

Management Discussion and Analysis

Economic Overview and Outlook

Global Economy

The world economy grew at 2.9% in 2019 as compared to 3.6% in 2018. The growth was marginally weaker than the initial forecast of the International Monetary Fund (IMF) due to lower growth prospects in some emerging economies, including India, Mexico and South Africa. Developed economies reported slower growth as well, with the US economy being a drag after a strong run in the recent past.

Trade-related issues, geopolitical tensions and weakness in some key emerging markets – impacting both manufacturing and trade in the second half of 2019 – remained an overhang on global growth. Further, several countries faced the underlying impact of social unrest and weather-related setbacks. However, at the end of 2019, there were indications of economic growth bottoming out, underpinned by monetary policy easing in several economies.

With the US and China reaching phase one agreement and the Brexit uncertainty waning at the start of 2020, there were expectations of marginal growth acceleration. However, the dramatic changes in the global human and economic ecosystem due to the outbreak of the COVID-19 pandemic led to a sharp downgrade in growth forecasts, with the IMF now predicting the 'worst economic downturn' since the Great Depression in the 1930s.

Outlook

As the pandemic situation continues to unfold, with containment measures resulting in significant loss in output, the IMF expects economic output to contract sharply by 4.9% in 2020. An estimated 170 countries will witness a negative per capita income, with many facing overlapping crises, including healthcare issues, a weakened economy, low external demand, capital outflows and commodity market declines. That being said, risks to forecasts remain on the downside and any recovery will depend on the pace at which the pandemic subsides and economic activities normalise.

Global Economic Growth Trend

(%)

Economies	2019	2020 (P)	2021 (P)
World	2.9	-4.9	5.4
Advanced economies	1.7	-8.0	4.8
US	2.3	-8.0	4.5
Euro area	1.3	-10.2	6.0
Japan	0.7	-5.8	2.4
UK	1.4	-10.2	6.3
Other advanced economies	1.7	-4.8	4.2
Emerging markets/ developing economies	3.7	-3.0	5.9
China	6.1	1.0	8.2
India	4.2	-4.5	6.0

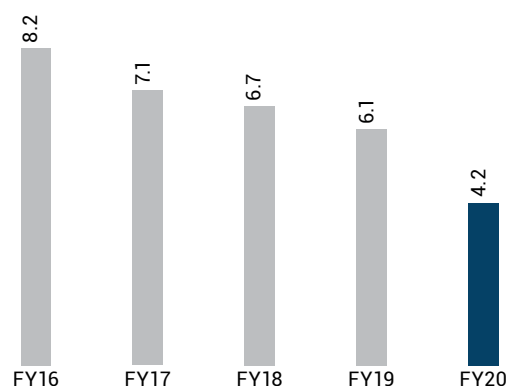
(P) = Projected (Source: IMF WEO, June 2020)

Indian Economy

The Indian economy too faced its fair share of challenges in FY 2019-20. Weak domestic consumption, credit tightness, delayed government infrastructure spending and sluggish manufacturing brought the country's GDP growth to a 11-year low of 4.2%. The government announced a series of reforms including reduction in corporate tax rates and facilitating credit flow to SMEs, to revive the economy. The Reserve Bank of India (RBI) remained largely accommodative with its monetary policy stance and implemented innovative measures to keep interest rates lower for longer. However, hopes of a recovery in the fourth quarter of the fiscal was dashed by the onset of the pandemic as economic activities came to a standstill with the government imposing the most stringent form of lockdown to contain the spread.

India GDP Growth

(%)



(Source: The Central Statistics Office)

However, India's long-term growth potential remains intact. The government announced an economic stimulus package of ₹20 lakh crores, or 10% of GDP, in May 2020 to stabilise and revive the economy. Further, various other steps are being taken by the government to boost the economy.

Prior to this slowdown, India's GDP had been growing at a five-year average of 7.5%. Several key macroeconomic indicators, including fiscal deficit, current account deficit and inflation, had reached very comfortable levels. India's ranking on the Ease of Doing Business improved to 63 in 2019 from 77 in 2018 and 142 in 2014, a record jump for any major global economy. Several structural reforms, a vibrant business environment and a relatively stable currency attracted foreign investors.

COVID-19 Impact in India

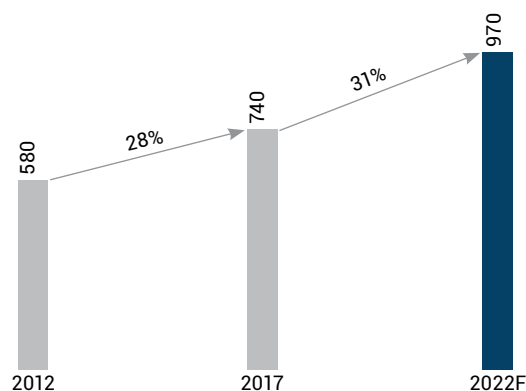
The Government of India imposed a nationwide lockdown, beginning in the last week of March 2020 to May 2020, as part of its pandemic containment measures, which put a majority of 1.3 billion people and domestic economic activities in suspended animation.

Government's Relief Measures and Push for Self-reliance

In May 2020, the government announced a comprehensive package, which included ₹1.7 lakh crores for direct cash and food-related benefits to provide relief to daily wage labourers, informal sector workers and farmers. As part of the package, the RBI announced a host of measures, including reduction in Cash Reserve Ratio (CRR), long-term repo operations, moratorium on all term loans and interest on working capital loans, as well as special liquidity funding. Other measures include hassle-free lending and capital infusion packages for MSMEs, a change in the definition of MSMEs to make it more broad-based, issue of immediate pending income tax refund orders, special emergency health response package and relaxation in statutory and compliance matters. Further, a Self-reliant India Movement was launched to promote domestically manufactured goods and services.

chemicals market is expected to grow to \$870 billion in 2020 and further to \$970 billion in 2022.

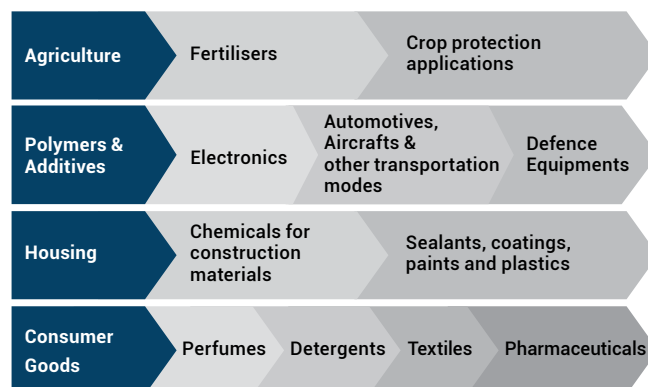
Global Speciality Chemicals Market (\$ billion)



Source: CRISIL Report titled 'Market Assessment of Speciality Chemicals'

Agrochemicals dominated the speciality chemicals revenue pie, accounting for 21% in 2017, with increasing applications in fertilisers, herbicides, insecticides and pesticides. The polymers and plastic additives segments comprised the second-largest revenue share at 12-14%.

Some Key Usage Areas for Speciality Chemicals



Evolution of the Speciality Chemicals Sector

Driven by innovation and expanding usage in several emerging areas, production and consumption of speciality chemicals were initially concentrated in developed regions like North America, Western Europe and Japan. With trade liberalisation, technology transfer and rapid economic growth, the industry began proliferating in developing economies. China emerged as a leading producer of speciality chemicals, aided by easy availability of raw materials/feedstock, cheap labour and capital, sizable end-use market and government support.

However, with increasing focus on safety, health and environment stipulations worldwide, stricter enforcement

Outlook

The IMF expects India's GDP to contract by 4.5% in FY 2020-21. However, the government's structural reforms agenda and several policy measures to boost the investment climate are likely to enable a sharp rebound in FY 2021-22, provided the pandemic situation is brought under control and domestic consumption returns to pre-COVID levels as growth engines reach full throttle.

Industry Overview

Speciality chemicals comprise high-value, low-volume chemicals that are recognised for their performance-enhancing end-use applications across several verticals. These chemical products are sold based on specific requirements, rather than on their composition, driving a higher degree of value addition across the final products. Typically, speciality chemicals find significant usage in agrochemicals, automobiles, aviation, personal care products, polymer additives, water chemicals, textiles, construction chemicals, surfactants, flavours and fragrances, and dyes and pigments.

The global chemicals market stood at about \$3.7 trillion in 2017 comprising basic chemicals, industrial gases, petrochemicals, polymers and speciality chemicals (accounting for about 20% of the global chemicals market). Given the strong visibility within current and emerging applications, the speciality

led to disruptions in the supply chain that was substantially dependent on China. Further, the relative strength of the Chinese currency, rising labour costs and reduction of government subsidies eroded the comparative advantage. The Chinese government is also promoting consolidation in the industry to shift away from high-polluting, lower-end segments.

With supply chain disruption and uncertainty in China, global players are looking at diversifying their sourcing and India offers a strong alternative with comparable scale, technology, raw materials and supportive government policies.

Growth Drivers

- **Growing Urbanisation and Rising Middle Class**

Urbanisation leads to pent-up demand for construction materials, which in turn drives demand for speciality chemicals in various related industries, including painting and coating. Further, urbanisation also leads to changing lifestyles and rise in the cosmetics, food and fuel industry, in turn boosting the demand for speciality chemicals.

- **Increase in R&D Activities**

Ongoing investments in R&D activities have facilitated the development of new products with advanced features. This has expanded application as well as enabled the development of customised, value-added products for niche usage.

- **Development of Eco-friendly Products**

End consumers are increasingly becoming environment conscious and are focusing on responsible consumption of natural resources. This has led to increased preference for eco-friendly products, even at higher price points.

- **Economic Growth in the Asia-Pacific Region**

Rapid economic growth in the Asia-Pacific region, especially in India and China, is a major driver for the speciality chemicals industry. In addition, advancement of the electronics markets in Japan, South Korea, Taiwan and China has also led to higher demand in the region.

- **Realigning Global Supply Chains**

Global Derisking has provided Indian companies an opportunity to increase their influence on the global supply chain by offering comparable scale and quality with focus on innovation and value-added products.

- **Higher Import Substitution**

The supply disruption has also prompted domestic companies to reduce dependence on imports and secure supplies locally, which is also resulting in lower logistic costs and timely availability.

- **Enhanced Demand from End-user Industries**

An increase in demand in end-user industries such as paints and coatings, textiles, construction, food processing, personal care and home care is propelling the development of the Indian speciality chemicals market.

- **Increased Domestic Consumption**

The penetration of speciality chemicals in India is currently lower than developed economies like the US and UK, representing a huge growth potential. Additionally, rising awareness among consumers for better products will enhance demand for speciality chemicals. Speciality chemicals aid in the advancements in process technology, which enable user industries innovate better products, thus boosting the growth of speciality industry.

- **Improved Consumption Standards**

Policies and measures adopted by the government to promote the use of safe products, regulating more products and strengthening consumption standards have paved the way for the development of better products, such as solvent-based paints versus water-based paints, among others.

- **IPR Protection**

India ranks 55th out of 130 countries in the International Property Rights (IPR) Index compared to China's 59th position. In legal terms too, India ranks 71 against China's 77. This means Indian IPR protection provides better edge to the innovators against counterfeits, than Chinese legal system. This has given a boost to its R&D intensive, early technology lifecycle production.

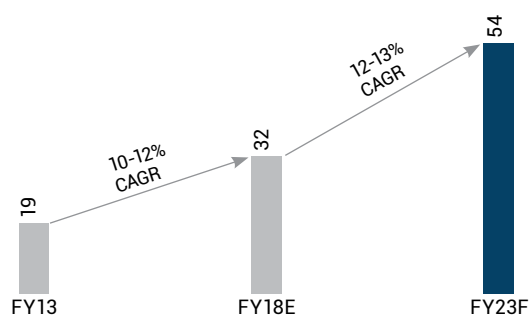
Further, leading speciality chemicals businesses are focusing on sustainability and green chemistry. With climate change posing significant risks, there is increased emphasis on sustainable raw material supply chain and reduction in carbon footprint. Sustainability is now core to business growth and market leadership and is built into product development and marketing, with innovation playing a pivotal role.

Outlook

The size of the speciality chemicals industry in India was estimated to be \$32 billion in FY 2017-18, growing at 10-12% over the last five years. The key categories include agro chemicals, personal care ingredients, polymer additives, water chemicals, textile chemicals, construction chemicals, surfactants, and flavours and fragrances. According to CRISIL, this segment is expected to clock 12-13% CAGR between FY 2018-23 driven by rising domestic consumption and exports, which translates into a \$20-25 billion opportunity.

Growth of the India Speciality Chemicals Market

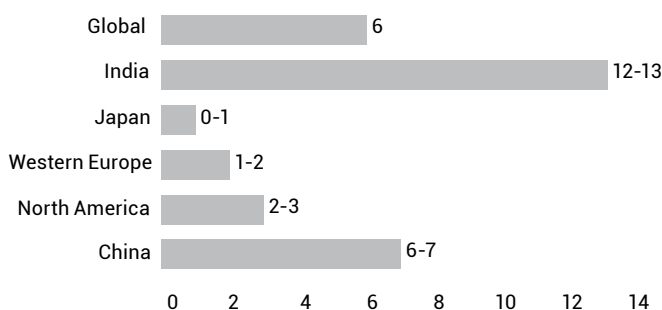
(\$ billion)



Source: CRISIL Research

CAGR from FY 2018-23

(%)



In recent years, there has been a decisive shift in the Indian speciality chemicals industry. The industry has moved away from a generic space to a knowledge-based, innovation-driven industry and speciality chemicals are witnessing increasing usage in agrochemicals, pharmaceuticals, automotive and textiles.

Key Opportunities

The global speciality chemicals market is expected to have grown at 5.4% annually between 2015 and 2020, driven by liberalised trade, process technology proliferation, lower economic barriers, rapid growth in Asia and rising standards of living in the developing world. The Asia-Pacific region has become the world's largest market for speciality chemicals in value terms, followed by North America. There is also an increasing focus on innovation, sustainability and competitiveness with leading speciality chemicals businesses looking at developing new products and expanding growth opportunities while also limiting the depletion of natural resources caused by their operations. Within this framework, there is opportunity for suppliers from countries that have had the foresight to develop ecosystems that are conducive with the emerging opportunities and India is increasingly in the forefront as a strong manufacturing location. Players with

product/process development and manufacturing capabilities; experience in aligning with innovator companies, backed by strong environment, health and safety frameworks would have the potential to benefit from this trend over the years.

The Indian speciality chemicals sector is likely to witness secular growth by expanding its range of products/chemistries/applications and moving away from upstream/commoditised products to downstream/value-added products. Further, Indian manufacturers are well positioned to tap emerging opportunities, aided by:

- 1) Strong product/process capabilities
- 2) Scalable manufacturing infrastructure
- 3) Established raw material supply chains
- 4) Culture of quality and safety adherence
- 5) Long-standing global customer relationships
- 6) Expanding R&D footprint and
- 7) The chemistry/technology talent pool available locally
- 8) Strong IP governance
- 9) Lower manpower cost
- 10) Favourable government policies

In addition, the US-China trade war and the COVID-19 related supply disruptions have prompted leading chemical players to reduce their dependence on China.

India is a natural beneficiary of these shifts. Leading Indian companies in the sector are entering into an increasing number of strategic supply contracts, which indicates that a strong traction is building up for the country – which should drive long-term benefits.

The domestic manufacturing ecosystem continues to evolve, with more chemistries and value-added processes backed by local availability of feedstock supplies emerging as a key differentiator.

Further, active support under the make in India programme, plans to roll out Production Linked Incentive (PLI) scheme, etc. would help the growth of this segment Further. The Government has prepared a Draft National Chemical Policy, which aims at growing the share of the chemicals sector in the country's GDP and increasing competitiveness. The proposed measures include setting up of a 'Speciality Chemicals Forum' to frame relevant consumer standards, impose anti-dumping duty to protect the local industry, approve up to 100% FDI in the sector and reduce the list of reserved chemical items for production, thereby driving greater investments in technology upgradation and modernisation.

COVID-19 Impact on the Speciality Chemicals Sector

The impact of COVID-19 on the speciality chemicals segment is likely to be limited. Also, as some speciality chemicals are classified as essentials, the extent of impact on production and sales was limited to lockdown-related supply chain disruptions.

Global Pharmaceuticals Industry

The pharmaceutical industry develops, manufactures and markets medications. The use of medicines across the world has grown significantly in the past decade. Globally, pharmaceutical spending stood at \$955 billion in 2019 and is expected to grow at 2-5% CAGR (2019-2024), reaching \$1.12-1.15 trillion, partly due to increased usage and partly driven by changes in the speciality and innovative product composition of new brands available in the market. The growth dynamics differ in developed and pharmerging markets (emerging markets with high pharma growth potential), especially as the latter is more volume-driven with low salience for brands.

Pharma spending in developed markets is expected to increase from \$609 billion in 2019 to \$665-695 billion in 2024, at a 1-4% CAGR. In pharmerging markets, spending is projected to grow from \$244 billion in 2019 to \$315-345 billion in 2024, at 5-8% CAGR.

The top 10 countries in pharmaceutical growth in 2024 will be the US, China, Japan, Germany, Brazil, Italy, France, the UK, India and Spain. India will make it to the list for the first time, due to better R&D and healthcare facilities, better drug accessibility, development of skilled manpower and low cost advantage of Indian manufacturers luring more international acceptance for Indian pharma players.

Source: <https://www.iqvia.com/insights/the-iqvia-institute/reports/global-medicine-spending-and-usage-trends>

Global Pharmaceutical Spending and Growth

Regions	2019 (US\$ billion)	2014-2019 CAGR (%)	2024 (US\$ billion)	2020-2024 CAGR (%)
Developed	609	3.3	665-695	1-4
Pharmerging	244	7.7	315-345	5-8
Rest of the world	102	2.6	100-130	1-4
Global	955	4.2	1,115-1,145	2-5

Source: IQVIA Global Medicine Spending and Usage Trends; IQVIA Institute, March 2020

Growth Drivers

• Rising Life Expectancy

The global pharmaceutical markets are experiencing constant growth due to the increase in life expectancy world over, driven by better lifestyles and availability of improved healthcare infrastructure.

• Increasing Chronic and Infectious Diseases

The rising spread of new chronic infectious diseases is resulting in higher spending on medicines. The recent outbreak of the COVID-19 pandemic is a case in point.

• Rising R&D Spend

Higher spend on R&D activities facilitates innovation in drug products and treatments. Leading industry players spend up to 20% of their topline on R&D activities. Moreover, the emergence of biopharmaceuticals has opened a new area in drug discovery, enabling industry players to develop more effective drugs and therapies.

Outlook

Prescription drug sales worldwide are expected to grow at a CAGR of 6.9% (FY 2019-24), with higher FDA approvals, additional sales of \$109 billion from orphan drugs and the proportion of oncology therapies rising to 19.4% of industry sales.

Indian Pharmaceuticals Industry

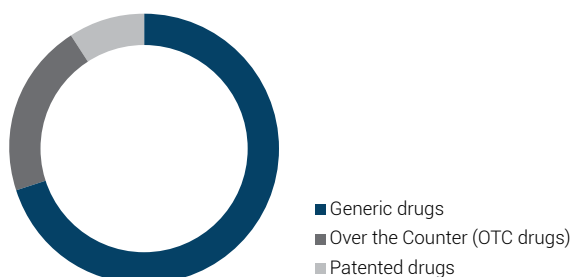
The Indian pharmaceuticals industry is one of the fastest growing sectors and is valued at \$22 billion in 2019. Over the past few years, the industry has steadily developed substantial scale to meet export demand. Total pharmaceutical exports touched \$13.69 billion in FY 2019-20 (up to January 2020), with Indian generics constituting 20% of global generics exports. In fact, India supplies over 50% of global demand for various vaccines, 40% of generic drugs in the US and 25% of all medicines in the UK.

(Source: IBEF and IQVIA)

The pharmaceuticals sector is a non-cyclical industry, which comprises formulations, bulk drugs and chemicals/intermediates. The pharmaceuticals market in India can be divided into:

- Active Pharmaceutical Ingredients (APIs)
- Contract Research and Manufacturing Services (CRAMS)
- Formulations
- Biosimilars

Composition of the Indian Pharmaceuticals Industry (In Terms of Revenue)



Growth Drivers

• Supply-side Drivers

- Cost advantage
- Availability of skilled manpower
- Major manufacturing hub for generics
- USFDA approved plants constitute 22% of the total approvals
- Increased penetration of chemists

• Demand-side Drivers

- Increasing incidence of fatal diseases
- Increased drug accessibility
- Growing penetration of healthcare
- Increased incidence of stress-related diseases due to lifestyle changes
- Availability of better diagnostic facilities

• Policy Support

- National Health Policy, 2015, focused on increasing public expenditure on healthcare
- Reduction in approval time for new facilities
- Plans to set up new pharmaceutical education and research institutes
- Price control exemption to drugs manufactured through indigenous R&D under the National Pharmaceuticals Pricing Policy (NPPP) 2012
- PLI scheme for various Pharma molecules

COVID-19 impact on the Indian Pharmaceuticals Sector

COVID-19 positively impacted the pharmaceuticals industry, as demand for preventive and hygiene products has increased sharply. However, production has been affected due to supply chain disruptions, even though pharmaceuticals are classified as essentials.

As per the National Account Statistics published by the Ministry of Statistics and Programme Implementation (MoSPI), the value added by the pharmaceuticals sector clocked 9% CAGR, from ₹0.9 trillion to ₹1.3 trillion, between FY 2011-12 to FY 2015-16. The Gross Value Added (GVA) by the pharmaceuticals manufacturing sector remained at 6-7%, while the total GVA by the pharmaceuticals sector stood at ~1% during the same period.

Company Overview

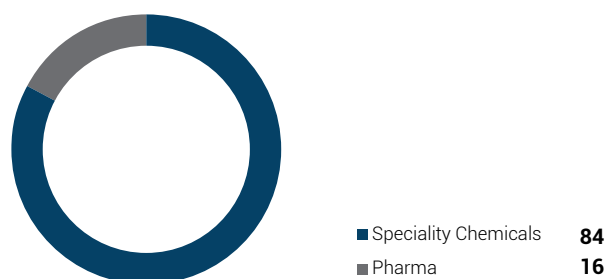
Aarti Industries Limited (Aarti Industries) is one of the most competitive benzene-based speciality chemical companies in the world. Aarti Industries is a rare instance of a global speciality chemicals company that combines process chemistry competence (recipe focus) with scaled up engineering competence (asset utilisation). Over the last decade, the Company has transformed from an Indian company servicing global markets to a fundamentally global company selecting to manufacture out of India. The Company ranks among the top five globally for 75% of its portfolio and is a 'Global Partner of Choice' for various major global and domestic customers.

Aarti Industries has a de-risked portfolio that is multi-product, multi-geography, multi-customer and multi-industry. Its 200+ products are sold to 700+ domestic and 400+ export customers spread across the globe in 60 countries with major presence in the USA, Europe and Japan. Its speciality chemicals and intermediate products find usage in pharmaceuticals, agrochemicals, polymers, pigments, printing inks, dyes, fuel additives, aromatics, FMCG and various other industrial sectors.

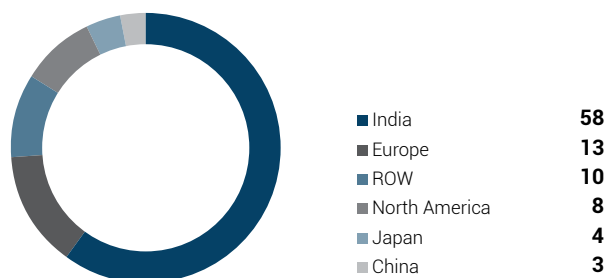
Agrochemicals, pharmaceuticals and FMCG, which are generally agnostic to economic cycles and contribute 50-60% of AIL's revenue, while other end-user industries such as polymers, pigments, printing inks, dyes, fuel additives, aromatics, etc., – which are generally dependent on global and domestic economic cycles – account for the balance 40-50% of revenue. This mix provides a steady growth opportunity and stability to Aarti Industries' business.

The Company is committed to the highest standards of health and safety with environment polices mapped to global benchmarks ensuring customer confidence and business sustainability. The Company has 14 zero discharge units and a strong focus on 'reduce, reuse and recover' across its 17 manufacturing sites.

Business by Segment (%)



Business by Geography (%)



Speciality Chemicals Segment

Speciality Chemicals is the major revenue-generating segment for Aarti Industries, contributing approximately 84% of sales in FY 2019-20. The Company has integrated operations across the benzene, sulphur and toluene product chains, and is ranked among the top three players globally for the manufacture of Nitro Chloro Benzenes (NCB) and Di-chloro Benzenes (DCB). The Company is also the only manufacturer of nitro fluoro aromatics using the Halax process and the only manufacturer of Phlyenediamines (PDA) value chain in India. Most of its speciality chemical products are primarily along the benzene-based value chain. Other chemicals such as sulphuric acid and its derivatives, single super phosphate, Toulene-based derivatives, calcium chloride granules, fuel additives and phthalates are also part of its manufacturing portfolio. Products in the speciality chemicals segment have varied applications across agrochemicals, pharmaceuticals, polymer additives, pigments and dyes industries. The various processes used in the manufacturing operations include chlorination, nitration, ammonolysis, hydrogenation, ethylation and fluoro compounding. Aarti Industries has integrated its operations across the product chain of benzene, sulphur and toluene which gives it the ability to effectively use co-products and generate value-added products.

Key Strengths

• Established Long-standing Relationships

Aarti Industries has a multi-product, multi-geography and multi-industry approach that creates substantial diversification in revenues and limits risks. This diversification strategy has ensured that no single product or customer accounts for more than 8% of revenues. The product portfolio is supported by a framework of sound manufacturing practices, high quality standards and regulatory compliance, which has led to the Company's transformation from another speciality chemicals supplier to a 'Global Partner of Choice'.

• Integrated Operations on a Global Scale

Aarti Industries operates an integrated operating model that ensures efficient utilisation of by-products from manufacturing processes as intermediates of other chemical reactions or converts them into commercially saleable products. A high level of backward and forward integration across all key value chains enables the Company to benefit from the global trend of vendor consolidation and long-term supply contracts.

• Wide Array of Growth Opportunities

Based on its presence across various end-use applications and a larger customer base, the Company has created a wide range of growth opportunities and currently exports over 40% of its products to various global locations including North America, Europe, China and Japan. It is also well-integrated into the burgeoning chemical manufacturing infrastructure in India.

• R&D Innovation Programme

Aarti Industries is a knowledge-driven Company. Its R&D investments include three state-of-the-art R&D centres. Capitalising on superior technological capabilities through knowledge transfer across several differentiated processes/chemistries, the Company has developed a strong pipeline of niche, value-added products and processes. A higher level of innovation in the product profile enables better yield and margins. This has also enabled the Company to increase revenues from downstream products where it sees less competition and creates stronger customer engagements. The recently commissioned research and technology centre in Navi Mumbai called the Aarti research and Technology Centre (ARTC) has dedicated labs for process safety, effluent treatment, flow chemistry, kilo lab, high-pressure reactors, etc. This R&D centre will scale up to 250 scientists and engineers taking the Company's research resource base to 400+ (for speciality chemicals and pharma). The centre is focused on developing a larger range of high-end value-added products and new chemistries to create niche market opportunities.

Financial Performance – Speciality Chemicals

Speciality Chemicals	FY20	FY19	FY18	FY17	FY16
Sales (₹ cr)	3,865	3980	2,985	2,569	2,430
% of total sales	84	84	78	81	81
Export (₹ cr)	1,630	1625	1,409	1,294	1,223
% of segment sales	42	41	47	50	50
Segment EBIT (₹ cr)	814	820	581	566	504
EBIT %	21	21	19	22	21

Multi-year Contracts for Supply of Chemical Intermediates

In FY 2017-18 and FY 2018-19, Aarti Industries entered into three multi-year contracts with global majors for supply of chemical intermediates.

During June 2020, the Company received a notice for termination from the customer for its first long-term contract. The Company is aware that the reason for the same is the customer's change in strategy. They now are focusing on the final formulation and would like to source the API rather than manufacturing it. The customer continues to remain confident and committed to the growth initiative as envisaged earlier and the change in strategy would help them in enhancing the solutions for end-users. Aarti Industries is strategically placed in this value chain and the assets invested shall enable the Company to continue to participate in this key agrochemical molecule, which will act as a growth driver for the Company. With the termination of this contract, the guarding provisions for compensation under the contract come into effect to safeguard the Company's interest.

Pharmaceuticals Segment

Aarti Industries has expert capabilities in the development and manufacture of several world-class products in the healthcare division. The Company has five pharma manufacturing plants, two of which are approved by the United States Food and Drug Administration (USFDA) and the remaining three are World Health Organisation (WHO) and Good Manufacturing Practices (GMP) certified. Additionally, the Company has two R&D facilities that are dedicated to the pharmaceutical business. Under its pharmaceuticals business, the Company manufactures APIs, intermediates and xanthine derivatives.

Currently, Aarti Industries manufactures various commercial APIs with 30 US Drug Master Files (USDMF), 12 Drug Master Files (DMF), of which seven are under assessment, and 18 Certificates of Suitability (CEP), two of which are under assessment.

Key Strengths**API Manufacturing Division**

Aarti Industries' API manufacturing facilities are equipped with dedicated production blocks for steroids and oncological APIs. The Company has successful backward integration processes in place of key raw materials for most of its products. This is the core strength of the API business, which enables the Company to sustain its leadership position.

Aarti Industries manufactures APIs for a wide range of therapeutic purposes including Anti Hypertensive, anti-asthmatic, anti-cancer, Central Nervous System (CNS) agents, skincare, decongestant, Anti-thalassemic, analgesic and ophthalmologic. Additionally, the Company also manufactures intermediates for over 35 APIs. The APIs are exported to regulated markets globally, including the US, several countries in the European Union and Japan.

Xanthine Division

The xanthine division has expertise in and manufactures various derivatives. These include caffeine theophylline anhydrous, aminophylline, etophylline, theobromine, etc. These derivatives are used in beverages, nutraceuticals and pharmaceuticals. Two manufacturing facilities are dedicated to manufacturing xanthine derivatives and have obtained star certifications such as Star Kosher, Hazard Analysis Critical Control Point (HACCP) and GMP for manufacturing and testing.

CRAMS division

Aarti Industries also undertakes Contract Research and Manufacturing Services (CRAMS) focused on intermediates. This is the fastest growing business segment in the healthcare division of the Company. Aarti CRAMS is one of the leading cost-competitive and quality manufacturing hubs for many global players, including big pharma companies.

CRAMS basically consists of the following two activities:

Contract Research Organisations (CROs)

Offerings

- Advanced intermediates for APIs
- Process development
- Validation batches for intermediates
- Commercial production
- Contract manufacturing services in dedicated anti-cancer block for phase 1 to final drug substance and regulatory support / quality assurance
- GMP documentation

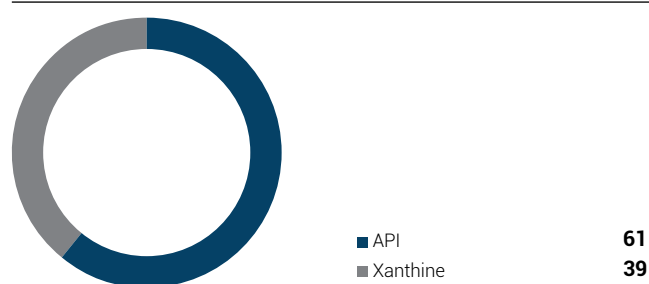
Contract Manufacturing Organisations (CMOs)

Offerings

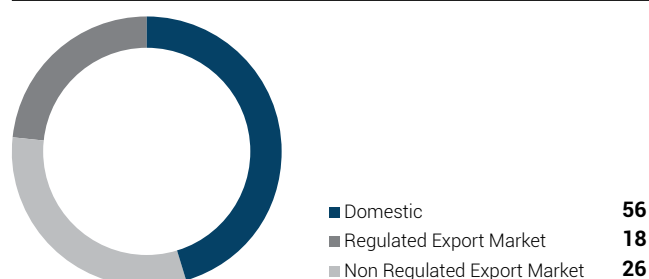
- Advanced intermediates for phase 0 to III candidates
- Development of raw materials and advanced intermediates for innovators and generic API companies
- Process development and optimisation
- Analytical method development
- Various Generic APIs and Intermediaries

The Company is working with several innovators on API intermediates opportunities.

Revenue of the Pharmaceuticals Business in FY 2019-20 (%)



Revenue from Xanthine Derivatives in FY 2019-20 (%)



Revenue from APIs in FY 2019-20 (%)



Financial Performance – Pharmaceuticals

Pharmaceuticals Chemicals	FY20	FY19	FY18	FY17	FY16
Sales (₹ cr)	756	726	556	426	426
% of total sales	16	16	15	14	14
Export (₹ cr)	335	352	248	208	193
% of segment sales	44	49	45	49	45
Segment EBIT (₹ cr)	137	113	581	566	504
EBIT %	18	16	14	11	9

COVID-19 Impact

Aarti Industries would also like to share with you an update related to the impact of the COVID-19 pandemic on various aspects of the Company's business activity.

Manufacturing Operations

Following the directives of the Central Government, the Company had faced logistics-related challenges for the movement of raw materials, finished goods, manpower, etc. As a result, the Speciality Chemical manufacturing facilities of the Company had initially gone into temporary shutdown on safe mode in a phased manner, while the Pharma business—being included in essential goods—has continued manufacturing operations throughout this period. Subsequently, based on the Company's wider product profile, which includes key ingredients to various pharma/agrochemical intermediates, are also included in essential goods. The Company, therefore, applied for permissions and was granted them to operate its pharmaceutical facilities and to enable movement of critical workforce, materials, etc. After securing the supply chain, logistics and mandatory compliance requirement, The Company resumed operations at its manufacturing units in the first half of April 2020. The units had reached operational levels of about 80% in the months of May and June 2020. While supply chain and labour availability challenges are being seen, the Company is taking adequate efforts, including revision in rates, wherever applicable, to secure resources and mitigate the threat.

Customer Demand and Movement of Materials

Over 60% of the Company's revenue comes from end-use applications such as agrochemicals, pharma, fertilisers and FMCG, which are verticals that have not seen any significant impact of the COVID-19 pandemic. Hence, the Company's business, to that extent, remains largely protected from the currently significant changes in the operating environment. Globally, the discretionary portion of customer spending in sectors such as automotive, aviation, real estate, textile, electronics, etc. is expected to remain weaker over medium term as compared to the past trajectory. In view of this, some of the Company's products with end-use applications such as polymers and additives, dyes, pigments, etc. are witnessing demand contraction. The Company expects some of these impacted sectors to have a V-shaped recovery from FY 2021-22. However, the current environment makes it difficult to accurately assess the extent of impact at this stage.

On the other hand, with rising global concerns, global supply chains are looking to hedge their risk and restructure their buying decisions to reduce reliance on supplies from China. This allows Indian manufacturers to expand their presence and market share in the global market, which is an opportunity the Company continues to pursue aggressively. Given these changing dynamics, the Company is closely monitoring the situation and will take the necessary steps to ensure optimum utilisation of its units and also identify potential growth opportunities for the long term. In this respect, the Company's large number of long-term client engagements and the wide range of products with varied applications provide the flexibility to adequately align its production with ongoing shifts in global demand.

It may also be noted that the Company expects the execution on its long-term contract to be on track and does not expect any significant impact from the COVID-19 pandemic to these contracts, production for which has been started recently. Further, the Company is facing certain challenges related to movement of materials at the port, especially at JNPT in Mumbai. The Company is monitoring the situation closely and is taking adequate steps, including exploring export routes from other alternative ports in Gujarat to prioritise its shipments.

Project Execution

On account of the lockdown announced by the central and state governments and also due to restrictions in manpower movement, migration of labour and delayed delivery of equipment, work on the Company's expansion projects had been impacted at the start of the current financial year. The Company has prioritised certain activities to manage the timelines of critical projects. While there may be some delay in the project work, on an overall basis, the long-term impact of the same is not expected to be significant. Further with the growth prospects continuing to draw traction, we expect the project pipeline for the Company to remain strong and robust over next few years.

Financial Position

The Company's financial and liquidity position remains strong, based on robust internal accruals and a well-capitalised balance sheet. The Company has continued to meet all its financial obligations on time. In addition to existing resources at its disposal, the Company has secured additional credit lines to safeguard liquidity and meet all the obligations in the future.

As an endeavour to stay committed to long-term opportunities and also to ensure that the challenges of COVID-19 do not affect to its extended arm, the Company has extended support by providing additional monetary assistance and food rations to various temporary workers/labourers whose lives have been affected due to the lockdown.

The management continues to closely monitor all key developments across various aspects of the business and is taking the necessary steps to address any impending issues. The Company remains strong on its growth targets of about 15-20% bottom line growth over next 3-4 years, despite various challenges.

Capex Initiatives

On an overall basis, the Company had performed satisfactorily in a tough year. We have invested over ₹1,150 crores in various projects and have made progress in expanding our manufacturing base, diversified our product mix, continue to invest in R&D/product/process development and have created a solid platform for ongoing business expansion.

Major Projects under Execution

Location	Details
Vapi, Kutch and Tarapur	• Various Speciality Chemicals, APIs and Pharma Intermediates
Jhagadia	• De-bottlenecking and expansions • Chlorination and Speciality Chemical Complex, • Nitration of Chloro Benzenes
Dahej	• Capex for 3rd Long term Contract Capex for 1st & 2nd long-term contracts

Aarti Industries has driven a strong return profile despite incurring significant capex over the last few years. Most recently, the Company launched commercial production at the two captive manufacturing units at Dahej SEZ in Gujarat, linked to long-term supply contracts. Revenue contribution is expected to commence during FY 2020-21 with growth in exports as both units have committed demand from overseas customers. In FY 2021-22, capacity utilisation is expected to optimise further.

The Company is in the process of expanding its capacities of nitrochlorobenzene, dichlorobenzene and certain downstream value-added products and pharma capacities. The Company expects to have an investment of about ₹1,000-1,200 crores

annually for next couple of years. Based on these plans, the Company expects to sustain growth with greater contribution from value-added products. Incremental growth investments are planned in areas such as introduction of new value chains (for instance, chloro-toulenes, etc.), along with development initiatives for new processes and niche products, which will provide long-term visibility and potential to deliver better returns.

Risk Management

Safeguarding Our Tomorrow

Doing business involves taking risks. However, to be a successful business, we need to manage those risks

efficiently. As a speciality chemicals and pharmaceuticals company, we are exposed to a wide range of factors that could act as hurdles in our growth journey. We have, therefore, set up an integrated risk management system designed to ensure the sustainability of the business through timely identification, assessment and mitigation of risks.

At Aarti Industries, we strive to foster a high awareness of business risks and internal controls to provide transparency in our operations. Our holistic risk management framework safeguards our business while propelling us on our journey of long-term value creation for all stakeholders.

Types of Risks		Mitigation Measures
	Regulatory Risk We operate in several global markets and are exposed to the risk of changing regulations.	We have remained cognisant of the importance of adopting Safety, Health and Environment (SH&E) norms. We follow the highest SH&E standards with an investment of over ₹250 crores in the last five years. We also judiciously follow the 3R principle of reduce, reuse and recycle across our sites. To be in a favourable place with European nations, we have been REACH* compliant since 2012. *Registration, Evaluation, Authorisation and Restriction of Chemicals is a European Union regulation that addressed the production and use of chemical substances, and their potential impact on both human health and the environment.
	Innovation Risk Innovation is the key to success in the speciality chemicals market to ensure sustainable growth. Risk of redundancy and losing out to competition on account of poor R&D is a major overhang.	We are a knowledge-driven company with three R&D centres – one for speciality chemicals and two for pharmaceutical APIs. Since innovation is at the heart of speciality chemicals, we focus on strengthening our technical skillset around niche applications. We have always been focused on product innovation and have bagged many awards for innovation in the field of chemical engineering. Our benchmark R&D programme comprises over 170 scientists. Our innovation programme stems from transfer of knowledge from strategic customer relationships. Strong R&D push helps innovate specialised products with unique features and generate high margins.
	Forex Risk We are spread over a significant number of geographies and hence deal in different types of currencies. We, therefore, face the risk of financial losses due to unfavourable movement in any currency.	Around 42% of our revenue comes from exports. Majority of the global sales are dominated by the US Dollar, thus reducing the risk of cross-currency volatility. We keep a close watch on the movement of the Rupee and enter hedging contracts of maturities ranging from three months to three years to protect our business.
	Raw Material Risk We face the risk unavailability of raw materials and fluctuation in raw material prices.	We have fostered long-standing relationships with our suppliers to ensure steady availability of raw materials at competitive prices. We follow a raw material-plus pricing mechanism for our various speciality chemicals. This reduces risks on margin pressure / top-line pressure in the scenario of rising input costs.

Internal Controls, Systems and Adequacy

Aarti Industries clearly laid down policies, guidelines and procedures keeping in mind the nature, size and complexity of its business operations. The Company maintains a proper and adequate system of internal controls, which provides for automatic checks and balances. The Company's resilience and focus are driven to a large extent by its strong internal controls system for financial reporting. It follows strict procedures to ensure high accuracy in recording and providing reliable financial and operational information, thereby meeting statutory compliances.

The Company's internal team and Audit Committee closely oversee the business operations. They are responsible for the design, implementation and maintenance of adequate internal financial controls to ensure the orderly and efficient conduct of business. The Committee also ensures adherence to Company policies, safeguarding of its assets, prevention as well as detection of frauds and errors, accuracy and completeness of the accounting records, and timely preparation of reliable

financial information. Any deviations are promptly reported to the management. Various mitigation measures are then implemented to keep risk exposures at comfortable levels. Timely and adequate measures are undertaken to ensure uninterrupted functioning of the business.

Cautionary Statements

Your Company may, from time to time, make additional written and oral forward-looking statements, including statements contained in your Company's filings with the Bombay Stock Exchange and National Stock Exchange, and its reports to shareholders. Your Company does not undertake to update any forward-looking statements that may be made from time to time by or on behalf of your Company. All information contained in this presentation has been prepared solely by your Company. Your Company does not accept any liability whatsoever for any loss, howsoever, arising from any use or reliance on this Annual Report or its contents, or otherwise arising in connection therewith.