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THESIS
ON
“SHAREHOLDER VALUE CREATION
IN
THE AUTOMOBILE INDUSTRY IN INDIA”
SUBMITTED TO SAURASHTRA UNIVERSITY FOR
Ph.D. DEGREE IN THE FACULTY OF
COMMERCE
UNDER THE GUIDANCE OF
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Amisha S. Rana

Date:

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Amisha S. Rana

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"AN OVERVIEW OF INDIAN AUTOMOBILE INDUSTRY"

INTRODUCTION:

Automobile industry is a key driver of any growing economy. It plays a pivotal role in country's rapid industrial and economic development. It caters to the requirement of equipment for basic industries like steel, non-ferrous metals, fertilizers, refineries, petrochemicals, shipping, textiles, plastics, glass, rubber, capital equipments, logistics, paper, cement, sugar etc. it facilitates the improvement in various infrastructure facilities like power, rail and road transport. Due to its deep forward and backward linkages with almost every segment of economy, the industry has a strong and positive multiplier effect and thus propels progress of a nation. The automotive industry comprises of the automobile and auto component sectors. It includes passenger cars; light, medium and heavy commercial vehicles; multi-utility vehicles such as jeeps, scooters, motor cycles, three wheelers, tractors, etc; and auto components like engine parts, drive transmission parts, suspension and breaking parts, electricals, body and chassis parts; etc.

In India, automotive is one of the largest industries showing impressive growth over the years and has been significantly making increasing contribution to overall industrial development in the country. Presently India is the world's second largest manufacturer of two wheelers, fifth largest manufacturers of commercial vehicles as well as largest manufacturers of the tractors. It is the fourth largest passenger car market in Asia as well as a home to the largest motor cycle manufacturer. The installed capacity of the automobile sector has been 9,540,000 vehicles, comprising 1,590,000 four wheelers (including passenger cars) and 7,950,000 two and three wheelers. The sector has shown great advances in terms of development , spread, absorption of newer technologies and flexibility in the wake of changing business scenario. It is also finding increasing recognition world wide and a beginning has been made in exports in vehicles as well as components.

AUTOMOBILE HISTORY:

The automobile history dates back to the late 18th century. Nicolas Joseph Cugnot, a French engineer is credited with the first self propelled automobile. Cugnot's vehicle used steam power for locomotion. The vehicle found military application in the French army. Cugnot's automobile was never commercially sold.

In the beginning automobile industry was dominated by steam-powered vehicles. The vehicles were expensive and difficult to maintain. The incidence

of frequent boiler explosions also kept potential purchasers away. Commercial history of automobile started with the invention of gasoline powered internal combustion engines. The German inventor, Karl Benz constructed his first gasoline powered vehicle in 1885 at Mannheim, Germany. Commercial production of Benz cars started in 1888. Panhard et Levassor of France was the first company to exclusively build and sell motor cars from 1889.

The early 1900s saw many automobile manufacturing companies coming into existence in a number of European countries and the United States. The first mass produced automobile in the United States was the curved-dash Oldsmobile. It was a three-horsepower machine and sold 5,000 units by 1904. The economics of the US car market was disrupted by the arrival of Henry Ford and his Model T car. The Model T was the world's first mass produced vehicle—a million units were sold by 1920—a space of 10 years.

Mass production of cars led to cheaper vehicles. This made cars more affordable to the common American and European citizen. The British Automobile manufacturing history was revolutionized by assembly line production methods employed by two separate car makers—William Morris and Herbert Austin. Austin Seven was the world's first compact car. The Morris manufactured vehicles had engine mounted on front.

The 1960s saw rapid developments in automobile manufacturing technology. A milestone in the history of automobiles was achieved by the invention of efficient fuel injection process, independent suspension and turbochargers. Pontiac Trans Am was the best selling car from 1969 to 1980. Computer Aided Design (CAD) was introduced for designing vehicles from the 1980s. Ford Taurus was the first vehicle to be built using CAD.

BIRTH OF AUTOMOBILES:

Horses had dreams of them since time immortal, but it was only in the 18th century that the first horseless carriage actually hit the roads. That's not to say that the idea never struck anyone. Seeds of the idea, in fact, originated long before the first contraption was rolled.

The history, of the automobile actually began about 4,000 years ago when the first wheel was used for transportation in India. Several Italians recorded designs for wind-driven cars. The first was Guido da Vigevano in 1335. It was a wind-mill type drive to gears and thus to wheels. Vaturio designed a similar car that was also never built. Later Leonardo Da Vinci designed clockwork-driven tricycle with tiller steering and a differential mechanism between the rear wheels.

In the early 15th century, the Portuguese arrived in China and the interaction of the two cultures led to a variety of new technologies, including the creation of a wheel that turned under its own power. By the 1600s, small steam-powered engine models were developed, but it was another century before a full-sized engine-powered automobile was created.

A Catholic priest named Father Ferdinan Verbiest is credited to have built a steam powered car for the Chinese Emperor Chien Lung in about 1678. there is no other information about the automobile , only the event. Since James Watt didn't invent the steam engine until 1705, we can guess that this was possibly a model automobile powered by a mechanism like Hero's steam engine-a spinning wheel with jets on the periphery.

Although by the mid of 15th century the idea of a self-propelled automobile has been put into practice with the development of experimental car is powered by means of springs, clockworks, and the wind, Nicholas Joseph Cugnot of France is considered to have built the first true automobile in 1769. Design by Cugton and constructed by M, Brezin, it is also the first automobile to move under its own power for which there is a record. Cugnot's three-wheeled steam-powered automobile carried four persons and was meant to move artillery pieces. It had a top speed of a little more than 3.2 km/h (2mph) and had to stop every 20 minutes to build up a fresh head of steam.

Evan was the first American who obtained a patent for "a self-propelled carriage". He, in fact, attempted to create a two-in-one combination of a steam wagon and a flat-bottomed boat, which didn't receive any attention in those days. During the 1830s, the steam car had made great advances. But stiff competition from railway companies and crude legislations in Britain forced the poor steam automobile gradually out of use on roads. The early system-powered automobiles were so heavy that they were so heavy that they were only practical on a perfectly flat surface as strong as iron. A road thus made out of iron rails became the norm for the next hundred and twenty-five years. The automobile a got bigger and heavier and more powerful and as such they were eventually capable of pulling a train of many cars filled with freight and passengers.

France too had joined the motoring scenario by 1890 when two Frenchmen Panhard and Levassor began producing automobile a powered by Daimler engine, and Daimler himself, possessed by the automobile spirit, went on adding new features to his engine. He built the first V-Twin engine with glowing platinum tube to explode the cylinder gad-the very earliest from the sparkling plug. The engines were positioned under the seat inmost of the Daimler as well as Benz cars. However, the French duo Panhard and Levassor made a revolutionary contribution when they mounted the engine in front of the car under a 'bonnet'.

Charles Duryea built a car carriage in American with petrol engine in1892, followed by Elwood Haynes in 1874, thus paving the way for motor cars in that country.

For many years after the introduction of automobiles, three kind of power sources were in common use: steam engines, gasoline or petrol engines, and electrical motors. In 1900, over 2,300 automobiles were registered in New York, Boston, Massachusetts, and Chicago. Of these, 1,170 were steam cars, 800 were electric cars, and only 400 were gasoline cars.

In ten years of the invention of the petrol engine, the motor car had evolved itself to amazing designs and shapes. By 1898, there were 50 automobile manufacturing companies in United States, a number that rose to 241 by 1908. In that year, Henry Ford revolutionized the manufacture of automobiles with his assembly-line style of production and brought out the model T, a car that was inexpensive, versatile, and easy to maintain. The introduction of model T transformed the automobile from a plaything of the rich to an item even people of modest income could afford, by late 1920s the car was commonplace in modern industrial nations.

Hurbert Austin and William Morris, two different car makers, introduced mass production method of assembly, in the UK, thus paving the way for revolution in the automobile industry. Austin Seven was the world's first practical four-seater 'baby car' which brought the pleasures of motoring to many thousands of the people who could not buy a larger, more expensive car. Even the 'bull-nose' Morris with front mounted engine became the well-loved model and one of the most popular cars in the 1920s.

Automobile manufacturers in the 1930s and the 1940s refined the improved on the principles of Ford and other pioneers. Cars were generally large, and many were still extremely expensive and luxurious; many of the most collectible cars date from this time. The increased affluence of the United States after World War II led to the development of large, petrol-consuming cars, while most companies in Europe made smaller cars, many of which have been produced in Japan as well as in Europe and the United States.

The history of motor cars has surely been a well-traversed one. The automobiles, as it progressed, was a product of many hands, of revolutionary concepts, and of simple, almost unnoticed upgrading. In the end, the one who received the most for these challengers and changers was the motorist, whose interest, money, and enthusiasm have forced the auto-moguls to upgrade, perfect, and add to previous achievements in order to stay in the competition.

AUTO INDUSTRY: A WORLD OVERVIEW

1.1 The production of passenger and commercial vehicles has reached a new record of 66.46 million units in 2005. The growth in production has been as follows:

Year	World vehicle Production (units in million)	Percentage Increase/ Decrease
1997	55.87	
1998	53.20	(-)4.77
1999	55.74	4.77
2000	58.33	4.64
2001	56.17	(-)3.70

2002	58.45	4.05
2003	60.09	2.80
2004	64.16	6.77
2005	66.46	3.58

1.2 There has been an addition of 10.59 million vehicle production since 1997. A majority of this growth is coming from the Asia – Pacific region (excluding Japan). The production has nearly stagnated in Western Europe at 17 million, NAFTA at 16 million and Japan at 10 million but it has more than doubled in Asia-Pacific region from 7.1 million in 1997 to 16 million in 2005.

1.3 Again a bulk of this increase in Asia- Pacific region has come from China where production has trebled from 15.82 lakh units in 1997 to 46 lakh in 2005. The second contributor to this growth is India where the production has doubled going up from 7.72 lakh units in 1997 to 15.76 lakh in 2005. The third contributor to this growth is Thailand where it has increased from 3.60 lakh units in 1997 to 8 lakh units in 2005. It is pertinent to note that the global installed capacity in the sector is around 80 million, so still an idle capacity of about 15 million exists world wide.

1.4 The 12 global majors with 2 million units plus per year production capacity account for 53.02 million of vehicle produced in 2005 against a total of 66.46 million, which is almost 80 percent of the total production.

1.5 Global motorcycle production has increased from 30 million units in 2003 to 40 million units in 2005. Asia is the major producer of motorcycles in the world with 90% share. Within Asia, China accounts for 17 million units whereas India is at second position with 7.7 million units a year.

1.6 The industry being highly capital intensive, it offers huge entry barriers, so these existing global majors themselves are realigning their production bases coming closer to the scene of action which is in Asia- Pacific region mainly in China , India and Thailand. Besides the above the constant pressure for cost reduction on OEMs is forcing them to outsource more and more components from Low Cost Countries. The combined forces, as outlined above, have opened a floodgate of opportunities for Indian Automotive Industry.

1.7 India, with its strength of a huge domestic market, rapidly growing purchasing power, market linked exchange rate and well established financial market and corporate governance laws, is working as an attractive destination for new investments in this sector.

1.8 The rapid improvement in infrastructure including road, port, power and world class facilities for Testing, Certification and Homologation, ensuring availability of trained manpower and alignment of government policies with a view to promote fair competition can make Indian Automotive Industry more competitive in world arena besides making the country a favorable destination for investment by global majors in auto industry.

EVOLUTION OF INDIAN AUTOMOBILE INDUSTRY:

The automotive industry in India started developing in the 1940s, distinct growth rates started only in the 1970s. Cars were considered ultra luxury products, manufacturing was strictly licensed, expansion was limited and there was a restrictive tariff structure. The decade 1985 to 1995 saw the entry of Maruti Udyog in the passenger car segment in collaboration with Suzuki of Japan, and Japanese manufacturers in the two-wheeler and commercial vehicle segments.

After economic reforms took place in India in 1991, it is only in the mid-1990s, that the automotive industry started opening up. Thus, the mid-1990s are characterized by the entry of global automotive manufacturers through joint ventures in India. Till the 1990s, the automotive industry in India was primarily dominated by Maruti Suzuki, Tata Motors, Hindustan Motors and Premier Padmini in the passenger car segment. Ashok Leyland, Tata Motors and Mahindra & Mahindra dominated the commercial vehicle segment while Bajaj Auto dominated the two-wheeler segment. After the year 2000, further policy changes were introduced and focus on exports in the industry started increasing. Following that, the Core Group on Automotive Research & Development (CAR) was set up in the year 2003 to identify priority areas for Research and Development (R&D) in India.

Contribution of the automotive industry to GDP and employment in the 1990s:

Turnover of the automotive industry in the year 1998–1999 was Rs. 360 billion and the industry provided employment to over 10 million people directly and indirectly. The contribution of the automotive industry to the GDP during the same period was 4 per cent rising from 2.77 per cent recorded in the year 1992–1993.

Surge in road freight and passenger traffic generated demand for automobiles in 1990s:

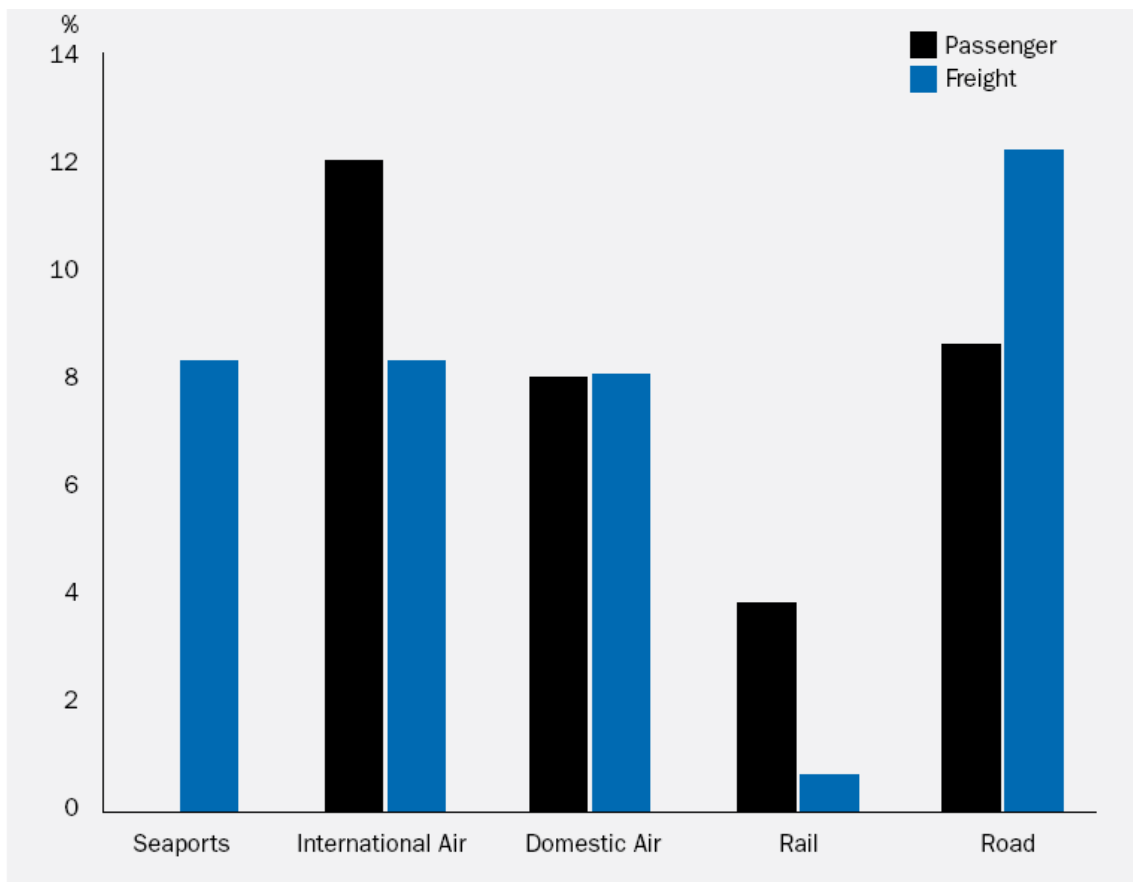
The average rate of growth of freight and passenger transport on the road was the highest compared to other means of transport such as rail, air and sea throughout the 1990s. Even in terms of absolute volume, traffic handled by roads was the maximum among the other means. This partly explains the rise in growth of the automotive industry especially since the 1990s.

The figure below shows the trends in traffic movement among different means in the transport sector. Among the other means of transport, roads

experienced the highest rate of increase in freight traffic, and the second highest rate of increase in passenger traffic in the 1990s. This figure depicts that transportation by road increased the most overall in the transport sector. Passenger transport by international air increased the maximum, but the high growth rates achieved in that regard, are over a much smaller base as compared to road transport or rail transport.

Highest increase in road transport among the other means of transport in 1990s:

The figure below shows the average rate of growth of different means of transport in transport in terms of freight and passenger traffic. All figures are in percentage.



Source: India's Transport Sector: The Challenges Ahead, The World Bank Group

The history of the automobile actually began 5,000 years ago when the first wheel was used for transportation, probably on Mesopotamian chariots in 3200 BC (The Great Idea Finder 2005). The dawn of automobile in India actually goes back to 4000 BC when the first wheel was used for transportation in India in form of chariots. Since then it has traveled a long way, from chariots to bullock cart, to the jet-age. It was in 1898 that the first motorcar rode down India's roads in Mumbai. Mumbai had its first taxicabs in the early 1900. Then for the next many years, cars were imported to satisfy domestic demand. Till the First World War, about 4,000 cars were directly imported to India from foreign manufacturers (Auto India Mart 2007). The

growing demand for these cars established the underlying requirements of the Indian auto market that these merchants were quick to pounce upon. Between 1910 and 1920 the automobile industry made a humble beginning by setting up assembly plants in Mumbai, Calcutta and Chennai. The import/assembly of vehicles grew consistently after the 1920s, crossing the 30,000 mark in 1930 (India Infoline 2007). The Hindustan Motors (HM) was set up in 1942 and in 1944; Premier Autobackmobile (PAL) was established to manufacture automobiles in India. However, it was PAL who produced the first car in India in 1946 by assembling

'Dodge De Soto' and 'Plymouth' cars at its Kurla plant in Mumbai, as HM concentrated on auto components and could produce their first car only in 1949. After a short period of time, it was another company, Mahindra and Mahindra (M&M), which manufactured sturdier utility vehicles, namely the American Jeep. In 1950s, Government of India granted approval to only 7 car dealers to operate in India. The 1960s witnessed establishment of two and three wheeler industry in India, and in the 1970s, things remained much the same. Since the 1980s, the Indian car industry has seen a major resurgence with the opening up of Indian shores to foreign manufacturers and collaborators. The 1990s became the melting point for the car industry in here when large number of foreign players came into the country through collaborations and partnerships. The Table 1 below shows the trend of production growth in the industry. It can be seen in Figure 3 too that growth was steep only after 1980s after the partial liberalization and steeper after total decontrol in 1991. Maximum decadal growth rate of 347.46% is seen between 1980 and 1990, when Maruti Udyog Ltd. entered market with other Japanese two-wheeler firms.

Table 1: Decadal Growth of Indian Automobile Industry

Source: SIAM 2007

YEARS	PRODUCTION	
	Number	Growth (%)
1960-61	41535	-
1970-71	181752	337.59
1980-81	625143	243.95
1990-91	2797241	347.46
2000-01	5497416	96.53
2006-07	11065142	101.28

Source: SIAM 2007

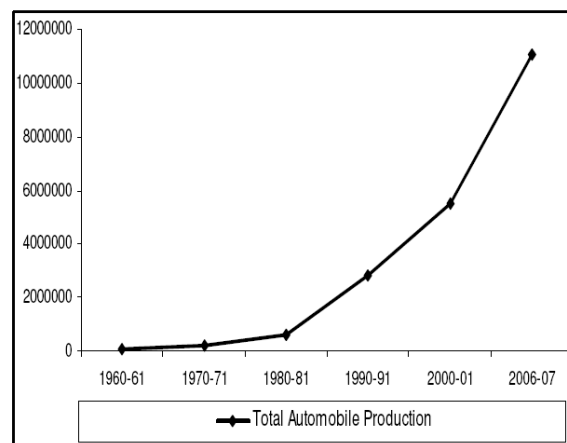


Figure 3: Trend of Production in Indian Automobile Industry

The Indian industrial sector has undergone fundamental regulatory changes in recent times as a consequence of the economic reforms program put together between 1988 and 1991. India moved away from the control era

towards the 'open' economy model. The policy changes in the automobile industry took place in two phases, i.e. pre-liberalization (total control and partial de-control) and post-liberalization periods.

The Automobile industry in India grew under a highly regulated and protected economic environment over the period 1950 to 1985. There were quantitative restrictions on imports of raw materials, components, and equipments through licensing and a tariff structure designed to restrict the market. Also there were restrictions on FDI, and imposition of indigenization of components production protected the domestic market. The initial changes, introduced in 1985, eased the licensing requirements, broad-based the classification of vehicles for issue of licenses, allowed selective expansion of capacity and partially relaxed controls with regard to foreign collaborations, imports of capital goods, raw materials and spares. Though liberalization of economic policies and the outward orientation introduced since 1991 brought about a dramatic change in this industry. these measures represented a 'domestic liberalization', the policy environment continued being geared towards imposing trade and investment regulations, constraining the growth of big business houses and regulating exchange rates (Narayanan 2001). Liberalisation of economic policies and the outward orientation introduced since 1991 brought about a dramatic change in this industry. These new measures effectively dismantled the license *raj*, which had made it difficult for Indian firms to import machinery and know-how, and had disallowed equity ownerships by foreign firms (Krishnan 2002). In July 1991, approval of foreign technology agreements and upto 51% foreign equity investment was allowed for the automotive sector. Further in 1997, some more reforms were made where new foreign entrants required establishing actual production facilities, the minimum foreign equity was raised to \$50 million, and the minimum indigenization was to be 50. Auto policy announced by the government in 2002 (Ministry of Heavy Industries and Public Enterprises 2002) permitted 100% foreign equity on an automatic basis. The Automotive Mission Plan 2006-2016 was released in 2007, which visualizes India emerging as a destination of choice in the world for design and manufacture of automobiles and auto components with output reaching a level of \$ 145 billion accounting for more than 10% of the GDP and providing additional employment to 25 million people by 2016.

THE INDUSTRY BACKGROUND:

In 1998 the Society of Indian Automobile Manufacturers (SIAM) was formed with a goal to promote sustainable development of the automobile industry, focusing on technology up gradation for environment and safety. SIAM is an important channel of communication for the industry with Government and National and International organizations. In keeping with a liberalized economic environment, the Society is committed to playing a proactive role in all issues of relevance to the industry. SIAM organizes, biennially, the Auto Expo series of Trade Fairs in cooperation with Confederation of Indian Industry (CII) and Automotive Component Manufacturers Association of India (ACMA). SIAM promotes the advancement of vehicular technology in India, which would ensure that the products are environment friendly, with enhanced safety features, are cost effective and provide mobility to most people.

The automotive industry in India has come a long way from its inception in the early 1940s to the present day dynamic form. As compared to a mere production of 4,000 vehicles in 1950, the production of the industry crossed a historic landmark of 10 million vehicles in 2006. The industry is witnessing an impressive growth in production in all the vehicle segments; see Figure 1.

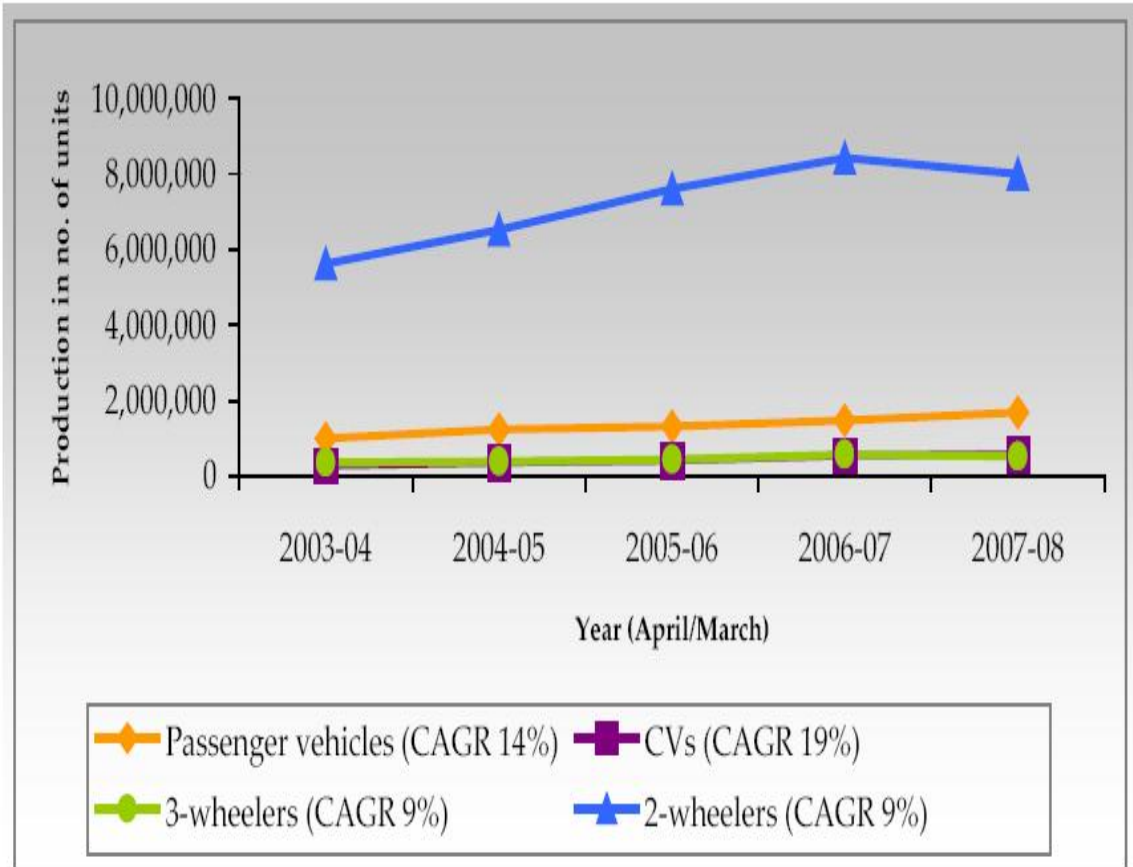


Figure 1: Production of India's automotive industry
(Source: ACMA 2008)

The Indian automotive industry today operates in terms of the dynamics of an open market. Both the automobile and the auto-component industries, which constitute the automotive industry, exhibit a good balance of domestic and foreign players. The direct foreign competition in the industry is on a continuous rise as evident from the industry's FDI figures; see Figure 2.

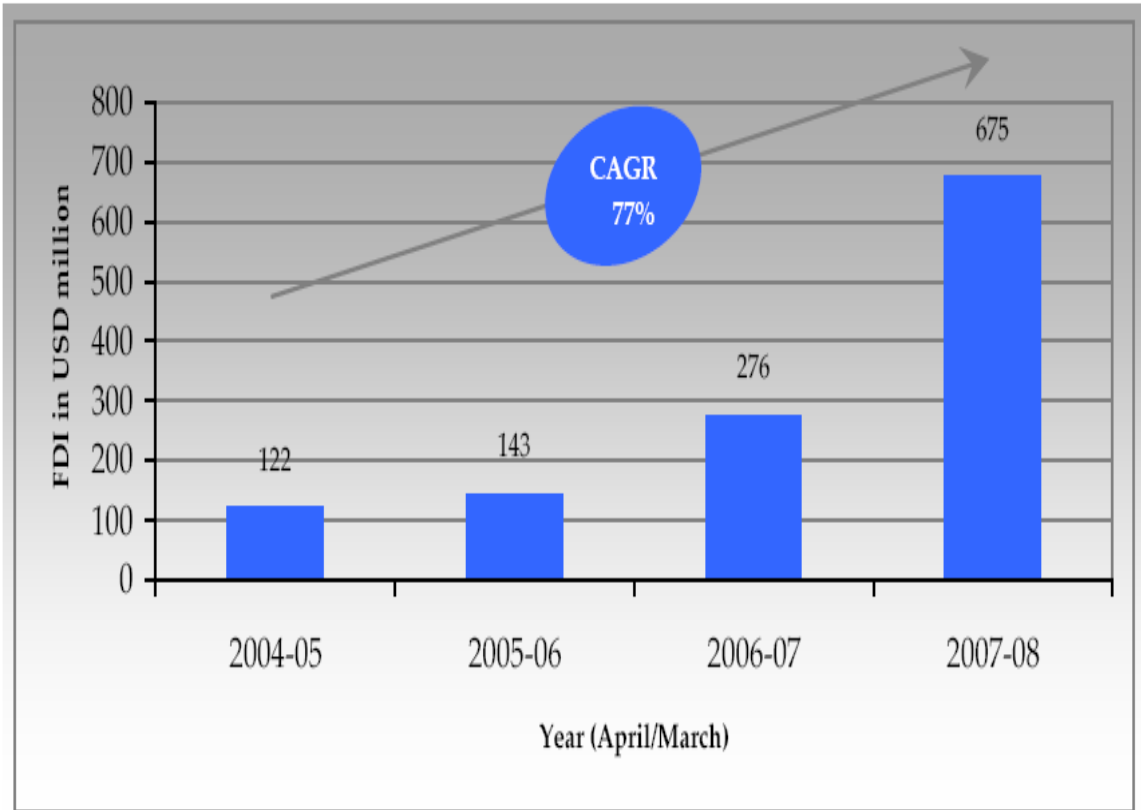


Figure 2: FDI trend in the Indian automotive industry
(Source: GOI 2008)

The influx of global auto-majors and Tier-1 suppliers into the Indian automotive industry has catalysed the development of capabilities of the industry. The industry is producing nearly all kind of vehicles and components. The exports and R&D efforts of the industry are on the rise. Today, the Indian consumers have at their disposal a broad array of vehicle models to select from at competitive prices and satisfactory quality levels.

However, much of the growth of the Indian automotive industry has happened over the last two decades. Prior to the 1980s, the functioning of the industry was heavily regulated by means of a bureaucratic licensing system. Automotive firms were required to obtain licenses from the Indian government for entry, expansion, diversification and relocation. The vehicle models produced by the industry were restricted to an absolute minimum. On one hand, such restrictive government policies helped the Indian automotive industry to develop indigenous capabilities, while on the other, it hindered the process of demand development and led to unsatisfactory industrial performance (Narayana 1989). The partial-liberalisation of 1980s and the liberalisation of 1990s have put the industry on the fast track of development. Today, the industry with its rising contribution to the GDP is considered as a sunrise sector for the Indian economy (GOI 2006).

The development of the Indian automotive industry has been shaped by the demand on one hand and the government interventions on the other, the influence of the latter being considerable (Narayana 1989). Various government interventions in the form of policies, existing at various points of time, have influenced the development of India's automotive industry. It is of interest in the undertaken study to identify these government policies and to understand the influence they had on the development of India's automotive industry. It is also of interest to understand the considerations made on the part of the Indian government that underlie these policies and to explore the role played by it in different stages of industry's competitive development. Such a study shall help to obtain a broader understanding about the role the government plays in the development of an industry. It shall also help to explain the industry structure and the demand characteristics of the Indian automotive industry as we see it today.

AUTOMOBILE INDUSTRY IN INDIA:

A well developed transport network indicates a well developed economy. For rapid development a well-developed and well-knit transportation system is essential. As India's transport network is developing at a fast pace, **Indian Automobile Industry** is growing too. Also, the **Automobile industry** has strong backward and forward linkages and hence provides employment to a large section of the population. Thus the role of Automobile Industry cannot be overlooked in Indian Economy. India is emerging as a source of high value and advanced quality engineering products and services for multinational companies. India is set to emerge not only as a large domestic market for automotive

manufacturers, but also as a crucial link in the global automotive chain. Among other industries, the automotive industry in India is understood to be the most dynamic. It has been experiencing strong growth rates after delicensing of the industry in 1991, when major economic reforms took place in India.

Automotive industry plays a pivotal role in country's rapid economic and industrial development. It caters to the requirement of equipment for basic industries like steel, non-ferrous metals, fertilisers, refineries, petrochemicals, shipping, textiles, plastics, glass, rubber, capital equipments, logistics, paper, cement, sugar, etc. It facilitates the improvement in various infrastructure facilities like power, rail and road transport. Due to its deep forward and backward linkages with almost every segment of the economy, the industry has a strong and positive multiplier effect and thus propels progress of a nation. The automotive industry comprises of the automobile and the auto component sectors. It includes passenger cars; light, medium and heavy commercial vehicles; multi-utility vehicles such as jeeps, scooters, motor-cycles, three wheelers, tractors, etc; and auto components like engine parts, drive and transmission parts, suspension and braking parts , electricals, body and chassis parts; etc.

In India, automotive is one of the largest industries showing impressive growth over the years and has been significantly making increasing contribution to overall industrial development in the country. Presently, India is the world's second largest manufacturer of two wheelers, fifth largest manufacturer of commercial vehicles as well as largest manufacturer of tractors. It is the fourth largest passenger car market in Asia as well as a home to the largest motor cycle manufacturer. The installed capacity of the automobile sector has been 9,540,000 vehicles, comprising 1,590,000 four wheelers (including passenger cars) and 7,950,000 two and three wheelers. The sector has shown great advances in terms of development, spread, absorption of newer technologies and flexibility in the wake of changing business scenario. It is also finding increasing recognition worldwide and a beginning has been made in exports of vehicles as well as components. During the year 2006-07 (up to November 2006), the automobile exports registered a growth of 27.25 per cent.

The Indian automotive industry has made rapid strides since delicensing and opening up of the sector in 1991. It has witnessed the entry of several new manufacturers with the state-of-art technology, thus replacing the monopoly of few manufacturers. At present, there are 15 manufacturers of passenger cars and multi-utility vehicles, 9 manufacturers of commercial vehicles, 14 of two/three wheelers and 14 of tractor, besides 5 manufacturers of engines. They have set up a manufacturing capacity of over 95 lakh vehicles per annum. The norms for foreign investment and import of technology have also been liberalised over the years for manufacture of vehicles. At present, 100% foreign direct investment (FDI) is permissible under the automatic route in this sector, including passenger car segment. The import of technology for technology upgradation on royalty

payment of 5% without any duration limit and lump sum payment of USD 2 million is also allowed under automatic route in this sector. The Indian automotive industry has already attained a turnover of Rs. 1,65,000 crore (34 billion USD) and has provided direct and indirect employment to 1.31 crore people in the country.

The growth of Indian middle class, with increasing purchasing power, along with strong macro-economic fundamentals have attracted the major auto manufacturers to Indian market. The market linked exchange rate, well established financial market, stable policy governance work and availability of trained manpower have also shifted new capacities and flow of capital to the auto industry of India. All these have not only enhanced competition in auto companies and resulted in multiple choices for Indian consumers at competitive costs, but have also ensured a remarkable improvement in the industry's productivity, which is one of the highest in Indian manufacturing sector.

LARGEST MANUFACTURERS OF THE AUTOMOTIVE INDUSTRY:

The largest Indian passenger car manufacturers include Tata Motors, Maruti Suzuki, Mahindra & Mahindra and Hindustan Motors. Presence of foreign players such as Mercedes-Benz, Fiat, General Motors and Toyota is also growing in this segment. Recently, the passenger car segment has also seen the entry of other global majors such as BMW, Audi, Volkswagen and Volvo.

Major Indian manufacturers of commercial vehicles are Tata Motors, Ashok Leyland, Eicher Motors, Mahindra & Mahindra and Force Motors. Like the passenger car segment, this segment has also seen foreign companies such as MAN, ITC, Mercedes-Benz, Scania and Hyundai entering the market. Two-wheeler manufacturing is dominated by Indian companies like Hero Honda, Bajaj Auto and TVS. Foreign players in this segment include Honda, Yamaha and Piaggio. Three-wheeler manufacturing is also led by Indian companies that include Bajaj Auto, Force Motors and Mahindra & Mahindra.

MARKET OVERVIEW:

The automotive sector comprises the Original Equipment Manufacturers (OEMs) and auto component manufacturers. Globally, the automotive industry is recognised as a key component and driver of national economy. The global automotive industry is in the midst of a major structural transformation –

- Among OEMs, global conglomerates are emerging, driven by mergers and alliances among manufacturers (eg: GM/Fiat/ Suzuki; Ford/Volvo/Mazda).

- Component manufacturers, or suppliers, are getting Tierised, with Tier 1 suppliers taking on the role of component aggregation and module supply/assembly, and component suppliers being relegated to Tiers 2 or 3.
- Relationships between OEMs and suppliers (especially Tier 1s) are becoming increasingly collaborative.

These trends have affected the Indian auto industry as well, leading to a rapid transformation of the industry over the last decade or so. After the end of licensing in 1993, the industry has witnessed rapid growth in volumes and capacity, and 17 new ventures have come up in the last 10 years. These include global giants such as General Motors, Ford, Toyota, Honda, Hyundai and Fiat. The industry encompasses commercial vehicles, multi-utility vehicles, passenger cars, two wheelers, three wheelers and auto components.

The domestic automobile market has been growing at 14.2 per cent CAGR over the past 4 years (2000-01 to 2004-05), while the auto components market has been growing at 19.2 per cent CAGR (2000-01 to 2003-04). The industry (OEMs and suppliers together) contributed nearly 4 per cent to the country's GDP in 2003-04. The automotive sector also offers significant employment opportunities. It employs 0.45 million people directly and around 10 million people indirectly.

The industry's capabilities in design, engineering and manufacturing have been recognised the world over, and most automotive majors are looking to increasingly source auto components from India. India is emerging as one of the most attractive automotive markets in the world, and is poised to become a key sourcing base for auto components. The table below captures the highlights of the sector in India that illustrates its growing significance.

Indian Automobile Industry
Largest three wheeler market in the world
2nd largest two wheeler market in the world
4th largest passenger vehicle market in Asia
4th largest tractor market in the world
5th largest commercial vehicle market in the world

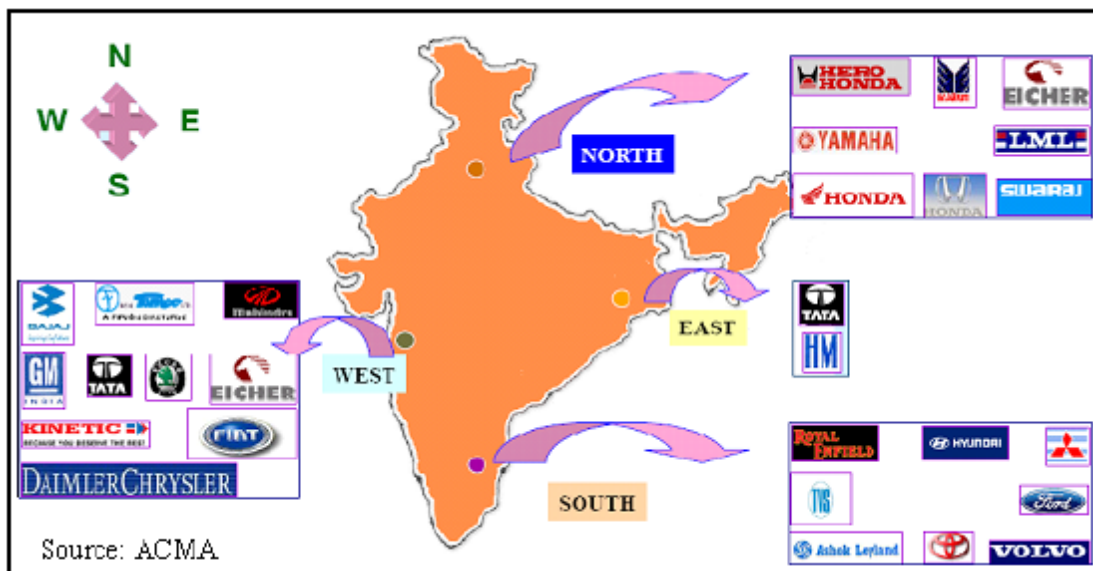
THE INDUSTRY STRUCTURE SPANS ALL SEGMENTS AND IS CONCENTRATED IN REGIONAL STRUCTURE:

The India automotive sector has a presence across all vehicle segments and key components. In terms of volume, two wheelers dominate the sector, with nearly 80 per cent share, followed by passenger vehicles with 13 per cent. The industry had few players and was protected from global competition till the 1990s. After government lifted licensing in 1993, 17 new ventures have come up. At present, there are 12 manufacturers of passenger cars, 5 manufacturers of multi utility vehicles (MUVs), 9 manufacturers of commercial vehicles, 12 of two wheelers and 4 of three wheelers, besides 5 manufacturers of engines. With the arrival of global players, the sector has become highly competitive.

Automobile manufacturing units are located all over India. These are, however, concentrated in some pockets such as Chennai and Bangalore in the south, Pune in the west, the National Capital Region (NCR, which includes New Delhi and its suburban districts) in the north, Jamshedpur and Kolkata in the east and Pithampur in the central region. Following global trends, the Indian automotive sector also has most auto suppliers located close to the manufacturing locations of OEMs, forming regional automotive clusters. Broadly, the three main clusters are centered around Chennai, Pune and the NCR.

The Indian automotive component industry is highly fragmented. There are nearly 6,400 players in the sector, of which only about 6 per cent are organised and the remaining 94 per cent are small-scale, unorganized players. In terms of value added, however, the organised players account for nearly 77 per cent of the output in the sector.

The sector manufactures components across all key vehicle systems. The break-up of the output from the organised sector, in value terms, across key vehicle systems, is shown in the figure.

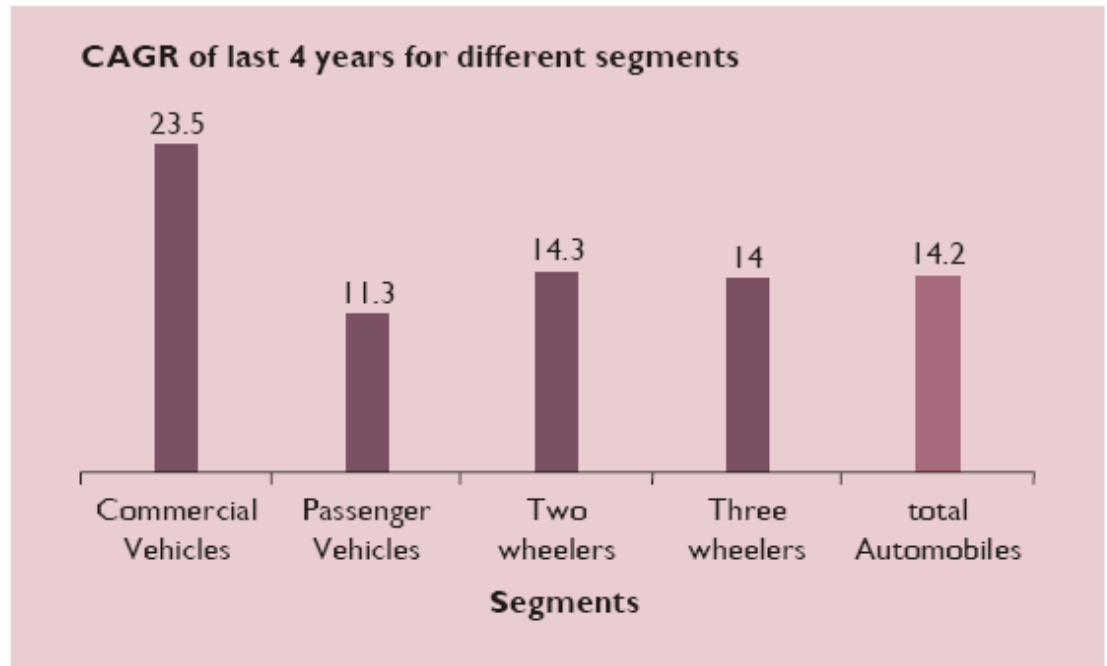


The automotive sector is growing strongly in both domestic and exports market

Indian automobile industry has been performing well both in the domestic and the international market.

Automobiles - domestic performance

The production and domestic sales of the automobiles in India have been growing strongly. While production increased from 4.8 million units in 2000-1 to 8.5 million units in 2004-05 (a CAGR of over 15 per cent), domestic sales during the same period have gone up from 4.6 million to 7.9 million units (CAGR 14.2 per cent).



Source: SIAM, KPMG Analysis

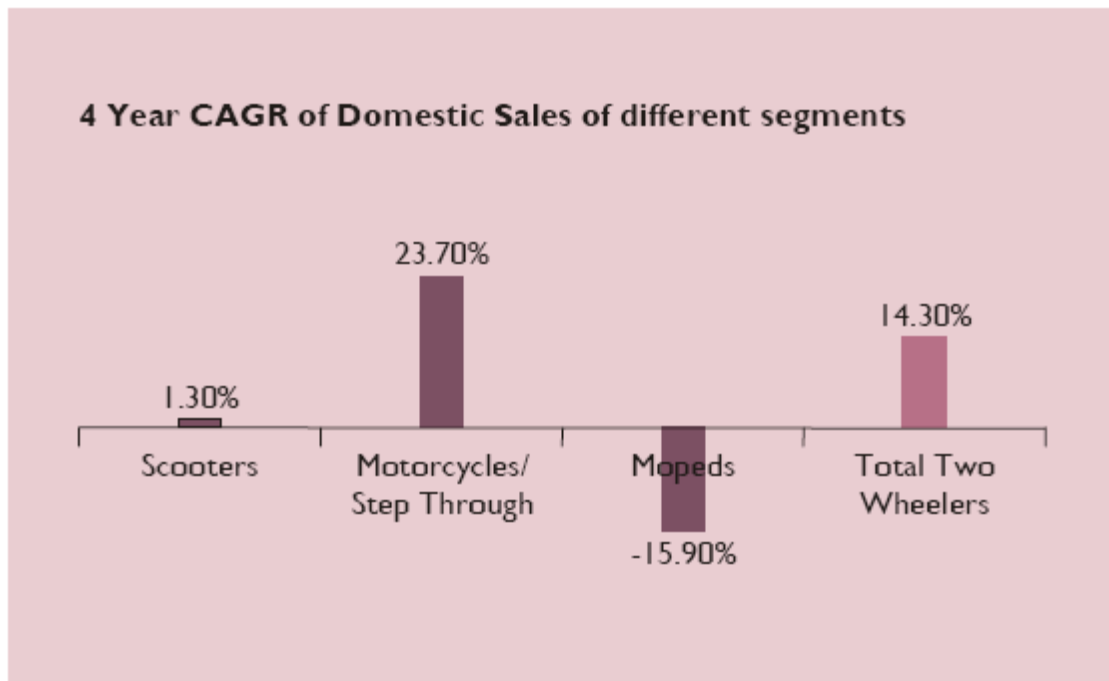
A positive trend in the domestic market is that the growth has not been driven by one or two segments, but is consistent across all key segments. Two wheelers, which constitute the majority of the industry volume, have been growing at a rate of 14.3 per cent, three wheelers at a rate of 14 per cent and passenger vehicles at a rate of 11.3 per cent. Commercial vehicles have been growing at a higher rate of nearly 23.5 per cent, although from a lower base.

Passenger vehicles consist of passenger cars and utility vehicles. This segment has been growing at a CAGR of 11.3 per cent for the past four years. A key trend in this segment is that with rising income levels and availability of better financing options, customers are increasingly aspiring for higher-end models. There has been a gradual shift from entry-level models to higher-end models in each segment. For example, in passenger cars, till recently, the Maruti 800 used to define the entry level car, and had a predominant market share. Over the last 3-4

years, higher-end models such as Hyundai Santro, Maruti Wagon R, Alto and Tata Indica have overtaken the Maruti 800. Another development has been the blurring of the dividing line between utility vehicles and passenger cars, with models like Mahindra & Mahindra's Scorpio attracting customers from both segments. Upper end sports utility vehicles (SUVs) attract potential luxury car buyers by offering the same level of comfort in the interiors, coupled with on-road performance capability.

Two wheelers

The production of two wheelers in India increased from 3.76 million vehicles in 2001 to 6.53 million vehicles in 2005.

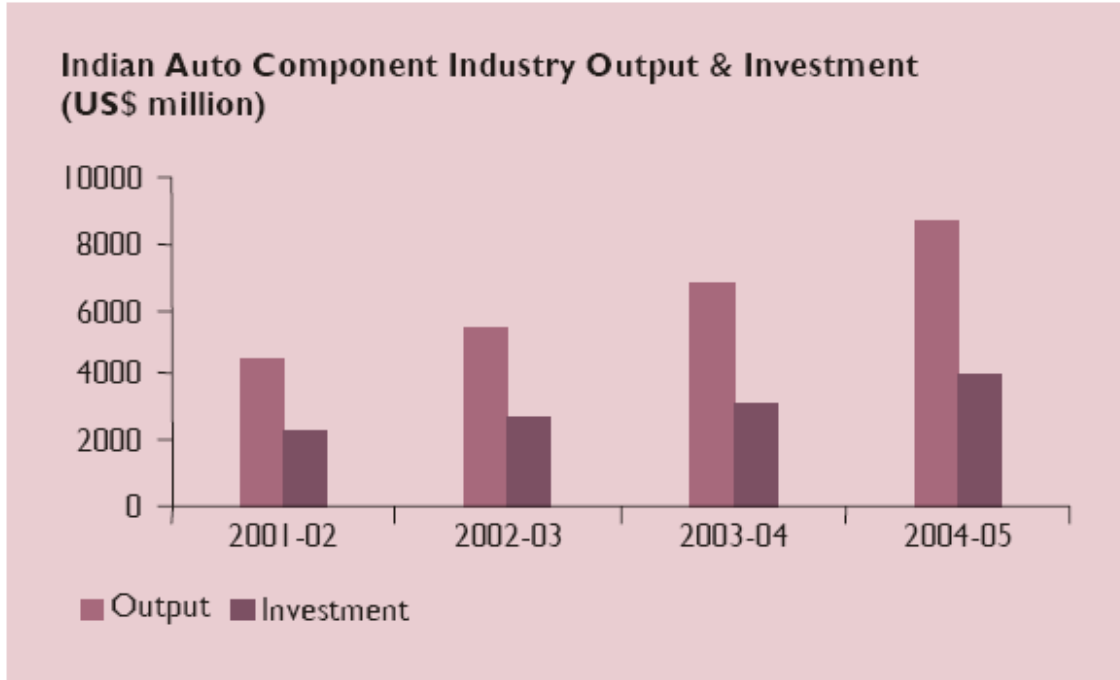


Source: SIAM, KPMG Analysis

The domestic sales have been increasing at a CAGR of 14.3 per cent for the past 4 years. Motorcycles constituted 79.5 per cent of the domestic sales of two wheelers in India and have been growing at nearly 24 per cent CAGR. In the scooter segment, overall domestic sales grew by 1.3 per cent CAGR, driven primarily by ungeared scooters and scooters with automatic gears. The sales of mopeds have declined at a CAGR of 15.9 per cent for the past four years. The motorcycle segment clearly drives the growth of the two wheeler segment in India. The two wheeler segment is being shaped by changing demographics and lifestyles. An increasing number of working women and greater affluence among college goers have led to an increase in demand for ungeared/auto geared scooters. As with the case of passenger vehicles, there is a rising demand for higher-end models that combine style and performance in this segment as well. In motorcycles, for example, models with higher engine capacities (125cc, 150cc or above) are proving very popular.

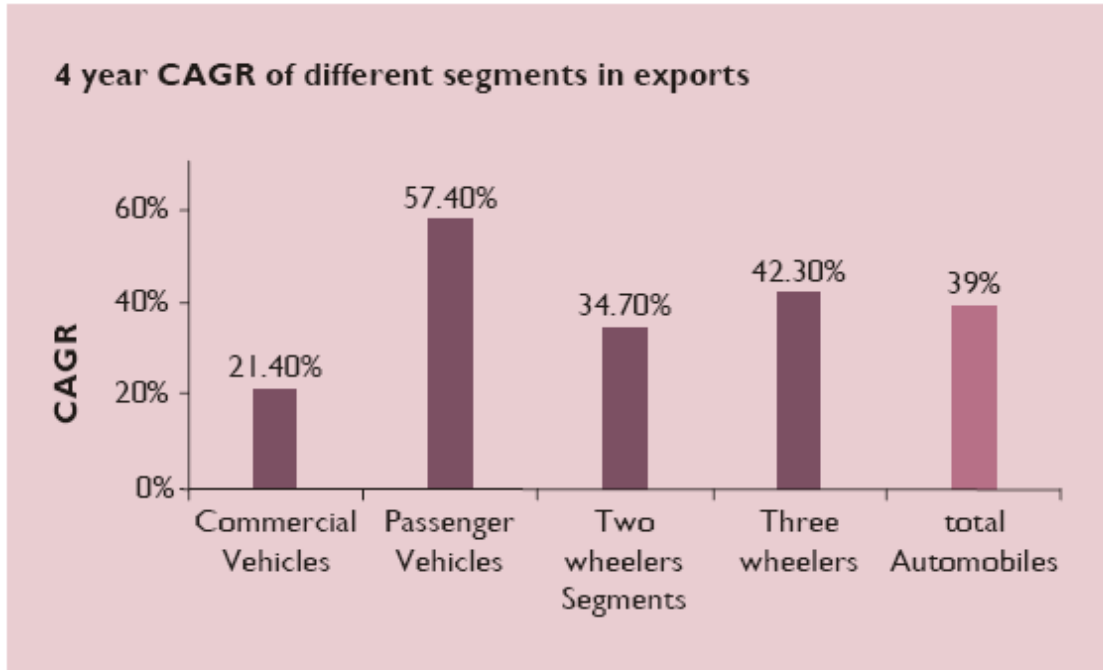
Three wheelers

The three wheeler segment in India is currently small in size, but growing rapidly. The production of three wheelers in India has increased from 203,234 vehicles in 2001 to 374,414 vehicles in 2005. The domestic sales have increased at a CAGR of 14 per cent for the past four years from 181,899 vehicles in 2001 to 307,887 vehicles in 2005. These vehicles find use as passenger vehicles (auto-rickshaws) as well as small capacity commercial vehicles (pick-up vehicles)



Source: ACMA

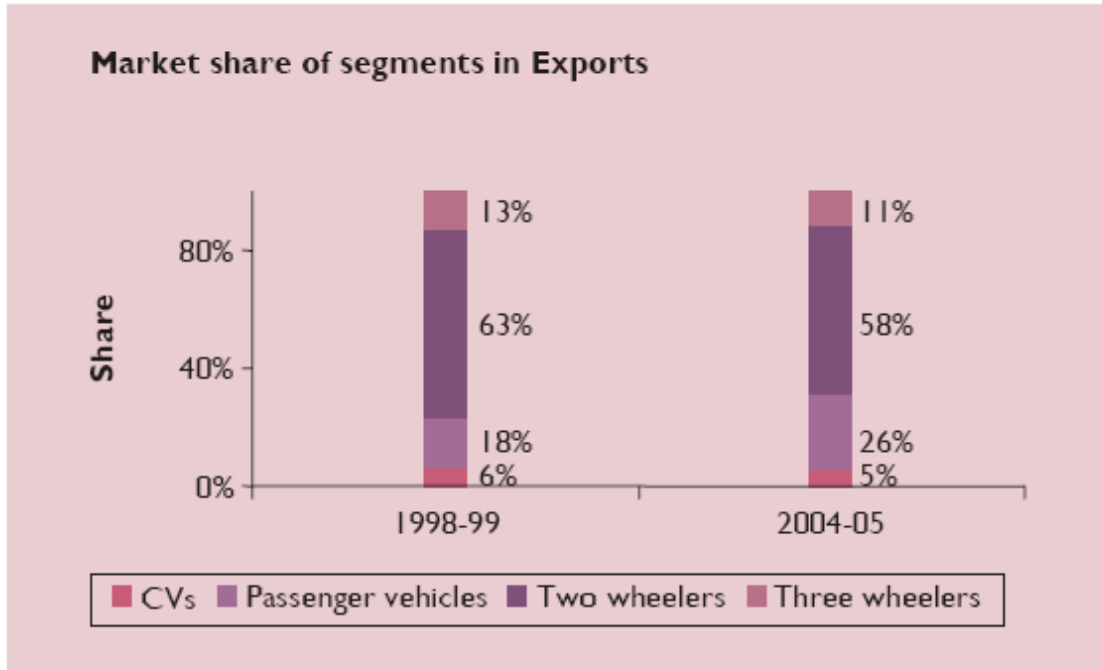
Auto Components - Investments are increasing in line with the output According to Automotive Component Manufacturers Association of India (ACMA), the output of auto component industry in India has increased [at a CAGR of around 25 per cent for the past three years from US\$ 4470 million in 2002 to US\$ 8700 million in 2005. With booming domestic sales and increasing demand from exports, the confidence of industry players is high. This is reflected in the increase in investments in capacity creation and expansion. Investments in this sector have increased from US\$ 2300 million in 2002 to US\$ 3950 million in 2005, a CAGR of 20 per cent.



Source: SIAM, KPMG Analysis

Exports of automobiles from India are booming

While the domestic sales of automobiles have been increasing at a significant rate, exports have taken a quantum leap in recent years. The exports of automobiles from India have been growing at a CAGR of 39 per cent for the past four years.



Source: SIAM, KPMG Analysis

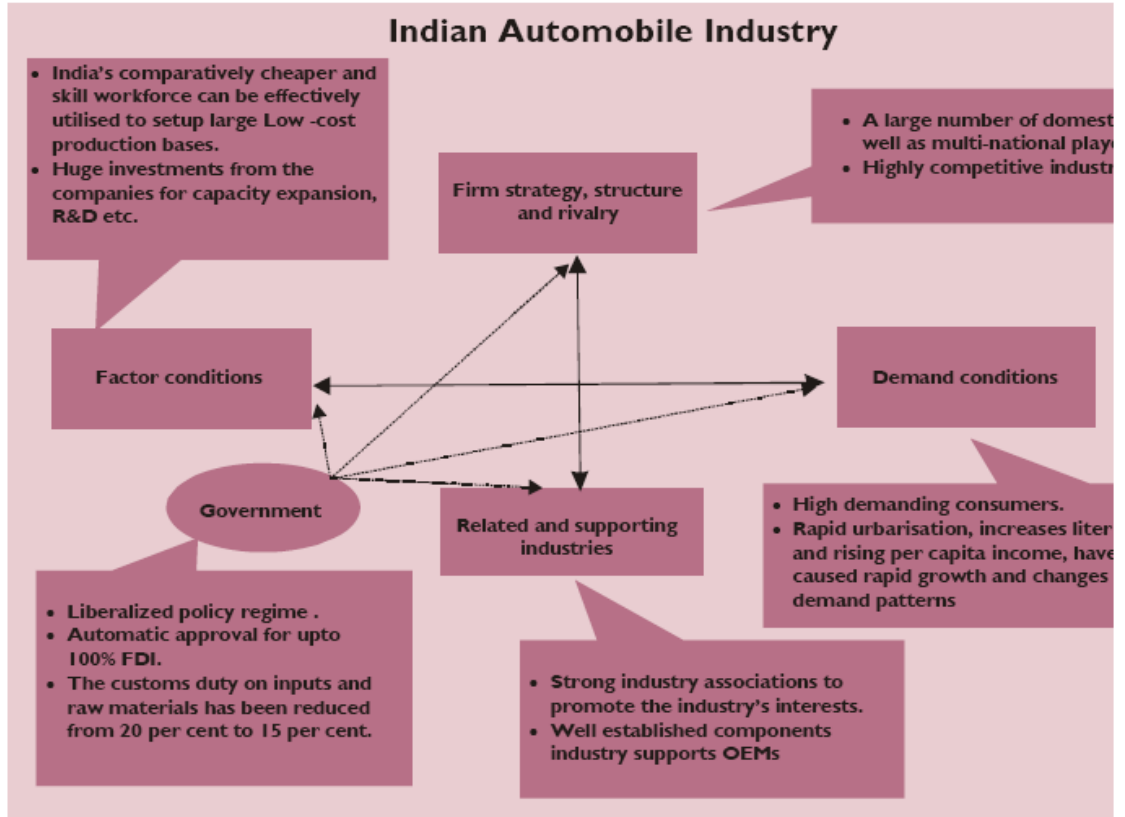
Exports growth has been spearheaded by the passenger vehicle segment, which has grown at a rate of 57.4 per cent. As a result, the share of passenger vehicles in overall

vehicle exports has increased from 18 per cent in 1998-99 to 26 per cent in 2004-05.

Europe is the biggest importer of cars from the country while predominantly African nations import buses and trucks. The Association of South East Asian Nations (ASEAN) region is the prime destination for Indian two wheelers.

Auto Components exports

Large potential Auto component exports from India grew from US\$ 760 million in 2002-03 to an estimated US\$ 1.4 billion in 2004-05. Key export destinations include the Americas (31.1 per cent), Europe (30.3 per cent), Asia (18.2 per cent), Africa (10.7 per cent) and the Middle East (7.6 per cent). Most of the key auto component manufacturers in India are very positive about the outlook for exports, and expect about 15 per cent of their revenue to come from exports over the next 3-5 years. It has been estimated that exports of auto components from India could be around US\$ 20-25 billion by 2015.



LARGEST MANUFACTURERS IN EACH SEGMENT WITHIN THE AUTOMOTIVE INDUSTRY:

Both domestic and foreign manufacturers have been mentioned. The list may not be exhaustive.

SHAREHOLDER VALUE CREATION IN THE AUTOMOBILE INDUSTRY IN INDIA

Passenger cars	Commercial vehicles	Two-wheelers	Three-wheelers
Maruti Suzuki	Ashok Leyland	Hero Honda	Bajaj Auto
Tata Motors	Tata Motors	Bajaj Auto	Piaggio
Mahindra & Mahindra	Eicher Motors	TVS	Mahindra & Mahindra
Hindustan Motors	Swaraj Mazda	Royal Enfield Motors	TVS Motors
Honda	Volvo	Kinetic Motors	Tata Motors
Toyota	MAN	LML India	Force Motors
Volkswagen	ITEC	Suzuki Motors	–
General Motors	Scania	Yamaha Motors	–
Ford	Mercedes-Benz	–	–
Audi	Hyundai	–	–

Source: The table has been compiled based on industry research and analysis

AUTOMOBILE PRODUCTION TRENDS

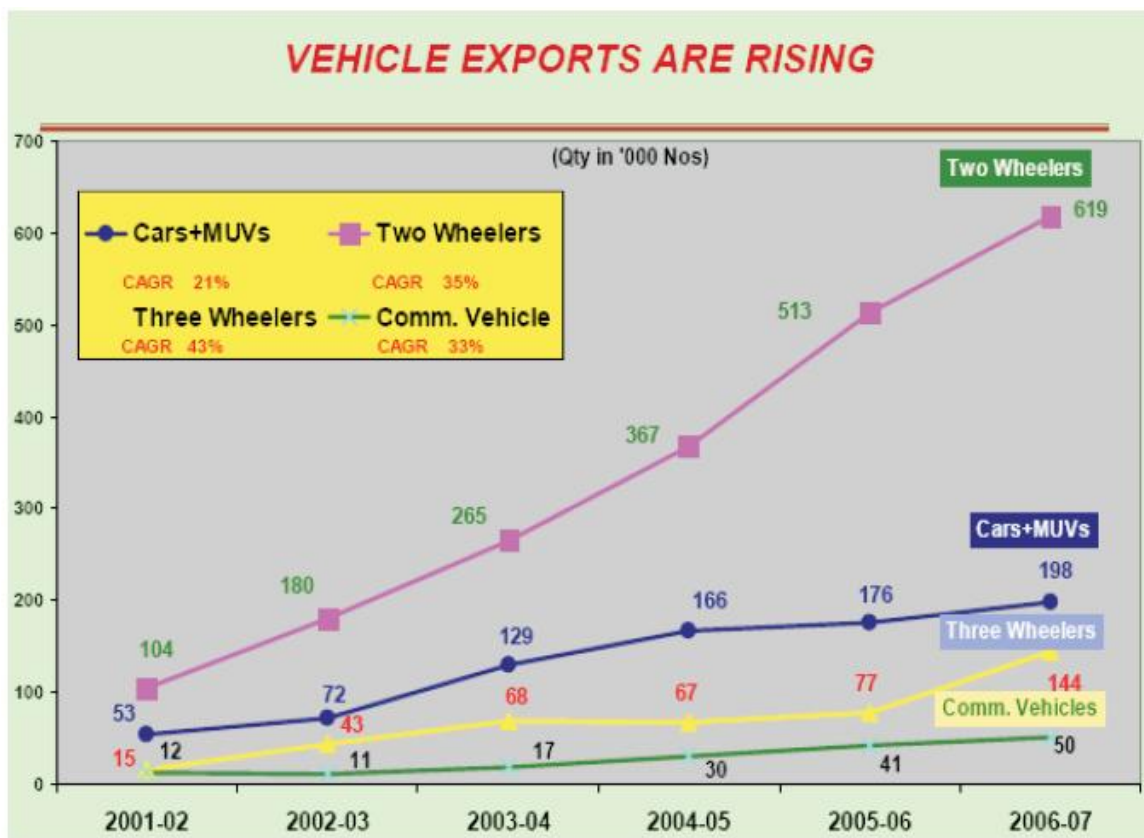
Category	2003-04	2004-05	2005-06	2006-07	CAGR
Total Passenger Vehicles	989.560	1.209.876	1.309.300	1.544.850	11,77%
Total Commercial Vehicles	275.040	353.703	391.083	520.000	17,26%
Three Wheelers	356.223	374.445	434.423	556.124	11,77%
Total Two Wheelers	5.622.741	6.529.829	7.608.697	8.444.168	10,70%
Grand Total	7.243.564	8.467.853	9.743.503	11.065.142	11,17%

Manufacturing Hub In India

Company	Particulars
Hyundai	Export Base for Small Cars.
Skoda	Hub for exports of cars to neighbouring countries.
Ford	Exporting CKDs of Ikon to South Africa & other countries.
Mitsubishi & Yamaha	Hub for 125 cc Motorcycles.
Maruti Suzuki	Exports cars to EU.
Honda	Hub for two-wheelers exports.

Manufacturing Hub for Components

Company	Particulars
Toyota	
Motor	Global Hub for Transmission.
Daimier	
Chrysler	Sourcing more than 70 million Euro.
Ford	Full Fledged Component Sourcing Team.
Fiat	Sourcing Components.



- Automobile Exports registered a growth of 25,43 % during April- March 2007 over the same period last year.
- Passenger Vehicles Exports grew by 13,05 %.
- Commercial Vehicles exports increased by 22,58 %.
- Three Wheelers exports by 87,17 %.
- Two Wheelers Exports grew by 20,65%

SIZE AND STRUCTURE OF AUTOMOBILE INDUSTRY IN INDIA:

The Indian automotive sector has a presence across all vehicle segments and comprises of key component manufactures, concentrated in regional clusters.

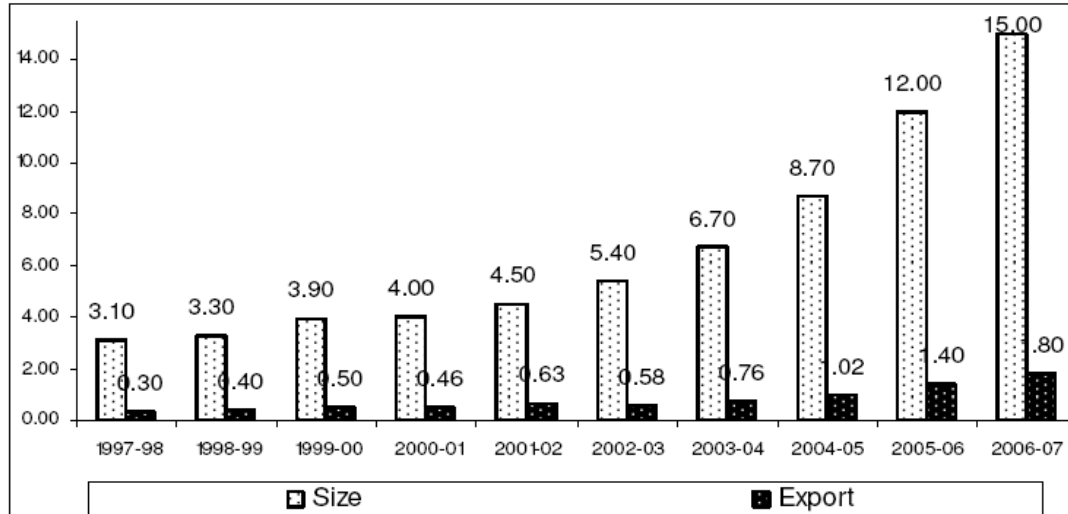
The Indian automobile market is still in its evolutionary stage. Therefore, no fixed or widely accepted method of segmenting the market has evolved as yet. Segmentation has mostly been done on the basis of product types, its weight/size or product uses. It is categorized into following four segments namely; Commercial Vehicles, Passenger Vehicles, Two Wheeler and Three Wheelers, which covers 5%, 14%, 77% and 4% of the total market share of the industry respectively (Society of Indian Automobile Manufacturers 2007).

It has been noticed that due to its strong backward and forward linkages, the auto industry has grown in clusters of inter-connected companies, which are linked by commonalities and complementarities (Ministry of Heavy Industries and Public Enterprises 2006a). While automobile manufacturing units are located in all regions of the country, there have been certain concentrations in some pockets. Following global trends, the Indian automotive sector also has most auto suppliers located close to the manufacturing locations of Original Equipment Manufacturers (OEMs), forming regional automotive clusters. Broadly, the three main clusters are centered around Chennai, Mumbai and Delhi. However, Pune is also developing as a new cluster in the country.

The efficiency of vehicle production is closely linked to that of the supplier base (Singh 2004). In India the auto component industry is one of the important key sectors of the auto industry.

The freeing of the industry from restrictive environment has on the one hand helped it to restructure, absorb newer technologies, align itself to the global developments and realize its potential; on the other hand, this has significantly increased industry's contribution to overall industrial growth in the economy. The firms have resorted to common platforms, modular assemblies and systems integration of component suppliers and e-commerce (CII-DSIR-IIFT 2004). The total numbers of auto component companies, which are member of Automotive Component Manufacturers Association (ACMA), are 536 at present and more than 10,000 firms in unorganized small sector, in tierized format (Ministry of Heavy Industries and Public Enterprises 2006b). The industry is however dominated by a few industrial business houses. The industry in the country has made rapid strides and is growing at a fast pace, which may be summarized in the following Figure 2. The industry has grown at annual compound growth rate of 17% over the last few years from 2000-01 to reach a size of around US \$10 billion in 2005-06, while component exports have grown at around 25 % per annum (IBEF 2006).

Figure 2: Size and Export of Indian Auto Component Industry
(In US \$ billion)



Source: ACMA 2007

The auto component industry has the potential of becoming export driver of the auto industry due to increasing globalization of the supply chains and cost advantage in many component groups supported by relatively (compared to other developing markets) well-developed labour skills and engineering base (Khisty 2000). This will help the industry to mark its global presence.

The automotive industry is one of the largest industries in India and is of high strategic importance to the Indian manufacturing sector overall. The industry has been growing at a fast and steady pace over the past five years registering a CAGR of 17 per cent. According to the Indian Brand Equity Foundation (IBEF), India is envisaged to be the third largest automobile market in the world by 2030 only behind USA and China.¹⁹ According to the UNIDO International Yearbook of Industrial Statistics 2008, India ranks 12th among the world's top 15 automotive nations. Given below are some of the key features of the automotive industry in India that indicate the size of the Indian automotive industry:

- Fourth largest market for passenger cars in Asia
- Second largest manufacturer of two-wheelers worldwide
- Fifth largest manufacturer of commercial vehicles worldwide
- Largest manufacturer of tractors and three-wheelers worldwide

PRODUCTION TRENDS ACROSS INDUSTRY SEGMENTS:

The growth of the automotive industry has been due to increase in production across segments. The most notable increases in growth have been seen in the passenger cars segment, commercial vehicles segment and the three-wheelers segment. The largest volume in production is in the two-wheelers segment, followed by the passenger cars segment and the commercial vehicles segment in that order.

During the last few years, certain macroeconomic conditions have helped the automotive industry to grow. The GOI has undertaken supportive policies for the automotive industry, there is easier availability of finance as compared to the 1990s and the real income of the Indian consumer is increasing. This is leading to increased purchasing power which is driving demand in the passenger cars segment and the two-wheelers segment. Demand for commercial vehicles has increased due to further development of the manufacturing sector, more trade and commerce between regions, increased road transport (passenger and freight) owing to the construction of more national highways and better roads. The table on the next page shows the production trends across segments in the industry from the year 2002–2003 till 2006–2007.

PRODUCTION FIGURES FOR EACH SEGMENT SHOW STEADY GROWTH RATES

The details of production are for the years 2002–2003 till 2006–2007.

All numbers are in '000 units while growth rate is in percentage.²¹

Vehicle category	2002–2003	2003–2004	2004–2005	2005–2006	2006–2007
Passenger cars	609	843	128	1 113	1 323
Utility vehicles	114	146	182	197	222
Commercial vehicles	204	275	354	391	520
Two-wheelers	5 076	5 623	5 530	7 609	8 442
Three-wheelers	277	356	374	434	556
Grand total	6 280	7 244	8 468	9 744	11 065
Growth rate	18.13	15.34	16.90	15.06	13.56

Source: Ministry of Heavy Industries and Public Enterprises

Passenger cars and utility vehicles

The passenger cars and utility vehicles segments grew by 18 per cent in 2006–2007, and have been growing at 12 per cent CAGR over the last decade. The passenger cars segment grew by 18.35 per cent, utility vehicles segment grew by 13.26 per cent and the Multi-Purpose Vehicles (MPVs) segment grew by 27 per cent in 2006–2007.

PRODUCTION FIGURES OF PASSENGER CARS AND UTILITY VEHICLES SEGMENTS

The figures are for the years 2005–2006 till 2006–2007.
 Figures are in '000 units and growth rate is in percentage.

Category	2005–2006	2006–2007
Passenger cars	1 046	1 238
Utility vehicles	196	222
Multi-purpose vehicles	66	84
Total passenger vehicles	1 308	1 544
Growth rate	–	18.04

Source: The ITP Division, Ministry of External Affairs

Leading small car market

The Indian passenger car market is known to be one of the most price sensitive car markets in the world. The small car sub-segment is hotly contested by several car makers. India is the third largest producer of small cars in the world after Brazil and Japan. Small cars account for 71 per cent of the domestic market of passenger cars. Global automotive majors such as Hyundai and Suzuki already have establishments to produce small cars in India, and companies like Honda, Ford, Renault, and Volkswagen are finalizing their small car plans. For instance, Toyota has announced plans of setting up a new small car manufacturing plant by 2010 with an annual production capacity of 100 000 units.

Tata Motors is launching a car called Nano by end 2008, priced at USD 2 500 making it the world's cheapest car. Given the current projections for the Nano, India can become the world's second largest market for small cars soon. India's second largest motorcycle manufacturer, Bajaj Auto is also bringing out a small car by 2010–2012 in collaboration with Renault and Nissan in the same price range.

PICTURE OF THE TATA NANO

The Tata Nano is set to revolutionize the small car market



Growing luxury car market

However, this does not mean that the luxury car market is not growing. Car manufacturers such as Audi, BMW, Volvo, Bentley and Mercedes-Benz have a big portfolio of luxury cars in India that are growing in popularity. As an indication, Mercedes Benz recorded a growth of 59 per cent in sales in the first quarter of 2008. This segment is expected to witness several launches of luxury cars and Sports Utility Vehicles (SUVs).²⁵ In fact Paul de Voijs, Managing Director of Volvo India said, “India is a very exciting market and the luxury car market is growing exponentially.” He added, “We see the luxury car market here more than doubling by 2009 on organic growth, upgraders, new launches, and because this segment grows faster in emerging markets”.

Commercial vehicles

The commercial vehicles segment in India can be divided into two sub-segments, medium and heavy commercial vehicles, and light commercial vehicles. Commercial vehicles production has grown at an average rate of 21.4 per cent between 2003–2004 and 2006–2007. Growth in this segment is driven by factors like general economic trends, improvement in infrastructure and replacement period of vehicles. The highway network expansion is expected to improve road conditions and impact the commercial vehicles market positively.

PRODUCTION FIGURES OF THE COMMERCIAL VEHICLES SEGMENT

The figures are for the years 2005–2006 till 2006–2007.
 Figures are in '000 units and growth rate is in percentage.

Category	2005–2006	2006–2007
Medium and heavy vehicles	219	294
Light vehicles	172	226
Total commercial vehicles	391	520
Growth rate	–	33.0

Source: The ITP Division, Ministry of External Affairs

Medium and heavy commercial vehicles

The medium and heavy commercial vehicles sub-segment consists of rigid trucks, tractor trailers, semi-trailers, bulkers and tippers. These vehicles may have a range of two to twelve axles and they mostly run on diesel. Manufacturing in this sub segment is dominated by Indian companies, Ashok Leyland, Eicher Motors and Tata Motors. In India, there are certain regulations for entry and exit of trucks and for operation of trucks in certain areas depending on the time. It can be possible, that to beat the regulation, large consignments are broken up so that smaller commercial vehicles can be used that may not have as many applicable regulations as there are on heavy commercial vehicles.

The two largest manufacturers of buses in India are Tata Motors and Ashok Leyland. Due to an increasing focus on environmental issues and emission norms, buses in some cities run on Compressed Natural Gas (CNG). In the capital city of New Delhi for example, it is mandatory for public transport buses to run on CNG. Another vehicle included as part of medium and heavy sized commercial vehicles is the tempo. Tempos are smaller than full sized trucks that cater to the rural and urban areas where big trucks cannot travel. Manufacturing in this sub-segment is taking place between Indian companies and global companies through joint ventures as well. Eicher Motors of India has recently tied-up with Volvo to manufacture trucks, Force Motors has tied up with MAN of Germany to manufacture tempos, Nissan and Ashok Leyland announced plans of manufacturing commercial vehicles, Mercedes-Benz and Hero Group have also tied up to manufacture commercial vehicles.

The commercial vehicles segment is expected to grow at a strong rate. Increasing Competition in the commercial vehicle segment is expected to boost its growth further, the same way increasing competition had a positive impact on the passenger car segment. The fastest growth though is expected in the heavy trucks sub segment.

Light commercial vehicles

In India, apart from the medium and heavy trucks, there is growing popularity of light commercial vehicles as well. The light commercial vehicles are popular in rural areas (which form the majority part of India) where due to infrastructural constraints like bad and narrow roads, only small trucks can operate. For example, Tata Motors produces India's first mini truck called Tata Ace. Tata Ace is a big hit both in the city as well as in the rural areas where it can travel easily carrying light weight products effectively, thus providing more penetration.

INDIA'S FIRST MINI TRUCK – THE TATA ACE

Tata Ace is a big hit in rural and semi-urban areas as a mode for goods transport



Two-wheelers

The two-wheeler is the most common mode of transport in India where the two-wheeler market mainly consists of scooters, motorcycles and mopeds. In terms of number of units produced, the two-wheeler segment is the largest. The market for luxury two-wheelers i.e. super bikes and other high performance motorcycles does not exist in India. BMW imported its sports motorcycles in the 1990s and failed miserably. There were talks of Harley Davidson entering the Indian market but those plans have been put on hold.

Promising growth of the two-wheeler segment in India:

Two-wheeler sales have grown at a CAGR of 11 per cent over the last decade and are expected to maintain strong growth rates as more and more people rise from poverty in India. Most of the population lives in rural and semi-urban areas where most people use cycles as a mode of transport. So when income levels increase in those areas, the first vehicle purchased is the two-wheeler. Hence, at its current growth rate, with increasing incomes, the number of two-wheelers being purchased will increase manifold. Rapid urbanization of semi-urban and rural areas, easy availability of finance, and new innovations in manufacturing of two-wheelers is resulting in a large number of new models being introduced each year, which will facilitate growth in this segment.

Production trends show maximum growth in the motorcycles sub-segment:

Between the years 2005–2006 and 2006–2007, production of scooters has decreased whereas production of motorcycles has increased. In fact, motorcycles make up 84 per cent of two-wheeler production and have displayed the highest increase in growth rates. There have been no changes in the production figures of mopeds and production of electric two-wheelers has begun recently in India.

PRODUCTION FIGURES OF THE TWO-WHEELERS SEGMENT

The figures are for the years 2005–2006 till 2006–2007.

Figures are in '000 units and growth rate is in percentage.

Category	2005–2006	2006–2007
Scooters	1 021	943
Motorcycles	6 207	7 112
Mopeds	379	379
Electric two-wheelers	–	8
Total two-wheelers	7 607	8 442
Growth rate	–	10.98

Source: The ITP Division, Ministry of External Affairs

India houses the world's largest motorcycle manufacturer, Hero Honda. In India, the market for motorcycles is different from that in developed countries, where motorcycles are powered by big engines and cater to a niche market. The most popular motorcycles are in the sub–150 CC category and the next category of motorcycles is the 150 CC–500 CC category. Neither are there many available models nor are there many customers in the 500 CC plus category.

Three-wheelers

Three-wheelers are light vehicles also known as auto-rickshaws that are mostly used as small taxis, pick-up vans and delivery vans for short distances in India. They are driven by two stroke or four stroke engines on petrol, CNG or Liquefied Petroleum Gas (LPG). There are few manufacturers of this type of

vehicle, but the three-wheeler segment has witnessed strong growth rates of 9 per cent CAGR over the past decade and a growth rate of 28 per cent in the year 2006–2007. A total of 434 000 three-wheelers were produced in the year 2005–2006, and 556 000 three-wheelers were produced in the year 2006–2007.

Shown herewith is a picture of the autorickshaw. Autorickshaws are very useful modes of transport given the road conditions and infrastructure in India. They are very popular in the form of small taxis in urban areas also. The autorickshaw is also used across India in the form of a goods carrier for delivering small consignments.

PICTURE OF A THREE-WHEELER USED AS A TAXI

Three-wheelers are used as taxis (as shown below) and as goods carriers also



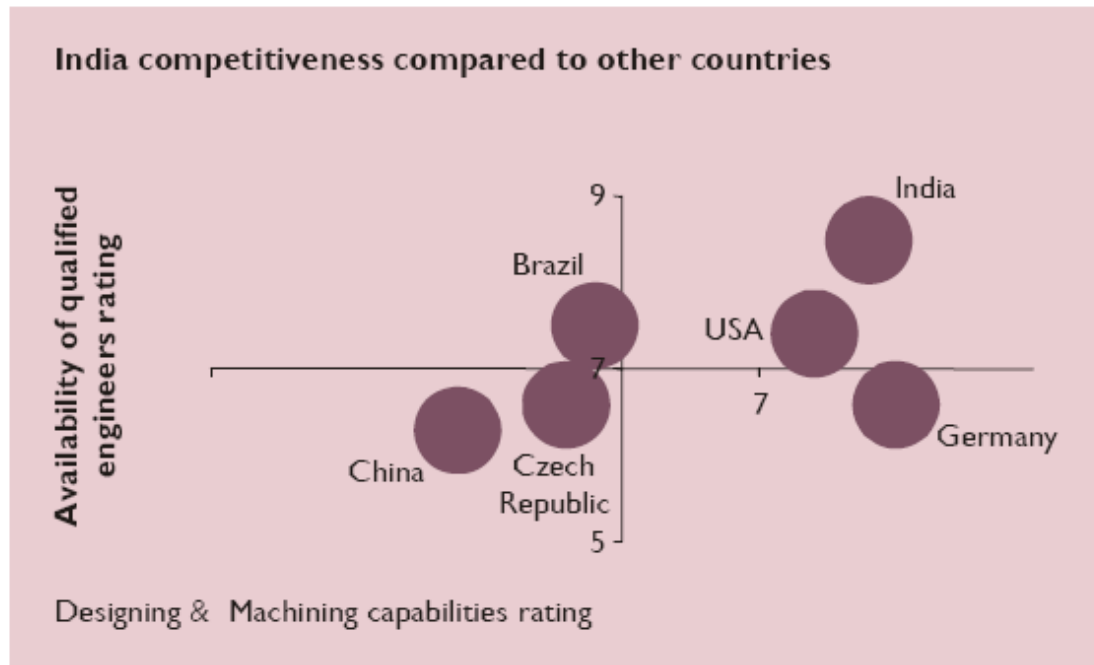
Tractors

India is the second largest tractor manufacturer in the world. In terms of market size, India is the largest, followed by USA and China. Growth in the tractor producing segment is directly related to growth in agricultural output and exports to neighboring countries. Production of tractors was 352 827 in the year 2006–2007 growing by more than 20 per cent. Indian tractors are gaining acceptance in international markets. In the past three years, exports of Indian tractors have grown by a CAGR of 55 per cent. The USA is the main market for exports but exports to other Asian countries and African countries is also increasing. In the year 2006–2007, 33 813 tractors were exported in all. Manufacturing facilities for tractors are mostly located in Punjab and Maharashtra. Out of 14 manufacturers, Mahindra & Mahindra is the market leader. One of the initiatives taken by the GOI to boost the tractor manufacturing segment includes setting up the National Centre for Testing of Tractors and Off

Road Vehicles in the state of Uttar Pradesh, which will be responsible for conducting research and for testing of tractors.

COMPETITIVE ADVANTAGES

India has several competitive advantages in the automobile sector, which have been analysed using the following framework. Availability of skilled manpower with engineering and design capabilities India has a growing workforce that is English-speaking, highly skilled and trained in designing and machining skills required by the automotive and engineering industries. In a combined assessment of manpower availability and capabilities, India ranks much ahead of other competing economies (see figure).



Source: ACMA, KPMG Analysis

Many Indian and global players are leveraging this advantage by increasingly outsourcing activities like design and R&D to their Indian arms. The Society of Indian Automobile manufacturers (SIAM) estimates that automotive vehicle manufacturers are expected to invest US\$ 5.7 billion in the Indian market from 2005 to 2010. Of this, about US\$ 2.3 billion will be on research and development and the rest probably on capex. Some examples of investment in areas leveraging the engineering and design capabilities of India include:

- MICO, the Indian operation of Bosch and a key player in fuel injection equipment, ignition systems and electricals, has invested in the MICO Application

Centre (MAC) for R&D. It has emerged as a key global R&D competency centre catering to the entire Bosch Group. It is the first of its kind in India and the Bosch Group's first outside Europe.

- GM set up a technical centre at Bangalore that became fully operational in September 2003. The centre focuses on both R&D and engineering, and takes up high-value work to complement current research programmes, as well as new exploratory research projects.
- Ford set up Ford Information Technology Services India (FITSI) in Chennai, which caters to the software requirements of Ford Motor Company in the region and around the world. FITSI develops solutions for Ford worldwide. For example, it developed web-based customer relationship services for Ford India, Australia and South Africa. In addition, Ford has shifted the CAD/CAM development, e-mail processing and application development from worldwide operations to India's FITSI.

COMPETITIVE INDUSTRY, WITH GLOBAL PLAYERS

Segment	Key Players
Commercial Vehicles	Tata Motors, Ashok Leyland, Swaraj Mazda, Mahindra & Mahindra, Bajaj Tempo, Eicher Motors
Passenger Vehicles	Tata Motors, Maruti Udyog, Honda Motors, Hyundai Motors, Toyota, Skoda, Mahindra & Mahindra, Daimler Chrysler, Hindustan Motors
Two Wheelers	Hero Honda, Honda Motors, Bajaj Auto, TVS Motors, Yamaha, Kinetic Engineering
Three Wheelers	Bajaj Auto, Piaggio India

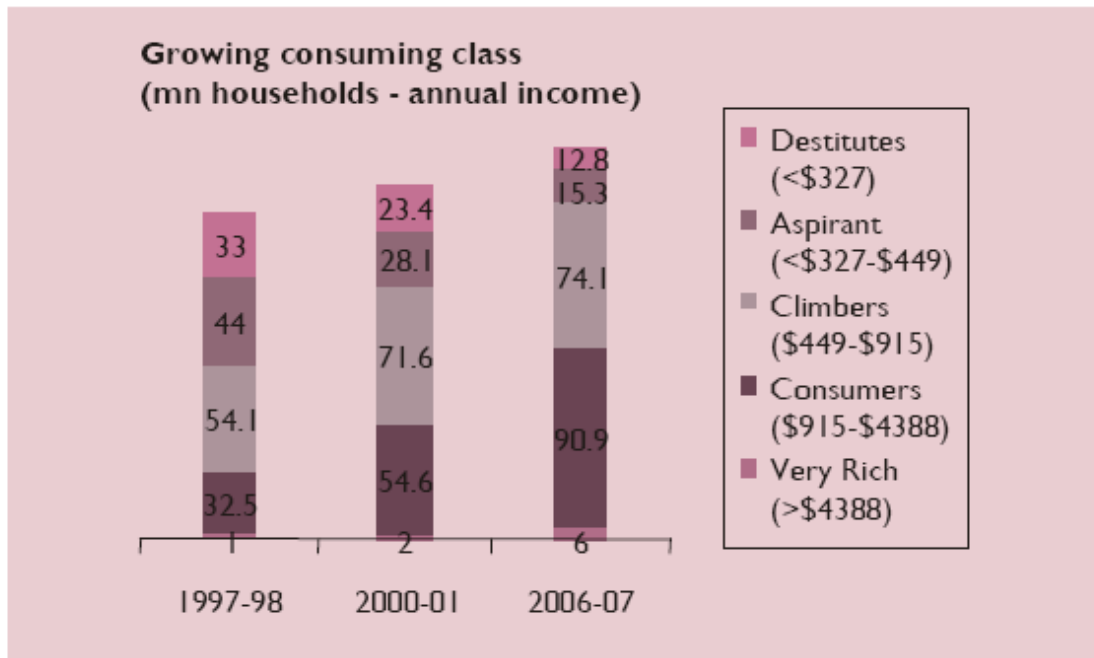
The Indian automobile industry is highly competitive with a large number of players in each industry segment. Most of the global majors are present in the passenger vehicle and two wheeler segments. In the components industry too, global players such as Visteon, Delphi and Bosch are well established, competing with domestic players.

The presence of global competition has led to an overall increase in capabilities of the Indian auto sector. Increase in competition has led to a pressure on margins, and players have become increasingly cost efficient. Quality levels have gone up, and there is an increasing focus on compliance to TPM, TQM and Six Sigma processes. This has led to an increased confidence among domestic players, who are now focusing on opportunities

abroad. Key players in the components sector like Bharat Forge and Sundaram Fasteners have become key global suppliers in their categories.

Large market with significant potential for growth in demand

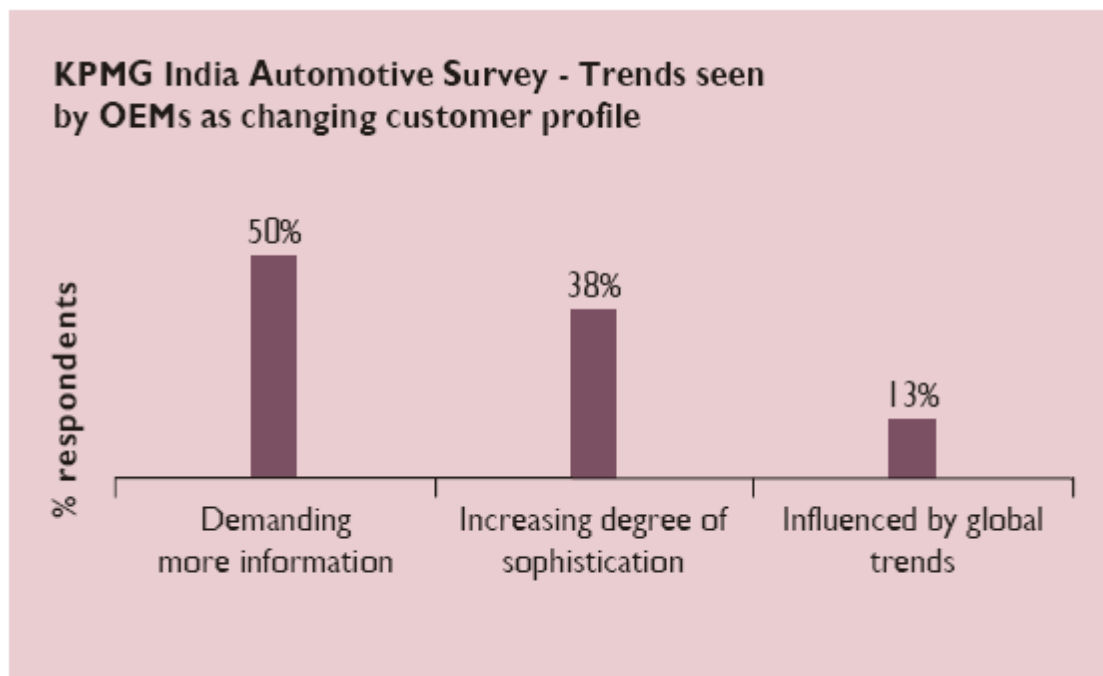
India offers a huge growth opportunity for the automobile sector – the domestic market is large and has the potential to grow further in the future due to positive demographic trends and the current low penetration levels.



Source: NCAER

Large target consumer base and rising income levels:

India has nearly 23 per cent of the global population and is one of the most attractive consumer markets in the world today. Income levels across population segments have been growing in India. According to National Council of Applied Economic Research (NCAER) data, the consuming class, with an annual income of US\$ 980 or above, is growing and is expected to constitute over 80 per cent of the population by 2009-10. In addition, a large proportion of the Indian population is relatively young - in the age group of 20-59 years. This is expected to further boost the automotive domestic market as a younger population has a higher consumption index. The rise in income levels of the Indians and the emergence of the consuming class that has higher propensity to spend offers great opportunities for growth to companies across various sectors.



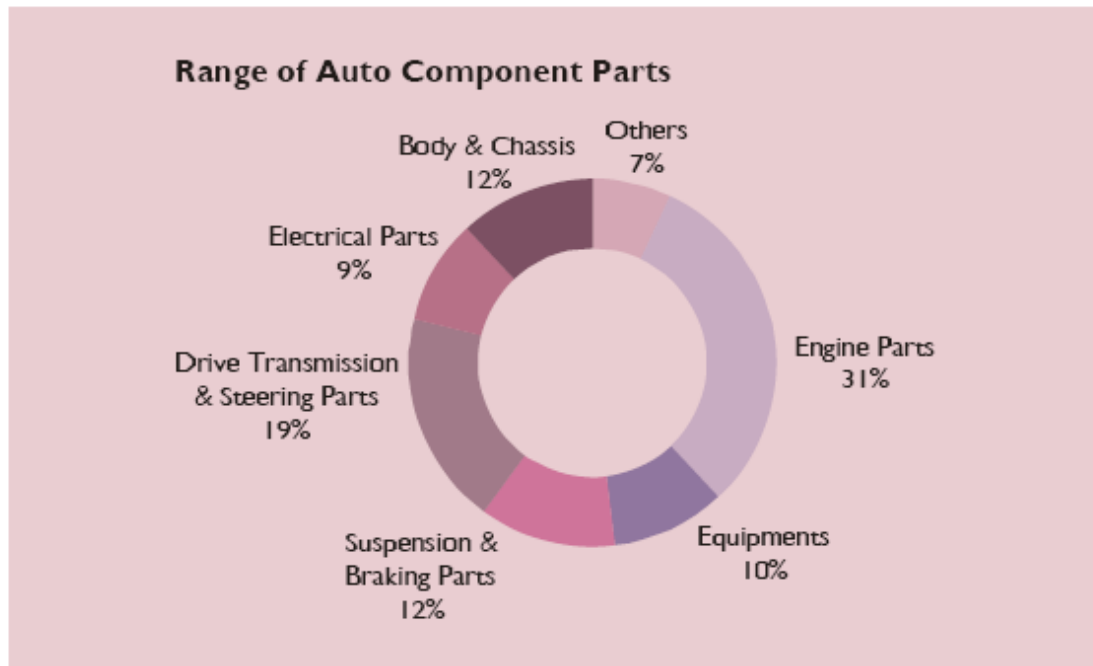
Changing lifestyles, driving demand for new segments

Consumers in India are now more informed, sophisticated and demanding. Urban consumers have been especially exposed to western lifestyles through overseas travel. For example, more than 5 million Indians traveled overseas last year and this number is expected to increase by 15 per cent to 20 per cent per annum. An increase in the number of working women and the prevalence of nuclear double-income families, especially in urban areas, are other trends shaping lifestyles. These changes are driving an increased need for personal transport, especially in segments like working women, young executives and teenagers. This has led to the growth in demand for motorcycles, ungeared and automatic scooters and compact cars. Across the automobile spectrum, consumer aspirations are driving demand for upper end models in all segments.

Presence of strong industry associations and supporting industries **Industry Associations**

The Indian automotive industry is well served by the two industry associations

- Society of Indian Automobile Manufacturers (SIAM) that represents the OEMs and Automotive Components Manufacturers' Association (ACMA) that represents the components industry. Both associations actively engage with industry, government and other stakeholders to promote the interests of the industry and improve competitiveness.



Source: ACMA

Supplier base

Indian automobile manufacturers are well supported by the automotive component industry. Indian companies produce a range of automotive components like engine parts, electrical parts, equipments etc. Ford is leveraging the large, high quality automotive supplier base of India and has made India a component-sourcing base. This has helped Ford reduce the cost of manufacturing and increase its exports. Ford India awarded the Q1 supplier status to 10 suppliers to help them export their products to Ford worldwide.

Government Regulations and Support

The Government of India (GoI) has identified the automotive sector as a key focus area for improving India's global competitiveness and achieving high economic growth. The Government formulated the Auto Policy for India with a vision to establish a globally competitive industry in India and to double its contribution to the economy by 2010. It intends to promote Research & Development in automotive industry by strengthening the efforts of industry in this direction by providing suitable fiscal and financial incentives. Some of the policy initiatives include:

- Automatic approval for foreign equity investment upto 100 per cent of manufacture of automobiles and component is permitted.
- The customs duty on inputs and raw materials has been reduced from 20 per cent to 15 per cent. The peak rate of customs duty on parts and components of

battery-operated vehicles have been reduced from 20 per cent to 10 per cent. These new regulations would strengthen India's commitment to globalisation. Apart from this, custom duty has been reduced from 105 per cent to 100 per cent on second hand cars and motorcycles.

- National Automotive Fuel Policy has been announced, which envisages a phased programme for introducing Euro emission and fuel regulations by 2010.
- Tractors of engine capacity more than 1800 cc for semi-trailers will now attract excise duty at the rate of 16 per cent.
- Excise duty is being reduced on tyres, tubes and flaps from 24 per cent to 16 per cent. Customs duty on lead is 5 per cent.
- A package of fiscal incentives including benefits of double taxation treaty is now available.

These government policies reflect the priority government accords to the automobile sector. A liberalised overall policy regime, with specific incentives, provides a very conducive environment for investments and exports in the sector.

Profile of Domestic Players

Name of the company	Parent company	Output	Models	Plants
Tata Motors Ltd	Largest commercial vehicle player in the country and one of the largest in the passenger vehicles segment.	Capacity - 160,000 units pa Volumes - 171,870 units in 2004 Operating income- US\$ 3.8 billion in 2005	Sierra, Sumo, Safari, Indica, Indigo	Pune (Maharashtra)
Mahindra & Mahindra Ltd	Flagship company of the Mahindra Group; largest player in the tractor segment in India	Capacity - 125,000 units pa Volumes - 69,737 units in 2004 Operating income- US\$ 1.47 billion in 2005	Armada, Bolero, Commander, Marshall, Maxx, Voyager, Scorpio	Mumbai, Nashik (Maharashtra)
Hindustan Motors Ltd.	A. C.K. Birla group flagship and one of the oldest auto companies in India.	Capacity - 64,000 units pa Volumes - 15,782 units Operating income- US\$ 159.7 million in 2004	Lancer, Ambassador, Contessa, Trekker, RTV, Pushpak, Pajero	Uttarpara (West Bengal), Pithampur (Madhya Pradesh), Trivellore (Tamil Nadu)
Ashok Leyland	Hinduja group	Operating Income - US\$ 952.9 million in 2005	Multiaxle vehicles, tractor, ecomet, engines, Viking BS-I, Viking BS-II, Vestibule Bus, 222 CNG bus etc	Ennore, two plants at Hosur, the assembly plants at Alwar, Bhandara, castings plant at Hyderabad
TVS Motor	TVS Group	Operating Income - US\$ 641.9 million in 2005	Mopeds - Excel, Champ, TVS 50 Scooterettes - Scooty Motorcycles - Max 100, Victor, Centra, Fiero	Hosur, Mysore
Bajaj Auto	Bajaj Group	Capacity - 2.52 million units pa Operating income - US\$ 1.3 billion in 2005	Motorcycles - Boxer, CT 100, Discover, Wind, Caliber, Pulsar, Eliminator Scooters - Spirit, Saffire, Wave	3 Plants at Akurdi, Waluj, Chakan

SHAREHOLDER VALUE CREATION IN THE AUTOMOBILE INDUSTRY IN INDIA

Name of the company	Parent company	Output	Models	Plants
LML	Lohia Group		Freedom, Graptor	Kanpur

Profile of Overseas Players

Maruti Udyog Ltd	Suzuki of Japan holds a 54.2 per cent stake in the company.	Capacity - 500,000 units pa Volumes - 472,122 units including exports in 2004 Operating income- US\$ 2.4 billion in 2005	800, Omni, Alto, WagonR, Zen, Baleno, Esteem, Gypsy, Vitara, Versa	Gurgaon (Haryana)
Hyundai Motors Ltd	Wholly India owned subsidiary of Hyundai Motor Company, S. Korea	Capacity - 150,000 units pa Volumes - 171,905 units	Santro, Accent, Sonata, Terracan	Irrungattukottai (Tamil Nadu)
Daimler Chrysler India	100 per cent subsidiary of Daimler Chrysler group	Capacity - 10,000 units pa Volumes - 1,640 units	E class, S class, C class	Pune (Maharashtra)
Fiat Motors	Subsidiary of Fiat Auto SpA	Capacity - 50,000 units pa Volumes - 10,428 units	Uno, Siena, Palio, Palio Adventure	Mumbai (Maharashtra)
Ford Motors Ltd	Ford Motor Company, the world's second largest automaker	Capacity - 100,000 units pa Volumes - 45,723 units	Ikon, Mondeo	Chengalpattu (Tamil Nadu)

International trade scenario

Most of the growth in the automotive industry is domestically driven. India's share in world trade is quite small. International sales of vehicles have been increasing gradually. India has ambitious plans to achieve USD 35 billion in exports by 2016. The GOI is taking measures to facilitate growth in the industry through development of automotive clusters that will serve as a base for automotive companies to produce and export from their manufacturing facilities. Various fiscal incentives are being offered and a strong increase in exports in the industry is expected.

Exports

The Indian automotive industry is gaining worldwide recognition with a steady increase in the rate of growth of exports. Automotive exports crossed the USD 1 billion mark in the year 2003–2004, and increased to USD 2.76 billion in the year 2006–2007. The industry exported 15 per cent of its passenger car production, 10 per cent of commercial vehicles production, 26 per cent of three-wheelers production and 7 per cent of two-wheelers production in 2006–2007.³³ The key exporters for passenger cars are Maruti Suzuki, Tata Motors and Hyundai Motors, the key exporter for MUVs is Mahindra & Mahindra and the key exporters for two-wheelers are Bajaj Auto and Hero Group. Key destinations of exports are the SAARC countries, European countries, Middle East and North America.

SUBSTANTIAL GROWTH IN EXPORTS OF PASSENGER CARS AND TWO-WHEELERS

The figures are for the years 2002–2003 till 2006–2007.

Figures are in '000 units and growth rate is in percentage.

Vehicle category	2002–2003	2003–2004	2004–2005	2005–2006	2006–2007
Passenger cars	71	126	162	171	194
Utility vehicles	1	3	5	4	4
Commercial vehicles	12	17	30	41	50
Two-wheelers	180	265	366	513	619
Three-wheelers	43	68	67	77	144
Grand Total	307	480	630	806	1 011
Growth rate	66.49	56.17	31.18	28.05	25.43

Source: Ministry of Heavy Industries and Public Enterprises

Imports

Imports have decreased substantially over the past decade. The most notable decline in imports can be seen in the commercial vehicles segment. This can be attributed mainly to a substantial increase in production capacities of commercial vehicles in India from 2000–2001 onwards.

Imports of passenger cars declined between 1996–1997 and 2000–2001. This was due to the expansion of manufacturing facilities of cars in India during the period. However, imports of passenger cars have increased in recent years. Growth in passenger car imports took place between 2001–2002 and 2005–2006 due to increase in demand for premium and luxury cars.

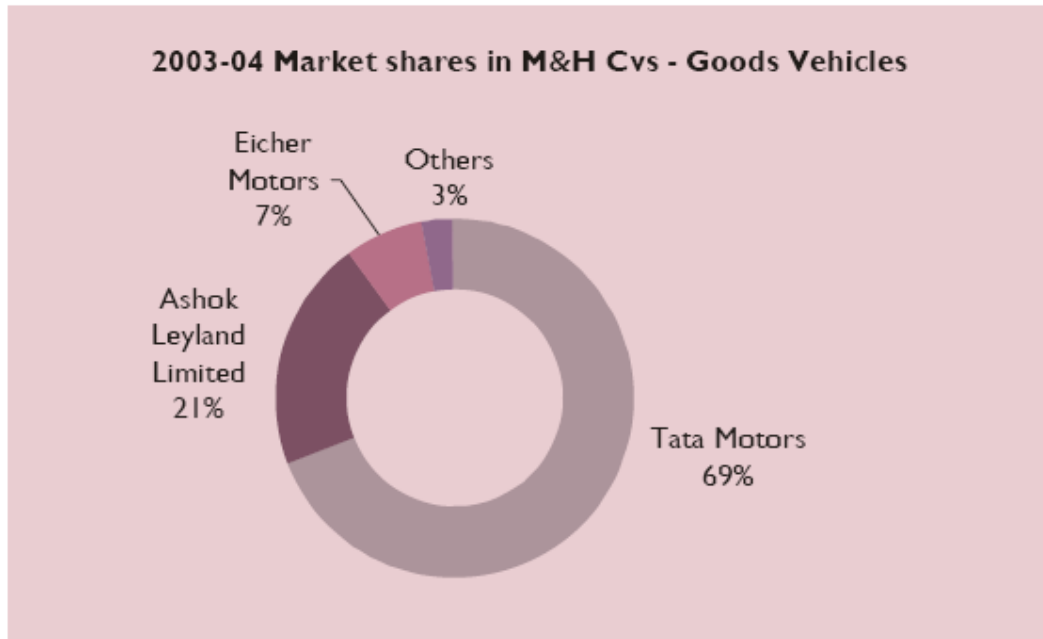
DECLINING IMPORTS ACROSS MOST SEGMENTS

The figures are for two periods, 1996–1997 to 2000–2001 and 2001–2002 to 2005–2006. Figures are in percentage, based on constant prices for 1993–1994.

Category	1996–1997 to 2000–2001	2001–2002 to 2005–2006
Passenger cars	(8.51)	6.55
Commercial vehicles	73.96	(10.08)
Two-wheelers	13.95	(8.61)
Tractors	13.71	(9.35)

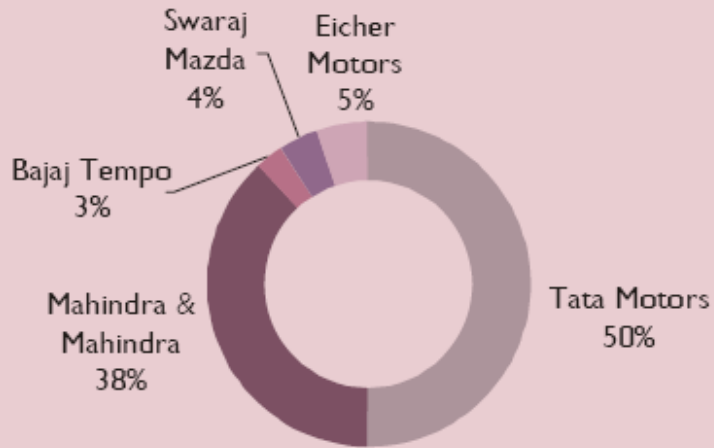
Source: Determinants of Competitiveness of Automotive Industry in India, ICRIER

Market shares



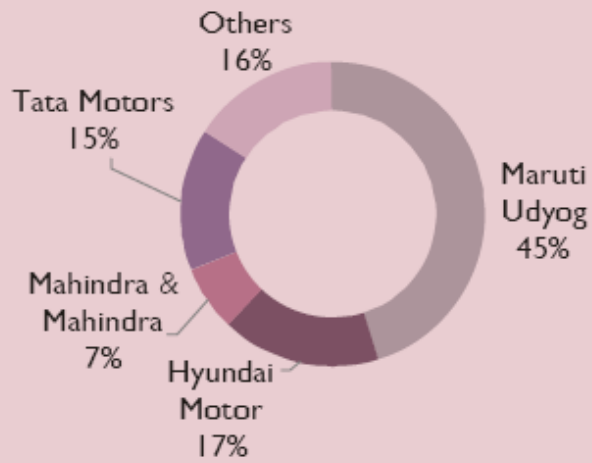
Source: www.indiaonline.com

2003-04 Market shares in LCVs - Goods Vehicles



Source: www.indiaonline.com

Overall share of Passenger Vehicles - 2003-04



Source: www.indiaonline.com

Challenges in the Indian automotive industry

Costs, infrastructure and human resource development are the underlying concerns in the automotive industry and manufacturers are being challenged on these counts. Labour costs are rising and economies of infrastructural improvements are not being realized efficiently. Companies are searching for technological advancements that can help contain costs of production and help in using resources efficiently to increase overall productivity.

Composition of costs and productivity

Raw material costs are by far the single largest costs where steel and rubber constitute the two main materials used by manufacturers. However, the variation in cost

of raw materials is not as much as that in cost of labour. Further, labour costs constitute a much higher share of the total cost in the automotive industry in American and West European countries compared to India. In addition to the absolute costs involved in the automotive industry, the tax structure also plays an important role. India has higher indirect taxes compared to some of the other countries in Asia, which reduces the cost advantages it has. A cost comparison study between Indian and Chinese automotive manufacturing companies revealed that the cost to manufacture a passenger vehicle in China is 23 per cent lower than it is in India with the main difference being higher taxes and their cascading impact in India, rather than cost of raw materials or labour costs.

Advantage of low labour costs in India

Low labour costs and easy availability of management and engineering skills is one of the prime advantages of manufacturing in India. Among the costs incurred to manufacture automotive products, it is the cost of labour that foreign companies can cut most easily by manufacturing in India. The cost per hour in India is only between 7 and 10 per cent of the cost of labour in the developed countries. However it needs to be assessed if India can maintain the cost advantage.

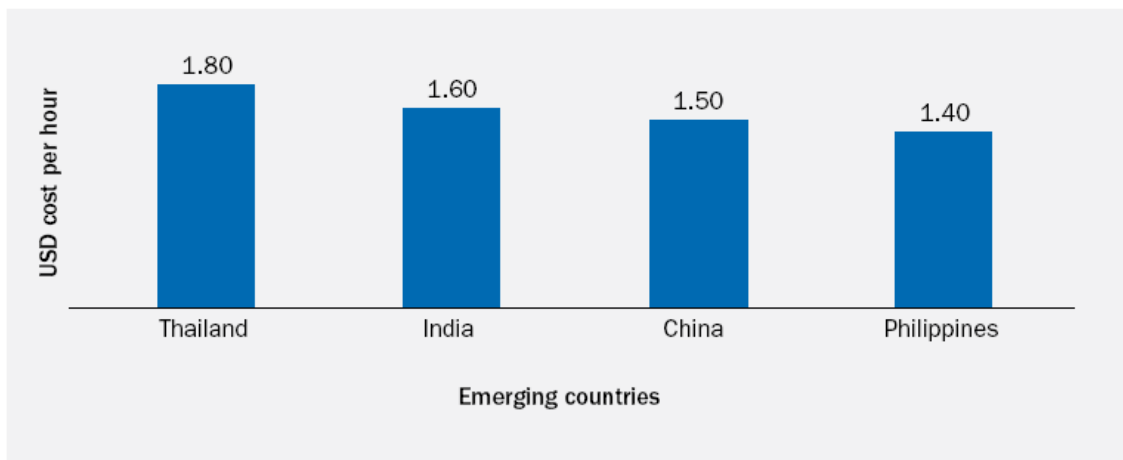
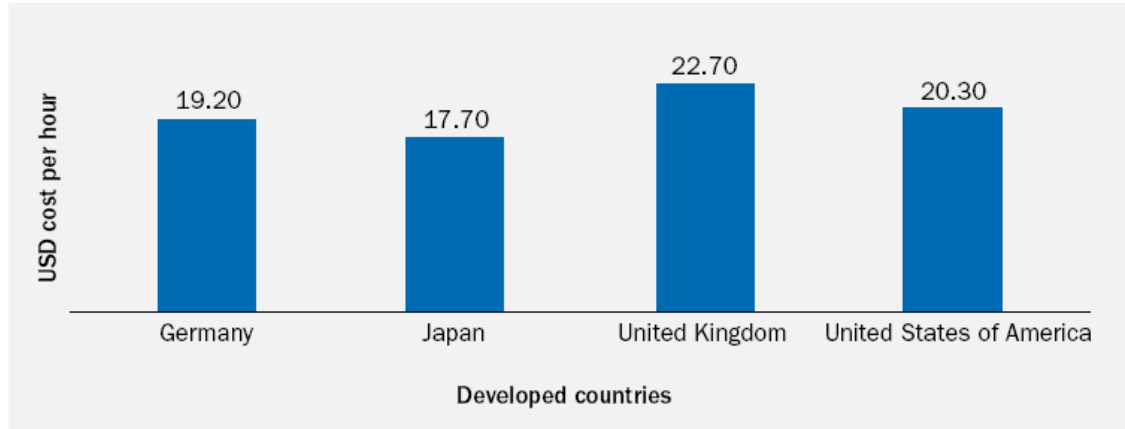
Low employee welfare leading to reduction in labour productivity

There is a significant increase in the number of contract workers being used in the automotive industry which helps to keep labour costs low, but this practice of hiring labour under contract also leads to exploitation in many cases. Thus, there is need for labour reforms aimed at increasing the welfare of workers. Manufacturing companies are being encouraged to retain and employ more permanent workers which will lead to higher levels of productivity. A survey conducted by Indian Council for Research on International Economic Relations (ICRIER) found that the much needed labour reforms would increase the level of productivity as reforms induce workers to work more efficiently. The survey found that between 10 and 30 per cent of the total production workers in the automotive industry are employed on contract basis. Further, wages paid to temporary

workers, are on an average only 25 to 50 per cent of wages paid to permanent workers.

COST OF LABOUR – A COMPARATIVE ANALYSIS

Cost of labour in USD per hour in developed and emerging economies is shown



Source: India Automotive Study 2007, KPMG

Technological advancements leading to cost reductions

Manufacturers are looking for ways to contain costs. With decreasing cost of technology, manufacturers are exploring ways to develop low cost automation and use it to reduce labour costs. Regarding efficiency in production, according to an econometric analysis conducted by ICRIER, it has been found that increase in foreign participation is directly correlated with higher technical efficiency. Thus, the government is inducing more foreign participation, so that technologically advanced products can be developed at lower costs overall.

Infrastructure

Continued investment in infrastructure is essential for India to be able to realize the targets set in the AMP. There are inadequate ports, insufficient feeder

rail lines to the ports, and bad roads. Despite the bottlenecks in this regard there are companies that have made the most out of the existing infrastructure. For instance, Hyundai has setup its factory very strategically near the port in Chennai and has built a supply chain hub around surrounding areas. It has now become the second largest passenger car manufacturer in India after entering the Indian market in 1998.

Roads

With respect to roads, the Golden Quadrilateral, a corridor connecting the four metro cities of India, New Delhi in the North, Mumbai in the West, Chennai in the South and Kolkata in the East spanning 6 500 kilometers is being built. The GOI has also launched a program for the construction of 66 500 kilometers of national highways of which 50 000 kilometers is expected to be completed by 2015. With better road infrastructure, significant growth is expected in the automotive industry. For instance, better roads are leading to greater demand for multi-axle vehicles.

Railways

The Ministry of Railways is in the process of developing freight corridors in Railways. Drawn on similar lines of highway projects linking east with west and north with south, the ministry is planning for an east-west corridor and a north-south corridor. Connectivity between rails and ports (both dry and sea ports) is essential and a blueprint for railway development is being prepared.

Ports

For India to develop into a global automotive hub, port development is imperative. Specialized port infrastructure for handling vehicle exports is being developed especially near the main automotive clusters near Mumbai and Pune in the West, Chennai in the South, and Kolkata in the East. Two new deep ports are being developed that have special emphasis on the automotive industry. One is in Dhamra in the state of Orissa (East India) which will be completed by 2010, and the second is in Sutrapada in the state of Gujarat (West India).

Power

The high cost and relatively lower quality of power in many parts of India is also an issue highlighted by many manufacturers. Many companies face fluctuations in supply of power and power outages that in turn affect the quality of production. The average manufacturer in India loses 8.4 per cent in sales due to power cuts as opposed to less than 2 per cent in China and Brazil. It is estimated that the power outages alone cost India 1 per cent of GDP.⁴⁰ Several companies are willing to pay more for power in return for consistent and good quality of power. The Eleventh Five Year Plan of India 2007–2012, issued by the Planning Commission of India, has set ambitious targets to generate and distribute more and better quality power.

Human resource development

Skill shortages and skill mismatches may emerge as a constraint to achieve the growth targets set in the AMP. Thus one of the main areas of focus cited by the Ministry of Heavy Industries and Public Enterprises is to develop advanced capabilities in the workforce. A large workforce consisting of both skilled and unskilled workers will be required to sustain the increased level of production. The challenge is to ensure that the demand–supply gap does not arise either in quantitative or in qualitative terms. The employment generated can be divided into direct and indirect employment. While direct employment is employment by way of workers being engaged in the production of automobiles and automotive components, indirect employment is generated in feeder and supplier industries in the areas of finance, insurance, mechanics and after-sales personnel for semi-skilled and unskilled workers in rural and semi-urban areas. According to the AMP, it is estimated that the automotive industry would require the following:

- Management and General: 28 per cent or 7 million
- Skilled workers: 62 per cent or 15.5 million
- Unskilled workers: 10 per cent or 2.5 million

The need for top level engineering and managerial manpower is being met by the Indian Institutes of Technology and Indian Institutes of Management. However more such institutes are required to impart high quality technical education to the workforce. Although there are several engineering institutes all over India, there is a growing need for more engineering institutes. The GOI has begun to take some initiatives in this regard. The National Automotive Institute is being set up that will serve as a knowledge bank for the automotive industry, conduct market research and analysis and develop training modules. The plan is to establish the institute in all the major clusters in India, so that the institute can benefit from active participation from automotive companies in those clusters.

SENTIMENTS OF THE INDIAN VEHICLE BUYER

Rising incomes and favorable demographic trends Per capita incomes in India are rising and the demographic changes taking place are expected to fuel further growth in the Indian economy through increase in demand for products. India has one sixth of the world's total population. The median age in India was 24.8 in 2007.⁴¹ According to an analysis done by the Population Research Centre, Institute for Economic Growth in India, 67 per cent of the Indian population will be aged between 15 and 64 in 2025. Thus increasing incomes combined with a very large young population will drive growth of the automotive industry as an automobile is a symbol of increasing prosperity for the young Indian consumer.

Prices and fuel efficiency

The Indian automotive market has been characterized as a small car market. Prices of cars form a larger percentage of the disposable income in India compared to persons in the same income group in western countries. Indians are very conscious about the fuel efficiency of their cars. A safe and therefore heavy small car being sold at a competitive price giving low mileage will not sell. One example of this is the Fiat Palio. On the other hand, a light weight car like the Hyundai Santro that gave good mileage became the second largest selling car after it was launched. Safety therefore is still not one of the main concerns of the Indian car buyer and price and fuel efficiency remain the most important considerations.

Alternative fuels

Most of the vehicles in India run on Petrol and Diesel where Diesel is increasing in popularity as a fuel for personal cars because of the element of subsidy in diesel prices. The Economist Intelligence Unit (EIU) forecasts that demand for fossil fuels in India is expected to grow at a relatively high rate of 7.2 per cent annually. Given the global energy crisis, development of techniques for using alternative fuels is now high on the agenda. Bio-fuels are not used on a large scale at all in India and efforts have recently started to introduce these fuels. India is behind many other big markets in Europe and the Americas in terms of emission controls. However in order to address the emission norms being followed worldwide, India is considering the price and availability of these fuels and enforcement of new emission controls. The GOI is also promoting R&D in this area to develop low emission technologies and energy saving devices.

Research and development

Research & Development (R&D) expenditure as a proportion of turnover is low in India. In the automotive industry, spend on R&D ranges between 0.5 and 3 per cent. R&D hubs are expected to develop in three of the four main automotive clusters in the country, in the South near Chennai, in the North at Manesar, and in Pune and Ahmednagar in West India. To provide support to companies in this regard, the GOI is promoting R&D in the automotive industry by providing financial incentives. Other measures are also being taken such as relaxing tariffs for plant and equipment imports, and setting up of automotive design firms. Thus allocation towards R&D of automotive industry is being increased and the scope of activities is being widened. Facilities for carrying out R&D are also being developed. For instance, the National Automotive Testing and R&D Infrastructure Project (NATRIP) was setup in July 2005 to create testing, validation and R&D infrastructure in India. Core facilities for NATRIP will be in Indore city in Central India. Testing and validation facilities including field tracks for tractors, trailers, construction equipment and various other vehicles will be done at Rae Bareilly in

Northern India. In fact, global majors such as Toyota, BMW, Honda and Volkswagen get their vehicles tested in India and get international certification. More and more companies now prefer India over China in this regard due to a stronger Intellectual Property Rights (IPR) system in India.

India is increasingly being perceived to become a key source of R&D services in the near future. 125 Fortune 500 companies have already setup their R&D bases in India and more automotive manufacturers are expected to do the same. Earlier, manufacturers used to depend on imported designs whereas now, Tata Motors and Mahindra & Mahindra are able to develop new models entirely locally. Global Advisory firm KPMG conducted a survey in 2007 with leading industry experts and senior management of automotive companies. The study revealed that low wages were the primary driver of growth of R&D, combined with superior quality of manpower. In a survey conducted by ICRIER it was found that there is a direct correlation between turnover and the number of workers in R&D. The results of this survey indicate that as a company's turnover increases, the proportion of R&D workers out of total workers increases.

Future Outlook

“To emerge as the destination of choice in the world for design and manufacture of automobiles and auto components with output reaching a level of USD 145 billion accounting for more than 10 per cent of GDP and providing additional employment to 25 million people by 2016” is the vision put forward by the Ministry of Heavy Industries and Public Enterprises. Going forward it is evident that the automotive industry in India offers immense potential in terms of sales and employment opportunities. Growth in the economy is expected to continue which is also going to help the automotive industry to expand. Rising disposable incomes and the new wave of consumerism arising out of it are going to be key drivers. Foreign direct investments are pouring into India in large numbers and manufacturing companies including global majors are going to setup manufacturing facilities first and then develop R&D services, both on a large scale. Companies are confident that productivity can be increased through low cost automation and management efficiency. After productivity, the major concern among manufacturers is the relatively poor infrastructure in the country. The slow pace of development of roads, railways and ports is a disadvantage, but continuous improvements are being made in this regard also.

The automotive industry in India has been crossing record milestones and is one of the world's fastest growing markets. The strengths of the Indian economy – large pool of skilled human resources, high quality engineering skills, strategic position combined with the strong growth trends in the economy and vast investments by global companies, are expected to drive the automotive industry to great heights. The outlook for India's automotive sector appears bright. The outlook for India's automotive sector is highly promising. In view of current

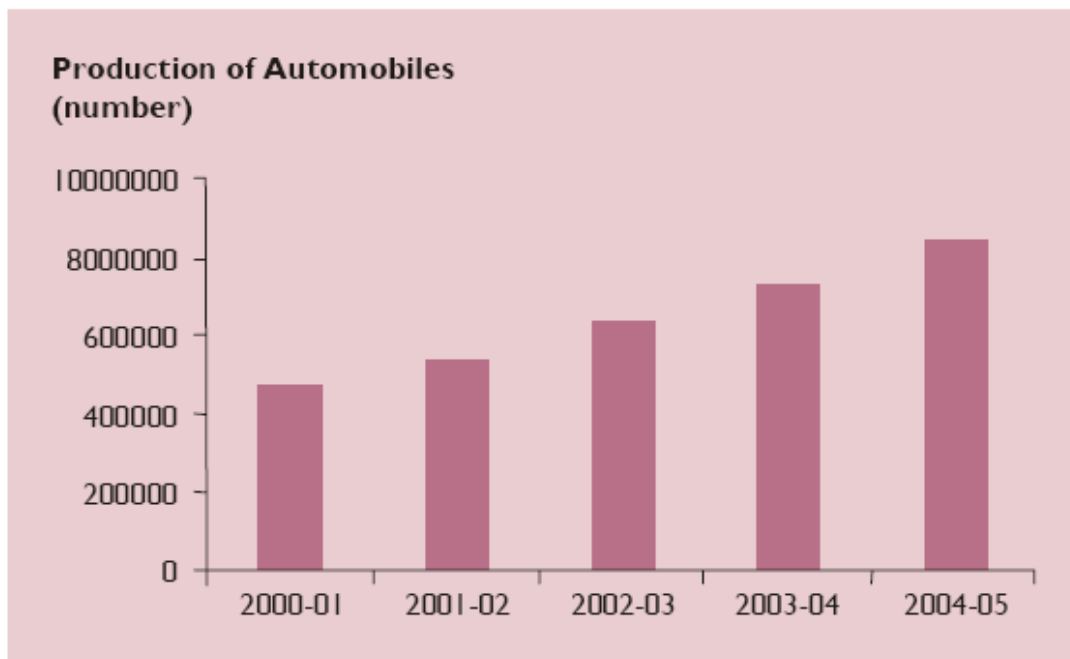
growth trends and prospect of continuous economic growth of over 5 per cent, all segments of the auto industry are likely to see continued growth. Large infrastructure development projects underway in India combined with favorable government policies will also drive automotive growth in the next few years. Easy availability of finance and moderate cost of financing facilitated by double income families will drive sales in the next few years.

India is also emerging as an outsourcing hub for global majors. Companies like GM, Ford, Toyota and Hyundai are implementing their expansion plans in the current year. While Ford and Toyota continue to leverage India as a source of components, Hyundai and Suzuki have identified India as a global source for specific small car models.

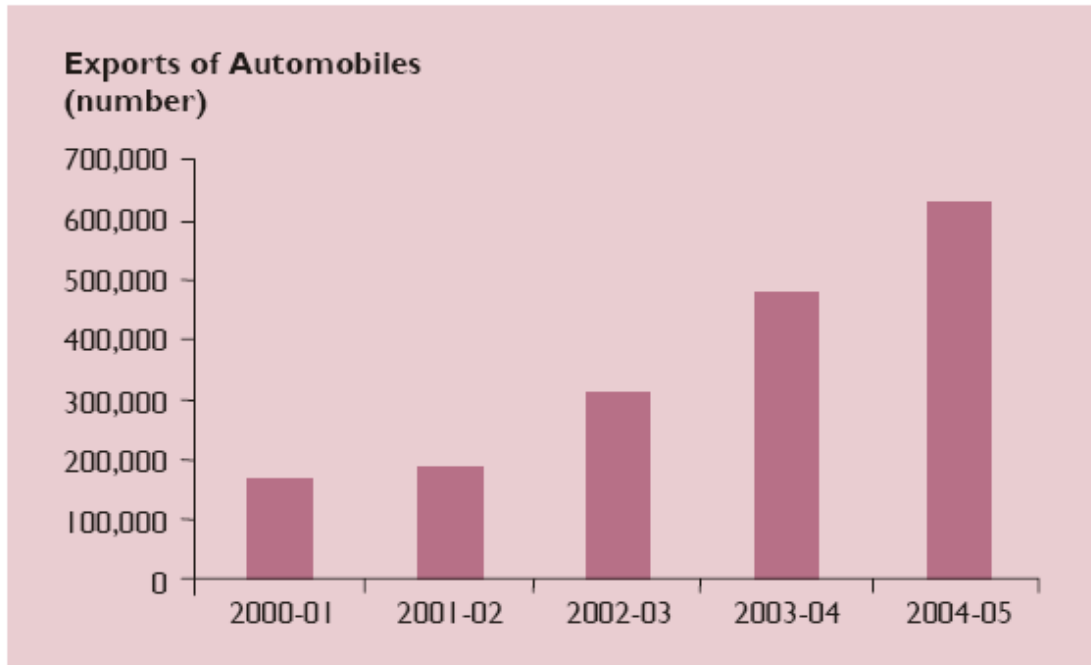
At the same time, Indian players are likely to increasingly venture overseas, both for organic growth as well as acquisitions. The automotive sector in India is poised to become significant, both in the domestic market as well as globally.

Production, Domestic Sales and Export Trends:

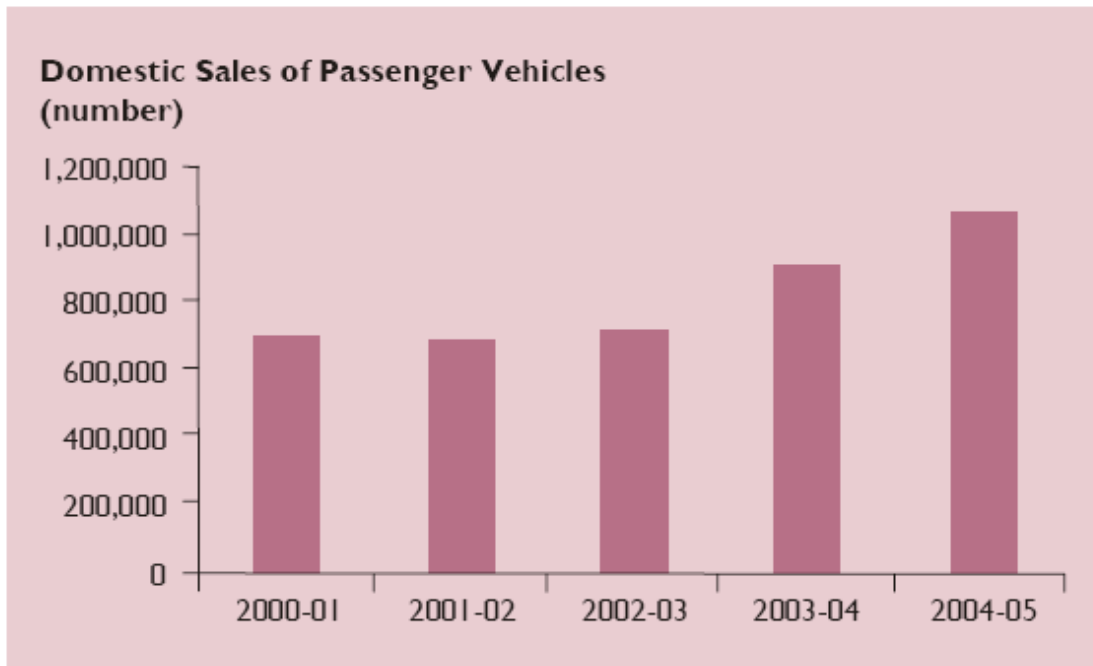
Automobiles



Source: SIAM



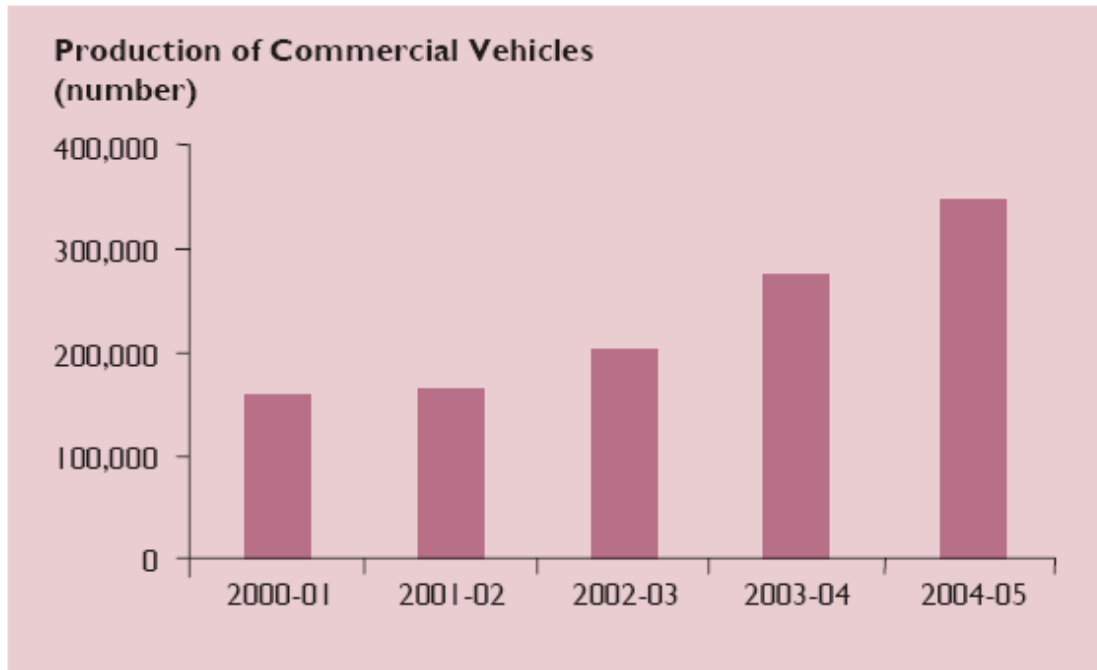
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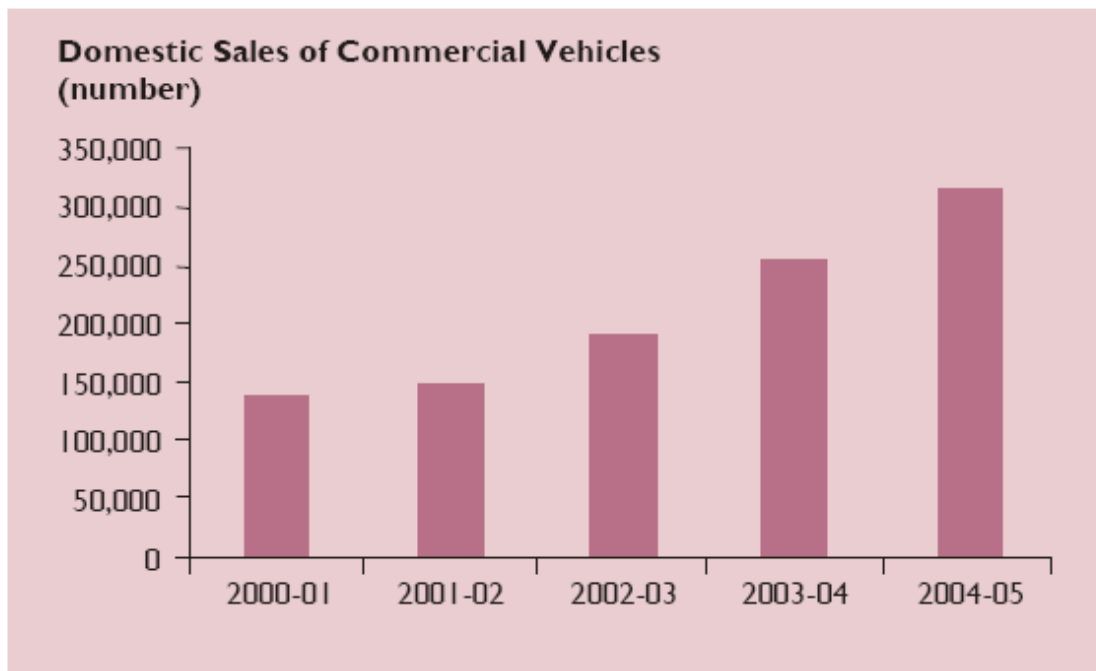
Source: SIAM

While Domestic Sales have been growing strongly since 2000-01, Exports have nearly tripled in the last 5 years

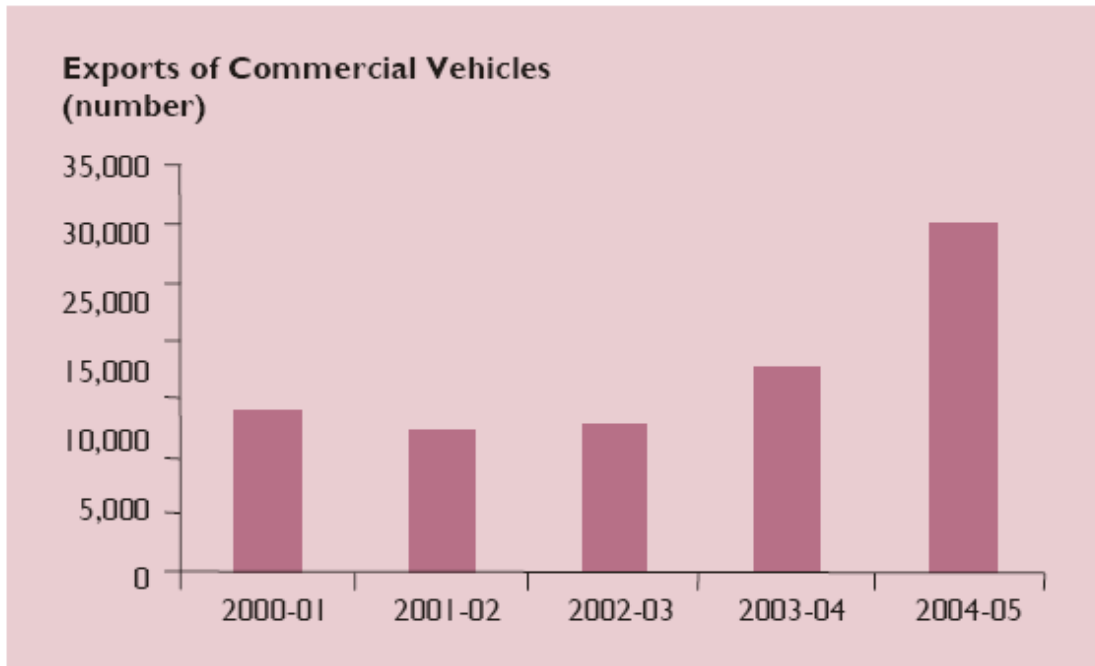
Commercial Vehicles:



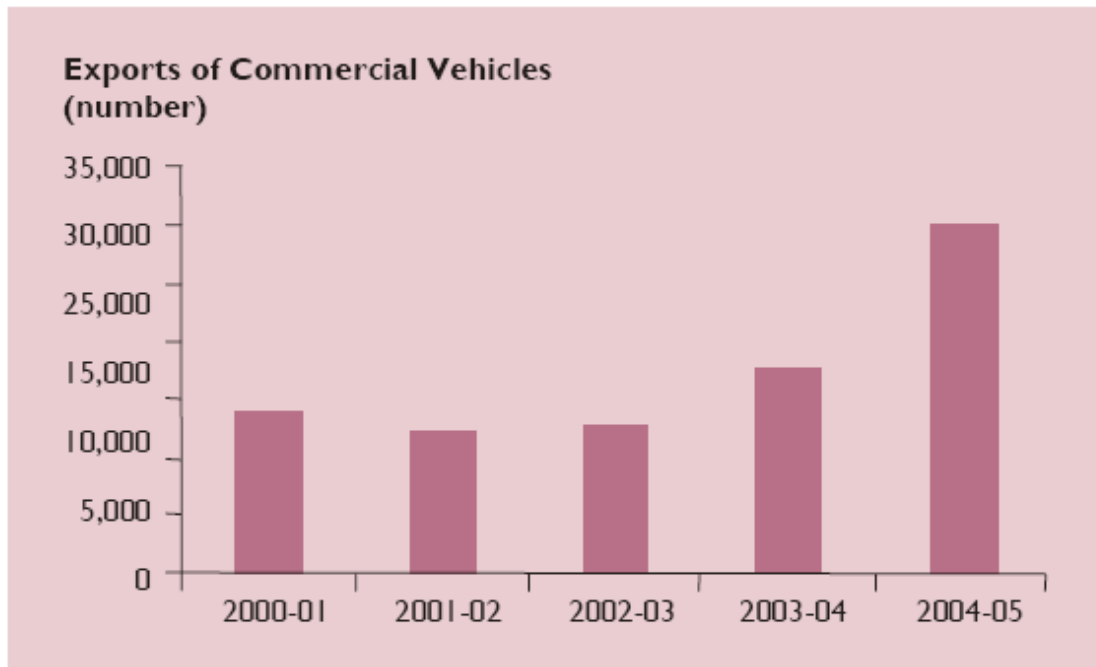
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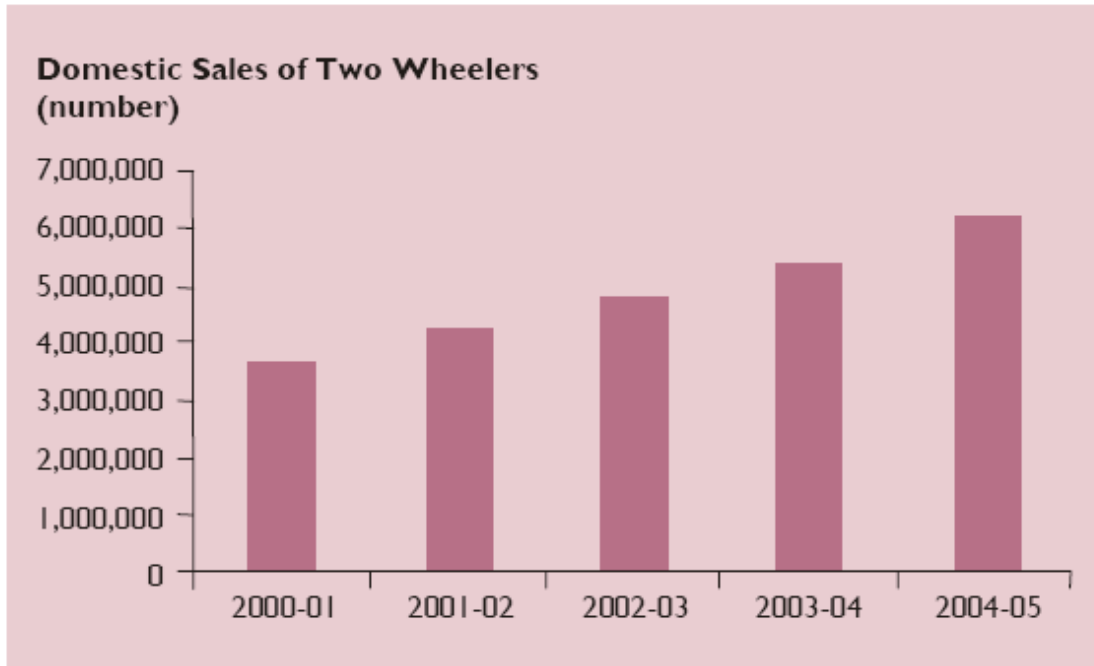
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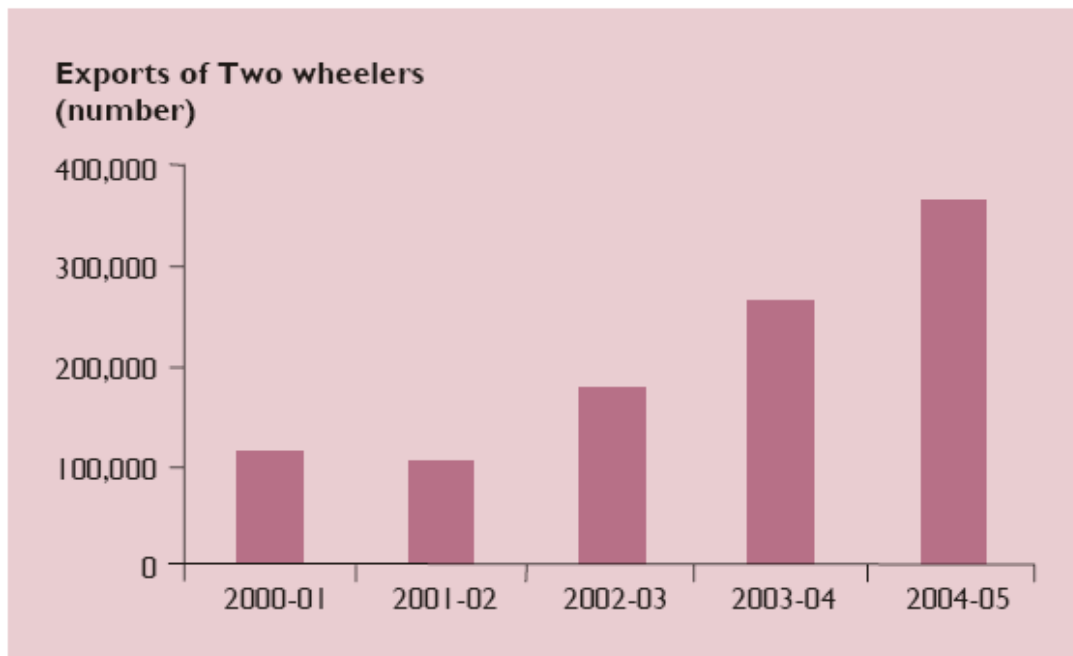
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Rapid growth in Exports signals the increasingly global outlook of these segments.

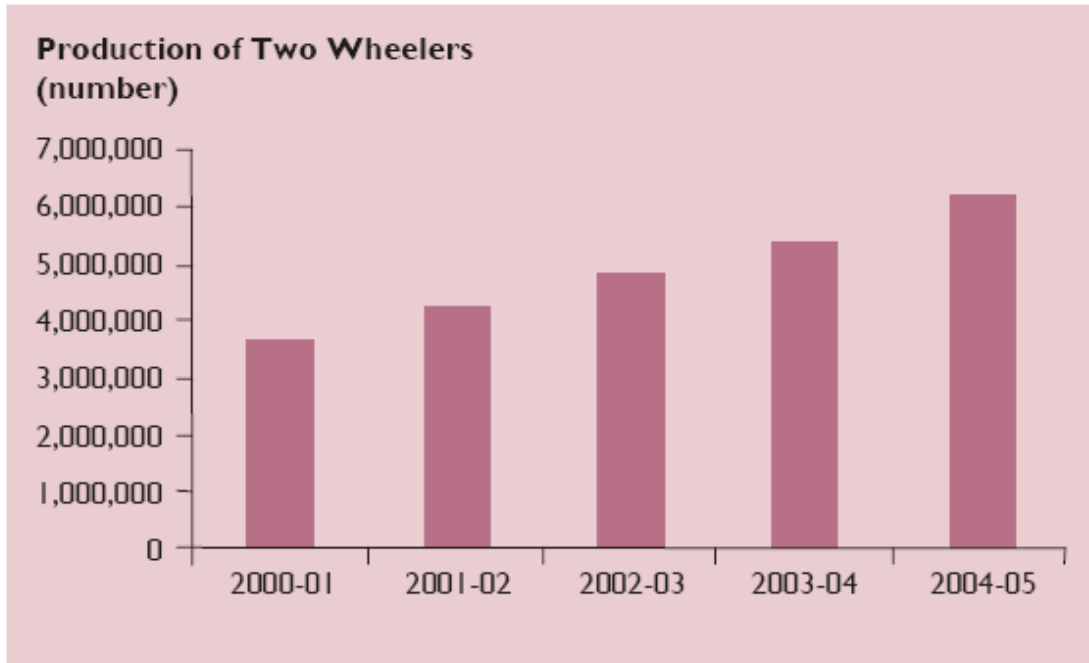
Two wheelers:



Source: SIAM



Source: SIAM

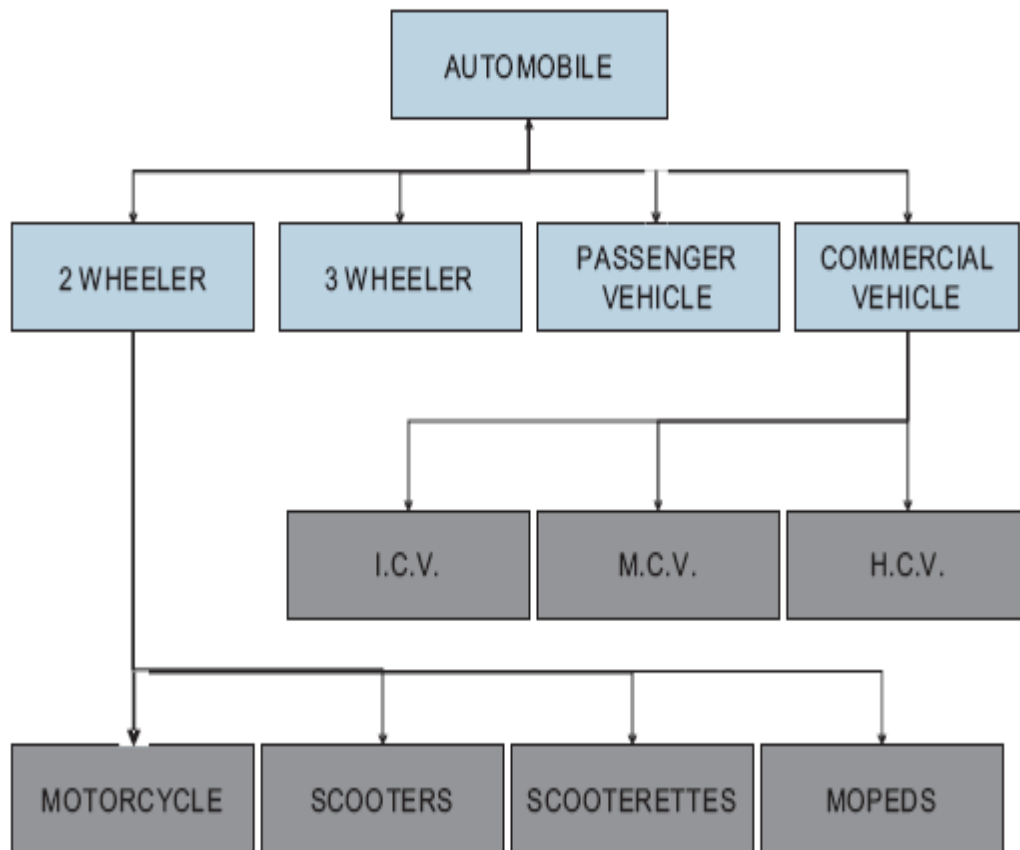


Source: SIAM

While domestic sales have been growing steadily over the years, exports have boomed over the last 5 years.

CONCLUSION:

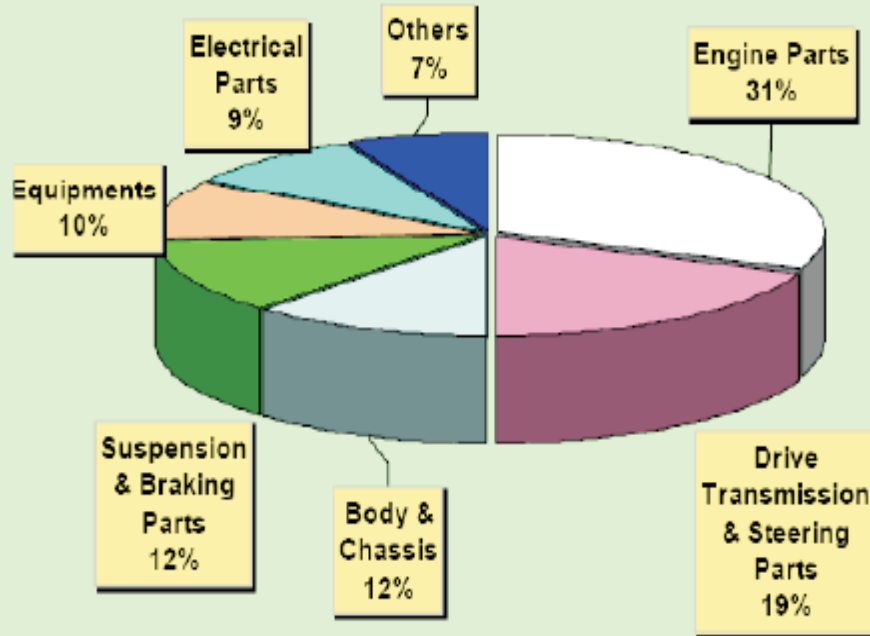
The US\$ 6.8 billion Indian automotive industry has grown at a staggering pace over the last few years at 25% growth from \$ 2.2 billion in 1995 to \$ 8.9 billion in 2005. The industry is projected by ACMA (Auto Components Manufacturers Association of India) to further increase at a 15% CAGR until 2012.

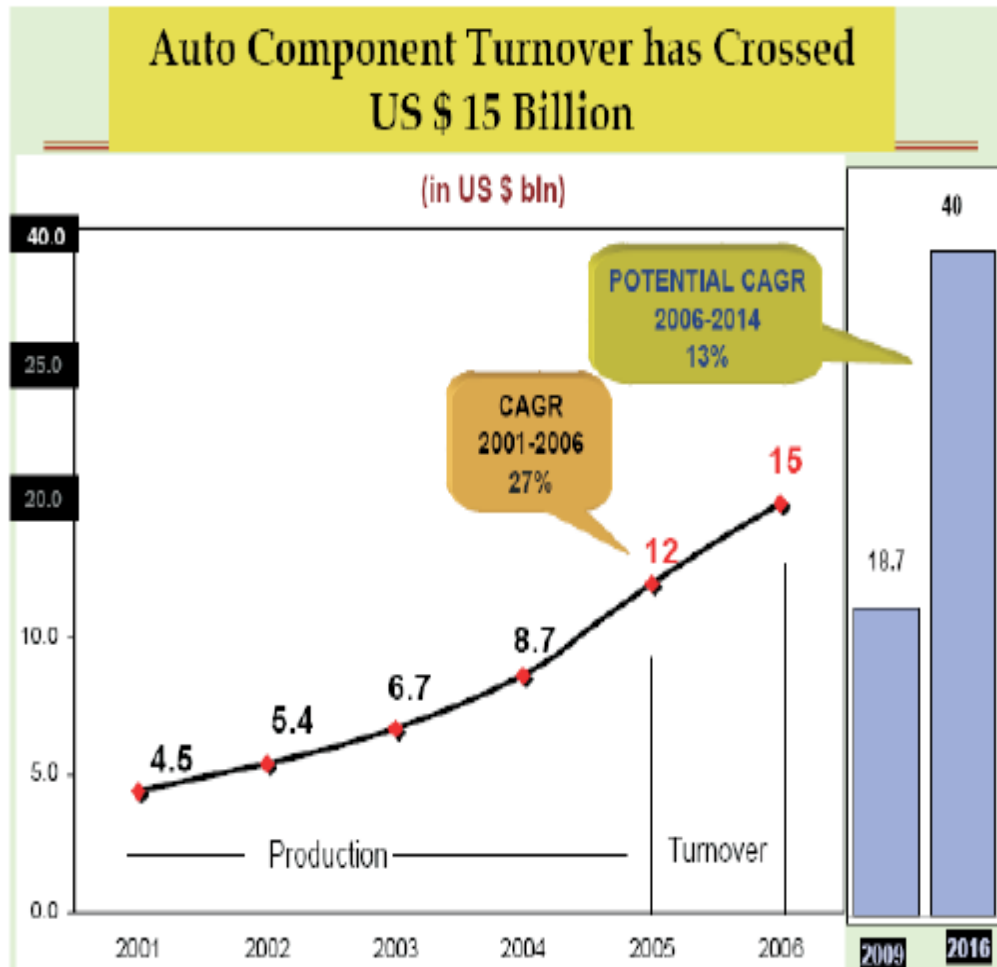


FAST FACTS

- The first automobile in India was rolled out in the city of Bombay in 1897.
- Foreign players are continually adding to their investments in Indian auto industry.
- Within the two-wheel segment, motorcycles account for some 80% of the market.
- Tata Motors dominate the commercial vehicle market with a 60% market share. .
- Two third of auto component parts are produced by Indian OEMs.
- India is the largest producer of two-wheeled transport in the world.
- India hosts the largest production of motorcycles in the world.
- India is the fourth largest car market in Asia – and recently achieved a 1million domestic annual sales volume.
- India is the fifth largest producer of commercial vehicles in the world today.

Comprehensive Production Range





- India has the potential to become one of the top 5 automotive economies based on its present growth potential.
- Steered by the country's high engineering skills, established production lines, a thriving domestic automobile industry and competitive costs, global auto majors are rapidly ramping up the value of components they source from India.
- The industry is poised to jump from exports of US\$ 1.8 billion in 2004-05 to US\$ 5.9 billion in 2008-09.
- According to the Automotive Component Manufacturers Association of India, more than a third (36 per cent) of Indian auto component exports head for Europe, with North America a close second at 26 per cent.
- In 2006, components worth US\$ 2 billion were exported by Indian companies, 75 % of which were bought directly by car companies.

- The original equipment manufacturers (OEMs) include firms like GeneralMotors, Ford Motor Company, Cummins International, Bosch, Volkswagen, BMW, MAN (trucks) and JCB (earthmoving equipment) amongst others. Over 20 OEMs have set up their International Purchase Offices (IPOs) in India to source components. This number is expected to double by the year 2010.
- India enjoys a definite cost advantage with regard to castings and forgings. The manufacturing costs in India are 25 to 30 % lower than western counterparts. India's competitive advantage does not derive from costs alone, but from its full service supply capability.

CHAPTER: 2***CONCEPTUAL FRAMEWORK OF SHAREHOLDER VALUE CREATION*****INTRODUCTION:**

'Shareholder Value Creation has become a mantra intoned with solemnity at every Annual General Meeting and in every Annual Report. The whole corporate world throughout the globe has been busy in fulfilling this goal. Any negligence by any company in this area may threaten its mere existence in the marketplace what to talk about its prosperity or growth. So, all the companies in the domestic sector as well as in the international sector are striving hard to accomplish this goal in their own ways, with the vision and mission they possess, with the forces and strategies they have and with the power and resources they can deploy. After the opening up of the economy, liberalisation of trade and commerce and crossborder flow of fund and technology, this move has gained added momentum with the rising expectation of the shareholders for their value of money and the forward looking statements concerning performance and position being released by the corporates in the media.

The economy has become more competitive and more dynamic in recent years and to succeed in it companies must juggle a host of conflicting demands. They must find ways of cutting costs and operating more efficiently. They must respond swiftly to changing customer demands and technological change. They must focus on nurturing the wellbeing of their employees who, in this new "knowledge" economy, are now recognised as core assets. They must constantly innovate if they want to keep up with and stay ahead of the competition. They must also carry out socially responsible actions, which help to reinforce their corporate reputation and brand image. As a consequence of companies trying to meet so many conflicting demands, however, traditional models and measures of company performance are being questioned, especially the shareholder value model. Is it valid in the current economic environment and will its use foster sustainable economic growth?

In the modern economy, the stakeholders are looking for new ways to measure performance and profitability to gain competitive edge. As of now, what the companies are using as financial metrics is incompatible with the financial market mechanism. When it comes to metrics and performance, the companies must confirm the relevance of tools to all the concerned. So, the present day competitive environment demands value based management (VBM). This approach is to fulfill the expectations of shareholders. A large number of companies are adopting various value based tools, like Economic Value Added (EVA), Market Value Added (MVA), to measure profitability.

VALUE BASED MANAGEMENT:

Recent years have seen a plethora of new management approaches for improving organizational performance: total quality management, flat organizations, empowerment, continuous improvement, reengineering, *kaizen*, team building, and so on. Many have succeeded – but quite a few have failed. Often the cause of failure was performance targets that were unclear or not properly aligned with the ultimate goal of creating value. Value-based management (VBM) tackles this problem head on. It provides a precise and unambiguous metric – value – upon which an entire organization can be built.

The thinking behind VBM is simple. The value of a company is determined by its discounted future cash flows. Value is created only when companies invest capital at returns that exceed the cost of that capital. VBM extends these concepts by focusing on how companies use them to make both major strategic and everyday operating decisions. Properly executed, it is an approach to management that aligns a company's overall aspirations, analytical techniques, and management processes to focus management decision making on the key drivers of value.

In the last decades, management accounting faced increasing challenges to adopt new approaches, designed to fit the changes in the economic environment and to correct perceived inefficiencies in existing controlling structures. This paper focuses on one of those recent developments, viz. value-based management (VBM). Since VBM is claimed to be changing financial management at the highest level in some of the world's largest companies, this literature review compares the value-based management approaches of six consultants, viz. Stern Stewart & Co, Marakon Associates, McKinsey & Co, PriceWaterhouseCoopers, L.E.K. Consulting and HOLT Value Associates and tries to assess the potential of their management frameworks.

Value-based management can be defined as an integrated management control system that measures, encourages and supports the creation of net worth. Although VBM is more than metrics, we first focused on a non-exhaustive number of value-based metrics, divided in two segments, the listed perspective-segment and the non-listed perspective. Since metrics are a means and not the goal of a VBM-program, we compared not only the metrics used by the six consultants, but also analysed their value-based management constructs as a whole. This analysis was based on the fundamental components of a holistic VBM-program, as defined by several researches on value-based management. This comparison revealed some clear similarities between the approaches, but also demonstrates distinctions and different accents. There is for instance a clear unanimity about the focus on maximizing shareholder value, about the conviction that the interests of all stakeholder groups are best served when putting the shareholder first and about the impact of value-based management on collaboration. Notwithstanding the similarities, they all six suggest using different types of measures, combine different systems and processes, have other views on strategy development and advocate their own training & education program.

In the last decades, management accounting faced increasing challenges to adopt new approaches, designed to fit the changes in the economic environment and to correct perceived inefficiencies in existing controlling structures. In the 1950s and 1960s an important debate focused on the character of information for decision-making. Another group of scholars addressed the issue whether the contribution margin approach was superior to systems that fully allocated overheads. In the 1970s several researchers flocked around the topic of residual income and the optimal control of relatively autonomous divisions. More recently with new developments in management accounting it appears that the three letter acronyms are becoming very popular. Some of the most fashionable are: SMA (strategic management accounting), ABC, ABM & ABB (activity-based costing and its variants; activitybased management and activity-based budgeting), BPR (business process re-engineering) and BSC (balanced scorecard). A common element, which distinguishes the later management accounting tools from the earlier ones, is that the more recent apparatus have emerged predominantly from practice and from consultants. Another modern-day .hot. topic in practice, which is claimed to be changing financial management at the highest level in some of the world's largest companies, (Bromwich, 1998) is value-based management (VBM).

Value-based Management, or VBM for short, is not a single idea. VBM is more a single framework for making consistent value-enhancing decisions. VBM artfully combines financial and strategic management techniques to manage the organisation's resources with the ultimate objective of maximising Value. Understanding the relationship between Strategy, financing, corporate governance and the creation of value is the key to making consistent value-enhancing decisions through the proper allocation of resources, people, land, equipment & buildings, and the financial assets in the organization that will derive the most value.

Maximising Shareholder Value

VBM is a comprehensive approach to management based on the principle that managers (shareholders' agent) at all levels of the organization must manage their firm's resources with the ultimate objective of maximizing shareholder value. VBM combines financial and strategic management techniques to create sustainable competitive advantage at all levels of the firm. By aligning internal business processes, strategies, and corporate governance and investor communications, VBM provide a common discipline, a consistent culture, and a singular focus on value for all business activities. VBM addresses the most fundamental questions in business:

- How much is your company worth?
- How much would its value be affected by each of several operating, investment, and financial policies?

- Will the corporate plan create value? Which SBUs are creating value?
 - How would alternate strategies affect shareholder value?
- Which compensation plan and other corporate governance initiatives motivate the greatest corporate value? Which metrics should be used in performance targets and evaluation?
- How should the business communicate with the investment community and other key stakeholders?

Maximizing Public Value

VBM is a comprehensive approach to management based on the principle that Public Sector Agencies (Public's Agents) must do it best with resources in their hands to derive the most public value in the service of its citizens, that is from the people, the land, equipment and buildings, and the financial assets in the respective agencies. VBM is a resource management tool. Public Service Agencies consume public funds and resources in delivering products and services to the public. Some public service agencies collect payments from consumers in licenses, fees or charges, while others do not. Public Service Agencies vary from those who collect fees and do not receive any direct government subventions, to those who rely completely on government subventions. In every case, getting maximum value out of the resources in their hands should be the aim, as this would offer the best return for the overall public good. What values are offered to the public, whether directly or indirectly many services are tangible, and can both be measured and priced. On the other hand, many other services are intangible and are social goods, which can neither be measured nor directly priced. But, even so, we must make deliberate effort to define what are the outcomes we are targeting for and what value we are delivering to the public.

What Is Value-Based Management?

From Coca-cola's "A Guide to Implementing Value-Based Management, 1997," VBM is defined as the following:

A way of thinking. VBM is a set of principles that allows us to manage value at all levels of our business. Value creation becomes not just our company's mission, it becomes the philosophy we work with daily. It becomes the framework for everything we do.

A process for Planning and execution. VBM is a method of developing strategies and evaluating decisions by using value-creation principles. The method works on broad business strategies and on each associate's daily work processes.

A set of Tools. VBM is a set of tools for understanding what creates value. And what destroys it. Because value is in the eye of the investor, the only correct way to measure value is from the investor's perspective. VBM explicitly introduces the perspective of current and prospective shareholders into all aspects of the management process, including strategy formulation, capital allocation, financial policy, performance measurement, investor-employee communication, and incentive compensation. Thus, business decisions are analyzed for their effects on the company's "economic value".

VBM emphasizes long-term cash flows analysis and risk analysis in all aspects of managerial decision making, such as evaluating individual projects and determining the economic value of the overall strategy of the business.

The VBM approach is ultimately aimed at the goal of structuring and managing a company in a way that will create more value for its owners. VBM is both a philosophy and a methodology for managing companies. As a philosophy, it focuses on the overriding objective of creating as much value as possible for the shareholders. The value mindset is clearly focused on long-term cash flow and risk considerations, consistent with investor thinking and the empirical evidence from capital markets. As a methodology, VBM provides an integrated framework for making strategic and operating decisions.

Value-based Management in Perspective

Value-based management is a management control system that measures, encourages and supports the creation of net worth. In the mainstream management accounting viewpoint the concept of control systems results from the behavioural shortcomings mentioned in the agency theory. In the perspective of a firm regarded as a set of contracts among factors of production with each factor motivated by its self-interest, a separation of the control of the firm on the one hand and the ownership of the firm, on the other hand, is an efficient form of economic organization. (Fama, 1980) However this separation can simultaneously cause austere dysfunctional behavior.

The agency theory focuses on the agency relationship between the actor or the group (the agent), who has certain obligations to fulfil for another actor or group (the principal) because of their economic relationship. The selection of appropriate governance mechanisms between the agent and the principal is, given the assumption that agents are motivated by their self-interest, necessary to ensure an efficient alignment in their interests. This alignment in interests can be disturbed by two main problems: the agency problem and the problem of risk sharing. The agency problem rests on the assumption that the desires and goals of the agents and principals can conflict; and that it is difficult or expensive for the principal to monitor what the agent is doing. (Eisenhardt, 1989) The problem of risk sharing is based on the assumption that the principal and the agent have also different attitudes towards risks,

which explains their different courses of action. (Shankman, 1999) Both problems are the corollary of a lack of goal congruence between the objectives of the agents and those of the principals of the organization. The central purpose of management control systems is to lead people to take actions in accordance with their perceived self-interest that are also in the best interest of the organization. (Anthony and Govindarajan, 2001) Value-based management systems are conceived to reduce this lack of goal congruence. Moreover, the various proponents of VBM systems think they have a very good answer to both problems outlined in the agency theory by trying to make managers think and behave more like owners.

Defining Value-based Management

Although there is an ongoing polemic regarding the metrics that should be used and initially even more who could claim the copyright on them, we see that apart from which management approach or process is used, VBM measures are generally based on comparison between (a) corporate market value & corporate accounting book value and/or (b) on the residual income measure. (Bromwich, 1998) Moreover, it seems that even in the way the different practices are being described, authors tend to veil their concepts in mist. We find however that most definitions of value-based management are a sign of the same way of thinking.

A first set of publicists describes the output of value-based management:

« Value-based Management is essentially a management approach whereby companies. driving philosophy is to maximize shareholder value by producing returns in excess of the cost of capital. » (Simms, 2001)

« Value-based Management is a framework for measuring and, more importantly, managing businesses to create superior long-term value for shareholders that satisfies both the capital and product markets. » (Ronte, 1999)

« Value-based management is a framework for measuring and managing businesses to create superior long-term value for shareholders. Rewards are measured in terms of enhanced share price performance and dividend growth. » (Marsh, 1999)

« Value-based Management is a management philosophy which uses analytical tools and processes to focus an organization on the single objective of creating shareholder value. » (Condon and Goldstein, 1998)

« Value-based Management is a new way for managing, focused on the creation of real value not paper profits. Real value is created when a company makes returns that fully compensate investors for the total costs involved in the investment, plus a premium that more than compensates for the additional risk incurred. » (Christopher and Ryals, 1999)

« Value-based Management is based on the notion that the central objectives for all public traded companies is to maximize shareholder value. Because it offers companies a logical and systematic way to pursue improvements in shareholder value, it has received considerable action in the business press. » (Bannister and Jesuthasan, 1997)

« Value-based Management is a term that describes a management philosophy based on managing a firm with Economic Value Creation principles. » (Armitage and Fog, 1996)

A second group focuses on the combination of the process and the outcome:
« Value based Management is a combination of beliefs, principles and processes that effectively arm the company to succeed in the battle against competition from the outside and the institutional imperative from the inside. These beliefs, principles and processes form the basis of a systematic approach to achieving the company's governing objective. » (Mc Taggart et al., 1994)

« Value based Management can be all embracing. It aligns strategies, policies, performance, measures, rewards, organization, processes, people, and systems to deliver increased shareholder value. » (Black et al., 1998)

« Value-based management is a managerial approach in which the primary purpose is shareholder wealth maximization. The objective of the firm, its systems, strategy, processes, analytical techniques, performance measurements and culture as their guiding objective shareholder wealth maximization. » (Arnold, 1998)

« Value Based Management is a management approach which puts shareholder value creation at the centre of the company philosophy. The maximization of shareholder value directs company strategy, structure and processes, it governs executive remuneration and dictates what measures are used to monitor performance. » (KPMG Consulting, 1999)

« The founding principle underlying Value-based Management is the discounted cash model of firm value. However, VBM is more than a performance measurement system. Proponents argue that if it is to be successful it must be used to tie performance to compensation. The guiding principle underlying the use of VBM, then, is that measuring and rewarding activities that create shareholder value will ultimately lead to greater shareholder value. » (Martin and Petty, 2000)

« Value-based Management says, in a nutshell, the key to increased shareholder value lies in the integration of strategic planning, performance measurement and compensation. » (Leahy, 2000)

« Value-based Management is a different way of focusing an organization strategic and financial management processes. In order to maximize value, the whole organization must be involved. » (Anonymous, 1998)

We found only one source that describes just the process:

« Value-based Management is a holistic management approach that encompasses redefined goals, redesigned structures and systems, rejuvenated strategic and operational processes, and revamped human-resources practices. Value-based Management is not a quick fix but a path requiring persistence and commitment. » (Boulos, Haspeslagh and Noda, 2001)

The references that define inputs, process and outputs of value-based management are scarce:

« An approach to management whereby the company's overall aspirations, analytical techniques and management processes are aligned to help the company maximize its value by focusing management decision making on the key drivers of shareholder value. » (Institute of management accountants, 1997)

In general, the distinctive features of value-based management are:

_ Management VBM is a management tool, a control system; an apparatus that is used to integrate resources and tasks towards the achievement of stated organizational goals. (Merchant, 1998)

_ Approach

VBM is a prescribed and usually repetitious way of carrying out an activity or a set of activities that propagate its values all over the organization. It is a robust disciplined process that is meant to be apparent in the heart of all business decisions. (Morrin and Jarell, 2001)

_ Maximizing shareholder value

VBM.s purpose is to generate as much net worth as possible. Or put in another way: to distribute the given resources to the most valuable investments. Maximization also implies a forward vision, based on expected outcomes.

2.3 Why Value-based Management?

As in every economic trade-off, managers are confronted with optimising the allocation of scarce resources. The current economic and social environment, characterized by countless changes and evolutions (Young and O.Byrne, 2001) provides management and more particularly those in management accounting and management control functions, with new challenges. Those challenges not only reveal inefficiencies in the existing management systems but also support the need for an integrated management tool. The most important challenges and inefficiencies are briefly discussed below. In the Anglo-Saxon countries and more recently also in continental Europe much attention is directed towards the issue of shareholder value. (Mills and Weinstein, 2000; Young and O.Byrne, 2001)

The attention for shareholder value has always been on the management agenda but in the 1960s and the 1990s the focus on shareholder value was less explicit. A McKinsey & Co research reveals that shareholder-oriented economies appear to perform better than other economic systems, and other stakeholders do not suffer at the hands of shareholders. (Copeland et al., 2000)

Furthermore it appears that there is a paradigm shift with regard to management objectives. In the past (and probably still even these days in some organizations) sales-growth or revenue-growth was often the governing objective. Residual income theory applied to customer or product profitability analysis reveals us that not every growth is a good thing to pursue.

This is however not the only change in management objectives, since management more and more realizes that traditional earning measures do not reflect the real value creation. Those traditional metrics are accounting based and therefore do not take into account the risk notion, neither the impacts of inflation, nor opportunity costs. Stern Stewart & Co (Stern Stewart, 1999) calls this: . the switch from .managing for earning. to .managing for value. . In addition, value is said to be one of the best performance measures because it is the only measure that requires complete information. To understand value creation one must use a longterm strategic point of view, manage all cash flows on the income statement and the movements on the balance sheet, and one must know how to compare cash flows from different time periods on a risk adjusted basis. It is therefore impossible to make good decisions without complete information, and according to Copeland there is no performance metric other than value that uses complete information. (Copeland et al., 2000)

Companies are looking for an approach that serves as many purposes as possible. The VBM approaches are argued to subsume or render unnecessary most, if not all, other types of performance measures at the corporate and strategic business unit levels. They therefore contest the principle of different accounting for different purposes. Bromwich (Bromwich, 1998) but also Ottoson and Weissenrieder (Ottoson and Weissenrieder, 1996) mention the search for comprehensive systems. Bromwich observes the need for measuring tools, applicable to different organizational levels, such as corporate and business unit level, while Ottoson and Weissenrieder emphasize the need for measurement systems, that can be used for internal and external communication.

In recent times, business executives have concentrated on improving « operational »

processes such as manufacturing, supply chain, sales and marketing, etc. All too often these activities have resulted in improvements that do not deserve the predicate .sustainable.. Kotter notes that the large majority of large change processes have failed to produce the results expected (Kotter, 1995) for the reason that they are missing an important ingredient. This ingredient is a lack of corresponding changes in the business management processes and in the organizational culture. A lack of changes regarding an economic focus; clarity about how capital is to be deployed and managed in the future and how ownership and accountability for operational changes are to be balanced

across the value chain, only serves to undermine the sustainability of these operational changes.

Not methodology

The focus of VBM should not be on methodology. It should be on the why and how of changing your corporate culture. A value-based manager is as interested in the subtleties of organizational behavior as in using valuation as a performance metric and decision-making tool.

When VBM is working well, an organization's management processes provide decision makers at all levels with the right information and incentives to make value-creating decisions. Take the manager of a business unit. VBM would provide him or her with the information to quantify and compare the value of alternative strategies and the incentive to choose the value-maximizing strategy. Such an incentive is created by specific financial targets set by senior management, by evaluation and compensation systems that reinforce value creation, and – most importantly – by the strategy review process between manager and superiors. In addition, the manager's own evaluation would be based on long- and short-term targets that measure progress toward the overall value creation objective.

VBM operates at other levels too. Line managers and supervisors, for instance, can have targets and performance measures that are tailored to their particular circumstances but driven by the overall strategy. A production manager might work to targets for cost per unit, quality, and turnaround time. At the top of the organization, on the other hand, VBM informs the board of directors and corporate center about the value of their strategies and helps them to evaluate mergers, acquisitions, and divestitures. Value-based management can best be understood as a marriage between a value creation mindset and the management processes and systems that are necessary to translate that mindset into action. Taken alone, either element is insufficient. Taken together, they can have a huge and sustained impact.

A value creation mindset means that senior managers are fully aware that their ultimate financial objective is maximizing value; that they have clear rules for deciding when other objectives (such as employment or environmental goals) outweigh this imperative; and that they have a solid analytical understanding of which performance variables drive the value of the company. They must know, for instance, whether more value is created by increasing revenue growth or by improving margins, and they must ensure that their strategy focuses resources and attention on the right option.

Management processes and systems encourage managers and employees to behave in a way that maximizes the value of the organization. Planning, target setting, performance measurement, and incentive systems are working effectively when the communication that surrounds them is tightly linked to value creation.

The value mindset

The first step in VBM is embracing value maximization as the ultimate financial objective for a company. Traditional financial performance measures, such as earnings or earnings growth, are not always good proxies for value creation. To focus more directly on creating value, companies should set goals in terms of discounted cash flow value, the most direct measure of value creation. Such targets also need to be translated into shorter-term, more objective financial performance targets.

Companies also need nonfinancial goals – goals concerning customer satisfaction, product innovation, and employee satisfaction, for example – to inspire and guide the entire organization.

Such objectives do not contradict value maximization. On the contrary, the most prosperous companies are usually the ones that excel in precisely these areas. Nonfinancial goals must, however, be carefully considered in light of a company's financial circumstances. A defense contractor in the United States, where shrinkage is a certainty, should not adopt a "no layoffs" objective, for example.

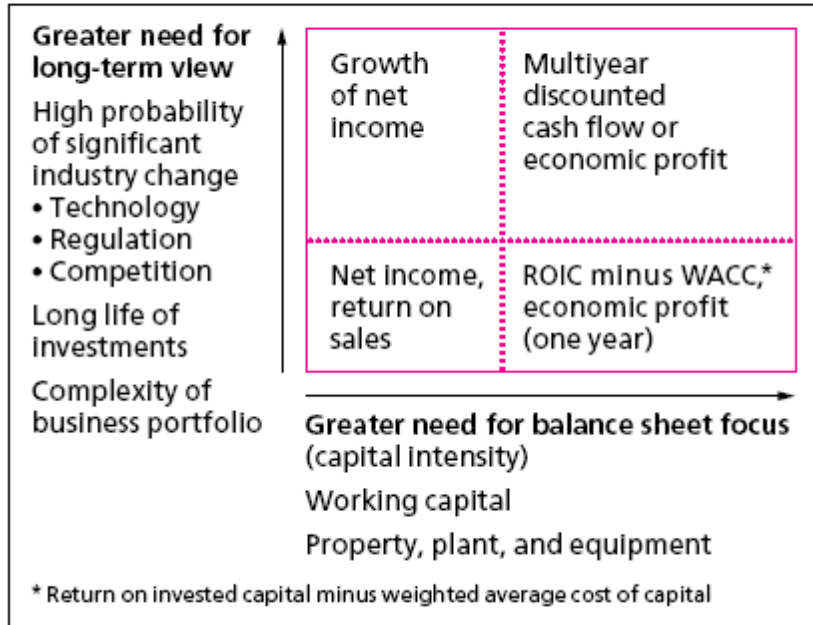
Objectives must also be tailored to the different levels within an organization. For the head of a business unit, the objective may be explicit value creation measured in financial terms. A functional manager's goals could be expressed in terms of customer service, market share, product quality, or productivity. A manufacturing manager might focus on cost per unit, cycle time, or defect rate. In product development, the issues might be the time it takes to develop a new product, the number of products developed, and their performance compared with the competition.

Even within the realm of financial goals, managers are often confronted with many choices: boosting earnings per share, maximizing the price/earnings ratio or the market-to-book ratio, and increasing the return on assets, to name a few. We strongly believe that value is the only correct criterion of performance.

Exhibit 2 compares various measures of corporate performance along two dimensions: the need to take a longterm view and the need to manage the company's balance sheet. Only discounted cash flow valuation handles both adequately. Companies that focus on this year's net income or on return on sales are myopic and may overlook major balance sheet opportunities, such as working capital improvement or capital expenditure efficiency.

Exhibit 2

Measuring corporate performance



Decision making can be heavily influenced by the choice of a performance metric. Shifting to a value mindset can make an enormous difference. Real-life cases that show how focusing on value can transform decision making are described in the inserts “VBM in action.”

Finding the value drivers

An important part of VBM is a deep understanding of the performance variables that will actually create the value of the business – the *key value drivers*. Such an understanding is essential because an organization cannot act directly on value. It has to act on things it *can* influence – customer satisfaction, cost, capital expenditures, and so on. Moreover, it is through these drivers of value that senior management learns to understand the rest of the organization and to establish a dialogue about what it expects to be accomplished.

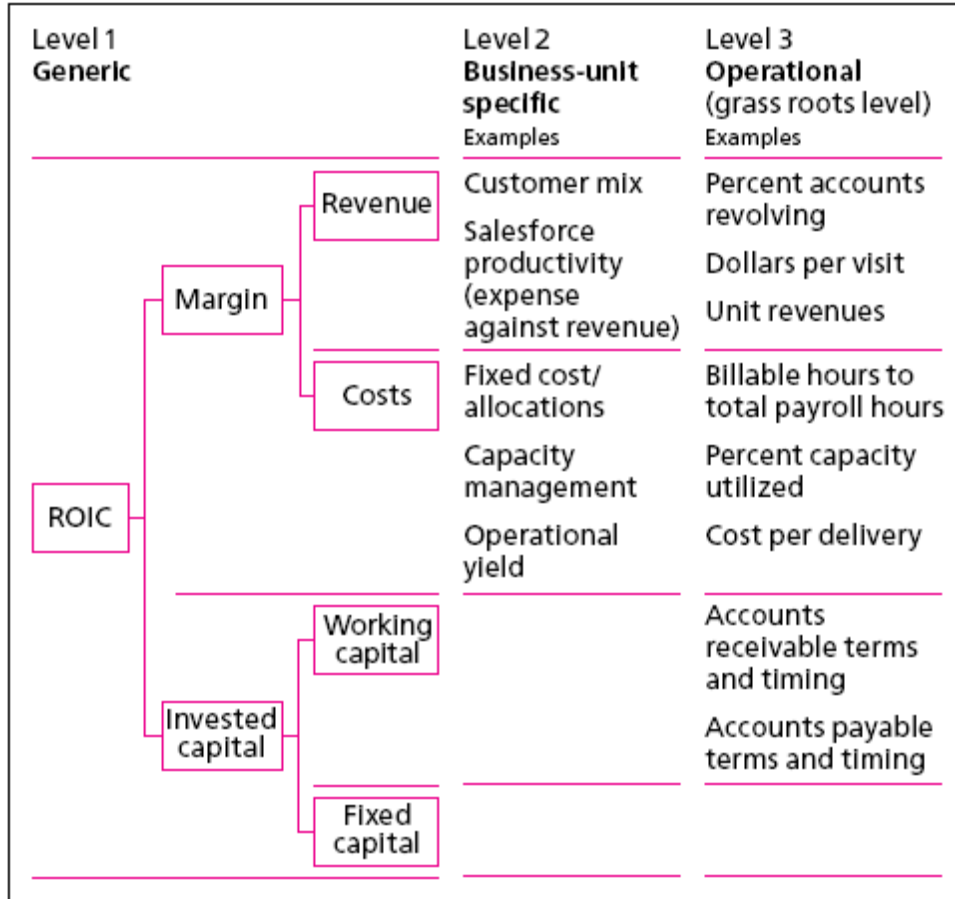
A value driver is any variable that affects the value of the company. To be useful, however, value drivers need to be organized so that managers can identify which have the greatest impact on value and assign responsibility for them to individuals who can help the organization meet its targets.

Value drivers must be defined at a level of detail consistent with the decision variables that are directly under the control of line management. Generic value drivers, such as sales growth, operating margins, and capital turns, might apply to most business units, but they lack specificity and cannot be used well at the grass roots level. Exhibit 3 shows that value drivers can be

useful at three levels: generic, where operating margins and invested capital are combined

Exhibit 3

Levels of value drivers



VBM IN ACTION: MANAGING THE BALANCE SHEET

In Company X, a large consumer products company, the performance of each of its 50 business units was measured by its operating margin or return on sales (ROS). As the exhibit shows, Company X was “doing better” than its average competitor because it was earning a 15.1 percent ROS compared with an industry average of only 14.3 percent.

But Company X had a problem. Its stock price was not performing well against the competition. Management was dissatisfied and began to ask questions. No one could understand why the stock market “didn’t appreciate” the company’s success.

Taking the analysis a little further, we see that Company X’s return on invested capital (ROIC) pretax was 27.2 percent, while competitors earned 34.3 percent. Company X was employing the wrong performance metric. Using ROS meant that it was completely ignoring balance sheet management. Consequently, its capital turnover (sales divided by invested capital) was only 1.8, versus 2.4 for its competitors.

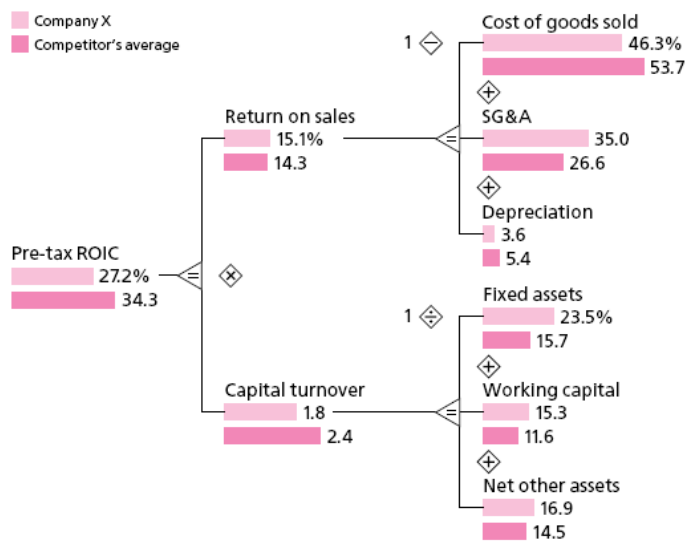
All told, the impact of improvement in the balance sheet amounted to roughly \$500

million. Of that total, \$146 million derived from improved management of working capital, particularly inventories. Because of its emphasis on sales, Company X was over-producing and carrying excess inventories to minimize the probability of stockout. Obsolete and outdated inventories necessitated periodic write-downs. Inventory management was a shambles.

An even larger value creation opportunity existed in consolidating manufacturing operations. Several plants in adjacent geographical areas were underutilized. When the least productive were closed and output shifted to the most productive facilities, two benefits emerged. First, less capital was employed to produce the same finished goods; and second, production became more efficient, raising operating margins. The value of consolidating operations was about \$364 million.

Company X failed to manage its balance sheet because of its emphasis on the wrong performance metric – return on sales. When it moved to ROIC and value creation, it discovered opportunities that had previously been missed.

ROIC tree of Company X versus the competition



Management processes

Adopting a value-based mindset and finding the value drivers gets you only halfway home. Managers must also establish processes that bring this mindset to life in the daily activities of the company. Line managers must embrace value-based thinking as an improved way of making decisions. And for VBM to stick, it must eventually involve every decision maker in the company.

There are four essential management processes that collectively govern the adoption of VBM. First, a company or business unit *develops a strategy* to maximize value. Second, it translates this strategy into short- and long-term *performance targets* defined in terms of the key value drivers. Third, it develops *action plans and budgets* to define the steps that will be taken over the next year or so to achieve these targets. Finally, it puts *performance measurement and incentive systems* in place to monitor performance against targets and to encourage employees to meet their goals.

These four processes are linked across the company at the corporate, business-unit, and functional levels. Clearly, strategies and performance targets must be consistent right through the organization if it is to achieve its value creation goals.

Strategy development

Though the strategy development process must always be based on maximizing

value, implementation will vary by organizational level. At the corporate level, strategy is primarily about deciding what businesses to be in, how to exploit potential synergies across business units, and how to allocate resources across businesses. In a VBM context, senior management devises a corporate strategy that explicitly maximizes the overall value of the company, including buying and selling business units as appropriate. That strategy should be built on a thorough understanding of business-unit strategies.

At the business-unit level, strategy development generally entails identifying alternative

strategies, valuing them, and choosing the one with the highest value. The chosen strategy should spell out how the business unit will achieve a competitive advantage that will permit it to create value.

This explanation should be grounded in a thorough analysis of the market, the competitors, and the unit's assets and skills. The VBM elements of the strategy then come into play. They include:

- Assessing the results of the valuation and the key assumptions driving the value of the strategy. These assumptions can then be analyzed and challenged in discussions with senior management.
- Weighing the value of the alternative strategies that were discarded, along with the reasons for rejecting them.

- Stating resource requirements. VBM often focuses business-unit managers on the balance sheet for the first time. Human resource requirements should also be specified.
- Summarizing the strategic plan projections, focusing on the key value drivers. These should be supplemented by an analysis of the return on invested capital over time and relative to competitors.
- Analyzing alternative scenarios to assess the effect of competitive threats or opportunities.

Developing business-unit strategy does not have to become a bureaucratic time sink; indeed, the time and costs associated with planning can even be reduced if VBM is introduced simultaneously with a reengineering of the planning process.

Target setting

Once strategies for maximizing value are agreed, they must be translated into specific targets. Target setting is highly subjective, yet its importance cannot be overstated. Targets are the way management communicates what it expects to achieve.

Without targets, organizations do not know where to go. Set targets too low, and they may be met, but performance will be mediocre. Set them at unattainable levels, and they will fail to provide any motivation.

In applying VBM to target setting, several general principles are helpful:

Base your targets on key value drivers, and include both financial and nonfinancial targets. The latter serve to prevent “gaming” of short-term financial targets. An R&D-intensive company, for example, might be able to improve its short-term financial performance by deferring R&D expenditures, but this would detract from its ability to remain competitive in the long run.

One solution is to set a nonfinancial goal, such as progress toward specific R&D objectives, that supplements the financial targets.

Tailor the targets to the different levels within an organization.

Senior business-unit managers should have targets for overall financial performance and unit-wide nonfinancial objectives. Functional managers need functional targets, such as cost per unit and quality.

Link short-term targets to long-term ones.

An approach we particularly like is to set linked performance targets for ten years, three years, and one year. The ten-year targets express a company’s aspirations; the three-year targets define how much progress it has to make

within that time in order to meet its ten-year aspirations; and the one-year target is a working budget for managers. Ideally, you should always set targets in terms of value, but since value is always based on long-term future cash flows and depends on an assessment of the future, short-term targets need a more immediate measure derived from actual performance over a single year. Economic profit is a short-term financial performance measure that is tightly linked to value creation. It is defined as:

*Economic profit =
Invested capital x (Return on invested capital – Weighted average cost of capital)*

Economic profit measures the gap between what a company earns during a period and the minimum it must earn to satisfy its investors. Maximizing economic profit over time will also maximize company value.

Action plans and budgets

Action plans translate strategy into the specific steps an organization will take to achieve its targets, particularly in the short term. The plans must identify the actions that the organization will take so that it can pursue its goals in a methodical manner.

Performance measurement

Performance measurement and incentive systems track progress in achieving targets and encourage managers and other employees to achieve them. Rarely do front-line supervisors and employees have clear performance measures that are linked to their company's long-term strategy; indeed, many have none at all.

VBM may force a company to modify its traditional approach to these systems. In particular, it shifts performance measurement from being accounting driven to being management driven. All the same, developing a performance measurement system is relatively straightforward for a company that understands its key value drivers and has set its short- and long-term targets. Key principles include:

Tailor performance measurement to the business unit.

Each business unit should have its own performance measures – measures it can influence. Many multibusiness companies try to use generic measures. They end up with purely financial measures that may not tell senior management what is really going on or allow for valid comparisons across business units. One unit might be capital intensive and have high margins, while another consumes little capital but has low margins. Comparing the two on the basis of margins alone does not tell the full story.

Link performance measurement to a unit's short- and long-term targets.

This may seem obvious, but performance measurement systems are often based almost exclusively on accounting results.

Combine financial and operating performance in the measurement.

Too often, financial performance is reported separately from operating performance, Where as an integrated report would better serve managers' needs.

Identify performance measures that serve as early warning indicators.

Financial indicators can only measure what has already happened, when it may be too late to take corrective action. Early warning indicators might be simple items such as market share or sales trends, or more sophisticated pointers such as the results of focus group interviews. Once performance measurements are an established part of corporate culture and managers are familiar with them, it is time to revise the compensation system. Changes in compensation should follow, not lead, the implementation of a value-based management system.

Compensation design

The first principle in compensation design is that it should provide the incentive to create value at *all levels* within an organization. Compensation for the chief executive officer – though a popular topic in the press – is something of a red herring. Managers' performance should be evaluated by a combination of metrics that reflects their organizational responsibilities and control over resources (Exhibit 6).

Exhibit 6

Performance metrics and managerial roles

Managerial role	Performance metric Returns to shareholder	Economic profit EBIT*	Capital utilization Individual operating value drivers
CEO	◆	◆	
Corporate staff	◆	◆	◆
Business-unit manager		◆	◆
Functional manager		◆	◆
All other employees			◆

* Earnings before interest and taxes

The Stakeholder Approach versus the Shareholder Approach

Managers in all kinds of organizations are now faced with the dilemma of how to reconcile the competing claims of shareholders and other stakeholders. Top management's concern with shareholder value has never been greater, as mentioned above. But, on the other hand, also the interest in stakeholder approaches to strategic management is rowing around the world. (Mills and Weinstein, 2000; Young and O.Byrne, 2001)

Business is all about creating value. This value creation process is only possible with the support of the different stakeholder groups. Despite the fact that the objectives of the different stakeholder groups do not always converge, they realize that working together to realize the multiple goals of the firm is the only way to reach some of their own objectives.

At first sight, literature suggests a great distinction between the stakeholder and the shareholder approach. However, when we look at the interpretation and observations of Grant (1998) according to the shareholder theory, we detect a great similarity between his viewpoint and that of Mills and Weinstein. For indeed, Mills and Weinstein (Mills and Weinstein, 2000) point out that the shareholder and the stakeholder principle do not have to conflict if the issues of the measurement of value and the distribution of value are looked at separately. They state the belief that the quest to create value is important for all organizations. The efficient use of resources should involve ensuring that an economic return in excess of the cost of capital is achieved. However, the wealth created does not have to be distributed with the primacy of the shareholder in mind. There is no reason why other stakeholders with legitimate claims should not be a key part of the distribution process.

The socially responsible business behavior., as defined by Rappaport (Rappaport, 1998), integrates the statements of Pruzan (Pruzan, 1998) that most traditional business thinking is based and dominated by the concept of shareholder accountability, with the conclusions of Mills and Weinstein, since this behavior is described as an alternative stakeholder approach, consistent with the shareholder interests without neglecting the other stakeholder groups and the emphasis on the competitiveness of the organization.

Value-based management, as an approach to encourage management in the value creation process and more particularly in the maximization of shareholder value, does not have to conflict with the stakeholder approach if the value-based management process within the organization is combined with socially responsible business behavior..

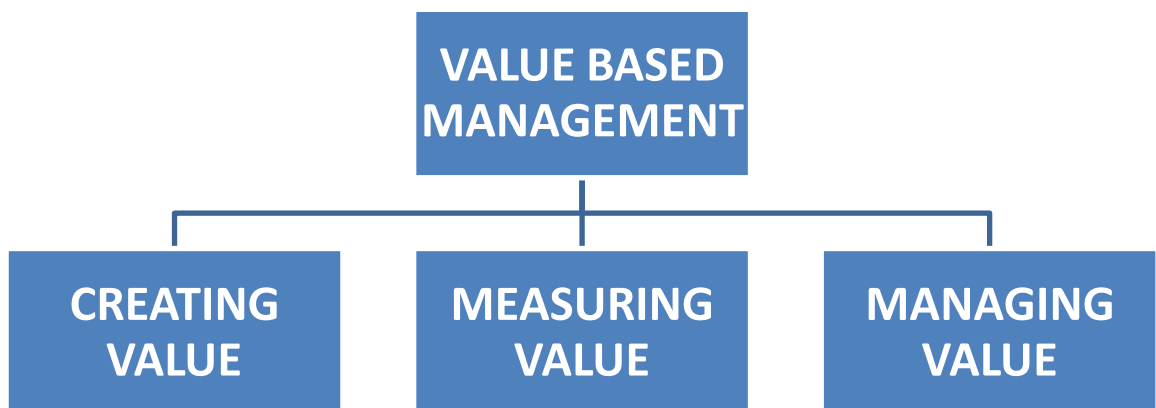
Historical Perspective:

The history of VBM, the focus on value, and business complexity, all are inter-related. VBM is a concept which advocates creating and enhancing

and organization's value by managing the complexities of a business. Before the emergence of Industrial Revolution, most of the companies were smaller in size, there was less competition and business complexities were few, and therefore, at that time it was not difficult for companies to create value. It was only by the end of the 18th century that companies realized that the importance of economies of scale and started to get it through high investments. This led to the emergence of a competitive environment. However, the focus was still on improving productivity and not on creating value. With the passage of time, new management philosophies came into picture, which started with concept of Scientific Management. Later on, a number of tools and techniques were developed so as to find out what the owners are getting after making a particular investment in business. During that time, with the increase of competition, the business environment became too complex. The Enron debacle further fuelled this complexity. So, the organizations cannot survive just on the changes in productivity but also they must ensure competitive edge. These new tools and techniques focused on value creation of an organization which brought into picture a new philosophy-Value Based Management (VBM).

This approach ensures that companies are running consistently on value, usually shareholder value. It is dependent on corporate purpose as well as value. The value can be either economic value (shareholder's value) or constituents (stakeholder value). This concept includes components as given in below figure.

Components of Value Based Management



An increasing attention has been given to the concept of value creation on the last period, for example The Financial Times report this fact on 14th of July, 1998 saying that during 1990s, the prioritizing of Shareholder value creation was increasingly identified as corporations' *raison d'être* (Ezzamel et al., 2008).

According to CIMA, (2004a), "the VBM approach became popular in the mid-1980 when Rappaport published his seminal text, creating shareholder value: the new strand for business performance in 1986." Fahi et al., 2005 indicates that, the concept of managing for value has become on the forefront of many of the recent literature in strategic management.

Furthermore, Ittner and Larcker (2001) have proposed a VBM framework for managing and measuring businesses with the explicit objective of creating superior long-term value for shareholders including six steps which are the most common in practices as follow:

1. Choosing specific internal objectives that lead to shareholder value enhancement.
2. Selecting strategies and organizational designs consistent with the achievement of the chosen objectives.
3. Identifying the specific performance variables, or "value drivers", that actually create value in the business given the organization's strategies and organizational design.
4. Developing action plans, selecting performance measures, and setting targets based on the priorities identified in the value driver analysis.
5. Evaluating the success of action plans and conducting organizational and managerial performance evaluations.
6. Assessing the ongoing validity of the organization's internal objectives, strategies, plans, and control systems in light of current results, and modifying them as required.

After critically reviewing the empirical research in managerial accounting on VBM Ittner & Larcker observed that researches are needed to determine whether all six steps in VBM process are needed to achieve superior performance. They also noted that studies to date have examined only one or few of the links in the process, and provide no evidence on whether the broad set of VBM practices adds greater value jointly than individually. The matter which needs future researches to address.

Some studies concluded that companies that have adopted the VBM programmes have been credited with delivering exceptional value for

shareholders .for example, Lloyds TSB doubled its shareholder value every three years after implementing VBM programme (CIMA , 2004a).

The empirical studies also have tested how the use of residual income based measures such as EVA can ensure goal congruence between the principal and agent and examined the explanatory power of economic measures compared with the accounting measures for the stock returns but the results are mixed (Ittner&Larcker, 2001)

Finally, the CIMA technical report about maximizing shareholders value (2004a) has concluded that:

“Value-based management thus places the interests of owners of companies back in the centre of decision-making. This in turn means those investors can rely on more than just the instruments of corporate governance to protect them from the possible conflicts of interest arising from the split between ownership and management. In this way, managing for value has the potential to bring the two sides of the enterprise governance framework closer and join them in a more comprehensive approach to management.”(CIMA, 2004a).

Management accounting practices

The value based management can be considered the fourth evolution stage in management accounting practices according to The International Federation Of Accountants (IFAC, 1998) where the attention of management accounting practices has been shifted by 1995 to the creation of value through the effective use of resources and using the techniques which examine the drivers of customer value, shareholder value and organizational innovation. The evolution of management accounting imply using a set of techniques and practices that are externally oriented and out-ward looking such as strategic management accounting techniques which help to determine the competitive advantage of a business, using strategic performance management systems such as: Balanced scorecard to translate the strategy into a set of performance measures to align the management practices and the decision making with the strategic objectives. Thus, may contribute to implementing the VBM approach successfully.

SHAREHOLDER VALUE CREATION:

Creating shareholder value is ultimately about value creation. It is about using assets —tangible and intangible — as efficiently and effectively as possible to create value for the owners of the company, the shareholders. In its simplest form, shareholder value means managing a publicly listed company to achieve enhanced share price performance and dividend growth. Dividend growth is only possible however if a company is managed for the long term, not the short. An unrelenting focus on interim and quarterly results, and on

share price alone, will fail to meet these expectations. Share price is a poor indicator of a company's underlying performance. It is highly volatile, heavily influenced by opinion, assumptions, and investor sentiment.

Shareholders value implies the shareholders worth in the company concerned, or to put it in simple terms, how much the share capital is backed by the financial net worth of the company. In the era of conventional accounting, when balance sheet was considered to reflect the true and fair view of the financial position of a company, financial net worth of the shareholders of a company was considered to be the summation of share capital and free reserves reduced by any accumulated loss not adjusted against profit and loss account or reserve and as such appearing on the Asset side of the Balance Sheet or any such items appearing on the Asset side.

But now the public perception has extended well beyond the Balance Sheet and shareholders worth is being considered off the balance sheet also in terms of market value and economic value. In terms of market value of shares, shareholders value is the total market capitalisation of the company, which is equal to the market value per share multiplied by the number of shares issued by the company. From the economic angle, shareholders value denotes the economic value of the business after deducting outsiders claim in terms of loan and advances. How these three approaches are related is very difficult to be precisely described. In many cases it has been observed that in spite of reduction in the book value of some stocks, their market prices have increased and there are also cases, where the book value of shares have been increased but in the market it is quoted at a lesser price. It is the market sentiment, which ultimately decides the equation. But one thing is very clear, to create value, a company has to earn adequate profit to enable it to go in for a return on investment for the shareholders in excess of the cost of capital. The larger the spread the more is the value and vice versa. How to increase the size of the cake and how big is a big, is the ultimate problem to be addressed. The size of the cake should be big enough to meet the expectation of the shareholders to become successful in the value creating activities. The expectation of the shareholders is guided by what he could earn somewhere else at a similar risk consistently.

Shareholders value creation is not a one-time phenomenon but the corporates should strive to create, sustain and enhance value to their shareholders on a constant and continuous basis as a conscious governing objective. There are several compelling factors such as increasing pressure for delivering expected rate of return, year after year, consistency in growth in terms of business, market share, profit and profitability, intense competitive pressure in the business environment amidst the clamour for socially responsible behaviour as a responsible corporate citizen etc. are pushing the corporates to meet this end. The globalisation of world economy through the integration of national economies with the international economy has further accelerated the necessity to put shareholders value creation at the top of the corporate agenda.

SHAREHOLDER VALUE CREATION AND CORPORATE GOVERNANCE:

Corporate governance has recently received much attention due to the recent failure of the large corporations such as: Enron in the U.S.A. While several codes have been established to protect the shareholders' rights, it has been proved that focusing on the accountability only is not enough because it doesn't guarantee the corporate success.

So, it has been suggested to consider the performance side focusing on the value creation to have more integrated governance. On this research, it is suggested to use the value based management (VBM) approach to integrate governance focusing on the strategic role of management accounting.

Corporate governance is considered one of the most controversial issues on both of the academic works and Practice. While the corporate governance codes and regulations were necessary to protect the shareholders' Rights, it has been proved that focusing on the accountability is not enough. Performance also should be considered. While the importance of integrating governance, there are very few studies (e.g. CIMA Strategic scorecard, 2004) that have tried to operationalize this integration in terms of best practices and techniques. so, the motivation of this study is to operationalizing the concept of integrated governance using the VBM approach, testing to what extent the VBM can contribute to a great value for shareholders and protecting their rights and examining how can the management accounting practices support implementing VBM, hence creating the shareholders value.

Integrated governance

There has been considerable discussion in the academia literature for managerial agency problems that arise from the separation of ownership and control. A number of corporate governance mechanisms has been proposed to ameliorate the principal agent problem. These proposed governance mechanisms proposed in prior literature include a smaller board size, more outsiders on the board, more board meetings, a high CEO pay-performance sensitivity, higher managerial ownership, higher institutional ownership, a stronger shareholder and effective audit committee (Chidambaram et al., 2007)

However, the proposed corporate governance mechanisms are focusing on the accountability or the conformance side paying less attention to the performance side. Recently, CIMA and IFAC have developed a governance framework integrating the conformance and the performance together in one framework "enterprise governance". The basic notion of this framework is that at the heart of enterprise governance is the argument that good corporate governance on its own cannot make a company successful and there is another important dimension for the enterprise governance should be taken into consideration which is the business governance "performance". This dimension (performance) focuses on strategy and value

creation and helps the board to make strategic decisions. Companies also must balance conformance with performance.

In more recent work, Busco et al. (2005) have gone further and argued for an integrated governance framework which combines conformance, performance and knowledge management. Using case studies of global organisations, this project studied the role of performance measurement systems and in particular the way in which financial and non-financial information are integrated in a common global measurement language.

Furthermore, Fahi et al. (2005) have argued that we have to go beyond the governance suggesting a new framework to the enterprise governance including three main dimensions: Conformance, performance and corporate responsibility. According to this framework the relationship between the two main dimensions (conformance and performance) is interchangeable as the conformance can lead to creating value and the performance can lead to the assurance.

Defining terms

Corporate governance is about promoting corporate fairness, transparency and accountability. Yet a precise definition of what is a relatively new-ish concept remains blurred. Some take a narrow view, seeing “governance” as a fancy term for the way in which directors and auditors handle their responsibilities towards shareholders. Others expand the concept to explain a firm’s relationship to society, often blurring the distinction between corporate governance and corporate social responsibility.

Few, however, will cavil at the following 1999 definition from the OECD: Corporate governance is the system by which business corporations are directed and controlled. The corporate governance structure specifies the distribution of rights and responsibilities among different participants in the corporation, such as the board, managers, shareholders and other stakeholders, and spells out the rules and procedures for making decisions on corporate affairs. By doing this, it also provides the structure through which the company objectives are set, and the means of attaining those objectives and monitoring performance.

Today’s corporate turbulence may seem unprecedented, but we’ve been here before. In his book “The Great Crash 1929”, J K Galbraith chronicled how an asset bubble breeds lax accountability. The bubble’s collapse exposes malfeasance as money gets tight. This creates loss of investor confidence and public outrage, which in turn prompts a hasty reaction by lawmakers and regulators. The worry for today’s executives is that the 2002 version of this cycle will result in inappropriately far-reaching rules. After all, despite the welter of American scandals, it’s worth restating that corporate governance works satisfactorily in thousands of firms. Or, as veteran investment banker Derek Higgs, the non-executive director of Allied Irish Banks, who is leading an official review into the role of Britain’s non-

executive directors, remarks, “I don’t think that in the UK or even, perverse as it may sound, in the US, things are actually so badly wrong.”

More to the point, regulation remains a very blunt instrument to tackle a hugely complex area. According to Mr Higgs, “The first thing in this game is that there are no absolutes. There are no blacks and whites. There is no such thing as getting it right—there are only behaviours that tend to improve the outcomes.”

Indeed, some argue that it is no coincidence that today’s corporate scandals have been centred in a country with a very legalistic culture. Peter Forstmoser, chairman of Swiss Re, one of the world’s largest reinsurers, and a veteran of the corporate governance scene, comments, “In America in particular there is too much emphasis on form. You hear stories about board members attending meetings flanked by their attorney and everyone having a very tick-box mentality. If you have that approach, you can’t have an open discussion to find a solution to problems.”

Alistair Johnston, who is managing partner of global markets at KPMG International, one of the Big Four accountancy firms, remarks, “The critical and over-riding question is ‘do the financial statements fairly present the company position in a way that is clear and transparent to all stakeholders?’ ”

Mr Johnston and others favour the approach based on the guiding principle of “truth-and-fairness” which is used by the International Accounting Standards Board. Says Mr Johnston: “We need to empower boards, the audit committee and the accounting profession so that whatever the detailed rules may say, they can assert that substance matters more than form.”

Just mandating greater disclosure doesn’t necessarily help. Ted Awty, UK head of assurance at KPMG, comments, “One of the problems of transparency is that disclosure soon becomes so voluminous that it ceases to be transparent. In the case of Enron, if you read the accounts in sufficient detail it is pretty much all there. But what does it mean? Clarity and openness are often in the minds of regulators but they can be translated by companies as sheer volume of disclosure, which isn’t effective.”

Similarly, an understandable desire on the part of regulators and politicians to believe that accountancy boasts a quasi-mathematical precision, thereby justifying sending errant chief executives to prison, risks seeming like wishful thinking. An accurate appraisal of corporate performance is a surprisingly elusive goal. The reason for this is not pilfering by executives, but because there are genuinely different views on assessing the value of assets such as brands, goodwill, intellectual capital, and the appropriate ways to expense items such as bid costs. Whereas in the past it was possible for a CEO to say, these are our assets and these are our earnings”, nowadays there is far more room for quite legitimate discretion. It takes a non accountant, Paul Coombes, director of McKinsey’s corporate governance practice, to state baldly, “The notion that there is one true figure that reveals how companies perform is a myth.”

Culture counts

In any case, corporate governance is about much, much more than the accuracy of the balance sheet. Indeed, except in cases of rudimentary fraud, the balance sheet is just an output of manifold structural and strategic decisions across the entire company, from stock options to risk management structures, from the composition of the board of directors to the decentralization of decision-making powers. To recall the OECD definition—“corporate governance is the system by which business corporations are directed and controlled”—the prime responsibility for good governance must lie within the company rather than outside it. The EIU survey backs up this viewpoint.

Whistle while you work	
Principal barriers to the implementation of proper corporate governance policies within companies	
% of respondents choosing as highest or second-highest barrier	
Cultural and managerial hostility to whistleblowing on dubious practices	51
Increased focus from shareholders and investors on operating cashflow measures rather than earnings per share	34
Lack of financial understanding on the part of senior executives and the board	30
Lack of financial understanding on the part of line managers and middle managers	27
Lack of business understanding on the part of external auditors	26
Lack of business understanding on the part of the board	23
Technology constraints make it difficult to get a decent integrated picture of the financial accounts quickly	21
Cost of implementing and communicating corporate governance policies throughout the organisation	20

Source: Economist Intelligence Unit online survey, July 2002.

Asked to rank the most significant barriers to improved corporate governance, executives selected cultural or managerial hostility to whistleblowing (chosen by 51% of respondents as the most significant or second most significant barrier), followed by an increased focus on the part of shareholders and investors on operating cashflow measures rather than earnings per share (34%) and a lack of financial understanding on the part of senior executives and the board (30%). Interestingly, cost was not perceived to be an especially significant barrier. Of the three top barriers, two relate directly to individual company culture and structure, and the effects of the other can also be mitigated by good internal governance.

Defining good governance precisely is difficult, of course. In the Economist Intelligence Unit survey, respondents were asked to identify the main remedies that would have helped prevent the Enron debacle. The key imperatives chosen were the following:

Full disclosure of off-balance-sheet transactions (57%), greater powers for the audit committee (48%) and regular rotation of external auditors (46%). Yet mandatory rotation of external auditors serves to reduce the discretionary powers of audit committees. Accountants also point out that rotation weakens auditors' understanding of the business.

What's more, a key lesson from the Enron experience, where the board was an exemplar of best practice on paper, is that governance structures count for little if the culture isn't right.

As Tom Tierney, a former managing partner of Bain, a consultancy, has explained, "Culture is what determines how people behave when they are not being watched." Graeme Musker, the company secretary, describes how AstraZeneca, a pharmaceuticals company, recently conducted an exercise asking, could what happened at Enron happen here? "We came to the conclusion that these are radically different companies with different cultures." Even so the company made a few tweaks to its processes. Instilling the right kind of corporate culture is the stuff of management bestsellers—there are no easy answers. But self-evidently, CEOs need to lead by example. Lawrence Weinbach, CEO of Unisys, an IT services company, told a recent meeting of leading American chief executives: "Once you as CEO go over the line, then people think it is okay to go over the line themselves." As for the composition of the board, members feel free to engage in what has been described as a role of "constructive dissatisfaction" by facilitating regular meetings from which executive directors absent themselves.

Top management must also grasp that directors' independence can be compromised by "soft conflicts" such as significant charitable contributions to a favourite institution, the award of consultancy contracts to associated companies or the employment of board members' children. As for the composition of the board, members do not need to have specialist finance or risk expertise to play an effective governance role. The task for the board is rather to understand and approve both the risk appetite of a particular company at any particular stage in its evolution and the processes for monitoring risk.

If the management team proposes changing that radically—for example, by dramatically gearing up the balance sheet, by switching the portfolio of assets from low to high risk, or by engaging in off-balance-sheet financial transactions that inherently alter the volatility of the business and its exposure to uncertainties—the board should be quite willing to exercise a veto. Where there is a proposal for shifting the level of risk, the board has the right to have the rationale explained and the obligation to reject the proposal if need be.

The price of safety

Just below the surface of the debate on how to improve corporate governance, untouched by the media and the politicians, flows a riptide of controversy about the relationship between innovation and conservatism, governance and growth. The optimist's view is that governance is not a burden to be tolerated, but a positive force to help businesses become and stay good. Dominique Thienpont of the European Commission's financial markets unit asserts that well-run companies with sound governance "outperform their indices". But others see a stark choice in the wake of Enron between companies that are accountable and those that are agile. Writing in the context of the debate about loose, innovative companies versus tight, structured firms, Bill Weinstein, professor at Henley Management College, argues, "We may now be caught with a real dilemma—not a situation in which we can waffle about 'balance' between loose networks that deliver more than their core competencies and identifiable units with strict lines of accountability."

Respondents to the EIU survey break into opposing camps. Asked to evaluate the impact of strict corporate governance policies on their business, 45% of the executives surveyed thought that M&A deals would be negatively affected because of the lengthening of due-diligence procedures, and 38% thought it would have a positive impact. Thirty-six per cent thought the ability to take swift and effective decisions would be compromised, against the 34% who thought decision making of this type would improve. No doubt, corporate governance would be made a lot simpler if companies avoided risk altogether.

They could, for example, shy away from "exotic" financial instruments and transactions with unduly opaque structures. But what counts as exotic in this context lies very much in the eye of the beholder. Forty years ago, a national airline that leased rather than owned its fleet would have looked odd.

Today's investors may accept securitisation but look askance at companies that heavily exploit instruments such as collateralised debt obligations (which apportion debt default risks in arcane ways). Defining where the real boundaries of acceptability lie is a formidable task (though one possible test would be whether the CEO can come up with a plain man's rather than sophist's explanation of what is being done and can say, not that "we have an arguable case in law", but rather that in terms of general business principles this is a reasonable way of doing things). But it is formidable precisely because companies, and their shareholders, have a legitimate interest in testing those boundaries. "You have to accept risks," says Helmut Maucher, honorary chairman of Nestlé. "Those who avoid them are taking the biggest risk of all."

Mixed message
 The impact of strict corporate governance on business

% of respondents

	<i>Negative</i>	<i>No impact</i>	<i>Positive</i>
The ability to form new alliances and partnerships with outside entities	18	44	38
The ability to undertake innovative activities such as corporate venturing or spin-offs	25	40	33
The ability to find new and legitimate means of reducing financial risk	24	35	40
The length of due-diligence procedures during M&A transactions	45	18	38
The ability to take swift and effective decisions	36	29	34

Source: Economist Intelligence Unit online survey, July 2002.

Better practice

Culture is necessary but not sufficient to ensure good corporate governance. The right structures, policies and processes must also be in place. AstraZeneca, a pharmaceuticals company, made one or two tweaks following a recent review of its governance practices, for instance. In future, outside auditors will not be awarded consulting contracting work that they will subsequently have to audit. And any substantial consultancy contract, of \$500,000 or above, will have to be expressly approved by the audit committee. AstraZeneca is also going to demand the rotation of audit partners—either every five or seven years.

But if any institution, inside or outside the company, deserves scrutiny, it is the board of directors. According to the Economist Intelligence Unit survey, 44% of respondents say the board of directors has primary responsibility for corporate governance. Yet asked to assess the understanding that non-executive directors had of their business, 28% thought they possessed only a satisfactory understanding and 14% thought their understanding was unsatisfactory or poor. More worrying still, when respondents were asked about the confidence they had in various institutions to uncover financial irregularities, the board received the fewest votes of complete confidence.

What’s more, a key lesson from the Enron experience, where the board was an exemplar of best practice on paper, is that governance structures count for little if the culture isn’t right.

As Tom Tierney, a former managing partner of Bain, a consultancy, has explained, “Culture is what determines how people behave when they are not being watched.” Graeme Musker, the company secretary, describes how

AstraZeneca, a pharmaceuticals company, recently conducted an exercise asking, could what happened at Enron happen here? “We came to the conclusion that these are radically different companies with different cultures.” Even so the company made a few tweaks to its processes. Instilling the right kind of corporate culture is the stuff of management bestsellers—there are no easy answers. But self-evidently, CEOs need to lead by example. Lawrence Weinbach, CEO of Unisys, an IT services company, told a recent meeting of leading American chief executives: “Once you as CEO go over the line, then people think it is okay to go over the line themselves.”

As for the composition of the board, members feel free to engage in what has been described as a role of “constructive dissatisfaction” by facilitating regular meetings from which executive directors absent themselves.

Top management must also grasp that directors’ independence can be compromised by “soft conflicts” such as significant charitable contributions to a favourite institution, the award of consultancy contracts to associated companies or the employment of board members’ children.

As for the composition of the board, members do not need to have specialist finance or risk expertise to play an effective governance role. The task for the board is rather to understand and approve both the risk appetite of a particular company at any particular stage in its evolution and the processes for monitoring risk.

If the management team proposes changing that radically—for example, by dramatically gearing up the balance sheet, by switching the portfolio of assets from low to high risk, or by engaging in off-balance-sheet financial transactions that inherently alter the volatility of the business and its exposure to uncertainties—the board should be quite willing to exercise a veto. Where there is a proposal for shifting the level of risk, the board has the right to have the rationale explained and the obligation to reject the proposal if need be.

The price of safety

Just below the surface of the debate on how to improve corporate governance, untouched by the media and the politicians, flows a riptide of controversy about the relationship between innovation and conservatism, governance and growth.

The optimist’s view is that governance is not a burden to be tolerated, but a positive force to help businesses become and stay good. Dominique Thienpont of the European Commission’s financial markets unit asserts that well-run companies with sound governance “outperform their indices”.

But others see a stark choice in the wake of Enron between companies that are accountable and those that are agile. Writing in the context of the debate about loose, innovative companies versus tight, structured firms, Bill

Weinstein, professor at Henley Management College, argues, “We may now be caught with a real dilemma—not a situation in which we can waffle about ‘balance’ between loose networks that deliver more than their core competencies and identifiable units with strict lines of accountability.”

Respondents to the EIU survey break into opposing camps. Asked to evaluate the impact of strict corporate governance policies on their business, 45% of the executives surveyed thought that M&A deals would be negatively affected because of the lengthening of due-diligence procedures, and 38% thought it would have a positive impact. Thirty-six per cent thought the ability to take swift and effective decisions would be compromised, against the 34% who thought decision making of this type would improve.

No doubt, corporate governance would be made a lot simpler if companies avoided risk altogether. They could, for example, shy away from “exotic” financial instruments and transactions with unduly opaque structures. But what counts as exotic in this context lies very much in the eye of the beholder. Forty years ago, a national airline that leased rather than owned its fleet would have looked odd.

Today’s investors may accept securitisation but look askance at companies that heavily exploit instruments such as collateralised debt obligations (which apportion debt default risks in arcane ways). Defining where the real boundaries of acceptability lie is a formidable task (though one possible test would be whether the CEO can come up with a plain man’s rather than sophist’s explanation of what is being done and can say, not that “we have an arguable case in law”, but rather that in terms of general business principles this is a reasonable way of doing things). But it is formidable precisely because companies, and their shareholders, have a legitimate interest in testing those boundaries. “You have to accept risks,” says Helmut Maucher, honorary chairman of Nestlé. “Those who avoid them are taking the biggest risk of all.”

The power of information

The corporate governance debate is a far more subtle one than the one played out in the newspaper pages might suggest. Tight governance can protect firms and investors from fraud, error and undue risk, but it can also threaten agility and innovation. Yet regulators, the media and the public are uncomfortable with the notion that accounting and governance are a legitimate area of discretion. The solution to the dilemma lies in transparency about a company’s governance policies.

As long as key players within the company understand and approve governance policies, and as long as investors and shareholders are then given clear and accessible information about those policies, the market can be allowed to do the rest, assigning an appropriate risk premium to companies that have too few independent directors or an overly aggressive compensation policy, or cutting the costs of capital for companies that adhere to conservative accounting policies.

That's the theory. But research has found that leading firms worldwide perform poorly when it comes to transparency.

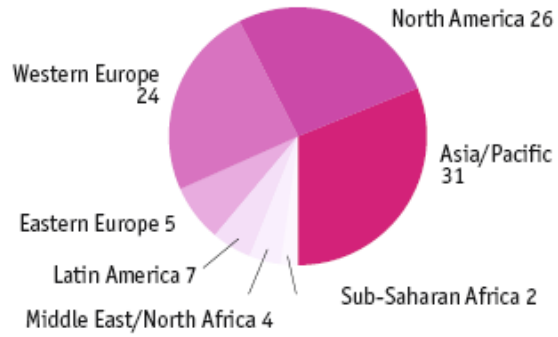
Executive survey results

As part of the research, the Economist Intelligence Unit conducted an online survey of 115 senior executives worldwide into their views on corporate governance.

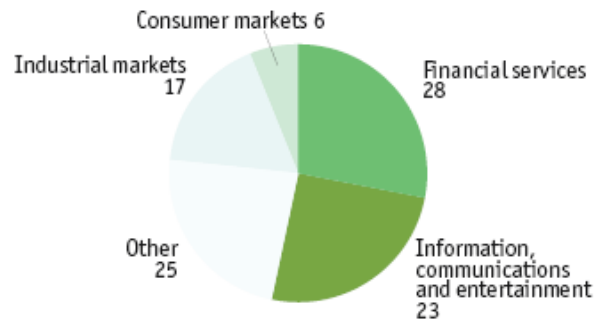
Respondent demographics

% of respondents

Location



Industry



Job title

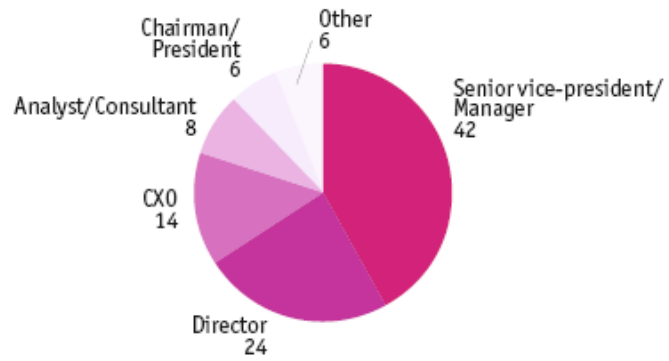
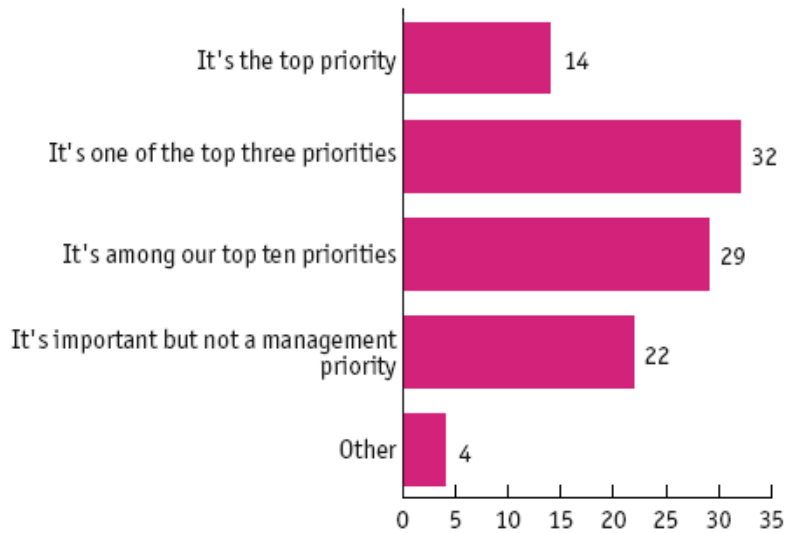


Figure 1
Where does corporate governance rate in the list of current priorities within your organisation?
 % of respondents



Source: Economist Intelligence Unit online survey, July 2002.

Figure 2
Who has primary responsibility for corporate governance issues within your organisation?
 % of respondents



Source: Economist Intelligence Unit online survey, July 2002.

Figure 3
How confident are you that the following type of incident could not happen at your firm?
 % of respondents

	1 <i>Complete confidence</i>	2	3	4	5 <i>No confidence at all</i>
Enron (ie systemic governance failures)	45	33	18	3	2
Allied Irish Banks (ie exposure to actions of rogue employee)	24	40	25	11	0
Equitable Life (ie exposure to unexpected market or macroeconomic movements)	12	31	36	18	3
Merrill Lynch (ie conflicts of interest between revenues centres in the same company)	28	28	25	13	5
Withholding of sensitive information from independent directors	21	37	19	22	1

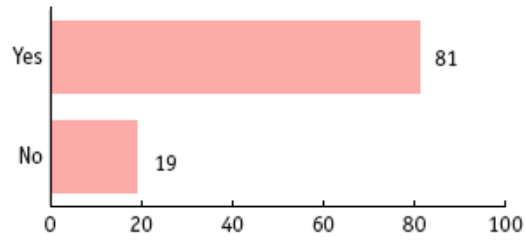
Source: Economist Intelligence Unit online survey, July 2002.

Figure 4
Which of the following pose the greatest threat to the share price of your organisation?
 % of respondents

	1 <i>Most threatening</i>	2	3	4	5	6	7	8 <i>Least threatening</i>
Unethical behaviour by employees	11	9	18	14	8	13	13	13
Credit risk	3	13	12	16	13	21	10	13
Market risk (ie a downturn in market conditions)	19	20	20	10	15	10	4	3
Operational risk (ie IT or logistics failures)	5	13	22	21	14	10	11	2
Reputational risk	15	7	13	20	13	11	4	7
A failure to innovate as fast as competitors	13	16	14	18	13	10	10	7
Poor financial reporting and disclosure practices, including communications with analysts	8	15	10	14	14	12	19	8
A shortage of top-quality senior management talent	15	22	26	9	5	8	9	4

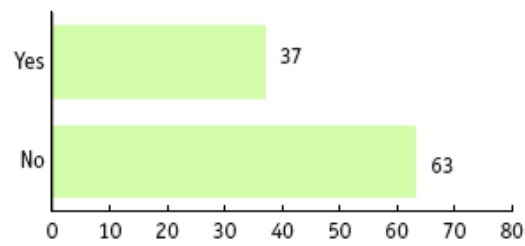
Source: Economist Intelligence Unit online survey, July 2002.

Figure 5
Does your firm have a code of ethics?
% of respondents



Source: Economist Intelligence Unit online survey, July 2002.

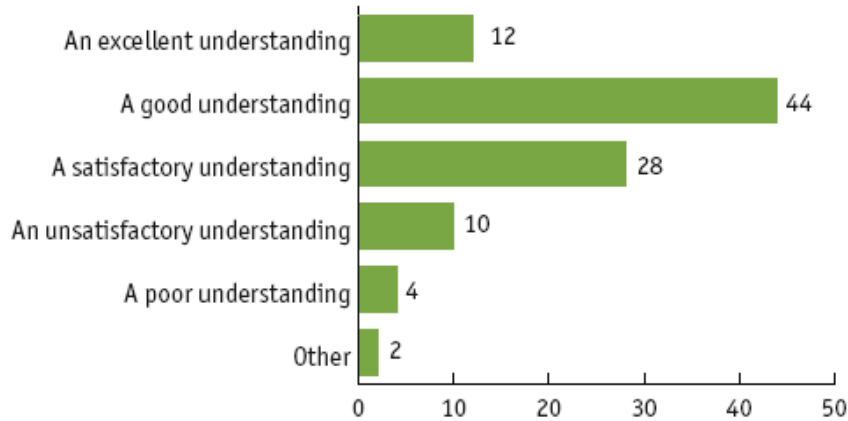
Figure 6
Has it been revised in the past 12 months?
% of respondents



Source: Economist Intelligence Unit online survey, July 2002.

Figure 7
In your view, what level of understanding of the business do non-executive board directors have?

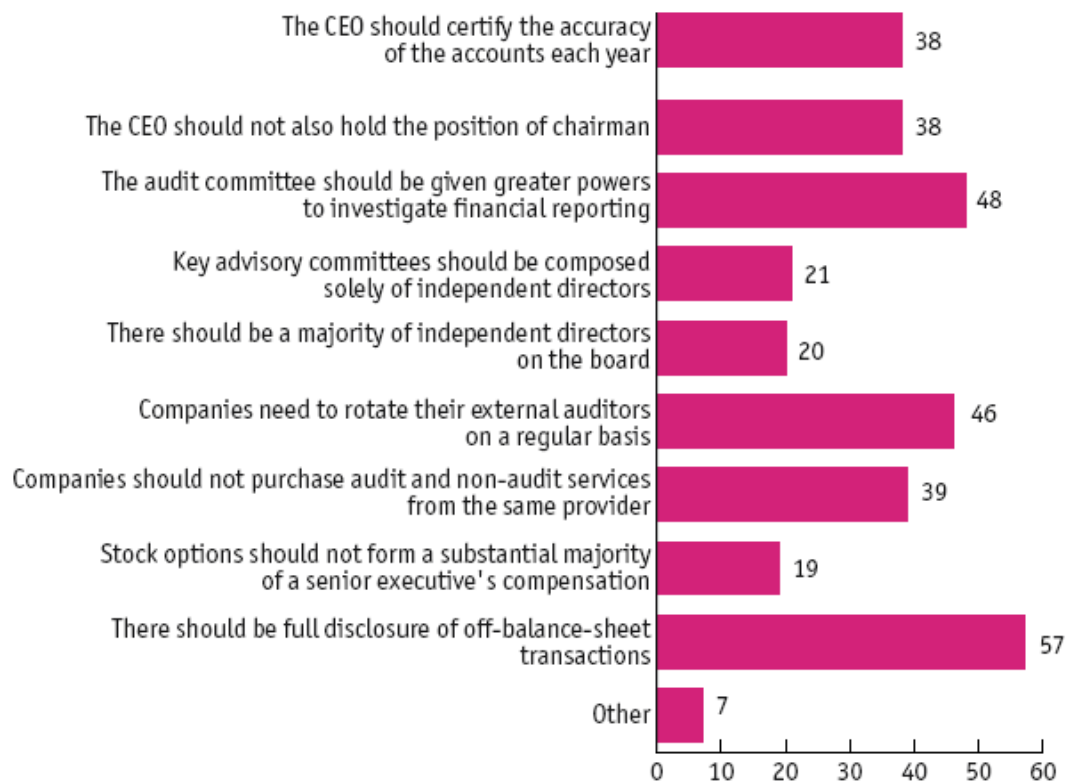
% of respondents



Source: Economist Intelligence Unit online survey, July 2002.

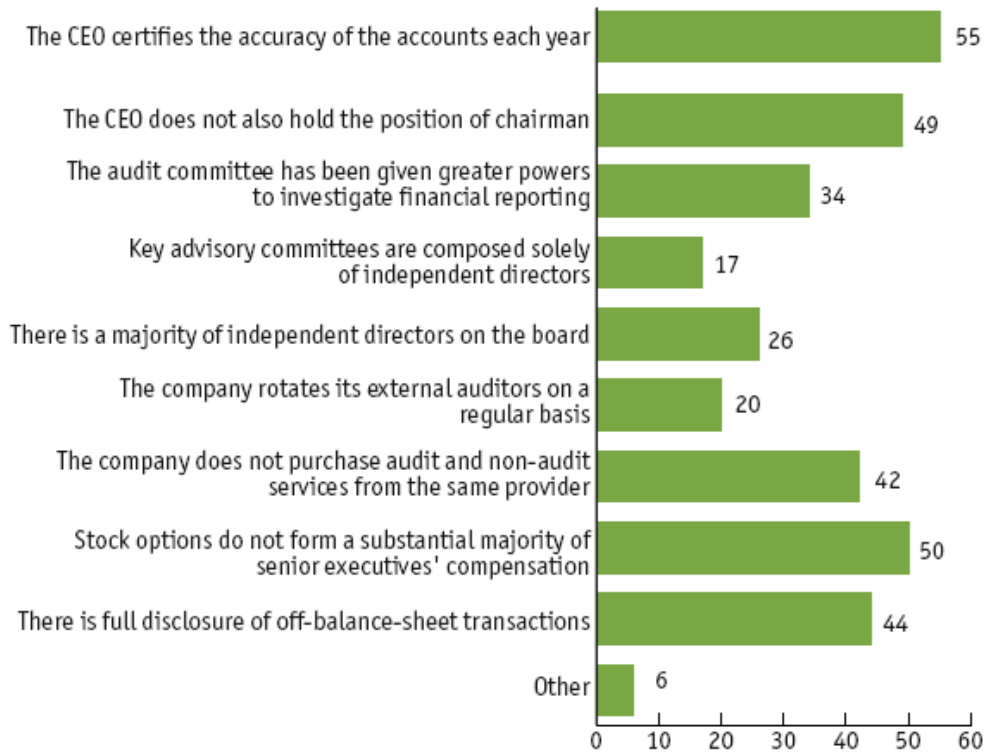
Figure 8
What are the principal lessons other companies can learn from the collapse of Enron?

% of respondents



Source: Economist Intelligence Unit online survey, July 2002.

Figure 9
How many of these prescriptions does your organisation put into practice?
 % of respondents



Source: Economist Intelligence Unit online survey, July 2002.

Figure 10

How much confidence do you have in the following to uncover irregularities in financial reporting within your organisation?

% of respondents

	1 <i>Complete confidence</i>	2	3	4	5 <i>No confidence at all</i>
Senior management	26	37	24	11	3
The board of directors	16	33	23	19	8
The CFO	33	37	17	12	1
The audit committee	16	39	25	12	4
External auditors	18	42	29	11	0
Internal auditors	19	38	29	10	0

Source: Economist Intelligence Unit online survey, July 2002.

Figure 11

How much confidence do you have in the following to rectify irregularities in financial reporting within the organisation if they are uncovered?

% of respondents

	1 <i>Complete confidence</i>	2	3	4	5 <i>No confidence at all</i>
Senior management	41	40	13	6	1
The board of directors	33	40	20	6	1
The CFO	42	31	18	8	0
The audit committee	25	34	23	13	1
External auditors	22	33	27	14	4
Internal auditors	19	31	26	13	5

Source: Economist Intelligence Unit online survey, July 2002.

Figure 12

What are the principal barriers to the implementation of proper corporate governance policies within companies?

	1 <i>Most significant</i>	2	3	4	5	6	7	8 <i>Least significant</i>
Technology constraints make it difficult to get a decent integrated picture of the financial accounts quickly	13	8	18	15	8	12	12	15
Lack of financial understanding on the part of senior executives and the board	9	21	23	17	13	5	7	5
Lack of financial understanding on the part of line managers and middle managers	5	22	17	24	19	8	1	4
Lack of business understanding on the part of the board	10	13	16	16	15	13	10	7
Lack of business understanding on the part of external auditors	4	22	19	15	1	12	8	5
Cost of implementing and communicating corporate governance policies throughout the organisation	7	13	11	17	13	14	15	11
Increased focus from shareholders and investors on operating cashflow measures rather than earnings per share	20	14	13	15	9	11	10	5
Cultural and managerial hostility to whistleblowing on dubious practices	19	32	8	12	7	6	5	8

Source: Economist Intelligence Unit online survey, July 2002.

Figure 13

What potential impact does the imposition of strict corporate governance procedures have on the following aspects of business?

% of respondents

	1 <i>Substantially negative impact</i>	2	3 <i>No impact</i>	4	5 <i>Substantially positive impact</i>
The ability to form new alliances and partnerships with outside entities	4	14	44	26	12
The ability to undertake innovative activities such as corporate venturing or spin-offs	4	21	40	20	13
The ability to find new and legitimate means of reducing financial risk	2	22	35	25	15
The length of due-diligence procedures during M&A transactions	10	35	18	26	12
The ability to take swift and effective decisions	7	29	29	19	15

Source: Economist Intelligence Unit online survey, July 2002.

Figure 14

Which of the following measures does most in your view to ensure corporate transparency for shareholders?

% of respondents

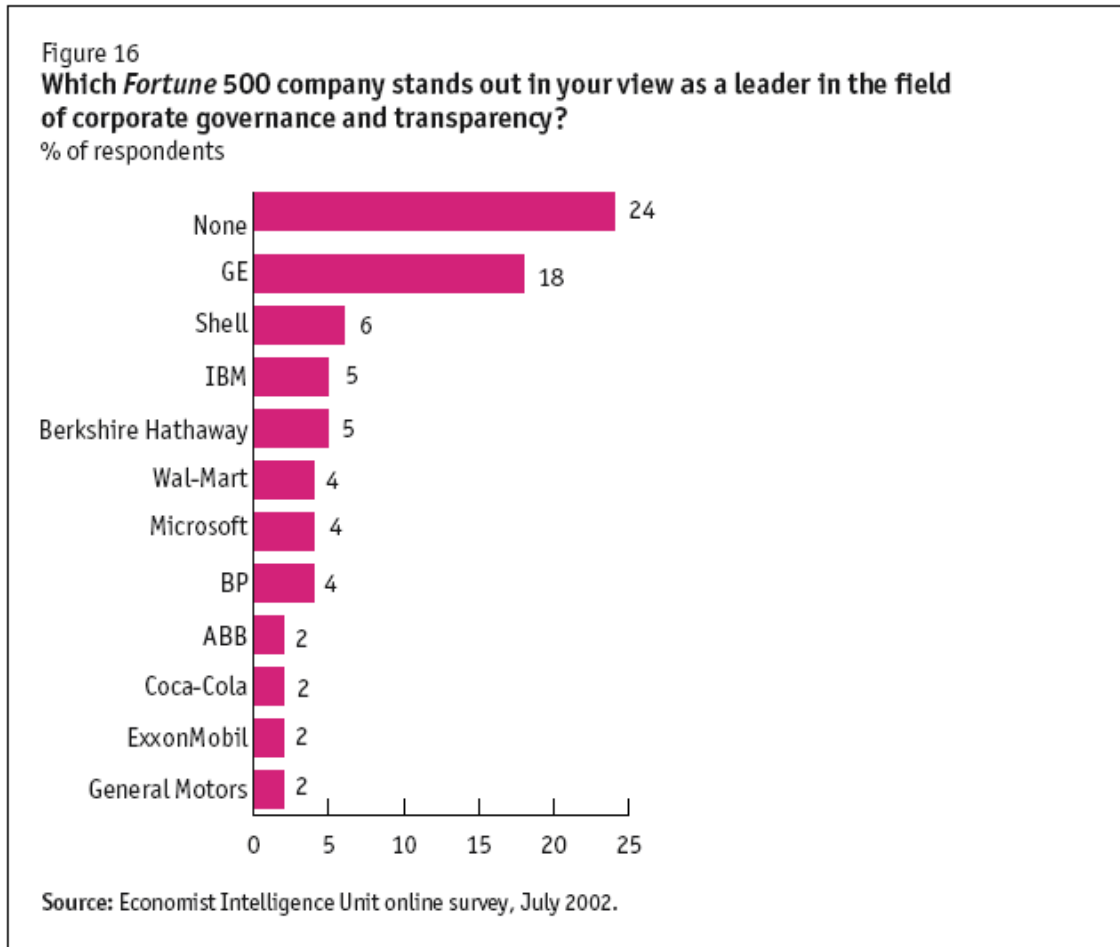
	1 <i>Most impact</i>	2	3	4	5	6	7	8	9 <i>Least impact</i>
Global adoption of International Accounting Standards in financial reporting	25	26	19	9	9	4	4	4	2
Mandating listed companies to adopt and publish corporate governance guidelines and a code of business conduct and ethics	16	18	17	15	15	4	7	4	4
Requirement for the reporting of results to uniform accounting guidelines before any reference to pro forma or adjusted information	19	23	23	9	10	6	4	5	1
Quicker disclosure of insider-trading by company officers	20	20	20	12	12	5	4	2	4
Requirement that reasons for and impact of accounting policies be included in annual reports	16	16	22	19	15	5	3	3	2
CEO to certify all statements and reporting of accounts to shareholders	22	13	13	14	17	6	5	7	2
Requirement for the inclusion of an Operating and Financial Review in the annual report	19	19	19	18	8	5	7	1	1
Use of scenarios and probabilistic forecasts in forward-looking financial statements	6	11	21	12	15	10	12	6	4
Financial results to be discussed at press conference with media and analysts together in the audience	10	12	14	11	18	5	10	8	10

Source: Economist Intelligence Unit online survey, July 2002.

Figure 15
How many of these measures does your company implement?
 % of respondents



Source: Economist Intelligence Unit online survey, July 2002.



ECONOMIC VALUE ADDED:

It is now well settled that the aim of every business entity should be to maximize shareholders wealth by enhancing the firm’s value and all the activities of a firm should be directed to achieve this objective. Various theories of firm conceptualize a firm in various ways and provide an understanding of factors that contribute to the success of a firm.

The **neo classical view** of the firm envisages a business entity as decision-maker based on the supply and demand of both input and output markets. **Organizational theory view** addresses aspects of a firm ignored by neoclassical economics. Disposing of the notion of the firm as a singular decision-maker and recognizing the firm as a complex organization encompassing multiple individuals, organization theory analyses the internal structure of the firm and the relationships between its constituent units and departments. The best explanation that has revolutionized the way we look at the business entity is given by Richard Coase who defined the business entity from a **Transaction cost view**. It explains the existence of the firm with respect to the reduction in costs of contractual arrangements between the buyers and sellers of productive resources. One can say that the ability of the firm to continue to be competitive for generating surplus depends on its ability to reduce transaction costs between the buyers and sellers of the productive resources. The **network view** argues that the business entity once formed is not an isolated instance but a part of a social network, which can be

defined as a set of nodes (e.g., persons, organizations) linked by a set of social relationships (e.g., friendship, transfer of funds, overlapping membership) of a specified type (Laumann, Galaskiewicz, and Marsden, 1978:458). In other words, an organization's productivity is determined less by its internal resources than by the set of resources that it can mobilize through its contacts. The more such contacts the firm has, the better it is 'plugged in' to the key task and influence processes of the industry, and the stronger is its strategic advantage (Madhavan, Balaji, John, 1998). The **Agency view and Stewardship view**, which are two opposite views regarding the conflict of interests between the various agencies involved in the management of the firm. Agency theory argues that unless managers are monitored constantly they act in self-interest, which might be at variance with interests of residual claimants most importantly those of shareholders. This variance can be reduced only through the added costs of monitoring or designing appropriate incentive structures (Jensen and Meckling, 1976). On the other hand the stewardship theory argues that managers interests lie in the well being of the organization and they are at variance with other stakeholders only when the managers' position is threatened due to environmental threats like mergers, acquisitions and takeovers (Donaldson, 1990). **The resource-based view** argues that the firm is bundle of tangible and intangible resources and an organization's success is dependent upon the efficient deployment of these resources to their best advantage (Grant 1991). **The knowledge based view** argues that the firm is a institution that creates an environment under which multiple individuals can integrate their specialist knowledge with low incentives designed to foster co-ordination between individual specialists, thus avoiding the problems of opportunism associated with high incentives directly related to knowledge transactions (Grant, 1996).

The theories, taken together, explain that the success of the business entity in maximizing the firm-value depends on the effectiveness of integrating interests of the firms stakeholders and managers by designing suitable incentive scheme; by improving productivity of resources in the face of uncertainties, by efficient networking with other institutions and social agents; and by reducing transaction costs.

Performance Measurement

Investors measure overall performance of a firm as a whole to decide whether to invest in the firm or to continue with the firm or to exit from it. In order to achieve goal congruence, managers' compensation is often linked with the performance of the responsibility centers and also with firm-performance. Therefore selection of the right measure is critical to the success of a firm. To measure performance of a firm we need a simple method for correctly measuring value created/ enhanced by it in a given time frame. All the current metrics trade off between the precision in measuring the value and its cost of measurement. In other words, each method takes into consideration the degree of complexities in quantifying the underlying measure. The more complex is the process,

the more is the level of subjectivity and cost in measuring the performance of the firm. There is a continuous endeavor to develop a single measure that captures the overall performance, yet it is easy to calculate.

Each metric of performance claims its superiority over others. Performance of a firm is usually measured with reference to its past record and the performance of other firms with comparable risk profile. The various performance metrics currently in use are based on the returns on investment generated by the business entity. Therefore to reach a meaningful conclusion, returns generated by the firm in a particular year should be compared with returns generated by assets with similar risk profile (cross sectional analysis). Similarly return on investment for the current period should be compared with returns generated in past (time series analysis). A firm creates value only if it is able to generate return higher than its cost of capital. Cost of capital is the weighted average cost of equity and debt(WACC).

The performance of a firm gets reflected on its valuation by the capital market. Market valuation reflects investor's perception about the current performance of the firm and also their expectation on its future performance. They build their expectations on the estimated growth of the business in terms of return on capital. This results in an incongruence between current performance and the value of the firm. Even if the current performance is better in relative terms, poor growth prospects adversely affects the value of the firm. Therefore any metric of performance, to be effective, should be able to not only capture the current performance but also should be able to incorporate the direction and magnitude of future growth. Therefore the robustness of a measure is borne out by the degree of correlation the particular metric has with respect to the market valuation. Perfect correlation is impossible because as shown by empirical researchers, fundamentals of a company cannot fully explain its market capitalization, other factors such as speculative activities, market sentiments and macro-economic factors influence movement in share prices. However the superiority of a performance metric over others lies in providing better information to investors.

Metrics of performance have a very important and critical role not only in evaluating the current performance of a firm but also in achieving high performance and growth in the future. The metrics of performance have a variety of users, which include all the stakeholders whose well being depends on the continued well being of the firm. Principal stakeholders are the equity holders, debt holders, management, and suppliers of material and services, employees and the end-users of the products and services. Value creation and maximization depends on the alignment of the various conflicting interests of these stakeholders towards a common goal. This means maximization of the firm value without jeopardizing the interests of any of the stakeholders. Any metric, which measures the firm value without being biased towards any of the stakeholders or particular class of participants, can be hailed as the true metric of performance. However it is difficult, if not impossible, to develop such a metric.

Most of the conventional performance measures directly relate to the current net income of a business entity with equity, total assets, net sales or similar surrogates of inputs or outputs. Examples of such measures are return on equity (ROE), return on assets (ROA) and operating profit margin. Each of these indices measure a different aspect of performance, ROE measures the performance from the perspective of the equity holders.

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ROA measures the asset productivity and operating profit margin reflects the margin realized by the firm at the market place. The net income figure in itself is dependent on the operational efficiency, financial leverage and the ability of the entity to formulate right strategy to earn adequate margin in the market place.

It is important to note that none of these measures truly reflect the complete picture by themselves but have to be seen in conjunction with other metrics. These measures are also plagued by the firm level inconsistencies in the accounting figures as well as the inconsistencies in the valuation methods used by accountants in measuring assets, liabilities and income of the firm. Accounting valuation methods are in variance with the methods that are being used to value individual projects and firms. The value of an asset or a firm, which is a collection of assets, is computed by discounting future stream of cash flows. The net present value (NPV) is the surplus that the investment is expected to generate over the cost of capital. Measures of periodical performance of a firm, which is the collection of assets in place, should follow the same underlying principles. Economic value added (EVA)² is a measure that captures the valuation principles.

ECONOMIC VALUE ADDED – the concept

EVA is the most misunderstood term among the practitioners of corporate finance. The proponents of EVA are presenting it as the wonder drug of the millennium in overcoming all corporate ills at one stroke and ultimately help in increasing the wealth of the shareholder, which is synonymous with the maximization of the firm value. The attractiveness of the EVA lies in its use of cash flow and cost of capital that are determinant of the value of the firm.

In the process, EVA is being bandied about with utmost impunity by all and undry, which includes the popular press. The academic world in its turn has come up with various empirical studies which either supports the superiority of EVA or questions the claim of its proponents. Currently the empirical evidence is split almost half way.

EVA is nothing but a new version of the age-old residual income concept recognized by economists since the 1770's. Both EVA and 'residual income' concepts are based on the principle that a firm creates wealth for its owners only if it generates surplus over the cost of the total invested capital. So what is new? Perhaps EVA could bring back the lost focus on 'economic surplus' from the current emphasis on accounting profit. In a lighter vein it can be said that in an era where commercial sponsorship is the ticket to the popularity of even the concept of god, the concept of residual income has not found a good sponsor until Stern Stewart and Company has adopted it and relaunched it with a brand new name of EVA.

Technically speaking EVA is nothing but the residual income after factoring the cost of capital into net operating profit after tax. But this is only the tip of the iceberg as will be seen in the next few sections. The paper examines EVA both as a measure of overall performance and a management philosophy that helps to improve the productivity of resources.

Mathematically:

$$EVA = (\text{adjusted NOPAT} - \text{cost of capital}) \times \text{capital employed} \text{-----}(I)$$

Or

$$EVA = (\text{Rate of return} - \text{cost of capital}) \times \text{capital} \text{-----}(II)$$

Where;

Rate of Return = NOPAT/Capital

Capital = total assets minus non interest bearing debt, at the beginning of the year

Cost of capital = cost of equity x proportion of equity + cost of debt (1-tax rate) x proportion of debt in the capital.

The above cost of capital is nothing but the weighted average cost of capital (WACC) Cost of equity is normally estimated using capital asset

pricing model (CAPM) that estimates the expected return commensurate with the riskiness of the assets.

If we define ROI as NOPAT/capital then the above equation can be rewritten as

$$EVA = (ROI - WACC) \times CAPITAL EMPLOYED \text{-----}(III)$$

Capital being used in EVA calculation is not the book capital, capital is defined as an approximation of the economic book value of all cash invested in going-concern business activities, capital is essentially a company's net assets (total assets less non-interest bearing current liabilities), but with three adjustments:

- Marketable securities and construction in progress are subtracted.
- The present value of noncapitalized leases is added to net property, plant, and equipment.
- Certain equity equivalent reserves are added to assets:
- Bad debt reserve is added to receivables.
- LIFO reserve is added to inventories.
- The cumulative amortization of goodwill is added back to goodwill
- R&D expense is capitalized as a long-term asset and smoothly depreciated over 5 years (a period chosen to approximate the economic life typical of an investment in R&D).
- Cumulative unusual losses (gains) after taxes are considered to be a long-term investment.

A firm can motivate its managers to direct their effort towards maximizing the value of the firm only by, first measuring the firm value correctly and secondly by providing incentives to managers to create value. Both are interdependent and they complement each other. Therefore this paper examines the EVA concept from two perspectives, EVA as a performance measure and EVA as a corporate philosophy.

Cost of equity is normally estimated using capital asset pricing model (CAPM) that estimates the expected return commensurate with the riskiness of the assets. If we define ROI as NOPAT/capital then the above equation can be rewritten as

$$EVA = (ROI - WACC) \times CAPITAL EMPLOYED \text{-----}(III)$$

Capital being used in EVA calculation is not the book capital, capital is defined as an approximation of the economic book value of all cash invested in going-concern business activities, capital is essentially a company's net assets (total assets less non-interest bearing current liabilities), but with three adjustments:

- Marketable securities and construction in progress are subtracted.
- The present value of noncapitalized leases is added to net property, plant, and equipment.
- Certain equity equivalent reserves are added to assets:
- Bad debt reserve is added to receivables.
- LIFO reserve is added to inventories.
- The cumulative amortization of goodwill is added back to goodwill
- R&D expense is capitalized as a long-term asset and smoothly depreciated over 5 years (a period chosen to approximate the economic life typical of an investment in R&D).
- Cumulative unusual losses (gains) after taxes are considered to be a long-term investment.

A firm can motivate its managers to direct their effort towards maximizing the value of the firm only by, first measuring the firm value correctly and secondly by providing incentives to managers to create value. Both are interdependent and they complement each other. Therefore this paper examines the EVA concept from two perspectives, EVA as a performance measure and EVA as a corporate philosophy. We shall examine EVA as a performance measure to assess whether it conveys any additional information to investors over conventional performance measures. In other words, whether information on EVA leads to better decision by investors.

Examining EVA as a corporate philosophy we intend to look at the efficacy of EVA when implemented at every level of managerial decision making process to encourage managers to deploy resources only on value enhancing activities and to align the interests of shareholders with managers. This involves two things, one is linking managerial compensation package with EVA and second is to inculcate the culture of evaluating every action from the viewpoint that it should generate EVA. The ultimate outcome should be enhancement in the firm-value measured by the capital market. When EVA is used as a management philosophy, it results in the enhancement of productivity by continuously focusing on return vis-à-vis cost of capital. However as market discounts expected long term performance of the firm, any compensation that motivates enhancement of short term EVA, may not maximize the firm value.

However with EVA culture, the firm as a whole focuses on the economic surplus and that definitely improves value enhancement process. Of course, this can be achieved even by implementing the other practices but the simplicity of EVA in communicating the very fundamental principle, that generation of surplus over cost of capital can only enhance the firm value, makes it a management technique superior to other planning and control techniques. We shall examine the appropriateness of this perception.

EVA AS A PERFORMANCE MEASURE

Proponents of EVA argue that EVA is a superior measure as compared to other performance measures on four counts:

- □ it is nearer to the real cash flows of the business entity;
- □ it is easy to calculate and understand;
- □ it has a higher correlation to the market value of the firm and
- □ its application to employee compensation leads to the alignment of managerial interests with those of the shareholders, thus minimizing the supposedly dysfunctional behavior of the management.

The last two merits can be considered as a reflection of the first two. If EVA truly represents the real cash flows of a business entity and it is easy to calculate and understand, then it automatically follows that it should be closely related to the market valuation and it should minimize the dysfunctional behavior of the management when used as an incentive measure. In other words, close relation to market valuation and convergence of managerial interests with shareholders interests is a vindication of EVA as a superior metric.

EVA as a performance measure looks into the efficacy of EVA both as an absolute measure in comparison with net income, residual income and similar measures as well as a ratio in relation with performance measures like ROE, ROA and Operating Profit Margin, which are commonly used by both managers and equity analysts alike. These measures are normally used internally by the management to evaluate employee performance, incentive calculation and investment decisions and externally by equity analysts to ascertain the performance and growth of the firm. Along with these measures valuation models like NPV, IRR, Payback period and Book rate of return are used both internally and externally by managers for investment decisions. The former measures are backward looking measures which take into account past and current performance and facilitates prediction of future performance, whereas latter measures are more forward looking and discount the expected future cash flow streams associated with a given investment or new investment to ascertain the economic viability of the same.

EVA a superior performance measure?

First let us look into the claim of EVA being superior than the conventional measures such as ROI, ROE and ROA, which are based on the accounting figures. Most of these measures give us the rate of return earned by the firm with respect to capital invested in the firm. The most important limitation of these measures are derived from limitations inherent in the measurement of accounting profit. As per current accounting practices, while historical-cost-based accounting measures are being used to carry most of the assets in the balance sheet, revenue and expenses (other than depreciation) are recognized in the profit and loss account at their current value. Therefore accounting rate of returns do not reflect the true return from an investment and tend to be biased downwards in the initial years and upwards in the latter years. Similarly as noted by Malkelainen (Esa Malkelainen 1998), distortion occurs basically due to the historical cost and straight line depreciation schedule used by most businesses to value their assets. This leads to a bias in these measures due to the composition of assets of a firm at any given point in time.

By composition he refers to the current nature of the assets, more current the assets are, the accounting rate of return is closer to the true rate of return. This distortion will not be significant if there is a continuous stream of investments in assets i.e. the value of the mix of assets is nearer to the current value of the assets. But the probability, that at any point of time, a firm should have such a composition of assets is rare, in most cases either the assets are old or relatively new. This precludes these accounting measures from being used to reach any meaningful conclusion regarding the true performance of the firm.

The other important limitation of accounting measures is that they ignore the cost of equity and only consider the borrowing cost. As a result it ignores the risk inherent in the project and fails to highlight whether the return is commensurate with the risk of the underlying assets. This might result in selecting projects that produce attractive rate of return but destroys firm value because their cost of capital is higher than the benchmark return established by the management. On the other hand accounting measures encourage managers to select projects that will improve the current rate of return and to ignore projects even if their return is higher than their cost of capital. Selection of projects with returns higher than the current rate of return does not automatically increase shareholders' wealth. Taking up only those projects, which provide returns that are higher than the hurdle rate (cost of capital) results in increasing the wealth of the shareholder. Therefore use of ROE, ROA or similar accounting measures as the benchmark, might result in selection of those projects that though provide rate of return higher than the current rate of return destroys firm-value. Similarly use of these measures result in continuing with activities that destroys firm value until the rate of return falls below the benchmark rate of return.

EVA proponents claim that because of these imperfections, the accounting based measures are not good proxies for value creation.

Managerial compensation based on these measures does not encourage value enhancement actions by managers. Value enhancement and earnings are two different things and might be at cross-purposes because short-term performance might be improved at the cost of long term health of the firm. Activities involving enhancement of current earnings may be short term in nature, whereas any value enhancing activities should focus on long term well being of the firm.

Avoidance of discretionary costs improves current performance while destroying value of the firm. Managers' focus on short-term performance will increase as long as their rewards are tied to the current performance over long-term value enhancement (Damodaran 1998, David Young 1999).

The question arises whether EVA is an improvement over conventional measures and serves the purpose of motivating managers to pay attention to shareholders value even if that results in compromising current performance. The answer may be negative because all the above limitations are also associated with EVA. As shown in equation III the calculation of EVA entails the usage of an accounting rate of return, the difference lies only in the fact that the cost of equity is also factored in to arrive at the residual income figure. Though incorporation of the cost of equity capital is the virtue of EVA, because it measures economic surplus, it does not remove the limitations of the accounting profit that forms the basis for computing EVA. Moreover the virtue might not be realized in practice since it is not easy to calculate the cost of equity. Market returns cannot be used as a proxy for cost of equity that supports assets in place because market discounts the expectations. Similarly it is difficult to use CAPM in measuring cost of equity because it is difficult to measure risk-free-rate of return, beta and market premium. Difficulties get compounded in an economic environment like India, where interest rates fluctuate frequently, the capital market is volatile and the regulators are yet to have a complete grip on the capital market to enhance its efficiency. Empirical studies show that the volatility in the Indian capital markets, like capital markets in other developing economies, is higher than capital markets in developed economies (Tushar Waghmare 2000). Similarly studies show that beta for companies listed in Indian capital markets is not stable (Sanyal, Guha Roy and Sanyal 2000). It is difficult to ascertain the market premium because of the short history of the Indian capital market, which has become active only in the last decade and also because of its high volatility. Therefore even if for the sake of argument it can be said that the potential of EVA as a measure of performance can be realized fully in an advanced economy, the argument that EVA is a better measure is not tenable in the Indian context.

In India EVA is being used with impunity. A case at point is the study published by Economic times (11th December 2000)³, on corporate performance. While computing EVA it used a flat rate of 13 percent as the cost of capital of all the enterprises included in the study. The study explains that an average 13 percent interest for both the years covered by the study is used as it is almost equal to the prime-lending rate of the commercial bank and financial institution. It is a basic principle of economics that 'higher the risk

higher is the expected return'. By estimating WACC at 13% this basic principle is violated. It may be argued that cost of debt should be taken post-tax and therefore effective cost of equity incorporated in the calculation is higher than 13 percent.

Even if this argument is accepted the computation cannot be defended because the cost of capital is estimated without using any accepted economic model. Moreover by using a flat rate, variation in risk profiles of firms have been ignored. This shows both the popularity of EVA in India and difficulties in measuring the same. The study has also ignored adjustments in capital and operating income suggested by proponents of EVA.

Is EVA simple to understand and calculate ?

The proponents of EVA propose certain adjustments in accounting figures to calculate a proxy for economic capital. The objectives of such adjustments are:

- 1) To measure capital at closer to the current value;
- 2) To include all investments that are treated as period costs by accountants (such as R&D expenditure) and
- 3) To bring EVA closer to the real cash flows of the company.

The Stern Stewart & Co. which is the front runner in eulogizing the utility of EVA, recommends nearly 160 adjustments to the accounting figures for a realistic estimate of EVA. These adjustments truly complicate the calculation of EVA. Most enterprises do not maintain in-depth data required for these adjustments and even if it is maintained it is not accessible to outsiders and it further complicates the computation. For the insiders who have access to the data these adjustments make the calculation too complicated to necessitate the hiring of a consultant. This involves additional costs, which are often not insignificant. Taking this into account most of the EVA proponents recommend that these adjustments have to be scaled down based on the relevance and incremental information that they offer. Stewart argues that distortions in GAAP-based accounting should be corrected to the extent that it is practical to do so, which means that adjustments should be made only if:

- 1) The amounts are significant;**
- 2) Managers can influence the outcome of the item being adjusted;**
- 3) The required information is readily available; and**
- 4) Non-finance professionals can understand them. (Stewart 1991).**

Thus Out of these 160 odd adjustments around 15 adjustments are considered crucial by die hard EVA proponents but in recent years this requirement has been scaled down significantly by many consultants to around five to six adjustments.

These adjustments are aimed at :

1) Producing an EVA figure that is closer to cash flows, and less subject to the distortions of accrual accounting;

2) Removing the arbitrary distinction between investments in tangible assets, which are capitalized, and intangible assets, which tend to be written off as incurred;

3) Prevent the amortization, or write-off, of goodwill;

4) Eliminate the use of successful efforts accounting;

5) bring off-balance sheet debt into the balance sheet; and

6) correct biases caused by accounting depreciation. (S David Young,1999)

Although many adjustments to GAAP-based accounting profit are possible, the following are the most commonly proposed:

1. *Non-recurring gains and losses.*

2. *Research and development expenses.*

3. *Deferred taxes.*

4. *Provisions for warranties and bad debts.*

5. *LIFO reserves.*

6. *Goodwill.*

7. *Depreciation.*

8. *Operating leases.*

Studies that endeavored to find out the benefits of these adjustments concluded that they are largely irrelevant and result in only incremental addition to the information produced by EVA, even if adjustments are tailored to the nature of the business of the company.

The main argument put forward is that even though the logic behind these adjustments is impeccable, whether these adjustments help in

countering any dysfunctional or suboptimal behavior of the managerial staff is suspect. It is argued that these adjustments are more crucial for the external user. But for most firms, adjusted EVA offers few advantages over unadjusted EVA. Moreover it carries the costs of increased complexity and any other costs that arise when profit measures deviate from GAAP. In short, the residual income measure first proposed by Alfred Sloan seventy-five years ago is likely to offer the same advantages as today's highly advertised EVA. (S.David Young 1999).

As mentioned above the veracity of EVA is dependant on the various adjustments proposed to minimize the accounting biases, which in itself is a complicated process. Other than this the increase in the number of adjustments increase the subjectivity involved in measuring EVA(Damodaran 1998). It is very difficult to and almost impossible to quantify all the value enhancement activities of a firm without involving lot of subjective estimates and therefore even with the various accounting adjustments proposed to remove the accounting biases in the estimation, EVA computation tends to increase the subjectivity in its estimate.

Though the idea of EVA is simple and theoretically elegant, its implementation is difficult and often takes away much of the potential benefits.

Is EVA a better signal to the capital market ?

Capital market theories have established cash flow based valuation models that are extensively used by analysts for valuation of firms and equity. It is highly improbable that a single number can capture all the inputs required by those models. Aggregation results in loss of information. Therefore accounting standard setters and regulators, all over the globe, require firms to be transparent and disclose information that financial statements fail to capture, either as a part of financial statements or by way of a separate report. Analysts use those information along with information collected from other sources, to value firms. However they often use a single figure, like ROI, as a signal for 'good and bad news'. EVA should be considered a superior substitute of ROI or similar measures only if it provides a better signal.

Independent researchers concluded that even though EVA is correlated to stock returns, it is not much greater than the correlation between accounting profit and stock return.

Therefore though EVA might be incrementally better over other measures, it does not really provide any significant informational advantage. It is pertinent to note that this conclusion is drawn by empirical studies that used the database created and maintained by Stern Stewart & Co (Dodd & Chen 1997; Biddle, Bowen & Wallace 1999). Therefore chances of bias due to incomplete data are almost eliminated. Empirical studies in other countries have also confirmed that EVA does not provide better signal to the capital market. If the empirical studies globally do not provide evidence to support the argument that EVA provides a better signal to the capital market, it may be easily concluded that results of similar studies will not be different for

companies listed in the Indian stock exchanges because Indian capital markets are less efficient as compared to markets in advanced economies. In India it is even more difficult to have a database for conducting such studies and therefore even if some studies show results different from the conclusions of global studies, the same should be viewed with utmost caution.

EVA as a Corporate Philosophy

Though EVA may not have better informational value to capital markets, it can be very useful in improving productivity of a firm, if adapted as a corporate philosophy. Productivity should be measured in terms of creation of wealth for shareholders. An appropriate corporate philosophy should result in goal congruence and should channel all efforts of the management and employees towards a pre-determined goal and strategies of the firm. A firm can enhance its value only if it is able to achieve optimal productivity, in terms of value over a long period of time. Over the years management experts and consultants have proposed many tools and techniques for improving productivity. Firms have tried these tools with varied degree of success. Many of the success stories in relation with implementation of those tools and techniques have taken their place in the annals of history.

Some of the most notable of these are Management Information Systems (MIS), Business Process Reengineering (BPR), Enterprise Resource Planning (ERP), and Brand Valuation in capital budgeting . Though all these tools have different perspectives, they aim at improving the productivity in physical terms and ignore the concept of value. They facilitate increase in the productivity and efficiency of the firm that ultimately contributes to the bottom-line of the firm but increased bottom-line is no guarantee for increase in the shareholders value.

Almost all the tools and techniques are used to reorient the employees' perception of managing 'value drivers' and that culminates into empowerment of employees cutting across the hierarchical levels. All these tools aims at improving productivity by reducing redundancies in the 'value chain', BPR by simplifying existing processes and eliminating on value added activities, MIS by improving the quality and flow of information and ERP by ensuring efficient allocation and utilization of enterprise resources.

The success of these tools reflects in reduced costs for delivering products or services to customers, though it may not always result in increasing shareholder value. These tools fail to distinguish between activities that create value and those that destroy value because they do not measure 'economic surplus' being generated by different activities. Moreover successful implementation of these tools and techniques involve extensive retraining of employees and constant monitoring of performance. In most cases the success or failure of these techniques depends on the effectiveness of communication of the philosophy and process of implementation to employees at all levels. The success of these tools to a great extent depends on how well the firm is able to resolve the problem of resistance to change

and the ability of the management to earn commitment of employees, to the implementation of these techniques. Given this scenario the implementation of these management tools across the firm is a long drawn process and the possibility of success is not very high.

In contrast EVA is an easy to understand concept. EVA, as a corporate philosophy, entails using of EVA at every decision level in the organization. In fact EVA should be adapted as a culture within the organization rather than as a project. EVA when used as a corporate philosophy does not require precise estimation, therefore hurdles in estimating EVA does not come in the way of building the EVA culture in an organization. A firm can roughly estimate its WACC a hurdle rate that is being used by firms in capital budgeting decisions. Therefore it is not difficult for employees to use EVA for decision making including operational decisions.

There are more than 300 corporates, world wide that have adapted EVA as a corporate philosophy. Many of these organizations are successful multinationals like Coca-Cola, Bausch & Lomb, Briggs & Stratton and Herman Miller. Some of the state owned enterprises in U.S.A. including the U.S. Postal service that has the largest civilian labor force in the world, have adapted EVA culture to improve efficiency in services and to motivate the employees.

The advantage of EVA over other similar tools is that it improves business literacy because of easy understandability and conceptual clarity. The one component that sets it apart over conventional measures is its consideration of the cost of capital and this is the one component, which should be understood by everyone involved in operations. because they do not measure 'economic surplus' being generated by different activities. Moreover successful implementation of these tools and techniques involve extensive retraining of employees and constant monitoring of performance. In most cases the success or failure of these techniques depends on the effectiveness of communication of the philosophy and process of implementation to employees at all levels. The success of these tools to a great extent depends on how well the firm is able to resolve the problem of resistance to change and the ability of the management to earn commitment of employees, to the implementation of these techniques. Given this scenario the implementation of these management tools across the firm is a long drawn process and the possibility of success is not very high.

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The advantage of EVA over other similar tools is that it improves business literacy because of easy understandability and conceptual clarity. The one component that sets it apart over conventional measures is its consideration of the cost of capital and this is the one component, which should be understood by everyone involved in operations. Business literacy is the effort of management to convey to all the employees the fact that for any activity to be value enhancing the return generated should be over and above the cost of capital employed for that activity. This small shift in the outlook of the employees immediately raises the threshold limit of the returns generated to create value. Usually employees do not look at their actions from this perspective and therefore there is a need to continuously highlight the concept.

As explained earlier compensation methods based on EVA work better in achieving the objective of goal congruence and minimize the agency cost. Use of EVA improves 'internal corporate governance' in the sense that it motivates manager to get rid of value destructive activities and to invest only in those projects that are expected to enhance shareholder value.

Ideally a management control system should motivate managers for 'self control' rather than managers are being controlled because human beings have general resistance to controls. Linking compensation with EVA helps employees in conducting a self examination of every action taken by them to ensure that it enhances EVA of the firm. Care should be taken to tie compensation to the enhancement of long term EVA rather than short term EVA. As discussed earlier, managers do have scope to enhance the short term EVA at the cost of long term value creation by rejecting good investment opportunities that have long gestation period or, avoiding discretionary costs or by targeting a capital structure that might reduce the WACC in the short run while enhancing the financial risk in the long run. One way to counter this limitation is to defer payment of a part of incentives.

Empirical evidence supports the above observations. Empirical studies concluded that EVA, when used as an incentive compensation measure, tends to improve the value of the firm by inducing managers towards value creating activities (Biddle, Bowen and Wallace 1999). Using EVA or Residual Income measures for incentive compensation leads to:

- The improvement in operating efficiency by increasing asset turnover;

- Disposal of selected assets and reduce new investments (the assumption is that these assets have failed in earning adequate returns when compared to the overall cost of capital) and
- more share repurchases (consistent with distributing under performing capital to shareholders).

It may be concluded that though EVA fails to provide additional information to the capital market, it can be used to improve the internal governance of a firm.

The Indian Context

India has found supporters for EVA. It has already earned favor with journalists and leaders in corporate reporting. However most of them do not calculate EVA rigorously, rather they take casual approach in calculating and reporting EVA. We have examined a study by Economic Times, the most popular business daily in India and the annual report of Infosys Technologies limited that has won prestigious 'best presented annual report' being awarded by the Institute of Chartered Accountants of India (ICAI) for five years in this context.

The study published by Economic Times neither adjusted book capital to bring it closer to economic capital nor used rigorous model to compute the cost of equity. Perhaps the short cut was adopted by the study to circumvent difficulties in estimating equity and converting book capital into economic capital.

Indian companies have started using EVA for improving internal governance. The Tata Iron and Steel Company (TISCO) is using EVA to measure performance of its mines and other business segments. Managers of the company find the measure quite useful and are highly enthused by the use of this measure. It is expected that EVA will gain popularity more as a management planning and control tool.

The concept of EVA is based on the sound economic principle that firm value increases only if it is able to generate surplus over its cost of capital and therefore it is based on strong theoretical foundation. However its calculation involves significant subjectivity and this reduces its informative value. Moreover it fails to provide better signals to the capital market as compared to conventional accounting measures like ROI, however hard selling of EVA has contributed positively in highlighting the fundamental economic principle, long forgotten by managers. In India companies are using EVA internally as a performance measure for improving productivity that would lead to enhancement of shareholder value. However a dangerous trend has also set in, to use EVA casually for external reporting. This trend should be stalled as such reporting might mislead users of those reports.

CONCLUSION:

In summary, focus is the most important shareholder value growth driver. Focus is the most important strategy used to improve shareholder value:

- Most outperformers are highly focused companies.
- Most “improvers” use focus as a lever to increase credibility on the stock market.
- Most underperformers are highly fragmented companies missing synergies between their business units.
- Focus is an easy strategy to communicate to the market.
- Focused strategy helps small companies (with little financial capacity) to grow business in their market niche:
 - Achieve competitive advantage.
 - Nevertheless focus requires clear vision and ability to undertake fundamental reorganisation.
 - Differentiation and innovation involve high risk and are not always achievable.
 - Business customer segment is higher-margin, lower churn, and usually early adopter of innovations.
 - Moving up value chain helps achieve competitive position and sustain growth.
 - Growth by strategic alliances allows to acquire new expertise or increase market share.

An important goal of financial management is to maximize the wealth of the organization highest capital employees wealth and consequently enhance the value of the firm. Shareholder wealth is traditionally reflected by either standard accounting parameters , the return on investments, assets and equity.

This financial information is used by managers, shareholders and other interested parties to assess their firm’s current performance, and also by stakeholders to predict its future performance. The question that arises is, whether these measures of corporate performance are linked to the expectations of the shareholders or not.

The problem with these performance measures is the lack of a proper benchmark for comparison. The shareholders require, at least, a minimum rate of return that above mentioned performance measures ignore.

Over the past several years, an alternative performance measure called Economic Value Added (EVA) has been gaining acceptance in the United States and has also been acknowledged by institutional firms as a credible performance measure. In order to overcome the limitations of accounting based measures of financial performance, Joel M Stern and G Bennett Stewart & Co., introduced a modified concept of economic profit in 1990, in the name of Economic Value Added (EVA) as a measure of business performance.

Stern Stewart has claimed that EVA, as a tool of financial management, was neither 'just a phenomenon' nor was limited to 'for profit' organizations. Economic Value Added has been put to use for management performance evaluation, and more than just a measure of performance, it is the framework for a complete financial management.

Market value added:

In the present economic scenario, the investor's perception of the world around is constantly undergoing a change. They need appreciation in the value of their investment in capital market instrument. As such, 'maximization of wealth' has become a widely accepted objective of the firms. The value is estimated in the terms of benefit that the investment can generate. With a view to measure shareholder's value, Stewart invented the term Market Value Added. (MVA)

Market Value Added (MVA) is the difference between the current market value of the firm and the capital contributed by investors. If MVA is positive, the firm has added value. If it is negative, the firm has destroyed value. The amount of value added needs to be greater than the firm's investors could have achieved investing in the market portfolio, adjusted for the leverage (beta coefficient) of the firm relative to the market.

The value will be created when:

- ✓ The management deploys its resources in efficient and effective manner yielding expected return for shareholder.
- ✓ The productivity of the organization increases continuously.
- ✓ There is a constant improvement in Price Earning (P/E) ratio as well as Earning Per Share (EPS)
- ✓ The existing investors receive a constant and good rate of dividend in order to keep flow of investments.

- ✓ The marginal productivity of capital in a company increases as compared to its competitors.

Market value of invested capital refers the market value of equity capital and debt capital, but the market value of debt is not easily available as debts are generally traded. Thus, the definition of MVA can be stated as market capitalization less net worth. Market capitalization is the product of closing share prices and the number of outstanding shares as on that date (i.e. date of balance sheet). Whereas, net worth is the sum of equity capital, reserves and surplus net of revaluation reserves less accumulated losses and miscellaneous expenses.

MVA = Market Capitalization – Net Worth

Market capitalization = closing share prices x no. of outstanding shares.

Net worth = capital invested including debt and equity capital less accumulated losses and miscellaneous expenses.

It is clear from the above definition that MVA simply reflects the price to book value relationship that is depicted by P/B ratio (Market price to book value ratio). The only difference between the MVA and P/B ratio is that MVA is an absolute measure whereas P/B ratio is a relative measure. A positive MVA implies that P/B ratio is greater than one. Therefore, it may be concluded that MVA is the change in the market value of a company between the two different points of time reference to a fixed quantity of outstanding shares.

It may be noted that if the number of shares change between two given points, MVA should be calculated with reference to shares outstanding on the latest point of time.

MVA represents the value added to the particular share over its book value. MVA informs how much value a shareholder has added to this wealth, which he has invested in the share. Accordingly, a company with an objective of enhancing the shareholder's wealth should attempt to capitalize on its MVA. MVA can be estimated by subtracting the book value of shares from the market value of shares. It is the silent that EVA helps in pushing up the MVA of the organization. As a result, EVA can be considered as an internal measure and MVA as the external measure of a company's performance.

CHAPTER 3**"LITERATURE REVIEW"**

With the fall of communism over a decade ago, capitalism has emerged as the dominant economic ideology in the world. Unfortunately, the results produced by ten years of global capitalism have not been uniformly positive. Saturation in the developed markets, a widening gap between rich and poor, growing levels of environmental degradation, and concern that the developing world may be losing control over its own destiny have combined to create drag on the global economy. The terrorist attacks in the U.S. on September 11, 2001 made it clear that the world is inextricably interconnected and that poverty, hopelessness, and perceived exploitation in one part of the world will not remain geographically isolated. Increasingly, global capitalism is being challenged to include more of the world in its bounty and protect the natural systems and cultures upon which the global economy depends. The idea of sustainability has come to represent these rising expectations for social and environmental performance. Global sustainability has been defined as the ability to "meet the needs of the present without compromising the ability of future generations to meet their needs." Similarly, sustainable development "is a process of achieving human development . . . in an inclusive, connected, equitable, prudent, and secure manner." A sustainable enterprise, therefore, is one that contributes

to sustainable development by delivering simultaneously economic, social, and environmental benefits—the so-called triple bottom line. Beyond this broad consensus on terminology, however, there remains disagreement among managers regarding the specific meaning of and motivation for enterprise-level sustainability. For some managers, it is a moral mandate; for others, a legal requirement. For still others, sustainability is perceived as a cost of doing business—a necessary evil to maintain legitimacy and right to operate. A few firms have begun to frame sustainability as a business opportunity, offering avenues for lowering cost and risk, or even growing revenues and market share through innovation.

For most firms, the pursuit of enterprise sustainability remains difficult to reconcile with the objective of increasing shareholder value. Indeed, some have even advocated that creating a more sustainable world will require firms to sacrifice profits and shareholder value in favor of the public good. By starting with legal or moral arguments for firm actions, however, managers inevitably underestimate the strategic business opportunities associated with this important issue. To avoid this problem, managers need to directly link enterprise sustainability to the creation of shareholder value. The global challenges associated with sustainability, viewed through the appropriate set of business lenses, can help to identify strategies and practices that contribute to a more sustainable world and, simultaneously, drive shareholder value; this we define as the creation of sustainable value for the firm.

If anything has changed in the business world over the last couple of decades, it is the pace of business change. Yesterday's high performers are often today's laggards, if one can still find them listed at all. Many of yesterday's shining stars, whether in the realm of business thought or business action, mistook what was superficially new for what was really new, responding to the cacophony of boom and bust rather than to the steady creak of a tectonic shift. Companies that aspire to sustainable high performance must attend to sustained. Because of these fundamental sustained changes, the task of managing shareholder wealth also has altered, requiring innovative, more expansive ways of thinking about resources and how they can be used to create value for today and tomorrow. Management that ignores the implications of these changes risks mismanaging both the most important component of their valuation as well as their most important value-creating resources.

Shareholder Value Is a Multidimensional Construct

Figure 1 illustrates the basic components for our shareholder-value framework. The model is built using two well-known dimensions that are a source of creative tension for firms. The vertical axis in the model reflects the firm's need to manage today's business while simultaneously creating tomorrow's technology and markets. This dimension captures the tension experienced by the need to realize short-term results while also generating expectations for future growth. The horizontal axis reflects the firm's need to grow and protect internal organizational skills and capabilities while simultaneously infusing the firm with new perspectives and knowledge from the outside. This dimension reflects the tension experienced by the need to buffer the technical core so that it may operate without distraction, while at the same time remaining open to fresh perspectives and new, disruptive models and technologies.

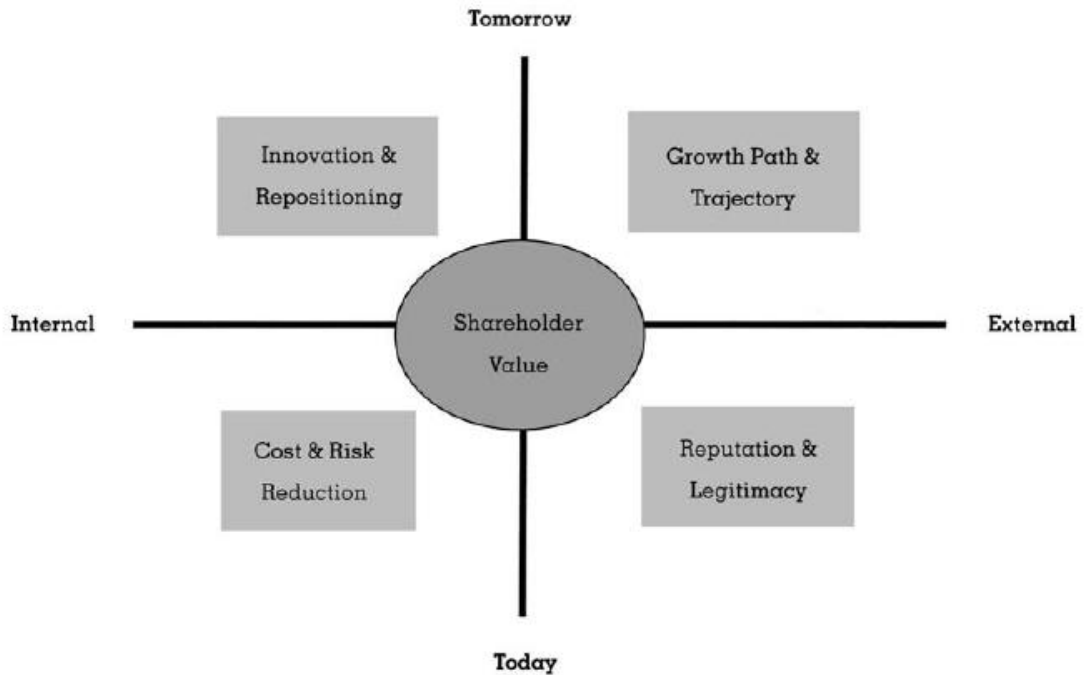


FIGURE 1
Key Dimensions of Shareholder Value

Corporate governance is a much debated topic. One reason for the debate is the recent scandals stemming from excessive managerial compensation and earnings manipulation. Critics have proposed various remedies, including better disclosure, separation of the positions of CEO and chairman, changes in board composition, and stricter codes of conduct (see Hermalin and Weisbach 2007). Much of the discussion can be understood as attempts to make sure that corporations, particularly public corporations, are run for the benefit of shareholders. It can also be interpreted, however, as a debate about the purpose of the corporation—or about whose interests the corporation should ultimately serve (Jensen 2001). Various academics have joined the debate, arguing that there is a widespread consensus that managers should strive to maximize shareholder value, and that doing so maximizes social welfare. There is also a claim that competitive forces push managers, regardless how reluctant, to set shareholder-value maximization as their main corporate target.

Moreover, it investigates the existence of a consensus by examining what managers say about shareholder value on their corporate Web sites. Finally, it asks whether shareholder-friendly declarations actually translate into better stock-price performance. The argument of a normative consensus is made especially by academics in law and finance. Accordingly, we are witnessing a widespread agreement that “corporate managers should act exclusively in the economic interests of shareholders,” and that “the best means to this end—the pursuit of aggregate social welfare—is to make corporate managers strongly accountable to shareholder interests” (Hansmann and Kraakman 2000, pp. 1 and 9). Bradley and Sundaram (2003, p. 4) reason along similar lines and state that we are witnessing “a conversion to the notion that the

purpose of the business corporation is to enhance shareholder value.” A normative consensus is also implicit in the corporate finance textbooks. According to Brealey, Myers, and Allen (2006, p. 15), for example, the fundamental objective of corporate finance is to maximize the current value of the firm’s shares.

The normative consensus is complemented, some say, by economic forces that compel managers to pursue the target of shareholder-value maximization—for example, according to Morck, Shleifer, and Vishny (1988), in the capital markets. We contend that the logic of this argument and the existence of a widespread consensus are debatable.

The ultimate reason for the lack of a consensus is that shareholder value has distributional implications—the firm’s surplus should eventually be paid out to shareholders. Yet centuries of conflicts for the appropriation and control of scarce resources have shown that a lasting consensus on how company resources and rents should be distributed is hard if not impossible to achieve. Nonetheless, the paper should help clarify many questions related to a policy of focusing on shareholder value, including its social justification, its tie to competitive markets, its implement ability, and its practical relevance. That clarification would seem to be important also in the current debate about corporate governance. Whether economic theory implies that shareholder-value maximization really increases social welfare. In theory, competitive markets for goods and services do put pressure on firms to cover costs. They do not compel them, however, to maximize profits, let alone to maximize firm or shareholder value, defined as the market value of the firm’s equity. The same conclusion applies to competitive capital markets.

A policy of shareholder-value maximization is an ill-defined goal to begin with. Moreover, not every shareholder is better off when stock prices increase or worse off when they decline. It is therefore not always clear what managers should do even if they wanted to benefit shareholders. Ultimately, however, consensus is an empirical question. The results of an examination of what 1,298 firms in 8 different countries write on their Web sites. If there were a widespread consensus about the merit of that target, managers would be glad to disclose a preference for it, but they do not. The target of shareholder-value creation is often not even mentioned. Common-law countries are the same in this respect as civil-law countries, in spite of being supposedly friendlier to shareholders (La Porta et al. 1998; La Porta, Lopez-de-Silanes, and Shleifer 2006). We also examine whether firms that state a preference for shareholder value perform better than other firms. However, firms willing to make an open commitment to shareholders live up to their words: their stock performs significantly better than that of other firms.

II. NORMATIVE CONVERGENCE: SHAREHOLDER-VALUE MAXIMIZATION VERSUS SOCIAL WELFARE MAXIMIZATION

Let us start with the assumption that shareholder-value maximization corresponds to firm value maximization. Jensen (2001, p. 11) argues that

firm-value maximization maximizes social welfare. “Two hundred years of work in economics and finance implies that in the absence of externalities and monopoly (and when all goods are priced), social welfare is maximized when each firm in an economy maximizes its total market value.” Under Jensen’s assumptions, competitive markets and firm-value maximization do indeed contribute, according to the First Fundamental Welfare Theorem, to increased social welfare (Salanié 2000). Formal proofs that the market equilibrium in complete markets is Pareto-optimal are in Debreu (1959) and Arrow (1964).

There are, however, at least two problems with the notion that firm-value maximization in competitive markets maximizes social welfare.¹ The first is that Pareto optimality does not imply *maximization* of social welfare. For example, not everyone is willing to accept the initial distribution of wealth and resources as desirable. Other allocations are possible, which means that many alternative competitive equilibriums are in principle feasible, and it is not clear which one is best from the point of view of society as a whole.

The second problem is that the necessary assumptions for the First Fundamental Welfare Theorem are rarely, if ever, met in practice. As pointed out by Jensen (2001), information and transaction costs, nontraded goods and services, public goods, externalities in production and preferences (envy, jealousies, etc.), and nonconvexities of production (natural monopolies) and preferences can prevent the achievement of a competitive equilibrium (see also Salanié 2000).

In particular, concerns about fairness affect how people make decisions and how they feel about the distribution of scarce resources (see, for example, Statman 2005). It is fairly well documented, for example, that an increase in everybody’s wealth is not necessarily Paretoefficient if some of us receive little and others a lot (see Bazermann 2002, and the literature cited therein). Individuals might therefore object to firm- (and shareholder-) value maximization because it leads to or maintains what in their view is an unfair resource distribution. One should also point out that, even if firm-value maximization did contribute to higher social welfare, one would still have to prove that the same is true of shareholder-value maximization. With perfect and complete capital markets, firm-value maximization is consistent with shareholder-value maximization. Intuitively, since shareholders are entitled to a payout only after the contractual claims of the remaining stakeholders have been satisfied, they have an incentive to generate as much firm value as possible to be able to benefit from a larger residual. Any deliberate deviation from a policy of firm-value maximization would be known to shareholders who could costlessly rewrite contracts with their managers to correct the deviation. The problem is that markets are not perfect. As a consequence, firm-value maximization is not always the same as shareholder-value maximization. Shareholders can benefit by taking from other stakeholders in the firm. For example, they can follow wasteful policies with a sufficiently high upside potential when the firm is close to defaulting on its debt obligations (Jensen and Meckling, 1976). They can also renegotiate contracts under the pretext of changed economic conditions, refuse to fulfill implicit contracts such as the informal promise of no layoffs or the promise of higher compensation in the

case of good performance (Shleifer and Summers 1988; Neumark and Sharpe 1996), and misappropriate resources.

III. COMPETITIVE FORCES AND SHAREHOLDER-VALUE MAXIMIZATION

Conceivably, competition in the markets for goods and services and for capital could compel managers to maximize shareholder value. Let us therefore begin with a closer look at the possible role that the markets for goods and services might play in that respect. After that, we examine the case of capital markets.

Markets for goods and services and shareholder-value maximization

One of the tenets of economic theory is that competition induces resources to move to their highest-valued use, a process that brings about an efficient allocation of production factors. For example, if the marginal productivity of labor is higher in manufacturing gas turbines than in growing wheat, labor will move out of farming and into manufacturing. Even though systematic evidence is lacking (Allen and Gale 2000),⁴ and even though there are various reasons why firms might be able to resist competitive challenges, it would be hard to deny that competition forces inefficient firms to cut costs and focus on customers' needs. Those that do not adapt are eventually driven out of the market, and their managers lose their jobs and the associated power and prestige.⁵ Competition, however, simply sets a survival condition, namely, that firms cover their contractual costs (Alchian 1950).⁶ Maximizing economic profits, let alone firm or shareholder value, is a target that goes beyond simply covering costs. Profit maximization involves generating the highest economic rents from current operations (a short run perspective). Maximizing firm-value involves making decisions that lead to the highest capitalized value of the flow of future economic rents (a long run perspective). And maximizing shareholder value, as a first rough approximation, involves distributing the rents from a firmvalue-maximization policy to shareholders (as opposed to distributing them to other stakeholders or dissipating them subsequently in unprofitable strategies).

Yet competitive markets for goods and services are not the only markets that could impose the target of highest shareholder value on managers. There are also capital markets. It would seem that truly open capital markets leave managers no option but to maximize share prices. What follows briefly addresses that claim.

Capital markets and shareholder-value maximization

Stock markets exploit differences between the market price of stocks and their perceived intrinsic value. When investors believe stocks are underpriced, they have an incentive to buy. In extreme cases, they might be tempted to obtain control to make managerial changes (Manne 1965; Allen and Gale 2000).⁸ This takeover threat would seem to induce managers who care about their jobs to pursue policies that increase shareholder value.⁹ In contrast, when investors think that stocks are overpriced, they tend to sell or short.¹⁰ In that situation, however, the incentive to boost share prices even further is

questionable since it would be a policy destined to fail. Worse, it would be a policy that would send investors false and misleading signals and thereby put managers' jobs at risk (Jensen 2005). According to Jensen, a better policy might be that of trying to eliminate the overvaluation. In any case, because of the possibility of overpriced stocks, capital markets do not generally encourage managers to increase share prices.

Hence, competitive markets do not seem to induce shareholder-value maximization. Our logic, however, has assumed that shareholder value is an implementable target and that all shareholders support higher share prices. What follows casts doubts on the validity of that assumption.

IV. SHAREHOLDER-VALUE MAXIMIZATION: AN ILL-DEFINED TARGET THAT MIGHT LACK UNANIMOUS CONSENT

With full information and perfect and complete capital markets, anything the firm does to increase share prices benefits shareholders. This is true whether they want to buy, sell, or simply hold their shares. But when we drop these assumptions, the unanimity can go away. Because of other concurrent financial interests, not all shareholders are better off when share prices increase or worse off when they decline. Moreover, in imperfect markets, shareholder value becomes an ill-defined target. Hence, managers would frequently not know what to do to benefit shareholders even if they wanted to. Let's discuss this ill-definition first.

A. Ill-definition

The main reason why shareholder value is an imprecise corporate target is its time dimension. It is unclear whether it refers to the present or to the future. Suppose managers are aware that the stock's intrinsic value is higher than its market value. If so, it is unclear what shareholder-value maximization means. It makes a difference whether they want to sell or hold their shares. If they want to sell, then it is important that the current stock price be high: managers could engage in various costly signaling activities, including share buybacks, to correct the potential mispricing. In contrast, if shareholders do not want to sell, costly signaling activities make little sense (Miller 1987). Differential horizon problems are not unusual. They have been observed, for example, among mutual fund shareholders (Johnson 2004) and among institutional investors in the market for corporate control (Gaspar, Massa, and Matos 2007).

Moreover, they are apparent when investors follow dividend-capture or IPO flipping strategies. Hence, should shareholder-value-maximizing managers try to benefit short-term shareholders or should they ignore them?

Diverging interests

The second problem with the shareholder-value target is the potential lack of unanimity among shareholders because of conflicting interests. This

phenomenon can best be illustrated by comparing the preferences of large and small shareholders. Large shareholders can use their voting power to: (a) legally (or illegally) extract private benefits of control (including tunneling via self-dealing transactions; see Johnson et al. 2000); (b) impose their tax preferences ; (c) greenmail the company; (d) ask the firm to pursue policies suited to their personal risk exposure (in family firms, for example, family members might be bound by contractual agreements and therefore be unable to diversify their portfolios); (e) discourage financing decisions that could dilute control; (e) force their strategic views on the firm; and (f) impose their preferences with regard to liquidation, going public (Gompers 1996), and going private transactions. Large shareholders might therefore benefit from managerial decisions even if share prices decline. Small shareholders have different interests. The literature on the private benefits of control offers plenty of arguments and evidence regarding the lack of unanimity between small and large shareholders (see, among others, Barclay and Holderness 1989; Dyck and Zingales 2004).

As it turns out, the lack of shareholder unanimity is not restricted to the conflict of interests between large and small shareholders:

(a) Some shareholders might simultaneously be bondholders, creditors, suppliers, employees, or competitors of the firm. Their net financial interests might therefore be at odds with those of other shareholders (see, for example, Loderer and Zraggen 1999). Similarly, some shareholders might derive non-pecuniary benefits from the firm and therefore have different interests than other shareholders. Governments, for example, might try to induce the corporations they are invested in to contribute to non-financial goals such as full employment or national security. They might therefore oppose restructuring decisions even if they mean higher stock prices;

(b) Shareholders might have different information and therefore hold different views about the most appropriate investment policy. These disagreements surface, for example, at the time of proxy fights;

(c) Shareholders might face different taxes. Depending on their tax bases in the computation of capital gains, for example, shareholders who sit on unrealized losses might oppose share buybacks and liquidation decisions even if that would increase stock prices.

In principle, shareholder disagreement could be resolved with side payments. Side payments, however, are sure to work perfectly only in frictionless markets. In the real world, these payments may not be possible because of information and transaction costs. The problem of diverging interests could also be overcome if shareholders sorted themselves in different investor clienteles. Yet even that would not guarantee unanimity because of the many dimensions the diverging interests can take and because shareholders' preferences change. Hence, stockholder disagreement can subsist.

In sum, there is no compelling case that competition pressures managers to seek the highest stock price. Competitive markets for goods and services do

not demand that. And neither do competitive capital markets. Moreover, shareholder value yields an ambiguous corporate target, and one that might lack unanimity. Ultimately, however, whether there is widespread consensus that firms should maximize shareholder value is an empirical issue. In what follows, we investigate whether managers are willing to pay at least lip service to shareholder-value maximization. We should stress that we are not trying to figure out what managers actually do. All we want is to document whether managers disclose a preference for shareholder-value maximization, at least in words. If there is indeed consensus, we should observe clear adherence in print to the goal of shareholder-value maximization, whatever that might mean. We also want to know whether firms that claim to pursue that target perform better.

N Vswanatham and Poornima Luthra (April/June 2005) with the increasing global competition, companies are focusing their efforts on creating shareholder value in order to survive the intense competition. In view of this, it is becoming important for companies to measure the value they create for their shareholders. Keeping track of the value created year-on-year enables companies to evaluate past decisions and make decisions that will improve shareholder value.

With the increasing focus on core competencies, many companies are outsourcing their information technology (IT) related activities to third party software service providers. Example, Indian software companies have become global leaders in providing these services due to their access to lower cost labour and highly skilled workforce. These software service providers have been facing severe backlash from the West where jobs are being lost due to outsourcing. With such challenges, it becomes important for the companies to become aware of their position (in terms of shareholder value creation, revenue and expenditure) in comparison with their competitors. Knowing these will enable the companies to define and redefine their strategy to improve their profit margins and also capitalize on their individual strengths to enhance shareholder value creation.

Copeland *et al* (1994) discuss the benefits of shareholder value measurement and Lambert & Burduglu (2000) provide methods for measuring this value. Lambert & Burduglu (2000) discuss SPM, while Stewart *et al* (2002) discuss EVA. Stapleton *et al* (2002) have applied the SPM to players of the athletic footwear industry. Walters (1999) develops the general operating value drivers for EVA. Such an analysis would enable firms in this industry to know their competitive advantages and disadvantages, and provide focus on the key areas of improvement of shareholder value.

Measuring shareholder value

Value-based performance measurement: Performance measurement is the method of assessing a company's progress towards achieving its preset goals. Through key performance measures, an organisation's strategy is linked to its operations. The objective of performance measurement and management is to increase the shareholder value, profitability, growth,

competitiveness, quality, customer satisfaction, etc. of an organisation resulting in improved performance (Moncla & Arents-Gregory 2003).

An important concept in performance measurement is benchmarking. Benchmarking is the systematic process of searching for the best business practices, innovative ideas and effective operating procedures to fuel progress and improvement (Bogan&English 1994, p. 1). Benchmarking enables companies to compare their key performance measures internally or externally. An organisation can study practices and measure performance from within itself, or against its industry peers. Benchmarking helps organisations refine their strategy through the re-examination of products, prices, practices, strategies, structures and services against competitors and other industry leaders (Bogan & English 1994, p. 9).

Models for measuring and predicting shareholder value

A particular category of performance measures are financial performance measures. Financial measures indicate to top-management whether their strategy execution is leading to better bottom-line results (Niven 2003, p. 19). The financial metrics are based on information obtained from balance sheets, income statements and cashflow statements (Bogan & English 1994, p. 57). Some examples of these metrics are revenue, gross profit, operating income, net income, earnings per share, long-term debt, cash flow, debt/equity ratio, etc. By adopting a performance measurement system based on financial measures, companies can identify the key performance metrics that would result in improved financial outcomes. As customers place an increasing demand on companies to provide “value-added” services, it is becoming vital for companies to be able to measure the value of these services in order to justify a premium price for the services and ensure continued profitability (Lambert & Burduroglu 2000). Many organisations have adopted a new breed of performance measures that are based on shareholder value, known as value-based management.

Shareholder value is the financial value created for shareholders by the companies in which they invest (Christopher&Ryals 1999, p. 2). A shareholder is any holder of one or more shares in a company. The evidence of being a shareholder is in the form of a stock certificate. The shareholder value theory states that a company creates this value when it meets or exceeds a cost of capital that suitably reflects its investment risk (Lambert & Burduroglu 2000, p. 10).

Companies are choosing to employ a system of measuring shareholder value for many reasons (Copeland *et al* 1994, p. 22). First, value is the best metric of performance as it is the only measure that is comprehensive and hence is useful for decision-making. By increasing shareholder value, companies can maximize the value for other stakeholders (customers, labour and government (through taxes paid) and suppliers of capital). Second, shareholders are the only stakeholders of a company who simultaneously maximize everyone’s claim in seeking to maximize their own. Finally, companies that are unable to create shareholder value will find that capital flows away from them and towards their competitors who are creating shareholder value.

Michael Durant (2007): paper entitles “Economic Value Added: The invisible hand at work” examines EVA is both a measure of shareholder Value and also a measure of performance. The value of business depends on investors’ expectations about the future profits of the enterprise. Stock prices track EVA far more closely than they track earnings per share or return on equity. A sustained increase in EVA will bring an increase in the market value of the company. As a performance measure , Economic Value Added forces the organization to make the creation of shareholder value the number one priority. Under the EVA approach stiff charges are incurred for the use of capital. EVA focused on improving the net cash return on capital invested. EVA is changing the way managers run their business and the way Wall Street price them. When business decisions are aligned with the interest of the shareholders, it is only a matter of time before these efforts are reflected in a higher stock price.

More recently, creating value for a firm’s shareholders - widely accepted objective for the firm - has been incorporated into the strategic management literature through what is termed value based planning (Hax et al., 1984). This approach provides a conceptual and operational framework for evaluating corporate strategy. At the same time, academicians have considered value creation issues to mergers and acquisitions (Rappaport, 1981), divestiture decisions (Alberts and al., 1984), business unit evaluation (Arzac, 1986), marketing strategy and company sales (Kerin et al., 1985), and asset growth (Fruhan, 1984 and Higgins et al., 1983).

Rappaport (1987) has defined the value drivers as growth rate, operating profit margin, income tax rate, working capital investment, fixed capital investment, cost of capital and value growth duration. J. Caby et al. (1996) and Ben Naceur et al. (1998) have combined the measures of value creation with the value drivers in order to know empirically the main determinants of the value creation process.

Sustainable value creation is of prime interest to investors who seek to anticipate expectations revisions.(Michael. J. Mauboussin and Kristen Bartholdson,2002)

□

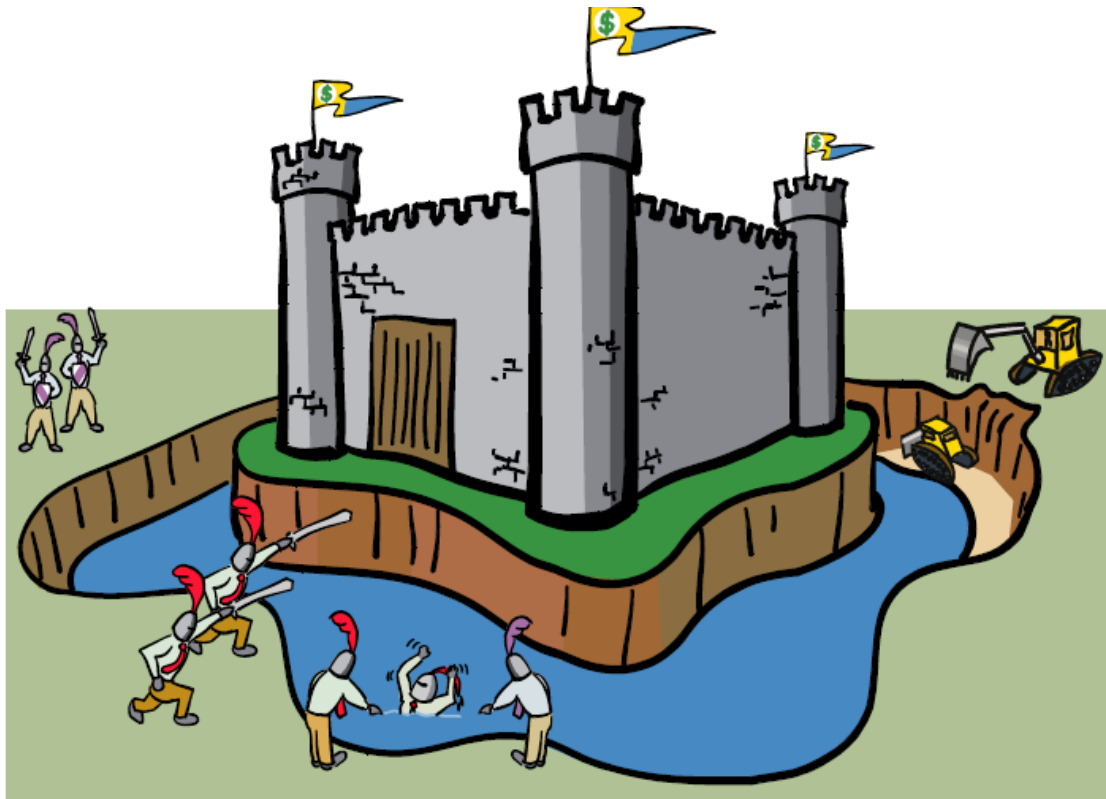


Illustration by Sente Corporation.

Michael. J. Mauboussin and Kristen Bartholdson (CSFB, Equity Research,2002) says, □ Ideally, corporate managers try to allocate resources so as to generate attractive long term returns on investment. Similarly, investors try to buy the stocks of companies that are likely to exceed embedded financial expectations. In both cases, sustainable value creation is of prime interest.

What exactly is sustainable value creation? We can think of it across two dimensions. First is the magnitude of returns in excess of the cost of capital that a company can, or will, generate. Magnitude considers not only the return on investment but also how much a company can invest at an above-cost-of-capital rate. Corporate growth only creates value when a company generates returns on investment that exceed the cost of capital.

The second dimension of sustainable value creation is how long a company can earn returns in excess of the cost of capital. This concept is also known as fade rate, competitive advantage period (CAP), value growth duration, and T. Despite the unquestionable significance of this longevity dimension, researchers and investors give it scant attention.

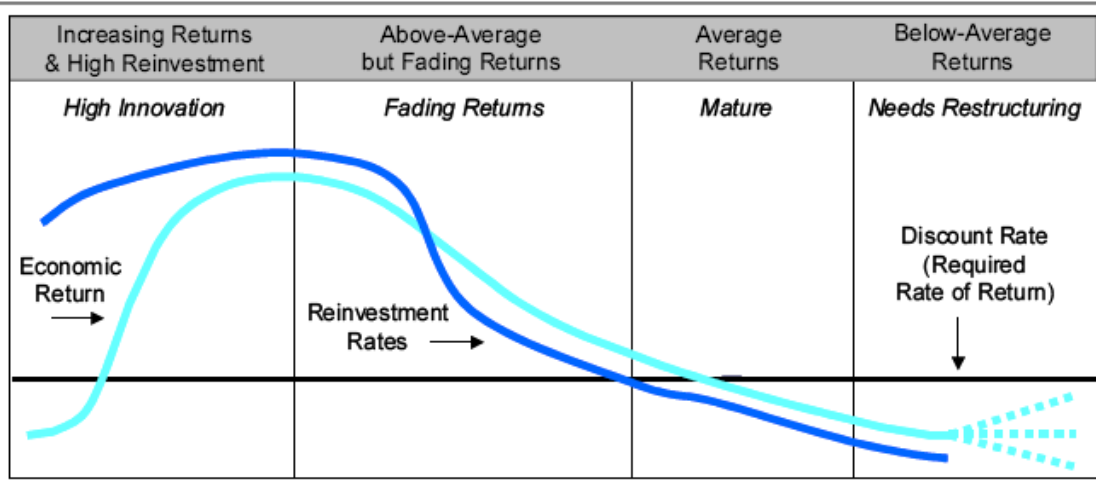
How does **sustainable value creation** differ from the more popular sustainable competitive advantage? A company must have two characteristics to claim that it has a competitive advantage. The first is that it must generate, or have an ability to generate, returns in excess of the cost of capital. Second, the company must earn a higher rate of economic profit than the average of its competitors.

As our focus is on sustainable value creation, we want to understand a company's economic performance relative to the cost of capital, not relative to its competitors (although these are intimately linked, as we will see). If sustainable value creation is rare, then sustainable competitive advantage is even more rare, given that it requires a company to perform better than its peers.

We can visualize sustainable value creation by looking at a company's competitive life cycle. (See Exhibit 1.) Companies are generally in one of four phases (see Appendix B for a breakdown by industry):

- **Innovation.** Young companies typically see sharp increases in return on investment and significant investment opportunities. This is a period of rising returns and heavy investment.
- **Fading returns.** High returns attract competition, generally causing economic returns to gravitate toward the cost of capital. In this phase, companies still earn excess returns, but the return trajectory is down, not up. Investment needs also moderate.
- **Mature.** In this phase, the product markets are in competitive equilibrium. As a result, companies here earn their cost of capital on average, but competition within the industry assures that aggregate returns are no higher. Investment needs continue to moderate.
- **Subpar.** Competitive forces often drive returns below the cost of capital, requiring companies to restructure. These companies often improve returns by shedding assets, shifting their business model, reducing investment levels, or putting themselves up for sale. Alternatively, these companies can distribute their assets through a bankruptcy filing.

Exhibit 1: A Firm's Competitive Life Cycle



Source: CSFB estimates.

One of the central themes of this analysis is that competition drives a company's return on investment toward the opportunity cost of capital. This theme is based on microeconomic theory and is quite intuitive. It predicts that

companies generating high economic returns will attract competitors willing to take a lesser, albeit still attractive, return which will drive down aggregate industry returns to the opportunity cost of capital. Researchers have empirically documented this prediction.

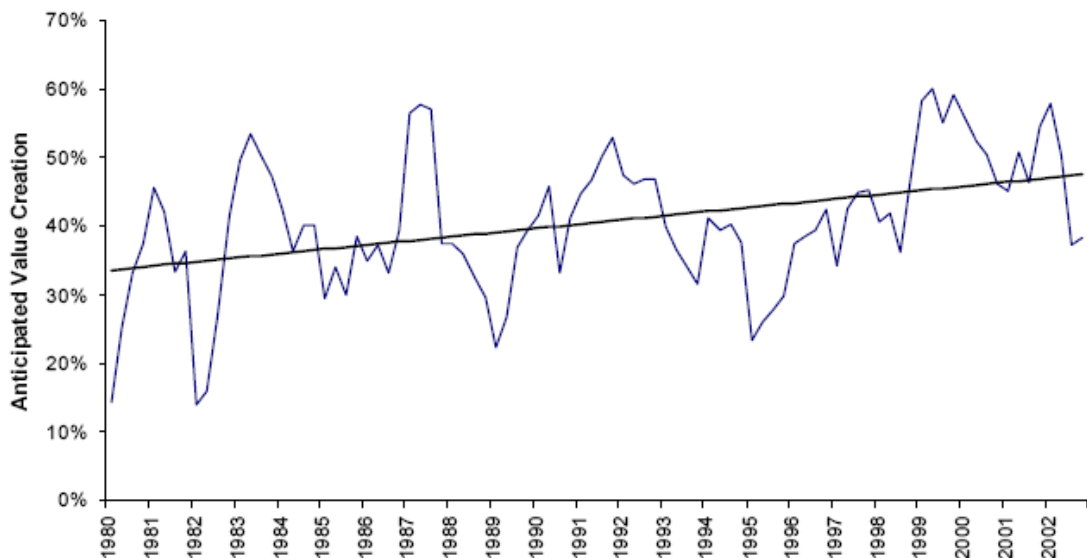
To achieve sustainable value creation, companies must defy the very powerful force of reversion to the mean. Recent research on the rate of mean reversion reveals a couple of important points. First, the time that an average company can sustain excess returns is shrinking.

This reduction in sustainable value creation reflects the greater pace of innovation and a shift in the composition of public companies (i.e., today there are more young public companies than 25 years ago). Second, reinvestment rates and the variability of economic returns help explain the rate of fade.

For example, a company that generates high returns while investing heavily signals an attractive opportunity to both existent and potential competitors. Success sows the seeds of competition. Why is sustainable value creation so important for investors? To start, investors pay for value creation. Exhibit 2 provides a very simple proxy for how much value creation investors have anticipated for the S&P 500 since 1980. We establish a baseline value by simply capitalizing the last four quarters of operating net income for the S&P 500 by an estimate of the cost of equity capital.

We attribute any value above and beyond this baseline value to future expected value creation. The exhibit shows that over one-third of the value of the S&P 500 reflects anticipated value creation, a ratio that has increased in recent decades.

Exhibit 2: Rolling Four-Quarter Anticipated Value Creation



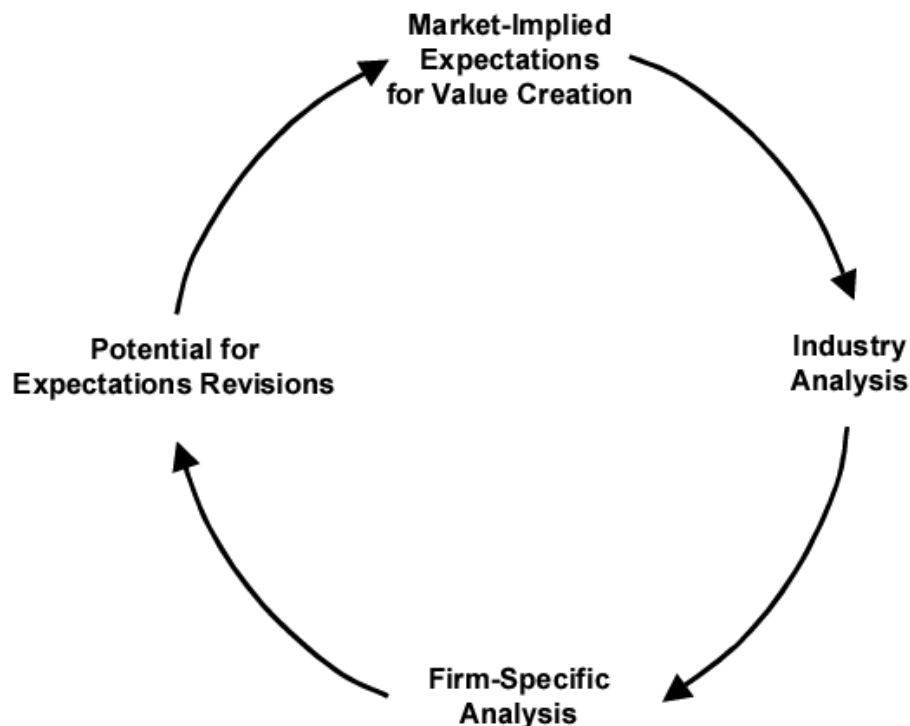
Source: Standard and Poor's, Aswath Damodaran, CSFB estimates.

More significant, sustained value creation is an important source for potential expectations revisions. At this point, we must draw a critical distinction between product markets—the markets for the goods and services that companies produce—and capital markets. Companies seek to understand the industry and competitive landscape so as to make decisions and allocate resources in a way that maximizes long-term economic profits. In contrast, investors seek to understand whether or not the expectations reflected in today’s price are likely to be revised up or down.

So companies and investors both use competitive strategy analysis, but for two very different purposes. Companies try to generate returns above the cost of capital, while investors try to anticipate revisions in expectations. If a company’s share price already captures its prospects for sustainable value creation, investors should expect to earn a risk-adjusted market return.

We will spend most of our time trying to understand how and why companies attain sustainable value creation in product markets. But we should never lose sight of the fact that our goal as investors is to anticipate expectations revisions. Exhibit 3 shows the process and emphasizes the goal of finding and exploiting expectations mismatches.

Exhibit 3: The Link Between Market Expectations and Competitive Strategy



Source: CSFB.

Over the years, legendary investor Warren Buffett has consistently emphasized that he seeks businesses with sustainable competitive advantages. He often invokes the metaphor of a moat. He suggests that buying a business is akin to buying a castle surrounded by a moat. Buffett wants the economic moat around the businesses he buys to be deep and

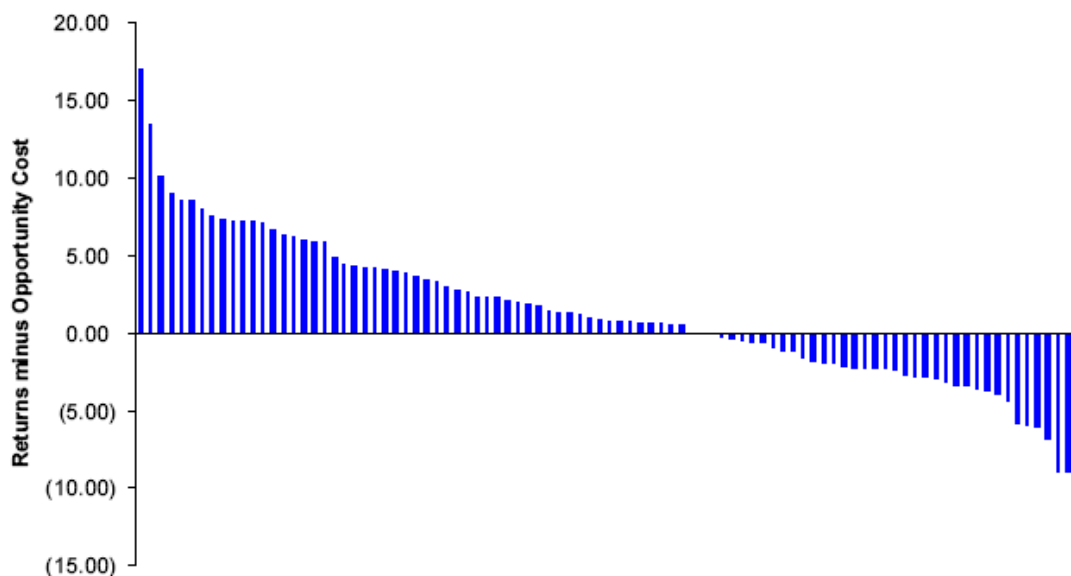
wide to fend off all competition. He goes one step further, noting that economic moats are almost never stable; they're either getting a little bit wider, or a little bit narrower, every day. So he sums up his objective as buying a business where the economic moat is formidable and widening. Our goal in this report is to develop a systematic way to explain the factors behind a company's moat.

What Dictates a Company's Destiny?

Peter Lynch quips that investors are well advised to buy a business that's so good that a dummy can run it, because sooner or later a dummy will run it. Lynch's comment begs an important question: What dictates a firm's economic returns? Note that we are not asking what determines a company's share price performance (which we know is a function of expectations revisions), but rather its economic profitability.

Before we answer the question, we can make some empirical observations. Exhibit 4 shows the spread between cash flow return on investment and the cost of capital for over 90 industries in the United States. Our sample includes in excess of 1,500 companies. We see that some industries have positive economic return spreads, some are neutral, and some don't earn the cost of capital.

Exhibit 4: Industry Returns Vary from Value-Creating to Value-Destroying

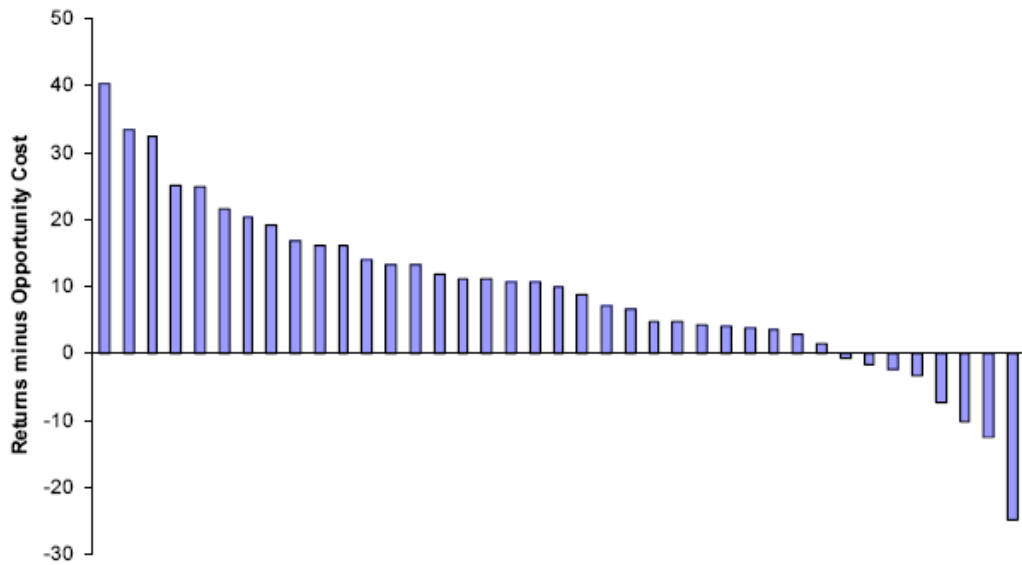


Source: CSFB HOLT estimates.

Next, we analyze the companies that make up a value-creating industry (Exhibit 5), a value-neutral industry (Exhibit 6), and a value-destroying industry (Exhibit 7). The important observation is that even the best industries include value-destroying companies, while the worst industries have value-creating companies. That some companies buck the economics of their industry provides some insight about potential

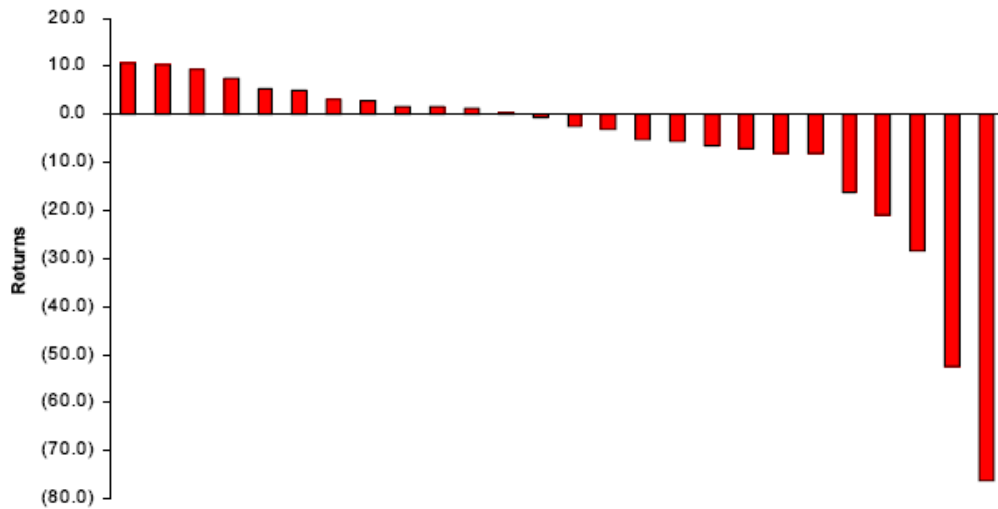
sources of economic performance.

Exhibit 5: Financial Service Industry—Value Creating



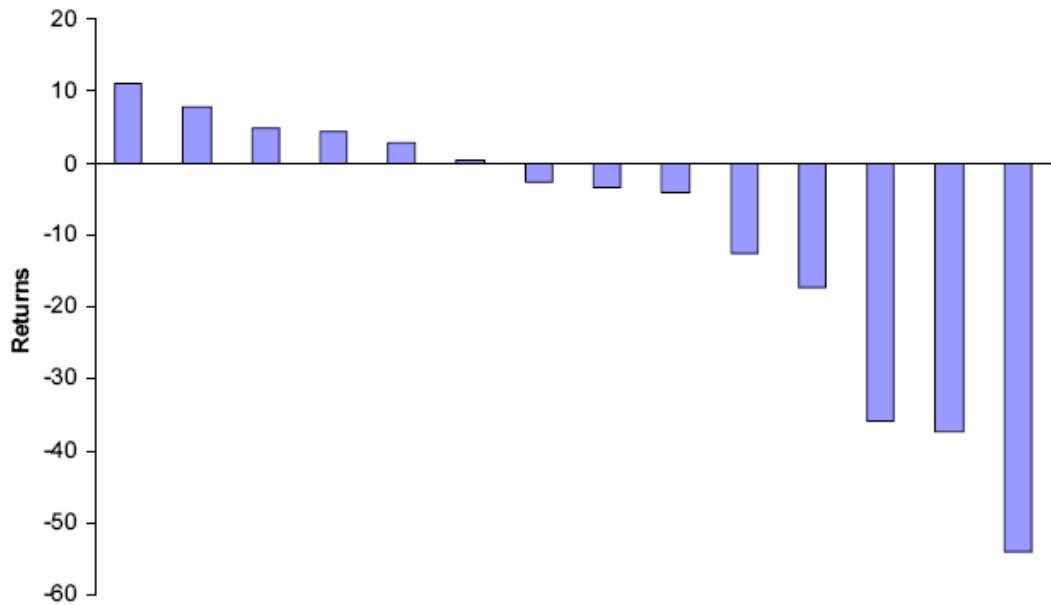
Source: CSFB HOLT estimates.

Exhibit 6: Telecom Equipment Industry—Value Neutral



Source: CSFB HOLT estimates.

Exhibit 7: Wireless Networking Industry—Value Destroying



Source: CSFB HOLT estimates.

Another important issue is industry stability. Stable industries, generally speaking, are more conducive to sustainable value creation. Unstable industries, in contrast, present terrific challenges and opportunities. But the value migration in unstable industries tends to be greater than that of stable industries, making sustainable value creation that much more elusive.

We can measure industry stability a couple of ways. One simple but useful proxy is market-share stability. This analysis looks at the absolute change in market share for the companies within the industry over some period. (We typically use five years.) We then add up the absolute changes and divide the sum by the number of competitors. The lower the average absolute change in the industry, the more stable the industry is. Exhibit 8 shows the market-share stability for seven industries. We see relative stability in the ready-to-eat cereal, soft drink, and beer markets, while batteries, personal computers, and autos demonstrate greater change.

Exhibit 8: Market-Share Stability

Ready-to-Eat Cereal	1996	2001	5 Year Change
Kellogg's Co	33.0	32.2	0.8
General Mills	27.0	26.9	0.1
Kraft	16.5	15.7	0.8
Private Label	9.5	11.0	1.5
Quaker Oats Company	9.5	9.6	0.1
Other	4.5	4.6	0.1
Total	100.0	100.0	
Average Absolute Change			0.6
Soft Drink	1996	2001	5 Year Change
Coca-Cola	43.1	43.7	0.6
PEPSICO	31.0	31.6	0.6
Cadbury Schweppes	14.6	15.6	1.0
Other	6.6	5.3	1.3
Cott	2.9	3.8	0.9
Royal Crown	1.8	0.0	1.8
Total	100.0	100.0	
Average Absolute Change			1.0
Beer	1996	2001	5 Year Change
Anheuser-Busch	45.4	48.8	3.4
Miller	21.9	19.3	2.6
Coors	10.0	11.0	1.0
Other	6.8	5.4	1.4
Pabst (includes Stroh)	11.7	5.0	6.7
Heineken	1.6	5.0	3.4
Labatt USA	1.2	2.0	0.8
Gambrinus	0.6	1.8	1.2
Barton	0.8	1.7	0.9
Total	100.0	100.0	
Average Absolute Change			1.3
Metal Cans	1996	2001	5 Year Change
Ball Corp.	33.0	32.0	1.0
Metal Container Corp. (private)	20.0	22.0	2.0
American National Can	27.0	22.0	5.0
Crown, Cork and Seal	19.0	20.0	1.0
Other	1.0	4.0	3.0
Total	100.0	100.0	
Average Absolute Change			2.4

Many authors and researchers have their own point of view and they have evidence for that from that. Here, we have an interesting research related to shareholder value creation which was Published in *Critical Perspectives on International Business*, 4.1, pp. 55-74, 2008. The purpose behind taking this paper is only to understand the different point of view by some genuine authors to avoid lop sided thinking and for that the whole paper has been put over here:

MAXIMIZING SHAREHOLDER-VALUE:
 A PANACEA FOR ECONOMIC GROWTH OR A RECIPE FOR ECONOMIC
 AND SOCIAL DISINTEGRATION?
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Purpose – To examine the claim that the pursuit of maximum value (wealth) for shareholders optimizes economic and social benefits for society as a whole.

Design/methodology/approach – Evidence cited in support of the claim and the methodology employed by its supporters are examined. Counter-evidence from a wide range of disciplines, including accounting, economics, finance, and medical sociology, is considered.

Findings – The evidence does not support the claim. Bias and severe methodological flaws in its supporters' research is revealed. Considerable evidence of adverse consequences is identified.

Originality/value – A paper which draws from an unusually wide range of disciplines to expose the fallacy a number of powerful myths about the economic and social benefits of making maximizing shareholder value the primary aim of corporate governance.

The view that maximizing shareholder-value (a stock market's valuation of a company's shares) should be the central aim of corporations is justified not merely on the basis of the shareholders' rights as owners but on economic efficiency and wider social wealth grounds. As Hansmann and Kraakman state: "The point is simply that now, as a consequence of both logic and experience, there is a consensus that the best means to this end (that is the pursuit of aggregate social welfare) is to make managers strongly accountable to shareholder interests" (2001: 441). Only fools or knaves, it is implied, oppose a policy of maximizing shareholder value. Criticism is foolish because it ignores the fact that such an orientation is the most effective way of achieving economic growth. Other models of capitalism are inefficient and should be abandoned. Criticism of the greatly increased wealth of a transnational elite and the immense increase in the pay and other benefits of chief executives and other 'visionary' leaders of many major corporations is knavish as it is driven by the 'politics of envy' – an irrational and spiteful emotion which ignores the fact that whilst some have benefited more, everyone is better off. We all get a slice of the action. Maximizing shareholder value, we are told, also maximizes social wealth. 'Trickle-down' and other processes improve the lot of everyone. It's a "virtuous cycle" (Bughin and Copeland, 1997). Deadbeat companies (and countries) can be transformed into innovative, entrepreneurial, efficient companies and countries if they aim every time and every where to create the greatest value for shareholders. This makes winners of us all: 'the rising tide lifts all boats'.

Evidence

But how far is the ubiquitous and evangelized advocacy of maximizing evidence-based? And is there counter-evidence of adverse economic and human consequences (social and biological) of the implementation of this model?

Is there a substantial body of evidence demonstrating that running corporations solely in the interests of shareholders ultimately benefits everyone? And additionally, is it true that we all shareholders now through pension funds. Is there what Peter Drucker (1976) calls “pension fund socialism ... worker and capitalist are one and the same person”?

One might think so from the volumes of supportive literature. But what is the quality of that literature? It is riddled with confirmatory bias and at odds with the evidence. Preformulated commitment to the desirability of an exclusive focus on maximizing shareholder value underpins arguments and data selection which are spun in the language and form of scientific research. Basic rules of valid empirical research are widely broken. Instead of solid empirical support the rhetoric of maximizing shareholder value is dominated by anecdotes; crude notions of causality; exaggerated predictive power; ridiculously simplistic views on the internal workings of companies, and an unreal and utopian/dystopian notion of markets. These flaws are now discussed.

Anecdotes:

These take the form of naming a ‘successful’ company (or companies) and attributing their achievements to their commitment to maximizing shareholder-value (c.f. Rappaport, 1998; Ehrbar, 1998; Grant, 2002). Less frequently, poorly performing companies (or companies) are also named and their inadequate results are said to be a result of their failure to focus on maximizing shareholder value. There is nothing wrong with using vignettes about companies as illustrative examples. They may help explain views. But such anecdotes are not evidence. Missing from these tales of success as a consequence of seeking maximum shareholder value are examples of equally successful companies which do not have that aim. Also absent are details of failed or poorly performing companies, which have themselves sought to maximize shareholder value. Using the names of successful companies as evidence of the efficacy of pursuing maximum shareholder value is as good as, or rather as bad as, that employed by astrologers in the popular press who provide details of single instances as evidence for generalizations about the characteristics of all people born between certain dates. For example, evidence of the assertion that ‘Leo’s’ are assertive is of this type: Leo features prominently in the astrological chart of Britain’s former fierce Prime Minister: Margaret Thatcher. Ignored are the timid ‘Leo’s’. It would be equally valid – that is invalid – to say X Company is successful, its CEO plays golf, therefore playing golf leads to corporate success. Or that Y ‘smoked’ all his life and died aged 101, so smoking is good for one’s health.

Citing the names of multiple companies which supposedly had been successful as a result of a shareholder maximization policy would not – even if based on rigorous sampling - overcome this flaw. The scientific term for this problem is sampling based on the dependent variable. It is recognized as a basic research error in attributing causality (March and Sutton, 1997). If some successful and some unsuccessful companies have the same policy, if surviving and dead patients took the same medicine, it is spurious to attribute success/survival to the actions also taken by the unsuccessful/dead parties. By only looking at companies deemed to have performed well one can never show what makes them different from companies which perform less well.

Peters & Waterman's (1982) legendary *In Search of Excellence* relied on this basic error but the anecdotal shareholder-value literature does not even get that far. Instead of partial samples of the successful we merely get one or a few 'examples'.

And there are other flaws with using anecdotes as evidence. Espoused policies and enacted policies are not always the same. A pronouncement of commitment from the named company to the maximization of shareholder value is wrongly treated as sufficient evidence of the implementation of that policy. Furthermore, even when there is commitment to maximizing shareholder value in a named company, the mere attribution of success to that policy – rather than to any other possible cause, or combination of causes – is not evidence of causality. As Ragin (1987: 27) observes: “rarely does an outcome of interest to social scientists have a single cause ... social causation [involves] different combinations of causal conditions [and] specific causes may have opposite effects depending on context”. Wensley (1997), points out that despite vast data processing it has not been possible to find any single variable that accounts for more than 10% of variation in business performance. To support the claim that shareholder-orientated companies perform better than companies which incorporate additional interests, anecdotal use of the names of countries, not just companies, is also used sometimes. McKinsey & Company, Inc., et al. (2000), for instance, claim that: “shareholder-orientated economies perform better”. The evidence advanced is the recent performance of the US economy – with occasional references to very selective aspects of the UK's record. Again, absent is any systematic comparison of large numbers of shareholder and non-shareholder-orientated economies. What does such evidence show? Studies of governance differences within developed countries do not show as a statistical matter that overall a shareholder-value orientation results in better performance (Gompers *et al.* 2003). And there are two further problems with the 'shareholder-orientated economies perform better' claim. First, it supposes that there is uniformity of orientation/practice within each “economy”. And yet, extensive empirical evidence points to internal diversity within countries – even within the US (e.g. O'Sullivan, 2000). Secondly, the time-period over which cross-country comparisons are made is always too short. It is implied that the 'superiority' of the US economy has been very long-standing. And yet, when the performance of the US economy was lagging behind its main rivals, the maximization of shareholder-value was the object of much external and internal criticism. Michael Porter, for example, in a *Harvard Business Review* essay called “Capital Disadvantage: America's Failing Capital Investment System” (Porter, 1992) argued that the bank centered capital markets of Germany and Japan allowed executives to manage in the long-term while US managers; fearfully driven by a sharp focus on quarter to quarter earnings growth which was enforced by the stock market's fickleness; invested myopically. A vast amount of 'declinist' literature was produced in the US reflecting a crisis of confidence. In the 1981-95 period the US had the lowest rate of overall productivity change in the OECD. In the 1970s the German dual board and co-determination system was upheld by many as the model – to the point that the *Bullock Committee* in the UK (Department of Trade, 1977) recommended its adoption. Later, the Japanese system - or more widely, the 'east Asian model' - became the ideal until the crisis of the Thai badht in mid-

1997 (Corsetti, et al., 1999). The 'Asian miracle' was relabelled 'crony capitalism' – the 'tiger economies' were seen as 'paper tigers'. Yesterday's model of emulation is today's model of aversion.

The cure-all

How is a shareholder-value maximizing model supposed to succeed? The literature on business and management is vast and varied. There is no consensus and a dispassionate reader would readily acknowledge the complexity of the field. Mintzberg et al. (1998), for instance, identify 10 different approaches to strategy. In 1996 Mikridakis noted some 43 different management theories – a score which no doubt has expanded since then. But every so often a glamorized cure-all/explain-all becomes fashionable. We humble scholars trying to systematically examine and test have, it seems, yet again failed to see the wood for the trees.

What do the advocates of shareholder-value maximization offer as the route to improving the management of companies? With circular logic companies are exhorted to cut out waste – defined as anything that is not enhancing shareholder value. But how can money spent wastefully be distinguished from what is vital or enhancing? As Geroski and Gregg state: "it is very difficult to be sure whether overheads are 'fat' or 'muscle', particularly when some support services have subtle and potentially long-run effects on corporate performance" (Geroski and Gregg, 1997: 14). Schilling and Hill (1998) estimate that up to two-thirds of new products that actually reach the market do not produce a financial return. In retrospect 'waste' can be identified. But can it be done in advance? If we acknowledge in-eliminable uncertainty of outcomes in significant areas of business then many decisions will necessarily be imperfect (Rubin and Weisberg, 2003; McSweeney, 2000; Danto, 1985; Keynes, 1936; Knight, 1921. The outcomes cannot be guaranteed or predicted. But if certainty is assumed then it can be concluded that correct decisions are always knowable in advance, and not just retrospectively. That foolish assumption is the bedrock of a significant section of the maximizing shareholder-value clericality. For many management consultancy firms it is also a very lucrative assumption. A range of certainty assuming calculative techniques - generically called 'value based management, often with proprietary names, such as Economic Value Added (EVA™), Total Business Return, Cash Flow Return on Investment, Economic Value Management, Discounted Economic Profits– which purport to enable every major and minor decision in companies to enhance shareholder value are advanced by major management consultancy firms – and by some academics. EVA, said *Fortune* (1993), is "the real key to creating wealth ... it drives stock prices". William Smithburg, Chairman of Quaker Oats, said that: "The best way to deliver enduring shareholder returns ... [is to] focus on a concept called Economic Value Creation" and because of that he "slept better at night knowing that our divisions are clearly focused on the things that will contribute to shareholder value" (quoted in *Enterprise Magazine*, April 1993). Mottis and Ponsard (2001: 45) claim that: "long-term observations do point to a strong correlation between adopting VBM-based incentives and long-term stock returns".

The logic is that as it is supposed that a company's current stock market value is the discounted value of all future cash flows which will accrue to the shareholders – that the key to creating maximum shareholder value is to

ensure that each decision within a company generates the maximum discounted cash flow. The aggregate of the micro-level decisions ensures maximum shareholder-value. As Jim Meenan, then Chief Financial Officer of AT&T, stated “when you drive your business units towards EVA, you’re really driving correlation with market value” (in Walbert, 1994) (see also McKinsey & Company, Inc., et al., 2000).¹ If the adverse consequences of the application of value based management were not so immense their claimed potency would simply be risible. They rely on the nonsensical assumptions of complete information, known preferences, and no uncertainty. These may be convenient for mathematized scribblings on blackboards or in journal articles, or for those who want to pretend that they can provide an answers ‘machine’, but the assumptions do not match the conditions of the real world. They are false theories but with very real consequences. Organizations are conceived of as analogous to simple, static, and closed physical entities. There is no room for novelty, for surprises, for human reflexivity. The calculative shareholder value enhancing techniques presume the availability of information which, as King (1975) states: “only God could provide”. Forecasting is difficult if it really is about the future (McCloskey, 1991). The practical, get-on-and-do it, it’s what the sophisticated do rhetoric of shareholder-value based management is not how the world works. It is a fantasy. The techniques are deduced from an unreal notion of perfect knowledge. But uncertainty cannot be escaped. Choices made in real time are never made with complete information. As Gigerenzer et al. (1989) observe “no amount of mathematical legerdemain can transform uncertainty into certainty” and as Albert Einstein noted: “Not everything that can be counted counts, and not everything that counts can be counted.” Jan Mouritsen of Copenhagen Business School states that “EVA is a very sorry representation ... if it is possible to calculate the net present value [discounted cash-flow] of an organization over the long run, then the strategies proposed cannot be very interesting” (1998: 480). Jack Welch, former CEO of General Electric, puts it more bluntly “shareholder value is not an *objective*. It is the product of great people doing great things, not consultants selling EVA calculators and all that crap”.² Mottis and Ponsard’s (2001) eulogy (above) relied on data in Hogan and Lewis (2000) which covered a period of rising share prices so that everything (including the colour of CEO’s socks) could be correlated with stock prices. And crucially they omitted to mention that Hogan and Lewis also found equal share price growth by non-adopters of value based management. The flaws in the idea that incorporating maximizing shareholder-value into every corporate decision are evident not only from an awareness of conceptual defects in the notion of calculating the discounted cash flow of such decisions, but also from empirical evidence. In fact, just about every study of the application of discounted cash flow techniques within organizations points to the absurdity of seeking to side-line complexity and uncertainty through the application of a mere numerical technique. Independent studies of the degree of correlation of EVA (and other variants) with the absolute level of changes in stock market valuations of companies find it is at best miniscule and often negative (Biddle, et al., 1999). For instance, a study of 582 US companies found a correlation in only 18 companies. In 210 companies the correlation was negative (Fernández , 2003).

Correlation does not prove causality, but without correlation causality is clearly absent.

The perfect market

What is supposedly different about shareholder-orientation - whether linked or not to calculative techniques, such as EVA – is that it ensures that company actions are market, and especially capital market, orientated. In place of the whims or the self-interest of managers, is a vast, dispassionate, analytical process which provides correct valuations, efficient allocation of resources, and effective incentives: the market.

Friedrich von Hayek states that: “The peculiar character of the problem of rational economic order is determined precisely by the fact that the knowledge of the circumstances of which we must make use never exists in concentrated or integrated form but solely as the dispersed bits of incomplete and frequently contradictory knowledge which all separate individuals possess ... to put it briefly, it is a problem of utilization of knowledge which cannot be given to anyone in its totality” (1945: 519). For him, the rational and optimal alternative is the market which he conceived as an epistemic device, a discovery procedure for processing, concentrating, and concisely transmitting (via price signals) information dispersed throughout society.

Hayek did not regard market ‘knowledge’ as perfect, but the notion of capital markets in the ideology of shareholder-value does so in two key respects. First, in efficiently processing all dispersed knowledge, and secondly, in correctly anticipating the future. Hence, the value of a company’s shares is said to be the sum of its *future* cash flow discounted back to the present. Even if individuals or institutions cannot comprehensively predict with accuracy, the market can do so. Michael Jensen states “[There is] no other proposition in economics which has more solid empirical evidence supporting it” (1978). But does the evidence support this view? The *Wall Street Journal* describes it as “The most remarkable error in the history of economic theory” and George Soros calls it “absurd” (2003: 3). There is an immense body of empirical studies demonstrating market irrationalities and imperfections.³ These include: dominance of short-term horizon (Benzarti and Thaler, 1995); irrational exuberance (Shiller, 2000); herd mentality (Arthur, 2000); bubbles (Shleifer, 2000); panics and over-reaction to prospects of losses (Campbell and Limmack, 1997); the week-end effect (Wang et al., 1997; Keim and Stambaugh, 1984), and so on. Cooper et al., (2001) found in a study of the period June 1998 to July 1999 – a time of exuberance for shares in Internet companies - that the inclusion of a ‘.com’ suffix in a firm’s name resulted in a 53% increase in price. Even firms with very limited links to the Internet who added a ‘.com’ suffix got a 23% increase in price.⁴

But, even if we ignore these imperfections in markets, managers and other employees in companies have to make multiple micro-decisions with imperfect information, faced with unavoidable uncertainty, and with limited control. Hayek asks: “what is the problem we wish to solve when we try to construct rational economic order?” He observed that “on certain familiar assumptions the answer is simple enough. If we possess all the relevant information, if we can start from a given set of preferences, and if we command complete knowledge of available means, the problem remains purely one of logic ... The conditions which the solution of this optimum

problem must satisfy have been fully worked out" (1945: 519). These assumptions are, of course, unreal. They are the false assumptions, Hayek argues, upon which Soviet state planning was built. He speaks of "the absurdity of ... starting an analysis with a situation in which all of the facts are supposed to be known" (1984 [1925]: 257). But ironically, the shareholder-value cleric, horrified no doubt about the notion of state planning, suppose that such knowledge can be identified within companies provided there is commitment to a wholly shareholder orientation.

Shares as a source of finance

But even if 'the' market cannot function as an effective guide for micro-decisions within companies, does it not act as effective evaluator of corporate performance through moving investment from underperformers to better performers? As we have seen above, the host of market irrationalities – speculative bubbles, for instance – is inconsistent with that view. As Lee states: "empirically we find that news about fundamentals explains only a fraction of volatility in returns ... stock prices move for reasons that have little to do with fundamentals ... smart investors need to consider "fashions" and "fads" as well as "fundamentals" (2001) (see also Shiller, 2000; Summers, 1986). Here is an illustrative example. On the 12th January 2003 the share price of the Anglo-Dutch company, Corus, fell as low as 4p. There was panic selling of the shares after a Dutch court upheld the right of the supervisory board of one of Corus' subsidiaries to block the sale of part of Corus' aluminium division. Almost 483 million Corus shares were sold that day. Consistent with the market's irrationality, an analyst from BNP Paribas, in a circular to investor clients, stated that: "Even at 4p, Corus shares are not worth buying." Yet even on the basis of a highly pessimistic view the scrap value alone of the assets were worth at least 36p per share. In early 2007, without any major changes in management operations or market prospects since 2003, the company was sold at a price of over 600p per share. The hysteria in the stock markets in January 2003 about Corus was not a rational assessment of fundamental value.

Even if it is supposed that this example is an exception and the wider evidence of market irrationalities is ignored - that is, if it is assumed that capital markets are entirely, or almost entirely, rational – there is another fundamental reason why the effective allocator of scarce investment resources claim is misleading. Stock markets are primarily mechanisms for the transfer of ownership of stocks/shares, rather than to provide investment funds (Berle and Means, 1967). Only when a share is issued for the first time does the amount paid possibly (not always) become available for investment (or other uses) by the issuing company. Whenever a share is sold again the payment is to the owner of the shares, not the company which first issued them. The stock market is a second hand, third-hand, fourth-hand ... nth-hand market. Very rarely is it a first-hand market. In most countries, including the US and the UK, the stock market is not, and never has been an important source of investment funds for major corporations. Instead, as Mary O'Sullivan points out, throughout the twentieth century corporate retentions (that is profits not distributed to shareholders and capital allowances) and debt (borrowings) have been the main sources for business investment (2000: 78).

From the late 1920s (the period for which O’Sullivan’s data starts) corporate retentions overall in the US have never been less than 66% of all sources of funding over any five or six year period. Shares have provided less than 18% and only reached close to that level (17.8%) in 1927-30 when companies sold large amounts of stock to speculators. During the period 1982-7 shares provided only 3.1% of net sources of funds for the 100 largest US manufacturing companies. Between 1940-1978 only 8% - and between 1960-1987 only 13% - of Fortune 500 companies issued/sold shares more than once (Ellsworth, 2002). But even the relatively small funding from new stock issues overstates the amount of investment funds via the stock market as funds from shares have “generally been used not to finance investment in new productive assets, but to transfer financial claims over existing assets” (quite often through an initial public offering (IPO) when the founders of a company sell their shares – they, not the company, get most or all of the money) – or “to restructure balance sheets” (O’Sullivan, 2000:79) (for instance, to pay off loans). Corbett and Jenkinson (1996, 1997) have shown that during the quarter of a century they studied (1970 to 1994 inclusive) the net contribution of stock markets to the financing of corporate investment in the non-financial sector in the US, UK, Germany and Japan was at most a tiny source of funds - indeed it was negative for the UK and the USA.⁵ Of course, it is possible to identify a few individual companies for whom new shares have on some occasions been an important source of investment funds. But overall, as Table 1 (below) shows, as a source of funds, contrary to the rhetoric which has justified so much inequality and privilege, stock markets have either been negative, that is, net extractors not providers (for the UK and the US) or trivially small providers (for Germany and Japan).

Table 1

Net Sources of Finance – 1970-94 (Percentages)

	<i>Germany</i>	<i>Japan</i>	<i>United Kingdom</i>	<i>United States</i>
Internal	78.9	69.9	93.3	96.1
Bank Finance	11.9	26.7	14.6	11.1
Bonds	-1.0	4.0	4.2	15.4
New Shares	0.1	3.5	-4.6	-7.6
Other	10.1	-4.0	-7.6	-15.1

Data source: Corbett and Jenkinson, 1997:74

The images we so often see on television of the fevered activities of expensively suited men and women surrounded by batteries of computers in ‘investment’ locations in Wall Street, the City of London, and elsewhere are not, as is usually suggested, pictures of a highly paid elite investing in companies – most of the time they are simply gambling, not on dogs or horses but on share prices. Descriptions of shareholders as “investors”, as “wealth creators”, and calls for companies to “payback”, to “return” cash to shareholders reinforce the myth of shareholders as significant providers of funding to top companies.

Upwards distribution of wealth

Even if stock markets have not been significant sources of investment funds, indeed any funds for companies, hasn't the huge increase in the volume of share dealing and the value of shares improved the financial position of everyone directly, or indirectly through pension funds? The percentage of US households 'owning' stocks directly or indirectly – the latter largely through pension funds – rose from about 19% in the early 1980s, to 32.5% by the end of the decade, to 41% in 1995, to 49.5% in 2002. In the UK, by the end of the 1990s stock ownership, direct and indirect, had risen to nearly 50%; in the Netherlands to 33%, 23% in France, 20% in Germany, and 15% in Italy (Ireland, 2005: 55). In Europe, by the end of the 1990s more than 17% of households in France, Germany, Italy, the Netherlands and the UK were holding stock directly. But, has this been "taking capitalism to the people" (J. Moore cited in Ireland, 2005: 55)? According to Madsen Pirie of the Adam Smith Institute, privatization in the UK has led to "the largest transfer of power and property since the dissolution of the monasteries under Henry VIII". But, as we shall see, just as the beneficiaries of Henry VIII's actions were an already rich elite, so too have been those who have overwhelmingly benefited from the stock market expansions. The concentration of wealth in the US is "extreme" (Wolff, 1998), as it is in the UK.

In 2001 the wealthiest 1% of Americans owned over one-third of total wealth and the next wealthiest 9% owned another third. That is, the wealthiest 10% owned two-thirds of total wealth (Kennickell, 2003). The concentration of wealth is even more extreme when residential wealth is excluded from the calculations - as it is by most analysts as most people cannot liquidate their home, otherwise they would have to live on the sidewalk. In 2001, the richest tenth of the US population owned over three-quarters of non-residential wealth. The richest 5% owned nearly two-thirds. By contrast, the bottom 50% of the population owned less than 2%. In relation specifically to shares, in 2001 the wealthiest 10% owned more than three-quarters of corporate shares. In contrast, the bottom half of the population owned only 1.4% (Ireland, 2005). Poterba (2000) estimated that in 1998, even when indirect ownership through pensions is included, the wealthiest 10% owned over 86% of corporate shares; the bottom 80%, that is eight out of ten people, owned a mere 4.1%. So much for Drucker's "pension fund socialism".

Data for the UK is much more difficult to obtain than for the US. However, the broad details are clear. "The distribution of wealth in the UK is also highly skewed, with extreme concentrations once again in the wealthiest 5-10 percent of households ... it is extremely unequal" (Banks et al., 2003: 23). And over the past few decades that inequality has continued to increase (Ireland, 2005; Dorling, et al., 2007). By 2003 the wealthiest 10% of the population owned almost three-quarters of marketable wealth (excluding value of homes) and the most wealthy 25% owned 85%. Including the value of homes, the wealthiest 25% owned 72% (HM Revenue & Customs, 2006). As in the US, the elite now own the vast majority of shares. Despite the rise of the so-called share [or equity] culture most people possess very few, if any, financial assets. Even in countries where share ownership has become more widespread, "shareholder primacy", as Ireland states, "remains in essence the

primacy of a small privileged elite; the primacy of the wealthiest ten percent” (Ireland, 2005: 67).

Envy

But aren't criticisms of wealth inequalities just based on a desire to 'level-down' for its own sake; or driven by envy of success? Isn't criticism "the politics of envy". As we have seen, claims about the positive impact of a shareholder valuation on economic development and aggregate social wealth are unfounded. But not only is the evidence of positive consequences absent, there is evidence of major adverse effects. Mary O'Sullivan (2000), Richard Ellsworth (2002), Richard Heller (2002), John Kay (2003a,b), and others have argued that focusing on shareholder value – rather than on product or service quality – ironically results in lower shareholder value in the longer-term. Rather than enhancing innovation and development of companies, the shareholder-value as objective (rather than outcome) prioritises narrow short-termism (Ellsworth, 2002; O'Sullivan, 2000). Baumol (2002:13) argues that "virtually all of the economic growth that has occurred since the eighteenth century is ultimately attributable to innovation". As Francis Bacon noted 400 years ago, if you don't innovate someone else will.

But how many significant innovations were inspired by a desire to maximize shareholder value? Which is likely to be the most motivating for research and development staff: curiosity or a desire to increase remote shareholders' wealth?; patient investment or a demand for quarterly returns?; a recognition that failures are inevitable or a rapid readiness to punish? Are we really to suppose that the principal motivation of Alexander Fleming, for instance - the discoverer of antibiotics - was a desire to set-up his own company and make a fortune? Innovation takes time and inevitably there are failures, failures which are necessary for learning (Freeman, 1974; Dodgson, et al., 2005). It also requires investment of funds with unpredictable returns. Studies of the actual contexts of successful innovation identify complex formal and informal, market and institutional networks, norms and incentives (McKelvey, 1996). Major developments involve extended interactions among researchers in different organizations such as universities and firms (Dodgson, et al., 2005). Without the fantasy of perfect productive and competitive knowledge and foresight of the shareholder value cleric, the returns on innovation investments are always unknowable. But the consequence of reduced investment is knowable: it is decline. The short-termism of the shareholder-value model, its emphasis on distribution of profits rather than their retention discourages such patient investment (O'Sullivan, 2000). Maximizing shareholder-value is an appropriate model for running down a company and a country, not for building them up (Lazonick and O'Sullivan, 2000).

The politics of envy or the politics of greed?

Shareholder value is part of a politics which is not merely indifferent to wealth inequality, but which accelerates it. In the UK inequality is back to the levels it was before the Second World War. In the past year the number of poor children, as defined by the government has grown by 100,000 (*The Economist*, 28 August, 2007). By 1979, both income inequality and relative poverty were at, or near their lowest levels. What followed was the most brutal reversal of all countries in the world with the exception of New Zealand (Hills,

2005). Maximizing shareholder value is both symptom and cause of greater wealth inequality. £43 billion in savings have been accumulated by the 35,000 people who work in the City of London; there has been a 29% rise in the sales of Bentleys and a waiting list of five years for Rolls Royces. Partners/directors in City firms earn enormous bonuses; for example, last year two partners in GLG Partners received bonuses of between £200 million and £250 million each. The remuneration of top executives of major companies has increased enormously. The median pay of a FTSE director is more than £1.5 million; that of a CEO almost £3 million. “In 1991, the average [US] large-company CEO received approximately 140 times the pay of an average worker; in he 2003, the ratio was 500:1” (Bebchuk and Fried, 2004: 1). And the trend continues to rise (Mendoza, 2007). Based on a study of giant firms, Froud et al. demonstrate that whilst these firms grew no faster than GDP the pay of the CEOs rose much faster. In 2006/07 alone the pay – or what is sanitized as compensation- of full-time directors of the UK’s top companies soared by 37% following a rise of 28% in 2005/06.⁷ During 2006/2007 average earnings in the UK rose by 3.4% in the private sector and by 3.1% in the public sector. But it seems that even these enormous levels and increases in pay are regarded as insufficiently motivating and so top management must also be incentivized by stock options and various bonus schemes linked to share prices to ensure a focus on shareholder value maximization. And yet, despite the shareholder-value bluster about incentives, there is no identifiable link between such pay increases and corporate performance (Core et al., 2003). It is a “cash machine” for top executives (*The New York Times*, November 8, 1998). As Dalton et al.’s review of more than 220 studies showed, share ownership and other share price linked schemes have no consistent effect on corporate financial performance (2003). As Froud et al. point out “top managers ... appear to be an averagely ineffectual officer class who do, however, know how to look after themselves (2006:7). And as we have seen, the notion that we are all part of some sort of communal ownership of shares through pension funds ignores that fact that the vast majority of shares are owned by an elite. In any event, in the UK and the US in recent years the pension benefits of many employees, especially new entrants, have been diminished, as has job security.

But so what? The espoused neo-liberal view is that the rich can get as rich as they like and in any event – through ‘trickle-down – the rest of us will also get better off. We all get a piece of the action. But this is a triumph of fantasy over fact. Not only do countries with greater overall wealth inequalities show lower levels of

economic growth (Glyn and Miliband, 1994), but they also have lower life expectancy, higher maternal mortality, and a higher proportion of low birth-weight deliveries. The association between absolute levels of wealth/poverty and the quality of peoples' health is widely know. Absolute levels of poverty or wealth are respectively bad or good for a person's health. Individuals' circumstances, such as family assets and earnings, are good predictors of longevity – at what age one dies.

Health

But there is far less awareness that wealth inequality *per se* is bad for national health, whatever the absolute material standards of living are in a country (Wilkinson and Pickett, 2006, 2007; Asafu-Adjaye, 2004; Smith, 1996). The rise even of diseases such as cardiovascular diseases and cancer (and its decline amongst the rich elite) is a very rapid response to rises in wealth inequality (Kaplan, et al., 1996). Multiple studies, across a wide range of countries, have related relative inequality to infant mortality, life expectancy, height, eyesight, mental breakdown tooth decay, and morbidity. The richer live longer, the poorer die earlier, the richer have fewer ulcers, the poorer more, and so on (Matthews et al., 2006). The lower down the social ladder one is, the more detrimental the health effects. One dies earlier and whilst alive the quality of ones health is inferior, not necessarily because one is poor but because one is poorer. One does not just have fewer financial assets but fewer biological assets.

Between 1981 and 2002 the expected number of years spent in poor health in the UK rose from 6.4 to 8.8 for men and from 10.1 to 10.6 for women. Among the developed countries it is not the richest societies which have the best health, but those which have the smallest wealth differences between rich and poor. "Inequality", Richard Wilkinson states, is "the most important limitation on the quality of life in modern societies" (1996: 14). And as Smith says, the "principal culprit" of this rise in 'developed' countries is "easy to find: the stock market surge" (2001: 16). The boom in share prices has brought significant benefits only to those at the very top of the wealth distribution" (Ireland, 2005: 72). In the US between 1989 and 1998, the real value of tangible assets increased by only 14% and the real value of financial assets other than shares by 38%. On the other hand, the real value of shares rose by 262%. Policies which facilitate maximization of shareholder value inevitably lead to greater inequality and undermining the health of many in a nation. The social and biological assets of many are undermined. When Tony Blair famously said in opposition to higher taxes, and in some cases any taxation, on the super rich that "it is not a burning ambition for me to make sure that David Beckham earns less money", he was acting, as C. Wright Mills said, as one of the powerful at the centre of public decisions "who do not themselves suffer the violent results of their own decisions" (1944). If attempts to challenge this situation and its causes - the politics of greed – is 'the politics of envy', let us have more of that politics.

The continuing rise in life expectancy, in many countries, including the US and the UK - that is the rise in the average age at death, despite a rising wealth

inequality – might seem to contradict the argument that greater wealth inequality causes poorer health. But, most people currently dying were born and have lived for quite some time in a period of declining – not increasing – inequality. So, rising life expectancy mortality does not falsify the argument. Multiple cross-national studies have shown that that higher levels of social expenditure and taxation as a proportion of gross domestic product are associated with longer life expectancy (and with a variety of positive health indicators). But furthermore, like all averages, mortality averages smooth out a lot of variation. Studies in the US, UK, and elsewhere, have shown rising life expectancy rates do not apply, for instance, to residents of deprived areas (McCarron, et al., 1994; Ben-Shlomo, et al., 1996). Overall, over the past twenty years the US has fallen from 11th in world ranking of life expectancy to 45th (CIA, August 2007). The UK's current rank order is 37th.

The rise of the ideology and practice of maximizing shareholder value – or more accurately shareholder wealth - is not a triumph of economic efficiency. Instead it reflects and reinforces the growing power of an increasingly assertive financial elite. Maximizing share value is not equivalent to maximizing corporate, national economic, aggregate social value. It is not a new idea, but it is not a mere fad or fashion. It reflects and reinforces structural changes. It is best seen as “one aspect of the more general shift in the last thirty years or so in the balance of class forces around the world” (Ireland, 2005: 70). Its vigorous reemergence involves a “shift in the internal social relationships within states in favour of creditor and retainer interests, with the subordination of productive sectors to financial sectors” (Gowan, 1999: vii).

In ‘developed’ countries, the disparity of wealth is greatest in those where the ideology of shareholder-value is strongest. The financial marketization focus of the shareholder-value model is a crucial part of wider neo-liberal politics. Although it is a long-standing notion in economic theory it was greatly strengthened by the end of the Cold War, which marked the closure of a distinct era in geopolitics and international relations. Since then; especially, but not exclusively in Anglo-American countries; there has been a growing dilution or abandonment of the institutions which had been built up to “civilize capitalism” (Kristensen, 2005). The rich are now less constrained. Both the ideal and the fear of an alternative to capitalism have gone. Increasingly, we see changes in models about income distribution and the comparative rights of capital and labour (Traxler, *et al.*, 2001). Labour is increasingly treated as “nothing more than an expendable commodity” (Ireland, 2005: 70).

Of course, this is not true of all companies. And even from the exclusive perspective of shareholder-value, serving other interests is prudential and pragmatically necessary en route to achieving that goal. Richard Ellsworth's comparison of customer-focused and maximizing shareholder-wealth focused companies found that “a corporate purpose focused on providing value to customers not only is competitively superior to a purpose of maximizing shareholder wealth, but also typically produces greater long-term returns to

shareholders” (2002:27). In contrast to the often rabid advocacy of the exclusive rights of shareholders, the courts in the US state of Delaware (where the majority of the Fortune 500 are incorporated) have made it clear that maximizing shareholder value is only required when a company ceases to exist (liquidation), or where there is a change of control. For this purpose, a merger of two publicly held firms would not result in a change of control provided the merged entity is controlled by a disaggregated group of shareholders. About half of the states in the US have enacted some form of stakeholder-oriented laws. These vary from the permissive to the mandatory. An example of the former is Pennsylvania, where the board *may* consider ‘the effects of any action upon ... employees’. An example of the latter is Connecticut, where directors are *required* to consider (*inter alia*) ‘the interests of the corporation’s employees’.⁹ The UK’s Companies Act 2006 states that “a director of a company must act in the way he [*sic*] considers, in good faith, would be most likely to promote the success of the company for the benefit of its members [i.e. shareholders] as a whole, and in doing so have regard” amongst other matters to “the likely consequences of any decision in the long term,” and “the interests of the company’s employees”.

But whatever the legal requirements or permissions, companies whose shares are traded on stock exchanges are persistently pressurized to maximize shareholder value – in the short-term - by financial institutions whose control of shares has risen from about 10% in the US and 25% in the UK in the 1950s to current levels of control of around 64% in the former country and 84% in the latter. Shares can readily be bought or sold and instantly transferred across national borders. Ownership does not require any knowledge of the underlying assets or employees. That detachment encourages excessive extraction, impatience, speculation, and flight. An exclusive focus on maximizing shareholder value - diverts attention and resources from the processes which create long-term business development: commitment, involvement, creativity and innovation. Instead it encourages and enables a parasitical relationship of shareholders with companies. It is vampire capitalism not productive capitalism.

The power of the shareholder value model “has been amplified through its acceptance by a worldwide network of corporate intermediaries, including international law firms, the big accounting firms, and the principal investment banks and consulting firms – a network whose rapidly expanding scale give it exceptional influence in diffusing the ... model of shareholder-centered corporate governance” (Ireland, 2005: 77)(see also Carter and Muller, 2006). Included in that network, also, are a host of lavishly funded right-wing think tanks and some academics who have largely been responsible for developing, and in even greater numbers promoting, theories which legitimate the shareholder-value model. As George Monbiot says: “the socially destructive notions of a small group of extremists have come to look like common sense” (2007: 27). Much of the pressure for the model came and continues to come from the US, or rather, from a section within the US; from finance capital, “as part of a more general pressure to compel governments worldwide to adopt neo-liberal economic and social policies” (Ireland, 2005: 80). That pressure has been direct (through persuasion, incentives, or coercion) and indirect, through bodies such as the

IMF, World Bank, and WTO which are dominated by it. Its influence within the EU is also significant. And of course, within many countries it has found willing partners.

That is not to argue against a positive role for stock markets, or a need for external scrutiny of companies, but to reject the view that the short-term interests of shareholders should override any other interests of corporations or wider society.

The economic and social arguments in favour of a shareholder-value model are not evidence based and there is considerable evidence of significant and increasing adverse consequences. Some wealth may trickle down to some - but most streams up to the elite. It is not possible to say whether the model will continue to increase its power over corporations and governments. Will it ultimately engulf those countries such as France, Germany and Japan where economic institutions are far more socially embedded than in Anglo-American countries? It has made some but still limited inroads in those countries, especially in the latter. But it is difficult to know whether, ultimately, the countervailing forces will be strong enough. On competition and industrial policy, the European Commission has demonstrated an increasing enthusiasm for neo-liberalism – notwithstanding “the wishful thinking of trade unions and the ‘social dimensions’ rhetoric of politicians” (Streeck, 2007: 540). If unrestrained, finance capital will have even greater power over our labour: there will be increasing employment insecurity, ill-health, stress, and probably violent and other crime and social upheaval. As academics, we can at least try to question claims which are not evidence-based, indeed which are often contradicted by the evidence, and to consider in whose interests particular policies serve. In a recent conversation with a fellow academic, he first boasted about his financial assets and then pronounced “we are all neo-liberals now”. Even those fortunate enough to have such assets should be wary of denial about the current and future dangers of de-civilization.

About the author

Brendan McSweeney (PhD LSE) University of London Professor of Management at Royal Holloway, University of London is a member of the editorial boards of *Critical Perspectives on International Business*, *Organization Studies*, and *Accounting Forum*. He has published papers on a wide range of topics in scholarly journals such as: *Accounting, Organizations & Society*; *Human Relations*; *Journal of International Business Studies*; *Journal of Organizational Change Management*; and *The Political Quarterly*. His jointly edited book (with Chris Smith and Robert Fitzgerald) *Remaking Management: Between Global and Local* was published in Spring 2008 by Cambridge University Press. He has been a consultant to a wide range of private and public sector organizations, most recently the Government of Japan.

1 AT&T soon abandoned EVA as did Quaker Oats whose share price fell after it adopted EVA.

2 Welsh was also echoing John Stuart Mills' recognition of the paradox that self-interested behaviour does not necessarily promote self-interest (Mills, 1873).

3 "Fundamental valuation efficiency" and "information arbitrage efficiency" are distinguishable (Tobin, 1984). Evidence of the latter is not sufficient evidence of the former. But in any event, inefficiencies of both types are readily identifiable in stock markets (Shleifer, 2000).

4 Fund management firms such as Foreign & Continental and Philips & Drew which tried to avoid buying shares in these companies got "the cold shoulder" from "pension funds" (Thrift, 2001: 426). Many companies such as Marconi which bought into them suffered huge losses.

5 The main reason for shares being a negative figures (an extraction - not a source of funds) is mergers and acquisitions where a firm uses cash to buy the shares of another firm but does not obtain cash through the issue additional shares.

6 In Germany, during 1980-84 (inclusive) and 1990-94 (inclusive) the figures for new shares are also negative, not positive (Corbett and Jenkinson, 1997: 77). For data on sources of investment funds in Italy and Spain see Cobham (2004).

7 Reducing wealth inequality through taxing the super-rich would it is has been claimed by Reagan, Thatcher, Bush, Blair, Brown and others have very deleterious effects on the economy by discouraging what they grandiosely call 'entrepreneurship' and 'leadership'. Edwin Locke of the right-wing Ayn Rand Institute proclaims that "on tax day thank the rich and support lifting the tax yoke of them" (2002). But by far the two most important factors in determining wealth-inequality are inheritance and chance –two factors that have nothing to do with entrepreneurship or leadership. Somehow the 'leaders' of leading German, Korean, and Japanese companies do not require such hugely disproportional incomes and bonuses as their US and UK counterparts.

8 As the dominant type of pension scheme is of defined benefits employee members of such schemes have not benefited from increases in shares prices. The shareholders of the firm as the residual claimants are the beneficiaries (Gordon, 1997)(For UK evidence see: Hussain, 2000).

9 In 1883, the English Court of Chancery was asked to decide whether the provision of *ex gratia* benefits to employees was contrary to the interests of the shareholders. In delivering his oft-quoted 'cakes and ale' judgment, Lord Justice Bowen was ruling in a case (*Hutton vs West Cork Railway Company*) in which there had been a change of control – the company had been taken over and he ruled against the old managers paying themselves a large bonus. In most circumstances (i.e. not a closure or not a change of control) he ruled that 'liberal dealing with servants' i.e. employees of a company was permitted.

Agens Wimmer in 'Business Relationship as value Drivers?' says, The understanding of the process of value creation, seeing through the causal relationships is the precondition of effective and efficient decisions. Rummler and Branche (1990) emphasise that the lack of success of companies is frequently caused by their inability to understand the factors influencing organizational and individual performance.

The shareholder value added components (cash flow from operation, discount rate used for evaluation, the debt used for financing, according to Rappaport 1998) are influenced by various value drivers. The value creating elements listed by Rappaport (1998) are factors expressed in money, but their development can be influenced by the anagement's decisions regarding operations, investments and financial issues. Each company must find the factors through which the value creating process can be influenced.

Lebas's model of the performance tree (1993) shows the multidimensional character of performance. The operations and the firms' processes influence the value created for the customer and through their market consequences (sales revenue) and related costs influence the financial result. Every company must find the key factors ("the roots of the tree", value drivers, performance drivers or action variable, with different terms in the different approaches) adjusted to its own objectives and processes. Through these key factors the company can influence the achievement of its goals and its effectiveness and efficiency, through which it can achieve a competitive advantage.

In this work, we argue that business relationships could be important elements, influencing factors of value creation by decreasing costs and increasing value provided for business partners, customers as well as suppliers. The importance of process orientation is emphasised and the process-oriented thinking prevails in many concepts and methods. The concept of supply- and value chain or the idea of process-oriented management (suggested by Rummler and Branche, 1990) attempt for effectiveness, efficiency and success are exceeding the frontiers of the company. Companies are starting to recognise that enhancing their own efficiency is not enough, they have to become the part of the most effective supply chain (Cooper 1996). Therefore, besides internal processes the relationships with business partners are increasingly important for firms' performance. Business relationships could become factors supporting the process of value creation.

From the above literature review by different authors and researchers and considering present research problem, in this study we look closely at the primary methods used by different firms to incentivize managers to focus on creating shareholder value and to monitor their effectiveness in doing so. We can **conclude** that...

- The practices of the firms engaged in implementing value-based management differ widely. Some VBM firms find themselves suffering from bloated investments that no longer earn competitive returns. The immediate need is to implement a performance measurement and reward system that encourages managers to rationalize their investment in assets, determining what is necessary to carry on the firm's operations and disposing the excess. For the other companies, the primary need for VBM may be assessing the value of strategic alternatives. Choosing the

right VBM approach should be as much about how the method aligns with management's reason for adopting VBM as any argument of superiority of one method over another. So having a clear understanding at the outset of what you want to accomplish is absolutely essential.

Firms do not have the luxury of being able to wait for their value creating efforts to run their full course before attempting to access their success. The interim performance of the firm and its business units must be measured periodically to recognize and reward those responsible. A very real need exists for a single-period performance metric that can measure historical performance in a way that appropriately reflects value creation for the period. There is no choice if we are to monitor the firm's operations over time. The roots of VBM represent improvements over traditional accounting metrics but still have their limitations. No matter how impressive a presentation, do not fall prey to strong claims for VBM metrics that a single period measure will correlate highly with firm value year in and year out. You will be disappointed.

- Successful VBM programs have certain common attributes:
 - ✓ Top management support-genuine commitment not simply token involvement,
 - ✓ Links to compensations,
 - ✓ Investment of time and money in educating the firm's workforce about how the program works, and
 - ✓ Simplicity valued over complexity.

The tools of VBM not finely calibrated instrument. So you should view the use of your VBM system to create shareholder value more like using a tugboat to nudge a super tanker into port, rather than using a sophisticated laser guidance system to direct smart bombs down smokestacks!

Summing up, all these we can say that no value-based management system is perfect, nor do all firms derive the same benefits from implementing VBM. Measuring performance accurately is more problematic for firms in rapidly changing markets where value is tied more closely to the firm's future growth opportunities than with its assets in place. Regrettably, there is no "Holy Grail" when it comes to selecting and implementing a value-based management system. However, even with the above-noted limitations, there remains considerable potential for unlocking significant shareholder value in many firms.

CHAPTER: 4**"RESEARCH METHODOLOGY"**

One of the basic desires of man is to know of things around him. He wants to understand fully the things of the world. No wonder does a man wish to acquire knowledge by enquiry. He asks so many questions such as why? How? When? He is desirous of finding answers to such questions.

Moreover, in day-to-day life, man confronts numerous problems, for which he wants to find immediate solution. Thus, man asks questions and finds answers. His effort to find answers is the outcome of a man's thirst for knowledge. This prompts him to find solutions to problems and urges him to do something better or more efficiently.

Such questions and problems crop up from the observation of an event or series of events. Sir Isaac Newton propounded the Law of Gravitation by observing the apples falling from the apple tree. He started asking questions "why do apples regularly fall to the ground instead of floating off into space?" This enquiry led to the discovery of the Law of Gravitation.

Research

The Word 'Research is derived from the French word, 'Researcher' meaning 'to search back'. A man in his social, economic, educational, political and business life faces many problems.

Definition of research

Some of the important definitions of research by well known authors are given below:

Fred Kerlinger: "Research is an organized enquiry designed and carried out to provide information for solving a problem."

Francis Rummel: "Research is a careful inquiry of examination to discover new information or relationships and to expand and to verify existing knowledge."

Robert Ross: “Research is essentially an investigation, a recording and analysis of evidence for the purpose of gaining knowledge.”

According to Professor Glifford Moody, research is a method of discovering truth, through critical thinking. He says, “Research comprises defining and redefining problems; formulating hypothesis or suggested solutions; collecting, organizing and evaluating data; making deductions and making conclusions; and at last, carefully testing the conclusions to determine whether they fit the formulated hypothesis.” This definition emphasizes three types of research : Firstly, the discovery of facts as in social surveys, secondly the analysis and interpretation of secondary data already collected and finally building up of theory based on primary and secondary data and sometimes on the basis of pure reasoning. In theory building, thinking of the highest order is quite essential; whereas in the survey variety, it is least important. Research of scientific method is nothing but a systematic process and it is composed of several prescribed steps:

- ✓ Identification of a research question.
- ✓ Formulation of hypothesis or predictions about the question in advance of the study.
- ✓ Design of the study to test the hypothesis.
- ✓ Observation of variables.
- ✓ Examination of relationships between the variables observed and Drawing conclusions about the research questions based on observed relationship.
- ✓ Classification of Research

Great difficulties beset the classification of research into some universally accepted categories. The distinctions among the different types of studies are not clear-cut; nevertheless the need for formulating appropriate research designs has made the classification of research essential. Different authors have classified research in different ways. One hears different types of research such as action research, descriptive research, exploratory research, historical research, comparative research, theory construction, model building, pure research, applied research, operations research, library research, individual research, group research and so on.

Objectives of the research:

The purpose of research is to discover answers to questions through the application of scientific procedures. The main aim of research is to find out the truth which is hidden and which has not been discovered yet. Though each research study has its own specific purpose, we may think of research objectives as falling into number of following broad groupings:

- ✓ To gain familiarity with a phenomenon or to achieve new insights into it (studies with this object in view are termed as exploratory or formative research studies);
- ✓ To portray accurately the characteristics of a particular individual, situation or a group (studies with this object in view are known as descriptive research studies);
- ✓ To determine the frequency with which something occurs or with which it is associated with something else (studies with this object in view are known as diagnostic research studies);
- ✓ To test a hypothesis of a casual relationship between variables (such studies are known as hypothesis-testing research studies).

Present study mainly focuses on the following points to be studied:

- To study the value creation for shareholders in the automobile industry.
- To study the profitability of the companies.
- To study the economic value added of the company.
- To study market value added of the company.

Steps in implementing EVA:

The implementation of EVA is a 4-step process which includes:

- (a) measurement
- (b) management system
- (c) motivation
- (d) mindset

(a) Measurement:

Any company that wishes to implement EVA should institutionalize the process of measuring the metric, regularly. This measurement should be carried out after carrying out of the prescribed accounting adjustments.

(b) Management System:

The company should be willing to align its management system to the EVA process. The EVA based management system is the basis on which the company should take decisions related to the choice of strategy, capital allocation, mergers and acquisition, divesting business and goal setting.

(c) Motivation:

The companies should decide to implement EVA only if they are prepared to implement the incentive plan that goes with it. An EVA based incentive system, however, encourages managers to operate in such a way as to maximize the EVA, not just of the operations they oversee but of the company as whole.

(d) Mindset:

The effective implementation of EVA necessitates a change in the culture and mindset of the company. All constituents of the organization need to be taught to focus on one objective-maximizing EVA. This singular focus leaves no room for ambiguity and also it is not difficult for employees to know just what actions of their will create EVA, and what will destroy it.

Types of research:

The basic types of research are as follows:

- ***Descriptive vs. Analytical:***

Descriptive research includes surveys and fact-finding enquiries of different kinds. The major purpose of descriptive research is description of the state of affairs as it exists at present. In social science and business research we quite often use the term *Ex post facto research* for descriptive research studies. The main characteristic of this method is that the researcher has no control over variables; he can only report what is happening. Most *ex post facto studies* also include attempts by researcher to discover causes even when they cannot control the variables. The methods of all kinds, including

comparative and co relational methods. In *analytical research*, on the other hand, the researcher has to use facts or information already available, and analyze these to make a critical evaluation of the material.

- ***Applied vs. Fundamental:***

Research can either be applied (or action) research or fundamental (or basic or pure) research. Applied research aims at finding a solution for an immediate problem facing a society or an industrial/business organization, whereas fundamental research is mainly concern with the formulation of a theory. “Gathering knowledge for knowledge’s sake is termed ‘pure’ or ‘basic’ research. Research concerning some natural phenomenon or relating to pure mathematics are examples of fundamental research. Similarly, research studies, concerning human behavior, carried on with a view to make generalizations about human behavior, are also examples of fundamental research, but research aimed at certain conclusions (say, a solution) facing a concrete social or business problem is an example of applied research. Research to identify social, economic or political trends that may affect a particular institution or the copy research (research to find out whether certain communications will be read and understood) or the marketing research or evaluation research are examples of applied research. Thus, the certain aim of applied research is to discover a solution for some pressing practical problem, whereas basic research is directed towards finding information that has a broad base of application and thus, adds to the already existing organized body of scientific knowledge.

- ***Quantitative vs. Qualitative:***

Qualitative research is based on the measurement of quantity or amount. It is applicable to phenomena that can be expressed in terms of quantity. Qualitative research, on the other hand, is concerned with qualitative phenomenon, i.e. , phenomena relating to or involving quality or kind. For instance, when we are interested in investigating the reasons for human behavior (i.e. why people think or do certain things,), we are quite often talk of ‘Motivation Research’ , an important type of research aims at discovering the underlying motives and desires, using in depth interviews for the purpose. Other techniques of such research are word association tests, sentence completion tests, story completion tests and similar other

projective techniques. Attitude or opinion research i.e. , research designed to find out how people feel or what they think about the particular subject or institution is also qualitative research. Qualitative research is specially important in the behavioral sciences where the aim is to discover the underlying motives of human behavior. Through such research we can analyze the various factors which motivate people to behave in a particular manner or which make people like or dislike a particular thing. It may be stated, however, that to apply qualitative research in practice is relatively difficult job and therefore, while doing such research, one should seek guidance from experimental psychologists.

- ***Conceptual vs. Empirical:***

Conceptual research is that related to some abstract idea(s) or theory. It is generally used by philosophers and thinkers to develop new concepts or to reinterpret existing ones. On the other hand, empirical research relies on experience or observation alone, often without due regard for system and theory. It is data-based research, coming up with conclusions which are capable of being verified by observation or experiment. We can also call it as experimental type of research. In such a research it is necessary to get at facts firsthand, at their source, and actively to go about doing certain things to stimulate the production of desired information. In such a research, the researcher must first provide himself with a working hypothesis or guess as to the probable results. He then works to get enough facts (data) to prove or disprove his hypothesis. He then sets up experimental designs which he thinks will manipulate the persons or the materials concerned so as to bring forth desired information. Such research is thus characterized by the experimenter's control over the variables under study and his deliberate manipulation of one of them to study its effects. Empirical research is appropriate when proof is sought certain variables in some way. Evidence gathered through experiments or empirical study is today considered to be the most powerful support possible for a given hypothesis.

- ***Some other types of research:***

All other types of research are variations of one or more of above stated approaches, based on either the purpose of research, or the time required to accomplish research, or the environment in which research is done, or on the basis of some other similar factor. From the point of view of time, we can think of research either as one-time research or longitudinal research. In the former case the research is confined to a single time-period, whereas in the latter case the research is carried on over several time periods. Research can be field-

setting research or laboratory research or simulation research, depending upon the environment in which it is to be understood as clinical or diagnostic research. Such research follows case study methods on in depth approaches to reach the basic casual relations. Such studies unusually go deep into the causes of things or events that interest us, using very small samples and very deep probing data gathering service devices. The research may be exploratory or it may be formalized. The objective of exploratory research is the development of hypothesis rather than their testing, where as formalized research studies are those with substantial structure and with specific hypothesis to be tested. Historical research is that which utilizes historical sources like documents, remains etc. to study events or ideas of the past, including the philosophy of persons and groups at any remote point of time. Research can also be classified as conclusion-oriented and decision-oriented. While doing conclusion-oriented research, a researcher is free to pick-up a problem, redesign the inquiry as he proceeds and is conceptualize as he wishes. Decision-oriented research is always for the need of a decision maker and the researcher is in this case is not free to embark upon research according to his own inclination. Operations research is an example of decision oriented research since it is a scientific method of providing executive departments with a quantitative basis for decisions regarding operations under their control.

Exploratory Study:

An exploratory study is undertaken when not much is known about the situation at hand, or no information is available on how similar problems or research issues have been solved in the past. In such cases, extensive preliminary work needs to be done to gain familiarity with the phenomena in the situation and understand what is occurring before we develop a model and set up a rigorous design for comprehensive investigation.

Exploratory studies are also necessary when some facts are known, but more information is needed for developing a viable theoretical framework. In sum, exploratory studies are important for obtaining a good grasp of phenomena of interest and advancing knowledge through subsequent theory building and by hypothesis testing.

The research design in the problem is exploratory design. The data are analyzed and based on the data suggestions are given.

Significance of the study:

Research is a foundation of knowledge. Hudson Maxin says, “ all progress is born of inquiry. Doubt is better than overconfidence, for it leads to inquiry, and inquiry leads innovation. ” which shows the importance of research. Today, the role of research is not limited to any one field, but it is applied in different fields like,

- ✓ Economics
- ✓ As a base of government policies
- ✓ In different industries for decision making
- ✓ For solving operation and planning related problems
- ✓ In social sciences

Research provides a good guideline for solving problems. For making decisions, for establishing some facts and further more increased amounts of research make progress possible. Research inculcates scientific and inductive thinking and promotes the development of logical habits of thinking.

Identification of research problems

Research may be motivated by the desire to know for the sake of knowing or by the desire to solve practical problems. The researcher, who is associated with practical problems, need not identify problems, since he has many problems on hand. But the research, who is associated with academic institutions, has to identify possible problems for investigation.

In simple words problem means a question thrown forward for solution. A problem exists when an individual interact with his environment and finds himself in an indeterminate situation, or in a state of questioning, doubting or uncertainly.

Problems may be classified as conceptual problems, which can be solved by creative thinking, selection and synthesis, logical problems which are solved by deductive methods and empirical problems, which are solved by inductive reasoning based upon observation of phenomena.

In specific problem-solving research, a research is concerned with application of research methods to find satisfactory solution to a pressing problem. In a business there are numerous problems which need solutions. As resources are limited, it is indispensable to identify only the important problems. In the field of academic research also, the researcher will be able to identify several problems but he can screen them out by preliminary selection.

A problem clearly and accurately stated is a problem that is often well on its way to being solved. Before research or fact finding can successfully start, the investigator must know what the problem is and why a solution is wanted. The 'what' of a problem is answered by an accurate definition of the situation? The 'why' can be established by the determination of the uses to which the findings will be or can be put?

Formulation of a Problem

Formulation of a research problem is translating and transforming the selected problem into a scientific research question. A problem well put is half solved. There are seven factors strengthening such careful formulation.

- ✓ Proper formulation of the problem provides a sense of direction to the research;
- ✓ Proper formulation specifies the scope of research;
- ✓ Proper formulation indicates the limitations of the research;
- ✓ Proper formulation clarifies the problem;
- ✓ Proper formulation establishes the major assumptions;
- ✓ Proper formulation expresses the context of the problem; and
- ✓ Proper formulation provides economy in research.

The great scientist Dr. Chandrasekar, who has written his thesis on "How stars are born and what they are made of," opined that he worked for his personal satisfaction on things generally outside the scientific mainstream.

It is impossible to set forth any rigid formulation of methods or procedures to be followed by all researchers. The researchers, the research undertakings and the conditions and circumstances are not alike. Therefore, it is not possible to follow a formula or standard procedure in all circumstances.

Statement of problem:

Problem definition is the most important research. Problem definition includes stating the problem and identifying the specific components of research problem. The research can be conducted properly only when research problem has been clearly defined.

“Shareholder value creation in the automobile industry in India”

It is a comparative study of Tata motors and Mahindra and Mahindra Ltd.

Research Design

Research Design is the blue print of the proposed study. It represents the overall scheme of the study. “A research design is a logical and systematic planning and it helps directing a piece of research”.

A research design is a pattern or an outline of a research problem’s working. It is a statement of only the essential elements of a study, those that provide the basic guidelines for the details of the problem. It comprises a series of prior decisions that are taken for executing a research problem.

A research design serves as bridge between what has been established. i.e. the research objectives and what is to be done, in conduct of study to realize those objectives. If there were no research design, the researcher would have only foggy notion about is to be done.

In fact, the research design is the conceptual structure within which research is conducted; it constitutes the blueprint for the collection, measurement and analysis of the data. As such the design includes an outline of what the researcher will do from writing the research hypothesis and its operational implications to the final analysis of data. More explicitly, the design decisions happen to be in respect of:

- ✓ What is the study about?
- ✓ Why is the study being made?
- ✓ Where will the study be carried out?
- ✓ What type of data is required?

- ✓ Where can the required data be found?
- ✓ What period of time will the study include?
- ✓ What will be the sample design?
- ✓ What techniques of data collection will be used?
- ✓ How will the data be analyzed?

Keeping in view the above stated design decisions; one may split the overall research design into following parts:

- The sampling design which the method of selecting items to be observed for the given study;
- The observational design which relates to the conditions under which the observations are to be made;
- The statistical design which concerns with the question of how many items are to be observed and how the information and data gathered are to be analyzed;
- The operational design which deals with the techniques by which procedures specified in the sampling, statistical and observational designs can be carried out.

From what has been stated above, we can state the important features of research design as under:

- It is a plan that specifies the sources and types of information relevant to the research problem.
- It is a strategy specifying which approach will be used for gathering and analyzing the data.
- It also includes the time and cost budgets since most studies are done under these two constrains.

In brief, research design must, at least, contain-

1. A clear statement of the research problem;
2. Procedures and techniques to be used for gathering information;
3. The population to be studied; and
4. Methods to be used in processing and analyzing data.

The research design is divided into three broad categories:

- Research design in case of descriptive and diagnostic research studies
- Research design in case of experimental research studies
- Research design in case of exploratory research studies

Research design in case of descriptive and diagnostic research studies:

Descriptive research studies are those studies which are concerned with describing the characteristics of a particular individual, or of a group, whereas diagnostic research studies determine the frequency with which something occurs or its association with something else. The studies concerning whether certain variables are examples of diagnostic research studies. As against this, studies concerned with specific predictions, with narration of facts and characteristics concerning individual, group or situation are all examples of descriptive research studies. Most of the social research comes under this category. From the point of view of the research design, the descriptive as well as diagnostic studies share common requirements and such we may group together these two types of research studies. In descriptive as well as in diagnostic studies, the researcher must be able to define clearly, what he wants to measure and must find adequate methods for measuring it along a clear cut definition of 'population' he wants to study. Since the aim is to obtain complete and accurate information in the said studies, the procedure to be used must be carefully planned. The research design must take enough provision for protection against bias and must maximize reliability, with due concern for the economical completion of the research study. The design in such studies must be rigid and not flexible and must focus on the following:

- ✓ Formulating the objective of the study.

- ✓ Designing the methods of data collection.
- ✓ Selecting the sample.
- ✓ Collecting the data.
- ✓ Processing and analyzing the data.
- ✓ Reporting the findings.

In descriptive and diagnostic one must consider the points mentioned above.

Research design in case of experimental (hypotheses-testing) research studies:

Hypothesis-testing research studies are those where the researcher tests the hypotheses of casual relationship between variables. Such studies required procedures that will not only reduce bias and increase reliability, but will permit drawing inferences about causality. Usually experiments meet this requirement. Hence, when we talk of research design in such studies, we often mean the design of experiments.

Professor R.A.Fisher's name is associated with experimental designs. Beginning of such designs was made by him when he was working at Rothamsted Experimental Station (Centre for Agricultural research in England). As such the study of experimental designs has its origin in agricultural research. Professor Fisher found that by dividing agricultural fields or plots into different blocks and then by conducting experiments in each of this blocks, whatever information is collected and inferences drawn from them, happens to be more reliable. This facts inspired him to develop certain experimental designs for testing hypotheses concerning scientific investigations. Today, the experimental designs are being used in researches relating to phenomena of several disciplines. Since experimental designs originated in the context of agricultural operations, we still use, though in a technical sense, several terms of agriculture in experimental designs.

Research design in case of exploratory research studies:

The present research study is exploratory study. Exploratory research studies are also termed as formulative research studies. The main purpose of such studies is that of formulating problem for more precise investigation or of developing the working hypotheses from an operational point of view. The

major emphasis in such studies is on the discovery of ideas and insights. As such the research design appropriate for such studies must be flexible enough to provide opportunity for considering different aspects of a problem under study. Inbuilt flexibility in research design is needed because the research problem, broadly defined initially, is transformed into one with more precise meaning in exploratory studies, which fact may necessitate changes in the research procedure for gathering relevant data. Generally, the following three methods in the context of research design for such studies are talked about:

1. The survey of concerning literature;
2. The experience survey;
3. The analysis of 'insight-stimulating' examples.

The survey of concerning literature happens to be the most simple and fruitful method of formulating precisely the research problem or developing hypothesis, hypotheses stated by earlier workers may be reviewed and their usefulness be evaluated as a basis for further research. It may also be considered whether the already stated hypotheses suggest new hypothesis. In this way the researcher should review and build upon the work already done by others, but in cases where hypotheses have not yet been formulated, his task is to review the available material for deriving the relevant hypotheses from it.

Besides, the bibliographical survey of studies, already made in one's area of interest may as well be made by researcher for precisely formulating the problem. He should also make an attempt to apply concepts and theories developed in different research contexts to the area in which he himself working. Sometimes the works of creative writers also provide a fertile ground for hypothesis-formulation and as such may be looked into by the researcher.

Experience survey means the survey of the people who have had practical experience with the problem to be studied. The object of such a survey is to obtain insight into the relationships between variables and new ideas relating to the research problem. for such a survey people who are competent and can contribute new ideas may be carefully selected as respondents to ensure a representation of different types of experience. The respondents to ensure a representation of different types of experience. The respondents so selected may then be interviewed by the investigator. The researcher must prepare an interview schedule for the systematic questioning of informants. But the interview must ensure flexibility in the sense that the respondents should be allowed to raise issues and questions which the investigator has not

previously considered. Generally, the experience-collecting interview is likely to be long and may last for few hours. Hence, it is often considered desirable to send a copy of the questions to be discussed to the respondents well in advance. This will also give an opportunity to the respondents for doing some advance thinking over the various issues involved so that, at the time of interview, they may be able to contribute effectively. Thus, an experience survey may enable the researcher to define the problem more concisely and help in the formulation of the research hypothesis. This survey may as well provide information about the practical possibilities for doing different types of research.

Analysis of 'insight-stimulating' examples is also a fruitful method suggesting hypotheses for research. It is particularly suitable in areas where there is a little experience to serve as a guide. This method consists of the intensive study of selected instances of the phenomenon in which one is interested. For this purpose the existing records, if any, may be examined, the unstructured interviewing may take place, or some other approach may be adopted. Attitude of the investigator, the intensity of the study and the ability of the researcher to draw together diverse information into a unified interpretation are the main features which make this method an appropriate procedure for evoking insights.

Now, what sort of examples are to be selected and studied? There is no clear cut answer to it. Experience indicates that for particular problems certain types of instances are more appropriate than others. One can mention few examples of 'insight-stimulating' cases such as the reactions of strangers, the reactions of marginal individuals, the study of individuals who are in transition from one stage to another, the reactions of individuals from different social strata and the like. In general, cases that provide sharp contrasts or have striking features are considered relatively more useful while adopting this method of hypotheses formulation.

Thus, in exploratory or formulative research study which merely leads to insights or hypotheses, whatever method or research design outlined above is adopted, the only thing essential is that it must continue to remain flexible so that many different facets of a problem may be considered as and when they arise and come to the notice of researcher.

Data collection:

Once we define the research problem and once research design has been planned out the study needs to collect proper data for the same. Mainly there are two types of data: Primary data and Secondary data. The primary data are those which are collected a fresh for the first time, and thus happen to be original in character. The secondary data, on the other hand, are those which have already been collected by someone else and which have already been passed through the statistical process. The researcher would have to decide which sort of data he would be using (thus collecting) for his study and accordingly he will have to select one or more method of data collection. The methods for collecting primary data and secondary data differ since primary data are to be originally collected, while in case of secondary data the nature of data collection work is merely compilation.

Dr. A.L.Bowley says that 'in collection of statistical data common sense is the chief requisite and experience the chief teacher.' While selecting the method of data collection a researcher should consider the following factors:

- ✓ Nature, scope and object of the inquiry.
- ✓ Availability of funds.
- ✓ Time factor.
- ✓ Precision required.

As far as present study is concern, the main source of data collection is based on secondary data, which is collected through:

- Annual reports published by the companies.
- Financial reports of the firm in the automobile industry.
- Data related to the calculation of shareholder value creation by the companies in the automobile industry.

Hypothesis of the study:

In simple terms, hypothesis means an assumption or some preposition to be proved or disproved. But for a researcher hypothesis is a formal question that

he intends to resolve. Thus a hypothesis may be defined as a proposition or a set of propositions set forth an explanation for the occurrence of some specified group of phenomena either asserted merely as a provisional conjecture to guide some investigation or accepted as highly probable in the light of established facts.

Hypothesis is usually considered as the principal instrument in research. Its main function is to suggest new experiments and observations. In fact, many experiments are carried out without the deliberate object of testing hypothesis on the basis of available information and then take decisions on the basis of such testing.

Thus hypothesis testing enables to make probability statements about population parameter(s). The hypothesis may not be proved absolutely, but in practice it is accepted if it has withstood a critical testing.

Hypothesis should possess the following points:

- Hypothesis should be clear and precise.
- Hypothesis should be capable of being tested.
- Hypothesis should state the relationship between variables.
- Hypothesis should consist established facts.
- Hypothesis should be stated as far as possible in most simple terms.
- Hypothesis should be tested within reasonable time.
- Hypothesis should explain what it claims to explain.

Null hypothesis and alternative hypothesis:

If we are to compare method A with method B about its superiority and if we processed on assumption that both methods are equally good, then this assumption is termed as Null hypothesis. As against this, we may think that the method A is superior or method B is inferior, we can then stating what is termed as Alternative hypothesis. The null hypothesis is generally symbolized as H_0 and the alternative hypothesis as H_1 .

For the present study-

H₀: There would be no significant difference in the shareholder value creation by the Companies in the automobile industry.

H₁: There would be significant difference in the shareholder value creation by the Companies in the automobile industry.

Procedure for testing hypothesis:

- Null hypothesis and alternative hypothesis:
Alternate hypothesis is usually the one which one wishes to prove and the Null hypothesis is the one which one wishes to disprove. Thus, a Null hypothesis represents all other possibilities.
- The level of significance:

It is very important concept in the context of hypothesis testing. It is always some percentage (usually 5%) which should be chosen with great care, though and reason. The 5 percent level of significance means that researcher is willing to take as much as 5 percent risk in rejecting Null hypothesis (H₀).

Tools of analysis:

(A)Economic Value Added Statement:

Economic value Added is a basic and important measurement to judge the performance of the enterprise. It can be prepared by subtracting the weighted average cost of capital from the NOPAT.

(B)Statistical techniques:

- T-test:
t-test is based on t-distribution and is considered an appropriate test for judging the significance of a sample mean or for judging the significance of the difference between the means of two samples in case of small sample(s). When population variance is not known (in which case we use variance of the sample as an estimate

of the population variance). In case two samples are related, we use paired t-test (what is known as difference test) for judging the significance of the mean difference between two related samples.

t-test: *paired for two sample for means*: This analysis for tool and its formula a paired two sample student's t-test to determine whether a sample's mean are distinct. This t-test form does not assume that the variances of both populations are equal. You can use a paired test when there is a natural pairing of observations in the samples, such as when sample group is tested twice-before and after an experiment. The statistical hypothesis for the "t" test is stated as Null hypothesis concerning differences. There is no significant difference in achievement between group 1 and group 2 on the welding test.

$$t = \frac{\bar{X}_1 - \bar{X}_2}{\sqrt{\frac{S_1^2}{n_1} + \frac{S_2^2}{n_2}}}$$

$$t = \frac{\text{difference between means}}{\frac{\text{variance}}{\text{sample size}}}$$

Where, \bar{X}_1 = mean of sample 1

\bar{X}_2 = mean of sample 2

n_1 = number of subjects in sample 1

n_2 = number of subjects in sample 2

$$S_1^2 = \frac{\sum (X_1 - \bar{X}_1)^2}{n_1}$$

$$S_2^2 = \frac{\sum (X_2 - \bar{X}_2)^2}{n_2}$$

- Mean (\bar{x}) or (\bar{X}) Arithmetical mean:

A number having an intermediate value between several other numbers in a group from which it was derived and of which it expressed the average value. It is the simple average formed by adding the numbers together and dividing by the number of numbers in the group.

$$\frac{\sum x}{n}$$

- Beta:

Beta measure the systematic risk, it shows how prices of securities respond to the market forces. Beta is calculated by relating the return on a security with return for market. Market will have beta 1. If beta is greater than 1 the stock is said to be riskier than market and vice-versa. If the value of beta is zero than the risk is same as of the market. Negative beta is rare.

- Karl Pearson's correlation coefficient:

Karl Pearson's coefficient of correlation is the best measure for representing the relationship between the two variables. The degree and direction of relationship between the variables can be obtained by it. Karl Pearson is the most accurate and it is very widely used. By this method the amount of relationship between two variables can be numerically measured. The formula for finding out correlation coefficient is-

$$r = \frac{\sum (X - \bar{X})(Y - \bar{Y})}{\sqrt{\sum (X - \bar{X})^2 \sum (Y - \bar{Y})^2}}$$

Limitations of the study:

The major limitations of the study are as followings:

- ✓ The study is undertaken for a particular period of time. So findings can not be applicable for a very long period of time.
- ✓ The data is taken from the secondary source and hence it is taken to be the authenticate resource.
- ✓ The data taken for analysis may affect the results of the study.
- ✓ Limitations of correlation might affect the results of the study.
- ✓ Statistical tests have their own limitation which might affect the conclusions.

The role of computer in research work:

At present computers are widely used for different purposes. Performing calculations almost at the speed of light, the computer has become one of the most useful research tools in the modern times. Computers are ideally suited for data analysis concerning large research projects. Researchers are essentially concerned with huge storage of data, their faster retrieval when required and processing of data with the aid of various techniques. In all these operations, computers are of great help. Their use, apart from expediting the research work, has reduced human drudgery and added to the quality of research actively. Researchers in economic and other social sciences have found, by now, electronic computers to constitute an indispensable part of their research equipment. The computers can perform many statistical calculations easily and quickly. Computation of means, standard deviations, correlation coefficients, t-tests, analysis of variance, analysis of covariance, multiple regression, factor analysis and various nonparametric analysis are just a few of the programs and subprograms that are available at almost all computer centers. Similarly canned programs for linear programming, multivariate analysis, monte carlo simulation etc. are also available in the market. In brief, software packages are readily available for the various simple and complicated analytical and quantitative techniques of which researchers generally make use of. The only work a researcher has to do is to feed in the data he/she gathered after loading the operating system and particular software package on the computer. The output or to say the result, will be ready within the seconds or minutes depending upon the quantum of the work.

Techniques involving trial and error process are quite frequently employed in research methodology. This involves a lot of calculations and work of repetitive nature. Computer is the best suited for such techniques, thus reducing the drudgery of researchers on the one hand and producing the final result rapidly on the other. Thus, different scenarios are made available to researchers by computers in a time which otherwise might have taken days or even months.

The storage facility which the computers provide is of immense help to a researcher for he can make use of stored up data whenever he requires doing so.

Thus, computers do facilitate the research work. Innumerable data can be processed and analyzed with greater ease and speed. Moreover, the results obtained are generally correct and reliable. Not only this, even the design, pictorial graphing and reports are being developed with the help of computers. Hence, researchers should be given computer education and be trained in the

line so that they can use computers for their research work but, one need to be aware about the limitations of computer-based analysis:

- ✓ Computerized analysis requires setting up of an elaborate system of monitoring, collection and feeding of data. All these require time, effort and money. Hence, computer based analysis may not prove economical in case of small projects.
- ✓ Various items of detail which are not being specifically fed to computer may get lost of sight.
- ✓ The computer does not think; it can only execute the instructions of a thinking person. If poor data or faulty programs are introduced into the computer, the data analysis would not be worthwhile.

But, the above mention limitations do not reduce the importance of the computer in research study. Even though it obviously has some limitations but, undoubtedly today, educational, commercial, industrial, administrative, transport, medical, social, financial and several other organizations are increasingly depending upon the help of computers to some degree or the other.

CHAPTER: 5**"ANALYSIS"**

The data, after collection, has to be processed and analyzed in accordance with the outline laid down for the purpose at the time of developing the research problem plan. This is essential for a scientific study and for ensuring that we have all relevant data for making contemplated comparisons and analysis. Technically speaking, processing implies editing, coding, classification and tabulation of collected data so that they are amenable to analysis. The term analysis refers to the computation of certain measures along with searching for patterns of relationship that exist among data groups. Thus, "in the process of analysis, relationship or differences supporting or conflicting with original or new hypotheses should be subjected to statistical tests of significance to determine with what validity data can be said to indicate any conclusions.

Maximizing shareholders' value is fast becoming the new corporate standard in India. Economic Value Added (EVA) and Market Value Added (MVA) are appropriate measures which evaluates the manner in which managerial actions affect shareholders' value. These are tools for identifying whether the management of the company has created wealth or destroyed it.

The basic objective of every organization is to create value for its owners. It must strive to at least provide dividend in the form of returns to those who have invested their money and expected a reward for such investment. If the companies are successful in generating value, then not only are the investors but the whole society at large is benefitted. It is the pursuit of value that directs the resources to be utilized optimally and productively. To assess the company's worth, not only the resource utilization but also the external performance of a company needs to be looked at. This is often faced by the outdated performance systems. A district economic evaluation methodology is to be applied to the different operations of the company. A few such innovations are Economic Value Added (EVA) and Market Value Added (MVA).*

Tata motors Ltd.:

1998 - Indica Indian manufacturers Tata Motors have quite the history under their belt, starting with the company's foundation in 1945 as a locomotive producer. Tata Motors is just one part of the business group Tata, formerly known as TELCO (Tata Engineering and Locomotive Company), which also has several other ventures, including a steel making plant and even a tea producing company.

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Tata got into the motoring business in 1954 when it starting producing heavy trucks in a joint venture with Daimler-Benz AG. So, in 1960. the first truck rolled out of the factory's door in Pune, India, a copy of a German Daimler truck. Tata starting exporting heavy- duty trucks but for the local market, they had to come up with lighter versions because of the infrastructure of the country. The first LCV (Light Commercial Vehicle) model, the Tata 407, began production in 1986.

At the beginning of the 90s, the company sought to evolve and expand into the car market, and it began a collaboration with Cummins Engine Company to produce more efficient diesel engines. Their first car was the Tata Indica, a model that enjoyed an unexpected success both in India and on other European markets, despite the fact that car-analysts gave it bad reviews.

The Indica won people over with it's low fuel consumption and powerful engine. It was so successful that Rover began selling it in the UK under the name of CityRover. The second generation of Indica, the V2, was even more successful.

Indica's major success gave Tata Motors the financial power to take over Daewoo Motors in 2004, in a effort to take their brand more international exposure. Other surprising acquisitions by the Tata Group include Jaguar and Land Rover as of March 26th, 2008 for a net 2 billion US dollars. Lately, Tata has made known its aggressiveness when it comes to gaining exposure and acquiring new brands.

2008 - Nano Tata Motors' financial power comes from the fact that its labor costs amount to only 9% of the profit, a reason for which many other car producers, including Volvo decided to move operations to India. Another important factor in Tata's success is the fact that the group holds several

machine tools and metal producing plants, further reducing production costs.

Apart from this, Tata does not lack the innovative spirit, bringing to the world the compressed air car (OneCAT) and the the cheapest model ever produced, introduced at the 2008 Geneva auto show, the Tata Nano, a car which will set you back some \$2.500. Also, Tata has expressed their wish to come up with a car made 100% out of plastic, in an effort to fight rising costs for metal production.

It seems that Tata Motors has the recipe for success and only time will tell where this car manufacturer will head next.

Tata Motors Limited is India's largest automobile company, with consolidated revenues of Rs. 92,519 crores (USD 20 billion) in 2009-10. It is the leader in commercial vehicles in each segment, and among the top three in passenger vehicles with winning products in the compact, midsize car and utility vehicle segments. The company is the world's fourth largest truck manufacturer, and the world's second largest bus manufacturer.

The company's 24,000 employees are guided by the vision to be "best in the manner in which we operate, best in the products we deliver, and best in our value system and ethics."

Established in 1945, Tata Motors' presence indeed cuts across the length and breadth of India. Over 5.9 million Tata vehicles ply on Indian roads, since the first rolled out in 1954. The company's manufacturing base in India is spread across Jamshedpur (Jharkhand), Pune (Maharashtra), Lucknow (Uttar Pradesh), Pantnagar (Uttarakhand) and Dharwad (Karnataka). Following a strategic alliance with Fiat in 2005, it has set up an industrial joint venture with Fiat Group Automobiles at Ranjangaon (Maharashtra) to produce both Fiat and Tata cars and Fiat powertrains. The company is establishing a new plant at Sanand (Gujarat). The company's dealership, sales, services and spare parts network comprises over 3500 touch points; Tata Motors also distributes and markets Fiat branded cars in India.

Tata Motors, the first company from India's engineering sector to be listed in the New York Stock Exchange (September 2004), has also emerged as an international automobile company. Through subsidiaries and associate companies, Tata Motors has operations in the UK, South Korea, Thailand and Spain. Among them is Jaguar Land Rover, a business comprising the two iconic British brands that was acquired in 2008. In 2004, it acquired the Daewoo Commercial Vehicles Company, South Korea's second largest truck maker. The rechristened Tata Daewoo Commercial Vehicles

Company has launched several new products in the Korean market, while also exporting these products to several international markets. Today two-thirds of heavy commercial vehicle exports out of South Korea are from Tata Daewoo. In 2005, Tata Motors acquired a 21% stake in Hispano Carrocera, a reputed Spanish bus and coach manufacturer, and subsequently the remaining stake in 2009. Hispano's presence is being expanded in other markets. In 2006, Tata Motors formed a joint venture with the Brazil-based Marcopolo, a global leader in body-building for buses and coaches to manufacture fully-built buses and coaches for India and select international markets. In 2006, Tata Motors entered into joint venture with Thonburi Automotive Assembly Plant Company of Thailand to manufacture and market the company's pickup vehicles in Thailand. The new plant of Tata Motors (Thailand) has begun production of the Xenon pickup truck, with the Xenon having been launched in Thailand in 2008.

Tata Motors is also expanding its international footprint, established through exports since 1961. The company's commercial and passenger vehicles are already being marketed in several countries in Europe, Africa, the Middle East, South East Asia, South Asia and South America. It has franchisee/joint venture assembly operations in Kenya, Bangladesh, Ukraine, Russia, Senegal and South Africa.

The foundation of the company's growth over the last 50 years is a deep understanding of economic stimuli and customer needs, and the ability to translate them into customer-desired offerings through leading edge R&D. With over 3,000 engineers and scientists, the company's Engineering Research Centre, established in 1966, has enabled pioneering technologies and products. The company today has R&D centres in Pune, Jamshedpur, Lucknow, Dharwad in India, and in South Korea, Spain, and the UK. It was Tata Motors, which developed the first indigenously developed Light Commercial Vehicle, India's first Sports Utility Vehicle and, in 1998, the Tata Indica, India's first fully indigenous passenger car. Within two years of launch, Tata Indica became India's largest selling car in its segment. In 2005, Tata Motors created a new segment by launching the Tata Ace, India's first indigenously developed mini-truck.

In January 2008, Tata Motors unveiled its People's Car, the Tata Nano, which India and the world have been looking forward to. The Tata Nano has been subsequently launched, as planned, in India in March 2009. A development, which signifies a first for the global automobile industry, the Nano brings the comfort and safety of a car within the reach of thousands of families. The standard version has been priced at Rs.100,000 (excluding VAT and transportation cost).

Designed with a family in mind, it has a roomy passenger compartment with generous leg space and head room. It can comfortably seat four persons. Its mono-volume design will set a new benchmark among small cars. Its safety performance exceeds regulatory requirements in India. Its tailpipe emission performance too exceeds regulatory requirements. In terms of overall pollutants, it has a lower pollution level than two-wheelers being manufactured in India today. The lean design strategy has helped minimise weight, which helps maximise performance per unit of energy consumed and delivers high fuel efficiency. The high fuel efficiency also ensures that the car has low carbon dioxide emissions, thereby providing the twin benefits of an affordable transportation solution with a low carbon footprint.

In May 2009, Tata Motors introduced ushered in a new era in the Indian automobile industry, in keeping with its pioneering tradition, by unveiling its new range of world standard trucks called Prima. In their power, speed, carrying capacity, operating economy and trims, they will introduce new benchmarks in India and match the best in the world in performance at a lower life-cycle cost.

Tata Motors is equally focused on environment-friendly technologies in emissions and alternative fuels. . It has developed electric and hybrid vehicles both for personal and public transportation. It has also been implementing several environment-friendly technologies in manufacturing processes, significantly enhancing resource conservation

Through its subsidiaries, the company is engaged in engineering and automotive solutions, construction equipment manufacturing, automotive vehicle components manufacturing and supply chain activities, machine tools and factory automation solutions, high-precision tooling and plastic and electronic components for automotive and computer applications, and automotive retailing and service operations.

Tata Motors is committed to improving the quality of life of communities by working on four thrust areas – employability, education, health and environment. The activities touch the lives of more than a million citizens. The company's support on education and employability is focused on youth and women. They range from schools to technical education institutes to actual facilitation of income generation. In health, our intervention is in both preventive and curative health care. The goal of environment protection is achieved through tree plantation, conserving water and creating new water bodies and, last but not the least, by introducing appropriate technologies in our vehicles and operations for constantly enhancing environment care.

With the foundation of its rich heritage, Tata Motors today is etching a refulgent future.

SWOT analysis of Tata motors

Strengths:

The internationalization strategy so far has been to keep local managers in new acquisitions, and to only transplant a couple of senior managers from India into the new market. The benefit is that Tata has been able to exchange expertise. For example after the Daewoo acquisition the Indian company learned work discipline and how to get the final product 'right first time.'

The company has a strategy in place for the next stage of its expansion. Not only is it focusing upon new products and acquisitions, but it also has a programme of intensive management development in place in order to establish its leaders for tomorrow.

The company has had a successful alliance with Italian mass producer Fiat since 2006. This has enhanced the product portfolio for Tata and Fiat in terms of production and knowledge exchange. For example, the Fiat Palio Style was launched by Tata in 2007, and the companies have an agreement to build a pick-up targeted at Central and South America.

Weaknesses

The company's passenger car products are based upon 3rd and 4th generation platforms, which put Tata Motors Limited at a disadvantage with competing car manufacturers.

Despite buying the Jaguar and Land Rover brands (see opportunities below); Tat has not got a foothold in the luxury car segment in its domestic, Indian market. Is the brand associated with commercial vehicles and low-cost passenger cars to the extent that it has isolated itself from lucrative segments in a more aspiring India?

One weakness which is often not recognised is that in English the word 'tat' means rubbish. Would the brand sensitive British consumer ever buy into such a brand? Maybe not, but they would buy into Fiat, Jaguar and Land Rover (see opportunities and strengths).

Opportunities:

In the summer of 2008 Tata Motor's announced that it had successfully purchased the Land Rover and Jaguar brands from Ford Motors for UK £2.3 million. Two of the World's luxury car brand have been added to its portfolio of brands, and will undoubtedly off the company the chance to market vehicles in the luxury segments.

Tata Motors Limited acquired Daewoo Motor's Commercial vehicle business in 2004 for around USD \$16 million.

Nano is the cheapest car in the World - retailing at little more than a motorbike. Whilst the World is getting ready for greener alternatives to gas-guzzlers, is the Nano the answer in terms of concept or brand? Incidentally, the new Land Rover and Jaguar models will cost up to 85 times more than a standard Nano!

The new global track platform is about to be launched from its Korean (previously Daewoo) plant. Again, at a time when the World is looking for environmentally friendly transport alternatives, is now the right time to move into this segment?

The answer to this question (and the one above) is that new and emerging industrial nations such as India, South Korea and China will have a thirst for low-cost passenger and commercial vehicles. These are the opportunities. However the company has put in place a very proactive Corporate Social Responsibility (CSR) committee to address potential strategies that will make its operations more sustainable.

The range of Super Milo fuel efficient buses are powered by super-efficient, eco-friendly engines. The bus has optional organic clutch with booster assist and better air intakes that will reduce fuel consumption by up to 10%.

Threats:

Other competing car manufacturers have been in the passenger car business for 40, 50 or more years. Therefore Tata Motors Limited has to catch up in terms of quality and lean production.

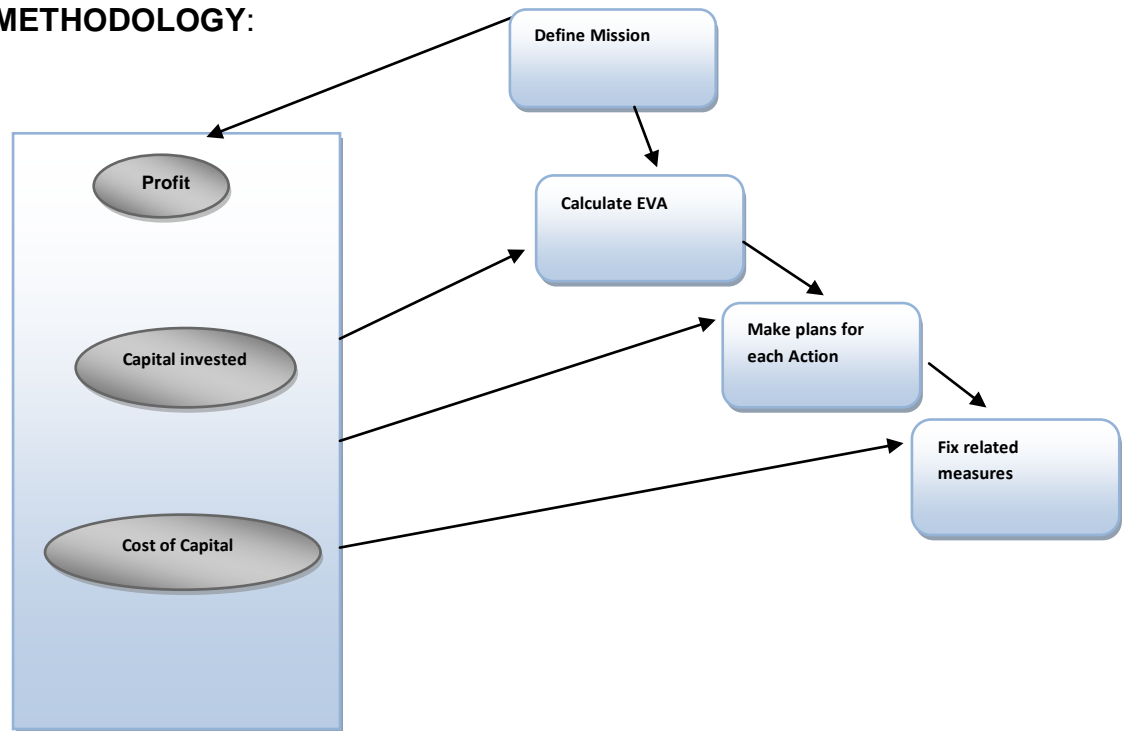
Sustainability and environmentalism could mean extra costs for this low-cost producer. This could impact its underpinning competitive advantage. Obviously, as Tata globalizes and buys into other brands this problem could be alleviated.

Since the company has focused upon the commercial and small vehicle segments, it has left itself open to competition from overseas companies for the emerging Indian luxury segments. For example ICICI bank and DaimlerChrysler have invested in a new Pune-based plant which will build 5000 new Mercedes-Benz per annum. Other players developing luxury cars targeted at the Indian market include Ford, Honda and Toyota.

In fact the entire Indian market has become a target for other global competitors including Maruti Udyog, General Motors, Ford and others.

Rising prices in the global economy could pose a threat to Tata Motors Limited on a couple of fronts. The price of steel and aluminium is increasing putting pressure on the costs of production. Many of Tata's products run on Diesel fuel which is becoming expensive globally and within its traditional home market.

EVA METHODOLOGY:



Source:<http://www.2gc.co.uk/pdf/2GC-bscEVAp.pdf>

The above mentioned figure depicts the methodology followed by companies for the purpose of calculating EVA, information is required regarding the profits, capital, cost of capital, etc., which are based on the mission and objectives of an organization. The EVA, in turn, is linked with various plans formed for each particular action and defines the measures to be applied for achieving the value creation objective. The measures are defined for each activity: profits, cost, capital and cost of capital.

EVA analysis of the companies:

Economic Value Added (EVA) is a financial performance method to calculate the true economic profit of a corporation. EVA can be calculated as net operating after taxes profit minus a charge for the opportunity cost of the capital invested.

EVA is an estimate of the amount by which earnings exceed or fall short of the required minimum rate of return for shareholders or lenders at comparable risk. Unlike market based measures, such as MVA, EVA can be calculated at

divisional (strategic business unit) level. Unlike stock measures, EVA is a flow and can be used for performance evaluation over time. Unlike accounting profit, such as EBIT, Net Income and EPS, EVA is economic and is based on the idea that a business must cover both the operating costs and capital costs.

Economic Value Added Defined:

Economic Value Added (EVA) may be defined as the net operating profits after tax minus an appropriate charge for the opportunity cost of all capital invested in an enterprise. Thus,

EVA=Net Operating Profit After Tax-Weighted Average Cost of Capital

For calculation of EVA, beta is the one of the most important component to be calculated and for calculating beta, return is to be calculated on the basis of stock price which is taken from BSE and correlation between the two returns i.e. return from stock price of the companies and bench mark return. Then the deviation of both the security and market is calculated for finding the beta.

Beta is calculated by multiplying correlation with standard deviation of the security and dividing it by standard deviation of market.

Risk free rate of return is obtained from the economic report of the union budget of the last five years. Then the cost of capital employed is obtained by the use of above calculated component.

The calculation of the different companies of EVA and its analysis is shown below:

Analysis of the study (EVA)**(in crores)**

Year	NOPAT	COCE	EVA of Tata motors ltd.
2003-04	810.34	25,548.075	-24,737.075
2004-05	1236.95	29,056.868	-27,819.918
2005-06	1528.88	30,039.305	-28,510.425
2006-07	1913.46	38,408.925	-36,495.465
2007-08	2028.92	49,842.555	-47,813.635

Table reveals Economic Value Added of Tata Motors Ltd. EVA of Tata motors ltd. shows negative trend during the study period. It is negative in all five years. It means Tata motors has not created any wealth in all five years. In the year 2004-2005 EVA of the company decreased by Rs. 3,082.183 crores comparing to previous year. In the year 2005-2006 it decreased by Rs. 690.507 crores as compare to the year 2004-2005. In the year 2006-2007 and in the year 2007-2008 it again decreased by Rs. 7,985.04 crores and Rs. 11,318.17 crores respectively. So overall EVA of the company shows decreasing trend during all five years. The major reason behind the negative EVA of the company is high cost of capital.

Analysis of the study (EVA)**(in crores)**

Year	NOPAT	COCE	EVA of Mahindra&Mahindra ltd.
2003-2004	411.49	14,803.38	-14,391.89
2004-2005	691.46	17,194.67	-16,503.21
2005-2006	1,399.57	20,910.88	-19,511.31
2006-2007	1,606.69	33,832.97	-32,226.28
2007-2008	1,846.79	39,310.15	-37,436.36

EVA of Mahindra & Mahindra Ltd. also shows negative trend during the study period. It is negative in all five years. In the year 2004-2005 EVA of the company decreased by Rs. 2,111.32 crores comparing to its previous year. In the year 2005-2006 it decreased by Rs. 3008.1 crores as compare to the year 2004-2005. In the year 2006-2007 and in the year 2007-2008 it again decreased by Rs. 12,714.97 crores and Rs. 5,237.08 crores respectively. So during all five years company has not created any wealth.

By comparing yearly EVA of Tata Motors ltd. and Mahindra & Mahindra ltd. it can be said that EVA of Mahindra & Mahindra ltd. remains higher by 41.82% than Tata Motors ltd. in the year 2003-2004. While in the year 2004-2005 it remains higher by 40.68%. in the year 2005-2006 again EVA of Mahindra & Mahindra ltd. remains higher by 31.56% comparing to Tata Motors ltd.. The trend remains continuous during the year 2006-2007 and in the year 2007-2008 where EVA of Mahindra & Mahindra ltd. remains higher by 11.70% and 21.65% respectively comparing to Tata Motors ltd.

Market Value Added:

As per the concept of EVA, the value of a company increases if it earns more rate of return as compared to the cost of capital and the value of a company decreases when the earnings are less than the cost of capital. Another measure that has recently gained momentum is Market Value Added (MVA). This concept measures the creation of wealth by a company since its inception. If the market value is more than the capital invested, it implies that the company has created value and in case the company has not created value, then the opposite holds. MVA is considered as an extended form of

EVA. Market Value Added is considered as stock market's assessments of EVA.

MVA is defined as the variation between the market value of the company and the capital contributed by shareholders and debenture holders. In other words, MVA is the total of capital claims held against the company, including the market value of the debt and equity. MVA of the company indicates that a company has created a significant amount of wealth for its shareholders. It serves as a measure of company's external performance. It reflects the view of the market on company's performance in terms of the market value of both debt and equity as compared to the capital invested in it. To know whether a company has been successful in creating wealth for its investors or not, the calculation of MVA can be calculated as:

$$\text{MVA} = \text{Market Capitalization} - \text{Net Worth}$$

Beliefs behind MVA:

- The primary objective of a company should be to maximize shareholder's wealth.
- A company should earn more than the cost of capital.

Analysis of the study: (MVA)

(In crores)

Year	Market Capitalization	Net Worth	MVA of Tata Motors Ltd.
2003-04	1,80,252.67	3,593.60	1,76,659.07
2004-05	2,36,248.87	4,111.39	2,32,137.48
2005-06	3,44,678.71	5,537.07	3,39,141.04
2006-07	2,86,012.76	6,869.75	2,79,143.01
2007-08	61,320.13	7,839.50	53,480.63

The table shows the MVA analysis of Tata motors ltd. where we can see that the trend of MVA is mix. The MVA is based on market capitalization which is also showing fluctuating trend. Market capitalization was Rs. 1,80,252.72 crores in the year 2003-2004. It increased to Rs. 2,36,248.87 crores in the year 2004-2005. It is continue with increased trend in the year 2005-2006. Which shows market capitalization of Rs. 3,44,678.71 crores. But, thereafter it

shows decreased trend in the year 2006-2007 and decreased up to Rs. 2,86,012.76 crores. Again in the year 2007-2008 it has decreased upto 2,61,320.13 crores which is very huge decrease and it is due to its decreased share prices.

From the table we can see that Networth of the company is increasing year by year. In the year 2003-2004 the Networth of the company is Rs. 3,593.60 crores and it increased up to Rs.4,111.39 crores in the year 2004-2005 and thereafter its increasing every year. In the year 2005-2006 it is Rs.6,869.75 crores and in the year 2007-2008 it is Rs.7,839.50 crores which shows increasing investments of the company.

The market value added also shows mix trend. From the table we can see that in the year 2003-2004 MVA of the company is Rs. 1,76,659.07 crores. Which increased up to Rs.2,32,137.48 crores in the year 2004-2005 and continuous to increase up to Rs.3,39,141.64 crores in the year 2005-2006. But, in the year 2006-2007 it goes down to Rs.2,79,143.01 crores and in the year 2007-2008 there is a down fall up to Rs.53,480.63 crores which shows huge down fall in the Market Value Added of the company. This mixed trend is due to fluctuating share prices of the company and somewhat level of performance.

Analysis of the study: (MVA)**(In crores)**

Year	Market capitalization	Net Worth	MVA of Mahindra & Mahindra Ltd.
2003-2004	63,167.45	1,775.03	61,392.42
2004-2005	59,402.92	2,012.26	57,390.66
2005-2006	2,11,364.04	2,908.87	2,08,455.17
2006-2007	2,04,896.22	3,552.91	2,01,343.31
2007-2008	65,708.39	4,350.07	61,358.32

Table reveals market value added of the Tata motors Ltd. and Mahindra & Mahindra Ltd. The table shows the MVA calculation of Mahindra & Mahindra Ltd. where we can see that the trend of MVA is fluctuating. The MVA based on market capitalization was Rs. 63,167.45 crores in the year 2003-2004. It decreased to Rs.59,402.92 crores in the year 2004-2005. This decrease was due to its increased share prices of the company. There after in the year 2005-2006 the market capitalization is Rs.2,11,364.04 crores. This increase is due to its increased share prices and improved performance standard. Then again in the year –in consecutive 2 years it decreases. In the year 2006-2007 it was Rs.2,04,896.22 crores which in the year 2007-2008 it shows very huge decrease of Rs.65,708.39 crores due to its decreased share prices for that year. So the market capitalization is highly fluctuating in this company.

From the table we can see that the net worth of the company is increasing year by year.in the year 2003-2004 the net worth of the company is Rs.1,775.03 crores and there after it is increasing year by year. In the year 2004-2005 it is Rs. 2,908.87 crores and thereafter it keeps increasing. In the year 2006-2007 it is Rs.3,552.91 crores crores and in the year 2007-2008 it is Rs. 4,350 crores which shows increasing investments by the company.

The market value added also shows fluctuating trend. From the table we can see that in the year 2003-2004 the market value added of the company is Rs.61,392.42 crores. while it goes down to Rs. 57,390.66 crores in the year 2004-2005. Then again in the year 2005-2006 it goes up to Rs. 2,08,455.17 crores while in the year 2006-2007 it decreased by Rs. 2,01,343.31 crores. In the year 2007-2008 again it goes down to Rs.61,358.32 crores which shows a huge decreased in Market Value Added of the company. This fluctuations are due to fluctuated share prices and somewhat level of the performance standards.

In the modern economy, the shareholders are looking for new ways to measure performance and profitability to gain competitive edge. As of now, what the companies are using as financial metrics is incompatible with the financial market mechanism. When it comes to metrics and performance, the companies must confirm the relevance of tools to all the concerned. So, the present day competitive environment demands value-based management. This approach is consistent with the mechanisms of financial markets and value measurement. The goal of this concept is to fulfill the expectations of shareholders. A large number of companies are adopting various value-based tools, like Economic Value Added and Market Value Added to measure profitability.

CHAPTER : 6**FINDINGS, SUGGESTIONS AND CONCLUSION**

The primary principle of every organization is to take capital from the investors and make it worthwhile. But in reality, this principle doesn't hold good. Often the companies talk about "Maximizing Shareholders Value", but only a few go about realizing this fundamental principle. To achieve this, a company must not be only the biggest player but, also efficient in its operations. Most of the companies shift their focus on metrics like share prices, earnings, earning per share, etc. but, these metrics do not take in to account the amount of additional capital contributed for generating additional income. For this purpose, the companies need to focus on the value added to shareholder's wealth.

HYPOTHESES TESTING:

H₀: There is no significant difference in the shareholder value creation by the companies in the automobile industry in India.

H₁: There is a significant difference in the shareholder value creation by the companies in the automobile industries in India.

analysis of the study: t-test (EVA)***(in crores)***

Year	EVA of Tata motors ltd.	EVA of Mahindra & Mahindra ltd.
2003-04	-24,737.075	-14,391.89
2004-05	-27,819.918	-16,503.21
2005-06	-28,510.425	-19,511.31
2006-07	-36,495.465	-32,226.28
2007-08	-47,813.635	-37,436.36

		N	mean	variance	Degree freedom	of	t-value
t- calculation	X1	5	-13,950	968760086	8		t:calculated 0.2509
	X2	5	-18,262.45	533890508	8		t:tabulated 2.306

Analysis of the study:t-test (MVA)

(In crores)

Year	MVA of Tata Motors ltd.	MVA of Mahindra & Mahindra ltd.
2003-04	1,76,659.07	61,392.42
2004-05	2,32,137.48	57,390.66
2005-06	3,39,141.04	2,08,455.17
2006-07	2,79,143.01	2,01,343.31
2007-08	53,480.63	61,358.32

		N	mean	variance	Degree of freedom	t-value
t-calculation	X1	5	216112.2	4756500074	8	t:calculated 0.1.5674
	X2	5	117988	5042886900	8	t:tabulated 2.306

Findings, Suggestions and Conclusion:

Findings:

Economic Value Added:

According to the study, Tata Motors Ltd. and Mahindra & Mahindra Ltd. have negative EVA during the study period. It means that both companies would not be able to create any wealth for their shareholders. There would be several reasons for that:

- In both companies, main cause of negative EVA would be higher cost of capital. There would be high maintaining cost of equity in both companies.
- Here, betas of both companies are sometimes higher than one, so market prices of both companies are volatile to some extent. That's why cost of equity is high in both the companies.
- Sometimes historical values distort EVA. Distortions of EVA are more pronounced in cyclic business where peaks and valleys feature in EVA figures. Industries with lots of fixed assets and with short investments period get affected by this pitfall since current assets do not represent the majority of total amount of assets; so value of assets not would be close to current value of capital tied the business. Thus it gives wrong signals about the aggregate company performance.

- In both the companies, they most probably use the owner's capital, so there would be less use of borrowed fund. That's why they would not get benefit of leverages.
- There would be increase in operating profit with the additional capital in the business, but the proportion of increase in profit is lower than the proportion of increase in the capital.
- The companies in the growth phase or business units with heavy new investments are likely to have current negative EVA although their true rate of return may be good and so long term shareholder wealth added (true long term EVA) would be positive. This is main criticism of EVA being a short term performance measure.

Market value added:

- From the calculation of MVA we can see that in Mahindra & Mahindra Ltd. and in Tata Motors Ltd. trend of MVA is fluctuating.
- As MVA is based on market capitalization which is related to share prices. In Mahindra & Mahindra Ltd. market capitalization is also fluctuating. While in Tata Motors Ltd. market capitalization is not so much fluctuating.
- In both the companies market value added is not steady. These fluctuations are due to fluctuating share prices and somewhat level of performance standard.
- In both the companies MVA is positive, that means both the companies have added value.

Suggestions:

EVA is negative in both the companies. Following suggestions can be made to improve EVA.

- Increasing NOPAT with the same amount of capital.
- Reducing capital employed without affecting the earnings.
- Investing in those projects that can earn return greater than the cost of capital.
- By reducing the cost of capital.
- By applying above-mentioned suggestions, EVA of the firm can be increased or negative EVA can be converted into positive.

CONCLUSION:

Automobile industry is a key driver of any growing economy. It plays a pivotal role in country's rapid industrial and economic development. It caters to the requirement of equipment for basic industries like steel, non-ferrous metals, fertilizers, refineries, petrochemicals, shipping, textiles, plastics, glass, rubber, capital equipments, logistics, paper, cement, sugar etc. it facilitates the improvement in various infrastructure facilities like power, rail and road transport.

Due to its deep forward and backward linkages with almost every segment of economy, the industry has a strong and positive multiplier effect and thus propels progress of a nation. The automotive industry comprises of the automobile and auto component sectors. It includes passenger cars; light, medium and heavy commercial vehicles; multi-utility vehicles such as jeeps, scooters, motor cycles, three wheelers, tractors, etc; and auto components like engine parts, drive transmission parts, suspension and breaking parts, electricals, body and chassis parts; etc.

In India, automotive is one of the largest industries showing impressive growth over the years and has been significantly making increasing contribution to overall industrial development in the country. Presently India is the world's second largest manufacturer of two wheelers, fifth largest manufacturers of commercial vehicles as well as largest manufacturers of the tractors. It is the fourth largest passenger car market in Asia as well as a home to the largest motor cycle manufacturer. The installed capacity of the automobile sector has been 9,540,000 vehicles, comprising 1,590,000 four wheelers (including passenger cars) and 7,950,000 two and three wheelers. The sector has

shown great advances in terms of development , spread, absorption of newer technologies and flexibility in the wake of changing business scenario. It is also finding increasing recognition world wide and a beginning has been made in exports in vehicles as well as components. Here we have some fast facts about the automobile industry.

The economy has become more competitive and more dynamic in recent years and to succeed in it companies must juggle a host of conflicting demands. They must find ways of cutting costs and operating more efficiently. They must respond swiftly to changing customer demands and technological change. They must focus on nurturing the wellbeing of their employees who, in this new “knowledge” economy, are now recognized as core assets. They must constantly innovate if they want to keep up with and stay ahead of the competition. They must also carry out socially responsible actions, which help to reinforce their corporate reputation and brand image. As a consequence of companies trying to meet so many conflicting demands, however, traditional models and measures of company performance are being questioned, especially the shareholder value model. Is it valid in the current economic environment and will its use foster sustainable economic growth?

Creating shareholders value is the key to success in today’s marketplace. There is increasing pressure on corporate executives to measure, manage and report the creation of shareholder value on a regular basis. In the emerging field of shareholder value analysis, various measures have been developed that claim to quantify the creation of shareholder value and wealth.

More than ever, corporate executives are under increasing pressure to demonstrate on a regular basis that they are creating shareholder value. This pressure has led to an emergence of a variety of measures that claim to quantify value-creating performance. Creating value for shareholders is now a widely accepted corporate objective. The interest in value creation has been stimulated by several developments.

In the modern economy, the stakeholders are looking for new ways to measure performance and profitability to gain competitive edge. As of now, what the companies are using as financial metrics is incompatible with the financial market mechanism. When it comes to metrics and performance, the companies must confirm the relevance of tools to all the concerned. So, the present day competitive environment demands value based management (VBM). This approach is to fulfill the expectations of shareholders. A large number of companies are adopting various value based tools, like Economic Value Added (EVA), Market Value Added (MVA), to measure profitability.

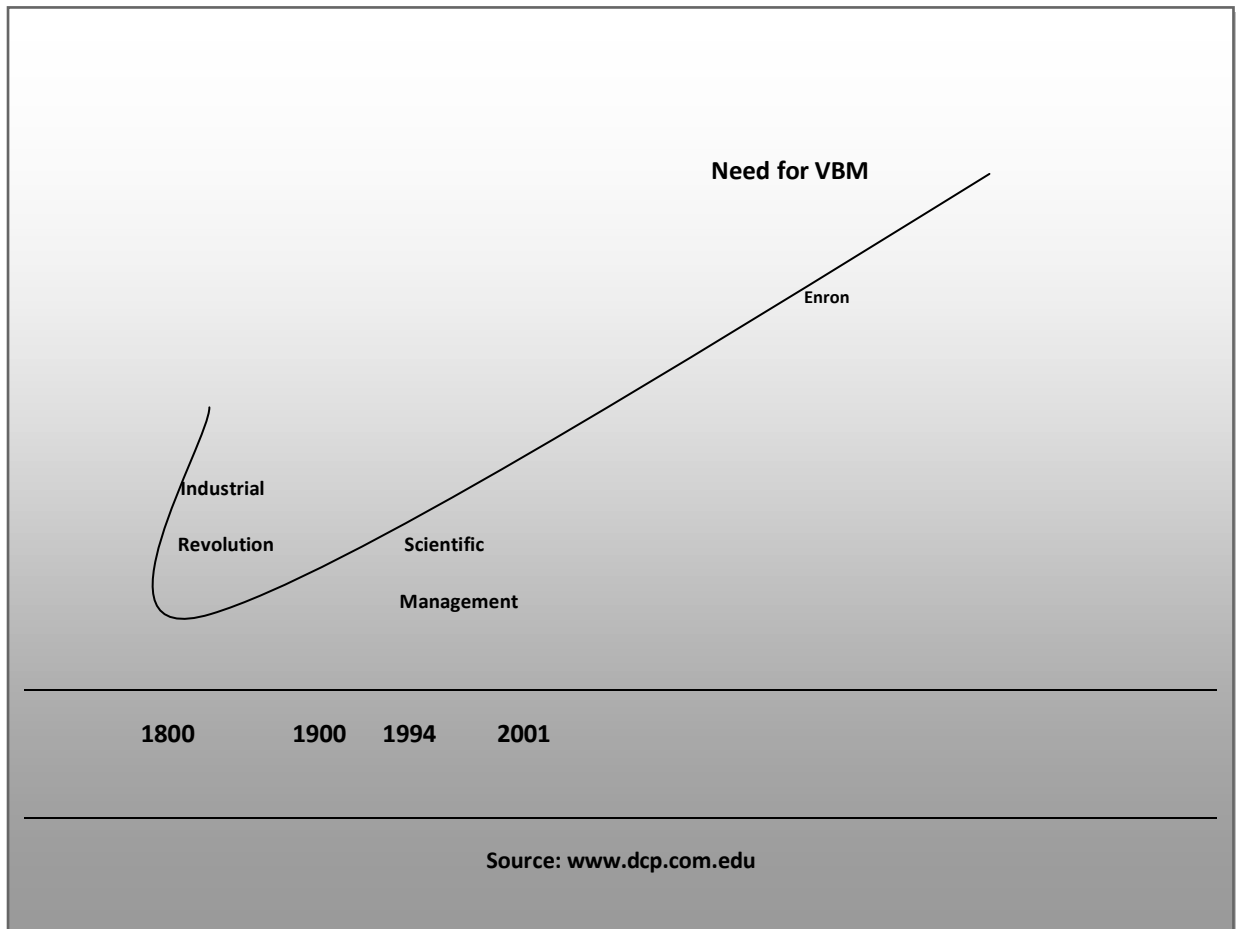
For most firms, the pursuit of enterprise sustainability remains difficult to reconcile with the objective of increasing shareholder value. Indeed, some have even advocated that creating a more sustainable world will require firms

to sacrifice profits and shareholder value in favor of the public good. By starting with legal or moral arguments for firm actions, however, managers inevitably underestimate the strategic business opportunities associated with this important issue. To avoid this problem, managers need to directly link enterprise sustainability to the creation of shareholder value. The global challenges associated with sustainability, viewed through the appropriate set of business lenses, can help to identify strategies and practices that contribute to a more sustainable world and, simultaneously, drive shareholder value; this we define as the creation of sustainable value for the firm.

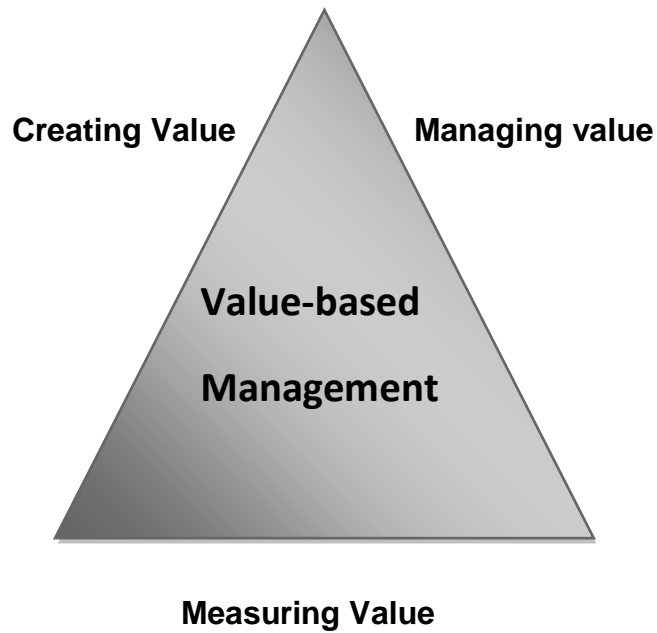
If anything has changed in the business world over the last couple of decades, it is the pace of business change. Yesterday's high performers are often today's laggards, if one can still find them listed at all. Many of yesterday's shining stars, whether in the realm of business thought or business action, mistook what was superficially new for what was really new, responding to the cacophony of boom and bust rather than to the steady creak of a tectonic shift. Companies that aspire to sustainable high performance must attend to sustained. Because of these fundamental sustained changes, the task of managing shareholder wealth also has altered, requiring innovative, more expansive ways of thinking about resources and how they can be used to create value for today and tomorrow.

Management that ignores the implications of these changes risks mismanaging both the most important component of their valuation as well as their most important value-creating resources.

Emergence of Value-based Management



Value based management ensures that companies are running constantly on value, usually, shareholders value. It is dependent upon corporate purpose as well as value. The value can be either of the economic value or other constituents. This includes components as given in below figure.

Components of Value-based Management***Value added:***

A firm is said to have added value over a period of time when the profits generated by it are more than its cost of capital. This excess amount is referred to as economic profit. This concept of economic profit is the basis for various financial techniques. For this purpose tools like EVA and MVA has been used by companies to measure performance.

EVA is primarily used for evaluating the performance of management

Usage of MVA includes:

- Setting organizational goals;
- Measuring performance;
- Capital budgeting;
- Corporate valuation;
- Analyzing equities;

- Motivation of managers;
- Communication with shareholders and investors ; and
- Determining bonus.

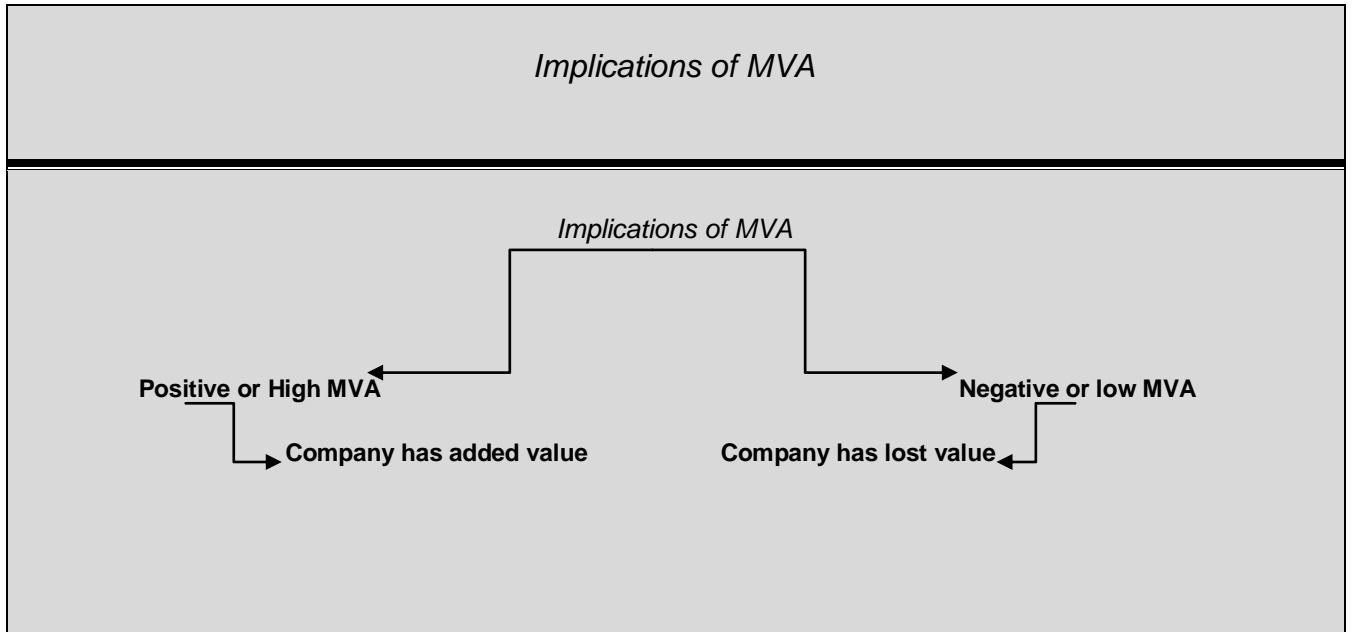
Problems with EVA:

- ✓ EVA is considered as a good measure for analyzing short-term company's value.
- ✓ Only one performance measure cannot be useful for measuring the performance of the company.
- ✓ It also suffers from wrong periodizing of returns and hence it may fail to depict the true result due to changes, like change in inflation rate.
- ✓ It represents the performance of current projects but not of future projects.

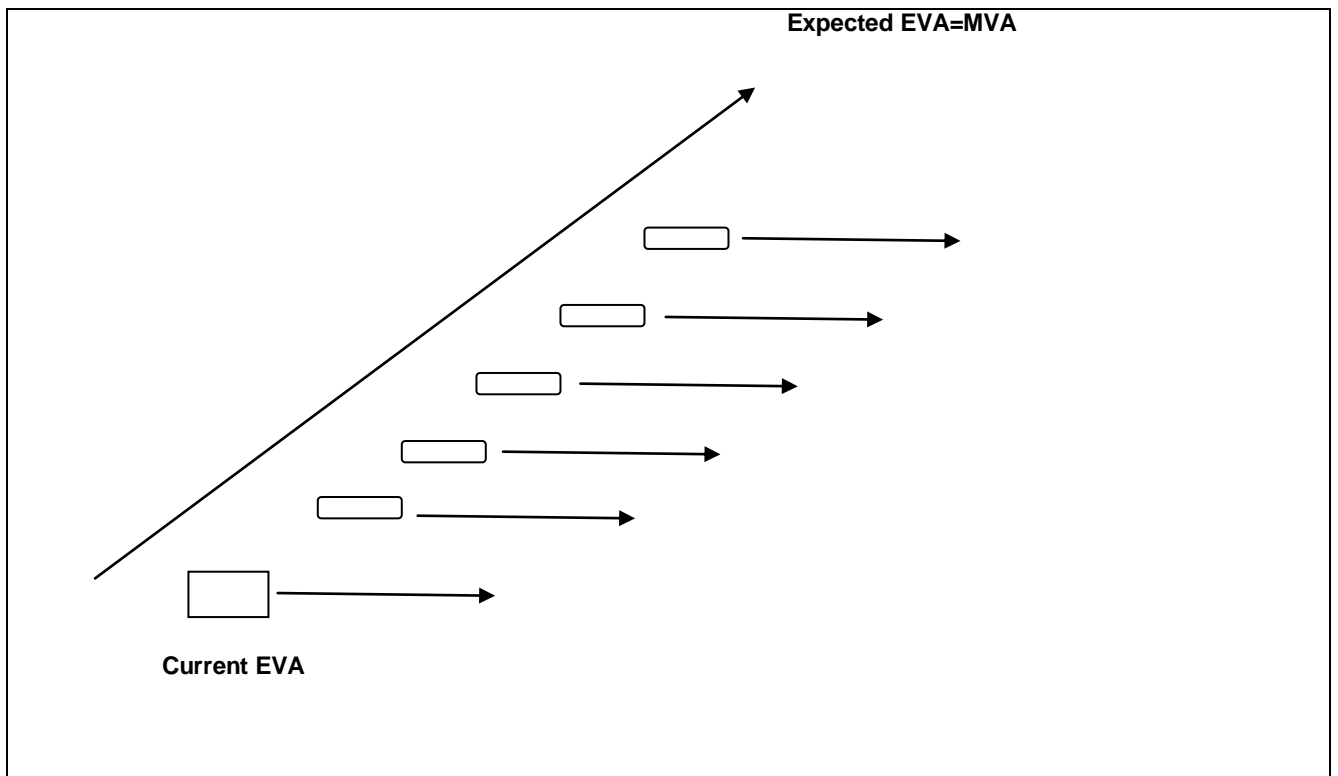
Such problems with EVA led to emergence of Market Value Added. MVA is considered as stock market's assessment of EVA.

Implications of MVA:

MVA of a company is also an indicator of its performance. It is generally considered that higher MVA is favorable on part of the company's performance. *Higher the MVA, better is for the company.* It can be depicted as below:



Relation between EVA and MVA:



Shweta gupta, lecturer in management, Apeejay institute of Management, Jalandhar, Punjab, India.

Problems with MVA:

- ✓ It does not consider opportunity cost of capital.
- ✓ It does not take in to account cash returns to shareholders because it measures the difference between market value and the capital invested for a specified time period only.
- ✓ It cannot be calculated at strategic business unit level and in case of privately held companies.

An important goal of financial management is to maximize the wealth of the organization highest capital employee's wealth and consequently enhance the value of the firm. Shareholder wealth is traditionally reflected by either standard accounting parameters such as profits, earnings and cash flow from the operations or financial ratios like earning per share and the return on investment and equity. But, there was a question that, whether these measures of corporate performance are linked to the expectation of the shareholders or not. Value-based management is an important tool for improving the company's performance. Because this approach moves about the notion of the value. At present, EVA and MVA are considered as the best economic metrics in order to measure the change in shareholder's value. These concepts have their own limitations but at the same time if it can be avoided carefully, then definitely it has the intrinsic prospective to take the company to new mounting scale of success.

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- www.cimaglobal.com
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- www.sternstewart.com

NEWS PAPERS:

- The Economic Times
- The Financial Express
- Business Standard

APPENDICES
Tata Motors Ltd.
Summarised Balance Sheet

	(Rupees Crores)	
	As at March 31, 2003	As at March 31, 2002
WHAT THE COMPANY OWNED		
1. NET FIXED ASSETS	3306.58	3478.34
2. INVESTMENTS	1195.98	1189.92
3. DEFERRED TAX ASSETS (NET)	—	95.00
4. NET CURRENT ASSETS	(433.34)	6.76
5. MISCELLANEOUS EXPENDITURE	91.55	—
6. TOTAL ASSETS (NET)	<u>4160.77</u>	<u>4770.02</u>
WHAT THE COMPANY OWED		
1. LOANS	1458.31	2304.96
2. NET WORTH	2597.16	2465.06
Represented by :		
Share Capital ... Rs. 319.83 Crores (Previous Year Rs. 319.82 Crores)		
Reserves	Rs. 2277.33 Crores (Previous Year Rs. 2145.24 Crores)	
3. DEFERRED TAX LIABILITY (NET)	105.30	—
4. TOTAL FUNDS EMPLOYED	<u>4160.77</u>	<u>4770.02</u>

Summarised Profit and Loss Account

	(Rupees Crores)	
	2002-03	2001-02
1. INCOME		
SALE OF PRODUCTS AND OTHER INCOME	10855.05	8915.21
LESS: EXCISE DUTY	1743.79	1389.29
	<u>9111.26</u>	<u>7525.92</u>
2. EXPENDITURE		
RAW MATERIALS, STORES AND OTHER EXPENSES	7233.44	6069.56
SALARIES, WAGES ETC	720.37	691.64
AMORTISATION OF DEFERRED REVENUE EXPENSES	2.62	89.83
DEPRECIATION	359.51	354.68
INTEREST	278.95	382.23
TOTAL EXPENDITURE	<u>8594.89</u>	<u>7587.94</u>
PROFIT/(LOSS) BEFORE EXTRAORDINARY ITEMS	516.37	(62.02)
WRITE BACK/(PROVISION) FOR CONTINGENCIES	20.00	(20.00)
PROVISION FOR DIMINUTION IN VALUE OF INVESTMENTS	(26.00)	(1.37)
EMPLOYEE SEPARATION COST	—	(25.82)
3. PROFIT/(LOSS) BEFORE TAX	510.37	(109.21)
4. TAX FOR THE YEAR (I) CURRENT (NET)	(19.71)	—
(II) DEFERRED (NET)	(190.55)	55.48
5. PROFIT/(LOSS) AFTER TAX	300.11	(53.73)
6. TRANSFER FROM GENERAL RESERVE	—	53.73
7. INVESTMENT ALLOWANCE (UTILISED) RESERVE WRITTEN BACK	0.90	—
	<u>301.01</u>	<u>—</u>
8. APPROPRIATIONS		
(i) Proposed Dividends	127.91	—
(ii) Tax on Proposed Dividends	16.39	—
(iii) General Reserve	33.00	—
(iv) Balance carried to Balance Sheet	123.71	—
	<u>301.01</u>	<u>—</u>

SHAREHOLDER VALUE CREATION IN THE AUTOMOBILE INDUSTRY IN INDIA

Summarised Balance Sheet

	(Rupees crores)	
	As at March 31, 2005	As at March 31, 2004
WHAT THE COMPANY OWNED		
1 NET FIXED ASSETS	3696.51	3247.80
2 INVESTMENTS	2912.06	3056.77
3 NET CURRENT ASSETS	545.36	(959.24)
4 MISCELLANEOUS EXPENDITURE	18.16	22.19
5 TOTAL ASSETS (NET)	<u>7172.09</u>	<u>5367.52</u>
WHAT THE COMPANY OWED		
1 LOANS	2495.42	1259.77
2 NET WORTH	4111.39	3593.60
Represented by :		
Share Capital	Rs. 361.79 crores	(Previous Year Rs. 356.83 crores)
Reserves	Rs. 3,749.60 crores	(Previous Year Rs. 3,236.77 crores)
3 DEFERRED TAX LIABILITY (NET)	565.28	514.15
4 TOTAL FUNDS EMPLOYED	<u>7172.09</u>	<u>5367.52</u>

Summarised Profit and Loss Account

	(Rupees crores)	
	2004-05	2003-04
1 INCOME		
SALE OF PRODUCTS AND OTHER INCOME	20648.66	15552.42
LESS : EXCISE DUTY	3063.44	2270.30
	<u>17585.22</u>	<u>13282.12</u>
2 EXPENDITURE		
RAW MATERIALS / COMPONENTS, MANUFACTURING AND OTHER EXPENSES	14208.70	10458.93
EMPLOYEE COST	1039.34	882.49
PRODUCT DEVELOPMENT EXPENDITURE	67.12	51.64
DEPRECIATION	450.16	382.60
INTEREST	154.15	161.26
TOTAL EXPENDITURE	<u>15919.47</u>	<u>11936.92</u>
PROFIT BEFORE EXCEPTIONAL ITEMS AND TAX	1665.75	1345.20
PROVISION FOR DIMINUTION IN VALUE OF INVESTMENTS	(9.67)	(48.30)
EMPLOYEE SEPARATION COST	(4.18)	(4.56)
3 PROFIT BEFORE TAX	<u>1651.90</u>	<u>1292.34</u>
4 TAX: i) CURRENT	(363.82)	(96.00)
ii) DEFERRED	(51.13)	(386.00)
5 PROFIT AFTER TAX	<u>1236.95</u>	<u>810.34</u>
6 BALANCE BROUGHT FORWARD FROM PREVIOUS YEAR	365.80	123.71
	<u>1602.75</u>	<u>934.05</u>
7 APPROPRIATIONS		
(i) Interim Dividend	-	139.95
(ii) Tax on Interim Dividend	-	17.93
(iii) Proposed Dividend	452.19	142.16
(iv) Tax on Proposed Dividend	63.42	18.21
(v) Residual dividend paid for the year 2003-04 (including tax)	1.54	-
(vi) General Reserve	500.00	250.00
(vii) Balance carried to Balance Sheet	585.60	365.80
	<u>1602.75</u>	<u>934.05</u>

SHAREHOLDER VALUE CREATION IN THE AUTOMOBILE INDUSTRY IN INDIA

Summarised Balance Sheet

	(Rupees crores)	
WHAT THE COMPANY OWNED	As at March 31, 2006	As at March 31, 2005
1. NET FIXED ASSETS	4521.23	3696.51
2. INVESTMENTS	2015.15	2912.06
3. NET CURRENT ASSETS	2545.95	545.36
4. MISCELLANEOUS EXPENDITURE	14.12	18.16
5. TOTAL ASSETS (NET)	9096.45	7172.09
WHAT THE COMPANY OWED		
1. LOANS	2936.84	2495.42
2. NET WORTH	5537.07	4111.39
Represented by :		
Share Capital Rs. 382.87 Crores (Previous Year Rs. 361.79 Crores)		
Reserves Rs. 5154.20 Crores (Previous Year Rs. 3749.60 Crores)		
3. DEFERRED TAX LIABILITY (NET)	622.54	565.28
4. TOTAL FUNDS EMPLOYED	9096.45	7172.09

Summarised Profit and Loss Account

	(Rupees crores)	
	2005-2006	2004-2005
1. INCOME		
SALE OF PRODUCTS AND OTHER INCOME	24293.23	20648.66
LESS : EXCISE DUTY	3401.92	3063.44
	20891.31	17585.22
2. EXPENDITURE		
RAW MATERIALS / COMPONENTS, MANUFACTURING AND OTHER EXPENSES	16879.38	14208.70
EMPLOYEE COST	1143.13	1039.34
PRODUCT DEVELOPMENT EXPENDITURE	73.78	67.12
DEPRECIATION	520.94	450.16
INTEREST	226.35	154.15
TOTAL EXPENDITURE	18843.58	15919.47
PROFIT BEFORE EXCEPTIONAL ITEMS AND TAX	2047.73	1665.75
PROVISION FOR DIMINUTION IN VALUE OF INVESTMENTS	9.69	(9.67)
EMPLOYEE SEPARATION COST	(4.04)	(4.18)
3. PROFIT BEFORE TAX	2053.38	1651.90
4. TAX EXPENSE	(524.50)	(414.95)
5. PROFIT AFTER TAX	1528.88	1236.95
6. BALANCE BROUGHT FORWARD FROM PREVIOUS YEAR	585.60	365.80
Arrears of preference dividend pertaining to erstwhile Tata Finance Ltd. (including tax)	(19.94)	-
	2094.54	1602.75
7. APPROPRIATIONS		
(i) Proposed Dividends	497.94	452.19
(ii) Tax on Proposed Dividends	69.84	63.42
(iii) Residual dividend paid for the year 2003-04 (including tax)	-	1.54
(iv) General Reserve	750.00	500.00
(v) Balance carried to Balance Sheet	776.76	585.60
	2094.54	1602.75

SHAREHOLDER VALUE CREATION IN THE AUTOMOBILE INDUSTRY IN INDIA

Summarised Balance Sheet

WHAT THE COMPANY OWNED	As at March 31, 2007	(Rs. in crores) As at March 31, 2006
1 NET FIXED ASSETS	6394.58	4521.23
2 INVESTMENTS	2477.00	2015.15
3 NET CURRENT ASSETS	2784.05	2545.95
4 MISCELLANEOUS EXPENDITURE	10.09	14.12
5 TOTAL ASSETS (NET)	11665.72	9096.45
WHAT THE COMPANY OWED		
1 LOANS	4009.14	2936.84
2 NET WORTH	6869.75	5537.07
Represented by :		
Share Capital	Rs. 385.41 Crores	(Previous Year Rs. 382.87 Crores)
Reserves	Rs. 6484.34 Crores	(Previous Year Rs. 5154.20 Crores)
3 DEFERRED TAX LIABILITY (NET)	786.83	622.54
4 TOTAL FUNDS EMPLOYED	11665.72	9096.45

Summarised Profit and Loss Account

	2006-2007	(Rs. in crores) 2005-2006
1 INCOME		
SALE OF PRODUCTS AND OTHER INCOME	31884.69	24001.44
LESS : EXCISE DUTY	4349.45	3347.95
	27535.24	20653.49
DIVIDEND AND OTHER INCOME	245.19	289.08
	27780.43	20942.57
2 EXPENDITURE		
RAW MATERIALS / COMPONENTS, MANUFACTURING AND OTHER EXPENSES	22853.69	16930.64
EMPLOYEE COST	1367.83	1147.17
PRODUCT DEVELOPMENT EXPENDITURE	85.02	73.78
DEPRECIATION	586.29	520.94
INTEREST	313.07	226.35
TOTAL EXPENDITURE	25205.90	18898.88
PROFIT/(LOSS) BEFORE EXCEPTIONAL ITEMS AND TAX	2574.53	2043.69
PROVISION FOR DIMINUTION IN VALUE OF INVESTMENTS	(1.09)	9.69
EMPLOYEE SEPARATION COST	(0.26)	-
3 PROFIT BEFORE TAX	2573.18	2053.38
4 TAX: i) CURRENT	(482.50)	(382.35)
ii) DEFERRED	(177.22)	(142.15)
5 PROFIT AFTER TAX	1913.46	1528.88
6 BALANCE BROUGHT FORWARD FROM PREVIOUS YEAR	776.76	585.60
Arrears of preference dividends pertaining to erstwhile Tata Finance Ltd. (including tax)	-	(19.94)
	2690.22	2094.54
7 APPROPRIATIONS		
(i) Proposed Dividends	578.07	497.94
(ii) Tax on Proposed Dividends	98.25	69.84
(iii) Residual dividend paid for year 2005-06 (including tax)	0.07	-
(iv) General Reserve	1000.00	750.00
(v) Balance carried to Balance Sheet	1013.83	776.76
	2690.22	2094.54

SHAREHOLDER VALUE CREATION IN THE AUTOMOBILE INDUSTRY IN INDIA

Summarised Balance Sheet

	(Rs. in crores)	
WHAT THE COMPANY OWNED	As at March 31, 2008	As at March 31, 2007
1. NET FIXED ASSETS	10452.27	6394.58
2. INVESTMENTS	4910.27	2477.00
3. NET CURRENT ASSETS	(272.85)	2784.05
4. MISCELLANEOUS EXPENDITURE	6.05	10.09
5. TOTAL ASSETS (NET)	15095.74	11665.72
WHAT THE COMPANY OWED		
1. LOANS	6280.52	4009.14
2. NET WORTH	7839.50	6869.75
Represented by :		
Share Capital	Rs. 385.54 crores	(Previous Year Rs. 385.41 crores)
Reserves	Rs. 7453.96 crores	(Previous Year Rs. 6484.34 crores)
3. DEFERRED TAX LIABILITY (NET)	975.72	786.83
4. TOTAL FUNDS EMPLOYED	15095.74	11665.72

Summarised Profit and Loss Account

	2007-2008	2006-2007
1. INCOME		
SALE OF PRODUCTS AND OTHER INCOME FROM OPERATIONS	33093.93	31819.48
LESS : EXCISE DUTY	4363.11	4349.45
	28730.82	27470.03
DIVIDEND AND OTHER INCOME	483.18	245.19
	29214.00	27715.22
2. EXPENDITURE		
RAW MATERIALS / COMPONENTS, MANUFACTURING AND OTHER EXPENSES	24093.93	22789.57
EMPLOYEE COST	1544.57	1368.09
PRODUCT DEVELOPMENT EXPENDITURE	64.35	85.02
DEPRECIATION	652.31	586.29
INTEREST	282.37	313.07
TOTAL EXPENDITURE	26637.53	25142.04
3. PROFIT BEFORE TAX	2576.47	2573.18
4. TAX : (i) CURRENT	(146.01)	(482.50)
(ii) DEFERRED	(401.54)	(177.22)
5. PROFIT AFTER TAX	2028.92	1913.46
6. BALANCE BROUGHT FORWARD FROM PREVIOUS YEAR	1013.83	776.76
	3042.75	2690.22
7. APPROPRIATIONS		
(i) Proposed Dividends	578.43	578.07
(ii) Tax on Proposed Dividends	81.25	98.25
(iii) Residual dividend paid for the year 2005-06 (including tax)	-	0.07
(iv) General Reserve	1000.00	1000.00
(v) Balance carried to Balance Sheet	1383.07	1013.83
	3042.75	2690.22

SHAREHOLDER VALUE CREATION IN THE AUTOMOBILE INDUSTRY IN INDIA

Mahindra & Mahindra Ltd.

Balance Sheet as at 31st March, 2004

	Schedule	Rupees lakhs	2004 Rupees lakhs	2003 Rupees lakhs
I. SOURCES OF FUNDS :				
SHAREHOLDERS' FUNDS :				
Capital	I	116,00.86		116,00.86
Reserves and Surplus	II	1,659,02.49		1,453,82.23
			<u>1,775,03.35</u>	<u>1,569,83.09</u>
LOAN FUNDS	III		729,80.78	1,139,84.45
DEFERRED TAX LIABILITY (Net)			203,25.00	177,10.00
Total			<u>2,708,09.13</u>	<u>2,886,77.54</u>
II. APPLICATION OF FUNDS :				
FIXED ASSETS	IV	1,332,97.01		1,413,77.86
CAPITAL WORK-IN-PROGRESS		38,41.10		52,31.00
			<u>1,371,38.11</u>	<u>1,466,08.86</u>
INTANGIBLE ASSETS	V		20,21.80	—
INVESTMENTS	VI		1,111,15.31	862,26.96
NET CURRENT ASSETS :				
Current Assets, Loans and Advances	VII	1,502,56.79		1,613,48.02
Less : Current Liabilities and Provisions	VIII	1,306,87.30		1,094,78.25
			<u>195,69.49</u>	<u>518,69.77</u>
MISCELLANEOUS EXPENDITURE (TO THE EXTENT NOT WRITTEN OFF OR ADJUSTED)	IX		9,64.42	39,71.95
Total			<u>2,708,09.13</u>	<u>2,886,77.54</u>

SHAREHOLDER VALUE CREATION IN THE AUTOMOBILE INDUSTRY IN INDIA

Profit and Loss Account for the year ended 31st March, 2004

	Schedule	2004 Rupees lakhs	2003 Rupees lakhs
SALES – Traded and Manufactured Goods [Note 11(a)]		5,829,24.59	4,452,64.97
<i>Less</i> : Excise Duty on Sales (net)		943,78.11	785,49.06
Net Sales		<u>4,885,46.48</u>	<u>3,667,15.91</u>
Other Income	X	171,98.19	144,14.24
Net Income		<u>5,057,44.67</u>	<u>3,811,30.15</u>
EXPENDITURE :			
Raw Materials, Finished and Semi-finished Products	XI	3,352,86.52	2,500,21.84
Excise Duty		11,65.34	(47.66)
Personnel	XII	417,45.39	381,29.03
Interest, Commitment and Finance Charges (Net)	XIII	51,58.65	86,89.75
Depreciation / Amortisation [Note 5(g)(i)]		165,19.90	165,43.65
Other Expenses	XIV	662,32.95	553,85.51
		<u>4,661,08.75</u>	<u>3,687,22.12</u>
<i>Less</i> : Cost of Manufactured Products capitalised		15,77.55	19,17.07
		<u>4,645,31.20</u>	<u>3,668,05.05</u>
Profit before provision for contingencies, exceptional item and taxation		412,13.47	143,25.10
<i>Less</i> : Provision for contingencies (Note 10)		3,42.00	3,87.30
Profit before exceptional item and taxation		<u>408,71.47</u>	<u>139,37.80</u>
<i>Add</i> : Exceptional Item (Note 22)		29,47.83	57,65.61
Profit before taxation		438,19.30	197,03.41
<i>Less</i> : Provision for tax - Current tax		63,50.00	12,30.00
- Deferred tax (Net) (Note 23)		26,15.00	39,20.00
Profit for the year		<u>348,54.30</u>	<u>145,53.41</u>
Balance of Profit for earlier years		423,94.35	333,05.74
<i>Add</i> : Transferred from Debenture redemption reserve (Net)		123,15.13	32,33.36
		<u>547,09.48</u>	<u>365,39.10</u>
Total of Profit and Loss Account balances shown above		895,63.78	510,92.51
<i>Deduct</i> : General Reserve		35,00.00	15,00.00
: Dividends paid (Note 25)		0.21	—
: Income-tax on Dividend Paid		0.03	—
: Proposed Dividends – See Directors' Report		104,41.27	63,80.64
: Income-tax on Proposed Dividends		13,37.79	8,17.52
Balance for 2003-2004 and earlier years carried to Balance Sheet		<u>742,84.48</u>	<u>423,94.35</u>
EARNINGS PER SHARE (Note 26) :			
(Face value Rs. 10/- per share) (Rupees)			
Basic		30.04	12.55
Diluted		30.04	12.55

SHAREHOLDER VALUE CREATION IN THE AUTOMOBILE INDUSTRY IN INDIA

Balance Sheet as at 31st March, 2005

	Schedule	Rupees lakhs	2005 Rupees lakhs	2004 Rupees lakhs
I. SOURCES OF FUNDS :				
SHAREHOLDERS' FUNDS :				
Capital	I	116,00.86		116,00.86
Reserves and Surplus	II	1,896,24.88		1,659,02.49
			2,012,25.74	1,775,03.35
LOAN FUNDS	III		1,052,61.95	729,80.78
DEFERRED TAX LIABILITY (Net)			189,75.00	203,25.00
Total			<u>3,254,62.69</u>	<u>2,708,09.13</u>
II. APPLICATION OF FUNDS :				
FIXED ASSETS	IV	1,364,15.23		1,353,18.81
CAPITAL WORK-IN-PROGRESS		110,72.79		38,41.10
			1,474,88.02	1,391,59.91
INVESTMENTS	V		1,189,78.90	1,111,15.31
NET CURRENT ASSETS :				
Current Assets, Loans and Advances	VI	2,317,38.15		1,524,93.55
Less : Current Liabilities and Provisions	VII	1,751,79.95		1,329,24.06
			565,58.20	195,69.49
MISCELLANEOUS EXPENDITURE (TO THE EXTENT NOT WRITTEN OFF OR ADJUSTED)	VIII		24,37.57	9,64.42
Total			<u>3,254,62.69</u>	<u>2,708,09.13</u>

SHAREHOLDER VALUE CREATION IN THE AUTOMOBILE INDUSTRY IN INDIA

Profit and Loss Account for the year ended 31st March, 2005

	Schedule	2005 Rupees lakhs	2004 Rupees lakhs
SALES – Traded and Manufactured Goods [Note 11(a)]		7,565,78.17	5,829,24.59
<i>Less</i> : Excise Duty on Sales (Net)		1,035,04.06	943,78.11
Net Sales		6,530,74.11	4,885,46.48
Income from Operations & Other Income	IX	238,31.32	171,98.19
Net Income		6,769,05.43	5,057,44.67
EXPENDITURE :			
Raw Materials, Finished and Semi-finished Products	X	4,595,37.10	3,352,86.52
Excise Duty		19,78.08	11,65.34
Personnel	XI	464,25.17	417,45.39
Interest, Commitment and Finance Charges (Net)	XII	(5,57.56)	51,58.65
Depreciation / Amortisation [Note 5(g)(i)]		184,05.45	165,19.90
Other Expenses	XIII	842,05.61	662,32.95
		6,099,93.85	4,661,08.75
<i>Less</i> : Cost of Manufactured Products capitalised		31,84.40	15,77.55
		6,068,09.45	4,645,31.20
Profit before provision for contingencies, exceptional items and taxation		700,95.98	412,13.47
<i>Less</i> : Provision for contingencies (Note 10 (b) & (c))		33.99	3,42.00
Profit before exceptional items and taxation		700,61.99	408,71.47
<i>Add</i> : Exceptional Items (Note 23)		13,55.16	29,47.83
Profit before taxation		714,17.15	438,19.30
<i>Less</i> : Provision for Tax - Current tax		215,00.00	63,50.00
- Deferred tax (Net) (Note 24)		(13,50.00)	26,15.00
Profit for the year		512,67.15	348,54.30
Balance of Profit for earlier years		742,84.48	423,94.35
<i>Add</i> : Transferred from Debenture redemption reserve (Net)		10,39.53	123,15.13
: Investment Allowance Reserve Written Back		2,45.00	—
		755,69.01	547,09.48
Total of Profit and Loss Account balances shown above		1,268,36.16	895,63.78
<i>Deduct</i> : General Reserve		100,00.00	35,00.00
: Dividends Paid		(0.23)	0.21
: Income tax on Dividend Paid		(0.03)	0.03
: Proposed Dividends – See Directors' Report		150,81.50	104,41.27
: Income tax on Proposed Dividends		21,15.18	13,37.79
Balance for 2004-2005 and earlier years carried to Balance Sheet		996,39.74	742,84.48
EARNINGS PER SHARE (Note 25) :			
(Face value Rs. 10/- per share) (Rupees)			
Basic		44.19	30.04
Diluted		41.96	30.04

SHAREHOLDER VALUE CREATION IN THE AUTOMOBILE INDUSTRY IN INDIA

Balance Sheet as at 31st March, 2006

	Schedule	Rupees lakhs	2006 Rupees lakhs	2005 Rupees lakhs
I. SOURCES OF FUNDS :				
SHAREHOLDERS' FUNDS :				
Capital	I	233,39.96		111,64.79
Employee Stock Options Outstanding		1,58.73		2,11.06
Reserves and Surplus	II	<u>2,673,88.40</u>		<u>1,872,77.09</u>
			2,908,87.09	1,986,52.94
LOAN FUNDS	III		883,38.22	1,052,61.95
DEFERRED TAX LIABILITY (Net)			146,75.00	189,75.00
Total.....			<u><u>3,939,00.31</u></u>	<u><u>3,228,89.89</u></u>
II. APPLICATION OF FUNDS :				
FIXED ASSETS	IV	1,375,25.93		1,364,15.23
CAPITAL WORK-IN-PROGRESS		<u>179,18.60</u>		<u>110,72.79</u>
			1,554,44.53	1,474,88.02
INVESTMENTS	V		1,669,08.84	1,189,78.90
NET CURRENT ASSETS :				
Current Assets, Loans and Advances	VI	2,761,39.88		2,299,56.30
Less : Current Liabilities and Provisions	VII	<u>2,063,98.40</u>		<u>1,759,70.90</u>
			697,41.48	539,85.40
MISCELLANEOUS EXPENDITURE (TO THE EXTENT NOT WRITTEN OFF OR ADJUSTED)	VIII		<u>18,05.46</u>	<u>24,37.57</u>
Total.....			<u><u>3,939,00.31</u></u>	<u><u>3,228,89.89</u></u>

SHAREHOLDER VALUE CREATION IN THE AUTOMOBILE INDUSTRY IN INDIA

Balance Sheet as at 31st March, 2007				
	Schedule	Rupees lakhs	2007 Rupees lakhs	2006 Rupees lakhs
I. SOURCES OF FUNDS :				
SHAREHOLDERS' FUNDS :				
Capital	I	238,03.27		233,39.96
Employee Stock Options Outstanding		3,18.12		1,58.73
Reserves and Surplus	II	3,311,69.56		2,673,88.40
			3,552,90.95	2,908,87.09
LOAN FUNDS :				
(a) Secured Loans	III A	106,65.34		216,67.60
(b) Unsecured Loans	III B	1,529,35.32		666,70.62
			1,636,00.66	883,38.22
DEFERRED TAX LIABILITY (Net)			19,78.62	146,75.00
Total.....			5,208,70.23	3,939,00.31
II. APPLICATION OF FUNDS :				
FIXED ASSETS :				
Gross Block		3,229,68.47		2,885,52.54
Less : Depreciation		1,639,11.62		1,510,26.61
Net Block	IV	1,590,56.85		1,375,25.93
CAPITAL WORK-IN-PROGRESS		280,59.91		179,18.60
			1,871,16.76	1,554,44.53
INVESTMENTS	V		2,237,45.70	1,669,08.84
CURRENT ASSETS, LOANS AND ADVANCES :				
(a) Inventories	VI A	878,48.37		878,74.37
(b) Sundry Debtors	VI B	700,88.67		637,96.89
(c) Cash and Bank Balances	VI C	1,326,07.19		730,30.60
(d) Other Current Assets	VI D	3,31.24		3,14.12
(e) Loans and Advances	VI E	839,41.48		498,89.83
			3,748,16.95	2,749,05.81
CURRENT LIABILITIES AND PROVISIONS :				
(a) Current Liabilities	VII A	1,950,21.91		1,520,84.12
(b) Provisions	VII B	715,42.52		530,80.21
			2,665,64.43	2,051,64.33
NET CURRENT ASSETS			1,082,52.52	697,41.48
MISCELLANEOUS EXPENDITURE (TO THE EXTENT NOT WRITTEN OFF OR ADJUSTED)	VIII		17,55.25	18,05.46
Total.....			5,208,70.23	3,939,00.31

SHAREHOLDER VALUE CREATION IN THE AUTOMOBILE INDUSTRY IN INDIA

Profit and Loss Account for the year ended 31st March, 2007			
	Schedule	2007 Rupees lakhs	2006 Rupees lakhs
SALES - Traded and Manufactured Goods [Note 11(a)]		10,940,50.23	9,113,66.15
Less : Excise Duty on Sales (Net)		1,312,79.14	1,124,89.36
Net Sales		9,627,71.09	7,988,76.79
Income from Operations and Other Income	IX	617,51.31	337,77.15
Net Income		10,245,22.40	8,326,53.94
EXPENDITURE :			
Raw Materials, Finished and Semi-finished Products	X	6,851,91.69	5,713,76.57
Excise Duty		(2,13.80)	11,61.05
Personnel	XI	666,15.33	551,78.39
Interest, Commitment and Finance Charges (Net)	XII	(67,45.43)	(18,40.16)
Depreciation/Amortisation [Note 5(e)(i)]		209,58.65	200,00.53
Other Expenses	XIII	1,318,57.27	1,004,03.20
		8,976,63.71	7,462,79.58
Less : Cost of Manufactured Products capitalised		47,09.94	26,53.40
		8,929,53.77	7,436,26.18
Profit before provision for contingencies, exceptional items and taxation		1,315,68.63	890,27.76
Less : Provision for contingencies [Note 10 (b) & (c)]		—	78.45
Profit before exceptional items and taxation		1,315,68.63	889,49.31
Add : Exceptional Items [Note 24]		121,98.47	210,01.18
Profit before taxation		1,437,67.10	1,099,50.49
Less : Provision for Tax — Current tax (including Fringe Benefit Tax)		365,72.87	285,40.00
— Deferred tax (Net) [Note 25]		(15,63.26)	(43,00.00)
Profit for the year before prior period adjustments		1,087,57.49	857,10.49
Prior Period Adjustment (Net of Tax) : [Note 17]		19,18.84	—
Profit for the year		1,068,38.65	857,10.49
Balance of Profit for earlier years		1,475,74.47	996,39.74
Add : Transferred from Debenture redemption reserve (Net)		15,67.20	43.39
		1,491,41.67	996,83.13
Total of Profit and Loss Account balances shown above		2,559,80.32	1,853,93.62
Deduct : General Reserve		110,00.00	100,00.00
: Interim Dividend Paid		184,03.05	—
: Income tax on Interim Dividend Paid		25,81.03	—
: Proposed Dividends - see Directors' Report		98,19.90	243,97.41
: Income tax on Proposed Dividends		16,68.89	34,21.74
Balance for 2006-2007 and earlier years carried to Balance Sheet		2,125,07.45	1,475,74.47
EARNINGS PER SHARE [Note 26] :			
(Face value Rs. 10/- per share) (Rupees)			
Basic		45.15	38.07
Diluted		40.94	34.93

SHAREHOLDER VALUE CREATION IN THE AUTOMOBILE INDUSTRY IN INDIA

Balance Sheet

 as at 31st March, 2008

Rupees crores

	Schedule		2008	2007
I. SOURCES OF FUNDS :				
SHAREHOLDERS' FUNDS :				
Capital	I	239.07		238.03
Employee Stock Options Outstanding		4.00		3.18
Reserves and Surplus	II	4,107.00		3,311.70
			4,350.07	3,552.91
LOAN FUNDS :				
(a) Secured Loans	III A	617.26		106.65
(b) Unsecured Loans	III B	1,969.80		1,529.35
			2,587.06	1,636.00
DEFERRED TAX LIABILITY (Net)			56.72	19.79
Total			6,993.85	5,208.70
II. APPLICATION OF FUNDS :				
FIXED ASSETS :				
Gross Block		3,656.13		3,229.69
Less : Depreciation		1,841.68		1,639.12
Net Block	IV	1,814.45		1,590.57
CAPITAL WORK-IN-PROGRESS		546.45		280.60
			2,360.90	1,871.17
INVESTMENTS	V		4,215.06	2,237.46
CURRENT ASSETS, LOANS AND ADVANCES :				
(a) Inventories	VI A	1,084.11		878.48
(b) Sundry Debtors	VI B	1,004.88		700.89
(c) Cash and Bank Balances	VI C	861.23		1,326.07
(d) Other Current Assets	VI D	13.27		3.31
(e) Loans and Advances	VI E	691.88		839.42
			3,655.37	3,748.17
CURRENT LIABILITIES AND PROVISIONS :				
(a) Current Liabilities	VII A	2,307.55		1,950.22
(b) Provisions	VII B	943.46		715.43
			3,251.01	2,665.65
NET CURRENT ASSETS			404.36	1,082.52
MISCELLANEOUS EXPENDITURE (TO THE EXTENT NOT WRITTEN OFF OR ADJUSTED)	VIII		13.53	17.55
Total			6,993.85	5,208.70

SHAREHOLDER VALUE CREATION IN THE AUTOMOBILE INDUSTRY IN INDIA

Profit and Loss Account for the year ended 31st March, 2008

Rupees crores

	Schedule	2008	2007
SALES - Traded and Manufactured Goods [Note 11(a)]		12,371.03	10,940.50
Less : Excise Duty on Sales (Net)		1,566.39	1,336.78
Net Sales		10,804.64	9,603.72
Income from Operations and Other Income	IX	867.00	617.52
Net Income		11,671.64	10,221.24
EXPENDITURE :			
Raw Materials, Finished and Semi-finished Products	X	7,725.91	6,827.93
Excise Duty		18.18	(2.14)
Personnel	XI	852.45	666.15
Interest, Commitment and Finance Charges (Net)	XII	24.24	(67.45)
Depreciation/Amortisation [Note 5(d)(i)]		238.66	209.59
Other Expenses	XIII	1,608.96	1,318.57
		10,468.40	8,952.65
Less : Cost of Manufactured Products Capitalised		46.49	47.10
		10,421.91	8,905.55
Profit before provision for contingencies, exceptional items and taxation		1,249.73	1,315.69
Less : Provision for contingencies [Note 10 (b) & (c)]		8.16	—
Profit before exceptional items and taxation		1,241.57	1,315.69
Add : Exceptional Items [Note 23]		165.20	121.99
Profit before taxation		1,406.77	1,437.68
Less : Provision for Tax - Current Tax (including Fringe Benefit Tax)		278.75	365.73
- Deferred Tax (Net) [Note 24]		24.65	(15.63)
Profit for the year before prior period adjustments		1,103.37	1,087.58
Prior Period Adjustment (Net of Tax) : [Note 16]		—	19.19
Profit for the year		1,103.37	1,068.39
Balance of Profit for earlier years		2,125.08	1,475.75
(Less)/Add : Transfer (to)/from Debenture Redemption Reserve (Net)		(16.88)	15.67
		2,108.20	1,491.42
Total of Profit and Loss Account balances shown above		3,211.57	2,559.81
Deduct :			
: General Reserve		115.00	110.00
: Interim Dividend Paid		—	184.03
: Income Tax on Interim Dividend Paid		—	25.81
: Proposed Dividend		282.61	98.20
: Income Tax on Proposed Dividend		38.48	16.69
Balance for 2007-2008 and earlier years carried to Balance Sheet		2,775.48	2,125.08
EARNINGS PER SHARE [Note 25] :			
(Face value Rs. 10/- per share) (Rupees)			
Basic		46.24	45.15
Diluted		41.52	40.94