CHAPTER 4

Profile of Indian Industry and Sample companies

4.1 An overview of Indian Industrial sector

India has a history of rich civilizations like Indus valley Civilization. With the abundant natural resources, we were primarily classified as an agrarian economy. Being the largest producers of cotton and spices, India attracted foreign traders and industrialists. We had significant trading relations with the Middle East and Europe. Several empires flourished here and with each of them, India soared into greater heights in the production of handicrafts and jewellery. We were recognized as the world's best producer of silk and textiles. Even though all these were boosting the Gross Domestic Product of India making it one among the largest economies of the world, the wave of industrialization formed in the western world didn't make much of a mark in India. The idea of automated machineries and skilled mechanics didn't attract Indian producers.

The beginning of Indian industrial era can be traced from the establishment of East India Company by the British. British incorporated railways and implemented English education for their personal gains. They looted and plundered us for the most valuable belongings of civilization. Entrepreneur Jamshedji Tata was the first Indian to establish a factory in Bombay, "Central India Spinning, Weaving and Manufacturing Company". Indian economy was severely shackled under the regime of British that by the time we gained independence, our GDP rates were mediocre, and growth was almost stagnant. After independence, it was a herculean task for the Indian government to build Indian economy from such lows. The school of Nehru thoughts leaned towards socialist ideologies. India adopted five-year plans as a mode of development and chose to remain a closed economy till we were equipped with adequate resources to meet the international competition.

The industrial policy of 1956 is one of the milestones in the history of Indian industry after independence. "This strategy prioritized the growth of fundamental and heavy industries, and outlined the significant role that the public sector would play in the country's economic progress." A comprehensive Industrial Policy Resolution was announced on 20th April 1956.

This resolution prioritized industrial growth. The foundation of industrial planning was built on iron and steel, heavy machinery, lignite initiatives, and fertilizer industries. Alongside the growth of existing steel plants in Jamshedpur, Kulti-

Bumpur, and Bhadravati, three new public sector plants in Durgapur, Rourkela, and Bhilai were either started or finished.

"The Chittaranjan Locomotive Workshop, The Hindustan Shipbuilding Yard in Vishakhapatnam, The Sindri Fertilizer Factory, and the Hindustan Machine Tools Limited (HMT) facility in Bangalore underwent expansion. A manufacturing plant for heavy electrical equipment was set up in Bhopal. Additionally, two new fertilizer factories were established in Nangal and Rourkela."("Indian Industries," 2013).

In the following Five-Year Plans, a variety of economic policies and reforms were introduced. Development was focused on public and rural sectors, with an emphasis on enhancing both the volume and quality of export goods, aiming for self-sufficiency and reducing imports among other related reforms. Political leaders also prioritized business regulations, centralized planning, and the nationalization of industries in sectors such as mining, electricity, and infrastructure.

The 1960s witnessed various types of economic reforms along with the five-year plans. One of them was to make India self-sufficient in food grain production. Focussing on this motto, 'Green Revolution' was given governmental support. Green Revolution focussed on afforestation, irrigational projects, using better and hybrid quality of seeds, better farming techniques and use of fertilizers and lots more. The beginning of market liberalisation and opening of economy was in the 1980s under Mr. Rajiv Gandhi. During his tenure, multiple pricing regulations were eased, sectors were opened up for private players to improve the GDP of the economy.

In the early 1990s, India's economic situation was bleak. The dissolution of its main trading partner, the Soviet Union, led to significant balance of payment issues for India. The country's loans continued to mount, leading the IMF to propose a bailout loan. Amidst these challenges, Dr. Man Mohan Singh, the Finance Minister at the time, launched the LPG (Liberalisation, Privatisation, Globalisation) plan. This plan is considered a significant milestone in the history of the Indian economy. It welcomed foreign direct investments, ended public monopolies, and fostered the development of the banking, service, and tertiary sectors. Efforts were also made to stimulate the growth of the money and capital market.

In 1991, the economy was opened for foreign and private players. Since then, India has experienced considerable economic growth. As of today, it has become one of the

fastest growing economies in the world with a GDP growth rate of around 6-7 %. Along with the increase in GDP, the country has also seen an increase in per capita income, quality of life, and industrial advancement.

Significant policy changes were introduced in the industrial sector in 1991, which included the elimination of entry barriers, a decrease in areas solely reserved for the public sector, a rationalized approach to monopolistic and restrictive practices, liberalization of foreign investment and import policies, efforts to address regional imbalances, and promotion of growth in the small and tiny sectors that are labour-intensive. Industrial growth saw a slight increase to 6.6% in 1997-98, but it dropped to 4.1% in 1998-99, likely due to underperformance in the mining and manufacturing sectors. The total industrial output experienced growth of 6.7% in 1999-2000, but it again decreased to 4.9% in 2000-01, primarily due to a decline in the manufacturing sector.

During 2000-01, the growth rate of consumer goods, both durable and non-durable, quickened to 7.9%. Six fundamental infrastructure industries, namely electricity, crude oil, refinery, coal, steel, and cement, which collectively contribute 26.7% to the average Index of Industrial Production (IIP), experienced a growth of 5.3% in 2000-01, compared to 9.1% in 1999-2000. The deceleration of industrial growth during 2000-01 can be attributed to several factors including a lack of domestic demand for immediate goods, low inventory demand for capital goods, high oil prices, the presence of surplus capacity in certain sectors, business cycle fluctuations, inherent delays in industrial restructuring, disasters like the Gujarat earthquake, high interest rates negatively impacting private investment, and a slowdown in the global economy.

The Tenth Plan (2002-07) achieved a Gross Domestic Product (GDP) growth rate of eight per cent, with the industrial sector, particularly the manufacturing sector, growing at ten per cent. This consistent high growth rate demonstrates the strength of the Indian industry, specifically in the automobile/auto components and pharmaceutical sub-sectors.

To maintain the momentum of growth and investment, numerous initiatives have been implemented for modernization, technology upgrade, reduction of transaction costs, and increased export focus. These efforts aim to enhance India’s global competitiveness and promote balanced regional development.

Moreover, to boost exports, the Department of Commerce has initiated major programs such as the Assistance to States for Infrastructure Development for Exports (ASIDE), Market Access Initiatives (MAI), Special Economic Zones (SEZs) Policy, and the modernization of the Director General of Foreign Trade (DGFT), among others. The contribution of total trade in goods and services to the GDP has seen a significant increase, rising from 16% in 1990-91 to 47% in 2009-10. In 2015, foreign trade made up 48.8% of India's GDP.

"India is ranked 77th out of 190 countries in the World Bank's 2018 ease of doing business index, up 23 points from the last year's 100 and up 53 points in just two years. In terms of dealing with construction permits and enforcing contracts, it is ranked among the 10 worst in the world, while it has a relatively favourable ranking when it comes to protecting minority investors or getting credit."("Indian Industries," 2013).The strong efforts taken by the Department of Industrial Policy and Promotion (DIPP) to boost ease of doing business rankings at the state level is said to impact the overall rankings of India." A brief analysis of some selected major players in Indian industry is given below.

4.2 Automobile Industry

Automobile industry is one among the oldest and prominent industrial sectors in India. It is the world's fourth largest, with the country currently being the world's fourth largest manufacturer of cars and seventh largest manufacturer of commercial vehicles.

The initial beginnings of this industry can be traced back to the early 1940s. However, the growth of automobiles was slow. After independence, India focused on agriculture and efforts were initiated towards green revolution and self-sufficiency. Industry was given much less priority. Also, there existed stringent regulations in starting a new business or importing new machinery. "Thus, the Indian automobile industry can be viewed in terms of the pre-1991 (before liberalization) and post-1991 (after liberalization) phase. During the pre-liberalization period, 1942 Hindustan Motors Ltd. incorporated, and the first vehicle was made in 1950. In 1947 the Government of Bombay accepted a scheme of Bajaj Auto to replace the cycle rickshaw by the auto and assembly started in a couple of years under a license from Piaggio". (Krishnaveni & Vidya, n.d.)

Since 1970s India functioned the same way with minimal growth in automobile sector. “Major factors affecting the industry's structure were the implementation of MRTP Act, FERA and Oil Shocks of 1973 and 1979.”(Krishnaveni & Vidya, n.d.) In the beginning of 1980s, there was slight growth but still dominated by few companies. This led to a monopoly in automobile sector. Also lack of competition paved the way to diminution in quality. Post liberalization in 1991, the whole scenario in the Indian Automobile industry changed. “The 90s were a turning point for India’s car industry, with the customer being the ultimate authority. Manufacturers from India and abroad were all competing for the customer’s favour. Even though there was a short downturn in sales at the beginning of 1999, the market quickly recovered. All the new models were launched with the growing market in mind..”(Krishnaveni & Vidya, n.d.)

Foreign players entered the market and changed the concept of competition. The increase in investments boosted exports and helped the economy to tackle its balance of payments problem. “Globalization is prompting leading car manufacturers to consolidate, advance their technology, broaden their product range, explore new markets, and cut costs. They are resorting to common platforms, modular building, incorporation of component supplier systems, and e-commerce.”.

“The component industry is experiencing vertical integration, leading to the rise of system and assembly suppliers instead of individual component suppliers. The Indian Government permits 100% Foreign Direct Investment (FDI) in the automobile sector via the automatic route. These initiatives are expected to enhance the industry’s products and performance.”(Krishnaveni & Vidya, n.d.)

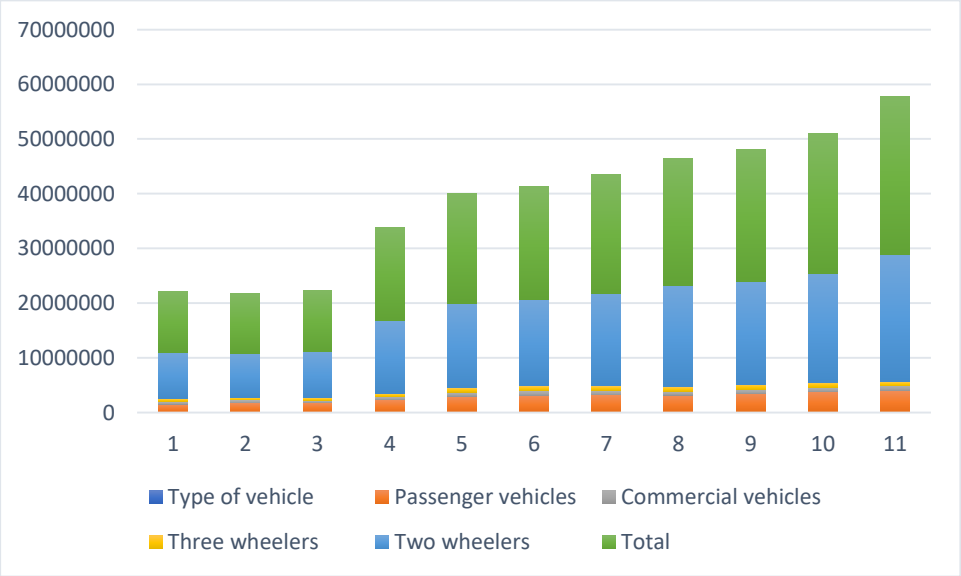
Table No 4.1 Category-Wise Production of Automobiles in India (No. of Vehicles)

Type of vehicle	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Passenger vehicles	1,545,223	1,777,583	1,838,697	2,357,411	2,982,772	3,123,528	3,233,561	3,221,419	3,465,045	3,801,670	4,020,267
Commercial vehicles	519,982	549,006	417,126	567,556	790,735	911,574	831,744	698,864	786,692	810,253	895,448
Three wheelers	556,126	500,660	501,030	619,194	799,553	877,711	839,742	830,120	949,019	934,104	783,721
Two wheelers	8,466,666	8,026,681	8,420,903	13,349,349	15,453,619	15,721,180	16,883,049	18,489,311	18,830,227	19,933,739	23,154,838

Total	1,10,87,997	1,08,53,930	1,11,77,756	1,68,93,510	2,00,26,679	2,06,33,993	2,17,88,096	2,32,39,714	2,40,30,983	2,54,79,766	2,88,54,274

Source: Society of Indian Automotive Manufacturing (SIAM)

Figure 4.1 Category-Wise Production of Automobiles in India (No. of Vehicles)



(Source: Prepared using Excel from table 4.1)

Today, India manufactures low-cost cars across the world. It is recognized to be the 4th largest automobile market in world. The automobile industry includes automobile spare parts, passenger vehicles, and other accessories. The production, sales and export of automobile industry is depicted in the following tables. Graphical presentation is also given for better understanding.

Table 4.1 shows that during 2006-07, a total of 11,087,997 vehicles were produced in the automobile industry. The production has increased almost 17,766,277 vehicles by end of the decade. In recent years India uplifted the market potential for automobiles due to a rise in demand. The same has led to an increased production. Production of two-wheeler has been grown remarkably. Overall, the production of the automobile industry has increased quite significantly during this period. Figure 4.1 supports these observations.

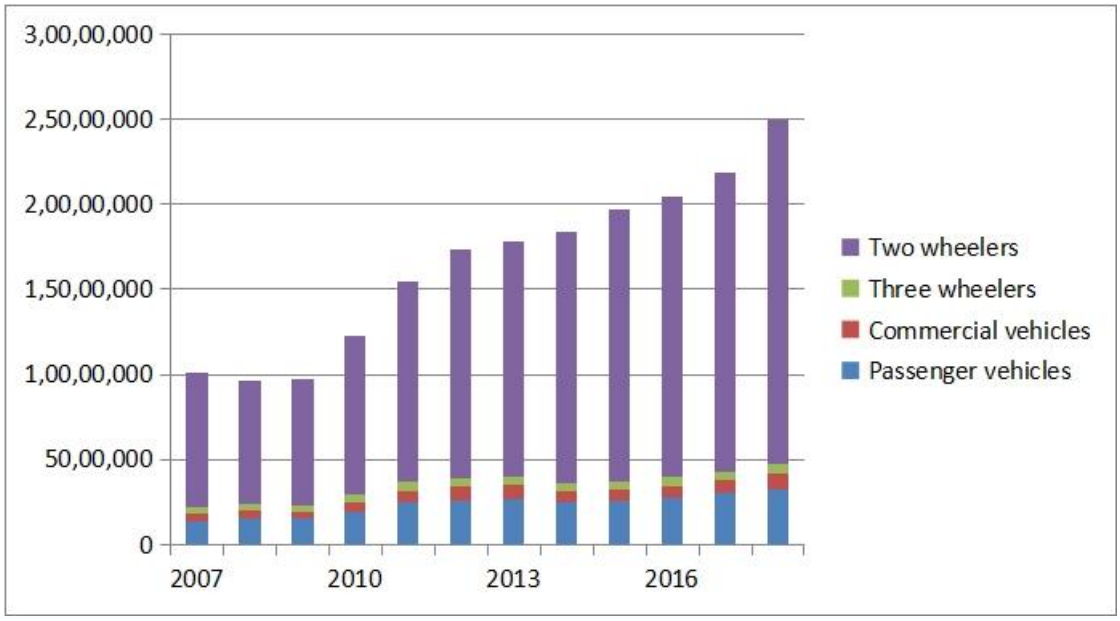
Table No 4.2 Category-wise sales of automobiles in India (No. of Vehicles)

Type of vehicle	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Passenger vehicles	1,379,979	1,549,882	1,551,880	1,951,333	2,501,542	2,618,072	2,686,429	2,503,685	2,601,236	2,789,208	3,047,582
Commercial vehicles	467,765	490,494	384,122	532,721	684,905	809,532	793,150	632,738	614,948	685,704	714,082
Three wheelers	403,910	364,781	349,719	440,392	526,024	513,251	538,291	479,634	532,626	538,208	511,879
Two wheelers	7,872,334	7,249,278	7,437,670	9,370,951	11,768,910	13,435,769	13,797,748	14,805,481	15,975,561	16,455,851	17,589,738
Total	**10,123,988**	**9,654,435**	**9,723,391**	**12,295,397**	**15,481,381**	**17,376,624**	**17,815,618**	**18,421,538**	**19,724,371**	**20,468,971**	**21,863,281**

(Source: Society of Indian Automotive Manufacturing (SIAM)

From Table 4.2 it is evident that overall sales of automobiles have increased. The sales of passenger vehicles have been increased 10,123,988 vehicles to 21,863,281 vehicles for the year 2006-07 to 2016-2017. Two wheelers have become an integral part of daily life. When more women started working, they also started using two wheelers to commute to their jobs. Increase in the sale of two wheelers can be seen as the flourishing of the economy in general. The sale two wheelers have doubled in the last decade. Figure 4.2 shows this in graphical format.

Figure 4.2 Category-Wise sales of Automobiles in India (No. of Vehicles)



(Source: Prepared using excel from table no 4.2)

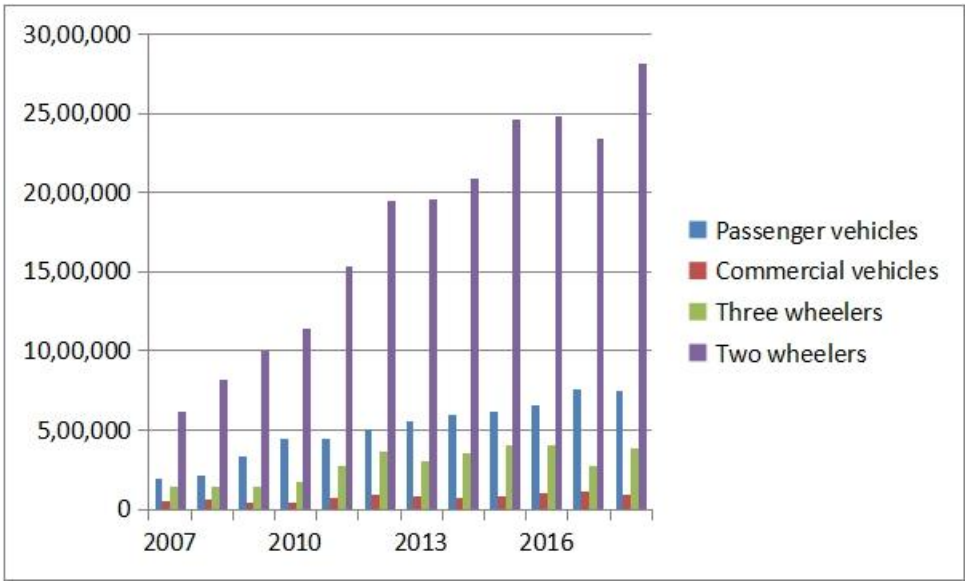
Table No 4.3 Category-wise exports of automobiles in India (No. of Vehicles)

Type of vehicle	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Passenger vehicles	198,452	218,401	335,739	446,145	444,326	507,318	554,686	593,507	621,341	653,053	758,727
Commercial vehicles	49,537	58,994	42,673	45,009	74,043	92,663	79,944	77,056	86,939	103,124	108,271
Three wheelers	143,896	141,225	148,074	173,214	269,968	362,876	303,088	353,392	407,600	404,441	271,894
Two wheelers	619,644	819,713	1,004,174	1,140,058	1,531,619	1,947,198	1,960,941	2,083,938	2,457,466	2,482,876	2,340,277
Total	**1,011,529**	**1,238,333**	**1,530,660**	**1,804,426**	**2,319,956**	**2,910,055**	**2,898,659**	**3,107,893**	**3,573,346**	**3,643,494**	**3,479,169**

Source: Society of Indian Automotive Manufacturing (SIAM)

"The government encourages foreign investment and allows 100% FDI in the sector via the automatic route. The industry is fully de-licensed, and free imports of automotive components are allowed. India is the second fastest-growing market for automobiles and components globally. High growth has taken place in engine, drive transmission, and steering parts. Engine parts, being high value-added in its nature, have been contributing most to total production. Endowed with the potential of low-cost quality products, India edges over many other developing countries in component manufacturing"(Miglani, 2019)

Figure 4.3 Category-wise exports of automobiles in India (No. of Vehicles)



(Source: Prepared using excel from table no 4.3)

Exports of vehicles have shown steady growth for the period 2006-07 to 2016-17. Exports of
commercial vehicles and three wheelers have decreased the exports during the period 2012-2013. After that they also show an upward trend. Figure 4.3 gives a graphical representation of the same.

4.3 Pharmaceuticals Industry

"Since time immemorial, India is famous for its indigenous treatment methods. It is the land where Ayurveda was born. However these traditional methods were effective in curing the diseases, the lack of mass production and marketing kept the industry from flourishing. The dawn of modern Indian Pharmaceutical Industry began with the incorporation of two companies; Bengal Chemical and Pharmaceutical Work (BCPW) Ltd., Kolkata established by Acharya PC Ray in 1901 and Alembic Chemical Works Co. Ltd., Vadodara established by TK Grajjar, Rajmitra and BD Amin in 1907. These companies helped in re-designing the traditional methods of drug developing, manufacturing, and marketing. Drug manufacturing became more scientific and efficient."(Indian Traditional Medicinal Systems, Herbal Medicine, and Diabetes | SpringerLink, n.d.)

"The development of industry can be sub categorized into pre- patent period (Before 1970) and post patent (After 1970). During the pre-patent period, there were very few domestic players in the market, relatively absent. It was dominated by foreign companies. There were traditional methods but no scientific production of drug manufacturing. This changed with the introduction of patent law (1970). Local companies started to involve in the big picture. Still the government was striving to offer support to the Indian companies." (History of Indian Patent System | About Us | Intellectual Property India | Government of India, n.d.) "As recommended by Mashelkar Committee in 1999, a Pharmaceutical Research and Development Support Fund (PRDSF) with a corpus of Rs.150 crores have been set up under the administrative control of the Department of Science and Technology. A Drug Development Promotion Board (DDPB) to administer the utilization of PRDSF has also been set up". (Akhtar, 2013) "In 1997, National Pharmaceutical Pricing Authority was set up to control the prices of pharmaceutical drugs in India. In India, it

is the government and not the companies that fix the drug prices. Later in 2005, in conformation with the TRIPS agreement, India amended its Patent law in 2005 which introduced product patent in Pharmaceutical Industry. FDI up to 100% is allowed in this industry."(Indian Traditional Medicinal Systems, Herbal Medicine, and Diabetes | SpringerLink, n.d.)

"In general, this sector is combined with companies from organized sector and unorganized sector, ranging from MSMEs to subsidiaries of foreign companies. Being primarily engaged in either bulk drugs or formulation (research institutions), they cater for retail needs as well as provide the facilities for institutional drug market in India. Today India is the largest global producer of generic drugs. During post patent period, Industry has grown drastically. India witnessed a considerable amount of FDI inflow in Pharmaceutical sector. Exports soar high in this period. Europe, USA, Japan and Australia were the main importers from India. CAGR of pharmaceutical industry is more than 15% in the last five years."(Akhtar, 2013)

"Indian Pharmacopoeia Commission (IPC) is an autonomous institution of the Ministry of Health and Family Welfare which sets standards for all drugs that are manufactured, sold and consumed in India". (Home - Indian Pharmacopoeia Commission, n.d.) "The standards that are in effect since 2010, is the Indian Pharmacopoeia 2010 (IP 2010). The Pharmacopoeia 2014 was released by Health Minister in 2013, the Eighth Edition of Indian Pharmacopoeia (IP-2018) was released by the Secretary, Ministry of Health & Family Welfare, Government of India."(Home - Indian Pharmacopoeia Commission, n.d.)

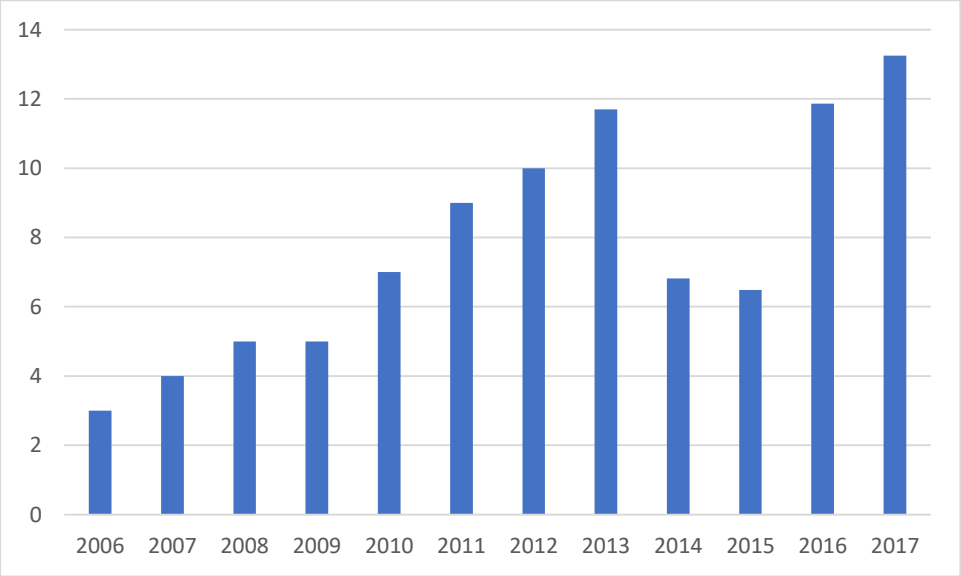
Table No 4.4 Value of export of pharma products from India

YEAR	USD(Billion)
2006	3
2007	4
2008	5
2009	5
2010	7
2011	9
2012	10
2013	11.7
2014	6.82
2015	6.48
2016	11.86
2017	13.25

(Source: A brief report on pharmaceutical study in India, ASA Associates)

"India's pharmaceuticals export is to more than 200 countries. On a country wise basis, the top five destinations of India's pharmaceutical products during 2007-08 are the USA (19%), Germany (4.7%), Russia (4%), U.K. (3.7%) and China (2.8%). All the major Indian pharmaceutical companies are looking at the global market to accelerate their growth performance. These include such potential regulated markets as the US, Japan and Europe, the semi regulated markets of BRICS (Brazil, Russia, India China and South Africa) countries and least regulated markets of Africa, middle east and Southeast Asia.

Figure 4.4 Value of export of pharma products from India



(Source: Prepared using Excel)

"India has emerged as a crucial provider of generic medications for developing nations and is among the top distributors of the world's most affordable AIDS drugs. The US, which is the world's biggest market for generic drugs, remains the largest individual export destination for India."(Akhtar, 2013)

"The pharmaceutical industry significantly contributes to human welfare and offers substantial socioeconomic advantages to society, including job creation, supply chain development, and community growth. The industry is also a key player in technological innovation, potentially reducing economic activity costs in other sectors. The Indian Pharmaceutical Industry (IPI) is among the world's largest and most advanced, ranking fourth in volume and thirteenth in value. The country is responsible for approximately 10% of global pharmaceutical production and 2% of

the world's pharmaceutical markets. Over time, it has made considerable strides in infrastructure development and technical capability, resulting in the production of a diverse range of pharmaceutical products.".(*Akhtar - 2013 - Indian Pharmaceutical Industry An Overview.Pdf*, n.d.)

"The industry currently manufactures large quantities of drugs across all major therapeutic categories. It boasts a substantial workforce with technical expertise, excelling in process development and downstream processing.."(Akhtar, 2013)

4.4 Information Technology

Information technology is the key to the spectacular changes witnessed by the end of 20th century. This is a knowledge-based industry. Basically, IT involves processing and communicating information. But it also extends to creating new methods for communication. The Internet itself has made the world into a global village. More engineers and technicians began to develop designs and newer ways to manage information. There was increasing demand for computer engineers in developed nations like America and India saw it as an opportunity. We witnessed a huge number of young technicians immigrating to western countries. Till 1980s the growth of IT industry in India was nominal. There was no structure of regulating and monitoring body in India at that time.

In 1984, we brought up with a policy change to boost investments in the IT sector. Tariffs were brought down to attract foreign companies. Tata Consultancy Services were still there but they weren't bringing in many investments. During the same time in 1988, NASSCOM (The National Association of Software and Service Companies) was established under the Society's Act. NASSCOM is a global trade body with members from various countries including USA, UK, EU, Japan, and China. NASSCOM comes up with regular reports on the growth and activities of the IT industry and acts as a catalyst in facilitating trade of software and services.

By the liberation of economy in 1991, IT industry had sweeping changes in all aspects. Several domestic and foreign companies started investing in India. The investments were focused on cities like Bangalore and Hyderabad. Chennai, Gurgaon, Kochi, Mysore, Noida, Chandigarh, Bhuvaneshwar etc. Soon Bangalore came to be considered as the Silicon Valley of India. India was producing high quality work at

cheap labour rates. This was a big motivation for FDI inflows in the country. Young Indian professionals were attracted towards the idea of working abroad under good packages joined IT sector. Within no time, IT became the backbone of the service sector in India.

The Information Technology industry has mainly two components; IT services and BPO (Business Process Outsourcing). The growth in this industry has pumped the growth of National GDP by creating job opportunities and increasing the country's exports.(Information Technology India, Top IT Companies in India - IBEF, n.d.)

Information Technology sector is considered as one of the rapidly expanding industries in India. In addition to its contribution towards the GDP, the industry has been in a pivotal role in uplifting the living status of the people working in the sector. IT has redefined the way we do business. It has re-engineered the typical ways of production and service methodologies. Core banking and digital currencies have revolutionized the financial sector. The logistics and marketing sectors also benefitted from the IT services. The introduction of IT reduced the time gap for production and rendering services.

There are several research and development societies of Department of Information Technology, for instance, Centre for Development of Advanced Computing (CDAC) and Society for Applied Microwave Electronic Engineering and Research (SAMEER). These R&D societies have tie ups and collaborations with academicians. From time to time, they take up application-oriented projects for users/industries. PARAM "Yuva", a high-performance computing system is commissioned under the guidance of C-DAC.

The "PARAM Sheersh" Supercomputing Facility at the Northeastern Hill University (NEHU), Shillong conducts scientific and engineering research in strategic areas in the North-East region. The nationwide grid-computing initiative, Garuda, aggregates supercomputing and storage resources nationwide, provides a problem-solving environment, and enables collaborative R&D for research and user community. Garuda connects 45 premier institutions across 17 cities.

4.4.1 IT Act 2000

The Information Technology Act was implemented in 2000 and later gone through several amendments including in 2008. The amendment in 2008 has been enforced and rules of important sections have been notified in October 2009 addressing the needs of national cyber security. The Act has, inter alia, added provisions to deal with new forms of cybercrimes like publishing sexually explicit material in electronic form, video voyeurism and breach of confidentiality. The Indian Computer Emergency Response Team (CERT-In) has been designated as the nodal agency for coordinating matters related to cyber security and emergency response. CERT-In has published a crisis management plan for countering cyber-attacks and cyber terrorism. It has also created a panel of IT security auditors.

Table No 4.5 IT Sector's share in GDP (in %) of total GDP

Year	Percentage of Total GDP
2006	4.3
2007	4.4
2008	5.9
2009	5.8
2010	6.1
2011	6.4
2012	7.5
2013	8
2014	8.1
2015	9.5
2016	9.3

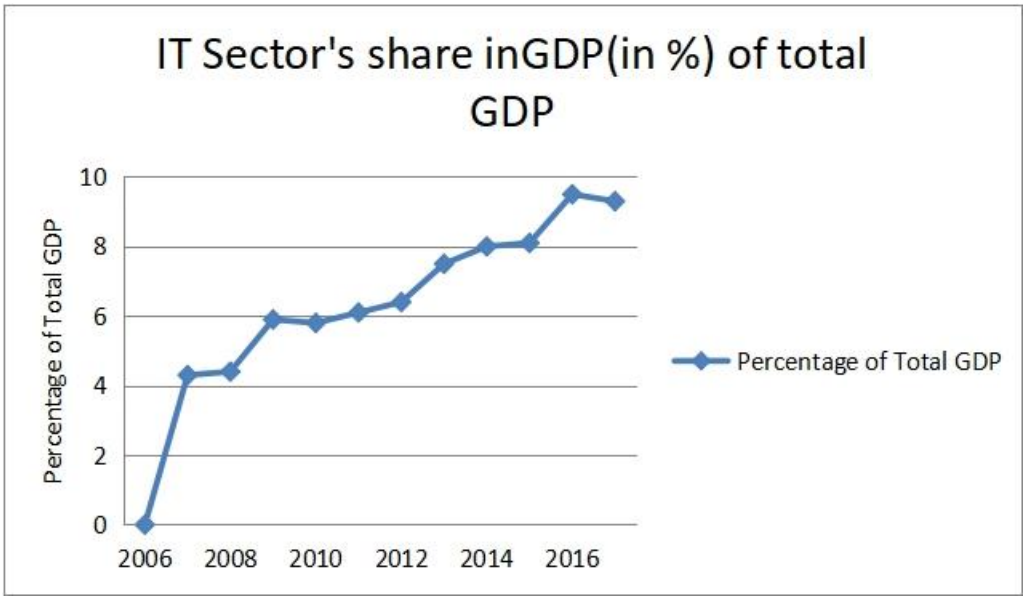
(Source: www.statista.com)

The Certifying Authorities (CAs) licensed by the CCA (Comptroller of Certifying authority) have issued more than 14,00,000 Digital Signature Certificates. These are being used in applications such as Real Time Gross Settlement System & Electronic Fund Transfer, email, e-procurement, share trading and issue of import/export licenses and filing of company returns.

Several applications have been brought into our daily lives. Today the world is at our fingertips. Instagram, WhatsApp, Zomato, Uber, Google pay are some of the

applications that redesigned our lives. IT has become irreplaceable in today's economy and life.

Figure 4.5 IT sector's share in total GDP



(Source: Prepared using Excel from table 4.4)

"The IT sector's export revenue has been growing year after year, with an impressive average growth rate of 35.71% during the same period. It's important to note that from 1991 to 2015, the major chunk of total revenue was contributed by IT export revenue. The lion's share of the total revenue, around 62-66%, is made up by IT exports. This is largely due to the unique characteristic of the Indian software industry, which is mainly export-oriented. India, being a leading player in IT-ITES (Information Technology Enabled Services) exports, serves almost all developed nations. It acts as the back-office for these countries, especially in the field of business process management. These business operations are carried out from India for developed markets like the USA and European countries."(Malik, 2021)

Table No 4.6 IT Sector- Exports in US Dollars

Year	Exports
2006	25.69
2007	32.22
2008	47.02
2009	50.41

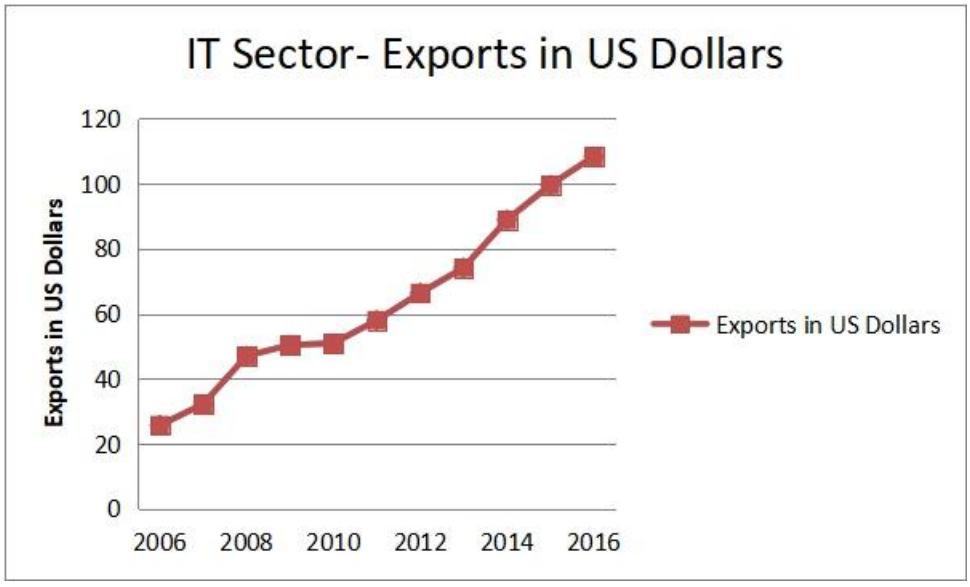
2010	50.91
2011	57.98
2012	66.38
2013	74.15
2014	88.9
2015	99.64
2016	108.4

(Source: Indian Department of Electronics/IT Reports)

"The IT & BPM industry has emerged as a major propellant of growth for the Indian economy, making substantial contributions to the nation's GDP and societal welfare. In FY22, the IT sector constituted 7.4% of India's GDP, and it is projected to contribute 10% to India's GDP by 2025. With the spread of innovative digital applications across various sectors, India is now ready for the upcoming stage of its IT revolution".

"India is viewed by the rest of the world as having one of the largest Internet user bases and the cheapest Internet rates, with 76 crore citizens now having access to the internet." (Information Technology India, Top IT Companies in India - IBEF, n.d.)

Figure 4.6 IT Sector – Exports in US Dollars



(Source: Prepared using Excel from table no. 4.5)

"Computer services and ITES/BPO services have surfaced as key contributors to the current account of the balance of payment, earning foreign exchange reserves for the Indian economy. The Reserve Bank of India (RBI) has been publishing data on these

service exports as part of the Balance of Payment Statistics since 2000. To understand the significance of these service exports in reducing India's current account deficit, a comparative analysis of its main service components - software, travel, transportation, and insurance - was conducted using a growth trend model for the period from 2000 to 2016."(Malik, 2021)

Table No 4.7 Total Domestic revenue in US Dollars

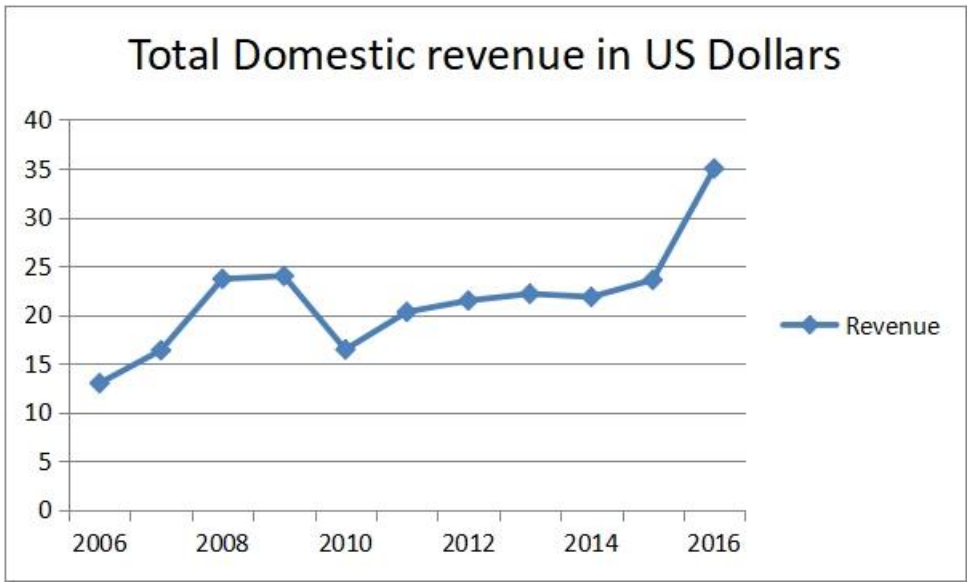
Total Domestic revenue in US Dollars	
Year	**Revenue**
2006	12.98
2007	16.36
2008	23.68
2009	23.98
2010	16.44
2011	20.29
2012	21.45
2013	22.15
2014	21.83
2015	23.58
2016	35

(Source: Indian Dept. of Electronics/IT Reports)

A robust interconnection is present between the Information Technology (IT) sector and the broader economy. The application of IT can elevate productivity and efficiency in numerous industries. It can induce enhancements in sectors such as accounting, procurement, inventory control, and production and operations management. Moreover, the utilization of IT could potentially amplify productivity and/or quality to levels that may not be attainable otherwise.

The application of IT in rural banking and micro-finance could potentially improve efficiency in the informal sector and have a wider impact on the population. Providing farmers with access to information could also be beneficial for the agricultural sector. Farmers could receive weather updates, market price information, farming advice, offers for buying and selling livestock, and specific training. IT could also enhance basic education in rural areas. The IT sector, being one of the largest employers of women, could play a vital role in empowering women and reducing gender disparities.

Figure 4.7 Total domestic revenue in US Dollars



(Source: Prepared using Excel from table 4.7)

"The sector offers its employees the flexibility to work from home and adjust their working hours, which allows women to balance their jobs with family life. The analysis clearly indicates that IT not only has the potential to speed up growth in the Indian economy, but also to foster widespread economic development." (Allad, 2015)

4.5 Profile of companies

4.5.1 Automobile sector

1. **Amararaja battery** is the technology leader and one of the largest manufacturers of lead-acid batteries for both industrial and automotive applications in the Indian storage battery industry." They are the manufacturers of the famous AMARON brand. It is a prominent company of the amaraja group. The group has global presence in more than 32 countries with a wide variety of products in food and beverages, power products, electronic manufacturing, health care, metal fabrication and many other fronts. The conglomerate has its headquarters in Tirupati. It has been founded by Ramachandra Naidu Galla in the year 1985.
2. "**Apollo Tyres Ltd** is the world's seventh largest tyre manufacturer, with annual consolidated revenues of ₹172.76 billion in March 2017. It was incorporated in 1972. Its first plant was commissioned in Perambra, Thrissur,

Kerala, India." It is head quartered in Gurgaon. There are two global brands: Apollo and vredestien. Mr. Onkar S Kanwar is the Chairman and Managing Director of Apollo tyres ltd. "Apollo Tyres has been honoured with ICSI (The Institute of Company Secretaries of India) CSR Excellence Award 2019 under the 'Best Corporate in Large' category."(Notice-Annual-Report-Atl-Fy17.Pdf, n.d.)

3. "**The Bajaj Group** is amongst the top 10 business houses in India. Its footprint stretches over a wide range of industries, spanning automobiles (two wheelers manufacturer and three wheelers manufacturer), home appliances, lighting, iron and steel, insurance, travel and finance. The group's flagship company, **Bajaj Auto**, is ranked as the world's fourth largest three and two-wheeler manufacturer and the Bajaj brand is well-known across several countries. Founded in 1926, at the height of India's movement for independence from the British, the group has an illustrious history. Jamnalal Bajaj, founder of the group, was a close confidant and disciple of Mahatma Gandhi. In fact, Gandhiji had adopted him as his son. Bajaj Auto has also led the pioneering introduction of India's first ever Quadricycle – Qute. Bajaj Auto exports to 70+ countries and a significant share of revenues come from Exports. This stands as a testament to the new brand image – The World's Favourite Indian." Bajaj auto was awarded Car and Bike Awards in Two-Wheeler Category Manufacturer of the Year (2019) (Annual report Bajaj 2017)
4. **Balkrishna Industries limited** is one of the leading manufacturers in the Off Highway tire market in India. It was established in 1987 and been headquartered in Mumbai, India. "Balkrishna Industries has successfully focused on specialist segments such as agricultural, construction and industrial vehicles along with earthmoving, port and mining, ATV, and gardening applications. As a result, the company has developed into a global player in the Off-Highway tire industry with a 6% market share and a sales volume of 850 million US dollars corresponding to a 30% increase over the last five years." company operates in single segment, tyres. The company is a public limited company incorporated and domiciled in India and has its registered office at Waluj MIDC, Aurangabad, Maharashtra, India". (Annual report 2017, Balkrishna Industries)

5. **CEAT** was established in 1958 in Mumbai. It is the flagship company of Ram Prasad Goenka (RPG) Group. Today it is one among the biggest tyre manufacturers and has a strong global presence. “CEAT produces over 15 million tyres a year and offers the widest range of tyres to all segments and manufactures world-class radials for: heavy-duty trucks and buses, light commercial vehicles, earthmovers, forklifts, tractors, trailers, cars, motorcycles and scooters as well as auto-rickshaws.” (Annual Report 2017, CEAT)It has been certified ISO 9001 in the year 2015. British Safety council presented the award of Sword of Honour in the year 2016.
6. **Hero moto corp** has been head quartered in new Delhi. It was founded by Mr. Brijmohan Lall Munjal. “The company is into designing and developing technologically advanced motorcycles and scooters for customers around the world. It became the world’s largest two-wheeler manufacturer in 2001, in terms of unit volume sales in a calendar year and has maintained the coveted title for the past 18 consecutive years. it has over 50% market share in the domestic motorcycle market”. (Annual Report 2017, Hero Motocorp) In the year 2016, company has been awarded with manufacturing innovator of the year award.
7. “**Motherson Sumi Systems Limited (MSSL),** the flagship company of the Motherson Group was established in 1986 in joint partnership with Sumitomo Wiring Systems, Japan. MSSL including its subsidiaries and JVs is one of the leading manufacturers of automotive wiring harnesses, mirrors for passenger cars and a leading supplier of plastic components and modules to the automotive industry. Its broad business portfolio includes wiring harnesses, mirrors for passenger car, injection moulded products, modules including dashboards, door trims, bumpers, blow moulded components, liquid silicone rubber moulded components, injection moulding tools, extruded rubber products, precision machined metal components and waste recycling systems”. (Annual Report 2017, MSSL)
8. **Sundaram Clayton Limited** was established in 1962 under the Chennai based group of TVS. “SCL is a leading supplier of aluminium die castings to automotive and non-automotive sector. SCL manufactures aluminium pressure die castings for heavy commercial vehicles, passenger cars and two wheelers. The product range includes flywheel housing, gear housing, clutch housing,

filter heads, air connectors, lube oil cooler cover assembly, filtration module casting, turbo charger etc". (Annual Report 2017, SCL) In 2010, it was awarded with Gold Certificate of Merit by The Economic Times manufacturing Excellence Awards. It sells approx. 54 % of its products in the domestic market and export the remaining 46%. SCL has been certified with ISO 14001.

9. **Tata motors** is a part of Tata group established by Shri Jamshedji Tata in 1868. "It is a leading global automobile manufacturing company. Its diverse portfolio includes an extensive range of cars, sports utility vehicles, trucks, buses and defence vehicles. Tata Motors is one of India's largest OEMs offering an extensive range of integrated, smart and e-mobility solutions." Tata motors won the "the best learning organization of Asia award" in 2010-11. Currently the CEO is Mr. Guenter Butschek. (Annual Report 2017, Tata motors)
10. "**TVS Motor Company** is the third largest 2-wheeler company in India with a revenue of over ₹20,000 crore (US$2.9 billion). It has an annual sale of more than 3 million units and an annual capacity of over 4 million vehicles. TVS Motor is also the 2nd largest exporter in India with exports to over 60 Countries. A member of the TVS Group, it is the largest company of the group in terms of size and turnover" TVS Motors bagged the Indian Motorcycle Award for the year 2017. "TVS Motor has been awarded Highest in Customer Satisfaction by J.D. Power Asia Pacific Awards for 2018." (Annual Report 2017, TVS)

4.5.2 Pharmaceuticals

1. **Aurobindo Pharma** was founded in 1986 by Mr. P.V Ramprasad Reddy & K. Nityananda Reddy along with a group of professional. It was started as a single unit in Pondicherry. The shares were listed in 1992. They specialize in manufacturing generic pharmaceuticals. "The company's area of activity includes six major therapeutic/product areas: antibiotics, anti-retroviral, cardiovascular products, central nervous system products, gastroenterological, and anti-allergic. The company markets these products in over 125 countries". (current trends in regulatory project management).Aurobindo ranks among the top two publicly

traded pharmaceutical firms in India based on sales for the fiscal year 2018. In addition to this, Aurobindo develops semi-synthetic products based on fermentation and creates innovative proprietary biocatalysts via its subsidiary, AuroZymes. AuroZymes has pioneered key technology in biocatalysis and has pinpointed numerous products for deployment within the Aurobindo conglomerate. The technology advancements of AuroZymes encompass panels of enzymes from 12 distinct classes and roughly 3,000 biocatalysts for utilization in screening against potential targets."(Annual-Report-2016-17.Pdf, n.d.)

2. **Biocon** is a premier biopharmaceutical company which focuses on **"**discovering, developing and producing biologics in chronic therapies such as diabetes, oncology and immunology for global markets." **"**Biocon's first product to go to market was papain, an enzyme found in papaya which is used to prevent beer from turning hazy". Becomes the first Indian company to launch a biosimilar Insulin Glargine pen in Japan.(Biocon_Annual_Report_2017.Pdf, n.d.)
3. **Cadilla Pharmaceuticals** was established as a private sector company in 1951 at Ahmedabad, Gujarat by Mr. Indravadan Modi. It went through a demerger in 1995 and became Cadilla pharmaceuticals and Cadilla health care. Thus, over last sixty years, the company is preparing products like API's-Intermediates, finished formulations,OTC-Food Supplements, Biotechnology Products and pharmaceutical Machinery. "In 2019, Cadilla pharma won, TISS award for the Leap Vault CLO under the categories of 'Program for Sales Enablement' and 'Social Media Based Learning Program".(Annual-Report-CHL-2016-2017.Pdf, n.d.)
4. **The Chemical Industrial and Pharmaceutical Laboratories (CIPLA)** was registered as a public company limited in 1935. Later in 1984 the name was changed into CIPLA. It is an Indian multinational pharmaceutical and biotechnology company, headquartered in Mumbai, India. Cipla basically develops medicines to treat respiratory, cardiovascular disease, arthritis, diabetes, weight control and depression; other medical conditions including Escitalopram (anti-depressant), Lamivudine and Fluticasone propionate The equity shares of Cipla are listed on the Bombay Stock Exchange, National Stock Exchange of India, Its Global Depository Receipts (GDRs) are listed on the Luxembourg Stock Exchange.

5. **Dr. Reddy's Laboratories** is a global pharmaceutical firm. The company was founded by Anji Reddy, a graduate of the guiding institution, Indian Drugs and Pharmaceuticals Limited, located in Hyderabad, India. The firm manufactures and markets a wide range of pharmaceuticals both within the country and abroad. It has an impressive portfolio of over 190 drugs, 60 active pharmaceutical ingredients (APIs) for drug manufacturing, diagnostic kits, critical care commodities, and biotech products. In September 2016, Dr. Reddy's introduced "Purple Health" in India, a platform centered around patients to provide solutions that cater to their unfulfilled needs. Purple Health aims to address patient needs across four areas: awareness, access (to medication), adherence (to therapy), and experience (simplified medication experience).(1500033215_Annual Report 2016-17.Pdf, n.d.)
6. "**Divi's** has been established for more than 29 years in Hyderabad, India with two manufacturing units and is one of the top pharmaceuticals companies in India. Divi's is recognized as a 'Reliable Supplier of generic APIs (Active pharmaceuticals ingredients)' and a trustworthy 'Custom Manufacturer' to Big Pharma and is among the top API manufactures in the world. Divi's recently reached the milestone of being one among the top 3 API manufacturers in the world and one among the top API companies in Hyderabad. Divi's is a Public limited company listed on the Indian stock exchange."(27th-Annual-Report-2016-17_1-Min.Pdf, n.d.)
7. "**Lupin Pharmaceuticals, Inc**. is the U.S. wholly owned subsidiary of Lupin Limited, which is one of the top five pharmaceutical companies in India. Lupin's research initiative encompasses the complete pharmaceutical product spectrum. The company, headquartered in Mumbai, India, places a strong emphasis on research. It has a dedicated program for the creation of New Chemical Entities. Lupin boasts a cutting-edge R&D facility in Pune and is a prominent international contender in the Anti-TB sector. The company was founded in 1968 by Desh Bandhu Gupta."(Lupin-Annual-Report-2016.Pdf, n.d.)
8. "**Jubilant Life Sciences** is a global company which offers integrated Life Science products and Innovative Solutions provider serving, Pharmaceutical, Nutrition, Agrochemical, Consumer and Industrial customers with our customized products and solutions that are innovative, cost-effective, and conforming to excellent quality standards. offers a broad portfolio of high-quality ingredients that find

application in a wide range of industries. The company's portfolio also extends to custom development and manufacturing for pharmaceutical and agrochemical customers on an exclusive basis". (Jubilant Life Sciences Limited, n.d.)The main businesses of the company are divided into Specialty Chemicals, Nutrition and Health solutions, and chemical Intermediates. Even though the company is headquartered in Noida, it has offices in China, Belgium, and US. In 2021, Jubilant life sciences is demerged its life science business to Jubilant Ingrevia Ltd and Jubilant life sciences has changed its name into Jubilant Pharmova Ltd.

9. **Suven Pharmaceuticals Pvt Ltd** was incorporated in 1989 and went public in 1995. The company is headquartered in Hyderabad, India. The shares of the company are listed in both BSE and NSE. In 2007, it obtained its first product patent from US patent office. In 2019, the pharma business was demerged from the company to suven pharmaceuticals ltd. "The Company is a research-focused organization. As such, it does not have any product for marketing. The Company provide research services to global pharma/life sciences entities." (AnnualReport2016-17.Pdf, n.d.)Majority of the drug discovery projects are focused on Brain health. Several projects are under the organization to provide better cognitive health to the people suffering from Depression and other neurological disorders.
10. **Piramal health care**, founded in 1984, headquartered in Mumbai, is renamed to Piramal Enterprises ltd in 2012, is a global conglomerate whose primary business is in Pharmaceuticals. It also has business in financial services and real estate. "The company offers a diverse range of products and services through end-to-end manufacturing capabilities across 15 global facilities and a global distribution network in over 100 countries. The pharmaceutical business includes Piramal Pharma Solutions (PPS), an integrated Contract Development and Manufacturing Organization (CDMO), Piramal Critical Care (PCC), a Complex Hospital Generics business, and the India Consumer Healthcare business selling over-the-counter products."(AR_2016-Adobe.Pdf, n.d.)

4.5.3 Information technology

1. **First source solutions limited** is owned by RP-Sanjiv Goenka Group, having its headquarters in Mumbai. The company is a provider of business process

outsourcing services. The company offers a wide variety of solutions including analytics, digital automation, transformation, design etc. In 2018, the company bagged the NASSCOM customer excellence award in the category of process efficiency.

2. "**Info Edge India Limited** was incorporated on May 1, 1995, under the Companies Act, 1956 as Info Edge (India) Private Limited and became a public limited company on April 27, 2006. Starting with a classified recruitment online business, naukri.com, Info Edge has grown and diversified rapidly, setting benchmarks as a pioneer for others to follow. Driven by innovation, creativity, an experienced and talented leadership team, and a strong culture of entrepreneurship, today, it is India's premier online classifieds company in recruitment, matrimony, real estate, education, and related services." (*Annual-Report-2016-17.Pdf*, n.d.)Their focus is on recruitment, matrimony, real estate, and education. Recently they had investments in Zomato as well.
3. **Infosys** is a NYSE listed global consulting and IT services company with more than 228,000 employees, established in 1981. "Infosys played a remarkable role in India's emergence as the global destination for software services talent. the company pioneered the Global Delivery Model and became the first IT Company from India to be listed on NASDAQ."(Joshi, n.d.) The company has 13 subsidiaries over the world. Infosys has been awarded the number 3 ranking on the Forbes list of The World's Best Regarded Companies for 2019.
4. **Mindtree** is a Larsen and Turbo Company founded in 1999 and headquartered in Bangalore. "Mindtree delivers digital transformation and technology services from ideation to execution, enabling Global 2000 clients to outperform the competition". (*Mindtree-Annual-Report-2016-17.Pdf*, n.d.)Mindtree provides services on six heads: Digital, Operations, IT consulting, Engineering R& D Enterprise software. The company won the award for outstanding delivery by service provider by Information Services Group, NASDAQ.
5. **Mphasis** was founded by Jeroen Tas, Jerry Rao in the year 1992 in Bangalore. It focusses building software and providing technical assistance in the industries like Banking, Insurance, hospitality, health care and many more. It also pushes the boundaries of AI and next gen hi-tech services including cyber security. The company tries to build next-generation technology to help enterprises transform businesses globally. Customer centricity is foundational to Mphasis and is

reflected in the Mphasis' Front2Back™ Transformation approach. Mphasis works towards a well-diversified work environment and culture in the organisation.

6. **"National Institute of Information Technology** is an Indian Multinational company that offers learning management and training delivery solutions to corporations, institutions, and individuals. It has three main lines of business worldwide: Corporate Learning Group, Skills and Careers Group, and School Learning Group." It is incorporated in 1981 at Gurgaon. "In addition to its cutting-edge Managed Training Services (MTS), NIIT will now offer services like Service Culture Indicator, Service Leader Workshops, and Service Excellence Workshops to take organizations to a new level of service that is enabled by fundamental principles and actionable models."(AnnualReport2017.Pdf, n.d.)
7. **"Oracle Financial Services Software Limited** is a subsidiary of Oracle Corporation. It is an IT solution provider to the banking industry. Founded in 1990 by Rajesh Hukku the company has headquarters in Mumbai. Oracle Financial Services Software Limited is ranked No. 9 in IT companies of India and overall ranked No. 253 in Fortune India 500 list in 2011". "Oracle Financial Services Software Limited has two main streams of business. The products division (formerly called BPD – Banking products Division) and Prime Sourcing. The company's offerings cover retail, corporate and investment banking, funds, cash management, trade, treasury, payments, lending, private wealth management, asset management and business analytics".(Ofss-Annual-Report-2016-17-3854654.Pdf, n.d.)
8. "**Persistent Systems** is a technology services company which was incorporated on 16 May 1990 as Persistent Systems Private Limited. It was subsequently converted into a public Limited company on 17 September 2010 with the name Persistent Systems Limited and a new certificate of incorporation was issued on 28 September 2007 from the RoC".(2016-17.Pdf, n.d.) In 2019, Persistent systems were ranked among top 125 companies by Training Magazine. They provide digital platforms & solutions as well as software product engineering.
9. "**Wipro Limited** is one of the leading companies in global information technology, consulting, and business process services. The company operates globally and has a good reputation "for its comprehensive portfolio of services, strong commitment to sustainability and good corporate citizenship. cognitive computing, hyper-automation, robotics, cloud, analytics, and emerging

technologies. In 2019, Wipro won “Global Breakthrough Partner of the Year” from Pivotal Software. “Wipro earned the top spot among the 100 most sustainable corporations in Asia in the 2016 Channel NewsAsia Sustainability Ranking, marking its second consecutive win. Additionally, Wipro received the “Digitizing India Awards” from CISCO, in partnership with CNBC, for the NRC Assam Project in the category of Digital Innovation in Citizen Services (eGovernance).”(Wipro-Annual-Report-for-FY-2016-17.Pdf, n.d.)

10. **Zensar Technologies Limited** was incorporated in 1991 under RPG Enterprises Group, headquartered in Pune, India. Its prior name was International Computers India Ltd, In 2000, its name has been changed to Zensar Technologies Ltd. It has major share of income from the US market, UK & Europe, and South Africa. The company provides solutions ranging from analytics, cloud to network transformation, smart platforms, and other mediums. Major revenue of the company comes from Hi-Tech, and manufacturing followed by banking, finance services, and insurance and retail. Zenlabs which was instituted in 2016 has become a huge success in innovation field by registering for more than 55 patents in such a short period of time.

References

Akhtar, Gulshan. "Indian Pharmaceutical Industry: An Overview." *IOSR Journal Of Humanities And Social Science* 13, no. 3 (2013): 51–66. https://doi.org/10.9790/0837-1335166.

Allad, Idrish. "IT Sector in India – Evolution, Growth and a Tool of Economic Development" 4, no. 2 (2015).

"1500033215_Annual Report 2016-17.Pdf." Accessed February 17, 2024. https://www.cipla.com/sites/default/files/1500033215_Annual%20Report%202016-17.pdf.

"2016-17-Annual-Report-for-Financial-Year.Pdf." Accessed February 16, 2024. https://www.bkt-tires.com/media/files/annual-report/2016-17/2016-17-annual-report-for-financial-year.pdf.

"27th-Annual-Report-2016-17_1-Min.Pdf," n.d.

"Annual_Report_2016-17.Pdf." Accessed February 17, 2024. https://www.motherson.com/storage/annual-report/Annual_Report_2016-17.pdf.

"AnnualReport16-17.Pdf." Accessed February 17, 2024. https://www.niit.com/authoring/Consolidated%20Results/AnnualReport16-17.pdf.

"Annual-Report-2016-17.Pdf." Accessed February 16, 2024. https://www.amararajaeandm.com/Files/AnnualReports/2016/Annual-Report-2016-17.pdf.

"Annual-Report-2016-17.Pdf." Accessed February 17, 2024. https://www.aurobindo.com/api/uploads/annualreports/Annual-Report-2016-17.pdf.

"AnnualReport2016-17.Pdf." Accessed February 17, 2024. https://www.suven.com/pdf/AnnualReport2016-17.pdf.

"Annual-Report-2017.Pdf." Accessed February 17, 2024. https://www.drreddys.com/cms/cms/sites/default/files/2021-08/annual-report-2017.pdf.

"Annual-Report-2017.Pdf." Accessed February 17, 2024. https://www.persistent.com/wp-content/uploads/2017/05/annual-report-2017.pdf.

"Annual-Report-CHL-2016-2017.Pdf." Accessed February 17, 2024. https://www.zyduslife.com/public/pdf/financial/annual/Annual-Report-CHL-2016-2017.pdf.

"Bajaj_auto_ltd_ar_2017_weba_indi_copy.Pdf," n.d.

"Biocon_Annual_Report_2017.Pdf." Accessed February 17, 2024. https://www.biocon.com/docs/Biocon_Annual_Report_2017.pdf.

"CEAT Limited Annual Report FY16.Pdf." Accessed February 16, 2024. https://www.ceat.com/content/dam/ceat/pdf/Annual_Reports/CEAT%20Limited%20Annual%20Report%20FY16.pdf.

"CRISIL-Ind-AS-Impact.Pdf," n.d.

"Hero-AR-2016-17.Pdf." Accessed February 16, 2024. https://www.heromotocorp.com/en-in/digital-annual-report-2016-17/pdf/Hero-AR-2016-17.pdf

"History of Indian Patent System | About Us | Intellectual Property India | Government of India." Accessed February 13, 2024. https://ipindia.gov.in/history-of-indian-patent-system.htm.

"Home - Indian Pharmacopoeia Commission." Accessed February 13, 2024. https://ipc.gov.in/.

"India Exports of Pharmaceutical Products." Accessed February 16, 2024. https://tradingeconomics.com/india/exports-of-pharmaceutical-products.

"India IT Industry Revenue: USD: Domestic | Economic Indicators | CEIC." Accessed February 16, 2024. https://www.ceicdata.com/en/india/information-technology-statistics-national-association-of-software-and-service-company-itbpm-domestic-revenue/it-industry-revenue-usd-domestic.
"Indian Pharmacopoeia Commission (IPC) Releases Eighth Edition Of Indian Pharmacopoeia (IP) - Food and Drugs Law - India." Accessed February 16, 2024. https://www.mondaq.com/india/food-and-drugs-law/671182/indian-pharmacopoeia-commission-ipc-releases-eighth-edition-of-indian-pharmacopoeia-ip.
India Brand Equity Foundation. "Pharmaceutical Companies in India, Indian Pharma Industry- IBEF." Accessed February 16, 2024. https://www.ibef.org/industry/pharmaceutical-india.
India Brand Equity Foundation. "Pharmaceutical Companies in India, Indian Pharma Industry- IBEF." Accessed February 16, 2024. https://www.ibef.org/industry/pharmaceutical-india.
"Infoedge-Subsidiaries-Annual-Report-2016-2017.Pdf." Accessed February 17, 2024. https://www.infoedge.in/pdfs/financial_pdfs/f_consol/Infoedge-Subsidiaries-Annual-Report-2016-2017.pdf.
"Joshi - Infosys Annual Report 2016-17.Pdf." Accessed February 17, 2024. https://www.infosys.com/investors/reports-filings/annual-report/annual/documents/infosys-ar-17.pdf.
Krishnaveni, M, and R Vidya. "Growth of Indian Automobile Industry," n.d.
"Lupin-Annual-Report-2016.Pdf." Accessed February 17, 2024. https://www.lupin.com/wp-content/uploads/2021/04/Lupin-annual-report-2016.pdf.
Malik, Manzoor Hassan. "Information Technology Exports and India's Macro-Economic Indicators." *International Trade, Politics and Development* 5, no. 2 (January 1, 2021): 114–35. https://doi.org/10.1108/ITPD-12-2020-0085.
Miglani, Smita. "The Growth of the Indian Automobile Industry: Analysis of the Roles of Government Policy and Other Enabling Factors." In *Innovation, Economic Development, and Intellectual Property in India and China: Comparing Six Economic Sectors*, edited by Kung-Chung Liu and Uday S. Racherla, 439–63. ARCIALA Series on Intellectual Assets and Law in Asia. Singapore: Springer Nature, 2019. https://doi.org/10.1007/978-981-13-8102-7_19.
"Mindtree-Annual-Report-2016-17.Pdf." Accessed February 17, 2024. https://investorsarchive.ltimindtree.com/sites/default/files/2017-10/mindtree-annual-report-2016-17.pdf.
Moneycontrol. "India's Software Service Exports Increased in 2017-18: RBI Data," December 10, 2018. https://www.moneycontrol.com/news/technology/indias-software-service-exports-increased-in-2017-18-rbi-data-3273701.html.
"Mphasis-Annual-Report.Pdf." Accessed February 17, 2024. https://www.mphasis.com/content/dam/mphasis-com/global/en/investors/annual-reports/Mphasis-Annual-Report.pdf.
"Notice-Annual-Report-Atl-Fy17.Pdf." Accessed February 16, 2024. https://corporate.apollotyres.com/content/dam/orbit/apollo-corporate/investors/financial-reporting/annual-report/2016-17/notice-annual-report-atl-fy17.pdf.
"NYSE_ORCL_2016.Pdf." Accessed February 17, 2024. https://www.annualreports.com/HostedData/AnnualReportArchive/o/NYSE_ORCL_2016.pdf.

"Piramal-AR2017-Final-For-Web-1.Pdf." Accessed February 17, 2024. https://www.piramal.com/wp-content/uploads/2020/05/Piramal-AR2017-Final-For-Web-1.pdf.
Roychowdhury, Viveka. "What Ails India's Pharma Exports?" *Express Pharma* (blog), October 5, 2017. https://www.expresspharma.in/what-ails-indias-pharma-exports/.
"SCL_Annual_Report_2016-17.Pdf." Accessed February 17, 2024. https://www.sundaram-clayton.com/Web%20files/SCL_Annual_Report_2016-17.pdf.
Statista. "India: IT-BPM Industry Revenue 2023." Accessed February 16, 2024. https://www.statista.com/statistics/320764/total-revenue-it-industry-india/.
Statista. "India: IT-BPM Industry Share in GDP 2023." Accessed February 16, 2024. https://www.statista.com/statistics/320776/contribution-of-indian-it-industry-to-india-s-gdp/.
Statista. "India: Value of Drugs and Pharmaceutical Exports by Leading Destination 2023." Accessed February 16, 2024. https://www.statista.com/statistics/624822/export-value-of-drugs-and-pharmaceuticals-by-country-india/.
"Tata-Motors-AR-2016-17.Pdf." Accessed February 17, 2024. https://investors.tatamotors.com/financials/72-ar-html/pdf/Tata-Motors-AR-2016-17.pdf.
"TVS Motor Company1-73.P65," n.d.
vcpote. "Difference in IND AS and Existing AS." TaxGuru, March 14, 2014. https://taxguru.in/chartered-accountant/difference-ind-existing.html.
"Wipro-Annual-Report-for-FY-2016-17-Interactive.Pdf." Accessed February 17, 2024. https://www.wipro.com/content/dam/nexus/en/investor/annual-reports/2016-2017/Wipro-Annual-Report-for-FY-2016-17-interactive.pdf.
"Zensar-Annual-Report-2016-2017.Pdf." Accessed February 17, 2024. https://www.zensar.com/sites/default/files/investor/annual/files/Zensar-Annual-Report-2016-2017.pdf.

.