NO. Then air was added and the gases were passed through the oxidation catalyst bed to oxidise CO and HC. This is called the dual bed catalyst.
Three Way Catalyst

Due to the rich engine operation the dual bed design is the last favorable in terms of fuel consumption. However, it is very simple in design and can be combined with a simple mixture formation system without electronic control. A further disadvantage is the fact that during the reductions of oxides of nitrogen under air deficiency conditions, ammonia (NH₃) is produced which is then partially re-oxidised to oxides of nitrogen during subsequent addition of air.

The three way catalytic converter simultaneously removes all these pollutant component to a high degree. Due to conflicting requirements of oxidation and reduction reactions, neither lean nor rich condition will be suitable. The mixture must be supplied to the engine at the stoichiometric ratios (chemically correct ratio). All three reactions take place at peak efficiency of conversion when the mixture is maintained at the stoichiometric ratio in a narrow band. Such precise control can only be achieved by electronic means. An oxygen sensor, using Zirconium Dioxide senses. The particle pressure of Oxygen in the exhaust and provides a steep charge in out put volts, when the mixture changes in the stoichio-metric region. This provides the ideal control signal for closed loop control of the fuel system to provide the correct mixture to the engine. The mixture formation system may be carburetor of fuel injection system.
**Unleaded Fuel**

Noble metals are used in catalytic converters Platinum and Palladium in oxidation catalyst Platinum and Rhodium in a three way catalyst. Rhodium helps reduction of NO while Platinum and Palladium accelerate oxidation of CO and HC.

Leaded fuel contains Tetra-ethyl lead as an antiknock agent or Octane enhancer compounds of lead are known to poison the catalyst and reduce its efficiency. Lead poisoning causes a permanent damage to the catalyst. Therefore unleaded fuel availability is a prerequisite for the catalyst filament programme. In the US and Japan unleaded fuel was introduced in 1974. Some European countries introduced unleaded fuel in 1989. In India unleaded fuel was introduced in the four metropolitan cities of Delhi, Bombay, Calcutta and Chennai in 1995.
### Table No. 74

**Indian Regulation Passenger Cars**

<table>
<thead>
<tr>
<th>Year</th>
<th>Emission</th>
<th>Standards</th>
<th>G/km</th>
<th>Remark</th>
<th>Comparable stringency</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>CO</td>
<td>HC</td>
<td>NOx</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1991</td>
<td>14.5 - 27.5</td>
<td>2 - 2.3</td>
<td>-</td>
<td>Based on weight</td>
<td>EcE 15 - 04 1982</td>
</tr>
<tr>
<td>1996</td>
<td>8.68 - 12.4</td>
<td>-</td>
<td>3 - 4.36</td>
<td>Based on engine size</td>
<td>U.S. 1975</td>
</tr>
<tr>
<td>1997</td>
<td>4.34 - 6.2</td>
<td>-</td>
<td>15.22</td>
<td>Based on engine size</td>
<td>EcE 83-1992</td>
</tr>
<tr>
<td>2000</td>
<td>2.72</td>
<td>-</td>
<td>0.97</td>
<td></td>
<td>EEC 1994</td>
</tr>
</tbody>
</table>

### Table No. 75

**Indian Regulations - Two Wheelers**

<table>
<thead>
<tr>
<th>year</th>
<th>Emission</th>
<th>Standards</th>
<th>G/Km.</th>
<th>comparable Stringency</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>CO</td>
<td>HC</td>
<td>HC+Nox</td>
<td></td>
</tr>
<tr>
<td>1991</td>
<td>12</td>
<td>8</td>
<td>-</td>
<td>1980 U.S.</td>
</tr>
<tr>
<td>1996</td>
<td>4.5</td>
<td>-</td>
<td>3.6</td>
<td>1980 EcE</td>
</tr>
<tr>
<td>2000</td>
<td>2</td>
<td>-</td>
<td>2</td>
<td>EEC 1994</td>
</tr>
</tbody>
</table>
In the case of two wheelers, we have to consider gasoline vehicles powered by two stroke engine and those powered by four stroke engine. Two stroke engines due to the nature of the basic design, emit large amounts of hydro carbons and negligible NO₂. Four stroke engines behave in a similar fashion to passenger car engines. However, these vehicles are characterised by low volumes of engines and lower prices.

In advanced countries the two wheeler population is small compared to cars and therefore emission regulations either do not exist or are very liberal. However, there are exceptions such as Taiwan, Sweden and Switzerland.

**Two wheelers**

It has been very difficult to apply catalysts for two stroke vehicles (only oxidation catalysts are required) because of two reasons:

1. High hydro carbon levels cause thermal overloading and catalyst damage and.

2. High gas vibrations can cause mechanical failure of the mounting or substrate itself.

But the advantages of two stroke simplicity, low cost and production volumes are so attractive that continuous attempts are being made to overcome the problem by redesign of engine to reduce HC
Levels and development of suitable catalysts to withstand mechanical stress due to vibrations.

In the case of four stoke vehicles, the already higher cost due to additional parts such as valves and valve gears has motivated the vehicle markers to avoid using a catalyst if possible. The general route taken by makers in countries like Taiwan is as follows: carburetor of variable venture mechanically controlled type (the type me for many years now) with lean calibration and closer production toleration without catalyst or with oxidation catalyst with suitable calibration of mixture. Carburetors of advanced design-constant depression type, without oxidation catalyst or with catalyst. Electronic fuel injection for two stroke engines has also been developed but so far commercially viable design has not been introduced in the market anywhere.

**Diesel Vehicles**

Emission control regulation for diesel engines target the control of particulate matter (Soot) and NO. Diesel engine modifications have made substantial improvements in the base engine out emission of particulate matter (PM) and NO. In the US., a typical heavy duty diesel engine exhaust a decade ago was above 0.8 g/bhph PM and above 6.0 g/bhph NO. Engine modifications resulted in a drop to 0.15 g/bhph PM
and 5.0 g/bhph NO. These achievements were assisted with a diesel fuel with less than 0.05 percent Sulfur content.

To further control diesel engine exhaust emissions, catalytic after treatment devices have been developed. These include a diesel oxidization catalyst, a catalytic soot filter, and a lean NO. catalyst.

Diesel oxidation catalysts (DOC) are fully developed and are now installed on heavy duty engines in the US since the 1994 model year. Doc catalysts destroy that portion of diesel PM that is organic Docs also destroy the gaseous HC which is responsible for the bad odour of diesel engine exhaust. DOC's do not remove the solid carbon soot PM, for several years Docs have been installed on passenger car diesel engines in Europe.

The catalytic soot filter (CSF) is a device that collects all of the PM. Periodically the collector soot must be burned off. When installed on 4 stroke diesel engineers the collected soot spontaneously combusts in the CSF at above 3752°C and as a result the CSF is cleaned to original condition for another cycle of PM collection PM removal efficiency is over 90 percent The CSF also destroys the gaseous HCS and CO. The CSF is in the design and application phase.

The lean NO catalyst is under fairly intense development as a means of diesel engine control. Diesel exhaust always contains excess
air with oxygen content ranging from 5 to 8 percent and reduction of NO₂ in such an atmosphere needs innovative methods. Lean NO catalysts are not yet commercially available for diesel engine emission control.

**Worldwide Emission Regulations**

As the ambient air quality depends on the mass of constituents present, and the emission depends on driving modes, the emission standards world over are based on the man of the pollutants emitted when the vehicles are driven according to schedule representing the driving condition in a city, known as "urban driving cycle". The vehicle driving pattern being different in different countries, due to different traffic conditions, each country uses its own driving cycle and corresponding limits for the mass emission.

The procedure consists of running the vehicle on chassis dynamometer with inertia simulation over a prescribed driving cycle, which is composed of different modes of vehicles operation such as idling, acceleration cruising and deceleration, collecting the tail pipe exhaust in pre evacuated bags using special equipment called the "constant volume sampling system" and then analysing the gases to determine the gases mens of expressed in gm/mile, gm/km or gm/test.
**Trends in U.S.**

The photo chemical SMOG, which engulfed the Los Angeles valley in California in 1970 drew the attention of the American people to the dangers of automobile pollution. The clean Air Act of 1970 mandated that the U.S. auto industry should reduce emissions by 90 percent in less than ten years. The industry responded admirable and achieved the goals.

The clean Air Act amendments of 1990, apart from presenting more stringent emission standards, call for more stringent procedures for evaporative emission determination and requirements for on-board storage of refuelling emissions and requirement of OBD (on board diagnostic system.)

The OBD system ensures that every car will under all conditions of operations be continuously checked. It will store any fault detected in the emission control system and later provide the stored data to the mechanic in the workshop so that the defects can be connected. This is supposed to have a positive effect on air quality.

The California state always lad enforced lower limits than the federal Government. The main constituents of the LEV programme of California are:

- Substantially low HC standards.
➢ HC determined through new component NMOG.

   This has been adopted because methane is a harmless gas.

➢ ZEV mandate as of 1998 to 2003.

➢ Stringent method of evaporative emissions determination.

➢ Requirement of complex on board diagnostic system.

➢ Reformulated fuels.

   The reduction of emission is a complex subject requiring an overall strategy and not merely some simple measures such as fitting catalytic converters. All countries have derived knowledge from US experience and have started adopting similar strategies.

   In Europe, they have targeted to reach near US standards mainly by exploiting the TWC technology for which unleaded fuel is a must for the year 2000, OBD will become mandatory.

   **Trends in India**

   For meeting the 1997 catalyst norms, unleaded fuel is important and these are applicable to cars sold in metropolitan cities only. By the year 2000 unleaded fuel will be available throughout the country. TWC technology with electronic engine management will be the route taken by the auto industry.
Two wheeler are a popular means of personal transportation in India. Most of them are powered by two stroke engines.

Regulations in Taiwan are the strictest as of today and they are met by using catalytic converters. They are tougher than the limits proposed for India in 2000. The Indian industry may have to draw knowledge from the experience of Taiwan and adopt suitable engine designs and catalytic converter designs.

**SUDDEN BRAKES ON AUTO INDUSTRY**

A large section of the nation's automobile industry will grind to a halt, with the application of surface transport ministry notification on emission norms.

The move spells rejection of last week's environment ministry recommendation to extend the deadline by three to six months.

Production of vehicles which do not meet these emission norms will have to be discontinued as a large section of the industry cannot meet the stipulations.

Car manufacturers with diesel versions might sputter along but production will be drastically affected in the case of petrol driven counterparts.

The last minute decision by the surface transport ministry has come as a shock to the entire industry which was sure of getting an extension as agreed to by the environment ministry.
The notification reads the biggest ever crises for the domestic automobile industry which will have major ramifications for the economy.

A part from production and corporate bottom line, a large number of workers will also be affected. The notification was issued under the Central Motor vehicle Act.

Production of all car manufacturers, except Maruti Udyog, will be affected. The casualty list include Hindustan Motors, Premier Automobile, DCM-Daewoo, General Motors and Mercedes-Benz. However, the LCV and HCV segments emerges almost scot-free, sparing companies such as TELCO and Ashok Leyland. Telco will be affected to the extent of its participate with Mercedes Benz.

The motorcycle segment comprises another sufferer with major players including Escorts, Yamaha, TVS Suzuki and Kawasaki Bajaj, putting brakes on 100cc assembly lines. Hero Honda will emerge unscathed.

Three wheeler manufacturers will also be affected with Bajaj Auto being the worst off at it 80 percent market share.

Cross-country vehicle such as Jeeps from Mahindra and Mahindra and Maruti Gypsy will be badly hit. However, scooter manufacturers will not be affected at all.
Interestingly, the ministry of environment, in a meeting on March 21 had decided to grant a breather to the automobile manufacturers and these recommendations were sent to the ministry of surface transport.

For car manufacturers also, a six month extension was allowed to meet the evaporate emission norms. Sources said that it was impossible to meet the March deadline as the designated laboratory for conducting tests at the Automotive Research Association of India, Pune, became operational only in February.

In the case of cross country, vehicle manufacturers, it had been recommended to allow a six month extension for vehicle to be sold outside the metro areas.

These companies had been asked to adhere to the norms by fitting catalytic convertors in metropolitan areas.

Similarly three wheeler manufacturers were also granted a six month reprieve.

**Human Resource Management**

Companies now realise that quality of human resource in the organisation ultimately spells the difference in the market. Though India can boost of a huge pool of trained manpower, they are often found lacking in the mindset for the vicissitudes of modern day management. Tapping this resource calls for a paradise shift in the attitudes of both the employer and the employee. The environment of corrupt political
leadership and short sighted laws which discourage employment certainly needs an overhaul. The Indian automotive Industry is witnessing an enormous number of new entrants who want to capture a part of this important growing market. This provides a number of opportunities for the auto component industry but the rules of the game are going to be quite different from what most Indians are used to in the past. The survivor will be those who concentrate on core competencies and manage their strategic alliances well contain costs by constantly improving productivity and above all become world class quality companies.

The Indian automobile industry recorded an unprecedented growth of 23 percent is 1995-96 to reach a production of over 3.5 million units. Of these passenger cars increased by 33 percent to 3.53 lakhs, two wheelers by 20 percent to 2.66 million and light and heavy trucks by 24 percent Along with the ancillaries which account for over half the value of any vehicle, the industry had a highly satisfactory year. If the auto majors had sales of over Rs. 8,000 crores, the makers of tyres, batteries, castings, forging, gears, electrical and fuel systems had an equal turnover.

This rapid growth attracted the attention of international manufacturers and projects with investments exceeding Rs.10,000 crores are already in the pipeline with several more awaiting approval or under finalisation. In cars, after Maruti in 1983 came Daewoo of Korea in 1995,
followed by General Motors and Ford of the U.S. Mercedes Benz from Germany, Peugeot of France and Uno from Italy BMW, Hyundai, Honda, Mistsubishi, Skoda, Volkswagen and other are in close pursuit.

This growth has stimulated the development of many support services in accessories and supplies, making the auto industry one of India's most rapidly growing area for employment at high and low technical levels. Continued acceleration over the next few years will make the industry one of the major engines of the country's economic growth. In retrospect, it seems, so unfortunate that the well intentioned but naïve past policies of self reliance and socialism has prevented this economic take off much earlier.

The demand for cars is no longer reflected by booking as the precipitate collapse of bookings of Cielo, Esteem and Mercedes has demonstrated. It points to the fact that speculators and finance companies had greatly inflated demand. Deliveries for the Peugeot 309 have just begun and Fiat Uno and Opel Astra will soon follow. Their waiting lists may be equally fragile. After many decades, Indian customers may see a real buyer's market where the auto makers offering better options, accessories, credits, price bargains and services will pursue the customers.
The real demand has been stimulated by advertising, domestic and international business growth and urbanisation. The increasing availability of consumer credit which enables people to mortgage part of their future incomes to get better cars has also been an importation factor. The naturally increasing middle class, devouring the latest TV and refrigerators also want better cars because they are the most visible public symbols of their status.

The increasing congestion in Indian cities makes many believe that the market will soon become saturated. The demand potential is undoubtedly there with estimated 35 million households having annual income exceeding Rs. 1-2 lakhs. At present there are less than 2.5 million cars in India including those owned by the large corporate, professional and text seector. If smaller countries like South Korea could absorb 1.15 million cars, Thiland 4.78 lakhs. Malaysia 2.02 lakhs and tiny Taiwan 2.78 lakhs in 1995, the market potential in India is obviously huge.

**India As An Asian Base**

Car makers like BMW, Ford, GM, Honda, Hyundai, Mitsubishi, Peugeot and Volkswagen along with the existing car makers do not seem to be too much concerned about the availability of their proposed investments totalling some Rs. 40,000 crores to raise the total
production capacity in India to about 1.2 million cars in the next five
to years. They are actually looking beyond the domestic market and hope to
meet their global needs.

**Bus Body Building Care For Concern**

Road transports is an important and dominant from of
transport for the people in India, over 80 percent of passengers move by
road and it is estimated that by the year 2000 road traffic will account for
87 percent of passenger movement. Buses play a major role in
transporting the interstate and intercity passengers for various trip
purpose like work, education, recreation, etc. There are a number of cases
of passenger bus accidents and at time some of them result in fatalities.
Their effects are further compounded due to inappropriate constructions
of buses as these vehicles are in many instances built with spurious
material, are non standard and lack sturdiness.

It is unfortunate that the body of the bus, which plays an
important role in safety and comfort of the driver and passengers, is
fabricated, by and large, in the unorganised sector where standards and
specifications are not necessarily followed. The differential in excise duty
rates between build body sold by chassis manufactures and that built by
others has encouraged mushrooming growth of body building industry all
over country with numerous wayside body builders. Surveys have shown
that a large number of these wayside body builders do not have even the basic adequate infrastructure and knowledge for quality body building. These body builders do not always follow standards and specifications to meet minimum quality and safety requirements.

The introduction of the central motor vehicles rules in 1989 and subsequent amendments have focused on the aspects of safety technical requirements, emission testing and conformity of production of automobiles. But this sector, lacks the knowledge of such regulations under the CMVR and there is inadequate legislative control and monitoring of such operations.

Government and various agencies have identified this lacuna in this sector and have decided to bring in legislation under CMVR on recognising and accrediting bus body builders.

As a first step to evolve an integrated approach to initiate the process of developing and introduce a structured system, AIAM initiated a study of various aspects of the bus body fabrication and the present status of this industry. One of the important areas identified was the need for a database of the bus body building industry. A pilot survey was conducted in the National capital Region of Delhi, Jaipur, Faridabad and Meerut and the following key aspects have emerged.

➢ This sector is largely made up of urorganised industry.
➢ The infrastructure in many instances is adequate to meet minimum quality requirements.

➢ The sector is generally unaware of the safety and technical requirements.

➢ Quality control function does not exist in most of the units.

➢ Design function does not exist at all.

➢ Customer requirement does not call for any compliance.

We believe that this sector needs to be upgraded and strengthened. AIAM initiated a project to evolve a framework to define the criteria for a code for bus body building based on requirements of safety and comfort of drivers and passengers.

To monitor the enforcement of this code a regulatory system has been proposed along with a procedure for type approval and conformity of production for approved units. A system of inspection, testing and certification by Government approved agencies for 100 percent inspection of produced vehicles has also been suggested.

It is hoped that, to ensure safety and reliability of bus body building and eventually of the drivers and passengers, this sector would
receive adequate attention of the authorities to bring in legislation and regulation for better monitoring and control.

**Time To Update Technology**

The fiscal year 1996-97 saw mixed fortunes for the automotive industry. From a high growth curve during the early months, the industry ended the year with much lower growth rates. The average growth rate for the vehicle industry for the whole year was 14 percent as compared to 25 percent during the previous years. The first quarter of the current financial year has seen a further slowdown in all segments of the industry.

Despite the temporary slowdown, the demand for passenger cars is projected to grow from the current level of four lakhs to seven lakhs by the year 2000. In response to this projected growth, the auto component industry is expected to increase its production from Rs. 12,000 crores in 1996-97 to Rs. 23,000 crores by end of the decade by supplying not only to new vehicle manufactures but also catering to the export market. To reach this level of production, the investment in the sector is expected to go up from Rs. 6,000 crores to over Rs. 10,000 crores.

To make this happen, the following issues are being addressed by members of the Automobile component manufacturers
Association (ACMA). In the Eighties, a series of joint ventures were forged to meet the requirements of Maruti and light commercial vehicles based on Japanese technology. However, no further substantial upgradation of technology in the car segments took place. Hence the component manufacturers were unable to introduce state of the auto technologies being offered in the rest of the world. With the advent of the second wave of new generation vehicles in recent years, hectic activity has began in the component industry and several tie-ups are taking place and additional investment are being committed in component manufacture.

The overseas component manufacturers not wanting to be left behind in the "Great Indian Automotive Race", have also actively started seeking Indian Partners for joint ventures. The ACMA members are joining hands with foreign partners when a technology gap exists, as in automotive electronics, castings and forging, precision electric parts and components, interior and exterior trims, decorative plastics, complete systems and assemblies safety and environment related equipment.

The component industry has always been active in exports continuing this trend, it increased its exports from Rs. 750 crore in 1995-96. To an estimated Rs. 936 Crore in 1996-97. However, sustained
exports are viable only if the latest technology is available and this can be built up only on large domestic volumes.

This occurred during the late Eighties and the Nineties, leading to substantial export of components like fuel injection parts, motorcycle parts, systems, auto lighting equipment, spark plugs and parts and accessories. Now with the new breed of components being developed by the industry, the prospects for increasing exports are promising. In view of India's competitive advantages, the new vehicles manufactures from abroad also plan to develop local components vendors for global sourcing. The international component manufactures setting up manufacturing bases in India with local partners will also find it more economical to enter into buy back arrangements.

To further increase the exports of auto components from India, ACMA has suggested that the new vehicle JVs should be allowed to export Indian made auto components to meet their export obligations under the memorandes of understanding. These developments may well result in a sustained annual export growth of 20 to 25 percent and with a distinct possibility of reaching the $1 billion mark within 5 years.

The industry today is undergoing a major transformation and also feeling the pressures of the challenges which accompany such a change process.
Technology is a key factor, the eighties had seen a quantum jump by the industry on the technology front. The Nineties will witness another step change by component manufactures in both product and process technology. This is being addressed through new joint ventures or through in houses R&D. The spending on in house R&D has to go up substantially to atleast three percent or better still five feucent of sales if the industry has to become self reliant and offer leading edge of technology products to both domestic and international customers.

Increasingly, the new vehicle manufacturers from abroad are also attracting their existing component suppliers, elsewhere to come and set up manufacturing bases in India with state of the art technology as part of their global strategy of "follow the OEMs". The dilemma facing the domestic components industry is the need to tie up with multiple foreign partners to become eligible to supply to more than one of the new vehicle manufacturers (a need arises out of low volumes of many of the OEMs).

World-wide during the past there years, the vehicle industry has been moving towards vendors who supply complete systems or modules to support lean manufacturing in the vehicle industry. International trends show that the vehicle manufacturers are passing on more and more of the value addition to the component suppliers.
Simultaneously, there is also a move by the vehicle industry internationally to reduce the number of vendors.

The Indian component industry has started addressing this change. However, it is going to take at least five years to evolve tiering in India as it exists in other countries because this requires a complete remodelling of industry into clear cut tiering structure. The larger sized companies will naturally be the most competent to take on the role of a Tier 1, with the smaller companies becoming the Tier 2 and Tier 3.

The world is witnessing dramatic improvements in the level of productivity and quality which has become the main vehicle for increasing profitability in the industry. These concepts will need to be embraced by the Indian component industry more closely to sustain its global competitiveness. The rejection rates in developed countries are now recorded in PPM instead of percentages. This has been possible in these countries due to three main reasons.

1. The volumes justify high level of automation (automation coupled with defect prevention systems).

2. The machines built in these countries have a high process capacity ratio (CPR) of over 1.66 leading to a robust and stable processes.
3. The raw materials supplied to auto component manufacturers never exceed 200 PPM defect level in their supplies.

It is imperative that the above three vital aspects be addressed by ACMA members jointly with the vehicle manufacturers, the machine tool manufacturers and basic raw material suppliers.

As many as 119 ACMA members have obtained ISO 9000 certification, and within two years of the QS 9000 being evolved, seven members have obtained this certification, which is now the benchmark of auto component suppliers the world over. The QS certification will ensure complete system adherence and will lead to a quantum jump in quality, thus bringing us an par with local/international competition in terms or defects in PPM.

For the customers to get real value for money, it is imperative for the automobile sector to produce viable volumes or atleast offer the component industry attractive volumes to achieve effective localization. The lessons learnt from the experience faced by the Indo-Japanese ventures of "new generation" LCVs in the Eighties are a pertinent reminder of what could go wrong if companies do not plan for economic volume production. The Government policy should therefore take this important aspect into account to prevent further fragmentation of capacity in the auto component sector.
The practice currently followed by the Government is to enter into MOUs (Memorandum of Understanding) with the new vehicle manufacture. These MOUs lay clown basic intentions of the manufacturers in terms of investments, exports, localization and other obligations. However, none of the MOUs commitments are enforceable by law. Also there is no uniformity or transparency in the agreements. This brings in a degree of uncertainty and subjectivity in government policy.

What is needed is a more definite "Localization Guideline." Many developing countries have laid down clear local content policies to develop their automotive industry, for example, China, Malaysia, Thailand, Indonesia, Philippines and Taiwan. For instance, in China, new assembly ventures are required to have minimum volumes of 1.5 lakh cars and are also expected to start with a local content of 40 percent and reach a level of 85 percent in three year's time. Local sourcing is hence a criterion for the selection of joint venture partners. After two years of highly impressive growth, the auto scoter is going through a lower growth phase during the current year. This is temporary phase that should be used by the component manufacturers to upgrade their technology and process capability. This transition is going to be painful for some manufacturers, but it has to be faced if the industry is to emerge with renewed vigour to supply the new generation cars in India and also
address the international market with a clear export target of at least $ 1 billion in four to five years.

With all the above developments/steps being taken by auto component manufacturers, ACMA is confidant that the members will surely reach "World Class" in four or five years.

**PARKING PROBLEM**

Anyone who owns a car knows how frustrating it is to park in the chaotic cantinas of our metropolitan areas. With developers and municipalities loath to set aside valuable land for parking and a continual explosion in the urban car population, further chaos seems imminent.

But Bombay based Eltrol Ltd, a manufacturer of industrial control equipment, sees a solution and a profit, in this impending vision of car parking hell. The solution, if you can't spread'em out stack'em up. Eltrol intends to howk automated vertical parking towers in Indian cities. The towers thousands of which dot the urban landscapes of most densely-populated Asian cities like Tokyo, Honkong and Seoul are now to be made by Eltrol in technical collaboration with Nissei Build a Japanese manufacturer of automated parking systems.

" We're trying to generate space in the sky. I want to make sure that these towers are visible everywhere in a couple of years."

That parking is notoriously inadequate in the island city is well known. It is limited to sprinkling of pay and park islands operated by
private agencies hired by the Bombay Municipal Corporation, most are in the central business district.

Most high-rise buildings ban visitors from parking in others, parking areas have been converted for commercial use. The result parking spills onto the street. And with official statistic warning of a doubling in car trips between the shrubs and the city centre by the turn of the century the situation can only worsen.

The parking towers could be best used in areas like Bandra-Kurla complex, Bombay's new business district, where local authorities are now mandating parking areas. "The tower does have potential, it has a great space saving advantage". Says V.K. Pathak, chief planner of the Bombay Metropolitan Regional Development Authority (BMRDA), which is in change of setting up the Bandra-Kurla complex. Similar new urban developments in other cities too could use the towers to save space by integrating them into the building, so that users could park their cars and walk right in.

The rationale behind the towers is simple: use the space of three cars about 50 sq.m. to park up to 100 cars (depending upon the number of levels). That's a considerable advantage over conventional multi storeyed parking lost. Which require substantial amounts of space. The system is automatic and stacks cars using an elevator parking and retrieval, takes a maximum of 90 seconds.
And the cost? well it works out to between Rs. 2 lakh and Rs. 2.5 lakh per car so a 20 cars tower could cost about Rs. 40 lakh whether that is too expensive it a moot point.

But there are problems with using the automated towers is existing high rise buildings there simply isn't enough space to stand them there Municipal rules mandate the provision of space around any structure, it towers are to be built in existing compounds, they would have to stand apart from the buildings they serve, something impossible in most complexes. A modification in municipal regulations would be necessary to build them in existing compounds.

Eltrol officials say they have about 300 inquiries all over India for the tower from Hospital developers, housing societies and commercial complexes. The first tower will be ready for commissioning by the end of this year. If the idea catches on there might yet be succory for harried drivers looking for parking on the jousting grounds that are Indian roads.

**TRAFFIC PROBLEM**

In the short term the pressure on the roads will cause traffic congestion in cities as it had done in Bangkok. But like Thailand, when cars become a product of the masses, it will become a contentious political issue and governments will be forced to improve traffic
management and find the funds for building roads, highways and over bridges.

This automobilisation of India may cause anguish to thinkers and bureaucrats long conditioned to the socialist idea that cars are a wasteful luxury of the leisure classes. They will have to correct themselves. The car has been conclusively proved to be a major engine of economic growth in every nation for every employee in a car factory, there is a multiplier of about 10 jobs in the ancillaries, spares, accessories, delivery, distribution, service, fuel and supplies.

Then there is another big multiplier. Every good job in the organised industry and supporting services also creates gainful employment among those who provide the new incomes with housing, food, fuel, clothing, household gadgets, carpentry, plumbing construction and leisure. The proliferation of tea shops, general stores and services around auto factories create many more entrepreneurial jobs than the ones inside any plant.

The car may not therefore directly create many regular jobs but it does generate huge growth in gainful self employment and other economic activities.

The experience of many Asian and south American countries shows automobilisation is capable of banishing poverty more surely than government projects and subsidies.
But Indian planners missed this golden opportunity. Political leaders and their bureaucrats imbued with elevated but impractical ideals of Gandhian simplicity and socialistic dogma condemned the car as a symbol of unnecessary elitism deploring the wastefulness of capitalistic competition. They introduced a regime of licences and regulations that stifled progress. Price controls and high taxes hurt industrial profitability and their ability to invest into product and plant modernisation and research. Foreign collaborations became the crutches upon which the industry leaned upon for respectability and progress.

**PROBLEM OF POLLUTION IN TWO WHEELERS**

Declaring that the health of the nation was more important than that of the two and three wheeler industry, The supreme court today asked manufacturers to devise a time frame by next week to drastically reduce pollutants emission from vehicles, at least in the metros.

A three-judges bench comprising of Chief Justice A.M Ahmad, Justice K.S. Paripoonan and Justice Sujatha Monohar told the automobile association counsel Arun Jaitley, that the pollution caused by two-wheelers in the country had reached dangerous levels.

The bench was hearing a public interest petition by environmentalist lawyer M.C.Mehta.

The court was informed that the two and three wheeler population in Delhi alone was put at 16 lakhs and was growing fast.
Saying this was a very serious problem, the judges clarified that the manufactures would have to speed up their research and development to reduce emission levels either with the help of catalytic convectors or some other means.

You can extend this research period as much as you want or shrink it as much as you want. This court is surrendering to the industry on the time period. But you have to think about this problem seriously.

The court will not interfere with your on line production. But as far as the future production is concerned, we have to think about cutting it down seriously if you do not come up with solutions on your own the judges said.

The Chief Justice observed that has recent visit to China had been an eye-opener as for as traffic congestion and vehicular pollution was concerned.

"During my stay I hardly found any two-wheelers and all four wheelers had catalytic converters. Even if one found a two-wheeler plying it was only mopeds. The bicycle was the only machine which could be seen in large numbers" the Chief Justice said.

The Judges said if the manufacturers of two wheelers managed to create a situation where they reduced emission levels as will as production levels, the court would sec to it that the public transport system was improved.
The court was not convinced in Mr. Jaitley's argument that between 1991 and 1996 the manufacturers of two wheelers has been able to substantially reduced emission fevers by improvement in engine design.

The Judges noted that they were sure that the country could survive on present two wheeler vehicle population, "if we stop buying two wheelers or health who definitely be better. But if the vehicle population is allowed to grow at the present pace, the situation going to only worsen."

The Judges said the manufacturers would have been able to a better Job if they had concentrated on R&D all these years.

Mr. Jaitley told the judges that the only way to reduce the emissions now was to fit all vehicles with catalytic convertors.

**INDIAN AUTO COMPONENT INDUSTRY: TIME FOR REFLECTION**

It is introspection time for the Indian auto components industry. An industry that gained international acceptance in a short span of time, now finds itself at crossroads. The bullish mood that infected the industry in the wake of the rush of entries of foreign automobile majors is definitely missing.

The fortune of the auto component industry is inextricably linked with that of the automobile industry. Boom time for the auto components industry started with the arrival of India's people's car Maruti
that become the symbol of hopes and aspirations of India's growing middle class.

This new car that required components that would adhere to its stringent quality standards, virtually gave birth to a whole lot of new age auto components manufacturers who manufactured components that combined the best of technology and quality. As Maruti became India's best selling car, the path of Indian auto component industry took an upswing. Export figures also climbed. Low costs of labour and raw material and vastly improved quality standards enabled exports to take a quantum jump.

The influx of foreign auto majors ranging from Mercedes Benz, Ford, General Motors to Daewoo two years back presented a world of opportunity for the industry. The auto components industry went overboard they went in for huge capacity expansions and modernization programme. It was dream that was soon to turn sour.

The global auto giants released that the Indian market was not as lucrative as it was made out to be. Their target went haywire, inventories piled up and bookings were conceded at the drop of the hat. The auto component industry in India that is driven by domestic demand also faced with sluggish growth.

The Indian auto components industry has a chequered history. It started off as a small industry in 40s supplying components to Hindustan Motors and Premier Automobiles. In the 50's the arrival of
Telco, Bajaj, Mahindra & Mahindra led to steady increased production. It was however, in the 80s with Maruti that growth took a sudden acceleration and the industry came of age.

Traditionally, the auto components industry can be categorized into five segment engine parts which include pistons, carburetors, engines, valves, etc, electrical parts like ignition, coils, spark plugs, transmission and steering parts like steering systems, Clutch plates, Suspension and braking parts which include shock absorbers, air brakes, equipment's like head lights, electric horn, dash board instruments etc.

Like other industries, the auto components industry faces several problems. Besides the current sluggish growth of the domestic automobile market, there are other issues involved quality is one of the other most important issue. Indian manufacturers are way behind other countries in quality control. Take for example, ISO-9000 certification—the international quality benchmark only about one third of Indian auto components manufacturing companies are. ISO-9000 certified. Globally, companies are moving towards Zero PPM (Parts Par million) rejection rate, whereas in India it is more than 25,000 PPM.

Competition is also heightening up Indian manufacturers face competition not only from auto component manufacturers from china, Taiwan and south Korea, but also from multinationals who have set up shop in India. Several auto players like General Motors have set up their
auto component subsidiaries in India, which not only supply components to their parent company in India but also export them to other countries.

Very few companies who export components from India are OEM (Original Equipment Manufacturers) suppliers. Most of the manufacturers supply to the after market where quality check is less stringent. Besides Indian goods do not enjoy a good perception abroad.

Spurious auto parts are a great threat to the auto component industry especially in the domestic market. The spurious manufactures who indulge in blatant trademark infringements and control more than 30 percent of the market constitute a major challenge for the Indian component industry.

The situation is, however, not so bleak. Indian companies are gearing to get over this temporary slump. Several companies have entered into technological collaboration and equity partnership with world leaders in auto components.

Companies have not only adopted their systems but also their work ethics and management practices.

Indian auto components industry has seen tougher times and have always come out with flying colours. The present sluggish growth is only a temporary phase. Strict quality controls, sound technology and high volumes will enable the Indian auto component industry to chart greater progress.
SLUGGISH SALES KEEP AUTOMOBILE BIGGIES GUESSING

Nine months into the current financial year, the automobile industry is looking confused. Automobile production has grown faster than sales, leaving major manufacturers and dealers with sizeable stocks. But the industry bigwigs are of the opinion that it is too early to predict a slow down in one of the fastest growing industries in the country.

While the production of automobile of all kinds rose by 17 percent, the sales rose only by about 14 percent. The mismatch in production and sales has left many automobile companies especially the light commercial vehicle (LCV) manufacturers and some mid-size car manufacturers with sizeable inventory by end of 1996.

Further, it is evident that most of the slowdown in growth has occurred in the LCV segment, which is dominated by Telco, Ashok Leyland and Bajaj Tempo. The declining sales has led to a significant piling up of stock with the dealers.

Industry sources are of the view that if there is a slowdown in the economy, the first segment to be hit should be the heavy duty truck segment. But this has not happened probably because the big truck operators are able to achieve economics of sales despite lower margins.

But it is the LCV operators, who generally are one truck operators who have became hopless victims of an early slowdown in
industrial activity. Their moves have been further aggravated with banks refusing to extend loans to small time operators.

However, analysts are of the view that the beginning of a recession in the LCV segment may also eventually affect the medium and heavy commercial vehicle (M&HCV) segment. During the last three months, in the lower payload LCV segment, Telco still retained a 70 percent market share followed by Bajaj Tempo with a 25 percent market share. Telco's share, however, slipped in the higher payload (six tonnes and above) LCV segment to 50 percent from 60 percent.

The M&HCV and LCV segments which accounts for the lions share of the truck market recorded a growth rate of 17 percent and 14 percent respectively for the period April to December 1996. In the LCV segment, among the Indo-Japanese players barring Eicher Motors, both DCM Daewoo and Swaraj-Mazda showed a drop in sales.

DCM-Daewoo and Swaraj-Mazda sold 487 and 2,938 vehicles as against 1453 and 2939 respectively. However, Eicher Motors sold 4335 as against 3755 for the corresponding period last year.

On the passenger car front, the sales in April-December 1996 shot up to 2,85,747 from 2,41,008 in the corresponding period of the previous year. The industry owes the jump in sales to the entry of at least there new entrants, DCM-Daewoo, Mercedes-Benz and General Motors.
Among the existing players only Maruti Udyog has recorded a healthy growth in the first nine moths from 1,87,260 (1995-96) to 2,33,190 (1996-97). All the existing players have recorded a major drop in sales. Hindustan Motors 19,702 (17924). PAL-Peugeot 7380 (4680), PAL 15,705 (5134) and Telco 7,383 (5351). The sales of the new entrants, DCM-Daewoo 13776, Mercedes-Benz 1664, and General Motors, 4028.

The slow off take has forced the car manufacturers in the small and mid size segment to offer huge discounts in order to maintain their hold over the market.

Over the last few months Esteem and Cielo manufacturers are offering cash incentive as high as Rs. 8000 or 30 days credit. The sales of utility vehicles and two-wheelers have remained static being unscathed by the general slow down in the industrial growth rate till now.

The production and sales of two and three wheelers witnessed a good growth in the nine moths period of April to December 1996. While production in the period grew by a 16 percent to touch 24,10,329 the sales grew at the rate of 14 percent over the corresponding period of the previous year to touch 23,53,171.

However, the largest player in both the two and three wheeler segment, Bajaj Auto faced a drop in its market share. The two-wheeler segment also witnessed a jump in all segments. The total sale of scooters stood at 9,73,146 as against 8,88,041. The sale of motorcycle was 7,09,019 compared to 5,85,114 in the corresponding period last year.
The automobile market saw the sale of mopeds go up to 5,13,294 from 4,61,135 in the corresponding period last year.

The multi utility vehicle (UV) segment showed a growth rate of 21 percent for the period April to December 1996. Out of a total sales of 56,736 vehicles, the major beneficiary was Mahindra & Mahindra who sold approximately 50,937 as against 41,404 UVs, while Maruti sold 5,799 compared to 5,580 Gypsies.

This growth rate show the popularity of multi utility vehicles in India especially in the rural areas.

The sales statistics for Telco during the period under review (current financial years) indicate that while cumulative sales are a head of sales in comparable period of last year. Monthly sales trends are not so encouraging with all the major companies in the industry setting up additional capacities, the future would see a tremendous increase in competition.
BUDGET BODES LITTLE HOPE FOR AUTOMOBILE SECTOR

The automobile sector does not expect much from the coming budget. But this does not stop it from wishful thinking. It hopes that the government will reduce excise and custom duties.

The last financial year saw the automobile industry riding high on the crest of success with more than 25 new projects making investments of over Rs. 220 billion for creating additional production capacity of over 3.5 million.

With most of the foreign majors entering the Indian automobile industry opting for the CKD/SKD route to test Indian waters, it is the taxation structure on CKD/SKD imports which has assumed importance.

Says a company, source, when the new joint venture projects were approved it was understood that imports and indigenisation level would be determined by the markets.

When the actual imports began, concerns of foreign exchange, indigenisation and investment levels made the government treat all component imports as CKD/SKD. This required the importers to secure an import licence and pay a duty of 50 percent, a countervailing duty (CVD) of 60 percent making a total of 110 percent.
Most of the foreign majors like Mercedes Benz, Peugeot, Opal entered the luxury car segment using the CKD/SKD route. Says M&M Managing Director Mr. R.K. Pitamber, "this budget should give more clear-cut guidelines for CKD and SKD projects." He pointed out that higher incidence of taxes and duties on CKD/SKD parts pushed up the price of the vehicles and in turn affected demand adversely.

The last budget did not announce anything to excite the auto industry. In addition to excise duty relief to the two wheeler industry, import duties on raw materials like steel, plastics and cheaper components were also lowered. This helped component manufacturers to keep the spurious component manufacturers at bay.

The pre-budget memorandum prepared by the Association of Indian Automobile Manufacturers (AIAM) advocates a three-tier duty structure with raw materials attracting the lowest rate, the final product attracting the highest rate and the component and intermediates falling in the middle range.

"This stance has been taken by AIAM with a view to encourage value addition at home. Although the duties on inputs and raw materials have been reduced in the last budget structure still continues to be complex and inverted," according to a spokesperson of AIAM. The industry at large feels that the government should remove the anomalies in the duty structure of auto components and intermediates.
Explaining this, an industry expert said, "components and intermediates such as tyres and tubes, brake and radiator houses, V belts, gaskets, washers, floor coverings and mats, brake linings and pads, safety glass, electrical equipment attract higher duty the pletely bulit vehicles."

Another segment from the anomaly arising earlier budget impost is vehicle segment. Taxed rate category from passed earlier, the utilities at lower tax of 15 percent, 40 percent for cars by catch. The 15 percent depllicable only for vehicle are 10 seaters with a gross weight of 2,700 kg.

This, they expect will by hike sales by 30 percent to 40 percent over the long-term trend increasing sales.

**Mahindra Ford Vendors Told To Stop Supply For Escort's Petrol Model**

Mahindra Ford India Ltd. (MFIL) has asked its various components manufactures to stop supplying parts for its petrol Escort till further notice.

According to industry sources, the company's vendors have stopped supplying components for the 1.3 litre petrol Escort in October. However, for the more popular diesel version vendors are supplying components. Mahindra Ford official when contacted in Chennai, reiterated they had adequate supplies to produce the petrol Escort.
Vendors, however, say that the company purchases components on a just in time basis, and generally does not stash high inventory level.

The company has a high components inventory and fully built-up cars for its 1.3 litre petrol Escort, sources say-in-fact the company's component purchases for the petrol version has fallen sharply in August and September, before its suppliers were officially told not to supply components for the petrol version till further notice. The company had some time ago decided to phase out the standard model of the petrol Escort deciding instead to continue with the deluxe version. It also decided to introduce a more powerful a 1.6 litre petrol-driven Escort. Mahindra Ford was able to sell only 644 petrol Escorts during July-September this year. While it sold 295 cars in July, the figure fell sharply August to 117 and doubled in September to reach 232. On the other hand, sales of the more popular diesel Escort have been falling during this period.

Sales in July totalled 756 units and fell drastically to 477 in August, September sales stood at 36 pieces less than half of July. The Escort, when first introduced, hoped to achieve equal sales for both the diesel and petrol versions. However, the response completely confounded Ford's expectations when over 75 percent of the consumers opted for the diesel model.
Ford officials were puzzled as this was an experience totally alien to them. Market surveys later revealed that the customer believed that a 1.3 petrol Escort was weaker than its "more powerful" diesel counterpart. This prompted Ford to think of a bigger petrol engine and hence the 1.6 litre was thought of.

Meanwhile, the joint venture has been doing its bit to increase sales of the petrol version through its recent anniversary and freedom offers. Dealers maintain that the response has been tepid, though company officials say that consumers have taken to the two schemes.

**Maruti Cuts Production By 20-25 Percent As Demand Dips**

The country's largest car manufacturer, Maruti Udyog Ltd. (MUL), has slashed its production by 20-25 percent for the next three months. This follows increasing slowdown of passenger car sales. Confirming the move, MUL officials maintained that the production cut was being made in order to keep inventories at manageable levels.

"We have a flexible manufacturing facility that can be tuned to keep in line with the fluctuating demand pattern," pointed out an official. Besides, demand usually weakens in the last three months of the calendar year as customers prefer to go in for the new year model, according to the official.
The total production in 1997-98 was 3,54,336. For the first seven months (April-October) of the current year the production is down to 2,04,568. While the average production per month last year was 29,528, it is down to 29,224 in the first seven months of 1998. The production in October 1998 alone was down to 26,740.

Market sentiment has been punctured by the economic slowdown which has hurt the interests of the salaried class and small entrepreneurs the most. In addition market rumors of MUL launching new models and reducing prices of certain models led to a decline in sales of the economy segment cars, company officials said. Car buyers prefer to take a hard look at the new competitors to Maruti, like Santro, Matiz and Indica, before making up their mind on the next purchase, industry sources said.

Sales for the MUL models have been filling since September 1998 after having recorded a much higher growth in the first half of the month. The company sold 7,083 Omnis in September which fell to 4,747 in October '98. Esteem sales fell from 2,008 to 1,110 in October' 98. Sales of MUL's best selling model, Maruti 800, fell by 27 percent from 15,106 in September to 11,008 to October. The sales of Zen too fell from 6,851 in September to 5,907 in October 98.
Cumulative sales figures of passenger cars during this financial year have long been pointing to a slowdown in demand and the latest figures confirm this.

Falling sales have also forced MUL to increase dealer margins on the 800cc and the Zen. Dealers too admit that customer have been postponing their buying decision, not only because of poor money market conditions but also on the expectation of better bargains attached with new models.

Dealers on their part have stepped up their marketing campaigns. MUL models are being offered off the shelf with zero percent interest loans. Additional carrots are being dangles in the form of gifts and accessories.

Despite a slowdown in sales and the entry of many competitors in the passenger car segment, MUL officials said that the company sold 1,85,906 vehicles in the current financial year April-October 98, maintaining its market share of 83.6 percent.

*Catching 'em Young, The Maruti Way To Boost Sales*

Maruti is starting to catch 'em young.' While it will soon taste the first real sign of competition from Hyundai, Daewoo and Telco, some of its dealers have begun to literally take its cars to schools. This has already been done in seven schools in Bangalore by a local Maruti dealer, Solar Automobiles.
"School children may not be the buyers of Maruti cars, but it is important that we make an impression on them too. They often nudge their parents towards buying a car or have a say in the choice of the model," said Mr. H. N. Nayak, Chief Executive officer, Solar Automobiles.

All Maruti models, the 800cc, Omni, Zen, Maruti 1000, Esteem and Gypsy are taken to the schools where children are given free rides and some refreshments. The dealer's staff are also at hand to answer questions from children about the vehicles.

Not too many Maruti dealers are doing it right now, but it is an idea that is likely to catch on. "It is a very good idea and it is Maruti's practice to share such ideas with other dealers," said Rohtash Mal, chief general manager, marketing and sales, Maruti Udyog.

It is not just about reaching out to children. It is one of creating bonds with intending customers. Solar's plan should be carried out by others too. However, this is only one creative form of reaching out and dealers are encouraged to think up different ideas which can also be shared," Mr. Mal said. Solar has been holding drawing and slogan writing competitions for children and on Independence day this year, it held quizzes on Maruti and the country. Prizes were sponsored by Solar but Maruti has recently introduced a scheme where such cost of local promotions are shared between the dealer and Maruti.
Solar also plans to take school children for outings not too far away from their schools in the various Maruti models. "School children travel by the school bus or vans daily and surely they would prefer going in Maruti cars to the outings. It may not seem like a big thing for adults, but it is for children," Mr. Nayak said.

Solar has told local clubs in and around Bangalore that it would like to take part in any events, the clubs hold for children. Of course, examination times are a strict no-no and that's why solar is currently quiet, before starting off in January again and going on into February. March is examination time again and then it's holiday time and no school events are planned until classes re-open.

Yet, it is not as if Solar wants to while away this part of the year either. It has proposed that, instead of giving discounts and freebies on purchases of the 'Esteem', the buyers will be taken on a conducted tour overseas in groups, to places like Singapore and the like.

"Most people who buy 'Esteem' cars couldn't care less about a Rs. 30,000 discount. For, it's not everyone who can afford to pay the Rs. 5.30 lakh to Rs. 6.65 lakh or so that various of the 'Esteem' cost," he said.

**CV. Finances Shifting Gears To Passenger Cars**

Commercial vehicle financiers are moving towards financing passenger cars to keep their heads above water with a plethora of small cars scheduled to hit Indian roads in the next two month major
commercial vehicle (CV) financiers like Sundaram finance, Cholamandalam Finance and Birla Gloal Finance are increasing their business exposure to the passenger car segment.

Birla Global Finance has decided to treat car finance as top priority and also look at securitisation to boost volumes. Cholamandalam Finance, another major CV financier, is also actively looking at car finance and securitisation. Companies like Cholamandalam Finance have also opened talks with car manufacturers to work out competitive schemes.

In its first attempt to reduce its exposure to the commercial vehicle segment, Birla Global Finances Ltd. (BGFL) now extends finances only for repeat customers. According to P.Sridharan, Country head (Corporate lease and hire purchase) of BGFL The car segment is where the action is. We are not undertaking any fresh disbursement for funding commercial vehicles. Our primary focus will be car finance and securitisation. In fact, we are working on an entire range of services which enable a customers to source and park their funds with us." 

BGFL has already bought Rs. 12 crore worth portfolio from Dabur Finance and also picked up portfolios from Nagarjuna finance and Pearl Pacific Finance. Given the competition in the car Finance Segment, we will boost volumes through securitisation. We are discounting the future and paying the present value of such portfolios to these companies.
With the commercial vehicle finance segment showing no sign of revival in the near future, even industry majors like sundaram are looking at alternatives. Today, car finance contributes as much as almost 25-30 percent to our turnover. With the, new cars in, working on beefing our exposure all across the country.

The fact is that with the demand for vehicles coming in mostly from the petroleum and the cement sectors, CV financiers have come under pressure. Regional manager of Cholamandalam finance, pointed out that there was no improvement in the freight rates or retail demand for commercial vehicles.

The shift to car finance will enable better spread of risk. Although foreign banks are quite active in car finance, quite a number of finance companies has pulled out of the business. Strong NBFCs like us can offer competitive interest rates.

**Auto Finance Enters Fast Lane**

Still a were-but undecided on whether to buy a Santro! Want to wait for the Matiz, Indica or Palio! But the Santro booking are starting and your indecision could cost you dearly.

Set aside such fears. Help is at hand. ICICI is entering the auto finance market with a unique "booking finance scheme" which gives you options to hold on to a Santro booking or switch on to another when the Matiz is launched in November, the Indica in December and the Palio
in January. The scheme will mark the entry of the financial institution into the auto loans market.

According to the scheme, you can avail of "booking finance" for 45 days and then, if need be, roll it over for another 45 days or convert it into an auto loan from the day of delivery of your vehicle. It also gives you the option of canceling the booking for one car and moving to another.

"The scheme, at one stroke, keeps the customer in queue for the latest car, while at the same time does not prevent him from enchasing on his 'change in heart' at a later stage," ICICI sources said. It also saves from paying 10 percent of the car cost upfront.

This is how it works: You pay Rs 5,000 as the deposit amount for a Santro of which Rs 500 is the processing fee and Rs 4,500 is the margin. You enter into an agreement that you will pay 16 per cent interest on the booking amount which is paid on your behalf by ICICI (Indian Collaboration For Indian Consortium of Industry). On delivery, you pay 16 percent interest for the number of days you have taken the facility on the amount paid for the car minus the margin money paid by you.

For instance, if the delivery is made after 6 days (delivery of 500 Santros are expected on October 18) and the cost of the car (standard model in Mumbai) is Rs 2,80,000 then you pay interest for 6 days at 16 percent on Rs 2,75,500 which is around Rs.750.
BAD NEWS FROM THE NEW CAR MARKET

Several used car dealers are reporting better business than ever before. This is despite the fact that the second-hand car market in India is disjointed. Perhaps fearing the now infamous dreaded call by extortionists, new car enthusiasts have changed their mind and are falling in love with the good old Maruti again.

Buying a new car means, as per the latest rules, acquiring a PAN number which puts many off. Then again, there are those waiting for the Indica, who prefer an old Maruti as a stop gap arrangement.

Thanks to its re-sale value, Maruti 800 and Maruti Esteem are the hot favourites in the used car market. They also like the Zen, but there aren't many in the second-hand market, Most customers are going in for the 1993 upwards Maruti models. The oldest models (around 1994:M:800) are available at Rs 1.20 lakh while the latest, i.e., 1998 models are available at Rs 1.80 lakh. Apart from the fact that new cars are available off the shelf, a number of re-possessed vehicles by finance companies are finding their way into the used car market, thus hammering prices.

Overall, volumes have picked up by 20 percent in the past two months, say industry sources. "Today, customers are looking for quality even in the used car segment. And only a good car will fetch a good price. Customers really have many models is choose this segment today," While the prices of the small care have depreciated by 10-15 per

528
cent, those of the premium vehicles are down by 20-25 percent during 1998.

Premium cars like the Opel (Rs 8 lakh on-road) and Cielo (Rs 6.25 lakh) are cheaper by Rs 1.5 lakh today. Easy finance schemes, buy-back offers and other concerted efforts by car dealers to push sales seem to be yielding results. According to second-have car dealers, demand for used care for 1998 has been much better at 75 cars per month vis-à-vis 40 cars per month in 1997.

With the used car market booming, sales of ex-showroom models are under pressure. Many dealers today offer to buy back an old car in lieu for a new car. Manufacturers are offering schemes by the dozen to woo customers. Incentives like 15 gm gold to Rs 5,000 worth of car accessories are being offered by market majors. Everything from easy maintenance, refurbishing and a buy-back guarantee are being thrown in to push sales.

At the moment there are very few buyers for the 118 NEs, Premier Padminis and Contessas. The demand for Maruti 1000 in the used car market is also not too good, say players. Maruti Zen and the 800 ares the best selling models.