



Branded players to lead the way!

To gain from falling organized-unorganized price gap, real-estate demand pick-up

#### Tough times for domestic tiles over FY16-FY19...

The -Rs 270bn Indian domestic tile industry went through turbulent times over FY16-FY19 due to the dual impact of demonetization and RERA on the real estate sector, as well as the industry undergoing a GST and E-way bill-related transition. Also, higher capacity addition over FY16-FY18 by Morbi manufacturers, particularly in the vitrified segment, led to higher competitive intensity, pressurizing realizations and hurting utilization levels.

#### ...but 2HFY19 sees trend reversals

2HFY19 saw: (a) A ban on the usage of coal gasifiers by NGT, increasing the production cost for wall tile/soluble salt manufacturers overnight and (b) higher fuel prices, competitive intensity & coal gasifier ban leading to subsequent price hikes taken by the Morbi cluster, seen for the first time in last three years. Once real estate demand slowly rebounds over the next two years, we should see gradual market share gains for bigger branded players; there would also be continued emergence of 3-4 players from Morbi given that the industry is sufficiently big to accommodate 7-8 decent-sized players.

#### Bath-ware fares better

The bath-ware industry (sanitaryware & allied products + faucets) has seen better growth vis-à-vis tiles led by better replacement demand, Swachh Bharat Abhiyaan and affordable housing. Over the last 4 years, sanitaryware and allied products have seen a 9-10% CAGR and faucet-ware 10-11% CAGR. In sanitaryware, Jaquar was the best performer over FY14-FY18 (~30%+ CAGR) while in faucet-ware, Cera Sanitaryware (-22% CAGR). Besides top brands like HSIL, Cera, Parryware/Roca, Jaquar and Kohler, players like Kajaria, Somany, Varmora, Simpolo and Prayag are steadily making inroads. Also, Asian Granito recently forayed into sanitaryware.

#### Our view

The Indian ceramic industry (tiles + bath-ware) should see better growth once RERA-induced consolidation in the real estate industry stabilizes and demand recovers. Stricter E-way implementation should lead to increased compliance costs for unorganized players and reduce the organized-unorganized pricing differential, leading to gradual market share gains for larger branded players. Additionally, with industry focus now shifting to improving capacity utilization, increase in production costs for unorganized players (due to higher tax

compliance, stretched WC cycles), pricing pressure should remain subdued; this should lead to stable avg. realizations in the near term, offering margin stability for Kajaria and Somany. Moreover, tile exports continue to be the growth anchor for Morbi (20%+ CAGR over last 4 years) and have helped in diverting significant production capacity from the domestic market.

For bath-ware, all branded players are focusing on increasing brand visibility and providing timely aftersales service. Also, with the perception of bathrooms gradually changing (concept bathrooms), branded players are launching new products/designs across the value chain with improved technology and ease of use. In this scenario, players like Jaquar, Cera and HSIL are better positioned to capture market incremental market share gains.

We believe recent structural reforms (banning of coal gasifiers in wall tiles, rising tax compliance) along with restricted capacity addition for next 1.5-2 years should augur well for the industry's way of working and lead to stable pricing. For branded players, like Kajaria, Somany, Cera and HSIL, increased tax compliance and reduced pricing differential should lead to incremental market share gains over next 2-3 years.

#### Competition dynamics

- In tiles, along with market leader Kajaria Ceramics and other established players like Somany Ceramics, HR Johnson, Asian Granito, RAK Ceramics, Orient Bell, Nitco and Cera, the industry will likely see the emergence of 4-5 Morbi brands like Simpolo, Varmora, Sunhearrt, Qutone and Oasis.
- In bath-ware, HSIL, Cera and Parryware continue to lead sanitaryware & allied products though Jaquar has given tough competition in last 4 years.
- Jaquar remains the undisputed market leader in faucets (bath fittings) with Cera, HSIL and Kohler also seeing decent growth in last 4 years.

Current Ratings: ADD on Kajaria (Sep'20 TP of Rs 629), LONG on Somany (Sep'20 TP of Rs 446), ADD on Cera (Sep'20 TP of Rs 3,150) & LONG on HSIL (Sep'20 TP of Rs 325).

### Companies covered

Listed Com	panies	Unlisted Companies				
Kajaria Ceramics	Cera Sanitaryware	RAK Ceramics	Simero Vitrified	Prayag Polymer		
HR Johnson (Prism Cement)	HSIL Ltd.	Simpolo Ceramics	Jaquar Group			
Somany Ceramics	Lexus Granito (NSE SME)	Varmora Group	Kohler India			
Asian Granito Limited		Sunhearrt Ceramik	Grohe India			
Orient Bell		Qutone Ceramic	Aqua			
Nitco Ltd.		Exxaro Tiles	Toto India			



### **Key observations**

### Tier-II organized players grow strongly in tiles over 2014-18, bigger modestly

#### Growth led by wide product offerings, higher export share, distribution network expansion

The Indian tile industry saw ~6% revenue CAGR over FY13-FY18, with total market size reaching ~Rs 270bn as on Mar'18. As depicted in Exhibit 2, emerging tier-II players have seen strong consolidated sales CAGR over 2014-2018 (Simpolo 24%, Varmora 15%, Sunhearrt 19%, Qutone 28%, Exxaro 37% and Lexus 33%), which we believe was led by wide product offerings, higher export contribution, distribution network strengthening (amid dealer addition in new geographies, higher brand awareness, competitive pricing vs. unorganized players).

Behemoths like Kajaria/Somany/AGL posted decent revenue CAGR of 10%/8%/10% over FY14-FY18 owing to continued market share gains from other established tier I brands, higher product offerings (bath-ware for KJC & SOMC, Quartz for AGL) and stronger distribution channels. Cera, though a relatively new entrant in tiles, posted a 39% tile revenue CAGR over FY14-FY19.

# Bath-ware growth moderately ahead of tiles; players diversifying product bouquet for growth

### Jaguar grows strongly in sanitary-ware, Cera in faucet-ware

The Indian bath-ware industry has grown at a 10-11% CAGR over FY14-FY18 with the total market touching ~Rs 132bn as on Mar'18 led by a thrust on affordable housing, growth in commercial real estate and Swachh Bharat Abhiyaan. For mid and higher segments, branding, design and timely aftersales service continue to play a critical role in influencing the consumer's end choice. Players have been diversifying into each other's turf to remain competitive and become a one-stop bathroom solution provider. Among listed players, Cera/HSIL have posted a 15%/7% revenue growth over FY14-FY18; other players like Kohler/Jaquar/Toto/Grohe posted 19%/17%/35%/11% revenue growth.

Jaquar has grown strongly in sanitaryware with a ~37% CAGR over FY15-FY18, while Cera at a 22% CAGR in faucet-ware. In the last 3-4 years, Kajaria (via 'Kerovit')/Somany have also made in-roads in the bath-ware segment with a 29%/19% revenue CAGR over FY16-FY19.

### Tile export growth remains strong; exports a key focus area for emerging players

### India aggressively competing with Chinese counterparts

As per the World Ceramic Review, in CY17, India strengthened its position as the world's second largest tile producer and consumer; production increased from 955 to 1,080mn sqm (up +13% yoy) while domestic consumption fell by 3% to 760mn sqm. Morbi continued with its rapid growth and currently has many production lines devoted mostly to exports. Exports

from India have grown at 43% CAGR over CY13-17, up from 55mn sqm to 228 mn sqm. In value terms, exports reached €737mn in CY17, equivalent to an ASP of €3.2/sqm.

As per our channel checks, Indian tile manufacturers are aggressively competing with Chinese players of late because, in addition to the traditional stronghold in Middle East, Morbi players have benefitted from the anti-dumping duty imposed by some European and South American countries. Also, the Chinese tile industry has been hit by rising labor costs, higher RM costs and closure of some plants due to environmental issues. India's top exporting destinations are the Middle East, South East Asia, Africa, Brazil, Sri Lanka and Nepal and more recently Indonesia, Philippines, North America and some European countries. As per some industry experts, India has become cost competitive in Ceramic/Wall, GVT tiles and large slab tiles, but lags in PVT manufacturing cost due to China's huge production lines. India's ceramic export revenues touched Rs 80bn in FY18 and were pegged at Rs 90bn-100bn in FY19E. The only chink in the export armor is the impending anti-dumping duty imposition from GCC countries (-42% of total volume exports from Morbi).

For some emerging players, exports have been a key growth driver over FY14-FY18, forming a decent proportion of revenues (Sunhearrt 38%, Varmora 21%, Simpolo 19%, Lexus 70%). Most sizeable producers in Morbi have set up a dedicated exports department, unheard of a decade back. Though export margins are similar (sometimes lower) to domestic margins, a better WC churn and volume growth have led Morbi players to increase their focus on the same. Better revenue growth due to exports over last 3-4 years has allowed upcoming brands to re-invest some profits into A&P, add capacity and expand distribution network reach.

### Brand promotion focus: A&P spends + sales commission at 2-3% of sales

#### Big, unlisted players step up promotion expenses too

As shown in Exhibit 10, A&P and sales commission expenses (% of sales) for more established players has been on an uptrend over the last 2-3 years. Kajaria, Somany and AGL have guided to continue increasing or at least maintaining A&P expenses (% of sales) ahead as well. Note that bigger unlisted players, having understood the importance of creating and maintaining their own brands, have been spending aggressively on brand promotions, celebrity tie-ups (Simpolo, Qutone, Metro Tiles, Oasis Group), participation in national (ACETECH/Vibrant Ceramics) and international exhibitions (The big 5 CONSTRUCT, CERSAIE, CEVISAMA, CERAMBATH), higher sales commissions and dealer meets/foreign tours. However, unavailability of the exact breakup of such costs (with some unlisted players likely reporting such spending under other expenses) makes it difficult for us to fully (and truly) capture the increased A&P focus of emerging players.

Over last 3 years, Kajaria, Somany and AGL have revamped their TVC presence together with an increased presence in print and digital media and domestic/international participation.

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#### Ambassadors & brands:

- Kajaria continued its association with actor Akshay Kumar as its brand ambassador for tiles and Anushka Sharma for Bathware (under Kerovit brand) and launched its TVC.
- Somany has recently appointed Salman Khan as its brand ambassador.
- HR Johnson is concentrating more on print and digital media for A&P, together with augmented reality (AI and virtual reality) while Katrina Kaif remains its brand ambassador.
- AGL launched its TVC in FY18.
- Among Morbi manufacturers, Qutone has appointed Anil Kapoor and more recently Tamannaah Bhatia (for EvaGres) as its brand ambassadors, Simpolo is set to appoint Hrithik Roshan, Oasis has appointed Kriti Sanon, while Emcer Tiles had invited Kareena Kapoor for launching its large slab tiles 'eSLAB' last year.

**Annexure 1** provides a glimpse of the print ads of several listed and unlisted tiles players, both Morbi and pan-India based.

# Limited capacity addition in near future; focus to remain on increasing utilization levels

#### Excess industry capacity to limit new plant installation for next 2 years

As per industry experts, major new capacity, mostly vitrified, has come up in Morbi over the past two years, with ~133 new facilities becoming operational and taking the number of vitrified plants to ~250+ and installed capacity to ~900msm (up 4.7x from ~190msm). There are 750-800 units currently operational in Morbi with a combined capacity of ~1,950msm. For the last 3-4 years, most emerging players are preferring Italian machineries (vs. Chinese earlier) for critical processes (tile biscuit pressing, tile heating, digital printing) in vitrified tiles; this has significantly improved product quality coming out of Morbi. Also, new plants, even of many Morbi-based unorganized players are running on multi-fuel technology (natural gas, propane gas or coal).

Some tier-II players with decent production capacities (incl. group companies) are Varmora (33msm), Simpolo (25msm), Sunhearrt (23msm), Oasis (24msm), ICON Group (18msm), Metro Tiles (14msm) and Qutone (15msm). Some players also have technological tie-ups with European players for manufacturing high-end tiles or value-added products.

As per industry experts, 15-20 new wall tile plants are likely to be operationalized, but no major GVT/PVT/slab plants are likely to come up at least for the next 1.5-2 years due to overcapacity. Current capacity utilization at Morbi would be 60-65% and our channel checks reveal that industry focus is now on increasing utilization over adding new capacities.

For tile slabs, plants are running at ~50% utilization with 11-12 plants operational and a total revenue generation capability of Rs 8-9bn vs. current market size of Rs 4bn (Rs 2.5bn domestic and Rs 1.5bn exports).

### Improving tax compliance to lead to better billing practices

#### Organized-unorganized pricing differential to narrow down

In its recent meeting, the GST Council decided to implement new GST returns from Oct'19 and e-invoicing from Jan'20. Both measures would help the govt. track GST transactions more closely. Other steps being undertaken for gradually improving tax compliance (starting with larger businesses) are listed below.

#### Other steps taken to improve tax compliance

- Large firms would need to generate invoices for B2B business-to-business transactions on a designated portal. This will help prevent instances of buyer taking credits for taxes that the seller has never paid to the government;
- Selling without invoices, often with the connivance of buyers, and retailers pocketing the tax amount
  collected from buyers instead of remitting it to the government are two ways tax evasion takes place
  at the retail level. Officials believe the plan to validate e-way bills with the data collected at toll plazas
  of movement of radio frequency identification-enabled vehicles will help check this problem,
- Govt. plans to install RFID tag readers to record details of goods transported by vehicles with RFID, thereby reducing manual intervention for goods verification and resolve the circular trading issue.
- 4. The Ministry of Corporate Affairs is implementing a geotagging scheme for companies and pooling the geo-tagging information available from the MCA database with the data generated by indirect tax authorities. This will help in verifying the credentials of different parties to a transaction.

(Source: Link 1, Link 2, Link 3)

Tax compliance crackdown and random GST checking in Morbi has increased and become more stringent in the last 6-9 months. Our interaction with some manufacturers reveals that there have been instances of even manual verification of goods by revenue authorities in the last 2-3 months in case they find something suspicious in billing. Recently, GST officials raided 55 locations in Morbi, targeting traders and a few transporters; this was one of the biggest synchronized raids by the department in last 3-4 months (earlier raid had happened in Jan'19).

As per some industry people, such constant fear of raids and back tracing of bills will gradually force unorganized players to move towards more percentage of full billing over the next 1-2 years. This is expected to increase cost of operations for the unorganized sector, gradually forcing them to increase selling prices; this in turn would reduce the organized-unorganized pricing differential, creating a level-playing field in the industry.

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# New launches, innovative designs, product differentiation — key drivers for emerging brands

#### First-mover advantage of bigger players reducing on new product launches

The industry has seen increased aggression by emerging players in launching new products with innovative designs. Some of these include:

- Besides Kajaria, Somany, AGL and RAK, emerging players like Simpolo, Varmora, Qutone and Sunhearrt have been aggressive in launching new sizes, innovative designs and higher value-added products in wall, ceramic, PVT and GVT segments.
- Tier-II players continue to lead the way in launching new categories (thin tiles, parking tiles, roofing tiles, wooden wall/flooring lookalike tiles, wallpaper lookalike tiles).
- I-Marble floor launched by Qutone is another unique product which competes directly with natural marble used in flooring.
- Simpolo has introduced fourth- generation Nano technology which gives tiles at least 90% glossiness —a first in the Indian tile industry.
- Kajaria, Somany, HR Johnson, Simpolo, Varmora, Oasis and ICON have increased their
  presence in sanitary-ware and faucet-ware (some players), while Asian Granito and HR
  Johnson have diversified into quartz manufacturing as well.

A key observation from our channel checks is the reduction in the exclusive time period on a new product launch enjoyed by bigger players (Kajaria, Somany) vs. emerging brands and Morbi manufacturers in the last 4-5 years (down from at least 1.5-2 years to a maximum of 6 months). A relevant example of reducing first-mover exclusivity period is the introduction of large slab tiles by Kajaria in India. The company's exclusivity advantage gradually reduced as many players entered the segment with aggressive capacity addition over the last one year. Qutone, AGL, ICON Group, Simpolo, Varmora, Sunhearrt, Lioli and Simero have all jumped in to cater to the large tile slab market.

### Focus on strengthening distribution network, increasing retail touch points

### Emerging players targeting smaller dealers of established brands

A key observation from Exhibit 1 is that both established and emerging players are focusing more on adding more dealers and retail touch points since the last 3-4 years, with stronger tier-II brands becoming aggressive on pan-India basis. South India is India's most lucrative market due to higher new consumption/replacement of tiles. Additionally, the region — particularly Kerala — has large dealers with some of them having a turnover in excess of Rs 2-3bn and capable of lifting truckloads of tiles at one go. Emerging players are mostly targeting smaller dealers of established brands by either offering them exclusive dealerships or making them the main dealer in that region.

Most players are also increasing the number of display centers and franchisee-operated showrooms in tier-II/III cities to market their entire range of products and not lose customers to competition. Morbi manufacturers (mostly unorganized ones), have succeeded in bringing tiles & sanitaryware to villages and small towns led by proficiency in manufacturing cost-effective tiles. However, once first-time users get accustomed, bigger organized and emerging brands get access to a ready market that they can capture by leveraging product quality, consistent services and brand name.

#### Industry WC position gets stretched between FY16-FY18

#### Established and emerging players focused on improving receivable days in FY19

Our analysis of WC days for bigger industry players between FY16-FY18 (as per available data) suggests that WC cycles for most established branded and emerging players have remained stretched over the past few years due to impact of (a) muted industry growth, (b) excess capacity addition by the Morbi cluster and (c) liquidity crunch led by demonetization and then NBFC crisis. This led to pricing war and higher competitive intensity, forcing many players to sacrifice WC for growth.

As per our channel checks, on an average, the receivable days for many small and medium sized Morbi manufacturers have increased to 100-120 days currently vs. 75 days 2 years back as money rotation is impacting the entire value chain. For larger emerging branded players from Morbi, receivable days had increased from 55-60 days 2 years back to 75-80 days currently. However, larger branded players and emerging Morbi players have been focusing on controlling their receivable days since last 1 year and are gradually improving their WC cycles.

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### Morbi's Ceramic Cluster - India's answer to Chinese Tile Juggernaut

- As per an international industry magazine, China remained the world's largest producer, consumer and exporter of tiles in CY17 but saw a fall in both production and exports during the year. Although China's industry and market remain difficult to quantify due to large discrepancies between available figures, CWR's estimates suggest that Chinese production totaled ~6,400mn sqm in CY17 (down 1.5% on CY16), equivalent to 47.2% of world production, while domestic consumption was estimated at 5,498mn sqm, 41.4% of world consumption. This compares with a production capacity calculated by official Chinese sources at more than 11bn sqm, spread over some 1,400 companies and 3,500 production lines. Exports from China fell for the fourth year, running from 1,025 to 908 million sqm (down 11.4% yoy and witnessing the biggest fall in the past 4 years).
- Gujarat has three ceramic clusters Morbi, Thangadh and Himmatnagar. Apart from ceramic tiles and sanitary-ware, Morbi also has a large presence of wall clock manufacturers and paper mills.
- As per our channel checks, Morbi accounts for 75-80% of India's ceramic tiles in volume terms. In value terms, vitrified tiles form 54% of total industry output in Gujarat, followed by ceramic floor tiles at 10%, ceramic wall tiles at 30% and industrial tiles at 6%.
- Currently, 750-800 manufacturing units (tiles + bath-ware & fittings) are operating in the city and its surrounding areas (Wakaner, Dhuva, and Thangadh). Total installed capacity in tiles is ~1,900-2,000msm/annum. Total number of tile units operating in India (Morbi, Himmatnagar; Gujarat, North India, South India) is 850-860.
- As per some industry experts, between FY16-FY18, ~133 new vitrified tile manufacturing facilities became operational in Morbi, taking the total number of plants from 77 to 210. Production capacity increased 4.5x from 4 lakh boxes/day to 18 lakh boxes/day over this period. In FY18 alone, ~100 new units have come up in Morbi at an investment of Rs 70bn. As per one leading manufacturer, capacity addition in Morbi grew at 20-25% CAGR over FY15-FY19 while demand including exports for the cluster grew by 15-17% CAGR over this period.
- Many Morbi manufacturers have historically not been good at marketing, branding and distribution. However, as per our channel checks, they have impressive cost management skills, which include:
  - o Promoters/relatives assuming shop floor responsibilities.
  - Sharing of technical resources.
  - Installing multi-fuel technology kilns which can move to coal, natural gas or LPG depending on their prices.
  - Borrowing of spare parts from each other rather than maintaining expensive inventories.

- Outsourcing specific manufacturing sections to specialists at a fraction of the cost which would otherwise entail payouts to resident executives of MNC companies.
- Sharing of logistics costs.
- Most Morbi manufacturers address equity funding requirements for their businesses by
  raising financing even from competition. For instance, companies A, B and C all are
  competing amongst themselves. However, all three of them join hands to form D, a
  new company, where they would be pitching in their money and sharing technological
  knowhow with one another. Thus, most entrepreneurs end up owning small stakes in
  multiple factories.
- About five years back, only a handful of players in Morbi invested in advanced foreign technology & equipment versus more than 60% now. Earlier, press used to be the only major equipment which players acquired from foreign technology providers, instead of entire production plants being acquired now. Almost all leading international ceramic technology providers have a manufacturing/service center/regional office located in Morbi or Ahmedabad to cater to these clients.
- The annual turnover including exports from the tile cluster in and around Morbi was Rs 260bn-270bn (~US\$ 3.8bn) in tiles and sanitary-ware. As per some rough estimates, the ceramic cluster provides direct employment to 4,00,000 people and indirect employment to 6,00,000 people. It supports over 2,000 auxiliary industries, including paper mills, packaging and engineering workshops and ceramic machinery factories.
- India became the 2<sup>nd</sup> largest tile exporter in the world in CY17. Due to the presence of many ports in Gujarat, the ceramic cluster also has a huge export turnover and currently exports to 150+ countries, prominent among them being GCC countries (particularly Saudi Arabia), Nepal, Sri Lanka, Africa, Brazil, Mexico, Spain, Italy and Turkey. Morbi did business worth Rs 42bn and Rs 62bn in FY16 and FY17 respectively, and as per industry players, this is expected to reach Rs 100bn in FY18 (Rs 85bn till Jan'18). Due to anti-dumping duties introduced on China by Brazil, Eastern European countries and US, and due to improvement in product quality and technology, Morbi is expected to see strong growth in exports over the next few years. One rough estimate suggests that exports from Morbi have reached around 240msm in CY17.
- As per some industry experts and our channel checks, over the last 4-5 years, Morbi
  manufacturers have led the introduction of new types of tiles (thin tiles, parking tiles,
  I Marble) and designs though now branded players have also become more aggressive
  in launching of new designs.
- Since Morbi is a large cluster, setting up of a new plant takes lesser time vs. anywhere else in India due to the presence of many machinery & service suppliers and skilled contractors. For example, a Ceramic plant can be up and running in around 6-8 months

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while a PVT/GVT plant can be fully operational between 9-12 months while the same plant will take 1.5-2 years elsewhere in India.

- As per some industry people, due to higher capacity leading increased supply and a
  reduction in prices in last 2 years, vitrified tile producers in Morbi are either cutting
  down on production hours or keeping units shut for some time to stay afloat amid
  growing competition. A similar situation had occurred three years back in the wall tile
  segment, when the number of units had increased from 200 to 350 over a short period.
- Some experts attribute this sudden jump in vitrified production capacity to lack of business diversification by Morbi promoters as they do not diversify into any other sectors or products and tend to pump in their profits only in the ceramic industry for now. Going forward, things might change due to payback period increasing for the industry and excess competition.

### What has changed in Morbi in last 9-12 months?

- Post the pricing war in the GVT segment (prices corrected by 20-25% on an average) post Vibrant Ceramics of Nov'17, 1HFY19 also saw the impact of jump in gas prices for the industry resulting in further erosion in industry's profitability. This resulted in fuel costs as % sales increasing from 18-19% in FY18 to 22-23% by 1QFY19. Due to this, Morbi manufacturers started talking about price hikes in Aug-Sep'18 for the first time after nearly 1-2 years as their margins were under continuous pressure. Eventually, very limited price hikes were taken by Morbi cluster but on an average, prices started bottoming out from here onwards.
- The Permanent committee to Combat Harmful Practices in International Trade of the General Secretariat of the Gulf Cooperation Council (GCC) started an anti-dumping investigation in early Nov'18 against imports of ceramics and porcelain products of Indian, Chinese and Spanish origin to the GCC after their Office received a counter-dumping complaint from Saudi Ceramics and Al Fanar companies. In recent years, GCC based producers have augmented domestic production, adopted aggressive marketing strategies and leveraged the existing distribution structure to bring down imports, which is currently one of the major challenges being faced by the tiles producers in the region and has forced them to target only the high-end market, as the imported products dominate the low-end market (local prices have declined by 25% in last 5 years). As per data available with us, India's exports as % of total exports to GCC countries were ~42%/41% volume/value wise in CY17 though this is expected to come down to ~34-35% in CY18 as newer markets open for Morbi manufacturers. The government of India under its foreign policy of 2015-20 gives 3% incentives to tile exporters under the Merchandise Exports from India Scheme and 2% duty draw back.
- In Jan'19, there was a raid by GST officials in relation to tax evasion by six companies
  of a major ceramic group of Morbi. This was first big raid after a long time wherein

- search operation was carried out at 34 premises of the group. During the raid, IT officials discovered a modus operandi of maintaining parallel book of accounts using specific software by these companies for last 3 years. The evasion was unearthed after a 7-month long watch. The department found undisclosed sale proceeds in books of account of ~Rs 1.25bn (Source: Link).
- In early Mar'19, the National Green Tribunal (NGT) ordered ceramic units in Morbi, using coal as a fuel via coal gasifiers, to immediately shut down to control the deteriorating air and water pollution in the Morbi-Wakaner region. Around 400-450 units in Morbi, mostly producing Ceramic Wall and Soluble Salt, were immediately affected by this decision. According to the order, units had to dismantle all type of coal gasifiers, even if they were complying with the earlier-set pollution control norms and shift to using cleaner fuels like PNG (piped natural gas) or other non-coal derived fuel to continue their operations. Post, NGT's order and Gujarat Pollution control board (GPCB) closure notices to all the units which were using coal gasifiers, most of the units started shifting to Natural gas. Though 85-90% of these units had PNG connections, they were not using the same to keep fuel costs lower. The ban on use of coal gasifiers was one of the most impactful structural change in Tile industry in recent times. Shift from coal to natural gas impacted Morbi's way of operations by i). increasing compliance due to usage of 100% billed natural gas vs. coal which could be purchased in cash as well; ii) the price differential between coal and the PNG on energy equivalent basis increased the production cost by 10-15%; iii) stretch in WC requirement as LNG billing is done every fortnightly while coal was taken mostly on credit (1.5-2 months) and additionally BG of amount equivalent to 1 month of LNG billing is to be given to Gujarat Gas. Due to this, production cost the entire cluster was forced to take a price hike of ~8-10% in Wall tiles.
- Additionally, Morbi ceramic industry also faced a challenge about procurement of key raw materials, including potash feldspar and soda feldspar. According to industry players, the ceramic units used to procure these two key raw materials from Rajasthan in the form of chips, which were later processed at Morbi and utilized for making vitrified tiles. However, the Rajasthan government decided in Mar'19 that these materials can be supplied outside the state only in powder form and banned the supply of soda and potash feldspar chips outside state. Since feldspar was a cheaper raw material option vs. other types of clays in Vitrified tiles, it has led to some cost increase for vitrified tile makers.

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# Takeaways from our recent channel checks in Morbi

Takeaway	Details
Appeal against NGT order ban	Currently, an appeal against the NGT order ban on coal gasifiers has been filed by coal suppliers and gasifier manufacturers in HC, and the final judgement is pending. However, most industry people we met believe that there is no merit in the appeal and the reversal of the ban will likely not happen. In case there is a reversal, many manufacturers are ready to file a counter appeal for not allowing the use of coal gasifiers in Morbi any time in the future on pollution grounds.
Good growth in wall tiles	From early-March to late-April, many manufacturers in Morbi were forced to shut down or run at low capacity utilization vs. earlier due to NGT order ban and gas pressure problems causing erratic supply. As a result, there was an artificial shortage of wall tiles which has led to good growth in Wall tile production in the past 1-1.5 months.
Working capital position	On average, receivable days for many small-and-mid-sized Morbi manufacturers has increased to 100-120 days vs. 75 days 2 years back. There is high cash crunch in the system and money rotation is hurting the entire value chain. Most branded players in Morbi are focusing on controlling WC days.
New export markets open up	Exports from Morbi continue to grow strongly and this has eased pressures on overall capacity utilization in the cluster. In last 1-2 years, new markets like Indonesia, Philippines, Mexico, Brazil and Nepal have opened for Indian manufacturers apart from the existing GCC market. With the ongoing China-US tariff war, Morbi manufacturers are actively looking to grow in the US and tie up with distributors there. On the other hand, GCC has mostly finished its anti-dumping investigation on the Indian, Chinese and Spanish tiles and some judgement on the same is expected soon.
Tax compliance crackdown	Tax compliance crackdown has increased in the last 1 year and random checking from GST flying squads has also become a lot more thorough vs. earlier. Just last week, in one of the biggest synchronized raids by the GST department, officials raided 55 locations (mostly tile traders and transporters) in Morbi in an effort to plug loopholes and hit directly at bogus billing. Additionally, earlier last week, around 22 trucks bound for Delhi and Haryana carrying wall and floor tiles were detained by Rajasthan Pali CGGST staff as they did not have proper E-way bills.
Tile prices bottom out	All people we met believe prices in ceramic and vitrified tile segments already bottomed out in early 2HFY19. Post the NGT order, prices in wall tiles have increased by 10-12% as cost of production has gone up for the industry. For vitrified tiles, avg. price hikes have been at 2-3%, some of it due to increase in costs of RM coming from Rajasthan. The branded-unbranded price differential may continue to narrow due to increased tax compliance.
Prices hiked but sustainability the key	As per our earlier channel checks in Apr'19, Kajaria had taken a price hike of 4-5% in Ceramic tiles, Asian Granito 7-10% in wall tiles and double charge tiles, while Sunhearrt 10% in Wall tiles and 3-5% in PVT & GVT. Most price hikes were taken in commodity products and not on value-added products. Morbi manufacturers have taken an 8-10% price hike; however, actual net impact of price hikes on the industry after adjusting for dealer discounts/incentives and if or not the market will accept this price hike will be clear gradually over the course of the year.
Sharpened A&P focus	Apart from Simpolo, Varmora, Qutone and Sunhearrt, other upcoming brands from Morbi are Oasis, Simero, Emcer, Itaca, Blackberry Tiles, and Color Tiles. Many of them have increased focus on below-the-line branding and promotions; their A&P spends (as % of sales) have steadily increased in last 2-3 years. Usage of social media, particularly WhatsApp has helped emerging players in reaching a wider targeted audience at a fraction of the cost and helped these brands reach tier III and IV towns.
Fuel dynamics - NG vs. propane	Gujarat Gas has recently reduced prices of natural gas supplied to its industrial consumers, including the Morbi cluster in Gujarat by Rs 2.5/scm (~8% price cut). Earlier, GGAs supplied natural gas to ceramic makers in Morbi for ~Rs 30/scm. Prices are benchmarked to that of its nearest competitor fuel, propane, which earlier sold for ~Rs 32/scm. With crude prices falling globally, propane is now available at Rs 28/scm. Propane prices are likely to drop to Rs 24/scm as per some industry sources. GGAS had seen a spurt in demand for natural gas supply to Morbi-from 2.5mscmd to 6.5mscmd-following NGT's order earlier this.
Ceramix'19 scheduled in Nov'19	World's largest ceramics expo 'Ceramix-19' is scheduled to be held in Gandhinagar, Gujarat in Nov'19. This would be the 3rd such exhibition in Gujarat since 2016 though few people we interacted with believe it would not be as big as Vibrant Ceramics 2017. As per an article, apart from Indian manufacturers and exhibitors, there would be participation of global manufacturers from Spain, Poland, Vietnam, China, Thailand, and Brazil.

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### Takeaways from meetings/interactions on India's tile ecosystem

Takeaway	Details
Market size to be big enough to accommodate 8-9 mid-to- large sized players over mid- to-long-term	Indian domestic tile market is ~Rs 275bn and has been growing though at a low pace in last 3-4 years due to slowdown in real estate. However, the market is still big enough for 6-7 decent sized players to keep posting growth yoy. In fact, 15 years ago, there were 9-10 mid-sized brands operating in the Indian market, and all were seeing growth in line or above the market growth. Going forward, Indian tile market can again accommodate 8-9 decent sized players who will keep growing along with the market pie and could look to gain share from smaller marginal or non- focused players.
Branding plays a critical role	The 3 key drivers for choosing a tile among Indian customers are product, price and brand in that order. However, if brand & product are established, the company can command a price premium (max 10%). For instance, Kajaria currently enjoys a 5-7% premium vs. its closest rival and this premium differential increases as one moves down the branding table. Pricing premium (even in specific sizes or designs) will continue so long as the market leader or first-mover keeps innovating and brings newer designs, sizes, applications & products in the market backed by marketing initiatives.
	Gaining brand visibility through branding activities can be achieved quickly via TVC, celebrity tie-ups, big event sponsorship and other expensive marketing initiatives. Also, a new brand might catapult to limelight in a short time if it has a unique offering (e.g. Qutone) and can ramp up quickly.
Distribution network & reach equally important	Setting up of a distribution network and its sustainable growth is driven by human capital and hiring of the right industry person who can bring in more quality dealers (particularly Class A1 dealers) and who has on-ground knowledge. Any new player with financial muscle power will also take 4-5 years to establish a strong distribution network like Kajaria/Somany to meaningfully challenge them. Also, it would be imperative to set up own manufacturing capacity to complement the push into branding & distribution. Merely outsourcing and selling under own brand will not help any player grow significantly in the long term.
Emerging players following footsteps of bigger brands	Over the last 5 years, new players have been emerging out of Morbi with increased focus on branding and innovation. Simpolo, Varmora, Qutone, and Sunhearrt have emerged as they started following a strict way of doing business and putting systems and policies in place. Players who have or are willing to follow a set system and way of doing business are more likely to succeed due to changing customer perception and requirements.
Margin sustainability by passing on inflation cost & price hikes	Before 4-5 years, competitive advantage and industry dynamics for organized players were better, enabling them to easily take price hikes during periods of rising commodity prices. However, in the last 3 years, significant capacity addition by Morbi manufacturers has heightened competitive intensity. Consequently, organized players have struggled to pass on the recent increase in commodity prices (like gas) as the unorganized segment was very aggressive and the demand environment also remained subdued. Things seem to be changing in last few months though, as unorganized players have also been facing severe RM inflation pressures further aggravated by NGT ban on coal gasifier usage and stretched WC cycles. Therefore, after a long time, these manufacturers have announced price hikes, which if sustain, can be positive for the industry in the mid-to-long term.
Cost of putting up plants going up	While the tile industry has seen a number of small and medium sized units enter the market over the last 10 years in Ceramic, PVT and GVT segments, cost of putting up units for higher value-added products has been steadily going up as even the unorganized players have started shifting from Chinese machinery dominated plants to ordering critical machinery from Italian/Spanish suppliers. Though Morbi as a cluster has strong financial muscle, incremental capacity addition in case of GVT and large slab tiles together with subdued demand, already existing capacity and increase in payback period on new investment from 3 years two years back to 6-7 years should prevent new competitors from entering the market in near future.
Economies of scale another important differentiator	Economies of scale remains a huge advantage for players like Kajaria/Somany due to its crucial role in cost savings (10-15% of cost reduction can be achieved due to economies of scale at a single plant). In fact, China can price its tiles very aggressively due to economies of scale enjoyed by most of its manufacturers.
After sale service becoming a crucial consumer influencer	In last 3-4 years, after sales service has started playing a bigger role in consumer psyche and brand loyalty. An important area where brands, particularly bigger ones, can separate themselves from unorganized players is after sales service. Both Kajaria and Somany have a strong after sales service network spread across India and can immediately cater to customer complaints (both builders and retail). Compared to them, 2nd tier players have relatively limited service network despite their continued network investments. Unbranded players don't have such network and are least bothered to solve customer complaints once products are sold. In the bath-ware industry, aftersales service has become an important end parameter for customer conversion and maintenance of brand loyalty and is ranked right besides brand and pricing. People are ready to pay money but want after sales service to be quick and effective particularly in the mid and upper consumer segments.
Threats from product substitution	Tiles industry in India is not facing any major disruptive threat from any other product. Products like Marble/Granite are costly compared to tiles and they have their own unique high-end consumers who would never move into tiles. Wooden flooring (laminated) is at a nascent growth stage (mainly used as a highlighter) and is costly as well due to which it might take years for the product to gain strong meaningful traction in the Indian floor market. Apart from this, technology disruption will not play a major role because all players have the same kind of technology available.

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### Annexure 1

### Branding & promotion continues to be a key focus area for serious players



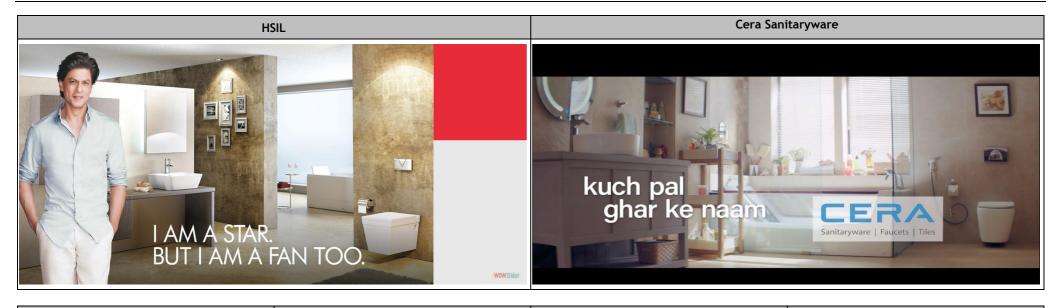
Source: Company, Equirus Securities



Source: Company, Equirus Securities

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Source: Company, Equirus Securities

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Exhibit 1A: Company Information - Tile Industry

Companies	Operatio nal Since	Own + JV Tile Manuf. Cap. (msm)	S&F Manuf. Capacity (Mn pcs/year)	No. of Plants	Tile Plants	Sanitaryware + Faucetware Plants	Retail Vs. Institutional Mix	Exports to countries	FY19 Capacity Utilization
Kajaria Ceramics	1988	68	Sanitaryware: 0.6 Faucetware: 1	9	7	1 + 1	70%-30%	35+	Tiles: 97% Sanitaryware: 95%+ Faucetware: 65%
HR Johnson	1958	68	Sanitaryware & Faucetware: 1.6	13	11	1 + 1	70%-30%	65+	Tiles: ~60%
Somany Ceramics	1968	56	Sanitaryware: 1.15 Faucetware: 0.65	11	9	1	65%-35%	55+	Tiles: 83% Sanitaryware: 61% Faucetware: 82%
Asian Granito	2000	28	Sanitaryware: Outsourced currently	8	8	0	39%-61%	58+	Tiles: 80%
Orient Bell	1977	32	None	5	5	None	NA	0	Tiles: 74%
Nitco	1953	<mark>(16</mark> )	None	4	4	None	NA	24	NA
RAK Ceramics	2006	16	Sanitaryware: 1	4	3	1	NA	0	NA
Varmora Group	1994	33	Sanitaryware: 1.2 Faucetware: Outsourced currently	9	8	1	65%-35%	70+	Tiles: 75% Sanitaryware: 88%
Simpolo Ceramics	1991	20	Sanitaryware: 1	5	4	1	70%-30%	45+	Tiles: 70%
Oasis Group	2007	21	Sanitaryware: 0.6	9	8	1	NA	20+	NA
Sunhearrt Ceramik	2009	23	None	9	9	None	None	60+	NA
ICON Group	2007	18	NA	7	7	None	NA	30+	NA
Qutone	2008	18	None	4	4	None	80%-20%	60+	Tiles: 70%+
ITACA	2009	10	NA	2	2	1	NA	40	NA
Exxaro	2012	14	None	2	2	NA	70%-30%	16+	NA
Color Tiles	2006	10	None	3	3	NA	NA	18	NA
Vita Granito	2007	8	None	1	1	NA	NA	12+	NA
Simero Vitrified	2014	7	None	2	2	NA	65%-35%	7	Tiles: 75%

Sources: Company websites, Corporate Videos, Industry Magazines, Channel checks

NA - Not Available

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Companies	Distribution Network	Brand Ambassador	Display Centres/Showrooms	Products/Other Businesses	Brands
Ajaria	Dealer: 1,500; Exclusive Dealers: 270; Touch Points: 10,000	Tiles - Akshay Kumar Sanitaryware - Anushka Sharma Plywood - Ranveer Singh	Display Centres: 34 Kajaria Studio: 222 Kajaria Prima Plus: 41 Kajaria Galaxy: 25 Kajaria Prima: 161 Kajaria World:19	Ceramic Tiles (Floor & Wall), PVT, GVT & Sanitaryware + Faucetware, Plywood	Kajaria - Tiles/Plywood Kerovit - Sanitaryware + Faucets
HR Johnson	Dealers: 1,000+; Retail Touch Pts.: 10,000	Tiles - Katrina Kaif	House of Johnson Showrooms: 19 Display Centres: 11	Tiles (Floor & Wall), Sanitaryware + Faucetware, Modular Kitchens & Engineered Marble + Quartz, Construction Chemicals	Johnson
Somany	Dealers: 1,800; Retail Touch Pts.: 9,000	Salman Khan	Showrooms: 330	Ceramic Tiles (Floor & Wall), PVT, GVT & Sanitaryware + Faucetware	Somany
Asian Granito	Dealers: 1,300; Retail Touch Pts.: 6,500	None	Showrooms: 300 Display Centres: 13 Branch Offices: 18	Ceramic Tiles (Floor & Wall), PVT, GVT & Composite Marble + Quartz, Sanitaryware	AGL
Orient Bell	Dealers: 2,000; Retail Touch Pts.: 2,500	None	Orient Bell Tile Boutiques: 188	Ceramic Tiles (Floor & Wall), PVT & GVT	Orient
Nitco	Dealers: 1,200; Retail Touch Pts.: 5,000	None	Showrooms:173 (Own 12); Depots: 10	Floor (Ceramic & Porcelain) & Wall Tiles, Marble & Mosaic	Nitco
RAK	Dealers: 800	None	Exclusive Showrooms: 14	Ceramic Tiles (Floor & Wall), PVT, GVT & Sanitaryware	RAK
Varmora Group	Dealers: 1400; Retail Touch Points: 5,000	None	Exclusive Franchisee Tiles showrooms: 199 Exclusive Franchisee Sanitaryware showrooms: 177 Domestic Display Centres: 13 Foreign Excl. Showrooms: 8 Branch Office: 20	Ceramic Tiles (Floor & Wall), PVT, GVT & Sanitaryware + Faucetware + Furniture + Home ware + Spinning + Fasteners + IT	Varmora/Nextile
Simpolo	Dealers: 1,100	Hrithik Roshan is going to be appt. as Brand Ambassador	Simpolo Galleries: 45 Branch Offices: 5	Ceramic Tiles (Wall), PVT, GVT & Sanitaryware	Simpolo
Oasis Group	10,034 channel partners	Tiles - Kriti Sanon	NA	Ceramic Tiles (Floor & Wall), PVT, GVT & Sanitaryware + Faucetware	Oasis
Sunhearrt Ceramik	Dealers: 1,200; Retail Touch Points: 4,780	None	Branch Offices: 6 Display Lounges: 78 Showrooms: 6	Ceramic Wall & Floor/PVT/GVT	Sunhearrt
ICON Group	NA	None	NA	Porcelain Tiles, Ceramic Tiles (Floor & Wall), PVT, GVT	ICON
Qutone Ceramic	Dealers: 800+; Luxuria Dealers: 100+ Sub Dealers: 3,500	Tiles - Anil Kapoor Tamannaah Bhatia for EvaGres - Luxury Tiles being launched by Qutone group in India	Showrooms: 12 International: 1 (Spain) Regional Offices: 10 Company Depots: 6	Ceramic Wall Tiles, DGVT (IQ Smart Tiles - I-marble and Floor Tiles)	Qutone

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Companies	Distribution Network	Brand Ambassador	Display Centres/Showrooms	Products/Other Businesses	Brands
ITACA	Dealers: 300+	None	NA	Digital Wall Tiles, Porcelain Tiles, Sanitaryware	ITACA
Exxaro	Dealers: 800 Retail Touch Points: 1,200	None	Company Display Centres: 9 Branch Offices: 8 Depots: 5	PVT/GVT	Exxaro
Color Tiles	NA	None	NA	Wall Tiles/PVT/GVT/Color Body	Color tile
Vita Granito	Dealers: 300+	None	International Office: 1 (USA)	PVT/GVT/Quartz Stone	VITA
Simero Vitrified	Dealers: 500	None	NA	GVT, Double Charged, Full Body Tiles	Simero

Source: Company websites, Corporate Videos, Industry Magazines, Credit Rating Rationales, Channel checks

Capacity, Dealer Network & Showroom data might not be entirely accurate for some of the companies due to unavailability of updated data

NA - Not Available

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Exhibit 1B: Company Information - Bath Fitting Industry

Companies	Operational Since	Sanitary Capacity (mn pieces/annum	Faucet Capacity (mn pieces/annum	Manufacturing Plants	Retail Vs. Institutional Mix
HSIL	1960	4.2	3	Sanitaryware: 2 Faucets: 2	75%:25%
Cera	1980	~3.3	-2.4	Sanitaryware & Faucets: 1	70%:30%
Jaquar	1960	1.8	0.125mn/day	India: 5 South Korea: 1	75%:25%
Roca/Parryware	2006	4.0	1.8	Sanitaryware: 4 Faucets: 1 Plastics: 3	70%:30%

Source: Company websites, Corporate Videos, Industry Magazines, Credit Rating Rationales, Channel checks

Capacity, Dealer Network & Showroom data might not be entirely accurate for some of the companies due to unavailability of updated data

NA - Not Available

Companies	Distribution Network	Brand Ambassador	Display Centers/Showrooms	Products/Other Businesses	Brands
HSIL	Trade Partners: 3,375+ Retail Touchpoints: 22,000+	Shah Rukh Khan Jacqueline Fernandez Shraddha Kapoor for Benelave	Brand Stores: 310 Service Engg.: 300+ After Sales Service centres: 20	Building Products, Consumer Products, Retail Division, Packaging Products	Mass: RAASI, H-Vitreous, Benelave Premium: Hindware Italian collection, Hindware, Hindware Art Super Premium: ALCHYMI Pipes: TRUFLO Luxury: Amore, QUEO
Cera	Dealers: 2,841 Retail Touchpoints: 11,306	None	Cera Style Studios: 9 Cera Style Galleries: 136 Cera Style Centres: 2,700 Cera Tile Gallery: 56 After Sales Service centres: 13 After Sales Service Team: 250	Sanitaryware, Faucets, Tiles, Wellness Products, Water Heaters, Modular Kitchen	Mass: Jeet Mid: Cera Premium: Senator by Cera Modular Kitche: Senator Cucine Luxury: Tieup with ISVEA (Italy)
Jaquar	Dealers: 2,500 Exclusive Dealers: 355	Deepika Padukone: Lighting	Orientation Centres: 22 International Showrooms: 8 Service Technicians: 1,200	Sanitaryware, Faucets, Wellness Products, Lighting, Water Heater	Mass/Mid: Essco Premium: Jaquar Luxury: Artize
Roca/Parryware	Priority Retail Outlets: 300 Distributors: 1,284 Multi Brand Outlets: 8,000	None	Exclusive Brand Outlet: 15 Parryware Outlets: 500 Roca Outlets: 200 Display Studios: 6 Sales Offices: 7	Sanitaryware, Faucets, Pumps, Kitchen Sinks, Water Heaters	Budget: Johnson Pedder Mass Premium: Parryware Premium: Roca, Johnsson Suisse Luxury: Armani Roca, Laufen

Source: Company websites, Corporate Videos, Industry Magazines, Credit Rating Rationales, Channel checks

Capacity, Dealer Network & Showroom data might not be entirely accurate for some of the companies due to unavailability of updated data

NA - Not Available

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### Financial parameter comparison of various companies

### Exhibit 2: Sales (Rs mn)

Companies	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	(2013- 2018) CAGR	(2014- 2018) CAGR	(2014- 2019) CAGR	Exports as % of Total Sales	Tiles as % of Total Sales
Kajaria Ceramics	7,355	9,532	13,130	15,833	18,363	21,868	24,135	25,496	27,106	29,562	11%	10%	10%	2-3%	96%
HR Johnson (TBK)	11,580	14,680	17,290	18,320	19,160	22,270	22,280	17,150	16,854	18,273	-2%	-3%	-1%	NA	NA
Somany Ceramics	5,423	7,199	8,790	10,539	12,629	15,431	17,177	17,309	17,127	17,151	10%	8%	6%	4%	92%
AGL Ltd.	4,064	4,804	6,238	7,084	7,752	8,460	9,939	10,639	11,556	11,867	10%	10%	9%	10%	87%
Nitco Tiles	4,516	6,427	8,419	7,734	7,786	8,374	7,887	7,158	6,096	5,965	-5%	-6%	-5%	20%	78%
Orient Bell	2,539	2,911	5,463	5,737	5,851	6,932	7,025	6,543	6,478	5,711	2%	3%	0%	0%	100%
Simpolo Vitrified	868	1,512	1,853	2,953	3,412	4,532	4,712	5,832	8,035	NA	22%	24%	-	19%	90%
Varmora Granito	1,939	3,017	3,593	4,363	4,448	5,403	6,839	5,299	7,770	NA	12%	15%	-	21%	88%
RAK Ceramics (CY)	4,038	4,390	6,175	7,823	7,933	7,241	5,684	5,843	NA	-	-7%	-10%	-	0%	94%
Sunhearrt Ceramik	13	1,673	2,756	2,831	2,644	3,092	3,557	3,579	5,231	NA	13%	19%	-	38%	100%
Qutone Ceramic	99	225	402	869	1,407	2,624	2,662	3,123	3,831	NA	35%	28%	-	25%	100%
Exxaro Tiles	-	-	88	33	621	1,098	1,280	1,682	2,198	NA	132%	37%	-	0%	99%
Simero Vitrified	-	-	-	-	-	-	418	1,321	1,255	NA	-	-	-	15%	100%
Lexus Granito	-	-	-	634	587	804	1,015	1,645	1,812	NA	23%	33%		51%	100%
Tile Industry			1,70,000	1,95,000	2,15,000	2,40,000	2,60,000	2,70,000	2,70,000	2,75,400	7%	6%	5%		

Source: MCA Website, Channel Checks, Credit Rating Rationales

Industry data is from Kajaria Ceramics Annual Presentation. FY19 Tile Industry mkt. size is based on our understanding & channel checks

NA - Not Available

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# Exhibit 3: EBITDA (Rs mn)

Companies	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Kajaria Ceramics	1,149	1,486	2,062	2,446	2,851	3,540	4,571	4,963	4,564	4,495
HR Johnson (TBK division)	1,760	1,560	1,180	890	450	780	770	82	637	599
Somany Ceramics	558	677	742	857	814	1,076	1,429	2,337	1,859	1,634
AGL Ltd.	472	581	667	698	627	577	908	1,271	1,390	866
Nitco Tiles	274	767	851	-379	-137	22	185	231	36	-11
Orient Bell	330	251	496	579	469	458	471	527	470	370
Simpolo Vitrified	191	301	182	523	742	1,078	862	621	713	NA
Varmora Granito	102	201	254	446	381	378	426	221	545	NA
RAK Ceramics (CY)	755	416	484	417	445	516	96	371	NA	-
Sunhearrt Ceramik	-14	201	287	323	293	276	273	260	314	NA
Qutone Ceramic	8	13	39	84	132	200	241	133	758	NA
Exxaro Tiles	-	-	5	1	67	165	219	317	417	NA
Simero Vitrified	-	-	-	-	-	-	74	196	206	NA
Lexus Granito	-	-	0	97	88	128	136	190	307	NA

Source: MCA Website, Channel checks, Credit Rating Rationales

NA - Not Available

### Exhibit 4: EBITDA margins (%)

EBITDAM (%)	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Kajaria Ceramics	15.6%	15.6%	15.7%	15.5%	15.5%	16.2%	18.9%	19.5%	16.8%	15.2%
HR Johnson	15.2%	10.6%	6.8%	4.9%	2.3%	3.5%	3.5%	0.5%	3.8%	3.3%
Somany Ceramics	10.3%	9.4%	8.4%	8.1%	6.4%	7.0%	8.3%	13.5%	10.9%	9.5%
Asian Granito	11.6%	12.1%	10.7%	9.9%	8.1%	6.8%	9.1%	11.9%	12.0%	7.3%
Nitco Tiles	6.1%	11.9%	10.1%	-4.9%	-1.8%	0.3%	2.4%	3.2%	0.6%	-0.2%
Orient Bell	13.0%	8.6%	9.1%	10.1%	8.0%	6.6%	6.7%	8.1%	7.3%	6.5%
Simpolo Vitrified	22.0%	19.9%	9.8%	17.7%	21.7%	23.8%	18.3%	10.7%	8.9%	NA
Varmora Granito	5.3%	6.7%	7.1%	10.2%	8.6%	7.0%	6.2%	4.2%	7.0%	NA
RAK Ceramics (CY)	18.7%	9.5%	7.8%	5.3%	5.6%	7.1%	1.7%	6.4%	NA	-
Sunhearrt Ceramik	-106.0%	12.0%	10.4%	11.4%	11.1%	8.9%	7.7%	7.3%	6.0%	NA
Qutone Ceramic	8.0%	5.7%	9.8%	9.6%	9.4%	7.6%	9.0%	4.2%	19.8%	NA
Exxaro Tiles	-	-	6.2%	2.9%	10.9%	15.0%	17.1%	18.9%	19.0%	NA
Simero Vitrified	-	-	-	-	-	-	17.6%	14.8%	16.4%	NA
Lexus Granito	-	-	-	15.2%	15.1%	16.0%	13.4%	11.6%	16.9%	NA

Source: MCA Website, Channel checks, Credit Rating Rationales

NA - Not Available

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Fyhihi	t 5: PAT	(Rs mn)
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Companies	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Kajaria Ceramics	359	607	809	1,045	1,242	1,754	2,309	2,528	2,335	2,266
Somany Ceramics	204	239	251	320	289	464	647	982	704	463
Asian Granito	190	201	181	171	121	148	243	440	526	229
Nitco Tiles	-87	248	-568	-2,357	-2,111	-1,193	-602	-328	1,889	-537
Orient Bell	116	98	134	98	20	48	64	111	400	89
Simpolo Vitrified	83	133	30	153	338	539	359	102	118	NA
Varmora Granito	36	48	38	140	101	72	94	49	174	NA
RAK Ceramics (CY)	305	-42	79	38	40	35	-237	-36	NA	-
Sunhearrt Ceramik	0	67	96	93	92	85	109	121	62	NA
Qutone Ceramic	2	4	11	2	33	77	105	61	265	NA
Exxaro Tiles	-	-	1	0	-55	82	113	123	178	NA
Simero Vitrified	-	-	-	-	-	-	1	54	51	NA
Lexus Granito	-	-	0	15	3	20	32	65	70	NA

Source: MCA Website, Channel checks, Credit Rating Rationales

\*PAT figs. for HR Johnson not available separately

NA - Not Available

bit 6:		

Companies	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Kajaria Ceramics	4.9%	6.4%	6.2%	6.6%	6.8%	8.0%	9.6%	9.9%	8.6%	7.7%
Somany Ceramics	3.8%	3.3%	2.9%	3.0%	2.3%	3.0%	3.8%	5.7%	4.1%	2.7%
Asian Granito	4.7%	4.2%	2.9%	2.4%	1.6%	1.7%	2.4%	4.1%	4.6%	1.9%
Nitco Tiles	-1.9%	3.9%	-6.7%	-30.5%	-27.1%	-14.2%	-7.6%	-4.6%	31.0%	-9.0%
Orient Bell	4.6%	3.4%	2.5%	1.7%	0.3%	0.7%	0.9%	1.7%	6.2%	1.6%
Simpolo Vitrified	9.5%	8.8%	1.6%	5.2%	9.9%	11.9%	7.6%	1.7%	1.5%	NA
Varmora Granito	1.9%	1.6%	1.1%	3.2%	2.3%	1.3%	1.4%	0.9%	2.2%	NA
RAK Ceramics (CY)	7.6%	-1.0%	1.3%	0.5%	0.5%	0.5%	-4.2%	-0.6%	NA	-
Sunhearrt Ceramik	1.8%	4.0%	3.5%	3.3%	3.5%	2.8%	3.1%	3.4%	1.2%	NA
Qutone Ceramic	2.1%	2.0%	2.8%	0.3%	2.3%	2.9%	3.9%	1.9%	6.9%	NA
Exxaro Tiles	-	-	1.0%	1.0%	-8.9%	7.5%	8.8%	7.3%	8.1%	NA
Simero Vitrified	-	-	-	-	-	-	0.3%	4.1%	4.0%	NA
Lexus Granito	-	-	-	2.4%	0.5%	2.5%	3.2%	4.0%	3.9%	NA

Source: MCA Website, Channel checks, Credit Rating Rationales

NA - Not Available

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### Exhibit 7: RM costs as a percentage of sales

Companies	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Kajaria Ceramics	49%	56%	50%	45%	43%	38%	35%	36%	39%	39%
Somany Ceramics	48%	55%	58%	59%	62%	61%	59%	41%	41%	42%
Asian Granito	36%	42%	48%	51%	61%	62%	62%	56%	55%	56%
Nitco Tiles	51%	64%	65%	65%	57%	58%	59%	58%	53%	60%
Orient Bell	38%	40%	39%	41%	42%	44%	45%	46%	44%	45%
Simpolo Vitrified	32%	31%	35%	23%	34%	32%	36%	47%	59%	NA
Varmora Granito	60%	61%	57%	57%	59%	59%	65%	69%	44%	NA
RAK Ceramics (CY)	0%	0%	0%	0%	51%	51%	52%	59%	NA	-
Sunhearrt Ceramik	115%	64%	68%	71%	70%	73%	73%	67%	NA	NA
Qutone Ceramic	82%	75%	73%	47%	58%	63%	64%	78%	31%	NA
Exxaro Tiles	-	-	0%	0%	75%	43%	42%	63%	65%	NA
Simero Vitrified	-	-	-	-	-	-	49%	62%	61%	NA
Lexus Granito	-	-	-	79%	74%	75%	78%	48%	32%	NA

Source: MCA Website, Channel checks, Credit Rating Rationales

NA - Not Available

# Exhibit 8: P&F costs as a percentage of sales

Companies	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Kajaria Ceramics	14%	10%	16%	19%	20%	22%	20%	18%	19%	21%
Somany Ceramics	12%	12%	12%	12%	13%	13%	12%	19%	20%	22%
Asian Granito	18%	18%	18%	17%	15%	16%	13%	13%	12%	14%
Nitco Tiles	<b>7</b> %	4%	5%	9%	17%	16%	12%	9%	13%	10%
Orient Bell	17%	16%	19%	21%	24%	24%	21%	15%	18%	19%
Simpolo Vitrified	21%	22%	25%	12%	24%	21%	20%	17%	11%	NA
Varmora Granito	15%	21%	26%	22%	22%	26%	19%	11%	17%	NA
RAK Ceramics (CY)	0%	0%	0%	0%	22%	17%	16%	12%	NA	-
Sunhearrt Ceramik	52%	<b>7</b> %	6%	6%	6%	<b>7</b> %	6%	6%	NA	NA
Qutone Ceramic	0%	0%	0%	0%	0%	0%	0%	2%	19%	NA
Exxaro Tiles	-	-	0%	0%	0%	21%	19%	0%	0%	NA
Simero Vitrified	-	-	-	-	-	-	13%	<b>7</b> %	8%	NA
Lexus Granito	-	-	-	-	-	-	-	20%	22%	NA

Source: MCA Website, Channel checks, Credit Rating Rationales

\*P&F expenses as % of sales for many of the companies is not available as they might be including them either under cost of materials or other expenses

NA - Not Available

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Exhibit 9: Employee costs as a percentage of sales

Companies	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Kajaria Ceramics	8%	8%	8%	9%	9%	9%	10%	11%	12%	12%
Somany Ceramics	8%	8%	8%	7%	7%	7%	7%	11%	13%	13%
Asian Granito	5%	5%	5%	5%	5%	5%	6%	6%	8%	9%
Nitco Tiles	7%	6%	6%	9%	9%	9%	10%	11%	14%	14%
Orient Bell	11%	11%	10%	9%	10%	9%	9%	11%	12%	13%
Simpolo Vitrified	6%	8%	9%	4%	4%	4%	7%	9%	8%	NA
Varmora Granito	1%	2%	2%	2%	2%	2%	2%	6%	9%	NA
RAK Ceramics (CY)	0%	0%	0%	0%	7%	8%	10%	12%	NA	-
Sunhearrt Ceramik	8%	6%	5%	6%	6%	5%	5%	7%	NA	NA
Qutone Ceramic	3%	5%	6%	5%	6%	5%	6%	5%	11%	NA
Exxaro Tiles	-	-	0%	0%	5%	3%	4%	7%	<b>7</b> %	NA
Simero Vitrified	-	-	-	-	-	-	14%	9%	10%	NA
Lexus Granito	3%	6%	6%	10%	9%	8%	9%	12%	8%	NA

Source: MCA Website, Channel checks, Credit Rating Rationales

NA - Not Available

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Companies	2010	2011	2012	2013	2014	2015	2016	2017	2018
Kajaria Ceramics	8.7%	7.3%	7.8%	8.5%	7.8%	8.6%	9.5%	9.1%	7.4%
Somany Ceramics	11.9%	6.2%	5.5%	5.4%	5.2%	5.0%	5.5%	7.4%	7.1%
Asian Granito	21.9%	13.8%	11.5%	11.5%	8.0%	7.5%	8.1%	7.8%	7.5%
Nitco Tiles	17.0%	5.0%	5.8%	10.9%	10.3%	9.1%	11.4%	11.8%	13.4%
Orient Bell	9.8%	13.8%	13.5%	10.1%	9.5%	9.8%	10.3%	8.5%	7.4%
Simpolo Vitrified	11.3%	12.3%	15.9%	9.4%	14.0%	16.8%	16.5%	14.2%	11.5%
Varmora Granito	14.3%	6.4%	5.6%	6.2%	4.5%	3.3%	5.1%	6.1%	8.7%
RAK Ceramics (CY)	0.0%	0.0%	0.0%	0.0%	11.2%	12.4%	15.5%	5.6%	NA
Sunhearrt Ceramik	22.9%	5.7%	7.4%	4.0%	4.2%	3.8%	5.4%	8.3%	0.0%
Qutone Ceramic	5.8%	7.3%	10.9%	7.5%	5.3%	4.8%	5.5%	5.2%	12.8%
Exxaro Tiles	-	-	0.0%	0.0%	9.2%	6.3%	5.0%	10.0%	7.3%
Simero Vitrified	-	-	-	-	-	-	1.8%	1.5%	1.6%
Lexus Granito	-	-	-	2.1%	8.0%	4.6%	3.5%	10.3%	12.9%

Source: MCA Website, Channel checks, Credit Rating Rationales

\*Other expenses as % of sales for some of the companies will appear high as they might include P&F, A&P and Freight costs

NA - Not Available

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### Exhibit 11: Net worth (Rs mn)

Companies	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Kajaria Ceramics	1,893	2,226	2,819	3,568	5,176	7,221	9,562	11,797	13,766	15,660
Somany Ceramics	818	1,025	1,240	1,508	2,205	2,540	4,198	5,058	5,597	5,921
Asian Granito	2,063	2,240	2,396	2,646	2,754	2,898	3,554	3,990	4,317	4,511
Nitco Tiles	5,115	5,357	4,785	2,719	902	-376	-980	-1,308	1,652	1,117
Orient Bell	615	688	1,692	1,754	1,766	1,813	1,879	1,383	2,218	2,316
Simpolo Vitrified	252	377	727	868	1,207	1,745	2,104	2,375	2,431	NA
Varmora Granito	330	375	534	611	675	748	841	577	1,132	NA
RAK Ceramics (CY)	1,074	1,033	2,483	2,515	2,555	2,589	2,353	2,773	NA	-
Sunhearrt Ceramik	120	187	388	534	626	711	820	940	1,051	NA
Qutone Ceramic	42	67	193	227	288	468	1,056	330	1,300	NA
Exxaro Tiles	-	-	29	169	213	431	712	970	1,221	NA
Simero Vitrified	-	-	-	-	-	-	271	325	375	NA
Lexus Granito	-	-	-	129	134	153	215	377	683	NA

Source: MCA Website, Channel checks, Credit Rating Rationales

NA - Not Available

# Exhibit 12: Debt (Rs mn)

Companies	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Kajaria Ceramics	2,628	2,797	2,417	2,164	888	799	424	105	119	98
Somany Ceramics	1,622	1,785	1,668	1,619	1,520	1,686	1,890	2,179	2,530	2,479
Asian Granito	1,371	488	412	337	200	146	2,923	3,131	3,202	3,338
Nitco Tiles	4,555	5,278	6,323	11,942	9,513	8,869	7,916	5,989	8,368	7,645
Orient Bell	638	984	1,823	1,803	1,625	1,398	1,230	985	870	1,010
Simpolo Vitrified	403	408	880	825	605	940	1,399	1,601	1,745	NA
Varmora Granito	521	560	958	978	851	824	854	971	1,363	NA
RAK Ceramics (CY)	2,626	2,306	1,298	1,382	1,661	1,894	1,745	2,022	NA	-
Sunhearrt Ceramik	204	822	823	772	698	776	611	879	1,794	NA
Qutone Ceramic	43	99	270	450	432	581	1,547	354	3,136	NA
Exxaro Tiles	-	-	28	557	765	647	539	1,477	1,545	NA
Simero Vitrified	-	-	-	-	-	-	724	697	779	NA
Lexus Granito	-	-	0	304	265	259	487	716	532	NA

Source: MCA Website, Channel checks, Credit Rating Rationales

NA - Not Available

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# Exhibit 13: D/E (x)

Companies	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Kajaria Ceramics	1.4	1.3	0.9	0.6	0.2	0.1	0.0	0.0	0.0	0.01
Somany Ceramics	2.0	1.7	1.3	1.1	0.7	0.7	0.5	0.4	0.5	0.42
Asian Granito	0.7	0.2	0.2	0.1	0.1	0.1	0.8	0.8	0.7	0.74
Nitco Tiles	0.9	1.0	1.3	4.4	10.5	-23.6	-8.1	-4.6	5.1	6.84
Orient Bell	1.0	1.4	1.1	1.0	0.9	0.8	0.7	0.7	0.4	0.44
Simpolo Vitrified	1.6	1.1	1.2	1.0	0.5	0.5	0.7	0.7	0.7	NA
Varmora Granito	1.6	1.5	1.8	1.6	1.3	1.1	1.0	1.7	1.2	NA
RAK Ceramics (CY)	2.4	2.2	0.5	0.5	0.7	0.7	0.7	0.7	NA	-
Sunhearrt Ceramik	1.7	4.4	2.1	1.4	1.1	1.1	0.7	0.9	1.7	NA
Qutone Ceramic	1.0	1.5	1.4	2.0	1.5	1.2	1.5	1.1	2.4	NA
Exxaro Tiles	-	-	0.9	3.3	3.6	1.5	0.8	1.5	1.3	NA
Simero Vitrified	-	-	-	-	-	-	2.7	2.1	2.1	NA
Lexus Granito	-	-	-	2.4	2.0	1.7	2.3	1.9	0.8	NA

Source: MCA Website, Channel checks, Credit Rating Rationales

NA - Not Available

# Exhibit 14: Debtor Days

Companies	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
<u> </u>										
Kajaria Ceramics	38	36	33	33	33	36	41	49	61	56
Somany Ceramics	68	66	58	61	62	61	67	87	107	89
Asian Granito	58	65	76	88	90	71	72	107	126	123
Nitco Tiles	73	62	41	45	61	54	73	77	121	128
Orient Bell	45	49	53	47	45	49	55	57	71	74
Simpolo Vitrified	58	54	48	60	71	62	77	77	81	NA
Varmora Granito	48	47	55	54	62	60	66	92	80	NA
RAK Ceramics (CY)	0	47	58	50	71	67	62	109	NA	-
Sunhearrt Ceramik	0	72	59	73	79	69	94	115	NA	NA
Qutone Ceramic	105	49	48	44	51	39	43	80	69	NA
Exxaro Tiles	-	-	166	300	110	90	97	132	116	NA
Simero Vitrified	-	-	-	-	-	-	123	68	96	NA
Lexus Granito	-	-	-	63	109	82	66	70	121	NA

Source: MCA Website, Channel checks, Credit Rating Rationales

NA - Not Available

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### **Bath Fittings**

# Exhibit 15: Sales (Rs mn)

Companies	2014	2015	2016	2017	2018	2019	4 Yrs. CAGR
Cera Sanitaryware	6,637	8,217	9,172	10,115	11,821	13,436	16%
HSIL	17,465	18,570	19,593	20,716	22,495	27,097	7%
Jaquar & Company	16,542	18,148	22,377	26,747	30,789	35,870	17%
Kohler India	3,887	4,583	5,836	7,270	7,835	NA	19%
Parryware (CY)	7,799	7,722	7,694	7,925	NA	-	1%
Grohe India	2,716	3,229	3,663	3,782	4,072	NA	11%
Aqua (Plumber)	1,086	1,120	1,181	1,239	1,161	NA	2%
Toto India	564		1,051 (15m)	1,293	1,870	NA	35%
Prayag Polymers	520	714	989	1,190	1,378	NA	28%

Source: MCA Website, Channel checks, Credit Rating Rationales

\*Toto India shifted from CY to FY in 2016 so 2016 was a 15-month year for them

NA - Not Available

### Exhibit 16: EBITDA (Rs mn)

, , , ,						
Companies	2014	2015	2016	2017	2018	2019
Cera	949	1,175	1,413	1,709	1,708	1,906
HSIL	2,674	3,414	3,230	2,893	2,724	3,162
Jaquar	1,809	2,538	3,470	3,611	3,682	NA
Kohler	-299	-189	-1	213	332	NA
Parryware (CY)	1,034	1,005	1,074	1,164	NA	-
Grohe	561	249	120	15	243	NA
Aqua (Plumber)	136	143	134	151	143	NA
Toto	-316	-	-707 (15m)	-311	-12	NA
Prayag Polymers	56	69	123	160	190	NA

Source: MCA Website, Channel checks, Credit Rating Rationales

\*Toto India shifted from CY to FY in 2016 so 2016 was a 15-month year for them

NA - Not Available

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### Exhibit 17: EBITDAM (%)

Companies	2014	2015	2016	2017	2018	2019
Cera	14.3%	14.3%	15.4%	16.9%	14.4%	14.2%
HSIL	15.3%	18.4%	16.5%	14.0%	12.1%	11.7%
Jaquar	10.9%	14.0%	15.5%	13.5%	12.0%	NA
Kohler	-7.7%	-4.1%	0.0%	2.9%	4.2%	NA
Parryware (CY)	13.3%	13.0%	14.0%	14.7%	NA	-
Grohe	20.6%	7.7%	3.3%	0.4%	6.0%	NA
Aqua (Plumber)	12.5%	12.8%	11.3%	12.2%	12.3%	NA
Toto	-56.1%	-	-67.3% (15m)	-24.0%	-0.7%	NA
Prayag Polymers	10.7%	9.7%	12.5%	13.5%	13.8%	NA

Source: MCA Website, Channel checks, Credit Rating Rationales

\*Toto India shifted from CY to FY in 2016 so 2016 was a 15-month year for them

NA - Not Available

# Exhibit 18: PAT (Rs mn)

Companies	2014	2015	2016	2017	2018	2019
Cera	519	676	835	1,040	1,003	1,151
HSIL	562	984	1,147	1,031	748	704
Jaquar	1,147	1,536	2,163	2,201	2,080	NA
Kohler	-758	-760	-454	-217	-186	NA
Parryware (CY)	567	521	584	622	NA	-
Grohe	361	183	85	15	152	NA
Aqua (Plumber)	54	33	28	54	55	NA
Toto	-217	-	-958 (15m)	-434	-315	NA
Prayag Polymers	4	31	22	42	57	NA

Source: MCA Website, Channel checks, Credit Rating Rationales

\*Toto India shifted from CY to FY in 2016 so 2016 was a 15-month year for them

NA - Not Available

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### Exhibit 19: PATM (%)

Companies	2014	2015	2016	2017	2018	2019
Cera	7.8%	8.2%	9.1%	10.3%	8.5%	8.6%
HSIL	3.2%	5.3%	5.9%	5.0%	3.3%	2.6%
Jaquar	6.9%	8.5%	9.7%	8.2%	6.8%	NA
Kohler	-19.5%	-16.6%	-7.8%	-3.0%	-2.4%	NA
Parryware (CY)	7.3%	6.7%	7.6%	7.8%	NA	-
Grohe	13.3%	5.7%	2.3%	0.4%	3.7%	NA
Aqua (Plumber)	4.9%	2.9%	2.3%	4.4%	4.7%	NA
Toto	-38.6%	-	-91.1% (15m)	-33.5%	-16.8%	NA
Prayag Polymers	0.7%	4.3%	2.3%	3.5%	4.1%	NA

Source: MCA Website, Channel checks, Credit Rating Rationales

\*Toto India shifted from CY to FY in 2016 so 2016 was a 15-month year for them

NA - Not Available

### Exhibit 20: Net-Worth (Rs mn)

Companies	2014	2015	2016	2017	2018	2019
Cera	2,240	3,517	4,210	5,224	6,050	7,002
HSIL	11,215	14,357	13,874	14,500	14,893	15,145
Jaquar	5,311	6,729	8,935	11,165	13,319	NA
Kohler	3,615	2,845	2,402	2,173	1,988	NA
Parryware (CY)	4,700	5,220	5,760	6,739	NA	-
Grohe	576	758	731	746	898	NA
Aqua (Plumber)	319	297	319	373	404	NA
Toto	3,052	-	2,095 (15m)	1,658	1,342	NA
Prayag Polymers	70	131	153	194	251	NA

Source: MCA Website, Channel checks, Credit Rating Rationales

\*Toto India shifted from CY to FY in 2016 so 2016 was a 15-month year for them

NA - Not Available

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### Exhibit 21: Debt (Rs mn)

	2011	2015	2014	2017	2042	2040
Companies	2014	2015	2016	2017	2018	2019
Cera	483	592	351	342	243	182
HSIL	9,197	5,453	5,005	8,210	11,597	12,065
Jaquar	14	134	703	631	843	NA
Kohler	421	900	1,534	1,913	2,390	NA
Parryware (CY)	354	353	352	-	NA	-
Grohe	-	-	-	-	-	NA
Aqua (Plumber)	417	482	412	322	257	NA
Toto	1,226	0	2,489 (15m)	2,365	2,431	NA
Prayag Polymers	260	393	571	635	699	NA

Source: MCA Website, Channel checks, Credit Rating Rationales

\*Toto India shifted from CY to FY in 2016 so 2016 was a 15-month year for them

NA - Not Available

### Exhibit 22: D/E (x)

D/E (x)	2014	2015	2016	2017	2018	2019
Cera	0.2	0.2	0.1	0.1	0.0	0.03
HSIL	0.8	0.4	0.4	0.6	0.8	0.80
Jaquar	0.0	0.0	0.1	0.1	0.1	NA
Kohler	0.1	0.3	0.6	0.9	1.2	NA
Parryware (CY)	0.1	0.1	0.1	0.0	-	-
Grohe	-	-	-	-	-	NA
Aqua (Plumber)	1.3	1.6	1.3	0.9	0.6	NA
Toto	0.4	-	1.2 (15m)	1.4	1.8	NA
Prayag Polymers	3.7	3.0	3.7	3.3	2.8	NA

Source: MCA Website, Channel checks, Credit Rating Rationales

\*Toto India shifted from CY to FY in 2016 so 2016 was a 15-month year for them

NA - Not Available

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### Exhibit 23: Debtor Days

Debtor Days	2014	2015	2016	2017	2018	2019
Cera	59	72	75	80	83	81
HSIL	86	80	72	70	83	79
Jaquar	25	28	29	26	38	NA
Kohler	20	23	34	32	38	NA
Parryware (CY)	41	60	73	63	77	-
Grohe	44	51	51	49	74	NA
Aqua (Plumber)	42	45	46	58	59	NA
Toto	7	5	-	13	28	NA
Prayag Polymers	72	67	84	67	70	NA

Source: MCA Website, Channel checks, Credit Rating Rationales

\*Toto India shifted from CY to FY in 2016 so 2016 was a 15-month year for them

NA - Not Available

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### Global tile industry

Exhibit 24: Global tile industry - Top Global tile producers: China beats everyone hands down and India has managed to hold its 2<sup>nd</sup> position

Top Global Producers (in msm)	CY10	CY11	CY12	CY13	CY14	CY15	CY16	CY17	7 yrs. CAGR
China	4,200	4,800	5,200	5,700	6,000	5,970	6,495	6,400	6%
Brazil	754	844	866	871	903	899	792	790	1%
India	550	617	691	750	825	850	955	1,080	10%
Iran	400	475	500	500	410	300	340	373	-1%
Spain	366	392	404	420	425	440	492	530	5%
Indonesia	287	320	360	390	420	370	360	307	1%
Italy	387	400	367	363	382	395	416	422	1%
Turkey	245	260	280	340	315	320	330	355	5%
Vietnam	375	380	290	300	360	440	485	560	6%
Mexico	210	221	231	228	230	242	267	NA	
Egypt				200	220	230	250	300	
Total World Production	9,619	10,626	11,226	11,980	12,428	12,460	13,255	13,552	5%

Source: World Ceramic Review, Equirus Securities

Exhibit 25: Global tile industry - Top Global tile consumers: China and India remain the top 2 consumers in the world with Vietnam fast catching up

Top Global Consumers (in msm)	CY10	CY11	CY12	CY13	CY14	CY15	CY16	CY17	7 yrs. CAGR
China	3,500	4,000	4,250	4,556	4,894	4,885	5,475	5,498	7%
Brazil	700	775	803	837	853	816	706	708	0%
India	557	625	681	718	756	763	785	760	5%
Indonesia		312	340	360	407	357	369	336	
Iran	335	395	375	350	280	220	170	170	-9%
Vietnam	330	360	254	251	310	400	412	580	8%
Saudi Arabia	182	203	230	235	244	263	248	203	2%
Egypt				170	190	190	215	252	
Mexico		177	187	187	197	218	235	242	
Russia	158	181	213	231	219	192	173		
USA	186	194	204	230	231	254	274	283	6%
Turkey	155	169	184	226	215	234	241	254	7%
Total World Consumption	9,491	10,472	10,964	11,601	12,132	12,280	12,973	13,270	5%

Source: World Ceramic Review, Equirus Securities

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Exhibit 26: Global tile industry - Top tile exporters: India currently remains at 4th position but has seen very strong growth in exports in last 3 years leading to 35% CAGR over CY10-17

Top Exporters Countries (in msm)	CY10	CY11	CY12	CY13	CY14	CY15	CY16	CY17	7 Yrs. CAGR
China	867	1,015	1,086	1,148	1,110	1,089	1,025	908	1%
Spain	248	263	296	318	339	378	395	407	7%
Italy	289	298	289	303	314	317	332	338	2%
India	28	30	33	55	102	134	186	228	35%
Iran	54	65	93	114	109	112	126	148	15%
Turkey	84	87	92	88	85	77	81	93	1%
Brazil	57	60	59	63	69	77	94	90	7%
Mexico	57	59	63	64	62	61	56	53	-1%
UAE	44	48	50	51	53	54	48	46	1%
Poland	33	36	42	48	42	42	46	45	5%
Others	408	385	417	418	420	405	405	398	1%
Total	2,141	2,346	2,520	2,670	2,705	2,746	2,794	2,754	4%

Source: World Ceramic Review, Equirus Securities

Exhibit 27: Global tile industry - Top tile exporters: Though export growth has been very strong for India, avg. realizations have lot of scope for improvement

		CY2014		CY2015		CY2016	CY2017		
Companies	Value (Mn Euro)	Realization (Euro/sqm)							
China	5,530	5.0	NA		4,979	4.9	4,056	4.5	
Spain	2,328	6.9	2,452	6.5	2,570	6.5	2,686	6.6	
Italy	4,109	13.1	4,318	13.6	4,588	13.8	4,704	13.9	
India	325	3.5	498	3.7	598	3.2	737	3.2	
Iran	364	3.3	380	3.4	328	2.6	328	2.2	
Turkey	450	5.3	451	5.9	463	5.7	488	5.2	
Brazil	232	3.4	265	3.4	293	3.1	300	3.3	
Mexico	296	4.8	320	5.2	289	5.2	243	4.6	
UAE	NA		297	5.5	278	5.8	186	4.0	
Poland	200	4.8	222	5.3	246	5.3	250	5.6	

Source: World Ceramic Review, Equirus Securities

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#### Exhibit 28: Top Tile Importing Nations - Saudi Arabia remains a key market for Indian Tile exports

Countries	CY10	CY11	CY12	CY13	CY14	CY15	CY16	CY17 -	CY1	7
Countries	CTIO	CTII	CITZ	CITS	C114	CTIS	CTIO	CIII	% of National Consumption	% of World Imports
USA	130	131	147	165	164	179	194	202	71%	7%
Saudi Arabia	117	134	155	170	156	188	167	131	65%	5%
Iraq	66	80	105	121	102	106	112	129	99%	5%
Germany	86	90	89	89	95	100	115	109	87%	4%
France	104	110	107	96	99	99	104	112	88%	4%
South Korea	59	63	61	65	76	72	75	78	65%	3%
UAE	51	50	52	53	54	64	59	62	72%	2%
Philippines	31	31	38	46	53	60	75	82	66%	3%
Indonesia			37	36	46	45	57	64	19%	2%
Israel			43	48	44	52	57	58	94%	2%
Others	1,484	1,657	1,690	1,781	1,816	1,781	1,779	1,727		
Total	2,128	2,346	2,524	2,670	2,705	2,746	2,794	2,754		

Source: World Ceramic Review, Equirus Securities

### **Dynamics of GCC Market:**

- Tiles market in the GCC region is one of the most dynamic ones globally, as there is high demand for both high quality, high-priced tiles as well as for economical and cost-effective products.
- In CY17, total demand of ceramic tiles in the region stood at 481mn sqm, which translates into per capita consumption of 9.07sqm, one of the highest on a global scale.
- The region also has the highest number of consumers for high-priced/premium ceramic tiles.
- On an aggregate basis, ceramic tile demand in the region has registered a growth of more than 6 % (barring the year 2016) in each of the last four years.
- Production of tiles in the GCC region is concentrated in Saudi Arabia, United Arab Emirates and Oman.
- Most of the GCC-based ceramic tile producers are able to competitively price its products mainly due to competitive fuel prices and availability of raw materials in the region.
- Despite significant capacity addition by leading ceramic tile producers in the region, there is a huge demand-supply mismatch as many leading ceramic tile producers also export a significant part of their production to a number on non-GCC countries.
- In CY17, there was a demand-supply mismatch of nearly 259mn sqm in the region.
- As a result of this mismatch, the region imports more than 50% of its total demand from other Asian and European countries like China, India, Spain, Iran and Egypt.
- Heavy influx of ceramic tiles from China and India has forced many GCC manufacturers to target only the high-end market, as imported products dominate the low-end market.
- In recent years, GCC-based producers have augmented domestic production, adopted aggressive marketing strategies and leveraged the existing distribution structure to bring down imports, which is currently one of the major challenges being faced by tile producers in the region.

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Exhibit 29: Top export Destinations for Indian Tiles: Contribution of GCC region to total tile volume/value export of India remains important but has been going down over past 3 years due to opening of new markets

Volume in mn sqm	CY15	CY16	CY17	CY15	CY16	CY17			
Countries					% contribution to total volume				
Saudi Arabia	49	60	57	37%	32%	25%			
UAE	10	11	14	7%	6%	6%			
Oman	5	10	13	4%	5%	5%			
Kuwait	5	10	13	4%	5%	5%			
Mexico	0	7	16	0%	4%	7%			
Iraq	9	12	18	7%	6%	8%			
Brazil	8	3	3	6%	2%	1%			
Others	48	73	94	36%	39%	41%			
Total	134	186	228	100%	100%	100%			
growth yoy %		39%	23%						

Source: World Ceramic Review Magazine, Equirus Securities; \*Export volume data for CY18 is yet not available

Sales in mn Euros	CY15	CY16	CY17	Jan-Nov'18	CY15	CY16	CY17	Jan-Nov'18		
Countries				_	% contribution to total value					
Saudi Arabia	174	178	172	152	35%	30%	23%	19%		
UAE	38	38	47	53	8%	6%	6%	7%		
Oman	18	34	42	44	4%	6%	<b>6</b> %	5%		
Kuwait	19	33	42	27	4%	5%	<b>6</b> %	3%		
Mexico	0	28	60	50	0%	5%	8%	6%		
Iraq	30	33	54	44	6%	5%	<b>7</b> %	5%		
Brazil	44	16	21	19	9%	3%	3%	2%		
Nepal	18	26	35	42	4%	4%	5%	5%		
Sri Lanka	13	18	20	26	3%	3%	3%	3%		
Yemen	2	10	17	16	0%	2%	2%	2%		
Others	142	186	227	203	28%	31%	31%	42%		
Total Global Sales	499	598	737	809						
growth yoy %		20%	23%	21%						

Source: World Ceramic Review Magazine, Other Trade magazines, Equirus Securities

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# **Indian Domestic Tile Industry**

### Exhibit 30: Indian Domestic Tile Industry - Domestic tile consumption has been going through a tough period over last 3-4 years due to real estate slowdown

Particulars	CY 2010	CY 2011	CY 2012	CY 2013	CY 2014	CY 2015	CY 2016	CY 2017	7 yrs. CAGR
Production (msm)	550	617	691	750	825	850	955	1,080	10%
y/y growth	12%	12%	12%	9%	10%	3%	12%	13%	
Consumption (msm)	557	625	681	718	756	763	785	760	5%
y/y growth	13%	12%	9%	5%	5%	1%	3%	-3%	
Export (msm)	28	30	33	55	102	134	186	228	35%
y/y growth	8%	7%	10%	67%	85%	31%	39%	23%	

Source: World Ceramic Review, Equirus Securities

Exhibit 31: Domestic Tile industry volume breakup (in msm)

Ceramic Tiles (MSM)	CY 2010	CY 2011	CY 2012	CY 2013	CY 2014	CY 2015	CY 2016	CY 2017
Domestic	352	390	405	420	430	415	420	420
Imports	15	10	10	10	10	10	10	10
Total	367	400	415	430	440	425	430	430
y/y growth	10%	9%	4%	4%	2%	-3%	1%	0%
Polished Vitrified Tiles (MSM)	CY 2010	CY 2011	CY 2012	CY 2013	CY 2014	CY 2015	CY 2016	CY 2017
Domestic	150	185	221	235	236	233	245	240
Imports	20	15	15	15	40	30	30	10
Total	170	200	236	250	276	263	275	250
y/y growth	17%	18%	18%	6%	10%	-5%	5%	-9%
Glazed Vitrified Tiles (MSM)	CY 2010	CY 2011	CY 2012	CY 2013	CY 2014	CY 2015	CY 2016	CY 2017
Domestic	12	23	28	36	35	70	75	75
Imports	8	2	2	2	5	5	5	5
Total	20	25	30	38	40	75	80	80
y/y growth	33%	25%	20%	27%	5%	88%	7%	0%
Total (MSM)	557	625	681	718	756	763	785	760
y/y growth	13%	12%	9%	5%	5%	1%	3%	-3%

Source: Kajaria Ceramics Presentation, Equirus Securities



### Exhibit 32: Tile industry value breakup (Rs bn)

Particulars	CY 2010	CY 2011	CY 2012	CY 2013	CY 2014	CY 2015	CY 2016	CY 2017	7 yrs. CAGR
Ceramic Wall/Floor Tiles	75	90	96	100	105	110	115	120	7%
Polished Vitrified Tiles	55	70	81	90	105	110	115	110	10%
Glazed Vitrified Tiles	10	10	18	25	30	40	40	40	22%
Total	140	170	195	215	240	260	270	270	10%

Source: Kajaria Ceramics Presentation, Equirus Securities

Exhibit 33: Tiles market share of top players in India - Kajaria has gained market share in last 2 years while others continued to consolidate/lose their share

% share in Total Industry Size	FY12	FY13	FY14	FY15	FY16	FY17	FY18	FY19E
Kajaria Ceramics	8%	8%	9%	9%	9%	9%	10%	11%
Prism Cement (H&R Johnson division)	10%	9%	9%	9%	9%	6%	6%	7%
Somany Ceramics	5%	5%	6%	6%	7%	6%	6%	6%
Asian Granito (Tile revenues)	4%	3%	3%	3%	3%	3%	4%	3%
Nitco Tiles	5%	4%	4%	3%	3%	3%	2%	2%
Orient Bell	3%	3%	3%	3%	3%	2%	2%	2%
RAK Ceramics (CY)*	4%	4%	4%	3%	2%	2%	2%	-
Simpolo Ceramics*	1%	2%	2%	2%	2%	2%	3%	3%
Varmora Granito*	2%	2%	2%	2%	3%	3%	3%	3%
Sunhearrt Ceramik*	2%	1%	1%	1%	1%	1%	2%	2%
Cera Sanitaryware (Tiles division)	0%	0%	0%	0%	0%	1%	1%	1%
Murudeshwar Ceramics	1%	1%	1%	1%	0%	0%	0%	0%
Other organized (Oasis, ICON, ITACA etc.)	4%	5%	6%	6%	8%	10%	8%	10%
Unorganized Sector	52%	52%	52%	50%	50%	50%	50%	50%

Source: \*Channel Checks, Rating Rationales, Equirus Securities

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% share in Organized Industry Size	FY12	FY13	FY14	FY15	FY16	FY17	FY18	FY19
Kajaria Ceramics	16%	17%	18%	18%	19%	19%	20%	21%
Prism Cement (H&R Johnson division)	21%	20%	19%	19%	17%	13%	12%	13%
Somany Ceramics	11%	11%	12%	13%	13%	13%	13%	12%
Asian Granito (Tile revenues)	8%	6%	6%	6%	6%	7%	7%	<b>7</b> %
RAK Ceramics (CY)*	8%	8%	8%	6%	4%	4%	4%	0%
Simpolo Ceramics*	2%	3%	3%	4%	4%	4%	6%	5%
Nitco Tiles	10%	8%	8%	7%	6%	5%	5%	4%
Orient Bell	7%	6%	6%	6%	5%	5%	5%	4%
Varmora Granito*	4%	5%	4%	5%	5%	6%	6%	6%
Sunhearrt Ceramik*	3%	3%	3%	3%	3%	3%	4%	4%
Cera Sanitaryware (Tiles division)	0%	0%	1%	1%	1%	1%	2%	2%
Murudeshwar Ceramics	2%	2%	1%	1%	1%	1%	1%	1%
Other organized (Oasis, ICON, ITACA etc.)	8%	11%	12%	13%	16%	20%	16%	20%

Source: \*Channel Checks, Rating Rationales, Equirus Securities

Exhibit 34: Bathware market share of top players in India - Cera & HSIL consolidating their positions; Jaquar's lead due to its strong grip on Faucet mkt

Mkt. share in Total	FY14	FY15	FY16	FY17	FY18	FY19
Jaquar & Company	16%	16%	17%	18%	19%	19%
HSIL Ltd.	10%	9%	8%	8%	7%	7%
Cera Sanitaryware	7%	7%	7%	7%	7%	7%
Roca Bathroom	6%	6%	6%	5%	5%	5%
Kohler India	4%	5%	5%	6%	6%	6%
Grohe India	3%	3%	3%	3%	3%	3%
Kajaria Ceramics	0%	0%	1%	1%	1%	1%
Somany Ceramics	1%	1%	1%	1%	1%	1%
Other organized players	4%	4%	4%	4%	4%	4%
Unorganized players	50%	49%	47%	47%	47%	47%

Source: Channel Checks, Rating Rationales, Equirus Securities. FY19 market share data is based on estimates and so it might vary

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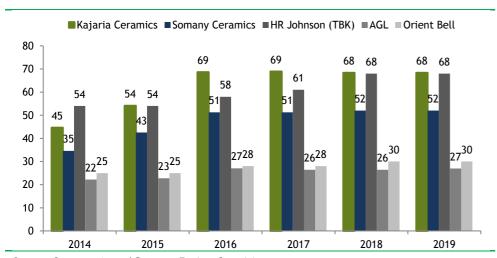


Mkt. share in Organized	FY14	FY15	FY16	FY17	FY18	FY19E
Jaquar & Company	32%	31%	33%	34%	35%	35%
HSIL Ltd.	19%	18%	15%	14%	13%	14%
Cera Sanitaryware	13%	14%	14%	14%	13%	13%
Roca Bathroom	12%	12%	11%	10%	9%	9%
Kohler India	9%	9%	10%	11%	11%	11%
Grohe India	6%	6%	6%	6%	6%	6%
Kajaria Ceramics	0%	0%	1%	2%	2%	2%
Somany Ceramics	1%	2%	2%	2%	2%	2%
Other Organized Players	7%	8%	7%	7%	8%	7%

Source: Channel Checks, Rating Rationales, Equirus Securities. FY19 market share data is based on estimates and so it might vary

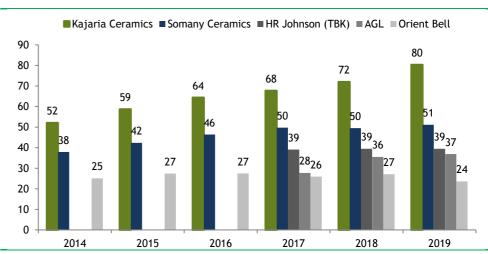
### Performance of Listed companies

### Exhibit 35: Capacity (in msm) for Listed Tile players (Own + JV)



Source: Company Annual Reports, Equirus Securities

### Exhibit 36: Sales Volume (in msm) for Listed Tile players (including Outsourcing)



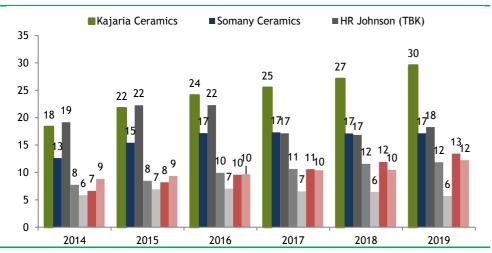
\*Sales Volume data for HR Johnson and AGL not available for FY14-16 For HR Johnson, have assumed sales volume to be equal to production volumes

Source: Company Annual Reports, Equirus Securities

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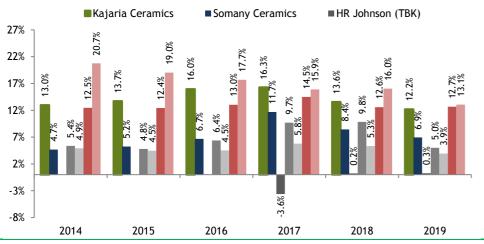


Exhibit 37: Kajaria and Cera have managed to post double digit growth in last 5 years



Source: Company Annual Reports, Equirus Securities

Exhibit 38: EBITM have been impacted for all companies in last 2 years



\*EBITM (%) for HR Johnson not available for FY14-16

Source: Company Annual Reports, Equirus Securities

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### Rating & Coverage Definitions:

#### Absolute Rating

• LONG : Over the investment horizon, ATR >= Ke for companies with Free Float market cap >Rs 5 billion and ATR >= 20% for rest of the companies

• ADD: ATR >= 5% but less than Ke over investment horizon

• REDUCE: ATR >= negative 10% but <5% over investment horizon

• SHORT: ATR < negative 10% over investment horizon

#### Relative Rating

• OVERWEIGHT: Likely to outperform the benchmark by at least 5% over investment horizon

BENCHMARK: likely to perform in line with the benchmark

• UNDERWEIGHT: likely to under-perform the benchmark by at least 5% over investment horizon

#### Investment Horizon

Investment Horizon is set at a minimum 3 months to maximum 18 months with target date falling on last day of a calendar quarter.

Lite vs. Regular Coverage vs. Spot Coverage

We aim to keep our rating and estimates updated at least once a quarter for Regular Coverage stocks. Generally, we would have access to the company and we would maintain detailed financial model for Regular coverage companies. We intend to publish updates on Lite coverage stocks only an opportunistic basis and subject to our ability to contact the management. Our rating and estimates for Lite coverage stocks may not be current. Spot coverage is meant for one-off coverage of a specific company and in such cases, earnings forecast and target price are optional. Spot coverage is meant to stimulate discussion rather than provide a research opinion.

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