26 Dec, 2022	PICK OF THE MONTH	VOL-8, NO-15
Industry: Specialty Chemicals	Aether Industries Limited	BUY
CMP: Rs.821	TARGET PRICE: Rs.1065	TIME : 12 months

About the Industry:

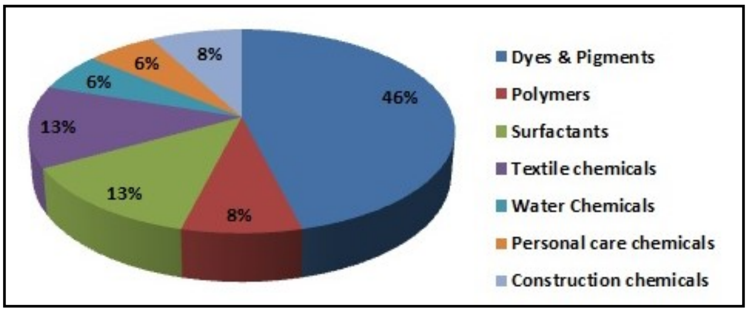
Global Specialty Chemicals Market: According to the F&S Report, the Asia Pacific (APAC) chemicals market is expected to grow at the fastest rate of 7-8%, while the mature chemical markets of Western Europe, North America, and Japan are expected to grow at a slower rate of ~3-4%. Needless to mention, specialty chemicals are **low-volume and high-value products** which are sold on the basis of their quality, utility and specific attributes which they impart to the end products while making them value-adds. The emphasis is on having specific properties or technical specifications of the specialty chemicals. On the same line as the global specialty chemicals industry; the Indian specialty chemicals industry can be divided into a mix of end-user driven as well as application-driven segments like, agrochemicals, fertilizers, dyes & pigments, construction/infratech chemicals, paints and coatings additives, water treatment chemicals, textile chemicals, flavors and fragrances, home & personal care ingredients etc. Pharmaceutical APIs (Active Pharmaceutical Ingredients), agrochemicals and fertilizers make up the two largest segments of the global specialty chemicals market or industry.

Exhibit 01: Global Specialty Chemicals Market Size (USD bn)

Source:precedenceresearch.com/specialty-chemicals-market, Progressive Research

High barriers to entry in the Indian specialty chemicals industry include the involvement of complex chemistries (for manufacturing products), rigorous product approval standards, lengthy & costly registration process, stringent quality requirement (for human consumption), need to build long-term relationship with suppliers and customers, high level of product customization, differentiated business models etc. The key trends and tailwinds in the upcoming quarters will include the increase in capital expenditure by Indian chemicals companies, increased R&D by Pharma, agrochem & specialty chemicals companies, rise of green chemicals & chemistries, trend change in chemical exports market with China +1 and Europe +1 strategies coming in to play, development of mega bulk drug parks (three in India), Make in India initiative, PLI and other government initiatives to boost the domestic manufacturing and also cut dependence on imports of critical APIs.

Exhibit 02: Indian Specialty Chemicals Segment Share



Source: Specialty Chemicals Industry in India-KPMG Nov, 2022, Progressive Research

SNAPSHOT	
52 week H / L	Mcap (INR mn)
1050/700	102,206
Face value: 10	
BSE Code	NSE CODE
543534	AETHER

Annual Performance				
(Rs mn)	FY20	FY21	FY22	FY23E
Total Revenue	3,019	4,498	5,900	7,019
EBITDA	697	1,122	1,681	2,004
EBITDA (%)	23.1	24.9	28.5	28.6
Other Income	20	40	70	202
Interest	81	113	131	92
Depreciation	74	110	155	199
PBT	561	938	1,465	1,914
PAT	396	711	1,089	1,411
Equity (Rs mn)	336	101	1,127	1,245
EPS (INR)	46.3	7.4	9.7	11.3

Quarterly Performance				
Parameters (Rs mn)	Dec-21	Mar-22	Jun-22	Sept-22
Sales (Net)	1,513	1,475	1,600	1,402
EBITDA	392	421	424	369
EBITDA (%)	25.9	28.6	26.5	26.3
Other Income	24	2	62	64
Interest	36	31	29	6
Depreciation	42	41	45	54
PAT	254	260	303	272
Equity (Rs mn)	1127	1127	1245	1245

Ratio Analysis				
Parameters (Rs mn)	FY20	FY21	FY22	FY23E
EV/EBITDA (x)	148.7	93.0	62.5	52.4
EV/Net Sales (x)	34.3	23.2	17.8	15.0
M Cap/Sales (x)	33.9	22.7	17.3	14.6
M Cap/EBITDA (x)	146.7	91.1	60.8	51.0
Debt/Equity (x)	1.5	1.3	0.8	0.6
ROCE (%)	40.2	43.5	39.0	33.3
Price/Book Value (x)	6.8	4.0	2.1	18.9
P/E (x)	17.7	9.9	7.6	72.4

Shareholding Pattern as on 30th Sept, 2022		
Parameters	No of Shares	%
Promoters	108,416,127	87.0
Institutions	12,303,165	9.8
Public	3,763,381	3.0
TOTAL	124,482,673	100.0

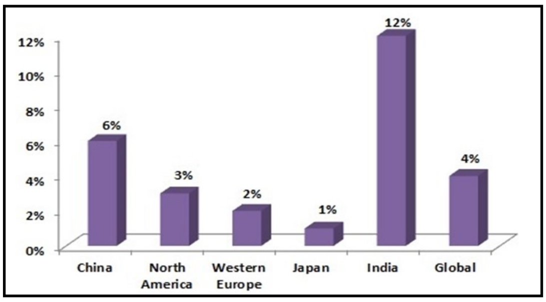
Source: Annual Report, Progressive Research

Note: Data calculated as on 23rd Dec, 2022

26 Dec, 2022	PICK OF THE MONTH	VOL-8, NO-15
Industry: Specialty Chemicals	Aether Industries Limited	BUY
CMP: Rs.821	TARGET PRICE: Rs.1065	TIME : 12 months

About the Industry (contd.): The tightening of some of the **environmental norms** has led to increase in operating costs coupled with rising labor costs, closure of some plants in the recent past as well as relocation of few manufacturing facilities are considered as significant production costs which the Chinese companies will continue to tackle. This situation is providing a **chance to Indian manufacturers** to strengthen their position in the global supply chain and become a viable alternative for those global players who seek to de-risk supply chains. Due to the China +1 offshore strategy, manufacturing capacities have started shifting to cost efficient markets with strong technology capabilities like India. Many analysts also believe joint ventures or technology transfers will drive the knowledge wave for the Indian industry and this will also help increase India's opportunities to capture larger market share. In addition to this, India has some integral growth drivers like increasing local demand, significant exports with room to expand as well as significant imports for domestic substitution. All these factors augur well with the various initiatives and PLI push which the GOI has been providing to the industry. There is an intensifying trend seen in the chemicals industry to shift towards **green chemicals** and/or sustainable chemistry products which are biodegradable, provide better performance or functionality and environmentally benign (throughout its lifecycle) till the disposal of the molecules. The evolution of green chemistry is anticipated to be a critical trend which will fuel the growth of the green chemicals market. As per F&S Report; the value of the global green chemicals market is expected to grow at a CAGR of 10.5% from ~USD27bn in 2020 to ~USD40-50bn by 2025.

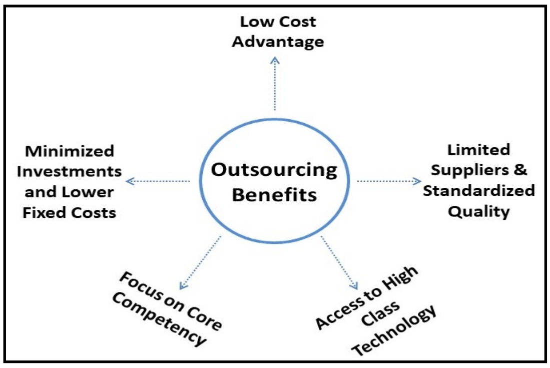
Exhibit 03: Specialty Chemicals CAGR Growth



Source: Specialty Chemicals Industry in India-KPMG Nov, 2022, Progressive Research

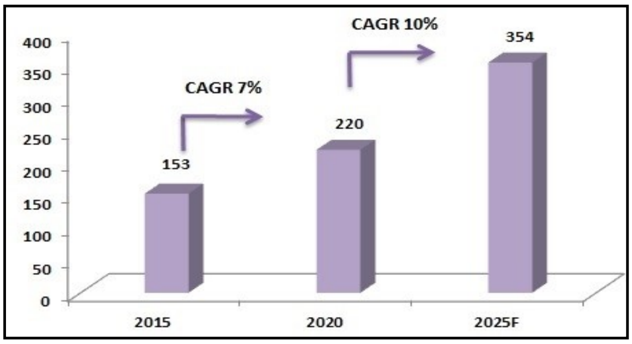
Global CRAMS Industry: Contract Research and Manufacturing Services (CRAMS) is basically **outsourcing services** or products including APIs, intermediates and formulations to low cost providers and manufacturers like China or India with utmost care taken to maintain quality standards as well as meeting the necessary international regulatory norms like the USFDA, Australian-TGA, UKMCA, EMEA etc. According to F&S, the global market for CRAMS (global specialty chemicals contract manufacturing) was valued at ~USD220bn in CY20. The Chinese and the Japanese market accounted for ~15% and 8-9% of global market (by value terms), the Indian market accounted for ~5% (~USD10.1bn) of the global CRAMS market while the North American and the European Union countries accounted for more than 60% market share. The major CRAMS players (fine chemicals business) include Quintiles, Covance, Catalent, Paraxel, Lonza, Charles River Lab, Patheon etc. CRAMS is also used for contract synthesis of agrochemicals (technical grades or active ingredients), intermediates & specialty chemical products, fine chemicals like API etc. Some of the major factors which augur well for the growth of the pharmaceutical CRAMS market include the improvement in healthcare infrastructure & technological innovations in the drug development processes in developing countries such as India, China, Mexico, Brazil etc. As a result of this, Pharma giants from developed countries are outsourcing the research and manufacturing operations to vendors in developing nations where availability of cheap labour makes them a hot spot. In addition to this, the number of USFDA approved manufacturing plants in developing countries is also increasing which encourages outsourcing from these nations.

Exhibit 04: Outsourcing Advantages



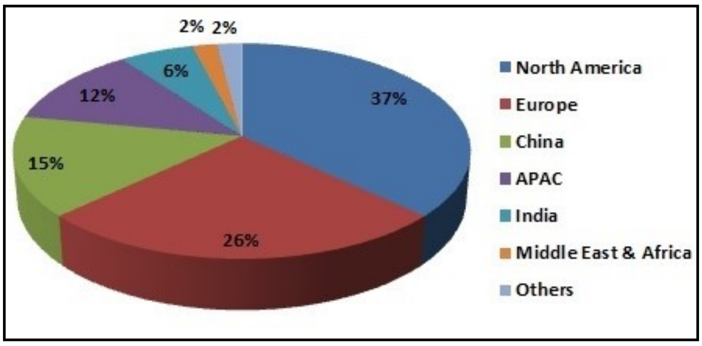
Source:economictimes.indiatimes.com/markets/companies/a-wind-of-change-is-starting-to-blow-in-pharma-manufacturing/,Progressive Research

Exhibit 05: Global CRAMS Market Size (USD bn)



Source: Frost & Sullivan May 2022 Report, Progressive Research

Exhibit 06: Global CRAMS Market By Region (2020)

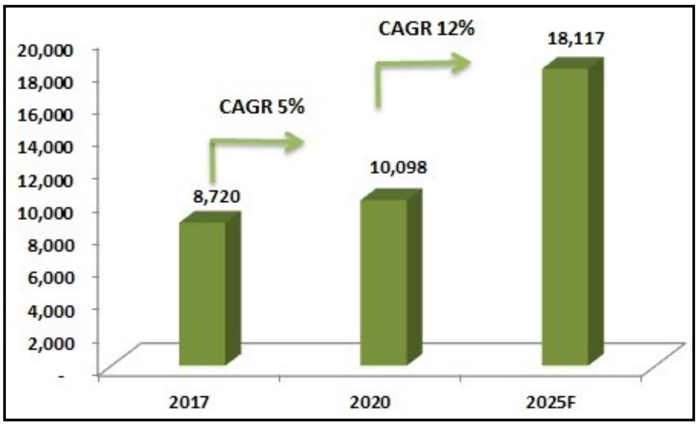


Source: Frost & Sullivan May 2022 Report, Progressive Research

About the Industry (contd.):

The Indian CRAMS Industry: India is gradually becoming a **preferred destination** for outsourcing research as well as manufacturing activities. The current and new age CRAMS providers are not only able to cater to the demand of the Pharma clients; but also able to fulfill requirement of players related to biotech, agrochemicals, nutrition, animal health, consumer goods etc. Currently, India is a frontrunner in the number of FDA approved manufacturing sites outside the US and is a leader in the bulk drug manufacturing market as well. Indian CRAMS companies hold a competitive edge across the global Pharma industry in being the most preferred partners for drug development and manufacturing. A wide range of product mix, high-end research services, biologics, complex technology services (offered at a low cost), the right scale, capacities, systems and infrastructure will help the integrated service providers capture a larger share of the innovator manufacturing opportunities. Some of the major factors which will lead to growth of the Indian CRAMS industry will be driven by **low cost** of setting up a facility in India which can attract many global giants to collaborate with local CRAMS players; there are a number of **USFDA approved manufacturing sites** (~300) in India which can support the growth of the Indian CRAMS industry. As per F&S Report, it is estimated that ~USD252bn worth of drug sales are likely to get **off-patent** from CY20-26 and many Indian companies are well placed to capture this opportunity; The Indian government is also trying to help the CRAMS development by signing some **intellectual property treaties**; India has an **abundant pool of professionals** working for drug development and research due to an enormous base of pharmacists and chemistry post-graduates. The Indian CRAMS market is expected to grow at a CAGR of approximately ~12% from USD10.1bn in CY20 to USD18.1bn in CY25; while the Indian market share is anticipated to be more than 5% of the global CRAMS market by 2025.

Exhibit 07: Indian CRAMS Market (USD mn)



Source: Frost & Sullivan May 2022 Report, Progressive Research

Exhibit 08: Indian Market Size

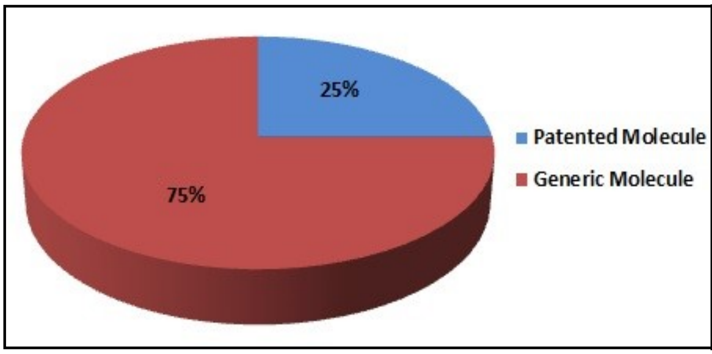
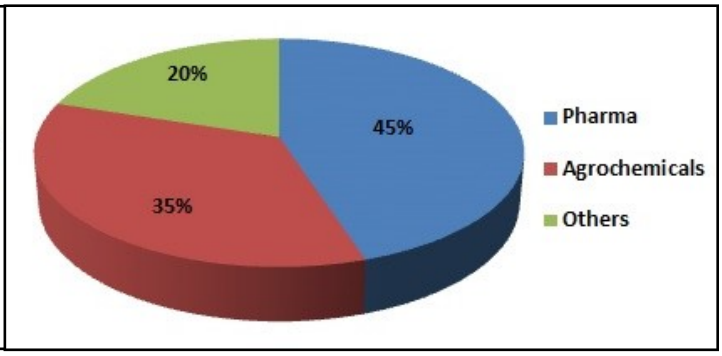


Exhibit 09: Indian Market Share



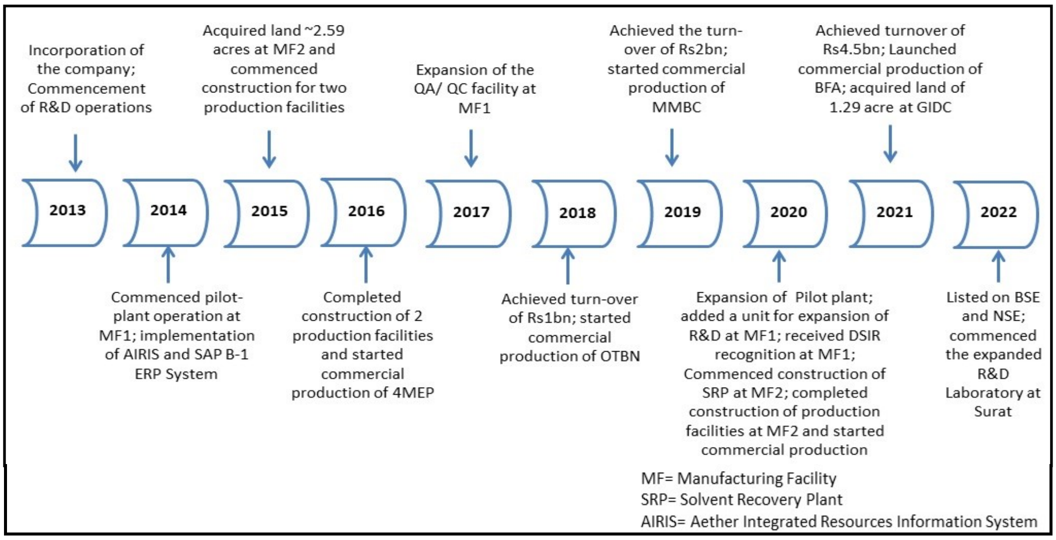
Source:economictimes.indiatimes.com/markets/companies/a-wind-of-change-is-starting-to-blow-in-pharma-manufacturing/, Progressive Research

About the Company:

Started in 2013 with a vision to create a niche in the global chemical industry; Aether Industries Limited (Aether) is a speciality chemical manufacturer focused on producing advanced intermediates and speciality chemicals. The *word Aether means pure in Greek and infinite in Sanskrit.* The company has a good **blend of creative approach** towards chemistry, technology and systems which can help enable sustainable growth. As per F&S Report (May 2022), Aether is one of the fastest growing specialty chemical companies in India, growing at a CAGR of ~43.1% between FY19 and FY22. The company has been following distinct criteria for choosing products based on chemical complexity, niche applications, limited competition, scalability and commercial potential. These processes involve complex as well as differentiated chemistries and/or technology core competencies. The company in the past has developed (and continues to develop) advanced intermediates & speciality chemical products with applications in the Pharma, agrochemicals, material science, coatings, high performance photography, additives and oil & gas. In FY20-21, Aether was the sole manufacturer (in India) for 4MEP, MMBC, T2E, OTBN, NODG, DVL and Bifenthrin Alcohol. The company has an experienced and senior Management team with extensive domain knowledge spearheaded by the Managing Director Mr. Ashwin Jayantilal Desai. In addition to this, the company also has career-technocrats like Dr. James Ringer, Mr. Raymond Roach, and Dr. Norbert Fluggen in its senior Management team. As of March 31, 2022, the company had 719 employees (excluding trainees) and more than 150 contract workers and trainees. The company does not have any subsidiary, associate or joint venture entities.

About the Company (contd.):

Exhibit 10: Milestone



Source: Aether AR2022, Aether RHP, Progressive Research

Majority of the products manufactured by the company are exported to more than 18-20 countries, including Italy, Spain, Germany, US etc. In a very short span of time (since its commercial launch), Aether has built three business models i.e. large scale manufacturing (LSM), CRAMS and contract / exclusive manufacturing. Aether has an ultra-modern R&D centre and world class pilot plant at its manufacturing facility (MF) site 1 and production plant at MF site 2. MF site 1 is ~0.86 acre facility which includes R&D facilities, analytical sciences, pilot plant, CRAMS facility and the hydrogenation facility. MF site 2 is ~2.6 acres with an installed capacity of 6,096MT (SRP Plant: 13,140MT) per annum and is the large-scale manufacturing facility of Aether. The new production facility work is in progress at MF site 3 (which is diagonally opposite to MF site 2). The production lines are anticipated to be live by January 2023 where stepwise production of the five new advanced intermediates (pharmaceutical applications) is expected for the LSM site 3. In February 2022, the company inaugurated its in-house SRP, which is a continuous distillation plant which has helped the company increase its bottom line via savings in energy costs and fetch better yields. All the R&D, pilot plant, CRAMS and LSM facilities are capable of switching between batch and continuous process technology. The facilities employ advanced technologies and systems such as continuous reaction technology, advanced batch reaction technology, high pressure reaction technology, fixed bed reaction technology (liquid/gas phase), cryogenic reaction technology, distillation technology (wiped film and short path); and distillation technology (high vacuum and fractional). The state-of-the-art **pilot plant** is a vital link between R&D and large-scale production. The pilot plant helps generate critical scale-up data in the transition from R&D to production and it also functions as a standalone manufacturing facility for low volume, high value products for CRAMS customers. The pilot plant includes a wide range of reactor and downstream equipment (in both continuous and batch processes) across the entire range of scale-up volumes, metallurgy, and process parameters automated through distributed control system (DCS) process automation. The pilot plant and CRAMS operations use a Siemens PCS7 DCS and the manufacturing facility uses a Yokogawa Centum VP DCS. The company is ISO 9001: 2015, ISO 14001:2015, ISO 45001:2018, ISMS 27001:2013 and Indian GMP certified.

Investment Rationale

(A) Operational Pillars:

The **products manufactured** by Aether are advanced intermediates and speciality chemicals that occupy a position in the chemical industry value chain between commodity chemicals and final actives & formulations which are closely aligned to **higher value range**. These products are more or less further away from the commodities but closer towards the final active part of the value chain. The company has three business models in which they operate i.e. (i) large scale manufacturing of intermediates and speciality chemicals; (ii) contract research and manufacturing services (CRAMS) and (iii) contract/exclusive manufacturing. These business models benefit from each other and have classical synergies for e.g., customers to whom Aether sells their intermediates and speciality chemicals are also target customers for CRAMS and contract manufacturing business models. The company tries its best to convert R&D (CRAMs) opportunities provided by the clients into LSM projects where value engineering, developing innovative processes and undertaking core competency chemistries helps the company have assured product off-take and better margins. The company continuously explores opportunities for the existing products or processes. Since **R&D is the heart of the operations at Aether**; the company tries to stand differentiated by developing in-house innovative processes, which provide better leverage (in terms of pricing with the customers). The company focuses on value engineering (of process and chemistry) to enter into new value chains and replace the low value products with high value products in the same chemistry. This also enables Aether to service customers' needs and also increase its wallet share. The company focuses on early stage process innovation for MNCs to help capitalize on the complete lifecycle of products and tries to be the initial suppliers for such customized speciality chemicals. The company is also trying to leverage its already existing long term customers and relationships to fetch repeat orders as well as capitalize on the **cross-selling opportunities**.

(A) Operational Pillars (contd.):

(i) LSM Operations: The company has stringent criteria for selecting products for LSM business. **Targeting competencies** rather than products gives Aether the flexibility to switch products in a short period. The **8X8 matrix** of competencies in chemistries and technologies opens up a large number of opportunities. The contribution of the LSM business is anticipated to increase by the end of the fiscal year with new product launches in the upcoming greenfield MF site 3. These products are of high value and have a significantly high demand in the current market scenario already. In addition to this, the R&D future molecules are strong with launch plans in all three business models in the upcoming years, in site 4 (in Surat) and site 5 (Panoli) greenfield manufacturing sites as well. The company is already advancing well with the initial, civil construction, product selections, regulatory approvals, overall design etc.

(ii) CRAMS: Under this business, the services outsourced to the customers include contract research, pilot scale-up services, contract manufacturing, full time equivalent (FTE) services, technology development, process development and process optimisation. The state-of-the-art pilot plant has dual functionality and also gives competitive advantage to generate critical scale-up data (transition from R&D to production) and it also functions as a standalone manufacturing facility for low volume, high value products. Some of the molecules developed in the CRAMS business have the potential to convert into regular commercial supplies and can later become LSM products for the company. **The CRAMS business allows** Aether to work with innovative companies on **cutting-edge new products** which ultimately help enhance R&D skill sets to develop own products. Increasing the production via contract manufacturing business allows the company to benefit from larger scale production and negotiating better prices. The company is looking at ambitious prospects for current products as well the future products in the **CRAMS business**, which is a robust revenue generating business model.

(iii) Contract Manufacturing/Exclusive Manufacturing: Aether is also involved in manufacturing products under a contractual supply agreement based model for both short and long term contracts and also involves exclusive and non-exclusive arrangements.
In the recent quarters; the company has been witnessing smart upticks in the growth of the CRAMS and Contract/Exclusive Manufacturing business models. The company is already seeing a significant upward trend in the inquiries, customer additions, contract renewals, and actual business being translated into revenues. In Q2FY23, the CRAMS business model has grown by ~69% (y-o-y basis) while the Contract/Exclusive Manufacturing business model has grown by ~112% (y-o-y basis).

(B) R&D: The specialty chemical industry perceives a **high barrier to new entrants** due to complex production processes requiring high levels of technical knowhow and R&D capabilities. The foundation of Aether is the in-house R&D capabilities for chemistries, technologies, core competencies, design & engineering and all the products developed have been the differentiating factor for Aether to attain leading market positions for certain products. The R&D team at Aether has vast experience while catering the top global players in agrochemicals, Pharma and chemical companies. As on 31st March, 2022**,** the product portfolio comprised of over 25 products which were marketed to ~34 global customers in 18 countries and to ~154 domestic customers. The company has been able to achieve the current market position via developing these differentiated processes which has helped Aether optimize the use of conventional raw materials, improve atom economy, enhance yields, reduce effluent discharge, increase cost competitiveness etc. The strength of the R&D team has increased from 164 in March 2022 to 193 in September 2022; four new senior scientists including three PhD project leaders are intended to be inducted to the team. On 11th October 2022, the company completed **the capex of newly expanded R&D Center.**

The dedicated in-house R&D facilities and the pilot plant is located at MF site 1 in Sachin. Some of the examples of the **chemistry core competencies** include Grignards, organolithium & other organometallic chemistry, ethylene oxide & isobutylene chemistry, hydrogenation, catalysis (homogeneous and heterogeneous), cross coupling chemistry, metathesis/polymerization chemistry etc. Some of the examples of the **technology core competencies** include continuous reaction technology, high pressure reaction technology, fixed bed reaction technology, DCS process automation and high vacuum distillation technology. The team also continues to focus on producing advanced intermediates and speciality chemicals involving complex and differentiated chemistries.

Aether has expertise in a number of chemistries and processes including:

Grignards and Organolithiations: Grignards (soft organometallic carbanions) and organolithiums (hard organometallic carbanions) help the formation of innumerable and diverse C-C bonds and Aether's scientists have mastered these chemistries

Ethylene Oxide Chemistry: is a reactive and useful building block which furnishes an array of intermediates (under carefully controlled conditions). Aether harnesses these chemistries for the production of value added fine and specialty chemicals

Tandem Grignard/Ethylene Oxide: is a complex combination reaction where Aether has the strongest competencies for most direct and atom economical route for manufacturing value added phenethyl alcohols and related intermediates

Isobutylene Chemistry: is the smallest and the cheapest protecting group available in the chemical industry where the scientists of Aether have not only mastered synthetic routes but have leveraged this competency towards aromatic tert-butylations as well as complex peptide synthesis

(B) R&D (contd.):

Hydrogenation: is addition of hydrogen across a site of unsaturation while being an extremely versatile, economical, green and sustainable chemistry

Asymmetric Hydrogenation: is the chemistry for inducing chirality (non-superposable on its mirror image) and Aether has delivered chiral center with the highest optical purity to its customers

Heterogeneous Catalysis: The norm in bulk chemical manufacturing, heterogeneous catalysis remains the forte of a very few in fine and specialty chemical manufacturing (other than hydrogenations). Aether's scientists consider heterogeneous catalysis in their route selection, often leading to routes which are significantly more atom economical, direct, and sustainable

Exothermic Chemistry: involve lithiation, nitration, sulfonation, chlorosulfonation, chlorination, bromination, and diazotization which are exothermic, instantaneous, hazardous, and are ideal candidates for adapting to continuous or flow reaction technology

Cross Coupling Chemistry: are widely used for C-C and C-N bond forming reactions

Olefin Metathesis/Polymerization: are used to break and make the ubiquitous C-C double bond where Aether uses numerous metathesis processes utilizing Grubbs/Schrock catalysts up to pilot plant scale

Exhibit 11: Product Categorisation

Product	Industry Application	Global Market Position	India Market Position	Launch	Chemistry and Technology Employed
4-(2- Methoxyethyl) Phenol (4MEP)	Metoprolol Succinate/ Metoprolol Tatrate	Largest manufacturer in the world (with 28% market share in CY2020)	Only manufacturer in India	Dec-16	Employs Grignard, ethylene oxide, and isobutylene as the core chemistry competencies; continuous reaction and fractional distillation as the core technology competencies for this product with high entry barriers as the process is very complex and the demand is quite niche
3-Methoxy-2-Methylbenzoyl Chloride (MMBC) (2)	Methoxyfenozide	Second largest manufacturer in the world (with 14% market share in CY20)	Only manufacturer in India	Sep-19	Deploys Grignard and carbon dioxide coupling as the core chemistry competencies; continuous reaction and high vacuum fractional distillation as the core technology core competencies
Thiophene-2-Ethanol (T2E)	Clopidogrel, Ticlopidine APIs	Largest manufacturer in the world (with nearly 50% market share in CY20)	Only manufacturer in India	May-17	Deploys Grignard and ethylene oxide as the core chemistry competencies; continuous reaction and fractional distillation as the core technology competencies
Ortho Tolyl Benzo Nitrile/4'-Methyl-2-Cyanobiphynyl (OTBN)	Valsartan, Telmisartan, Olmesartan, Losartan, Candisartan APIs	Market share of 8% in CY20	Only manufacturer in India	Dec-18	Deploys Grignard and coupling as the core chemistry competencies; continuous reaction and fractional distillation as the core technology competencies. Aether has improved the Grignard reaction and has also established a continuous recovery and recycle process for the THF solvent, to increase the yield of production and to improve the overall process economics
N-Octyl-D-Glucamine/ 1-Deoxy-1-(Octylamino)-D-Glucitol (NODG)	Coating additive, speciality monomer, electronic chemical	Second largest manufacturer in the world (with 13% market share in CY20)	Only manufacturer in India	Jul-15	The production process includes hydrogenation of n-octylamine with D-glucose to produce N- n- octyl-D-glucamine
1-2-(2Hydroxyethoxy) Ethyl Piperazine (HEEP)	Quetiapine, Hydroxyzine APIs	Largest manufacturer in the world (with 34% market share in CY20)	One of three major manufacturers, only manufacturer in India to be back integrated into key raw material	May-18	Deploys ethylene oxide as the core chemistry competency and continuous reaction (with in-house continuous dry HCl gas generation plant) as the core technology competency. Amongst all 3 Indian manufacturers of HEEP, Aether is the only backward integrated manufacturer
Delta-Valerolactone (DVL)	Coating additive, speciality monomer, electronic chemical	Second largest manufacturer in the world (with 13% market share in CY20)	Only manufacturer in India	Sep-16	Deploys heterogeneous catalysis as the chemistry core competency; continuous reaction technology, fixed bed reaction technology, gas phase reaction technology, and high vacuum fractional distillation as the technology core competencies
Bifenthrin Alcohol	Bifenthrin	Negligible	Only manufacturer in India	Aug-21	Deploy Grignard and coupling as the key chemistry competencies; continuous reaction and high vacuum fractional distillation as the key technology competencies

Source: Aether AR2022, Aether RHP, Progressive Research

(B) R&D (contd.):

The upcoming growth for the intermediate, speciality chemical products and the overall business is anticipated to be led by sustained demand by the end user customer segments in India and some key global markets. The company intends to reap the benefit from the already established relationships with multinational, regional and local customers while introducing new products with varied applications across industries. The Management has **planned the following products** for FY23 i.e. Dolutegravir (anti-retroviral to treat HIV/AIDS), Carbamazepine (anti-epileptic), Oxcarbazepine (anti-convulsants), Memantine (treats symptoms of Alzheimer's) and Ambroxol (treatment of respiratory disease). The R&D team continues to explore new core chemistry and technology competencies to add new value product lines for e.g., the R&D team is evaluating the possibilities of adding **fluorination** as a core chemistry competency and **photochemical reaction** technology as a core technology competency. Another segment which the company is actively considering is the advanced **organic silicone products** market, which has high end high value applications in material sciences, coatings, advanced electronics etc.

(C) Products: According F&S Primary Research & Analysis (in 2020), Aether was the largest manufacturer of 4MEP, NODG and T2E globally in terms of production volume and the only manufacturer of this product in India; the largest manufacturer of HEEP in India and globally in terms of production volume. Aether is one of the few companies (in the specialty chemicals sector in India) with continuous reaction technology as a core technology competency (at all developmental stages of the product i.e. R&D, Pilot Plant and large scale manufacturing). The company specializes in core chemistries like Grignards, organolithium, organometallic chemistry, ethylene oxide and isobutylene chemistry, hydrogenation, catalysis (homogeneous or heterogeneous), cross coupling chemistry and metathesis/polymerization chemistry. Some of the examples of technology related core competencies include continuous reaction, high pressure reaction, fixed bed reaction, DCS process automation and high vacuum distillation technology. Many of the products manufactured by Aether find application in a number of therapeutic segments in Pharma industry including hypertension, anti-platelet, anti-psychotic, anti-histamine and non-steroidal anti-inflammatory drugs (NSAIDs). In addition to this, many of the products also find application in material science, coatings, high performance photography, additives, oil & gas etc. Most of the advanced intermediates and speciality chemicals product portfolio was developed for the first time in India and were more or less 100% import substitution, thus favouring the **Make in India** campaigns of GOI (Source: F&S Report, May 2022).

The customers list includes over 160 multinational, global, regional and local companies. This list includes **Indian Pharma** companies like Aarti Drugs, Alembic Pharmaceuticals, Atul Bioscience, Cadila Healthcare, CTX Lifeciences Pvt. Ltd, Divis Laboratories, Dr. Reddy's Laboratories, Granules India, Hetero Drugs, IOL Chemicals, Ind-Swift Laboratories, IPCA Laboratories, Laurus Labs, Lupin, Mankind Pharma, Neogen Chemicals, and MSN Laboratories Pvt. Ltd; **Global Generic Pharma** companies like Moehs Iberica SL (Spain), Microsin SRL (Romania) and Dr. Reddy's Laboratories (India and Mexico); **Global and Domestic Generic Agrochemical** companies like Adama Agan (Israel), Adama Makhteshim (Israel), Deccan Fine Chemicals (India) and UPL Limited (India); **Global Oil and Gas** companies like Aramco Performance Materials LLC (US/Saudi Arabia); **Global Material Science/Coatings/Speciality Polymer companies** like Altana AG (Germany), BYK Chemie GmbH (Germany) and Avient Corporation (UK); **Global Textile** companies like Milliken & Co. (USA); **Global High Performance Photography** companies like Polaroid Film BV (Netherlands); **Global Marketing and Trading** companies like Austin Chemical Company, Inc. (USA) and Connect Chemicals GmbH (Germany); **Global and Domestic Chemical** companies like Ningbo Noubai Pharmaceutical Co. Ltd (China), Saurav Chemicals Limited (India), Neogen Chemicals Limited (India), and IOL Chemicals and Pharmaceuticals Limited (India); **Global Organometallic and Halogenated Chemistries** company Tosoh FineChem Corporation (USA).

Aether specialises in speciality chemicals and advanced intermediates products based on complex chemistry and technology. At the beginning of FY23, Aether was looking at launching 5 new intermediate products (first time in India) in the LSM division and has already launched one advanced intermediate for API ambroxol (treatment of respiratory disease). The company is also working to launch advanced intermediates for carbamazepine (anti-epileptic) and oxcarbazepine (anti-convulsant). The other two advanced intermediates for APIs dolutegravir (anti-retroviral to treat HIV/AIDS) and memantine (treats symptoms of Alzheimer's) are anticipated to be launched by FY23 end. The company plans to continue to expand its product portfolio with its existing competencies and adding new competencies as well. It plans to commercialise 4-5 products each year, going forward as well. The company has been catering to **niche intermediates** which also lead to the concentration risks associated with the product as well as the customers catered. However, the company also enjoys relationships in excess of 5 years with 7 out of the top 10 customers. The products manufactured by the company are advanced intermediates and speciality chemicals that occupy a position in the value chain between commodity chemicals and final actives and formulations with products more closely aligned to the higher value range. In addition to this, Aether is known to have a strong market positioning in complex intermediates where global competition is intense. The company has an advantage over new entrants as Aether delivers **quality products consistently** as compared to new entrants who may require making significant investments and also enduring a long gestation period with potential customers.

Investment Rationale (contd.):

Exhibit 12: APIs, Intermediates and Actions

	Class/Family	Action	API	Intermediate
Pharma	Anti-hypertensive	Prevent heart failure, kidney failure and acute stroke	Metoprolol	4MEP
	Anti-hypertensive- Class Sartans	Good anti-hypertensive effect and drug tolerance	Valsartan, Irbesartan, Telmisartan, Losartan	OTBN
	Anti-psychotic	Treating Psychosis	Quetiapine	HEEP
	Anti-histamines	Inhibit the action of histamine	Hydroxyzine	HEEP
	Anti-platelet	Platelet agglutination inhibitor	Clopidogrel	T2E
	NSAID	Analgesics- Reduce Inflammation Pain	Dexketoprofen and Naproxen	NODG
Other API				
Pharma	Dolutegravir	Anti-retroviral Medication	Dolutegravir	-
	Carbamazepine	Prevent and control seizures	Carbamazepine	-
	Oxcarbazepine	Anti-convulsant	Oxcarbazepine	-
	Alzheimer's Drugs	Alzheimer's	Memantine	-
	NSAID	Treatment of moderate or severe pain	Ketorolac	-
	Imipramine	Tricyclic synthetic antidepressant	Imipramine	-
Agro Chemicals	Methoxyfenozide	Insecticide	Methoxyfenozide	MMBC
	Bifenthrin	Insecticide	Bifenthrin	BFA
Spcl Chemicals	Delta-Valerolactone	Production of Polyesters	Delta-Valerolactone	DVL

Source: Aether AR2022, Aether RHP, Progressive Research

(D) For Brighter Future: For future growth, the company is looking at opportunities **for strategic acquisitions** in the US and EU (for R&D and manufacturing assets) that are expected to be in line with the existing or desired competencies. In addition to this, the company is also looking for opportunities to acquire businesses to either add additional chemistry or technology competencies (e.g., photochemistry) or to add business segments where the company is currently not present (for example, cytotoxic compounds, advanced silicone products or active pharmaceutical ingredients and formulations), which has high-end high-value applications in material sciences, coatings, advanced electronics and other similar applications. The Management is also focusing on identifying acquisition targets. In November 2022, the company executed a long-term master supply agreement (MSA) with Europe **based Polaroid** which is the holding company of the global Polaroid group of companies best known for its instant photography products. The MSA includes assistance in the areas of R&D and manufacturing services for Polaroid Film as well as Polaroid Sciences (new chemistry in fields of sustainability and medical use), thus proposing the groundwork for building on the current business as well as creation of new research and supply agreements. The MSA anticipates (based on historical data of the existing supply agreement) an overall revenue of USD15mn (~Rs1215mn) over the partnership period of minimum 3 years. *The revenues from additional research and supply agreements with the Polaroid Sciences division are not yet included.* This partnership is anticipated to contribute to the CRAMS business of Aether Industries which has already seen a growth of ~68% on a y-o-y basis. The Management of Aether is considering this new MSA as an important milestone in the history of R&D between Aether and Polaroid. The duo has already enjoyed a successful partnership for several years including a significant multi-year supply agreement which was inked in 2019. The two have already built considerable value together and intend to continue growth over the next 3 years. The Management believes CRAMs projects can lead the route to strategic associations for commercial LSM of products and possibly introduce additional manufacturing capacity. The company intends to increase its wallet share with long term customers while selling baskets of products as also leverage the existing sales and marketing network and diversified product portfolio with new multinational, regional and local customers. Aether continues to expand globally to serve the existing direct end-use customers as well as secure new direct end-use customers to expand the reach in new markets. The company is looking at having dedicated sales & marketing teams in certain focus geographies like North America, South America and Europe and also increase the number of global stock points to ensure timely delivery of products.

Investment Rationale (contd.):

(D) For Brighter Future (contd.):

The company is involved in developing products that are not only manufactured for the first time in India but also imported into India from China (before Aether manufactured them) in India. By developing these products the company is giving a fierce competition to Chinese manufacturers of these speciality chemicals. While supporting the idea of Make in India, the company has well supported the China +1 concept as well. Aether has been able to compete with Chinese manufacturers as the company can cater to small to large orders in a short period of time to clients who had to previously wait months with ease of communication, payment terms coupled with easy access to manufacturing facilities for audits and other purposes.

Aether focuses on sustainability by emphasizing on quality, environment, health and safety **(QEHS)** while maintaining high standards of consistent quality, efficacy, safety and adhering to global quality standards. The products manufactured go through various quality checks at various stages of production. Some of the key customers of Aether have audited and approved the manufacturing facilities and manufacturing processes. The company has set stringent environmental standards which meet regulatory requirements. The manufacturing principles and technologies focus on green chemistry or sustainable chemistry by employing cleaner chemistries, semi-continuous or continuous reaction technologies, automation in processes, optimize use of non-toxic raw materials and lower effluent generation. The company has installed a 100KLPD in-house zero liquid discharge (ZLD) plant, which includes primary & secondary chemical neutralization, triple stage multiple effect evaporator (MEE), multiple mechanical vapor recompression (MVR) plants, multiple agitated thin film evaporators, multiple reverse osmosis (RO) plants and a soil biotechnology platform with ozonation. In addition to this, the company has also issued a purchase order for the construction of a 16MW solar power generation plant (capex of ~Rs651.59mn financed by internal accruals) in Bharuch, (Gujarat) to provide electricity to the current operational manufacturing facilities has been commissioned in Q2FY23 and has already shown 85% output in the initial months itself. This will help save electricity load and thereby set off 24,000 tons of carbon dioxide per annum. The company has a complete waste management SOP (SOP-ET-020-handling, storage & waste disposal and SOP-HR-003- housekeeping) in place to address the waste management compliances.

Financials:

In a very short period of incorporation (~9 years) and ~5 years into commercial manufacturing; Aether has reached a revenue of ~Rs5,900mn in FY22, which is a good achievement for any speciality chemical intermediate player while reporting healthy return ratios. **R&D** has been critical to the success of Aether and has been a differentiating factor when compared to other competitors. The investments made by the company in R&D continue to remain high and are anticipated to be more or less in the range of 6.0-8.5%. In pursuit of the same, the company continues to participate in the pipeline of molecules for many speciality chemical players. On an average the LSM business contributed ~67% of the total turnover, CRAMS ~8% and contract/exclusive manufacturing 24%. The Management is seeing immense potential for the CRAMS business. In Q2FY23, ~52% of the total topline came from the LSM business model; ~13% from the CRAMS business, while ~33% from the contract/exclusive manufacturing business. In FY22, India (domestic sales) accounted for 35.30%, India (deemed exports) accounted for 17.50%, India (SEZ sales) accounted for 6.00% while the rest accounted for exports. In Q2FY23 exports stood at ~48.5% (including deemed exports and SEZ sales); exports outside the geography of India, accounted for ~36% of the total revenue from operations. The company has a substantially larger exposure to the export markets (increased from 7 countries in 2017 to ~18 countries in 2022), where the contracts have a **pass through clause**. Strengthening dollar can be an add-on to exporters like Aether and the company does not see any challenges in the export market.

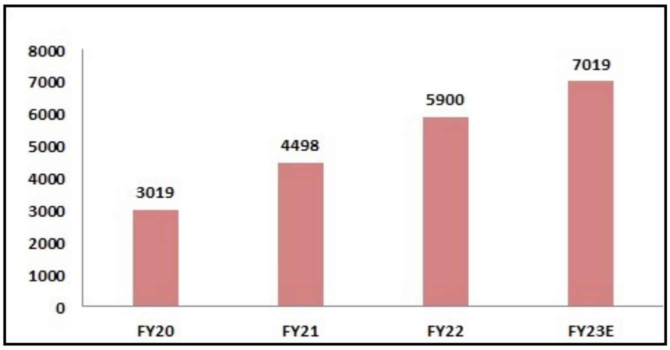
Aether generally keeps at least **5 months of inventory of raw materials**, work in progress and recoveries at the warehouses to mitigate the risk of raw material price fluctuations; the company typically maintains 15 days of inventory in work-in-progress (semi-finished goods) and a low level of inventory of finished goods. The company manufactures finished goods as per the orders received, and thus finished goods are not in inventory for more than 7 days. The procurement team maintains a lead-time material requirement planning system and utilize ERP software to manage the levels of inventory (on a real-time basis). The average selling price of the anticipated 5 new products is expected to be higher than the current product basket that Aether has in the LSM business model. The average selling price was ~Rs1479 (FY22) and the same is anticipated to be higher in the next 6-8 quarters. The company diligently tried to reduce the cost of goods sold which was seen reducing from 50.84% in FY21 to 48.25% in FY22 (this clearly indicates the successful implementation of de-bottlenecking being done in various products and procedures). The **total debt** of the company too, has been reducing on y-o-y basis coupled with good control on the expenses resulting in considerable increase in the **PAT margins (~19-20%).** The various expansion plans of the **business are intended to continue for sustainable growth** while the company will be looking at more or less doubling its capacity in the next 4-5 years.

Please Turn Over

Financials:

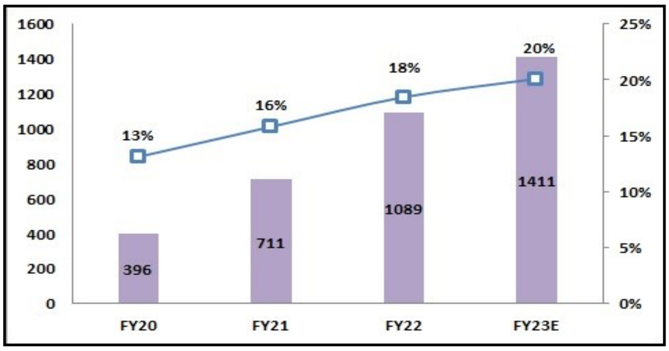
The **proceeds of the IPO** and the internal accruals have already met the current goals of expansion and have also helped the company become **virtually debt free**. These proceeds will also help the company finance 2 new greenfield projects; which is the current goal of **organic expansions**. The company is in the process of expanding the manufacturing capacities for existing products (including 4MEP and BFA) in order to meet the growing demand from the existing customers as well as to meet the requirements of new customers. In addition to this, the company also intends to add manufacturing capacities for the new product line. In August 2021, the company had commenced construction of a new manufacturing facility at a third site near the existing manufacturing facility in Sachin. This new facility is anticipated to host four streams for production of new speciality chemicals and intermediates having pharmaceutical, agrochemicals and material sciences applications. The greenfield plant is expected to be commissioned by the end of Q3FY23. As far as capacity utilisation is concerned, the same was ~79-80% in Q1FY22. Further, in March 2022, Aether secured additional leasehold lands (~30.88 acres) at **Panoli** which is approximately 54kms away from the current manufacturing. This augmentation of the capacity will not only help Aether fulfill the existing demand of the customers, but also provide an opportunity to launch new products in times to come. The Management is trying hard to **sustain the current earnings growth as well as margins** in FY23 as well. One can anticipate the company to come back for dilution of the excess equity (to comply with the SEBI norms) to the capital markets once again, but only after a span of 10-12 quarters. In the long run, the endeavour of the Management is to **achieve a balance** between the three business models so that they are not dependent on any business model. The current sales mix stands at ~46% for Pharma, ~33% for agrochem, ~6% for material science & high-performance photography, ~4% from coatings and ~5% oil and gas.

Exhibit 13: Revenue Trend (Rs in mn)



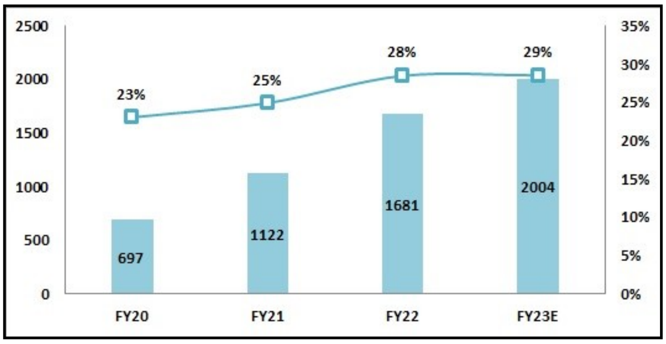
Source: Annual Reports, Progressive Research

Exhibit 14: PAT (Rs in mn) v/s PAT Margins (%)



Source: Annual Reports, Progressive Research

Exhibit 15: Ebitda (Rs in mn) v/s Ebitda Margins (%)



Source: Annual Reports, Progressive Research

Risks and Concerns:

Some of the **common risks** and concerns which most of the companies in the speciality chemicals industry face include seasonality of demand which can lead to underutilized capacities; downturns or industry cycles that can impact demand; economic conditions in which customers operate; customers' failure to successfully market their products; loss of market share of customers leading to reduced or discontinued purchase of products; regulatory issues faced in India or on international levels; changes in any registration requirements or non-renewal of registrations of products; changes in technology or consumer requirements that alter the demands for products.

The **financial performance** of the company is affected or influenced by a number of internal as well as external factors like domestic or global competition, costs of raw materials, government regulations and associated policies etc. **Raw materials** costs, its price fluctuations and availability largely impacts the operating expenses wherein the same is also sourced from third party suppliers including imports which are typically under contracts of shorter periods. *The key raw materials include chlorobenzonitrile methanol, toluene, methylene dichloride tetrahydrofuran, dichlorotoluene, thiophene, crude oil derivatives like phenol and commodities like hydrogen, ethylene oxide and Isobutylene gas.* Following the company's strategy, Aether is **investing in developing new intermediates** and speciality chemicals to add to the product mix. Despite following a careful protocol to develop new products, the same is also subjected to a number of **risks related to failure** of the products to meet market demands, market requirements, competition, failure to comply with applicable regulation, profitability, margins etc. **Product concentration** is one of the key risks associated with the business where Aether is currently involved; the company derives ~65% of revenues from 4-5 products. However, one must also keep in mind, Aether is the sole manufacturer in India for all these products and holds a sizable market share on a global level as well.

The speciality chemical industry has a **number of entry barriers like customer validation**, approvals, process innovation with cost reduction, maintaining high quality standards with strict specifications. Aether faces competition from many international manufacturers especially the **Chinese companies** with focus on product quality, technology, cost, delivery and services. Some of the crucial geographies to which Aether exports its products include Italy, Spain, Germany and the US where **foreign exchange rate risks** are inherent risks associated with the business due to sales from exports as well as procurement of raw materials (denominated in USD). The company is in a **continuous process of expansion or de-bottlenecking** which invites risks related to **capital expenditure** in order to grow the business, acquire new sites, expand the existing facilities and construct new facilities. The **timely execution** of projects is an important factor for upticks in the revenue which are highly influenced by the planned capex.

Aether is a manufacturer of intermediate molecules for a number of players in the Pharma and agrochemical industry which leads to the **inter-dependence** on these clients or customers. The company relies on major multinational and domestic companies or customers while catering to **relatively few products**. The company has a number of supply contracts of ~3-5 years which are linked to **a formula based pricing** structure. The supply contracts may be terminated at the end of their terms or on the basis of the notice provided by the customer (on mutual discussion). The **termination of supply contracts** can adversely affect the business, if not renewed. For some customers, the company relies on purchase orders to govern the volume and other terms for sale of products with specific price per unit and delivery schedule; and if such orders are amended or cancelled prior to finalisation, then the same may adversely impact the production schedules and inventories. **~87.09% of the shareholding** is with the promoter group; and the same will have to be reduced to 75% as per Sebi guidelines. This also invites issues related to **volatility in the stock price movements** due to immense illiquidity.

Outlook and Recommendations:

As the name of the company **Aether signifies infinite**, the Management team also has high goals chalked out to succeed and grow sustainably. The company currently is run by young and dynamic leadership, with the quest for finding products or molecules which will be developed for the first time in India. The evolution of the company has been quite quick and robust which is evident from the performance over the last 4-6 years. The infrastructure built in the last 6-7 years is quite robust; the manufacturing plant is built to the highest standards of technology & engineering with very **high standards of QEHS**; Aether continues to focus largely on delivering good quality products to its customers and does not want to compromise on the quality parameters. The company intends to capitalise on the **immense opportunities seen in the CRAMs business**, while eyeing at increasing the CRAMS basket.

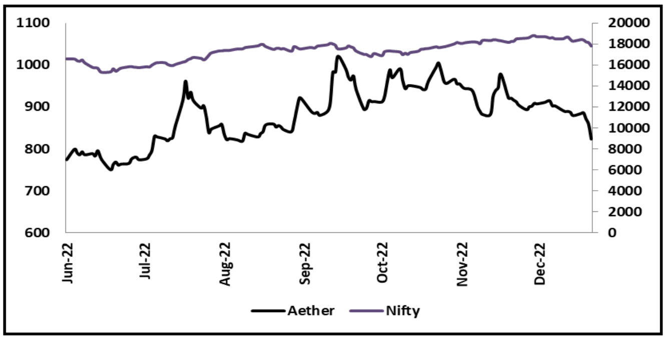
Aether has been targeting opportunities in its core competencies via a blend of chemistry, technology and systems. The company is also looking to diversify into additional business segments. In addition to this, the company has long term vision to acquire businesses related to additional chemistry or technology competencies (for example, photochemistry) and add business segments where they are currently not present (for example, cytotoxic compounds, advanced silicone products and formulations). As per the market information and research, the **prices of raw material are now getting stabilized** with the demand coming back with growth opportunities due to China +1 and Europe +1 initiatives. This bodes well for players like Aether where inquiries coming from Europe (especially for the contract/exclusive manufacturing) are good for upticks in the business.

Outlook and Recommendations (contd.):

Aether is one of the key players in this golden age for the Indian chemical and CRAMS industry. The Management team at Aether has **already been laying out the potential and fundamental foundation** to cater to this demand. The company is able to carry out innovative processes (at a global scale) which is difficult to replicate and creates **significant barriers for new entrants**. While the company continues to build the core competencies of technology, it is also working towards **building and expanding its scale**. Capex is the key theme while Aether continues to focus on import substitution products and prospects. The fundamentals of the company are set in place which gives confidence for sustainable growth in future. Currently, the Management is looking at decentralizing and **reducing the dependence** on the major segments i.e. agrochemical, Pharma and material science; trying to make the business segment more diluted and spread across the various segments. The major growth levers for the company include focus on contract manufacturing/exclusive manufacturing by developing innovative processes and value engineering; expand the product portfolio and diversify into additional business segments; expand the manufacturing, R&D and pilot plant capacities; strong presence in India as well as expand the sales & distribution network in international markets; leverage the strong position of the company in the specialty chemicals industry through strategic acquisitions and alliances. The company is continuously involved in innovations in such a way that the competitors cannot replicate the same while controlling the primary technologies behind the products which Aether manufactures, while participating only in the markets where Aether can make significant contributions.

The Management has been **successful in building** the business organically and have demonstrated consistent growth in terms of revenues and profitability while maintaining a high standard and quality of products which is critical to the brand value as well as continuous growth. Focus on QEHS, growth through strategic acquisitions and alliances, chemistry and processes, long standing relationships with a diversified customer base, strong presence in India, robust sales & distribution network in international markets, the synergistic business models focused on LSM, CRAMS and contract manufacturing/exclusive manufacturing by developing innovative processes and value engineering bode well for long term growth of the company. The Management has an ambitious **plan to be a global leader** in the Indian specialty chemicals, petrochemical industry and fine chemical industry while concentrating on products across Pharma, agro, material sciences, oil and gas etc. In the long run, the company is looking at having equal domestic and exports with more or less equal distribution of business revenues in LSM and contract research manufacturing. In order to become a global leader, the company is already trying to put the fundamental pieces in place with good infrastructure in R&D and pilot plant, production, good talent & team, with global advisory and business development strategies. The company currently deserves a premium due to a plethora of factors and triggers which makes Aether **a niche player with a number of tailwinds** and some headwinds. Fundamentals of the company are ofcourse stretched, and **Sipping is the correct way** to take an exposure in this aggressively strong growth oriented story with a target price of **Rs1065** for a horizon of 12 months.

Exhibit 16: Price v/s Nifty



Source: Ace Equity, Progressive Research

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