

Sector Report

Indian Pharmaceutical Sector

Credence Capital

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Indian Pharma Sector Report

Introduction

Within the global pharma market, India ranks tenth in value terms but is ranked third in volume terms. This is due to the fact that the market is dominated by branded generics, making up 70-80 % of the retail market with intense competition and low price levels. The country has an established domestic pharmaceutical industry, with a strong network of 3000 drug companies and about 10,500 manufacturing units. Out of these, 1,400 units are World Health Organization (WHO) good manufacturing practice (GMP) approved; 1,105 have Europe's certificate of suitability (CEPs); more than 950 match therapeutic goods administration (TGA) guidelines; and 584 sites are approved by the US Food and Drug Administration (USFDA).

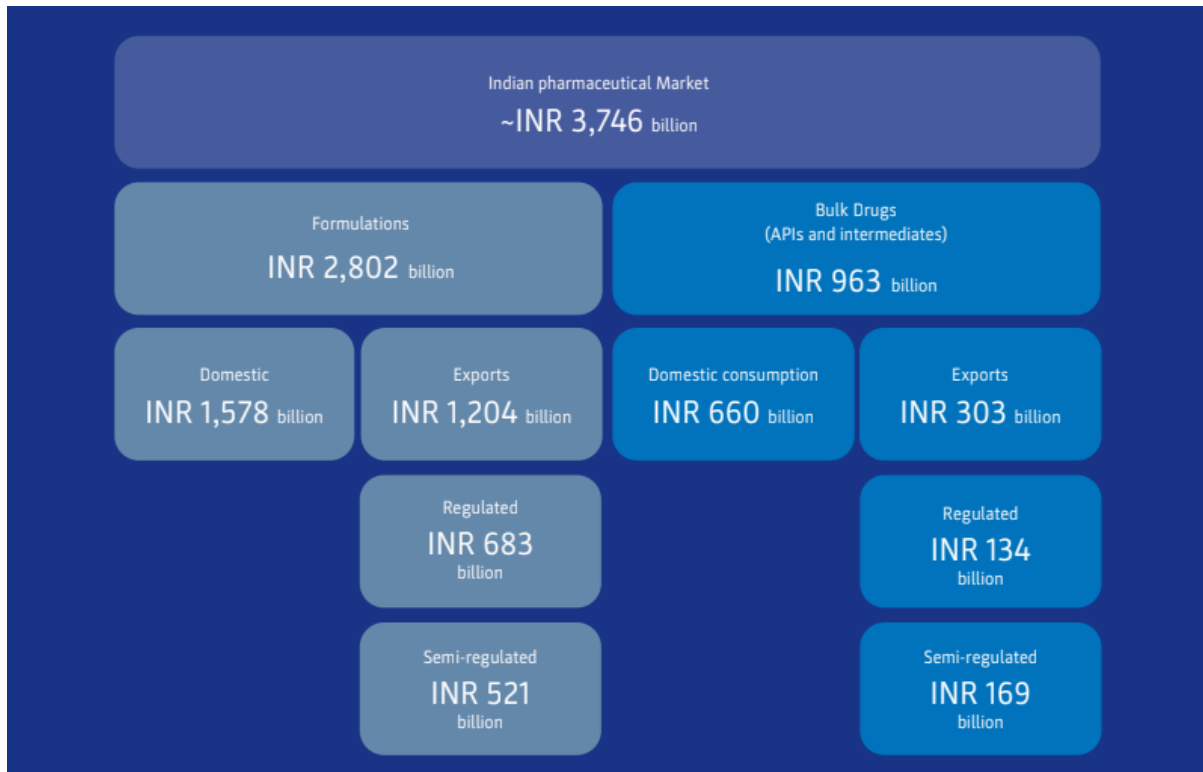
Global spending on medicines is expected to surpass US\$1.1 trillion by 2024 and India supplies 20% of global generic medicines market exports, in terms of volume, making the country the largest provider of generic medicines globally and expected to expand even further in coming years. Epidemiological factors like 20% increase in the patient pool, new diseases, and lifestyle and increasing prevalence of lifestyle diseases will boost the demand for pharmaceuticals in India. India exports its pharma products to more than 200 countries exporting largely to the USA, UK, South Africa and Russia. India's Pharma exports mainly consist of Drug Formulations and Biologicals up to 77% followed by Bulk drugs and intermediates up to 21%.

According to the Department of Pharmaceuticals, Ministry of Chemicals and Fertilizers Annual Report 2019-20, the total size of the industry is close to US \$ 43 billion (INR 3 lakh crore) and is currently experiencing a growth rate of 7-8%. The Indian pharma industry also supplies a good portion of the global generic medicine and vaccine demand, with exports reaching \$ 18 billion (1.33 lakh crore) in FY20. The imports were close to INR 72,800 crore in FY20 of which 52% of the expenditure was on import of medical devices. The Indian Pharmaceutical sector contributes 1.72 % to the country's GDP. It is estimated that the industry directly and indirectly provides employment to over 2.7 million people in high-skill areas like R&D and manufacturing.

The major players in the Indian pharmaceuticals sector are Sun Pharmaceuticals, Dr. Reddy's Laboratories, Divi's Laboratories, Cipla, Aurobindo Pharma, Torrent Pharmaceuticals, Lupin Ltd., Zydus Cadila Healthcare, and Abbott India among others.

Major pharmaceuticals hubs are spread over Andhra Pradesh, Gujarat, Maharashtra, and Goa are the major pharmaceutical manufacturing clusters in the country. The bulk drug clusters are located primarily in Ahmedabad, Vadodara, Mumbai, Aurangabad, Pune, Hyderabad, Chennai, Mysore, Bangalore, and Visakhapatnam (Vizag). The pharmaceutical hubs offer investment opportunities in the production of API (Active Pharmaceutical ingredients) or bulk drugs, biosimilars, vaccines, neutraceuticals, as well as food and drug testing and contract research.

Structure of Pharma Sector in India



Source: KPMG, CII API Industry Report 2020

The Indian Pharma industry can be broadly divided into API/Bulk Drugs and the Formulations category. Within the API/Bulk Drugs and Formulations sub-segments, the products can be sold within the branded and the generic categories. Domestic API consumption is expected to reach US\$ 18.8 billion by FY22. India is the largest exporter of formulations in terms of volume, with 14 % market share and 12th in terms of export value. Generic drugs, with 71% market share, form the largest segment of the Pharmaceutical industry in India. This is set to grow as exports of generics to the US rise, as branded drugs worth \$55 billion will become off-patent during 2017-2019. In the domestic market by revenue, Anti-Infectives (13.6%), Cardiac (12.4%) and Gastrointestinal (11.5%) had the biggest market share.

Two upcoming sub-segments in the Indian Pharmaceuticals sector are the Biosimilar and the Contract Research and Manufacturing Services (CRAMS) area. The Biosimilar market is expected to reach a size of US\$ 40 billion by 2030 and CRAMS industry has posted 48 per cent CAGR between FY15-18 and expected to witness a strong growth over 25 per cent over 2018-21. Biosimilar are medicines made from living cells through highly complex manufacturing processes and must be handled and administered under carefully monitored conditions. Biosimilar are used to prevent, treat, diagnose, or cure a variety of diseases including cancer, chronic kidney disease, autoimmune disorders, and infectious diseases. A biosimilar is a biologic that is similar to another biologic drug already approved by the FDA. Pharmaceutical companies are increasingly outsourcing research activities to academic and

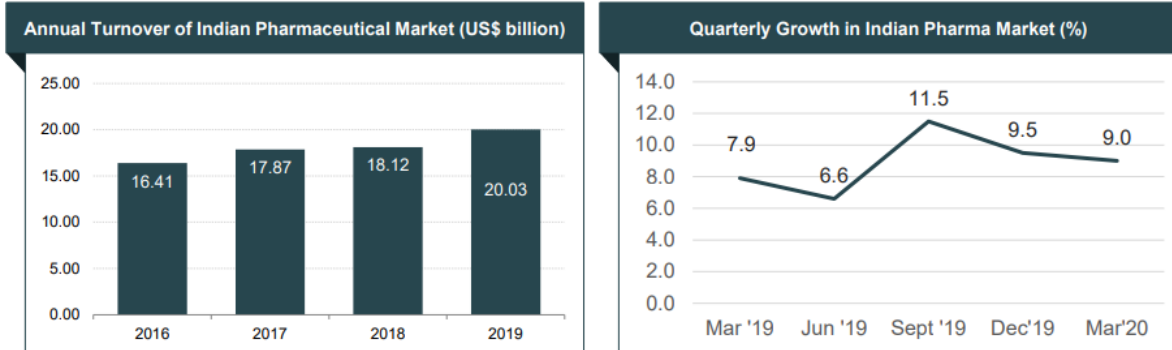
private contract research organizations (CROs) as a strategy to stay competitive and flexible in a world of exponentially growing knowledge, increasingly sophisticated technologies and an unstable economic environment. India is amongst the preferred destinations for outsourcing of research as well as manufacturing activities. The growth in the CRAMS space in India has been witnessed since 2005 when India began compliance with the World Trade Organization's (WTO) intellectual property rules. Several key pharma players are now outsourcing their early drug development activities covering pre-clinical and early phase research to some of the leading CRO players in the market which were earlier handled by pharma companies themselves. New age CRAMS providers are able to cater to not just the pharmaceutical clients, but also biotech, agrochemicals, nutrition, animal health, consumer goods and others.

Major Players in Pharma Sector in India*

S.No.	Name	CMP Rs.	P/E	Mar Cap Rs.Cr. †	Div Yld %	Sales Qtr Rs.Cr.	ROCE %	Sales Rs.Cr.	PAT 12M Rs.Cr.	Debt / Eq	EV / EBITDA	PEG
1.	Sun Pharma.Inds.	489.65	30.44	117483.44	0.82	7585.25	10.53	32048.39	3859.64	0.18	16.09	-6.55
2.	Dr Reddy's Labs	5112.20	43.72	85000.18	0.49	4426.50	11.11	18085.30	1944.10	0.14	27.40	-18.29
3.	Divi's Lab.	3060.75	50.91	81253.30	0.52	1730.47	25.19	5962.01	1596.16	0.01	35.11	5.19
4.	Cipla	770.10	38.37	62096.05	0.39	4346.16	11.77	17489.13	1618.41	0.20	17.43	11.19
5.	Biocon	428.00	67.35	51360.00	0.12	1671.30	13.11	6549.10	762.59	0.40	31.04	5.18
6.	Torrent Pharma.	2719.25	40.72	46015.15	0.63	2056.00	15.01	7973.00	1130.00	1.21	21.36	6.50
7.	Lupin	998.90		45274.18	0.60	3527.86	9.23	15025.08	-530.69	0.50	18.53	
8.	Aurobindo Pharma	772.10	15.16	45240.32	0.39	5924.78	18.73	23578.68	2985.17	0.35	9.47	1.21
9.	Cadila Health.	385.50	27.17	39465.28	0.91	3639.90	11.83	14396.70	1452.53	0.77	15.28	6.53
10.	Abbott India	16237.75	52.57	34505.22	0.66	1064.27	35.18	4158.52	656.34	0.07	35.00	2.49
11.	Alkem Lab	2802.35	24.19	33506.30	0.89	2003.49	18.58	8498.35	1385.21	0.28	18.22	0.93
12.	Piramal Enterp.	1246.35	359.37	28109.97	1.12	2937.34	9.65	13152.02	78.22	1.45	8.47	-7.84
13.	Glaxosmi. Pharma	1543.60	63.34	26149.52	1.30	648.59	32.88	3085.00	412.87	0.00	35.20	-2.84
14.	Ipca Labs.	2067.25	28.40	26120.14	0.24	1534.40	19.39	5104.92	919.81	0.14	19.62	1.50
15.	Syngene Intl.	577.35	67.20	23094.00	0.09	420.20	16.63	2011.20	343.65	0.36	33.87	4.47

*Non-Exhaustive List

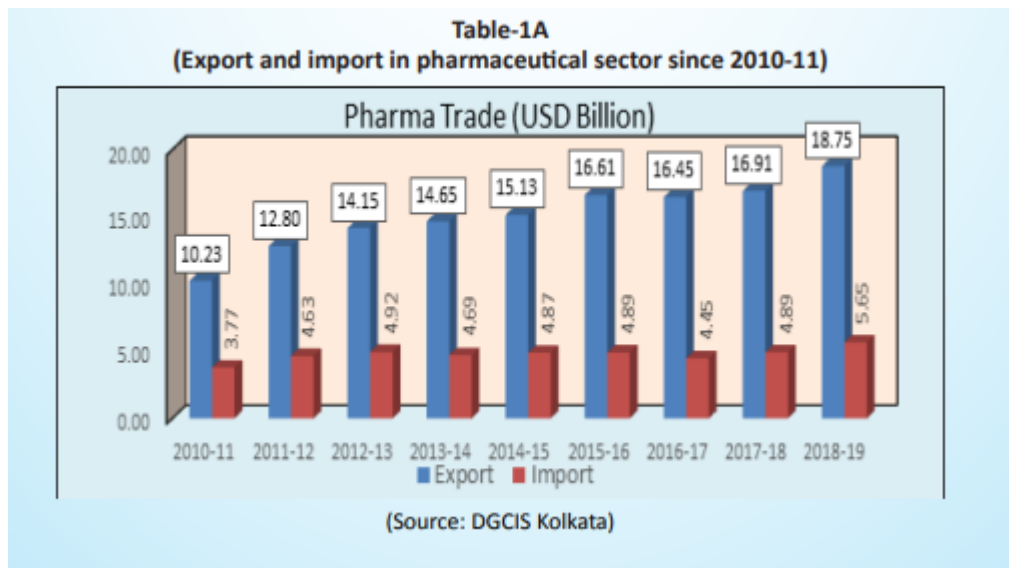
Domestic Indian Pharma Market



(Source: IBEF)

In the domestic pharmaceutical sector, the turnover reached INR 1.4 lakh crore (US\$ 20.03 billion) in 2019, growing 9.8 % year-on-year from INR 129,015 crore (US\$ 18.12 billion) in 2018. India's cost of production is significantly lower than that of the US and almost half of that of Europe, which gives it a competitive edge over others.

Trade in Pharma Market



India exported pharmaceuticals to the tune of INR 1.3 lakh crore with a recorded growth of 10.72% in 2018-19. Drug formulations & Biologicals was the third largest among the principal commodities exported by India during 2018-19. Indian pharmaceutical sector generates a trade surplus to the tune of US\$ 11 billion almost every year. India imports active pharmaceutical products from countries like China, USA, Italy, Singapore, Spain, Germany etc.

Foreign Direct Investment (FDI)

In the Pharmaceutical sector, FDI up to 100% is allowed through the automatic route for Greenfield (new) project investments and up to 74% for Brownfield (existing) project investments. Beyond 74% investment can be made through the approval of the government. Following the abolition of the Foreign Investment Promotion Board (FIPB) in 2017, the pharmaceutical sector saw FDI inflow worth INR 2,500 crore under 25 FDI proposals, with pharma being among the top 8 sectors attracting FDI in India.

Recent M&A Deals (Non-Exhaustive)

Target	Acquirer	Date	Value (US \$Mn)
Aquinox Pharmaceuticals	Sun Pharma	Jul-20	8.20
RA Chem Pharma	PE Firm(s)	Jul-20	174.00
Glenmark Pharmaceuticals*	Hypera Pharma	Feb-20	105.00
Glenmark Pharmaceuticals**	Integrace Pharma	Jan-20	16.13
Omnipresence	Syneos Health	Jan-20	14.00
Profectus Biosciences	Aurobindo Pharma	Nov-19	11.30
Wanbury	Cipla	Oct-19	12.50
Stelis Biopharma	Strides Shasun	Sep-19	40.00
Granules India	Aji Bio-Pharma	Aug-19	15.33
Orchid Pharma	Dhanuka Laboratories	Jun-19	88.00
C-Square	Reliance Industrial Investments and Holdings	Mar-19	11.90
Aceto Corporation	Suven Life Sciences	Mar-19	15.00
Spectrum Pharmaceuticals	Aurobindo Pharma	Jan-19	300.00
Vivimed Labs	Strides Shasun	Jan-19	10.50
Vensun Pharmaceuticals	Strides Shasun	Jan-19	93.00
Advent Pharmaceuticals	Aurobindo Pharma	Nov-18	12.50
Solara Active Pharma Sciences	Sequent Scientific	Sep-18	6.30
Novartis	Aurobindo Pharma	Sep-18	900.00
Apotex International	Aurobindo Pharma	Jul-18	86.00

* Dermatological generics business in Brazil

** gynaecology business in India and Nepal

Source: Venture Intelligence

Recent PE Deals (Non-Exhaustive)

Company	Investor	Date	Amount (US \$Mn)
Shriji Polymers (India)	Creador	Aug-20	33.7
RA Chem Pharma	Advent International	Jul-20	128
Piramal Pharma	Carlyle	Jun-20	490
Ami Lifesciences	Kedaara Capital	Feb-20	38.85
Integrace	TrueNorth	Jan-20	16.13
Slayback Pharma	Everstone	Jan-20	50
Akums Drugs	Quadria India	Dec-19	70
Naari Pharma	Ascent Capital	Dec-19	17.54
Bizongo	B Capital Group, Schroders, Accel India, Chiratae Ventures, IFC	Jul-19	30
Generico	Tomorrow Capital, Whiteboard Capital, Lightbox, Others	Jul-19	14
MedPlus Health Services	PremjiInvest	Feb-19	29.59
Solara Active Pharma	TPG Growth, Others	Jan-19	64.84
Apollo Pharmacies	Arpwood Partners, Others	Nov-18	72
Strides Consumer	India Life Sciences Fund	Oct-18	20
Netmeds	Sistema Asia Fund, Others	Sep-18	35
Sai Life Sciences	TPG Growth	Jun-18	135
Mankind Pharma	ChrysCapital, Others	Apr-18	336.33
Natco Pharma	Multiple PE	Dec-17	60.43
HealthCare atHome	Quadria India	Mar-17	40
Shilpa Medicare	TA Associates	Jan-17	25.43
Slayback Pharma	KKR	Dec-16	60
Eywa Pharma	Eight Roads Ventures, Others	Oct-16	30
Cipla Health	Eight Roads Ventures	Apr-16	19.44
Dialhealth	Everstone	Mar-16	60

Source: Venture Intelligence

Growth Drivers

The growth drivers for the sector include:

1. A steady rise in the population of the country currently estimated at 1.38 billion with an annual growth rate of close to 1.13% per year with an increase in prevalence of chronic diseases. The population is expected to rise to 1.5 billion by 2030
2. Cost competence of Indian manufacturers vis-vis companies in the USA and Europe. 4 out of the top 10 global generic companies are Indian companies
3. Growing number of diseases due to change in urban lifestyles with 32% of the population living in the urban areas and expected to grow in the future years. The penetration of non-communicable diseases (NCDs) such as cardiovascular diseases and diabetes has expanded. Deaths due to NCDs in India have increased from 37 per cent in 1990 to 61 per cent today
4. Affordability of drugs due to expected increase in household incomes. Due to the COVID-19 factor the economy is expected to contract in FY 21. However, as per a recent Goldman Sachs report, the economy will grow at 15.7% in FY22
5. Increased Health insurance coverage both public and private
6. Better accessibility of drugs due to expansion and growth in infrastructure in Tier-II and other urban & rural areas
7. Increased acceptability of modern medicines and therapies
8. Government's 'Pharma Vision 2020' aimed at making India a global leader in end-to-end drug manufacturing. The Government has recently approved a package of INR 9,940 crore to boost the domestic production of bulk drugs and exports. It includes establishment of bulk Drug Park with common infrastructure facilities and a Production Linked Incentive (PLI) scheme to promote domestic production of 53 critical key starting materials (KSM), drug Intermediates and APIs
9. Increase in public budget allocation to healthcare. Under Budget 2020-21, allocation to the Ministry of Health and Family Welfare is INR 65,012 crore (US\$ 9.30 billion)

Risk factors

Notwithstanding the benefits certain risk factor for the sector include:

1. Dependence on foreign countries, particularly China for Active Pharmaceutical Ingredients (APIs). India imports over 60% of its API requirements (expected to reach a size of \$ 18.8 billion by FY22). API and other key ingredients for popular painkiller paracetamol are also imported from China. China has also hiked the prices of key starting materials (KSMs) used for making medicines by 10-20 affecting API domestic production in India. The import of APIs has risen at a CAGR of 8.3 per cent from 2012 to 2019 and the bulk drug import reached a value of INR 249 billion in 2019
2. Further price controls can inhibit the growth potential of the sector. The National Pharmaceutical Pricing Authority (NPPA) undertakes price control decisions for essential and life-saving medicines. It has, so far, fixed ceiling prices of 860 scheduled formulations and retail prices for 1,189 new drugs
3. Regulatory approvals like those of US FDA have become more difficult due to the pandemic and resultant travel restriction. In the year 2019, Indian companies received 19 warning letters from the United States Food and Drug Administration out of total 41 issued by the Office of Manufacturing Quality (manufacturing plants located outside of the USA) a 4 year high and representing close to 45% of the total such letters issued by the US FDA. Some of the companies that received such warnings in 2019 include Lupin, Zydus, Aurobindo, Glenmark etc.
4. There has also been an increase in the raw material prices for drugs in general
5. The customer expectations from pharma are also on the rise imposing cost constraints on healthcare providers and pharma companies
6. A prolonged economic decline will also affect the long-term prospects of the sector.
7. A considerable growth has been seen in the space of the homeopathic product market expected to grow at a CAGR of 14%. Homeopathic remedies are generally safe, and the risk of a serious adverse side effects arising from taking these remedies is thought to be minimal in comparison to chemical based pharma products

COVID 19 Impact on Indian Pharma Sector

Indian companies have been active post the COVID with several Indian companies entering into joint ventures and acquisitions with pharma companies globally. In May 2020, Jubilant Generics Ltd entered into a non-exclusive licencing agreement with US-based Gilead Sciences to manufacture and sell the potential COVID-19 drug Remdesivir in 127 countries, including India. On July 02, 2020, Dr Reddy's Laboratories partnered with Japanese pharma giant Fujifilm Toyama Chemical and Global Response Aid (GRA) for development, manufacture and sale of antiviral drug Avigan (favipiravir) tablets for potential treatment of COVID-19. However, the case of Serum Institute of India pausing its trial of the Oxford University-AstraZeneca COVID-19 vaccine in India shows how it will be difficult at the least to have a potential COVID vaccine ready of the end of the year. This follows the suspension in other countries after a participant in the United Kingdom developed an unexplained illness.

Trends in the Indian Pharma Sector

Some trends that have been observed or are expected are as follows:

1. Pharmaceutical players worldwide have been hugely dependent on China for their supply of intermediates and APIs. After the pandemic experience, global pharmaceutical majors will want to reduce their dependence on China; and there ought to be more backward integration as companies attempt to establish themselves as end-to-end manufacturers
2. Greater outlays are expected in preventive healthcare and for public health emergencies. While that is good for all nations, and especially India where such spends are woefully inadequate, it is not certain how it will directly benefit pharmaceutical companies, other than hospital equipment suppliers
3. If the pandemic continues for another 3-6 months as it is expected to, we should be prepared to see increasing delays in the treatment of other diseases. Hospitals and nursing homes all over the world have already begun to push back admission of non COVID-19 patients. Delays in treating these patients could lead to worsening health conditions, as well as reduced demand for many pharmaceutical products
4. On the flip side, there can be an increased demand for over-the-counter (OTC) medicines. The COVID-19 outbreak has seen a significant upsurge in buying of OTC medicines, especially relating to immunity enhancement, vitamins, analgesics, and flu and anti-infective medication. This stockpiling is expected to continue in the short-term, and result in demand surges for OTC drugs
5. In the short-term we will see less face-to-face interaction between medical representatives and doctors. Given its importance, one might witness some negative impact on pharmaceutical sales.
6. Other than the race for COVID-19 vaccines, one might see some de-prioritization on R&D.
7. Finally, the pandemic will seriously affect medical tourism via travel restrictions. This, in turn, will reduce the consumption of pharmaceutical products across hospitals and selected pharma outlets.

Key Metrics used in the Pharma Industry

1. R&D expense as a % of Revenue

Most pharma companies have very high research and development (R&D) budgets because they can only survive and grow by discovering and developing new drugs. Knowing the R&D budget as a percent of revenue helps understand if the company is creating a strong pipeline of future drugs to come on the market. Compare the percent of R&D to revenues to industry standards and also to the company's own spending in past years.

2. Operating Profit Margin

Profit margin is another vital metric. Operating profit margin lets the investor understand the impact from R&D to see if the program is bringing successful candidates to the market, whether the marketing and selling costs are having a positive impact on revenues (market share gains), and whether external factors are negatively impacting the company.

3. PE and PEG ratios

To understand the market's expectation of the future portfolio and performance of the company, it is important to benchmark these valuation ratios to the industry ratio and the firm's ratio over the period of last 5-10 years.

Some other ratios that can be considered are:

- a) Revenue CAGR over the last 3-5 years
- b) Employee Cost as a % of Revenue
- c) Dividend to earnings
- d) Drug portfolio and pipeline

Some qualitative factors that need to be considered as well are:

- a) Management of the company along with relevant experience
- b) Quality of patents and product portfolio and pipeline
- c) Technology infrastructure developed by the company
- d) Risk mitigation practices with reference to legal, compliance and foreign exchange risks

Future Market Size & Performance

As per an ICRA report, the growth trajectory for the Indian pharmaceutical industry is likely to remain at 10-13 per cent in 2020-21. From a market size of \$ 12.6 billion in 2009, the sector has grown at a CAGR of 14.5%. A Goldstein Research report forecast the India pharmaceuticals market size to grow at a CAGR of 15.9% over the forecast years of 2017-2030.

The NIFTY Pharma has increased by more than 40% YTD, showing how the sector has fared better in comparison to other sectors within the economy with NIFTY close to its year starting levels now after the market rally. There has also been a shift in model of traditional generics as a driver of growth to current growth focussed on innovative speciality. Companies are moving up in the value chain from API/Bulk to Simple Generics to Complex Generics to Innovative Drugs.



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