

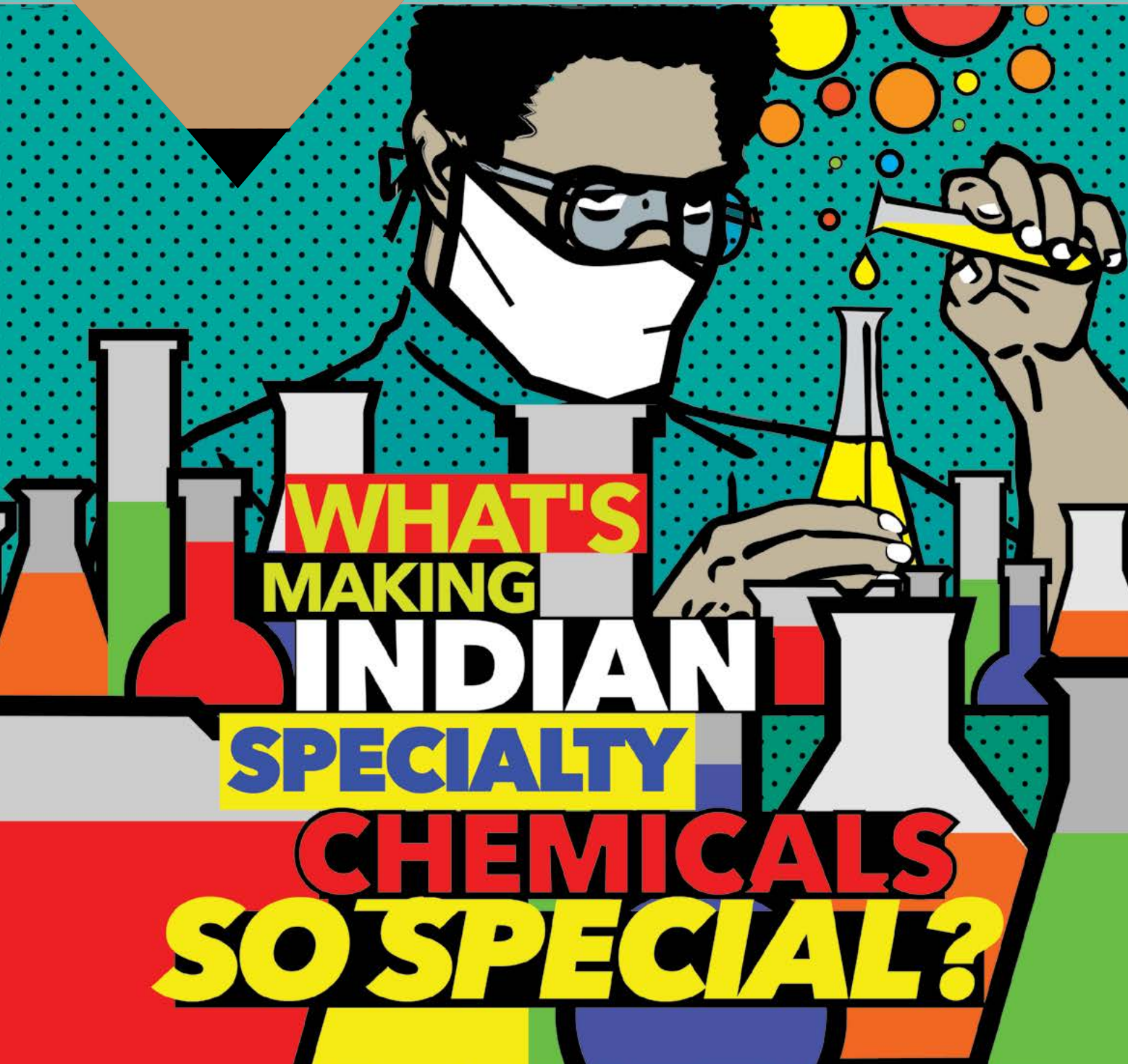
# GROUND VIEW

a **PHILLIPCAPITAL INDIA** THEMATIC PUBLICATION

pg 35. Limits of knowledge and value of trust

pg 37. INTERVIEW: Nitin Ghadiyar

pg 39. Indian Economy - Trend indicators



## WHAT'S MAKING INDIAN SPECIALTY CHEMICALS SO SPECIAL?

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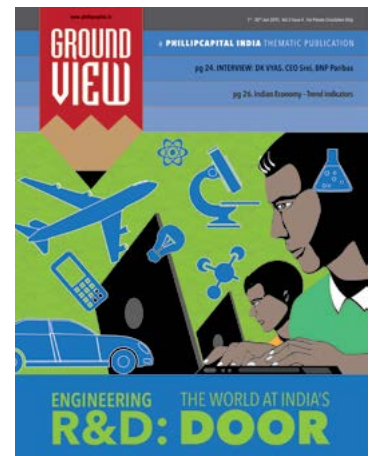
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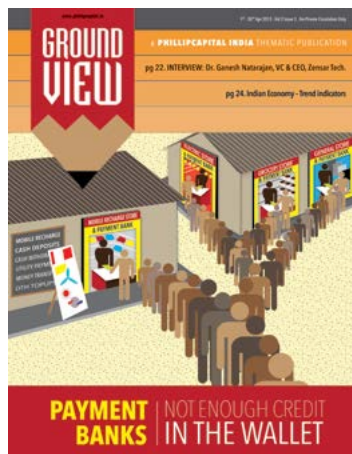
GROUND VIEW - PREVIOUS ISSUES



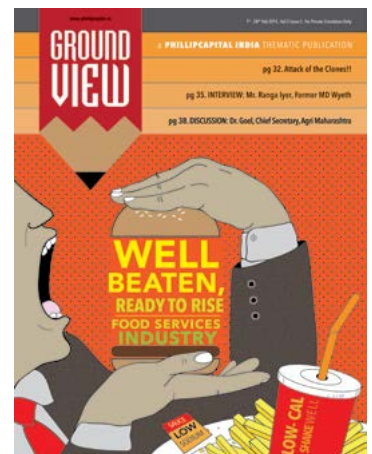
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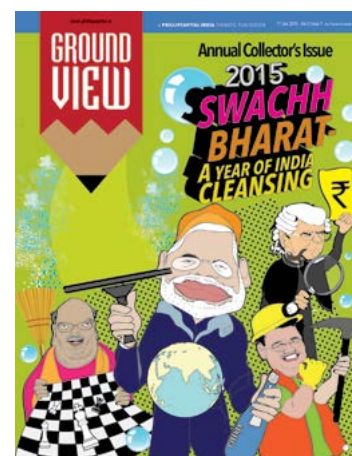
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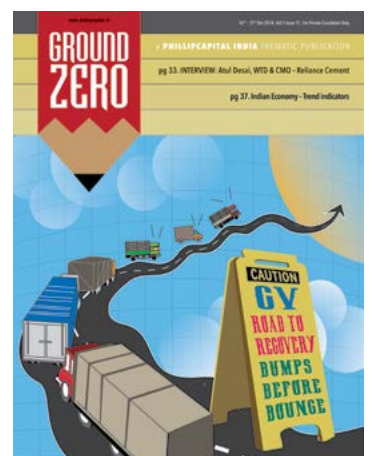
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1st Feb 2015 Issue 2



1st Jan 2015 Issue 1



16th Dec 2014 Issue 12

# LETTER FROM THE MANAGING DIRECTOR

The Indian specialty-chemicals sector has come a long way in the last seven decades or so — it has grown from a small-scale sector to a multi-dimensional one, taking on the challenges of globalisation. While our domestic sector now holds a recognised position on the global map, India's disadvantage in feedstock position and lack of adequate infrastructure hinders its progress into the big league.

However, the sector is going to benefit from the steadily growing domestic demand, conducive export environment, and positive policy initiatives by the government under its Make-in-India campaign. While a healthy domestic demand remains the backbone of Indian specialty chemicals, robust export opportunity emerging from moderating Chinese exports (with the country's regulatory clamp down) should propel the Indian specialty chemicals industry.

So far, the Indian specialty chemicals sector has failed to fascinate the investor community due to its low growth and highly fragmented structure. Our cover story on "What's making Indian specialty chemicals so special?," authored by Surya Narayan Patra, highlights the changing global trends that favour the domestic industry, and outlines potential beneficiaries. Hope you enjoy this very interesting and informative journey.

Wishing everybody a happy and prosperous Dussehra and Diwali.

Best Wishes

Vineet

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Shares his insights on brand building and his outlook on the FMCG industry

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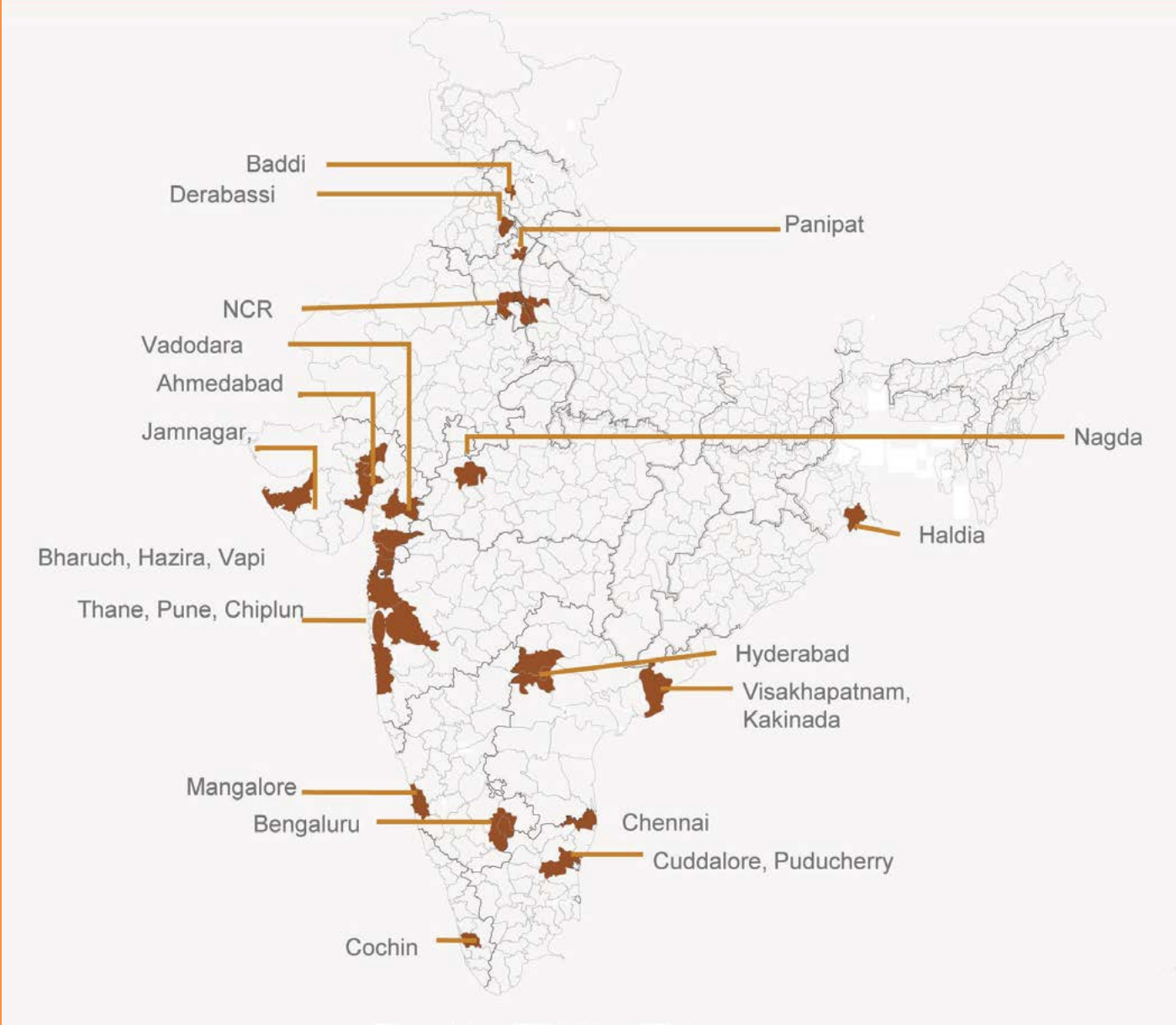
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# Chemical hubs across India



## WHAT'S MAKING INDIAN SPECIALTY CHEMICALS SO SPECIAL?

Will the investor community continue to ignore the Indian specialty chemicals sector, with a market size of about US\$ 25bn? This industry has already delivered healthy 13% CAGR (next only to China and Korea) over the last decade. India has emerged as the fastest-growing specialty chemicals market fuelled by sturdy domestic demand with strong economic growth, a large population, and rise in per-capita income. A simultaneous reduction in input costs, due to the sharp correction in crude prices, enhanced the earning efficiency of the industry, which relies on imported inputs. Moreover, softening of Chinese chemical exports, with environmental issues leading to a shut down and relocation of 1000+ chemical plants, adds zing to India's specialty chemicals exports potential for the next couple of years. Additionally, the Indian government's 'Make-in-India' initiatives in addressing the old hurdles of the industry, with enhanced focus on R&D and the rapid flow of FDI into the sector indicates value growth in the domestic specialty-chemicals industry. This issue takes an in-depth look into the rising tide that will float all speciality-chemicals boats.

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<b>pg. 6</b>	<b>INDIAN CHEMICALS SCENARIO</b> Indian chemicals is one of the fastest growing industries in the world
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**BY SURYA PATRA & MEHUL SHETH**

## Indian chemicals is one of the fastest growing industries in the world

Chemicals are now an integral part of human life due to their numerous applications that help improve the quality of life — these include breakthrough innovations enabling pure drinking water, faster medical treatment, stronger homes, and greener fuels. The chemicals industry is critical for the economic development of any country, as it caters to the needs of various industries.

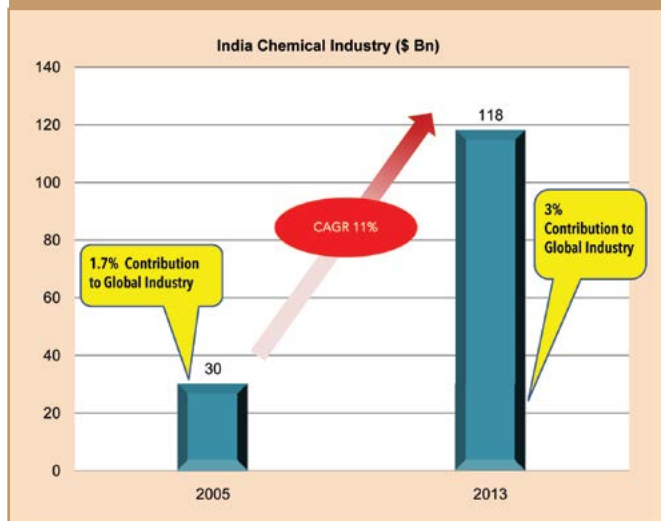
In India, the industry facilitated the country's march from being an agrarian economy to an industrial one, and provided huge employment opportunities. It is a significant contributor to India's economic development. While it is one of India's oldest industries, it has evolved to a mature core industry from a low-growth regulated one. Over the last decade, India's chemicals industry grew rapidly (4x, average annual growth of 17%) to touch US\$ 127bn in 2014. This industry accounts for 16% of India's manufacturing, 2.5% of GDP, and 9% of exports. Robust demand for chemicals was fuelled by strong economic growth, large

population, and rise in per-capita income. As a result of strong domestic demand and Asia's increasing contribution to the global chemicals industry, India has emerged as one of the 'focus destinations' of companies worldwide.

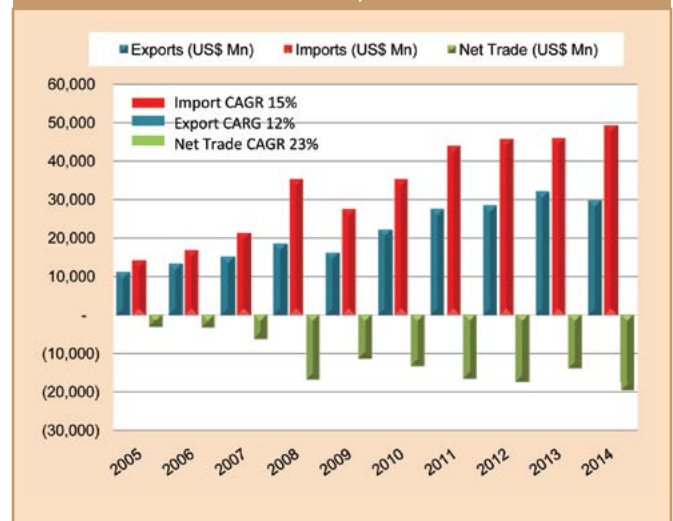
However, while the Indian chemicals industry's standalone progress has been great, it does not compare well on a global scale — it still holds only ~4% global market share and is yet to enter the league of international chemicals manufacturers.

While India's chemicals market grew rapidly over the last decade led by increasing demand, capacity creation remain muted — therefore, rising domestic demand was fed by ever-increasing imports, which saw a 15% CAGR. In fact, manufacturing capacity saw muted growth of 3.5% over the last eight years. However, thanks to increasing focus on value-added specialty chemicals, average annual growth in chemicals exports was 12% while it was 9% for chemicals exports volumes.

Indian chemicals saw a 4x jump over the last decade



Indian chemicals industry is largely import dependent and local consumption oriented



# Global chemical scenario – Easternisation is the key trend

The world chemicals industry saw steady progress to US\$ 4.20tn in 2013 from US\$ 1.50tn in 2003, reflecting an average annual growth of about ~11%. It was largely driven by China, where chemicals sales swelled rapidly at 27% CAGR to US\$ 1.39tn in 2013 from US\$ 131bn in 2003. Primarily led by Chinese progress, the centre of the world's chemical industry saw 'easternisation' during the last decade — the share of emerging Asian markets such as China, South Korea, India, and rest of Asia, saw their combined chemicals market share increasing to 53% in 2013 from 23% in 2003. During the same period, China led the chemical sales growth at 27% CAGR, followed by

South Korea and India at 13% each, and the rest of Asia (excluding Japan) at 15%.

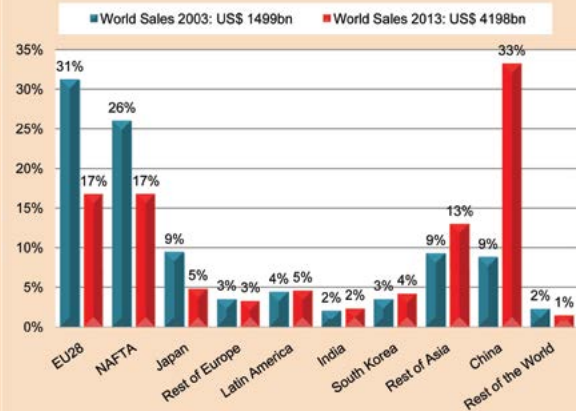
By contrast, annual chemicals sales by developed markets like North America, European Union, and Japan remain muted at 2-4%. Europe, the traditional leader of the world's chemicals industry, gradually lost its top spot to China. However, even as European countries lost their traditional leadership in terms of market size, they still maintained their leadership in terms of exports of chemicals, accounting for 43% of global chemicals exports. While Europe's technological advantage remained its key strength, rising energy and feedstock prices proved to be

## China became the undisputed leader of chemicals globally

World chemicals sales in 2013 are valued at US\$ 4198bn  
The India accounts for 2.3% of the total



## China led 'Easternisation' of global chemical industry

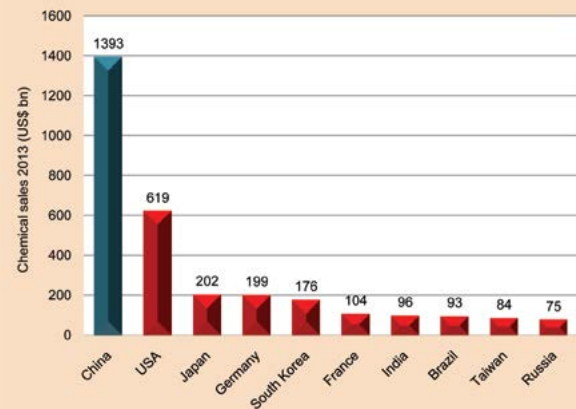


## EU remains the world's leading exporter of chemical

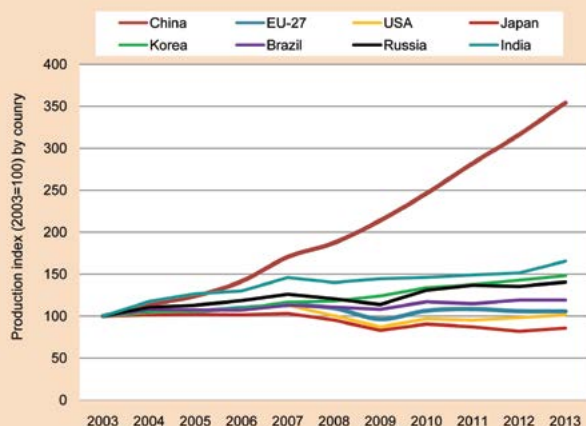
World exports of chemicals 2013 in %  
World imports of chemicals 2013 in %



## China became the undisputed leader of chemicals globally



### Emerging economies outpace advanced markets in chemical production



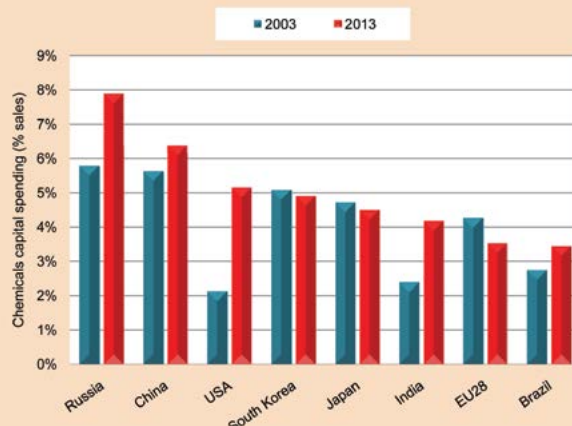
its Achilles' heel, especially compared to the oil and gas-rich Middle East and the United States.

While the global chemicals market shifted to the emerging Asian regions from the developed western world, production of chemicals saw 'easternisation' in the last decade.

Production in China saw a healthy average annual growth of 14% in 2003-13, followed by other emerging economies such as India at 5%, Korea at 4%, Russia at 3.5%, and Brazil at 2%. While the developed world's industrial competitiveness (particularly in Europe) came under pressure due to an ageing population and strict environmental/health/climate regulations, the emerging world gained from cost-effective manufacturing, rising chemical demand led by relatively higher economic expansion, and population growth.

Improving chemical production in the emerging markets

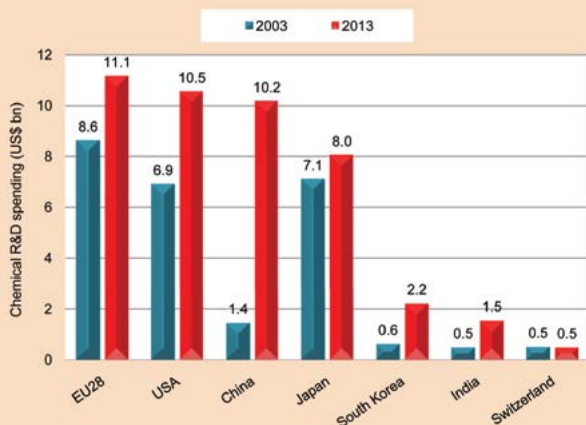
### Capital intensity of advanced countries far below emerging markets



has already been well complemented by rising capital-spend intensity (as a % of sales). Additionally, steadily growing R&D spending in chemicals by emerging countries suggests continued outperformance over the developed world.

Although China and USA are large global chemical markets, Germany leads in terms of net chemical exports, followed by Belgium, Korea, and Japan. China and India are net importers of chemicals. China's net import in 2013 was US\$ 25.6bn for all chemicals and US\$ 11.1bn for chemicals excluding pharma — this implies that China's dependency on imported pharma products is much more than chemicals. On the contrary, India's pharmaceutical exports are stronger compared to its chemicals exports.

### R&D spending by Asian countries saw rapid progress



### Net Export of Chemicals - 2013

Country (All Chem.)	Rank	Net Exp (\$ mn)	Country (All Chem. Ex-Pharma)	Rank	Net Exp (\$ mn)
Germany	1	63,278	Germany	1	33,501
Belgium	2	36,056	Japan	2	30,407
Rep. of Korea	3	26,867	Rep. Of Korea	3	29,868
Japan	4	12,786	Belgium	4	26,662
USA	5	6,628	USA	5	21,969
China		(25,624)	China		(11,113)
India		(3,920)	India		(13,984)



# India's natural disadvantage in feedstock shifted the focus to 'specialty chemicals'

Specialty chemicals are relatively high-value, low-volume chemicals. They are normally produced at a smaller scale (compared to commodity chemicals) and are sold based on their performance or function, rather than for their composition. They can be single-chemical entities or combinations of several chemicals and they tend to sharply influence the performance and processing of customers' products. Specialty chemicals' products and services need intensive knowledge, process development, and innovation whereas commodity chemicals are sold strictly based on their chemical composition — they are single-chemical entities. The commodity chemical product of one supplier is generally readily interchangeable with another.

The Indian chemicals industry (highly fragmented; largely represented by over 40,000 SMEs) has a natural disadvantage in terms of feedstock vis-à-vis the disproportionate cost advantage that Chinese players enjoy in bulk/commodity chemicals (led by their scale, provincial capital funding, and fiscal benefits) — therefore, the Indian players maintained their focus on small-scale, customised, value-added segments (basically, specialty chemicals).

The Indian specialty chemicals industry (US\$ 25bn) accounts for a marginal 3% of the global specialty chemicals market and about 20% of the overall Indian chemicals market. Unlike the domestic chemicals industry, which is dominated by a few large upstream players (Reliance industries, Indian Oil Corporation, Essar Oil), the domestic specialty chemical industry is highly fragmented (40,000 companies) and 60% of its volume is produced by

SMEs. Most of the domestic specialty chemicals businesses were created to meet immediate local demand with relatively smaller investments. Nonetheless, there are a select few (Aarti Industries, Vinati Organics) for whom supply arrangements with global chemical majors has worked wonders.

Nevertheless, due to a lack of innovation in new products and applications, most Indian specialty players lack connectivity with ultimate consumers and operate as low-cost manufacturers of materials that the MNCs deem basic for their own specialty chemicals businesses. Hence, the Indian specialty chemical sector is largely an intermediate-manufacturing industry with its prime focus on cost containment.

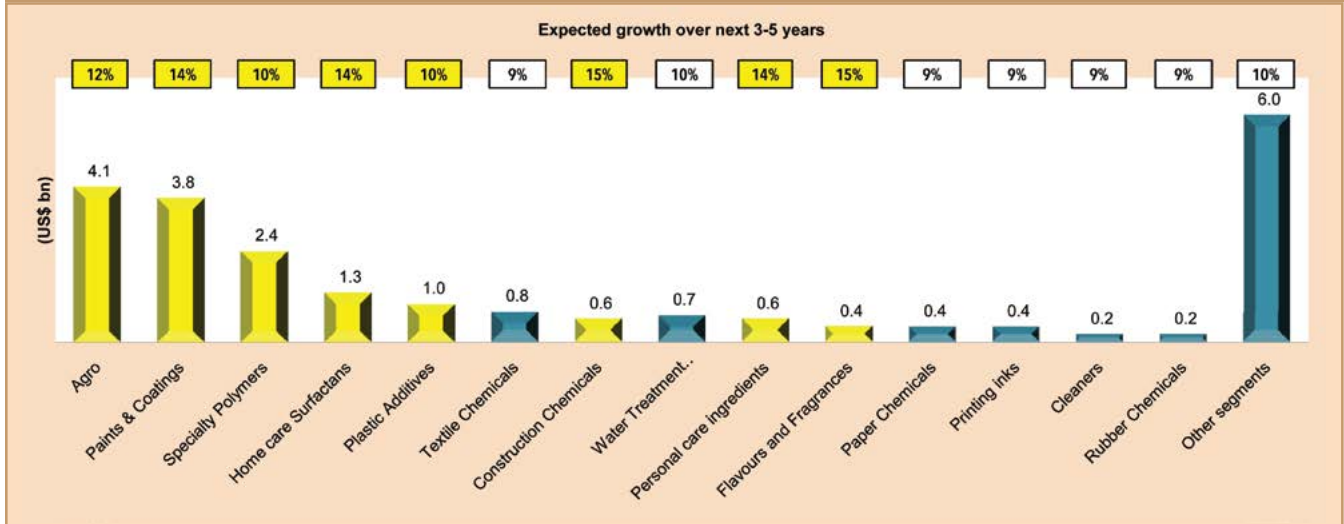
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## 60% of India's specialty chemical volume is produced by SMEs

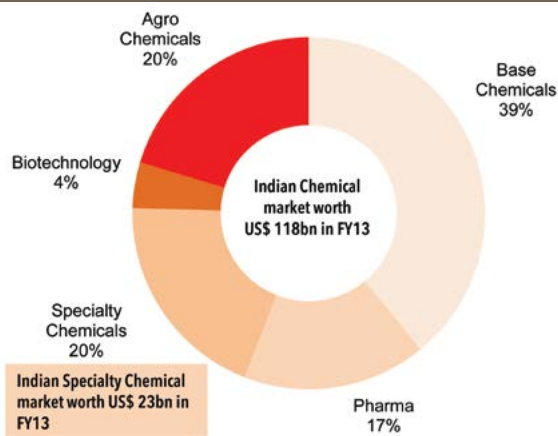
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Indian specialty chemicals, like commodity chemicals, is one of the fastest growing industry globally (only after China) and delivered 13% annual average growth over the last five years to US\$ 25bn in 2014. More than exports, steadily rising local demand supported the momentum. The industry gained from faster GDP growth, domestic demand attaining critical mass, low-cost manufacturing, and enhanced focus on process R&D and engineering capabilities.

## Composition of the Indian specialty chemicals market and target growth in respective segments

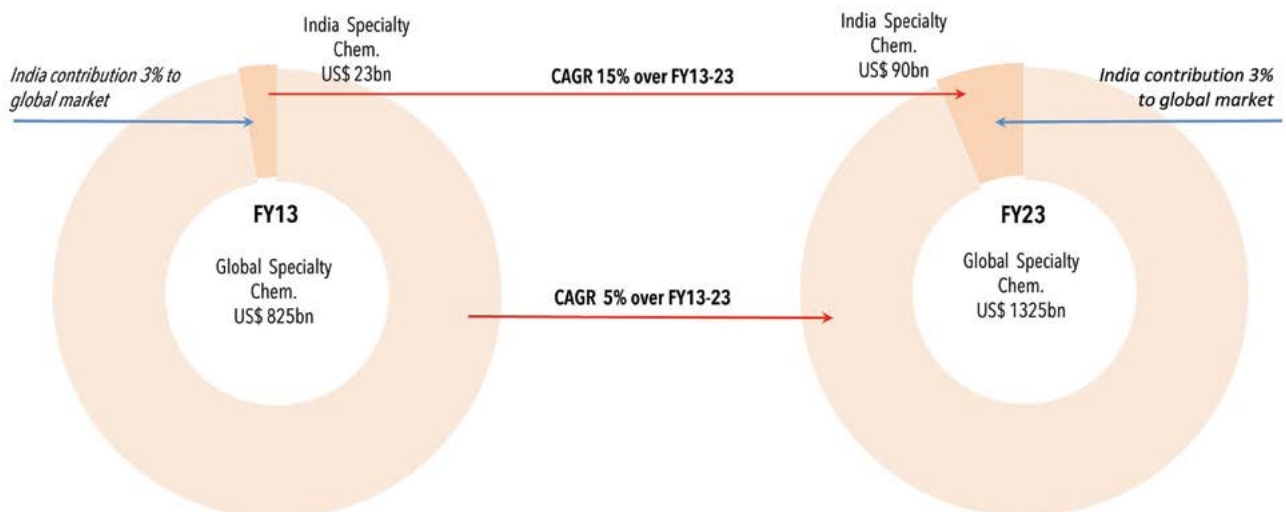


### Specialty accounts 20% Indian chemicals market



Since the domestic industry is focused on intermediate manufacturing, its growth is linked to the progress of end-use industries. While agrochemical ingredients represent the biggest single segment of the Indian specialty chemicals market, followed by paints, coatings and specialty polymers, the domestic industry is particularly strong in textiles and dyestuffs. Export of textile chemicals is an important contributor to this industry as this segment (represented by dyes, manmade filaments, and man-made staple fibres) is the only one that attained net exporter status.

### Fastest growth in Indian specialty chemicals market globally



With the healthy double-digit growth anticipation in user industries, the Indian specialty chemicals market is likely to deliver 12-15% average annual growth over FY15-20. Primarily led by ever-rising domestic consumption, increasing disposable per capita income, and changing life style in the country, Tata Strategic Management Group estimates Indian specialty chemicals to emerge as the fastest growing industry of the world and reach US\$ 80-100bn by 2023.

**Polymer additives: To see over 15% compounded annual growth**

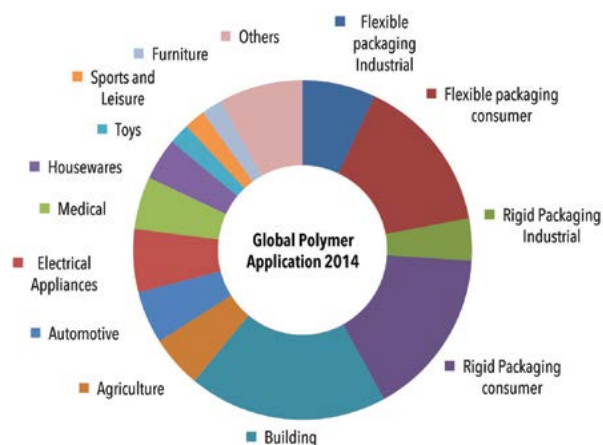
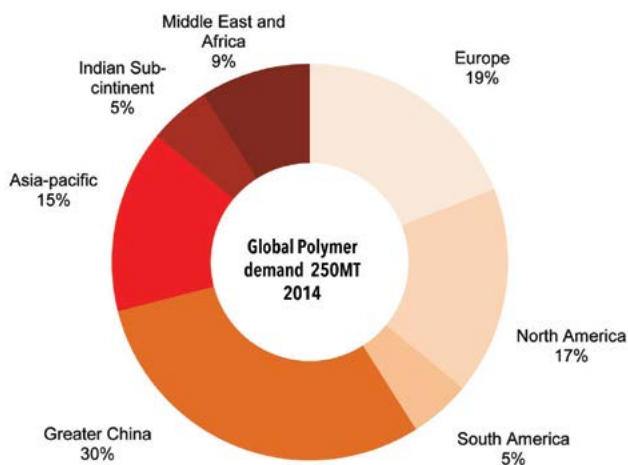
The Indian polymer additives market is estimated at ~US\$ 450mn and is the third-largest consumer of polymers, only after China and the USA, with about 6% of total market share. Polymer additives are specialty chemicals added to base polymers to enhance certain properties or improve processing. The market is dominated by multinational companies such as Clariant Chemicals, BASF, Lanxess, Baerlocher, Akzo Nobel, and Dow Chemical. Major domestic players include KLJ Group, Fine Organics, and Vision Organics. KLJ Group and Baerlocher India are market leaders in plasticisers and heat stabilisers, respectively. BASF, after its acquisition of Ciba, is the market leader in flame-retardants, light stabilizers, and antioxidants.

The Indian polymer additive market saw 10% CAGR over the last few years and is expected to report >10% CAGR on a low per-capita consumption base (i.e., 5kg in India vs. 12kg in China, 65kg in EU, and 90kg in North America), increasing demand of plastic in end-use segments (packaging, construction, and automotive sectors) and rising applications (replacing wood, metals, and glass).



**Mr Prabhsaran Singh, FICCI, says,**  
*“Domestic plastic-processing industry is expected to grow by more than 50%, driven by higher plastic usage in existing applications and end-use industries, to US\$ 21bn by 2017-18. Polymer consumption is expected to double by 2020 and with increased demand for polymers across the country, India is expected to become the seventh-largest consumer by 2025.”*

Global polymer demand scenario



### Dyes & pigments segment set for accelerated growth led by softening Chinese exports

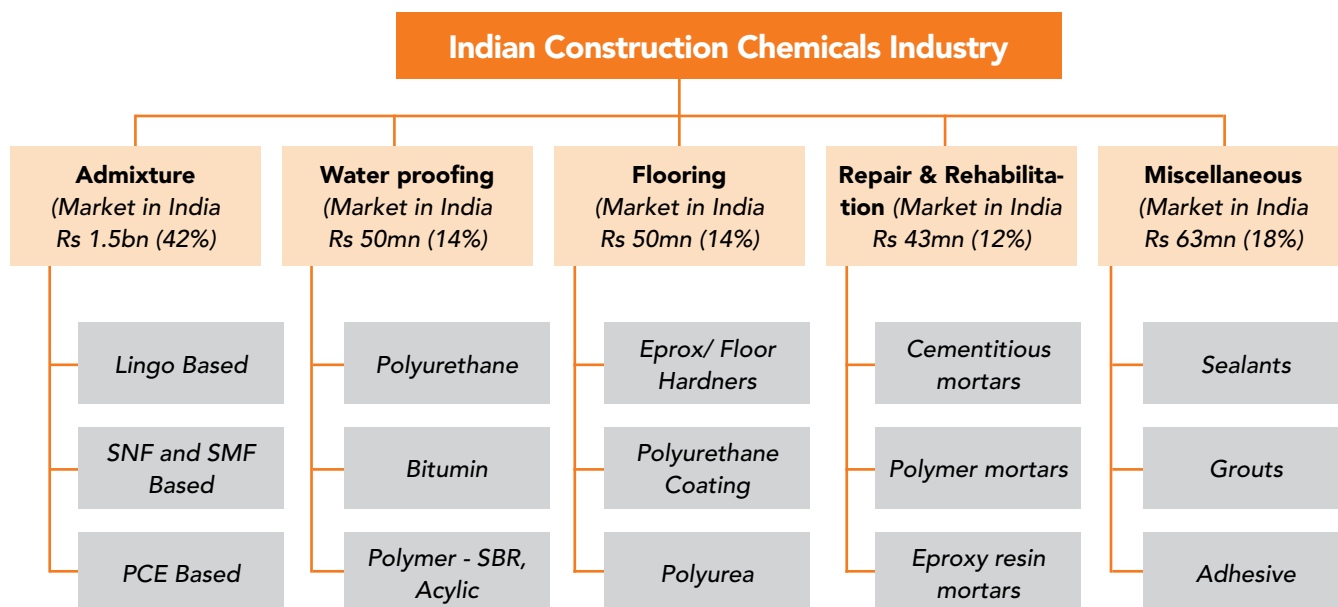
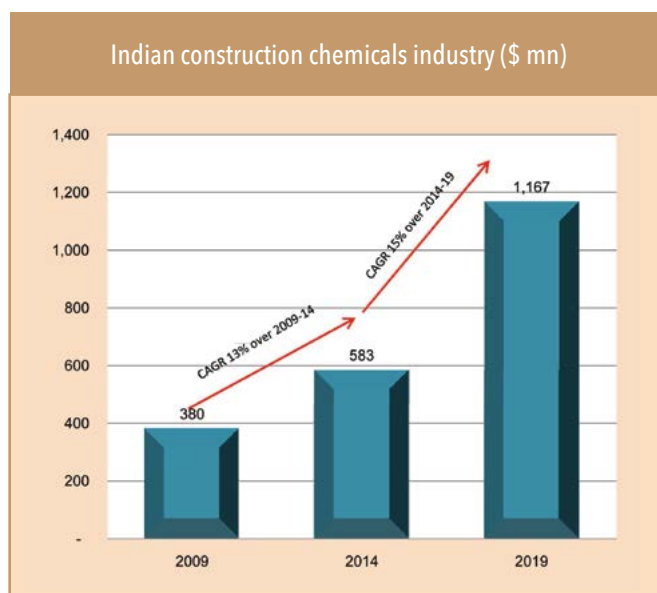
Dyes & pigments is a leading segment of the Indian specialty chemicals industry, as India is a net exporter and accounts for ~15% of the global market, second only to China. The pigment market is largely represented by carbon black and titanium dioxide (TiO<sub>2</sub>) and their respective target end-users are rubber/tyre and paint industries. On the other hand, textiles consume 60% of dyestuff while the rest is shared by paper, leather, and other consumer industries.

As per industry sources, the global demand for dyes and organic pigments is forecast to increase 9% p.a. to reach 9mn tonnes with a market size of ~US\$ 24.2bn in 2015. This growth will have a direct bearing on the domestic production of dyes and organic pigments since a large proportion of production is exported. On the other hand, softening Chinese exports (which account for about one-third of global demand) due to environmental concerns would drive accelerated growth for the Indian colorant segment.

### Construction chemicals to see >15% annual growth

The construction chemicals market in India has seen 13% CAGR to Rs 3.5bn in 2014 from Rs 1.9bn in 2009, supported by improving awareness

of their usefulness and growing preference for ready-mix concrete. The domestic industry is relatively consolidated with leading players (Pidilite, BASF, SIKA, FOSROC, SWC) holding dominant positions. However, approximately 300 companies are estimated to be operating in this segment. Going ahead, the construction chemicals industry – largely domestic oriented – is expected to see accelerated growth of >15% led by adoption of international construction standards and increase in high-rise buildings in tier-1 cities. Additionally, government initiatives such as 'Housing for all by 2022' and '100 smart cities' would drive the domestic construction chemical markets by >15%.



**Paints segment CAGR at 14% to touch US\$ 9.3bn in FY20**

The Indian paint industry is pegged at about US\$ 4bn (4% of global paint market) and split between decorative (70%) and industrial paints (30%). The segment is crowded with the presence of both organized and unorganized players. While the industrial paints segment is dominated by organized players (due to the need for specialized technology, higher capital investments, and good relationships with institutional/industrial buyers), the decorative segment sees competition from unorganized players. Global paint leaders are also

well entrenched in the Indian industry, led by their alliances with Indian peers and better technology.

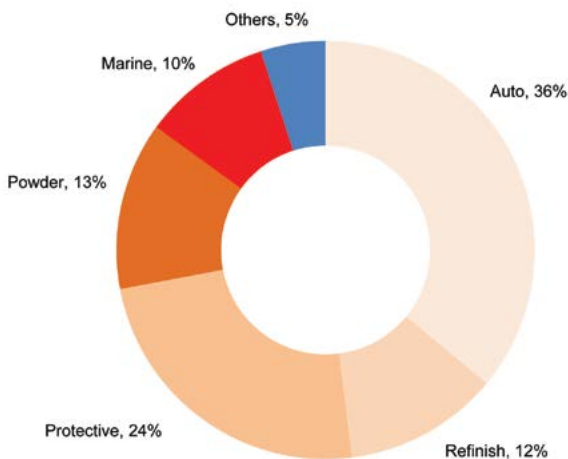
With increasing rural demand, urbanization, and rising industrial output, the Indian paint industry has already reported 14% CAGR over the past four years. Going ahead, the industry expects a shift in favour of organized companies, due to their entry into low-cost distempers and enamels. While solvent-based enamels are still popular in India, there is definitely a shift to water-based paints from solvents. Keeping environment concerns in mind, companies are coming up with new lead-free and low-Volatile Organic Compound (VOC) products. There is also a perceptible shift towards usage of organic pigments in premium paints with heavy metal pigments being phased out. With a shift in focus to value-added products and continued rise in rural demand and demand from urbanization, the Indian paint industry is likely to grow at 14% p.a. over the next five years.



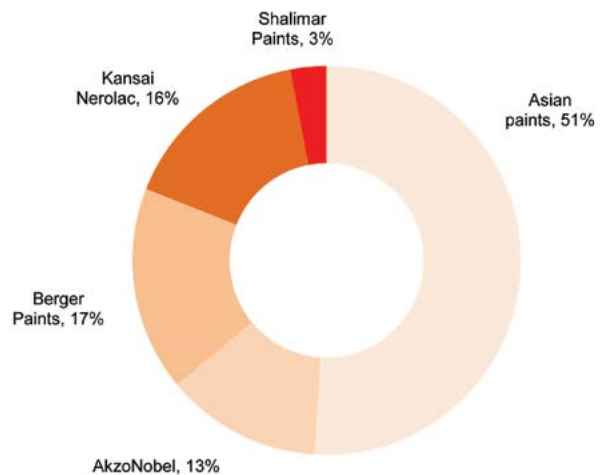
**Water treatment chemicals: Market to grow with stricter government regulations**

The Indian water treatment chemicals market was at ~US\$ 744mn in FY13. It experienced a 10% CAGR from 2010 to 2013. Based on applications, the market is classified into chemical processing, food and beverage, metal and mining, pulp and paper, power generation, oil and gas, and refinery.

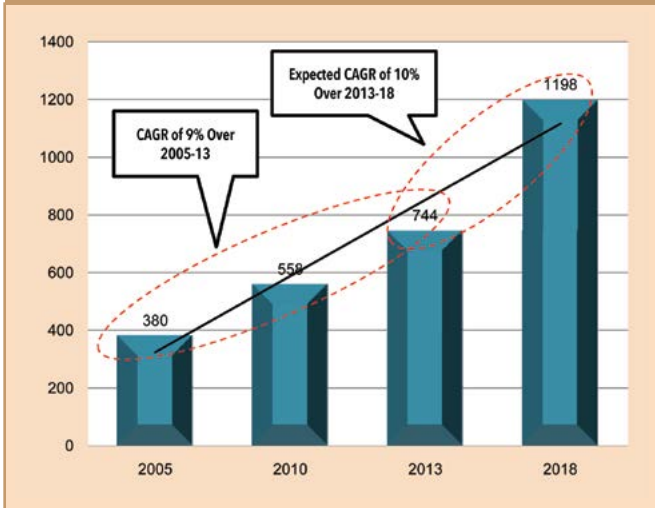
**Segment-wise Breakup of Industrial Paints**



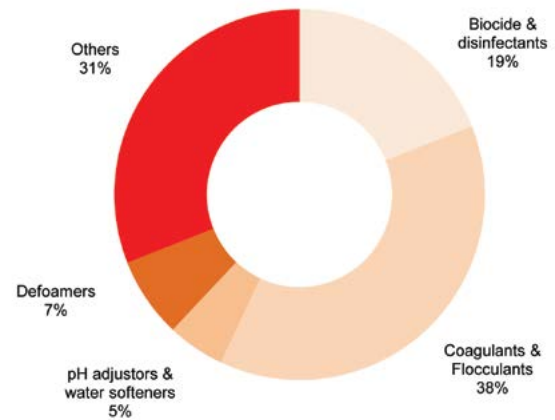
**Overall market Shares**



## Water Treatment Chemical Market (US\$ mn)



## Segment-wise Breakup of Water Treatment Chemicals 2013



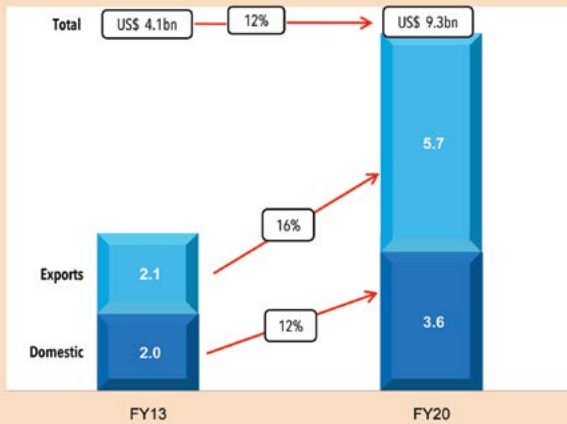
Coagulants and flocculants, which are used to purify water by coagulating the dissolved impurities, form the largest segment with ~37-40% market share, followed by biocides and disinfectants with 17-19% market share. Apart from use in potable water, the customer base is widespread across diverse industries ranging from large power plants, refineries, and fertilizer factories, to pharmaceuticals, food and beverages, electronics, and automobile companies. The market is highly competitive and participants include private companies, MNCs, and JVs. The market for water-treatment chemicals has seen a shift from traditional products to technically more advanced products. Manufacturers are increasingly producing patented formulations with exclusive rights that offer customized solutions in a particular market.

Around 70% of the market is dominated by the organized sector, largely water management multinationals and large-scale domestic companies

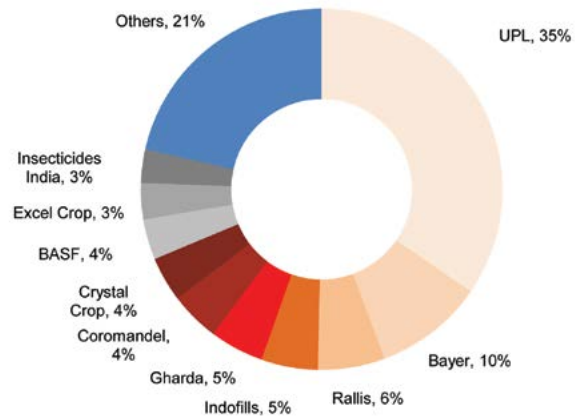
such as Nalco Chemicals India, Thermax, and Ion Exchange (India). These companies have a diverse product portfolio and a strong distribution network to cater to the Indian market. The water treatment chemicals market is likely to see a CAGR of 10% to reach ~US\$ 1.4bn in 2020. In its 12th five-year plan, the planning commission has earmarked an investment of US\$ 26.5bn, to ensure safe drinking water for rural and urban areas. The plan aims to increase focus on desalination and on ensuring environment protection through wastewater, and solid and sewage treatment. Over the next five years, the oil and gas sector is likely to be buoyant with major government and private sector companies expanding their plant capacities — this will boost water consumption and the need for wastewater treatment chemicals. Another critical success factor could be the 'Clean Ganga' initiative.



## Indian Agrochemical Industry (US\$ bn)



## Indian Agrochem market shares of Top 10

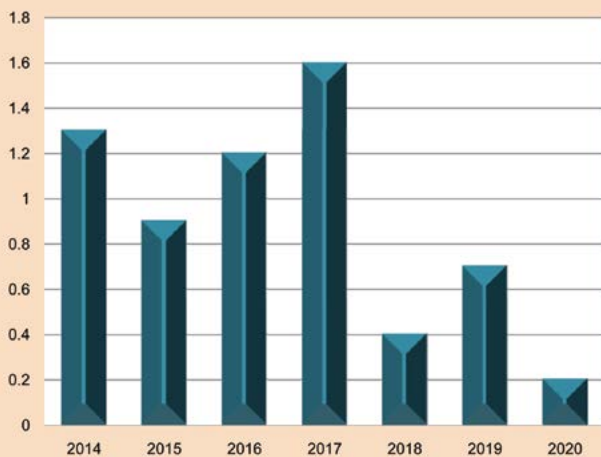


### Agro-chemicals are expected to see 12% CAGR until FY20 to reach US\$ 9.3bn

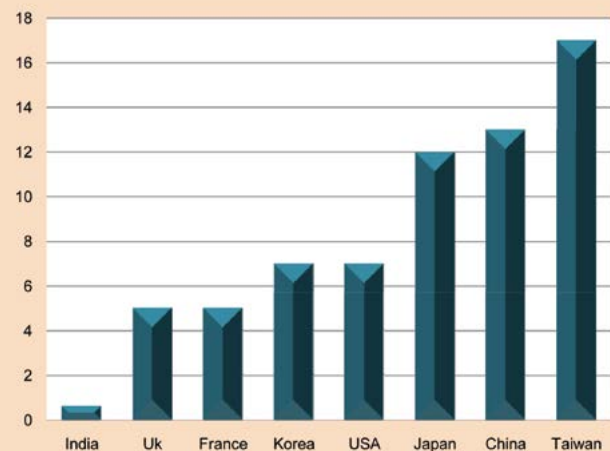
The Indian crop-protection industry is estimated to be US\$ 4.25bn in FY14 and grow at a CAGR of 12% to reach US\$ 9.3bn by FY20. Exports currently constitute almost 50% of this industry and are seen growing at a 16% CAGR to reach US\$ 5.7bn by FY20, thereby touching 60% share. Domestic market is seen growing at 8% CAGR to US\$ 3.6bn by FY20, as it is predominantly monsoon dependent. Globally, India is the third-largest producer of crop-protection chemicals, after the United States,

and Japan. While the exports of agrochemicals will see accelerated growth led by upcoming patent cliff (expanding the generic opportunity) and cost advantage, the domestic market would see better growth led by rising agrochemical consumption and increasing demand of food grains from declining farmlands.

## Agrochemicals Going Off-Patent (USD bn)



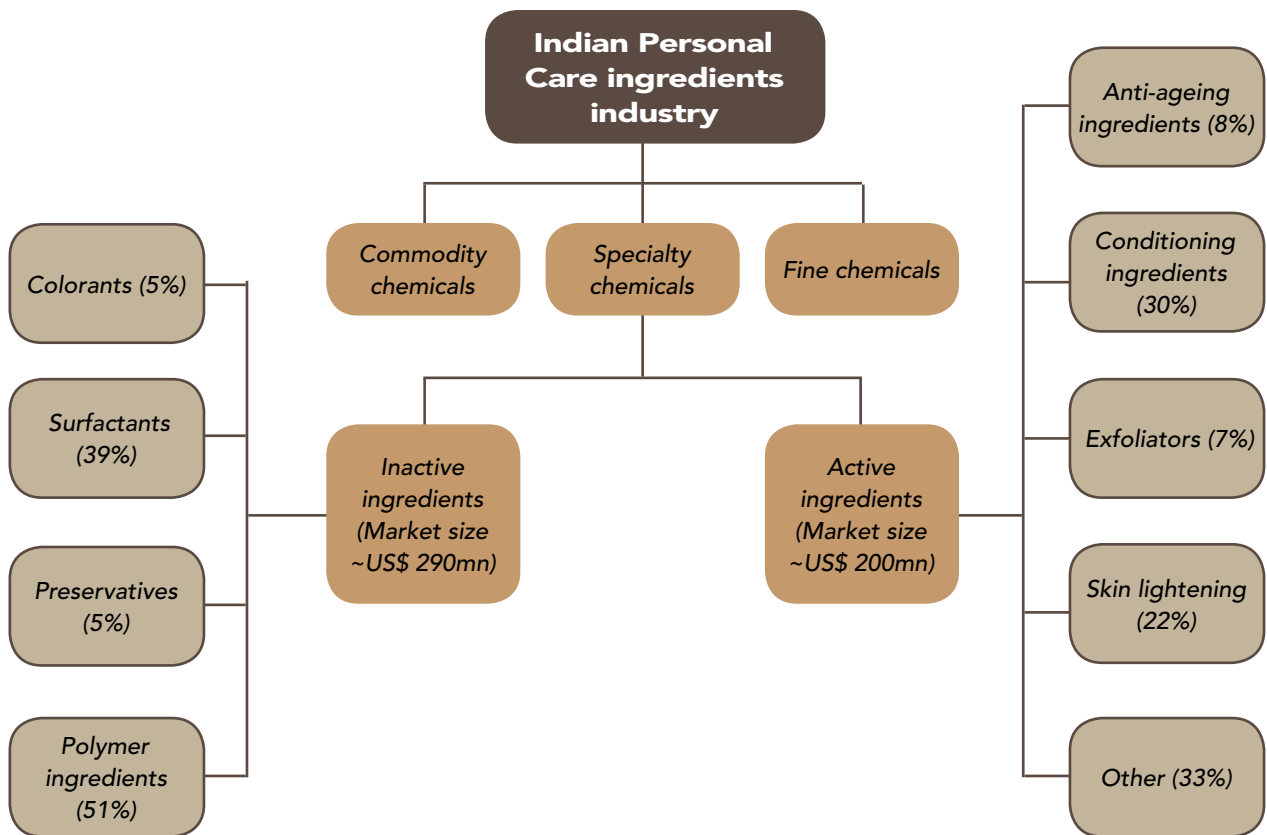
## Pesticide consumption comparison (Kg/ha)



**Personal care ingredients: Rising income and shift towards quality products to lead to 14% annual growth**

While the Indian personal-care industry (targeting bath and shower products, hair care, skin care, oral care, and fragrances) is estimated to be ~US\$ 7bn, the personal-care ingredients market is about US\$ 485mn. This market is characterized by strong presence of MNCs such as Cognis, Dow Corning, BASF, ISP, DSM, and Merck. Key domestic players include Vivimed Laboratories, SAMI Labs, and India Glycols. The market delivered 13% CAGR over the last few years. Rising income, increased

availability, and wider product portfolio of companies has led to growth in personal-care products and thereby personal-care ingredients. Premium segments will show good growth potential with increasing awareness and evolving consumers who are ready to spend more on quality products. Industry estimates peg the personal care ingredients market growth at 14-15% to reach ~US\$ 1.5bn by 2020.





# Environmental issues in China add zing to India's specialty chemicals export potential

**R**apid economic progress and simultaneous fast industrialization has certainly made China the global leader in terms of production, consumption, and exports of industrial output such as chemicals. On the other hand, blind economic/industrial expansion and lax regulations have contributed to serious environmental problems. **Various studies indicate that 16 of the world's 20 most polluted cities are found in China. Moreover, 20% of China's farmland, 16% of its overall soil, and ~60% of its groundwater is polluted. A study by an NGO says that 1.6mn deaths in China are caused by air pollution every year (4,000+**

**each day) — 17% of all deaths.**

In response to these human hazards, the Chinese Ministry of Environmental Protection (tasked with protecting China's air, water, and land from pollution and contamination) has implemented environmental protection provisions effective from January 2015 that enforce strict penalties and seize property of illegal environmental polluters. There will be no upper limit on fines and more than 300 different groups will be able to sue on the behalf of people harmed by pollution.

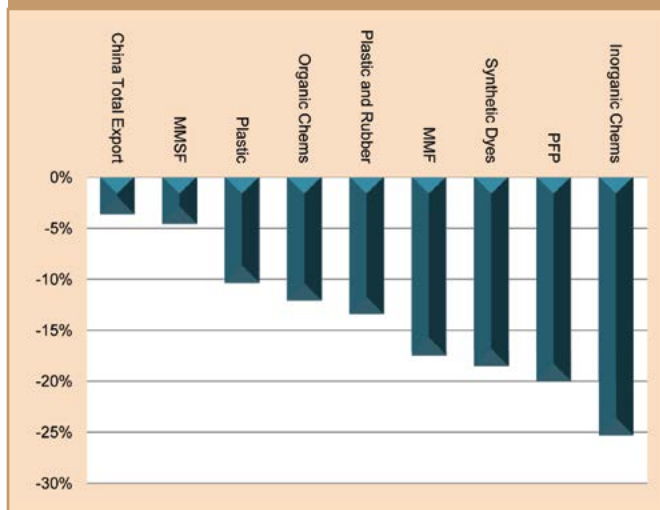
Under the new law, even local governments/provinces will be subject to discipline for failing to

**Acute air pollution in Beijing force people to wear mask**

**1.6mn deaths in China are caused by air pollution every year i.e.17% of all deaths.**



Visible decline in Chinese export volumes  
(primarily chemicals) in YTD 2015



enforce environmental laws. Regions will no longer be judged solely on their economic progress, but instead must balance progress with environmental protection. Additionally, local governments will be required to disclose environmental information to the public.

Such policy initiatives have already resulted in a shutdown of several major polluting industries such as papermaking, food processing, chemicals, and textiles — accounting for half the total water-pollutant emissions in China. As a result, Chinese exports have already softened starting January 2015.

Mr Chen Jining, China's Minister of Environmental

**Chemical factory in Tianjin**

**16 of the world's 20 most polluted cities are found in China**



Protection, warned (in the media) about taking further serious action against polluting industries that fail to meet national requirements by the end of 2016. This would lead to numerous plant shutdowns and shifting of plants, resulting in supply-demand imbalance in the global chemical industry — creating an export opportunity for Indian peers.

Mr Miao Wei, China's industry minister, was quoted by the Communist-party newspaper, People's Daily, as saying, "Many provinces are planning to relocate more than 1,000 chemical plants away from populated regions, a move which may cost around 400bn yuan."

"China's chemical industry has ignored environmental issues in the past. In order to have US\$ 1 benefit they have destroyed environment worth US\$ 10. Now china has become more sensitive and has to spend almost US\$ 1tn per year to clean up its environment," says Mr Satyen Daga.

Mr Rajendra Gogri, MD, Aarti Industries says, "Stricter environmental pollution practices in China and consequent clampdown on inefficient chemical plants have certainly led to import substitution from China by many global chemicals players. Such a scenario enhances Aarti industries' export scope and similarly other Indian companies should also benefit."

Though China has been a net importer of all chemicals put together, it is a large exporter of various chemicals such as manmade filaments

**60% of China's groundwater is polluted**



**A dead fish floats in water filled with blue-green algae at the East Lake in Wuhan, Hubei province August 20, 2012**

## Although China is a net importer of many chemicals, its exports size in chemicals is huge — softening of these exports could multiply export growth opportunities for India

Chemicals (US\$ mn)	China Exports	% share in global trade	China Net Export	India Net Export
Inorganic	15,026	13.9%	4592	-3634
Organic	45,444	11.5%	-14974	-3620
Pharma	6,592	1.3%	-11165	10064
Fertilizers	8,920	15.2%	5568	-5882
Tanning or Dyeing Extracts	6,724	8.4%	2204	1100
Miscellaneous Chemical	14,211	7.7%	-2872	-445
Plastics and articles	66,793	11.9%	-10760	-3762
Synthetic rubber/ factice	510	2.6%	-3489	-1194
Man-made Filaments	16,879	37.8%	13097	1896
Man-made staple fibres	12,818	32.9%	9507	1559
<b>All Chemicals</b>	<b>193,916</b>	<b>9.7%</b>	<b>-8292</b>	<b>-3920</b>
<b>All Chemicals (Ex Pharma)</b>	<b>187,324</b>	<b>12.6%</b>	<b>2873</b>	<b>-13984</b>

(worth US\$ 13.1bn), manmade staple fibres (US\$ 9.5bn), fertilisers (US\$ 5.57bn), inorganic chemicals (US\$ 4.6bn), and tanning/dyeing extracts (US\$ 2.2bn). Implementation of new environmental laws in China has already caused a decline in its chemicals exports and the trend is likely to sustain in FY16-17, led by the enforcement of stricter en-

vironmental laws. Incidentally, India's net chemical trade with international markets is almost similar to China (although much smaller than China's). Hence, the emerging trade gap due to softening Chinese exports offers huge export opportunity for Indian chemical players.

## A case study: How China became global chemical leader

**1978-1990** - An era of reforms and economic opening up: The Chinese government reformed and opened to the world in 1978. Considering the importance of the chemicals industry, the government permitted FDI, but maintained control. Alongside opening up, China's domestic consumption boom coupled with rapid economic expansion was where most of the FDI inflow happened. Most companies invested in China to produce for Chinese domestic demand.

**1990-2000** - Building China as a global manufacturing hub: During this period, the Chinese government permitted the entry of many MNCs into the country by forming JVs between local firms (primarily state-owned enterprises) to generate export sales. Fiscal incentives, ready common infrastructure (in terms of chemical industrial parks), quick approvals, and facilitating land acquisition,

encouraged MNC investment in China.

Dr Rajan Venkatesh, VP at BASF says, "China created enough demand for chemicals domestically and then smartly bargained with global leaders for technology collaborations, sighting the fact that China would be the largest global customer of their chemicals. That's how they ensured huge flow of FDI and ultimate multiplying growth in Chinese chemical industry".

**2000-2013** - Phase of rapid growth led by operating leverage: With multiplying capacity expansion and government facilitation, China became the land of opportunities with both export and domestic consumption seeing limitless growth. FDI by chemical MNCs boomed as China became more integrated into the world economy and chemicals became a major Chinese export.

## Various issues in China make India stand out as an alternate source

While rising chemicals demand led by rapid economic expansion propelled China towards becoming a choice destination for MNCs, government facilitation and cost advantages made the country a global manufacturing hub for chemicals for these MNCs in the last couple of decades. The very reasons for China's booming chemical industry are turning sour — rampant growth has started hitting its environment in a big way and labour cost advantages are no longer a reality.

Strategic facilitation by government agencies in China has resulted in massive FDI flow into the chemicals industry, but perils of subsequent excessive capacity creation (i.e., rising dependency on imported feedstock, scarcity of resources such as energy and water), and more importantly, frequent government intervention favouring state-owned enterprises has become a concern for MNCs' business strategies from 2014.

Since China's key advantage – low labour costs – is no longer a reality, MNCs have already wheeled



**Mr Venkat, Sr VP, BASF, says, "India has certainly emerged as an alternate source for BASF and we are already sourcing various chemical intermediates from Indian players, not only for our domestic operations, but also for global businesses – and the reliability on safety and**

**quality front has already been established with many Indian suppliers. Other MNCs would also have a similar experience in India. Such alliances are a win-win for both – BASF gets quality inputs at competitive costs and domestic players upgrade their manufacturing capabilities with the technical input from MNCs."**

their facilities from their homeland to emerging markets and find India (with cheap work force, quality standards, rapid growing economy, and good demand) a decent alternate source for manufacturing chemicals.

The Indian chemicals market, which has so far largely been driven by internal consumption, would benefit from steady growing domestic consumption on one hand, and the emerging export opportunity due to moderating of export from China.



# Will 'China's pain India's gain' really last long?



Production disturbance in the Chinese chemicals space certainly enhances export visibility for Indian specialty chemicals in the medium term, but Mr Satyen Daga, MD, Daga Global Chemicals Ltd. cautions the competitive positioning of the Indian specialty-chemicals industry vs. the Chinese ones in the long term. He says, "Chinese rail connections into Europe, Saudi Arabia, and Mongolia through its huge rail infrastructure project – Silk Route – could pose a big threat for the export competitiveness of the Indian industry. While the rail link to Europe would ensure quick and cost-effective supply of material, the link to Magnolia and the upcoming largest-ever global chemical industrial park – SADARA – in Saudi Arabia would ensure quick procurement of cost-effective input materials into China."

China's massive upcoming rail - Silk Route - connecting Europe and Saudi Arabia poses a threat to the cost-competitive position of the Indian specialty chemicals industry



# Falling crude price enhances the profit efficiency of specialty chemicals

Oil prices saw a sharp correction since mid-2014 with the price per barrel sinking to its lowest point since 2009. From its peak in June 2014 (average US\$ 112) to this year's low in October 2015 (average US\$ 46) the oil price fell by 57%. The price of naphtha, another key feedstock for the Indian petrochemicals industry, has similarly declined from a high of nearly US\$ 953/tonne in June 2014 to US\$ 433/tonne in October 2015.

Since India depends on imported crude/naphtha for over 75% of its feedstock requirement, the correction in input cost prices and simultaneous reduction in energy costs certainly benefits the domestic industry. More importantly, the specialty chemicals players are set to enjoy better profitability due to lower input costs as they hardly pass-on the benefit of lower input cost to user industries. Since specialty chemicals account for only <5% input cost of user industries, these players retain the cost advantage, but rarely pass it on. On the other hand, commodity chemicals find it difficult to retain the benefit of lower crude costs, as competition forces them to pass it on. Hence, Indian specialty chemical players would be the larger and

## Variation in the consolidated financial performance of chemical players

Year	Specialty Chems	
	YoY Ch (%)	EBITDA Margin (%)
FY15	6.8	10.0
FY14	11.1	9.6
FY13	7.8	10.1
FY12	21.0	11.2
FY11	19.3	11.6
FY10	(10.2)	11.2
FY09	43.5	9.1
FY08	22.1	10.6
FY07	15.2	11.3

sustained beneficiaries (vs. commodity players) of lower crude prices in the near future.

The consolidated financials of the Indian specialty chemicals players indicate that sales of specialty chemical players grew sharply with the spike in crude prices in early FY09, but declined with the correction in FY10. On the other hand, margins were higher in FY10 vs. FY09 — this is because the per-unit margin remained unchanged while the falling crude prices dragged overall sales of specialty chemical industry. . Similarly, the industry witnessed the margin expansion in 2015 with falling crude dragging the overall sales. Going ahead, with the bleak outlook over crude prices in the foreseeable future, the domestic specialty chemical industry is expected to deliver healthy operating efficiency in the near future.

Brent Crude Price (per BBL)



# Government's Make-in-India initiatives to address key hurdles for Indian specialty chemicals

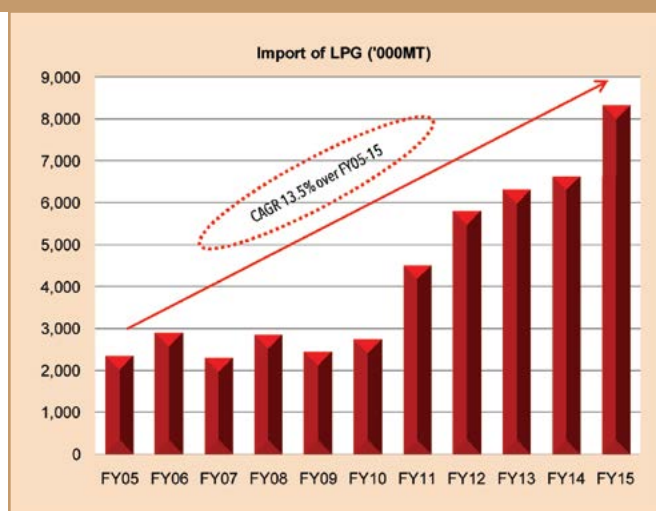
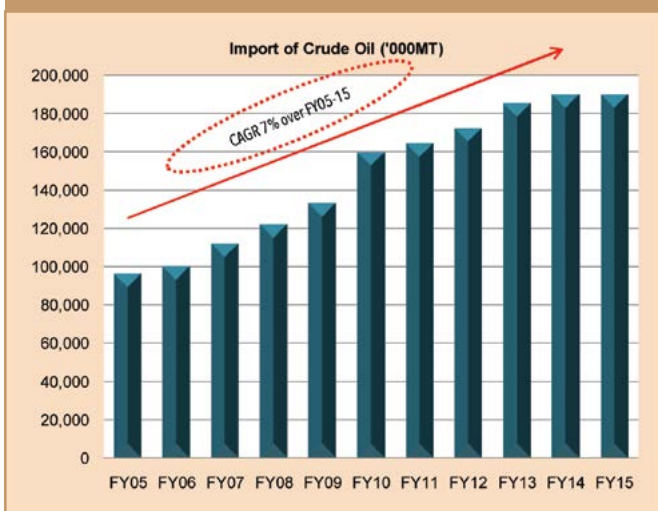
The Indian specialty chemicals sector has come a long way in the last seven decades or so — it has grown from a small-scale sector to a multi-dimensional one, which is taking on the challenges of globalization. The sector now holds a recognised position in the global map; however, India's disadvantage in feedstock position and lack of adequate infrastructure hinders its progress into the big league.

"The Indian chemicals industry either uses natural gas or crude oil as feedstock for manufacturing and these constitute a major portion of cost of production (30-60%). India imports nearly 76% of its crude oil requirements. Fluctuations in oil prices affects the growth projections of chemicals manufacturers — at times they are unable to pass-on the cost escalation (due to sudden increase in oil prices) to end consumers," says Mr Prabhsharan

Singh, Head, Chemicals & Petrochemicals Division, FICCI.

The other big deterrent in the growth of the Indian chemicals industry is inadequate infrastructure or lack of common infrastructure. Due to its very nature, the chemicals/petrochemicals industry requires certain basic infrastructure facilities such as common-effluent treatment plants, an effective green belt segregating the chemical units from the human habitat, a good port with a chemical storage terminal, and adequate berthing facilities. At present, each unit has to create specialised facilities on its own, which leads to duplication of efforts and investment that impacts the earning efficiency of the Indian chemicals industry that is largely represented by small and medium enterprises.

Import dependency in feedstock is one of the key hurdles for the domestic industry growth



More often, the scale of the Indian chemicals industry is believed to be one of the key restricting factors in domestic market growth. The industry is highly fragmented — with over 40,000 units in small-scale sectors and spread over various parts of the country. Installed capacities in most of these units are much smaller than global scales, which puts them in a disadvantageous position while tapping export opportunities where large volumes and operating efficiency is almost always a must.

Mr Sanjay Chaturvedi, Ex-Strategy Director, Rohm and Haas, has a different take on the challenges that the industry faces. He believes that the root cause of weakness in India's specialty chemicals industry is lack of technical talent. Specialty chemicals is an application-driven industry and it requires an integrated team of material scientists, chemical engineers, and chemists — which India lacks. He also believes that another key concern is that the Indian entrepreneur lacks a 'global' mind-set.

Mr Chaturvedi feels that chemicals is a knowledge-based industry and the areas for R&D include improvements in the manufacturing process for reduction in cost of production, application development to diversify demand, and new-product development. The level of R&D investments in the Indian chemical sector is low at around 0.3% of total sales and this is mainly concentrated on process development by local players. Thus, India does not have even a single application-testing centre.

However, the government's "Make-in-India" initiatives such as (1) setting up of reverse SEZs in feedstock-rich countries of the Middle-East, (2) formation of industrial clusters with common infrastructure, (3) facilitation for innovation in chemicals, and (4) establishing specialized vocational-training centres coupled with a continuous focus on green technology in chemicals are likely to address the age-old hurdles that Indian specialty chemicals industry has faced.

## Make-in-India campaign to complement the industry growth well

In its drive to make India a global manufacturing hub for chemicals, the Indian government has already made the following initiatives under its Make-in-India campaign, which complements the growth of the Indian specialty chemicals industry:

- Industrial licensing has been abolished for most sub-sectors except for certain hazardous chemicals.
- 100% FDI is allowed under the automatic route in the chemicals sector, subject to all the applicable regulations and laws.
- The government is continuously reducing the list of reserved chemical items for production in the small-scale sector, thereby facilitating greater investment in technology upgradation and modernisation.
- Policies have been initiated to set up integrated petroleum, chemicals, and Petrochemicals Investment Regions (PCPIRs will be investment regions spread across 250 square kilometres for manufacturing domestic and export-related products of petroleum, chemicals, and petrochemicals).

### Strategies Proposed to be executed until 2017:

- Implementation of strategy for sourcing and allocation of feedstock. Government is evaluating the proposal of setting up "reverse SEZ" in the feedstock rich country of the Middle-East to meet India's future feedstock requirement.
- Development of an innovation roadmap for chemicals sector and setting up of R&D fund under PPP model.
- Focus on green and sustainable technologies and reducing the environmental impact of the sector.
- Augmenting existing testing centres to act as certifying agencies for testing plastic products and raw materials to meet BIS standards.
- Establishing specialized vocational training centres in clusters for the chemicals industry.
- Formation of industrial clusters/plastic parks of world-class quality.



# Indian specialty chemicals is set for accelerated growth

**A**lthough the Indian specialty chemicals industry has come a long way, it remains at a relatively early stage of development. However, the current outlook for Indian specialty chemicals is at its best for an accelerated and quality growth led by steady domestic demand, emergence of conducive export opportunity led by Chinese environment issues and enhanced facilitation by government initiatives.

While the healthy track record of double-digit growth in domestic demand for specialty chemicals has already attracted global MNCs into India, the entry of more such MNCs will intensify competition for small and inefficient local players, making their survival difficult. Hence, the industry should see gradual but definite consolidation, leading to qualitative growth.

On the other hand, rising population with lowest per-capita consumption of chemicals in the country and India's relatively strong GDP growth outlook (7-8% over the next few years) indicates strong potential for India's chemicals demand. As per industry estimates, India's specialty chemicals market should

deliver strongest annual growth in the world (outpacing even China's) over the next five years.

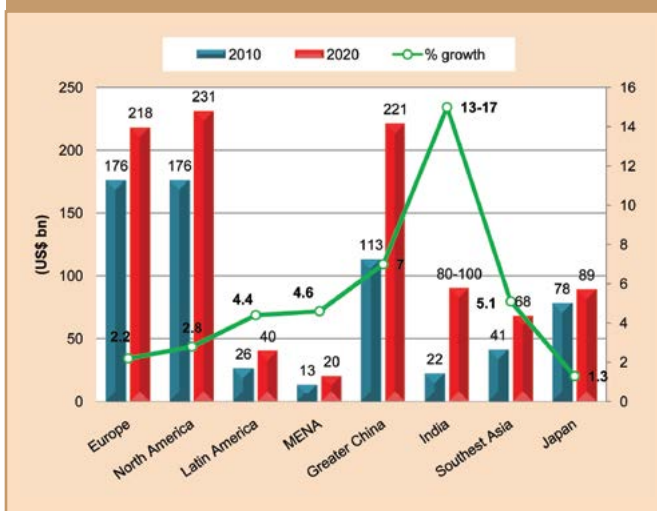
Additionally, favourable business initiatives by the Indian government — in chemicals infrastructure development, facilitating international investment, and the Make in India campaign — give visibility. With the government's focus on creating a conducive business environment, **capex into the Indian chemicals sector has already seen a 52% yoy jump to Rs 1.46tn in 2014 and FDI into the sector has jumped by 49% yoy in FY15 to US\$ 4bn (DIPP). Such capacity creation, along with China's exports softening and global peers looking at India as an alternate source of specialty chemicals, enhances the growth visibility this industry.**

Dr Rajan says, "BASF is convinced about the growth of the Indian specialty chemicals industry and that it can grow more and faster, which is evidenced from our commitment to the country. BASF is already setting up a huge plant in Dahej, Gujarat, with an investment of Rs 10bn. A new plant is coming up in Chennai for automotive catalyst business. We are setting up two other plants for the construction chemicals business. Additionally, BASF is setting up its global R&D/innovation campus in Mumbai. Such initiatives indicate the growth potential of Indian specialty chemicals".

"We are set to establish highly advanced technologies leading to the creation of a robust system across platforms, for example, upgraded technical-service labs to modernise manufacturing practices, leading to tailor-made products and services. This will further reinforce our commitment towards the specialty chemicals business in India and bring us closer to offering innovative and customised solutions for our customers," says Dr Deepak Parikh, Vice-Chairman & Managing Director, Clariant India.

The recent upgrading of India's rank in terms of 'ease of doing business in the world' to 52nd from 76th, at a time when global MNCs are feeling the heat of excessive government intervention in Chinese chemicals industry, would further

India stands out as the fastest growing specialty chemical market in the world till 2020



drive FDI flows into Indian chemicals. Indian specialty chemicals industry is all set for accelerated growth over the next decade compared with its historical growth of 11-14%.

Mr Manish Phanchal, Chemicals Head, Tata Strategic Management Group says, "The Make in India campaign is a key initiative of the current government, which aims to make India a global manufacturing hub. We expect the Indian specialty chemical market to grow at 15-18% per annum in FY14-20 and majority of it will be catered to by domestic production. Additionally, the entry of more and more MNCs into the country with an intention of tapping domestic demand and as an alternate source of intermediates to China would further scale up the domestic industry. That is how India would gain prominence in the global specialty chemicals industry like it earned in the pharmaceutical world."

#### **Scalability and efficiency to drive value growth of Indian chemicals peers**

While the Indian specialty chemicals market is larger (US\$ 25bn) than the domestic pharma market (US\$ 15bn), it is relatively less preferred by investors, primarily due to lack of scale and/or lower operational efficiency. Domestic specialty chemicals are highly fragmented — there are about 40 listed specialty companies with consolidated sales about US\$ 8bn, representing just about 30% of the total market.

Although the Indian specialty chemicals market is well represented by global MNCs (BASF, Clariant, Dow Chemical, Huntsman, Akzonobel, Mitsubishi Chemical Corp, Croda, Du Pont, Henkel, Wacker, Evonik, Syngenta, Solvay), barely a handful of companies are large. Among the listed names, BASF, SRF, Pidilite, Gujarat Flurochem, Aarti Industries, and Atul have sales in excess of Rs 250bn.

While Indian specialty chemicals should see accelerated growth, it is scalability and efficiency (led by R&D process/product/application) that would drive progress, as increasing competition from MNCs will pose a challenge for Indian companies.

Considering the highly fragmented nature and

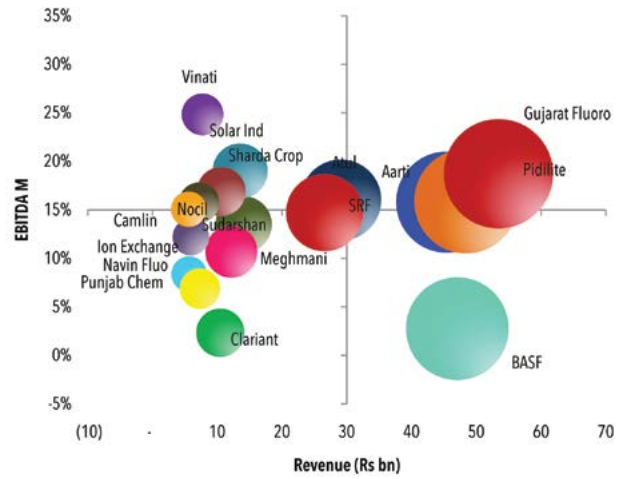
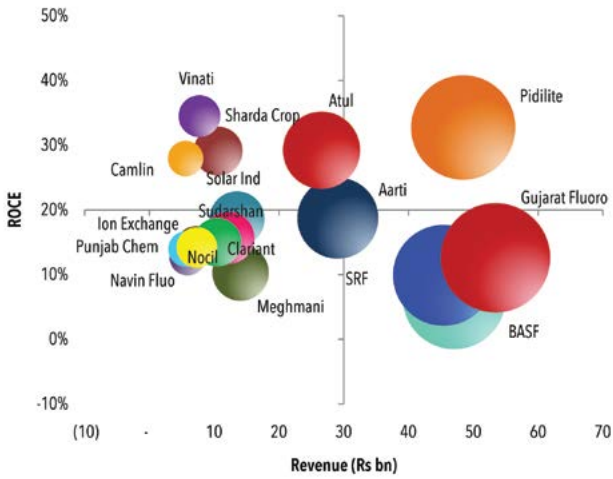
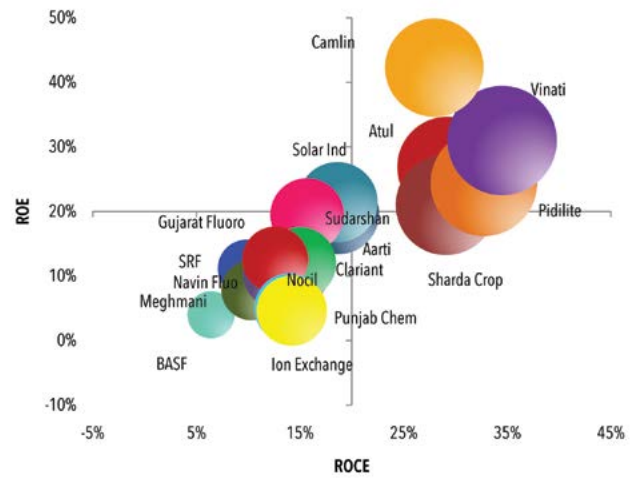
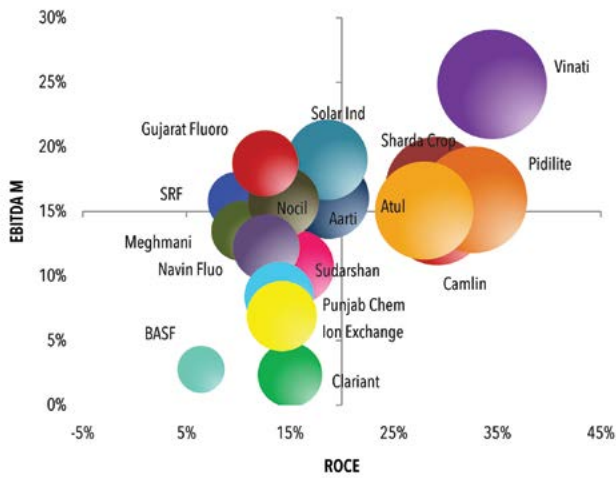
**Mr Manish Phanchal, Chemicals Head, Tata Strategic Management Group says, "Indian specialty chemical market to grow at 15-18% per annum in FY14-20 and majority of it will be catered to by domestic production"**

smaller scale of Indian specialty chemicals players, it is best to segregate them in terms of peers with sales of >Rs 5bn and with sales Rs 1.5-5.0bn with efficiency defined in terms of EBITDA margin of >15% and ROCE/ROE of > 20%.

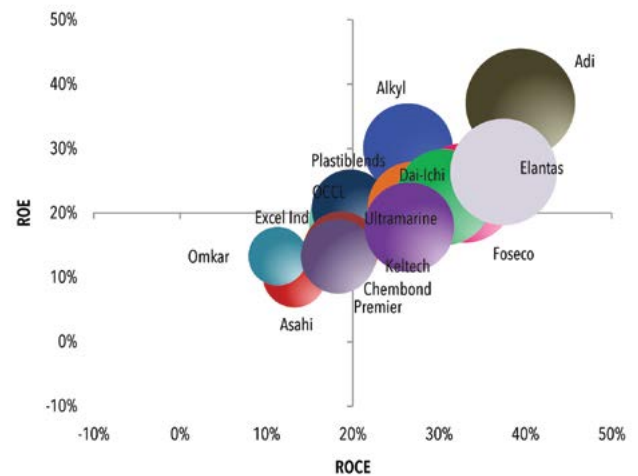
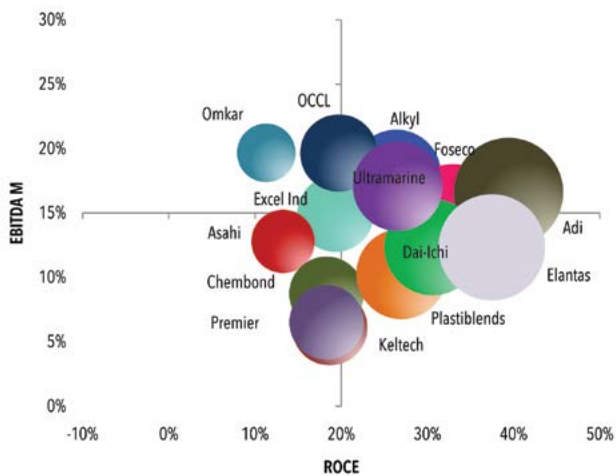
**Efficient names among listed specialty players with revenues of over Rs 5bn are Vinati Organics, Aarti Industries, Atul, Sharda Crop, Pidilite, Solar Industries, and Camlin. In this block, peers such as SRF and Gujarat FluoroChemicals, whose ROCEs dropped below 20% due to large capex, would mainly benefit from on-going emergence for special fluoro-chemistry capability, thereby enhancing their earning efficiency. On the other hand, listed MNC majors such as BASF and Clariant fall in the bracket of inefficiency due to major capex and high overheads.**

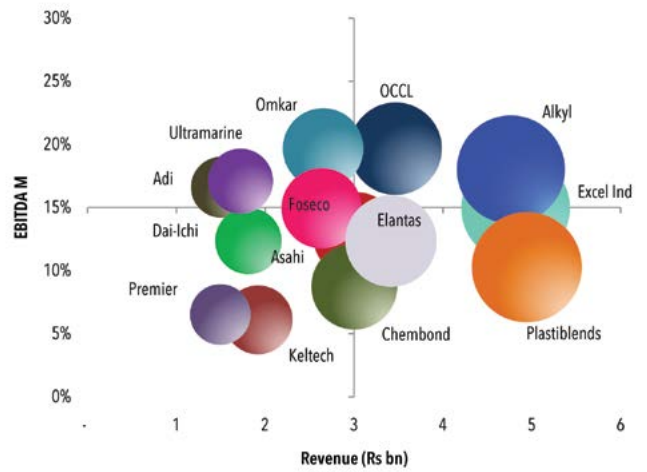
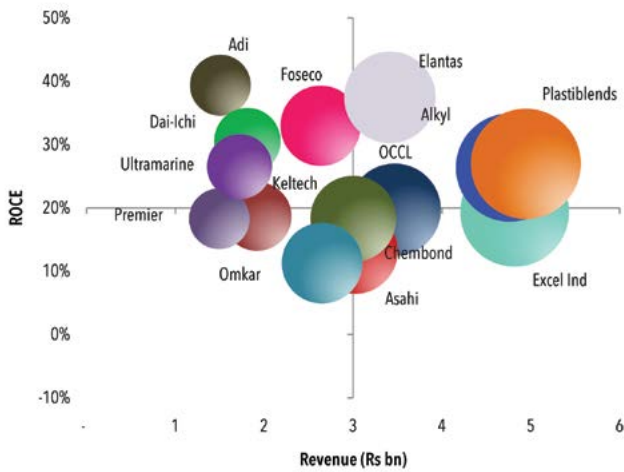
**Efficient names among listed specialty players with revenues between Rs 1.5-5bn are – Alkylamane, OCCL, Dai-Ichi Karkaria, Foseco, Ultramarine, and Adi Fine Chem. Efficient listed commodity chemicals players with revenues over Rs 3bn are – Bodal Chemical, Vishnu Chemical, Bhageria, Elantas Beck, Poddar Pigment, Transpek, and Indo Borax.**

## Positioning of Indian Specialty Chemicals peers (FY15 sales >Rs 5bn) based on scale and efficiency

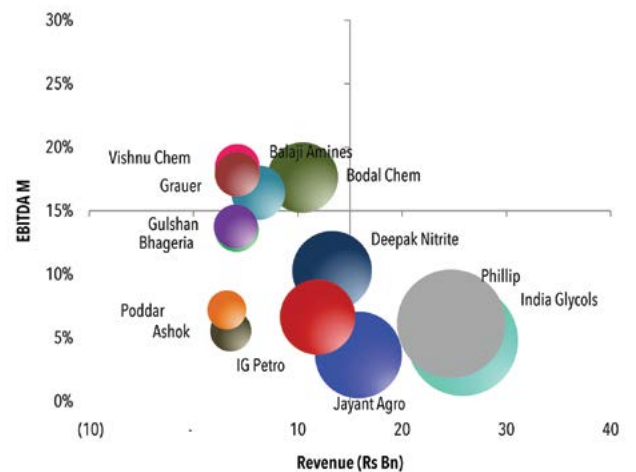
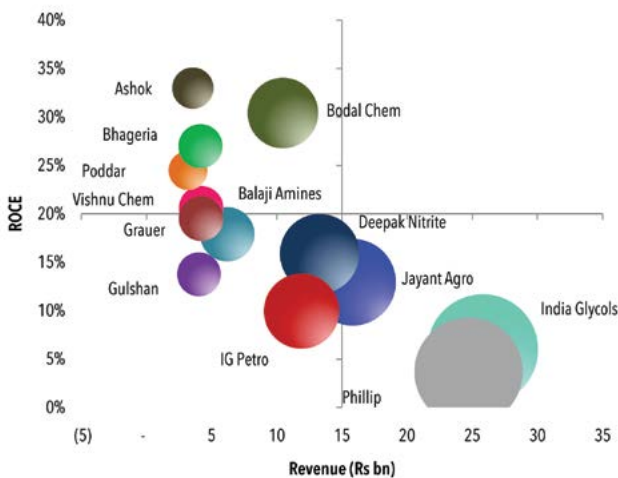
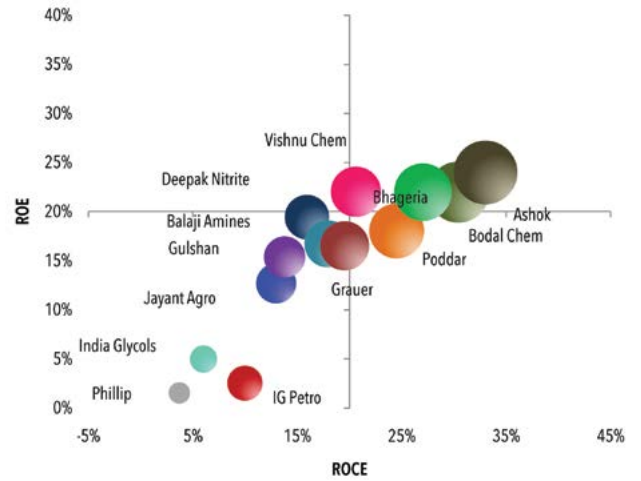
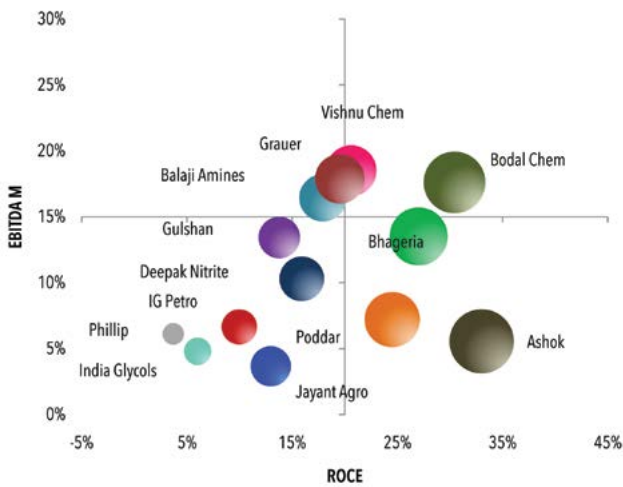


## Positioning of Indian Specialty Chemicals peers (FY15 sales Rs 1.5-5.0bn) based on scale and efficiency





Positioning of Indian commodity chemicals peers (FY15 sales >Rs 3bn) based on scale and efficiency



## India's specialty chemicals market will grow at 12-15% p.a. between FY14-20 and most of it will be catered to by domestic production



**Manish Panchal,**  
**Practice Head Chemicals**  
**TATA Strategic Management Group**

**In the context of a slump in crude prices and bleak near-term outlook, how have the dynamics of the global chemicals industry changed; also, what is the impact on the Indian chemicals industry?**

The current fall in oil prices is primarily due to oversupply rather than weak demand. Based on our analysis, supply-induced oil price declines have coincided with robust growth in the chemicals sector while demand-induced declines have coincided with declines in chemical-industry growth. Lower oil prices have reduced the industry's input costs, which some companies will be able to retain in higher gross profit. Specialized products that have demonstrated strong historical pricing power (such as paints and coatings) will see the strongest margin improvement because of lower oil prices, while commodity chemicals will be the least to gain.

**Chemical imports have grown five times faster than domestic production in FY06-14. Do you see domestic chemical production scaling up meaningfully and India becoming self-sufficient? Also, can India become a global manufacturing hub in chemicals, and if so, what can drive this?**

India is short of many critical feedstock that are needed to drive downstream domestic production. For example, ethylene and propylene, which are the basic building blocks

for many downstream chemicals are majorly (90%) used for manufacturing bulk plastics. Feedstock is much cheaper in the Middle East — so petrochemical intermediates produced there are cheaper. Hence, import dependency is here to stay. This, along with other factors, has led to more investments in the chemical sector in the Middle East, China, and Singapore in the last five years, compared to India.

However, just like the pharma sector, we expect the specialty-chemical industry in India to scale up rapidly in the next five years. India has the potential to become a manufacturing hub of specialty chemicals. We expect the Indian specialty chemical market to grow at 12-15% p.a. between FY14-20 and most of it will be catered to by domestic production.

**Do you see any progress in the Make-in-India campaign; any progress for the Indian chemicals sector? How would challenges (long approval process, high cost of production, availability of feedstock, infrastructure, taxation issues, land and labour issues) be addressed?**

The campaign is a key initiative of the current government and its aim is to make India a global manufacturing hub. We expect the chemical sector to gain immensely from this campaign, as solid steps are being taken to promote chemical manufacturing in India. For example, coal gasification for making fertilisers, Reverse SEZ, removal

of industrial licensing for most sub-sectors except certain hazardous chemicals are steps taken in this direction. The government's target is to up India's ranking in the Ease Of Doing Business Index to #50 (from current #142) in the next two years! We are optimistic that these challenges that the industry is facing will moderate in the next 2-3 years.

**Do you see a contract-manufacturing opportunity for Indian chemicals players under Make in India?**

Yes, this is true in case of knowledge chemicals. Large chemical companies want to focus on their core activities and are therefore outsourcing the manufacturing of certain chemicals to Indian manufacturers. With incentives under Make in India for industry/private-sponsored research programs, we expect more outsourcing of research programs as well. With high-cost operations in the USA and Europe, the focus is gradually shifting to India due to India's better IPR regime compared to China, cost advantage, and availability of technical manpower at low cost.

**Do MNCs see India as a target market for their chemical business, or a sourcing point? Do you see any trend emerging for cross-border alliances for the Indian chemicals industry?**

We can divide chemicals MNCs into two categories - MNCs with strong presence in India and MNCs with limited presence. MNCs having a strong presence are looking to increase market penetration and using India as an export/sourcing hub. Most of these MNCs also have R&D centres in India. MNCs with limited presence (mostly indent sales) are looking at both organic and inorganic growth options.

**Indian chemical industry saw three-fold growth vs. 122% growth in the global market in 2005-13. Is this an indication of rising value play by the domestic industry or higher focus on specialty chemicals rather than bulk/commodity chemicals? What is your outlook for the Indian specialty chemical industry and what would drive growth?**

There are still challenges associated with manufacturing of bulk chemicals in India like availability of feedstock, cheaper imports from neighbouring geographies, high interest rates, and infrastructure problems. However, the Indian

specialty chemicals industry is in for multi-fold growth in the next five years. Our per capita consumption of most specialty chemicals is among the lowest in the world. We expect this industry to reach US\$85-100bn by 2025 (currently US\$ 25bn). Agro chem/paint and coatings/polymers will continue to lead the pack. However, with government initiatives such as Swachh Bharat Abhiyan, Clean Ganga Project, and Smart Cities, demand for some other specialty-chemicals segments (water treatment chemicals, home care surfactants, construction chemicals) will grow at higher rates in the next five years.

**What is your assessment of the Indian specialty-chemicals market in comparison to China?**

Growth in demand for specialty chemicals in India will not only depend on the growth of end-use industries, but also on product penetration (consumption per capita) and specifications & standards. Specialty chemicals penetration in India is much lower compared to China. For example, spending on concrete admixtures in India is US\$1.5/m<sup>3</sup> compared US\$3/m<sup>3</sup> in China. Other key growth drivers of the Indian specialty chemicals industry include strong R&D capabilities, low-cost manufacturing, and improving standards. On the downside, it is still a highly fragmented industry. However, we expect it to consolidate in the next decade.

**Do you see a trend of Chinese import substitution in specialty chemicals? If so, and would that boost Indian specialty chemicals peers' exports? How would the on-going currency devaluation by China impact the global specialty chemical trade?**

Increasing cost of labour and power, and tightening pollution control norms, have diluted the cost advantages enjoyed by the Chinese specialty-chemical manufacturers.

Devaluation of Chinese Yuan will help Chinese exporters in the medium term, but in the long term, India is in a strong position to capture considerable share of global specialty chemical exports.

**What has really made China the global leader (in all respects— consumption, production, exports and imports) in the global chemicals space? How India is dif-**

## ferent from China and what would catapult the growth of the Indian chemicals industry?

The main reasons why the chemical industry in China flourished are ease of acquiring land for world scale plants, tax incentives, promotion of chemical exports by establishing export zones with hi-tech infrastructure, and availability of capital at subsidized interest rates. India is a consumption-driven economy, which holds true for the chemicals industry too — we have vibrant downstream industries in different segments. Also, India has the advantage of being close to ME where feedstock is cheaper. We have a strong R&D base and have the capability to produce world-class products. We also have strong presence in the export market in sub segments such as dyes, pharma, and agrochemicals. We can expect more such segments to be added in that list in the next 5-7 years.

**It seems the knowledge paper of "Reverse SEZ" by FICCI has captured a special interest of the government. Could you update us on the initiatives?**

Reverse SEZ concept was developed mainly to address our feedstock challenges. The basic idea is to develop

SEZs in countries where raw material is available in abundance and at a lower price. For example, price of gas in Iran is US\$2.5/mmBtu compared to US\$4.66/mmBtu in India. These SEZs can be used to manufacture chemical feedstock, which can be sent to India for further value addition. The department of chemicals has proposed a reverse SEZ in Chabahar Port area (Iran) for manufacturing industrial chemicals. We can expect similar activity in Myanmar, Mozambique, etc., in the next 2-3 years.

**Indian specialty chemicals industry is highly fragmented with large number of marginal players. Do you see enhanced consolidation amongst local players and do you expect meaningful M&A by global leaders in the Indian specialty chemicals sector?**

M&A has been playing a critical role in shaping the Indian specialty chemicals industry — in the last five years, several large- and medium-sized global specialty chemicals companies have used the acquisition route to establish their presence in India. For example, in 2013 alone, there were 34 deals in the Indian chemical industry with an estimated value of US\$ 2.2bn. This trend may get more

Several companies have used the M&A route to aggressively grow their business in India

### Growth through M&A

### Why?

**LANXESS**  
Energizing Chemistry

+



In order to consolidate competition globally

**HUNTSMAN**  
Enriching lives through innovation

+



To increase speed to market

**SOLVAY**  
asking more from chemistry®

+



To leverage organic chemistry strength in India

**ARKEMA**  
INNOVATIVE CHEMISTRY

+

**IHSEDU AGROCHEM**



To leverage feedstock availability

**CLARIANT**

+



To increase the proximity to the customer and increase speed to market

**EVONIK**  
INDUSTRIES

+



For global growth through adjacencies

## What are the challenges faced by the industry and what has the government done to address those?

Parameter	Challenges	Actions taken so far
Infrastructure	Poor connectivity by road, rail, and water	7,900km of highway projects awarded till March 2015 and corporatization of public ports for improving its efficiency have been proposed
	Power shortage	Coal blocks and spectrum allocated transparently through auctions
Regulations & Licenses	Too many and complex regulations	Target to increase India's ranking in 'ease of doing business index' to #50 in the next two years
	Multiple licenses / certificates are required to operate a plant in India	Industrial licensing has been abolished for most sub-sectors except in hazardous chemicals
Availability of Feedstock	Lack of adequate feedstock (higher cost and unavailability)	Gas prices linked to international prices. Will bring in investment to explore and increase supplies
		Reverse SEZ concept is being actively considered
Complex tax system	Inverted duty structure	Customs duty on basic chemicals like ethane propane, propylene, reduced to 2.5% from 5%
	Multiple taxes	Consensus arrived with states for amending constitution to implement GST (if implemented can contribute 2% to GDP growth)
Integrated Chemical Parks	Cumbersome land acquisition process	Centre to permit states to make changes to the Land Acquisition Act
	Slow implementation of PCPIRs	More investment planned to develop PCPIR's faster

pronounced provided companies adopt a proactive approach to M&A. Faster speed to market, stronger value chain presence, and product-portfolio optimization will be the key reason for companies to take the M&A route in the specialty chemicals space.

### If the government is able to implement GST in April 2016, how will it affect the Indian chemicals sector and more importantly, the specialty chemicals sector?

Implementation of the GST will have a significant impact and will change the manner in which business is carried out. The application of a single tax rate across all goods and service will result in redistribution of taxes across all categories. This

will lead to a reduction in taxes on manufactured goods, thereby impacting pricing of the final product. Unified GST will have favourable effect on logistics cost and transit time.

The biggest advantage to the industry would be that of reduction in transaction cost, with an immediate impact coming from the discontinuance of CST. Multi-stage taxation, along with an inability to take full benefit of CENVAT credit/refund, has been an issue for the industry. With central GST expected to be single rate for goods and services, going forward, credit accumulation may not be an area of concern. An additional boost to the industry is if the legislation provides for carrying forward of unutilized credit.

### About TATA Strategic Management Group (TSMG)

TSMG is a division of TATA Industries Ltd. TSMG was established in 1991 and since then has helped over 500 clients to grow their business in India and worldwide. It supports clients with a wide spectrum of benefit realization offerings including strategy formulation, product portfolio analysis, integrated cost reduction, supply chain transformation, strategic sourcing and organizational alignment. Its client's portfolio includes companies like Sabic, DSM, DuPont, Lanxess, Evonik, Merck, Pfizer, ACC, Aditya Birla Chemicals, Corning, Akzo Nobel, GE, Toshiba, Mitsubishi, Godrej Chemicals, TATA Chemicals, Rallis, Ecolab, Vopak, Maersk, Stolt-Nielsen, Yamato, Sony, and many more.



## Positioning of top 50 global chemical players based on 2014 operational performance (contd.)

Rank	Company	Chemical sales (\$ mn)	Chemical sales as % of total sales	Headquarters country	Chemical operating profits (\$ mn)	Operating profit margin	Operating return on chemical assets
1	BASF	78,698	79.6	Germany	7,896	10	10.3
2	Dow Chemical	58,167	100	U.S.	5,950	10.2	8.6
3	Sinopec	57,953	12.8	China	-351	def	def
4	SABIC	43,341	86.4	Saudi Arabia	12,033	27.8	14.3
5	ExxonMobil	38,178	9.7	U.S.	5,705	14.9	20.9
6	Formosa Plasticse	37,059	60.4	Taiwan	1,592	4.3	3.7
7	LyondellBasell Industries	34,839	76.4	Netherlands	na	na	na
8	DuPont	29,945	86.2	U.S.	6,184	20.7	32.7
9	Ineos	29,652	100	Switzerland	2,768	9.3	na
10	Bayer	28,120	50.1	Germany	4,717	16.8	16.1
11	Mitsubishi Chemical	26,342	76.2	Japan	870	3.3	3
12	Shell	24,607	5.8	Netherlands	na	na	na
13	LG Chem	21,456	100	South Korea	1,656	7.7	9.6
14	Braskem	19,578	100	Brazil	1,475	7.5	7
15	Air Liquide	19,210	94.1	France	3,688	19.2	11.6
16	AkzoNobel	19,011	100	Netherlands	1,426	7.5	6.6
17	Linde	18,593	82	Germany	5,100	27.4	na
18	Sumitomo Chemical	17,833	79.3	Japan	1,041	5.8	6
19	Mitsui Chemicals	17,201	100	Japan	454	2.6	3.6
20	Evonik Industries	17,177	100	Germany	1,737	10.1	8.3
21	Toray Industries	17,006	89.4	Japan	1,231	7.2	6.3
22	Reliance Industries	15,870	25.8	India	1,359	8.6	14
23	Yara	15,141	100	Norway	2,217	14.6	12.5
24	PPG Industries	14,250	92.8	U.S.	2,156	15.1	15
25	Solvay	14,134	100	Belgium	1,445	10.2	6.1

## Positioning of top 50 global chemical players based on 2014 operational performance

Rank	Company	Chemical sales (\$ mn)	Chemical sales as % of total sales	Headquarters country	Chemical operating profits (\$ mn)	Operating profit margin	Operating return on chemical assets
26	Lotte Chemical	14,121	100	South Korea	333	2.4	3.4
27	Chevron Phillips Chemical	13,416	100	U.S.	na	na	na
28	DSM	12,344	100	Netherlands	339	2.7	2.1
29	Praxair	12,273	100	U.S.	3,907	31.8	19.7
30	SK Innovation	12,011	19.2	South Korea	341	2.8	na
31	Shin-Etsu Chemical	11,874	100	Japan	1,753	14.8	7.6
32	Huntsman Corp.	11,578	100	U.S.	787	6.8	7.2
33	Syngenta	11,286	74.6	Switzerland	na	na	na
34	Borealis	11,076	100	Austria	326	2.9	2.9
35	Lanxess	10,646	100	Germany	543	5.1	5.6
36	Asahi Kasei	10,628	55.4	Japan	746	7	8
37	Sasol	10,299	55.1	South Africa	775	7.5	8.2
38	Air Products & Chemicals	9,989	95.7	U.S.	1,582	15.8	10
39	Eastman Chemical	9,527	100	U.S.	1,239	13	7.7
40	PTT Global Chemical	9,522	53.8	Thailand	1,038	10.9	11.2
41	Mosaic	9,056	100	U.S.	1,544	17.1	8.4
42	DIC	8,218	100	Japan	434	5.3	5.7
43	Arkema	7,915	100	France	594	7.5	6.6
44	Tosoh	7,657	100	Japan	486	6.3	6.7
45	Hanwha Chemical	7,655	100	Korea	134	1.8	1.1
46	Siam Cement	7,617	50.7	Thailand	481	6.3	8.5
47	Indorama	7,514	100	Thailand	161	2.1	2.7
48	BP	7,284	2.1	U.K.	na	na	na
49	Ecolab	7,215	50.5	U.S.	na	na	na
50	Johnson Matthey	7,203	43.4	U.K.	675	9.4	16.7

# Limits of knowledge and Value of Trust

BY VARUN KUMAR

A year ago, my then 2.5 year old came running to me and told me what he had learnt in school -- there are seven continents. It was cute. I was left wondering - he has no idea what a continent is and he hasn't mastered the concept of enumeration so even "7" is not exactly what he understands well.

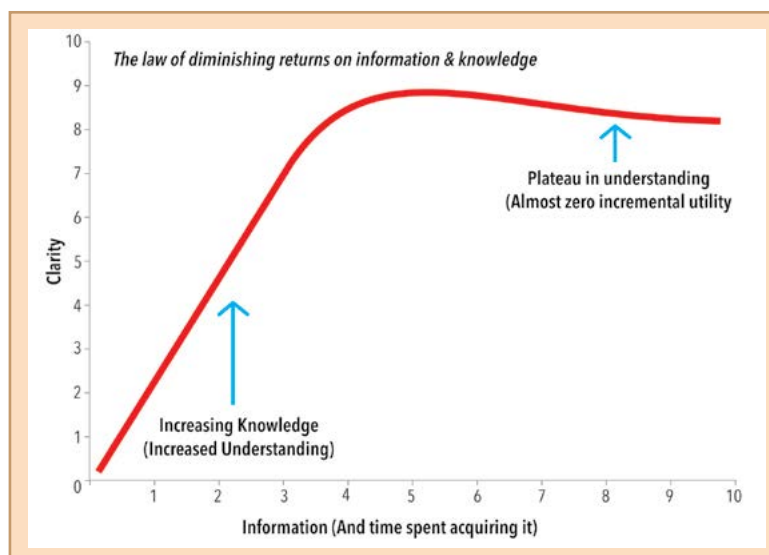
Then I realized that "understanding well", like everything in life, is a relative term and there are limits to knowledge because of sheer lack of a requisite background understanding, lack of time, and most important of all - what we know is mostly enough to serve our goals.

This idea applies to investing as well. I first realized it when a very senior investor once told me about his big position in TCS and said that sell side doesn't add much value and it's all about the management's capability and integrity - effectively indicating that trust is much more important because knowledge has limits. The more I thought about it, the more I realized that people can't be investing hundreds of millions in say an HDFC because an excel sheet indi-

cates it. It's to do with trust in people and in their passion.

I realized more about the limits of knowledge when I was trying to do a new product series with an aim of providing a bit thorough technical details of products that research analysts generally don't touch upon.

I did a note on Siemen's Signalling Systems, one on basics of Titanium Forging in context of BHFC and another on Waste Heat Recovery System in cement plants. I was planning to do one on FAG vs. SKF vs. NRB Bearings and that's where I hit a



serious roadblock. It is incredibly hard to understand the intricacies of different types of bearings - what kind of loading they support, which is best for axial load and which is best for radial load, how they are being designed or manufactured and where the critical challenges in new product development are, and which company is focusing on which area. In spite of having done 1-2 courses in Bearings Design in my IIT days, I failed to “understand well” how FAG is better than SKF or the other way around.

A similar thing happened in Cummins when I tried to learn more about the company vs. KOEL. The products are so specialized that the background knowledge base needed to understand product competitiveness well is extremely thorough.

These roadblocks exist in understanding every business and that is where I think the limits to knowledge lie. We, as investors, aren't equipped with knowledge -- and time -- to understand well so much diverse industries, engineering streams, technology trends, consumer preferences in 100 segments, product designs, market dynamics etc. We work with a bigger picture and that is where the value of trust and passion comes in. Investing is a team work and ultimately the promoters/CEOs of companies are the real team for an investor - one that fills the knowledge gaps or from a different perspective - and brings complementary skills.

That's where the value of trust lies. Trust in the passion and ability of the people who are running the firm, trust in the history of the franchise, trust in their core values and outlook towards business, towards minority shareholders etc.

The trust in the history of franchise of SKF makes us believe, with reasonable confidence, that they know how to design new products, how to run a profitable franchise and be competitive. If we are comfortable with market opportunities, we can be comfortable in investing.

Same applies to say a Cummins. We trust in their history, their global leadership and are comfortable to extrapolate that going ahead. We trust their management, the management's commitment and integrity and that I think plays the bigger part in investing decision rather than how exactly their new inlet valve system, driven by electronically timed Cam mechanisms does a better job than KOEL where Cam mechanisms are hydraulically operated [I made that part up by the way].

A big part of investing decisions are based on presence of Mr Parekh, Mr Puri, Mr Siddharth Lal, Mr Murthy, Mr Uday Kotak, Ms Shikha Sharma, Mr Adi Godrej, Mr Varun Berry, Mr Sobti and Mr Sikka etc in their respective firms. The world works in amazingly simple ways - it is just the people. And it should be that way. People evolved before businesses. And the interesting thing about trust, as a senior client told me, is that it is earned, can be examined and even intelligently analyzed. That point makes investing a tad little easy.

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# *Nitin Ghadiyar*

## **Shares his insights on brand building and his outlook on the FMCG industry**



Nitin Ghadiyar has over 35 years of experience in Leadership and Head of Company positions in leading pharmaceutical and consumer-product companies such as Colgate Palmolive, Parke-Davis, Reckitt Piramal, Johnson & Johnson, Dabur and Strides Arcolabs. He has made a significant contribution in building over 20 national brands in the FMCG and Health Care segments. He is a graduate in Economics and Statistics from St. Xavier's College, Mumbai, and a Post Graduate Management from the Jamnalal Bajaj Institute, also in Mumbai, with a specialization in Marketing. He currently serves on the Board of Rasna and has provided consulting to various domestic and international firms in Health Care - OTC, FMCG, and Pharma businesses. Being an expert in brand building and brand development in the FMCG and Pharma space, Nitin is a renowned consultant in the industry known for his ability to provide out-of-the-box solutions given his experience in delivering quantum growth consistently.

**BY JUBIL JAIN & NAVEEN KULKARNI**

**Q) Patanjali and its spectacular growth to Rs 25bn turnover in such a short period is the talk of the town among FMCG companies and in the analyst circles. What is your assessment of the impact Patanjali will make on the FMCG sector and specifically ayurvedic/herbal categories in the medium term?**

A) Patanjali has grown spectacularly in the last few years. While the company is present in many diverse FMCG categories such as biscuits, shampoos, toothpaste, atta, and masala, I do not see Patanjali making a significant dent on the market shares of any of the larger FMCG brands in these segments in the medium term. On the other hand, I believe that Patanjali will help the Ayurvedic and Herbal space to grow and will also help accelerate the growth of Companies such as Dabur, Baidhyanath, Emami, and other regional and national companies already present in this segment. It has been very successful in attracting consumers with an inclination for yoga, meditation, and ayurvedic remedies, but I believe that the rest of the consumers, which are still in a majority, will continue to find value in popular products of leading domestic and MNC FMCG companies and will not be swayed towards Patanjali beyond an extent.

**Q) In the last decade, in what way has the field of sales changed the most?**

One place where the sales structure and organisation has seen change would be Modern Trade. Emergence of modern trade has led to some amount of polarisation in what you do in general trade and what you do in modern trade. In modern trade, you need to compete not only in terms of price, but also relationships. This requires special skills and you need to build a team that understands this.

**Q) How would you judge the impact of social media on the way advertising is done today?**

A) I feel that social-media marketing is currently applicable only for premium categories – Sec A products. It has not yet penetrated beyond these. Nevertheless, one needs to be savvy and one needs to include it in advertising spends wherever relevant. But one need not go overboard. As a matter of fact, for several FMCG brands, I would still continue with traditional methods of advertising.

**Q) What is your assessment of the impact of Make in India for the FMCG industry?**

A) India is a very exciting place when it comes to the consumer industry. For major Indian brands such as Dabur, GCPL, Marico and indeed the iconic Rasna, exports markets are booming. The Modi government has recently floated a proposal that they would take the top-150 brands that are Made in India and assist in expand their global foot prints. One of the achievements of the Modi government has been to give visibility to Brand India in developed markets such as North America and various emerging markets in Africa, Latin America etc.

**Q) If you could summarise the golden rules of marketing in just four points....**

1. Innovate. Think out of the box
2. Constantly seek consumer insights. The smell of the bazaar should drive strategy
3. Take prudent risks and don't be afraid of failure. Tolerate and own failure and share and celebrate success
4. Always think quantum rather than incremental growth

# Indian Economy – Trend Indicators

## Monthly Economic Indicators

Growth Rates (%)	Sep-14	Oct-14	Nov-14	Dec-14	Jan-15	Feb-15	Mar-15	Apr-15	May-15	Jun-15	Jul-15	Aug-15	Sep-15
IIP	2.6	-2.7	5.2	3.6	2.8	4.8	2.5	3.0	2.5	4.4	4.2	6.4	4.4
PMI	51.0	51.6	53.3	54.5	52.9	51.2	52.1	51.3	52.6	51.3	52.7	52.3	51.2
Core sector	1.9	6.3	6.7	2.4	1.8	1.5	-0.1	-0.4	4.4	3.0	1.1	2.7	-
WPI	2.4	1.7	-0.2	-0.5	-0.9	-2.1	-2.3	-2.4	-2.4	-2.4	-4.1	-4.9	-4.5
CPI	6.5	5.5	4.4	5.0	5.2	5.4	5.3	4.9	5.0	5.4	3.8	3.7	4.4
Money Supply	12.7	12.0	11.4	10.2	11.5	11.4	11.3	11.5	11.7	11.1	11.3	10.9	11.2
Deposit	13.0	12.4	12.2	10.6	11.9	11.8	11.6	11.8	12.3	11.7	11.7	11.5	11.6
Credit	9.2	10.6	10.5	10.4	10.2	9.9	10.2	12.6	10.5	9.8	9.4	9.4	9.6
Exports	2.7	-5.0	7.3	-3.8	-11.2	-15.0	-21.1	-14.0	-20.2	-15.8	-10.3	-20.7	-23.9
Imports	26.0	3.6	26.8	-4.8	-11.4	-15.7	-13.4	-7.5	-16.5	-13.4	-10.3	-9.9	-18.9
Trade deficit (USD Bn)	-14.2	-13.4	-16.9	-9.4	-8.3	-6.8	-11.8	-11.0	-10.4	-10.8	-12.8	-12.5	-13.0
Net FDI (USD Bn)	2.9	2.8	1.8	4.0	4.7	3.8	2.7	3.3	3.8	1.7	1.7	1.9	-
FII (USD Bn)	2.4	1.7	4.8	-0.4	6.6	3.8	2.0	3.1	-2.8	-2.0	-0.7	-3.5	-
ECB (USD Bn)	3.2	2.8	3.5	0.6	2.6	2.3	2.7	7.3	2.4	2.4	3.2	2.1	0.8
Dollar-Rupee	61.8	61.4	62.0	63.0	61.9	61.8	62.5	63.4	63.8	63.7	64.1	66.5	0.0
Foreign Exc Res (USD Bn)	314.2	315.9	316.3	319.7	327.9	338.1	341.4	344.6	352.5	355.2	353.3	355.4	0.0

## Quarterly Economic Indicators

Balance of Payment <sup>(USD Bn)</sup>	Q1FY14	Q2FY14	Q3FY14	Q4FY14	Q1FY15	Q2FY15	Q3FY15	Q4FY15	Q1FY16
Exports	73.9	81.2	79.8	83.7	81.7	85.3	79.0	70.8	68.0
Imports	124.4	114.5	112.9	114.3	116.3	123.9	118.3	102.5	102.2
Trade deficit	-50.5	-33.3	-33.2	-30.7	-34.6	-38.6	-39.3	-31.7	-34.2
Net Invisibles	28.7	28.1	29.1	29.3	26.7	28.5	30.9	30.2	28.0
CAD	-21.8	-5.2	-4.1	-1.3	-7.9	-10.1	-8.4	-1.5	-6.2
CAD (% of GDP)	4.6	1.2	0.9	0.3	1.6	2.0	1.7	0.3	1.2
Capital Account	20.6	-4.8	23.8	9.2	19.2	16.5	23.6	30.7	18.1
BoP	-0.3	-10.4	19.1	7.1	11.2	6.9	13.2	30.1	11.4

GDP and its Components <sup>(YoY, %)</sup>	Q1FY14	Q2FY14	Q3FY14	Q4FY14	Q1FY15	Q2FY15	Q3FY15	Q4FY15	Q1FY16
Agriculture	2.7	3.6	3.8	4.4	2.6	2.1	-1.1	-1.4	1.9
Industry	5.9	4.2	5.5	5.5	8.1	7.2	3.8	7.2	6.4
Mining and Quarrying	0.8	4.5	4.2	11.5	4.3	1.4	1.5	2.3	4.0
Manufacturing	7.2	3.8	5.9	4.4	8.4	7.9	3.6	8.4	7.2
Electricity, gas and water supply	2.8	6.5	3.9	5.9	10.1	8.7	8.7	4.2	3.2
Services	8.9	9.7	8.3	5.6	8.4	10.2	11.1	8.0	8.6
Construction	1.5	3.5	3.8	1.2	6.5	8.7	3.1	1.4	6.9
Trade, hotels, Transport, & Communication	10.3	11.9	12.4	9.9	12.1	8.9	7.4	14.1	12.8
Financing, Insurance, Real Estate & business services	7.7	11.9	5.7	5.5	9.3	13.5	13.3	10.2	8.9
Public administration, defence, & other services	14.4	6.9	9.1	2.4	2.8	7.1	19.7	0.1	2.7
GVA at Basic Price	7.2	7.5	6.6	5.3	7.4	8.4	6.8	6.1	7.1

## Annual Economic Indicators and Forecasts

Indicators	Units	FY8	FY9	FY10	FY11	FY12	FY13	FY14	FY15	FY16E	FY17E
Real GDP growth	%	9.3	6.7	8.6	8.9	6.7	4.5	4.7	7.2	7.4	8.0
Agriculture	%	5.8	0.1	0.8	8.6	5.0	1.4	4.7	0.2	2.0	3.0
Industry	%	9.2	4.1	10.2	8.3	6.7	0.9	-0.1	6.6	7.0	7.5
Services	%	10.3	9.4	10.0	9.2	7.1	6.2	6.0	9.4	8.9	9.4
Real GDP	Rs Bn	38966	41587	45161	49185	52475	54821	91698	98271	105543	113986
Real GDP	US\$ Bn	967	908	953	1079	1096	1008	1517	1611	1624	1809
Nominal GDP	Rs Bn	49864	56301	64778	77841	90097	101133	113451	126538	139479	159079
Nominal GDP	US\$ Bn	1237	1229	1367	1707	1881	1859	1876	2074	2146	2525
Population	Mn	1138	1154	1170	1186	1202	1219	1236	1254	1271	1302
Per Capita Income	US\$	1087	1065	1168	1439	1565	1525	1518	1655	1688	1940
WPI (Average)	%	4.7	8.1	3.8	9.6	8.7	7.4	6.0	2.0	-1.0	5.6
CPI (Average)	%	6.4	9.0	12.4	10.4	8.3	10.2	9.5	6.0	5.0	5.0
Money Supply	%	22.1	20.5	19.2	16.2	15.8	13.6	13.5	12.0	12.0	13.0
CRR	%	7.50	5.00	5.75	6.00	4.75	4.00	4.00	4.0	4.0	4.0
Repo rate	%	7.75	5.00	5.00	6.75	8.50	7.50	8.00	7.50	7.0	7.00
Reverse repo rate	%	6.00	3.50	3.50	5.75	7.50	6.50	7.00	6.50	6.0	6.0
Bank Deposit growth	%	22.4	19.9	17.2	15.9	13.5	14.4	14.6	11.4	12.0	13.5
Bank Credit growth	%	22.3	17.5	16.9	21.5	17.0	15.0	14.3	9.5	10.0	12.0
Centre Fiscal Deficit	Rs Bn	1437	3370	4140	3736	5160	5209	5245	5126	16181	5568
Centre Fiscal Deficit	% of GDP	2.9	6.0	6.4	4.8	5.7	5.2	4.6	4.1	3.9	3.5
Gross Central Govt Borrowings	Rs Bn	1681	2730	4510	4370	5098	5580	5641	5920	6349	6313
Net Central Govt Borrowings	Rs Bn	1318	2336	3984	3254	4362	4674	4536	4469	4603	4566
State Fiscal Deficit	% of GDP	1.5	2.4	2.9	2.1	1.9	2.0	2.5	2.4	2.0	1.5
Consolidated Fiscal Deficit	% of GDP	4.4	8.4	9.3	6.9	7.6	6.9	7.1	6.6	5.9	5.0
Exports	US\$ Bn	166.2	189.0	182.4	251.1	309.8	306.6	318.6	316.7	298.0	311.4
YoY Growth	%	28.9	13.7	-3.5	37.6	23.4	-1.0	3.9	-0.6	-5.9	4.5
Imports	US\$ Bn	257.6	308.5	300.6	381.1	499.5	502.2	466.2	460.9	443.0	469.6
YoY Growth	%	35.1	19.7	-2.5	26.7	31.1	0.5	-7.2	-1.1	-3.9	6.0
Trade Balance	US\$ Bn	-91.5	-119.5	-118.2	-129.9	-189.8	-195.6	-147.6	-144.2	-145.0	-158.2
Net Invisibles	US\$ Bn	75.7	91.6	80.0	84.6	111.604	107.5	115.2	116.2	118.8	123.5
Current Account Deficit	US\$ Bn	-15.7	-27.9	-38.2	-45.3	-78.2	-88.2	-32.4	-27.9	-26.2	-34.6
CAD (% of GDP)	%	-1.3	-2.3	-2.8	-2.6	-4.2	-4.7	-1.7	-1.4	-1.2	-1.4
Capital Account Balance	US\$ Bn	106.6	7.8	51.6	62.0	67.8	89.3	48.8	90.0	65.5	75.5
Dollar-Rupee (Average)		40.3	45.8	47.4	45.6	47.9	54.4	60.5	61.2	65.0	60.0

Source: RBI, CSO, CGA, Ministry of Agriculture, Ministry of commerce, Bloomberg, PhillipCapital India Research



# PhillipCapital India Coverage Universe: Valuation Summary

Name of company	Sector	CMP Rs	Mkt Cap Rs mn	Net Sales (Rs mn)		EBITDA (Rs mn)		PAT (Rs mn)		EPS (Rs)		EPS Growth (%)		P/E (x)		P/B (x)		EV/EBITDA (x)		ROE (%)		ROCE (%)	
				FY16E	FY17E	FY16E	FY17E	FY16E	FY17E	FY16E	FY17E	FY16E	FY17E	FY16E	FY17E	FY16E	FY17E	FY16E	FY17E	FY16E	FY17E	FY16E	FY17E
Bajaj Auto	Automobiles	2,439	705,752	230,020	267,416	48,248	56,526	36,576	41,720	126	144	16.0	14.1	19.3	16.9	5.5	4.6	14.1	11.6	28.7	27.5	26.1	25.7
Bharat Forge	Automobiles	890	207,280	89,056	102,437	17,160	19,996	9,827	11,630	42	50	36.9	18.3	21.1	17.8	4.9	4.0	13.2	11.4	23.3	22.7	18.7	21.5
Hero MotoCorp	Automobiles	2,500	499,219	283,370	325,211	41,714	48,473	30,162	34,800	151	174	18.7	15.4	16.6	14.3	6.3	5.2	11.9	10.1	37.9	36.5	37.4	36.4
Ashok Leyland	Automobiles	95	269,931	173,918	216,048	18,391	23,574	8,574	12,778	3	4	266.6	49.0	31.5	21.1	4.7	3.9	15.3	11.4	14.8	18.5	12.3	16.0
Tata Motors	Automobiles	352	1,140,010	2,588,412	2,882,697	412,872	510,805	133,821	174,950	42	54	-5.0	30.7	8.5	6.5	1.6	1.3	4.1	3.4	19.1	19.9	8.4	10.8
Mahindra & Mahindra	Automobiles	1,288	800,029	414,587	474,617	50,048	61,627	35,601	44,715	60	76	19.3	25.6	21.4	17.0	3.5	3.1	16.1	12.9	16.4	18.0	14.2	16.2
Mahindra CIE	Automobiles	264	85,322	62,117	70,080	7,685	9,580	3,414	4,988	11	15	43.1	46.1	25.0	17.1	3.8	3.2	12.6	9.6	15.2	18.7	10.9	15.1
Apollo Tyres	Automobiles	187	95,239	131,888	149,178	20,245	23,496	10,857	13,013	21	26	7.6	19.9	8.8	7.3	1.5	1.3	5.0	4.5	18.1	18.5	15.4	15.9
Maruti Suzuki	Automobiles	4,250	1,283,765	565,951	677,653	96,353	113,046	57,789	70,480	191	233	55.7	22.0	22.2	18.2	4.5	3.7	12.9	10.4	20.2	20.4	20.6	21.0
ACC	Cement	1,376	258,385	126,698	146,510	16,153	21,858	10,385	13,933	55	74	-10.6	34.2	24.9	18.6	3.0	2.8	15.5	11.5	12.1	15.3	10.2	12.9
Ambuja Cement	Cement	210	325,821	231,195	268,414	34,634	47,120	16,536	21,857	8	11	-13.4	32.2	25.2	19.1	2.2	2.1	8.8	6.3	8.8	11.1	12.9	12.5
India Cement	Cement	81	24,881	58,814	65,319	8,224	9,926	966	2,430	3	8	n.a.	151.7	25.8	10.2	0.7	0.6	6.4	4.9	2.7	6.0	4.6	6.4
Mangalam Cement	Cement	224	5,987	10,756	11,489	1,252	1,817	431	825	16	31	13.8	91.5	13.9	7.3	1.1	1.0	8.8	5.5	7.8	13.5	6.4	9.6
Shree Cement	Cement	11,879	413,823	60,803	88,591	14,340	25,234	5,323	11,146	204	320	66.5	57.1	58.3	37.1	7.2	6.2	28.2	15.5	12.4	16.7	11.8	17.1
JK Cement	Cement	623	43,578	37,856	45,428	5,495	7,805	1,324	2,744	19	39	6.1	107.3	32.9	15.9	2.5	2.3	12.8	8.8	7.7	14.3	5.7	8.1
Dalmia Bharat Ltd	Cement	691	56,090	66,010	81,682	13,579	20,119	954	4,161	12	51	940.7	336.0	58.8	13.5	1.2	1.1	8.8	5.6	2.1	8.4	4.9	7.6
OCL India	Cement	514	29,244	25,843	30,098	4,866	6,425	2,395	3,661	42	64	76.3	52.8	12.2	8.0	2.0	1.7	6.0	4.0	16.7	21.4	13.6	19.6
JK Lakshmi Cement	Cement	378	44,456	27,011	34,300	5,266	7,079	1,905	3,244	16	28	5.7	70.3	23.3	13.7	2.8	2.5	11.8	8.3	12.2	18.1	8.4	11.5
HeidelbergCement	Cement	81	18,435	18,816	20,352	2,543	3,252	684	1,257	3	6	n.a.	83.7	26.9	14.7	2.0	1.7	10.5	7.5	7.3	11.8	5.6	7.8
Ultratech Cement	Cement	2,907	797,602	294,839	352,072	55,910	73,168	28,834	40,677	105	148	37.4	41.1	27.7	19.6	3.7	3.2	15.6	11.3	13.4	16.2	10.1	12.9
ABB India	Capital Goods	1,101	233,343	79,105	84,530	6,819	8,306	3,795	4,602	18	22	66.1	21.3	61.5	50.7	7.7	7.0	34.4	28.1	12.5	13.9	12.1	13.2
BHEL	Capital Goods	205	502,492	271,342	320,669	27,361	43,299	17,997	30,185	7	12	26.8	67.7	27.9	16.6	1.4	1.3	14.1	9.3	5.1	8.0	4.1	6.4
Alstom T&D	Capital Goods	526	134,642	44,305	51,431	4,241	6,267	2,130	3,620	8	14	76.8	70.0	63.2	37.2	9.4	8.3	32.0	21.3	14.9	22.3	15.5	22.3
Crompton Greaves	Capital Goods	178	111,592	131,691	144,955	6,203	12,015	2,194	5,776	4	9	19.2	163.3	50.9	19.3	2.8	2.5	21.0	10.9	5.5	13.1	4.5	9.1
Engineers India	Capital Goods	209	70,453	16,818	18,624	1,859	3,120	3,088	4,024	9	12	5.0	30.3	22.8	17.5	2.6	2.4	24.2	14.3	11.3	13.6	11.6	14.2
KEC International	Capital Goods	145	37,214	90,852	104,389	6,970	8,527	1,546	2,423	6	9	119.2	56.7	24.1	15.4	2.6	2.2	8.3	6.8	10.6	14.6	9.9	10.8

Note: For banks, EBITDA is pre-provision profit

# PhillipCapital India Coverage Universe: Valuation Summary

	CMP	Mkt Cap	Net Sales (Rs mn)	EBIDTA (Rs mn)	PAT (Rs mn)	EPS (Rs)	EPS Growth (%)	P/E (x)	P/B (x)	EV/EBITDA (x)	ROE (%)	ROCE (%)									
Name of company	Sector	Rs	FY16E	FY17E	FY16E	FY17E	FY16E	FY17E	FY16E	FY17E	FY16E	FY17E									
Alstom India	Capital Goods	642	23,419	28,472	1,687	2,385	23	32	12.5	36.0	27.5	20.2	4.0	3.5	20.5	13.7	14.4	17.3	15.3	18.5	
Larsen & Toubro	Capital Goods	1,540	1,433,545	1,259,213	123,953	168,246	49	77	3.4	58.1	31.5	20.0	3.3	2.9	18.4	13.7	10.4	14.6	4.8	6.5	
Siemens	Capital Goods	1,370	487,778	103,975	7,350	8,987	16	22	56.6	43.2	87.7	61.3	10.5	9.6	63.0	50.6	11.9	15.7	9.6	12.8	
Cummins India	Capital Goods	1,051	291,240	61,220	8,144	11,010	28	37	0.3	28.7	37.0	28.7	9.0	7.9	35.7	26.4	24.3	27.4	21.7	25.1	
VA Tech Wabag	Capital Goods	639	34,799	26,963	2,450	3,076	26	34	26.3	30.3	24.6	18.9	3.4	3.0	13.5	10.8	14.0	15.9	12.7	14.5	
Thermax	Capital Goods	851	101,372	56,147	5,122	5,159	23	28	39.9	18.7	36.7	30.9	4.3	3.9	19.9	19.4	11.7	12.7	11.2	11.9	
Vollas	Capital Goods	272	89,852	54,322	4,084	5,497	10	13	-0.3	31.8	26.5	20.1	3.8	3.3	21.3	15.6	14.4	16.6	14.6	16.9	
Coal India	Power	335	2,114,403	809,032	206,678	237,819	27	30	24.3	12.1	12.4	11.1	4.5	3.8	7.6	6.2	36.0	34.5	38.5	36.9	
NTPC	Power	126	1,037,692	777,730	838,834	169,155	192,050	11	12	-0.3	8.2	11.7	10.8	1.2	1.1	11.0	10.4	10.2	10.5	6.2	6.0
Power Grid	Power	133	695,801	206,449	179,809	218,831	12	14	23.4	19.5	11.2	9.4	1.6	1.4	9.6	8.5	15.3	16.2	6.1	6.6	
PTC India	Power	67	19,892	150,838	167,991	10,803	12,778	11	13	-8.4	13.7	6.1	5.4	0.6	0.6	7.2	6.9	9.8	10.4	8.1	8.1
Inox Wind	Power	381	84,506	46,134	8,391	10,822	27	33	127.1	21.1	14.0	11.6	4.6	3.5	10.6	8.2	32.5	30.2	26.0	25.8	
Chambal Fertilisers	Agri Inputs	59	24,637	108,394	8,288	8,476	9	9	35.9	2.9	6.8	6.6	1.0	0.9	6.7	6.3	14.3	13.3	6.7	6.8	
Coromandel Fertilisers Ltd	Agri Inputs	195	56,788	112,382	9,246	11,408	17	22	22.9	30.9	11.4	8.7	1.9	1.7	7.1	5.3	16.7	19.2	17.2	19.8	
Tata Chemicals Ltd	Agri Inputs	410	104,501	185,584	24,173	25,159	35	38	11.3	7.7	11.7	10.9	1.7	1.6	6.1	5.5	14.6	14.4	9.0	9.5	
Kaveri Seeds	Agri Inputs	491	33,906	9,577	2,251	2,952	31	44	-28.4	39.8	15.7	11.2	3.7	3.0	14.1	10.3	23.6	26.5	25.1	28.5	
PI Industries	Agri Inputs	683	93,261	22,849	4,477	5,355	21	27	16.7	26.7	32.5	25.6	8.2	6.5	20.5	16.8	25.3	25.3	26.1	26.0	
Rallis India	Agri Inputs	213	41,383	20,423	3,001	3,636	9	11	6.1	25.2	24.8	19.8	4.5	3.9	14.2	11.5	18.2	19.8	16.6	18.7	
United Phosphorus	Agri Inputs	470	201,573	133,799	147,892	26,276	13,809	32	35	17.1	8.7	14.6	13.4	3.0	2.7	8.4	7.2	21.8	21.0	17.7	17.0
Zuari Agrochemicals	Agri Inputs	161	6,780	56,596	3,060	n.a.	17	n.a.	370.6	n.a.	9.3	n.a.	0.8	n.a.	9.3	n.a.	8.5	n.a.	7.5	n.a.	
Deepak Fertilisers	Agri Inputs	131	11,555	33,995	5,176	n.a.	30	n.a.	13.0	n.a.	4.4	n.a.	0.6	n.a.	3.1	n.a.	15.2	n.a.	11.6	n.a.	
Monsanto India	Agri Inputs	2,508	43,295	6,046	1,330	1,623	69	85	12.3	23.0	36.1	29.4	11.5	11.9	31.9	26.1	31.8	40.6	24.6	28.0	
Andhra Bank	Financials	69	45,042	49,573	33,634	37,297	14	19	31.4	34.7	5.0	3.7	0.6	0.5	1.3	1.2	9.2	11.2	0.5	0.5	
Bank of Baroda	Financials	174	399,772	144,325	108,508	125,258	19	25	26.1	30.9	9.0	6.9	1.1	1.0	3.7	3.2	10.3	11.9	0.6	0.9	
Bank of India	Financials	141	112,016	126,964	146,510	87,478	12	27	-53.5	127.2	11.8	5.2	0.7	0.6	1.3	1.1	7.1	10.4	0.3	0.4	
Canara Bank	Financials	294	159,449	107,311	80,092	102,497	51	73	-9.8	42.8	5.7	4.0	0.8	0.7	2.0	1.6	10.2	14.0	0.5	1.0	

# PhillipCapital India Coverage Universe: Valuation Summary

Name of company	Sector	CMP Rs	Mkt Cap Rs mn	Net Sales (Rs mn)		EBIDTA (Rs mn)		PAT (Rs mn)		EPS (Rs)		EPS Growth (%)		P/E (x)		P/B (x)		EV/EBITDA (x)		ROE (%)		ROCE (%)	
				FY16E	FY17E	FY16E	FY17E	FY16E	FY17E	FY16E	FY17E	FY16E	FY17E	FY16E	FY17E	FY16E	FY17E	FY16E	FY17E	FY16E	FY17E		FY16E
Corporation bank	Financials	45	44,347	46,373	55,993	34,976	42,505	10,776	15,844	12	22	-30.4	81.2	3.7	2.0	0.1	0.1	1.3	1.0	10.0	13.6	0.4	0.6
HDFC Bank	Financials	1,085	2,731,610	264,087	314,568	212,048	252,451	120,821	145,211	48	58	18.3	20.2	22.5	18.7	3.9	3.3	12.9	10.8	18.2	19.0	1.9	2.9
ICICI Bank	Financials	283	1,642,992	215,970	248,403	226,725	253,443	123,255	140,435	22	25	12.1	16.1	13.1	11.3	2.0	1.8	7.2	6.5	14.5	14.9	1.8	2.7
IOB	Financials	37	45,893	73,446	n.a.	48,072	n.a.	11,896	n.a.	8		72.2		4.4		0.5		1.0		7.1		0.3	-
Oriental Bank	Financials	145	43,523	54,736	62,811	43,469	48,686	9,776	16,586	33	55	96.7	69.7	4.5	2.6	0.4	0.3	1.0	0.9	7.1	10.9	0.4	0.9
PNB	Financials	136	266,166	177,394	204,470	124,506	138,211	36,739	48,306	20	26	20.0	31.5	6.8	5.2	0.9	0.8	2.1	1.9	9.4	11.3	0.6	0.7
SBI	Financials	244	1,896,058	799,767	910,406	486,649	519,916	187,534	220,997	26	35	20.6	35.2	9.5	7.0	1.3	1.1	3.9	3.6	10.6	11.0	0.7	1.0
Union Bank	Financials	176	111,611	94,970	107,929	60,822	67,751	23,555	33,616	37	53	32.2	42.7	4.7	3.3	0.8	0.6	1.8	1.6	12.2	15.6	0.6	0.8
Indian Bank	Financials	138	66,160	48,014	56,438	33,385	38,546	11,319	15,260	25	32	17.1	29.3	5.6	4.3	0.6	0.5	2.0	1.7	8.6	10.4	0.6	1.0
DCB Bank	Financials	107	30,201	6,249	7,787	3,634	4,570	2,094	2,693	7	10	9.5	28.6	14.4	11.2	1.8	1.6	8.3	6.6	12.8	14.3	1.2	1.2
AXIS Bank	Financials	496	1,178,228	163,255	192,698	159,084	181,827	85,465	99,622	36	41	15.0	15.4	13.9	12.0	2.4	2.1	7.4	6.5	17.7	17.8	1.7	1.7
IndusInd Bank	Financials	950	562,166	42,485	53,394	39,631	48,893	22,094	27,426	38	47	12.3	24.1	25.0	20.1	3.4	3.0	14.2	11.5	16.1	14.9	1.8	3.0
HDFC	NBFC	1,294	2,041,753	311,386	n.a.	100,235	-	69,114	n.a.	32	38	17.4	-	40.1	34.0	5.8		20.4		21.0		2.6	-
Shriam Transport Fin	NBFC	990	224,693	48,513	56,136	35,543	41,756	13,693	17,149	60	76	10.6	25.2	16.4	13.1	99.0	99.0	6.3	5.4	14.0	15.4	2.1	2.3
SKS Microfinance	NBFC	438	55,575	12,314	19,127	3,469	5,699	2,440	4,119	19	33	30.5	68.8	22.6	13.4	4.3	3.3	16.0	9.8	20.9	27.6	4.0	4.2
LIC Housing Finance	NBFC	482	243,323	124,490	147,147	25,186	29,807	16,280	19,248	32	38	17.4	18.2	15.0	12.6	2.7	2.3	9.7	8.2	19.2	19.4	1.3	1.3
Chola Finance	NBFC	621	96,845	20,449	24,415	12,049	14,975	5,304	7,337	34	47	12.5	38.3	18.2	13.2	2.7	2.2	8.0	6.5	15.6	18.5	2.0	2.4
Mah & Mah Finance	NBFC	234	133,262	34,011	37,698	22,548	25,016	8,491	10,616	15	19	2.1	25.0	15.6	12.5	2.1	1.9	5.9	5.3	14.2	15.9	2.4	2.7
Shriam City Union	NBFC	1,839	121,215	23,595	28,070	15,493	18,486	7,095	8,660	108	131	27.1	22.1	17.1	14.0	2.6	2.3	7.8	6.6	16.3	17.5	3.6	3.7
Hindustan Unilever	FMCG	797	1,725,036	323,169	360,887	67,438	76,155	43,943	49,716	20	23	14.0	13.1	39.3	34.8	45.3	43.5	25.1	22.2	115.2	125.1	116.9	127.9
Marico Industries	FMCG	395	254,583	63,524	71,981	10,220	11,694	6,698	7,709	10	12	16.8	15.1	38.0	33.0	11.3	9.2	24.7	21.2	29.9	28.0	27.9	27.0
Jubilant Foodworks	FMCG	1,562	102,520	25,784	33,867	3,882	5,595	1,886	2,789	29	43	53.0	47.9	54.2	36.6	11.9	9.0	26.3	18.0	21.9	24.5	23.7	27.1
Godrej Consumer	FMCG	1,245	423,964	92,733	106,130	17,029	19,235	11,709	13,278	34	39	28.7	13.4	36.2	31.9	8.2	6.9	25.4	21.9	22.6	21.6	17.4	17.8
ITC	FMCG	344	2,761,917	386,541	425,303	142,239	157,863	97,143	108,674	12	14	5.8	11.9	28.3	25.3	7.9	6.9	18.8	16.7	27.9	27.2	23.7	23.8
Nestle	FMCG	6,211	598,804	88,510	110,477	16,720	23,846	10,766	13,845	112	144	-9.2	28.6	55.6	43.3	24.0	21.6	35.3	24.6	43.2	50.0	40.4	52.5
Colgate	FMCG	910	247,507	42,813	49,624	9,731	11,934	6,253	7,659	46	56	106.7	22.5	19.8	16.2	14.7	13.2	25.2	20.4	74.2	81.8	77.5	86.1

# PhillipCapital India Coverage Universe: Valuation Summary

Name of company	Sector	CMP Rs	Mkt Cap Rs mn	Net Sales (Rs mn)		EBIDTA (Rs mn)		PAT (Rs mn)		EPS (Rs)		EPS Growth (%)		P/E (x)	P/B (x)	EV/EBITDA (x)		ROE (%)					
				FY16E	FY17E	FY16E	FY17E	FY16E	FY17E	FY16E	FY17E	FY16E	FY17E			FY16E	FY17E	FY16E	FY17E	FY16E	FY17E		
Glaxo Smithkline Cons	FMCG	6,044	254,173	45,365	52,030	6,359	5,161	6,558	6,558	156	156	10.1	-0.0	38.8	38.8	10.8	9.9	36.4	43.6	27.8	25.5	28.8	26.5
Agro Tech Foods	FMCG	639	15,567	7,871	8,314	688	830	379	461	16	19	1.3	21.9	41.1	33.7	4.5	4.0	22.7	18.4	10.9	11.9	10.6	11.7
Asian Paints	FMCG	862	827,068	158,237	190,330	28,120	35,717	17,753	22,383	19	23	28.1	26.1	46.6	37.0	14.2	11.9	28.7	22.5	30.4	32.2	31.6	33.6
Emami	FMCG	1,068	242,424	28,216	34,697	8,172	10,341	5,969	7,585	26	33	33.9	27.1	40.6	32.0	16.2	13.2	30.4	23.5	39.8	41.3	33.8	30.5
Britannia	FMCG	3,181	381,691	88,418	102,237	11,765	14,333	8,409	10,274	70	86	55.0	22.2	45.4	37.1	21.2	15.5	32.4	26.1	46.8	41.7	50.1	44.9
Bajaj Corp	FMCG	419	61,788	9,385	11,089	2,810	3,294	2,579	2,951	17	20	15.3	14.4	24.0	20.9	11.4	10.1	21.3	17.9	47.7	48.2	40.5	48.0
Apotex Industries	FMCG	255	5,289	4,823	5,918	647	875	378	515	36	49	53.5	36.2	7.0	5.2	2.1	1.6	7.8	5.6	29.2	30.8	28.0	30.0
Dabur	FMCG	273	479,261	88,380	101,967	17,042	20,291	13,731	16,058	8	9	28.8	16.9	34.9	29.8	11.6	9.5	28.0	23.1	33.1	31.9	30.5	30.1
NCC	Infrastructure	81	45,030	82,975	87,126	7,260	8,059	2,622	3,515	5	6	134.5	34.1	17.2	12.8	1.3	1.2	8.8	7.6	7.6	9.2	10.2	10.8
Ashoka Buildcon	Infrastructure	164	30,702	29,224	36,925	8,387	11,526	1,180	1,803	6	10	22.8	52.8	26.0	17.0	1.6	1.4	8.2	6.0	6.0	8.5	5.0	6.7
GMR Infrastructure	Infrastructure	14	71,758	82,008	98,433	25,769	39,980	-15,716	-1,481	-3	-0	-48.6	-90.6	-4.6	-48.4	0.9	0.9	18.8	11.3	-20.3	-2.0	0.4	2.6
GVK Power	Infrastructure	8	12,555	29,885	48,605	18,897	28,264	-6,809	-3,136	-4	-2	33.8	-53.9	-1.8	-4.0	0.8	0.9	12.8	8.4	-45.7	-21.7	1.2	3.4
IRB Infrastructure	Infrastructure	254	89,268	51,647	55,985	28,586	31,805	5,031	6,425	14	18	-7.3	27.7	17.7	13.9	1.7	1.4	8.0	7.7	9.7	10.4	3.4	3.6
KNR Construction	Infrastructure	572	16,091	10,076	12,594	1,511	1,889	844	1,124	30	40	15.5	33.3	19.1	14.3	2.5	2.1	11.0	8.9	13.8	15.9	13.3	15.1
J Kumar InfraProjects	Infrastructure	739	23,810	17,058	22,176	3,156	4,103	1,339	1,928	42	60	41.9	44.0	17.8	12.4	2.6	2.2	8.9	6.9	15.8	19.6	12.9	15.3
Adani Ports & SEZ	Infrastructure	325	672,024	70,310	86,162	47,201	58,344	26,419	36,357	13	18	14.0	37.6	25.4	18.5	5.1	4.1	17.8	14.3	20.1	22.0	12.0	13.7
HCL Technologies	IT Services	834	1,172,148	435,467	503,792	98,727	117,813	77,603	93,539	55	66	6.9	20.7	15.2	12.6	4.1	3.4	11.9	9.9	26.9	27.0	27.3	28.3
Infosys	IT Services	1,098	2,521,127	611,631	695,923	167,754	198,009	133,050	156,204	58	68	7.9	17.4	18.9	16.1	4.5	4.0	12.9	10.7	23.9	24.7	24.1	26.3
TCS	IT Services	2,484	4,893,952	1,078,809	1,248,401	301,218	330,985	240,133	271,170	123	138	22.2	12.9	20.3	17.9	7.4	6.0	16.1	14.5	36.3	33.7	38.5	35.5
Persistent Systems	IT Services	690	55,232	21,728	24,845	4,348	4,997	3,124	3,646	39	46	7.5	16.7	17.7	15.1	3.4	2.9	12.3	10.5	19.0	19.0	18.2	18.5
KPIITechnologies	IT Services	117	23,047	32,149	35,749	3,050	4,370	1,895	2,775	10	15	-20.0	46.4	11.6	7.9	1.5	1.3	7.9	5.5	12.8	16.0	11.0	14.3
Wipro	IT Services	583	1,439,701	520,990	576,884	110,660	117,652	90,211	98,751	37	40	4.5	9.5	15.9	14.5	3.2	2.8	12.2	11.3	20.2	19.3	20.0	19.6
Tech Mahindra	IT Services	548	527,289	272,238	322,112	43,994	56,779	29,027	37,010	30	38	19.0	27.5	18.2	14.2	3.4	2.8	11.5	8.6	18.5	19.8	19.0	20.7
Mindtree Ltd	IT Services	1,409	118,101	43,955	51,068	8,239	10,025	5,981	7,301	71	87	11.3	22.1	19.7	16.2	4.8	3.9	13.8	10.8	24.5	24.3	26.4	26.4
NIIT Technologies	IT Services	446	27,245	27,314	30,378	4,570	4,967	2,645	2,988	44	49	132.1	13.0	10.2	9.0	1.7	1.5	5.7	4.9	17.0	16.8	17.1	16.3
Zee Entertainment	Media	387	371,309	56,763	66,309	14,740	19,196	9,293	12,199	10	13	-4.9	31.3	39.9	30.4	6.9	6.2	24.2	18.3	17.2	20.3	19.5	22.1

# PhillipCapital India Coverage Universe: Valuation Summary

Name of company	Sector	CMP Rs	Mkt Cap Rs mn	Net Sales (Rs mn)		EBIDTA (Rs mn)		PAT (Rs mn)		EPS (Rs)		EPS Growth (%)		P/E (x)		P/B (x)		EV/EBITDA (x)		ROE (%)		ROCE (%)	
				FY16E	FY17E	FY16E	FY17E	FY16E	FY17E	FY16E	FY17E	FY16E	FY17E	FY16E	FY17E	FY16E	FY17E	FY16E	FY17E	FY16E	FY17E		FY16E
HT Media	Media	91	21,145	24,775	27,423	3,318	3,820	2,262	2,626	10	11	25.8	16.1	9.3	8.1	0.9	0.8	6.5	4.8	10.2	10.4	11.0	11.4
Jagran Prakashan	Media	141	45,947	20,844	22,253	5,761	6,307	2,812	3,211	9	10	22.4	14.2	15.9	13.9	2.8	2.5	8.3	7.1	17.7	17.7	15.3	14.0
Hathway Cable	Media	41	34,009	27,804	40,401	6,124	10,900	1,270	5,270	8	34	58.4	315.1	4.9	1.2	0.4	0.3	7.2	3.7	8.8	28.4	5.8	17.3
Den Networks	Media	115	20,564	23,573	34,431	6,203	11,872	1,353	4,775	9	33	4.0	253.0	12.5	3.5	0.8	0.7	2.9	1.1	6.6	19.8	8.6	19.0
Dish TV	Media	103	109,985	31,773	36,769	10,074	12,179	2,572	4,275	2	4	66.2	42.7	25.7	-210.4	29.3	11.8	9.5	-492.5	113.9	59.1	60.9	60.9
Hindustan Media Vent	Media	264	19,365	9,112	10,147	2,190	2,628	1,684	2,070	23	28	19.7	23.0	11.5	9.4	2.2	1.8	8.5	6.4	18.8	18.9	21.3	21.4
DB Corp Limited	Media	308	56,643	21,141	23,841	6,217	7,330	3,524	4,507	19	25	11.4	27.9	16.1	12.6	3.9	3.4	9.0	7.3	24.2	27.0	21.4	24.4
Eros International	Media	459	42,894	18,247	20,035	4,447	5,265	3,190	3,694	34	40	29.1	15.8	13.4	11.6	2.4	2.0	10.4	8.6	17.8	17.3	13.9	14.0
Hindalco Inds	Metals	89	182,958	1,060,066	1,104,039	97,201	114,585	10,857	23,009	5	11	-61.1	111.9	16.9	8.0	0.5	0.4	7.6	6.1	2.8	5.6	3.7	4.7
NALCO	Metals	40	104,249	68,246	72,530	9,940	11,726	8,560	9,388	3	4	-58.5	9.7	12.2	11.1	0.8	0.8	5.4	5.5	6.5	6.9	5.9	6.3
Hindustan Zinc	Metals	151	638,446	155,976	164,820	73,243	81,729	76,770	85,038	18	20	-6.2	10.8	8.3	7.5	1.3	1.2	3.9	2.8	15.8	15.6	15.4	15.2
Tata Steel	Metals	248	241,201	1,348,037	1,391,486	131,532	169,127	24,406	44,384	25	46	81.9	81.9	9.9	5.4	0.7	0.6	7.7	5.7	7.2	11.9	4.3	5.5
JSW Steel	Metals	905	218,843	476,143	548,441	95,714	113,239	21,707	31,951	90	132	17.7	47.2	10.1	6.8	0.9	0.8	6.1	4.9	9.0	11.8	6.3	7.6
Jindal Steel & Power	Metals	74	67,749	205,664	230,731	41,477	51,159	-18,148	-10,757	-20	-12	-386.5	-40.7	-3.7	-6.3	0.3	0.3	11.4	9.0	-8.6	-5.4	3.2	1.3
SAIL	Metals	57	236,035	426,075	472,921	24,899	44,313	-2,486	3,847	-1	1	-111.4	-254.7	-95.0	61.4	0.6	0.6	19.9	11.9	-0.6	0.9	1.2	2.1
Sesa Sterlite	Metals	108	319,891	751,388	854,934	214,326	234,972	66,334	88,469	18	24	-18.4	33.4	6.0	4.5	0.6	0.5	5.0	4.4	9.5	11.6	7.5	8.6
ONGC	Oil & Gas	255	2,181,650	1,575,249	1,847,063	630,097	712,597	277,127	333,773	32	39	22.3	20.4	7.9	6.5	1.1	1.0	3.9	3.3	13.6	14.6	11.7	12.8
Petronet LNG	Oil & Gas	188	140,963	287,804	368,036	15,937	18,782	8,186	10,417	11	14	-7.2	27.2	17.2	13.5	2.3	2.0	10.3	8.5	13.1	14.9	9.8	11.1
Cairn India	Oil & Gas	159	297,539	123,092	124,761	64,940	63,382	38,974	34,062	21	18	-36.9	-12.6	7.6	8.7	0.5	0.5	3.8	3.6	6.5	5.7	5.9	5.1
GAIL	Oil & Gas	317	401,917	583,930	634,989	57,593	70,621	34,491	43,749	27	34	8.7	26.8	11.7	9.2	1.3	1.2	8.4	6.2	11.0	12.9	7.8	9.3
Indraprastha Gas	Oil & Gas	478	66,983	43,984	48,003	8,780	9,519	4,690	5,180	34	37	7.4	10.4	14.3	12.9	2.8	2.8	7.2	6.7	21.0	21.7	15.7	16.3
Gujarat State Petronet	Oil & Gas	124	69,965	12,888	13,563	11,501	12,093	5,746	5,973	10	11	24.0	3.9	12.2	11.7	1.7	1.5	6.2	5.4	13.8	12.9	11.4	10.8
Oil India	Oil & Gas	444	266,844	119,237	127,243	58,603	63,358	37,321	40,308	62	67	39.0	8.0	7.1	6.6	1.1	1.0	4.2	3.7	15.2	14.9	11.1	11.2
Berger Paints	Other	227	157,628	54,368	n.a.	6,498	n.a.	3,868	n.a.	11	n.a.	22.0	n.a.	20.4	n.a.	4.8	n.a.	24.8	n.a.	23.7	n.a.	20.8	-
Bharti Airtel	Telecom	346	1,384,300	976,664	1,093,493	336,030	391,396	54,294	81,753	14	20	-10.1	50.6	25.5	16.9	2.0	1.7	7.4	6.0	7.8	10.2	5.7	6.8
Reliance Comm	Telecom	77	192,771	234,448	n.a.	82,810	n.a.	14,143	n.a.	7	n.a.	47.7	n.a.	11.3	n.a.	0.5	n.a.	6.0	n.a.	4.8	n.a.	4.2	-

# PhillipCapital India Coverage Universe: Valuation Summary

Name of company	Sector	CMP	Mkt Cap	Net Sales (Rs mn)		EBIDTA (Rs mn)		PAT (Rs mn)		EPS (Rs)		EPS Growth (%)		P/E (x)		P/B (x)		EV/EBITDA (x)		ROE (%)		ROCE (%)	
				FY16E	FY17E	FY16E	FY17E	FY16E	FY17E	FY16E	FY17E	FY16E	FY17E	FY16E	FY17E	FY16E	FY17E	FY16E	FY17E	FY16E	FY17E	FY16E	FY17E
Bharti Infratel	Telecom	408	773,935	80,099	87,244	56,483	63,555	23,155	27,390	12	15	16.3	18.3	33.3	28.1	4.7	4.9	13.7	12.1	14.1	17.3	10.7	12.3
Idea Cellular	Telecom	151	543,001	362,321	412,443	132,303	158,472	36,195	30,556	10	8	13.4	-15.6	15.0	17.7	2.0	1.8	7.3	5.8	13.6	10.4	7.9	7.3
Tata Communication	Telecom	416	118,517	210,225	223,566	33,948	37,007	1,600	2,857	6	10	50.3	78.5	74.1	41.5	20.0	17.0	5.8	5.2	26.9	41.0	4.8	5.9
Aurobindo Pharma	Pharma	806	470,646	141,386	155,686	32,802	37,987	20,105	23,746	35	41	22.4	18.1	23.3	19.8	6.6	5.0	15.6	13.0	28.1	25.3	24.8	26.3
Biocon	Pharma	442	88,370	34,911	41,122	8,560	10,383	5,061	5,913	25	30	22.8	16.8	17.5	14.9	2.2	2.0	9.5	7.7	13.7	-	11.7	-
Cadila Healthcare	Pharma	423	433,197	98,900	113,024	21,859	25,834	14,644	17,890	72	87	24.2	22.2	5.9	4.8	1.6	1.2	20.4	17.0	26.8	25.5	19.3	20.8
Divi's Laboratories	Pharma	1,071	284,357	37,597	44,330	14,287	17,067	10,542	12,606	40	47	22.3	19.6	27.0	22.6	6.7	5.5	19.9	16.5	24.9	24.4	-	-
Dr Reddy's Labs.	Pharma	4,197	715,632	175,442	199,328	45,264	51,825	30,006	34,447	176	202	31.6	14.8	23.8	20.8	5.1	4.2	16.2	13.8	21.5	20.0	14.9	14.7
Glenmark Pharma	Pharma	1,014	286,191	81,046	96,561	18,240	22,890	10,366	13,905	37	49	33.6	34.1	27.6	20.6	5.8	4.6	16.4	12.8	21.1	22.3	15.0	17.3
Ipca Laboratories	Pharma	742	93,606	35,045	44,254	6,970	10,472	3,410	5,867	27	47	27.4	72.1	27.2	15.8	3.6	3.0	14.4	9.5	13.4	19.1	11.5	16.3
Lupin	Pharma	2,067	930,507	13,728	17,245	3,034	3,932	1,883	2,419	23	30	48.0	28.5	88.1	68.6	13.0	11.0	307.0	236.9	15.2	16.5	-	-
Sun Pharma	Pharma	884	2,126,568	295,908	340,656	89,222	116,401	54,821	76,781	23	32	14.7	40.1	38.8	27.7	6.9	5.6	23.1	17.2	17.8	20.4	15.0	17.6
CIPLA LTD	Pharma	679	545,469	13,728	17,245	3,034	3,932	1,883	2,419	23	30	48.0	28.5	29.0	22.5	4.3	3.6	180.1	139.0	15.2	16.5	-	-
Concor	Midcaps	1,498	292,013	66,073	78,090	15,456	18,324	12,091	14,126	62	72	15.4	16.8	24.2	20.7	3.4	3.0	16.9	13.9	14.0	14.6	14.0	14.7
Praj Inds.	Midcaps	94	16,633	11,852	14,700	1,083	1,691	648	1,072	4	6	42.4	65.4	25.6	15.5	2.6	2.4	15.0	9.3	10.2	15.8	8.6	13.2
Pennar Inds.	Midcaps	48	5,801	15,728	19,290	1,553	2,132	596	903	5	8	66.0	51.6	9.7	6.4	1.2	1.1	4.3	3.2	12.5	16.4	15.3	18.1
Allcargo	Midcaps	311	39,317	63,634	72,953	5,762	7,150	2,966	3,772	24	30	23.7	27.2	13.2	10.4	1.8	1.6	7.2	5.4	13.7	15.2	11.7	13.4
Sintex Industries	Midcaps	104	46,464	83,577	104,860	14,451	18,165	6,212	8,730	14	20	12.8	40.5	7.5	5.3	0.9	0.8	6.2	4.7	11.8	14.4	8.2	9.5
The Byke Hospitality	Midcaps	159	6,374	2,137	2,761	449	580	241	329	6	8	20.3	36.7	26.4	19.4	5.4	4.5	14.2	10.8	20.6	23.0	19.3	22.5
VRL Logistics Ltd	Midcaps	374	34,111	18,632	21,013	3,134	3,653	1,266	1,613	14	18	38.7	27.4	26.9	21.1	7.7	6.1	12.0	10.0	28.4	28.6	24.7	27.4
Havells India Ltd	Midcaps	259	161,768	93,952	105,664	9,023	11,056	5,342	6,655	9	11	38.6	24.6	30.3	24.3	7.6	6.3	17.0	13.5	27.1	28.3	35.0	38.0
Finolex Cables Ltd	Midcaps	256	39,152	25,743	30,301	2,868	3,808	2,036	2,748	13	18	2.5	35.0	19.2	14.2	2.7	2.4	13.0	9.2	15.1	17.8	18.0	21.2
V-Guard Industries Ltd	Midcaps	917	27,522	20,234	24,132	1,591	1,969	887	1,143	30	38	25.5	28.8	30.9	24.0	6.1	5.0	17.5	13.9	21.5	23.0	29.6	31.8
Bajaj Electricals Ltd	Midcaps	246	24,812	46,479	52,025	2,579	3,159	858	1,219	9	12	-714.5	42.1	28.6	20.1	3.3	2.9	12.7	10.2	11.9	15.1	16.5	19.4

Note: For banks, EBITDA is pre-provision profit

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