30 December 2016

ANTIQUE

India Plastic Piping Sector

Growth drivers in place; cash waiting to flow in thick & fast




Basudeb Banerjee
+91 22 4031 3443
basudeb.banerjee@antiquelimited.com

Aasim Bharde, CFA
+91 22 4031 3429
aasim.bharde@antiquelimited.com

Basudeb Banerjee
+91 22 4031 3443
basudeb.banerjee@antiquelimited.com

Aasim Bharde, CFA
+91 22 4031 3429
aasim.bharde@antiquelimited.com

SECTOR REPORT

India Plastic Piping Sector

Growth drivers in place; cash waiting to flow in thick & fast

The Indian plastic pipes industry (INR220bn) has grown at a ~15% CAGR in the FY10-15 period and is expected to continue this pace over FY15-20E as well aided by shift from the unorganized segment and government focus on irrigation as well as low cost housing projects. Given the secular growth opportunities available in agriculture and housing, we believe that the industry as a whole has a huge scope ahead to capture this opportunity. Within this space, we expect the organized industry (~60% average pipes market share) to grow faster than the overall industry as it enjoys strong competitive advantages (over unorganized players) in terms of production capacities, distribution/dealer networks, strong brand equity, robust balance sheets, and strong cash flow generation capabilities. Within our coverage universe, Astral Poly Technik (ASTRA, Buy, PT: INR476) remains our preferred pick, followed by Finolex Industries (FNXP, Buy, PT: INR522) & Supreme Industries (SI, Buy, PT: INR995).

Irrigation – immense potential for growth ahead

Despite India having one of the largest land-banks in the world under agriculture, less than half of it is under irrigation. Given that Indian farmlands are largely dependent on the rains for its water supply, any vagaries in monsoon directly hits agricultural yields (which at ~3,000 kg/ha is far lower than the global average of ~4,500 kg/ha). To address this problem, the central government has increased its focus on irrigation projects (both large-scale as well as micro-irrigation projects) through its flagship PMKSY scheme. Other initiatives include supporting farm incomes (through crop insurance and interest subventions) as well as local government level initiatives to encourage farmers to adopt irrigation systems so as to reduce their dependence on the rains as well as improve yields. Given the immense potential available for irrigation/micro-irrigation, organized pipes players are in a sweet spot to capitalize on this opportunity as government projects are only limited within the organised PVC pipe makers based on their longevity and quality.

Housing – near and long-term drivers in place

The plastic piping industry can also count on the structurally sound future of housing demand in India. As India becomes a more services/manufacturing oriented economy (at the expense of agriculture), demand for urban/semi-urban housing is expected to continue its secular uptrend. Even today, India's housing demand far outpaces supply (~59 mn houses as of date). While private players in the real estate industry continue to address this situation, even the government has increased its thrust in this sector, especially at the low cost housing level. Given that plumbing/sewerage remain an essential component of real estate, organized players (who have the capacity/reach to satisfy this institutional demand) are well placed to capture this growing market. In addition, the replacement market remains robust as the shift from GI pipes continues to plastic alternatives like PVC/CPVC.

Demonetization – mere hiccup due to ground-level liquidity crunch

While the long-term remains secular for the organized industry per se, the near-term B2C demand has been disrupted due to the paucity of new currency notes at the ground level. As a result, spending on pipes at the rural level has got deferred for now. We expect the situation to normalize once the system gets flushed with adequate liquidity (over the next 3-6 months). On the housing front, pipes replacement being an urgent necessity (vs discretionary spends like tiles/plywood) and the low ticket nature of residential pipe purchases has ensured that demonetization has not hit business as of now.

Pipes Sector - Valuation Summary

Company	CMP	Mcap	P/E		RoCE		TP	Upside	Rating
	(INR)	(INR bn)	FY18E	FY19E	FY18E	FY19E	(INR)	(%)	
ASTRA	385	46	29.2	20.2	20.6	26.0	476	24	BUY
FNXP	447	56	17.0	15.4	33.9	35.0	522	17	BUY
SI	900	114	24.7	21.0	34.4	34.7	995	11	BUY

Source: Company, Antique

Agriculture pipes - Still a long way to go

Agriculture - Still a major backbone of the Indian economy

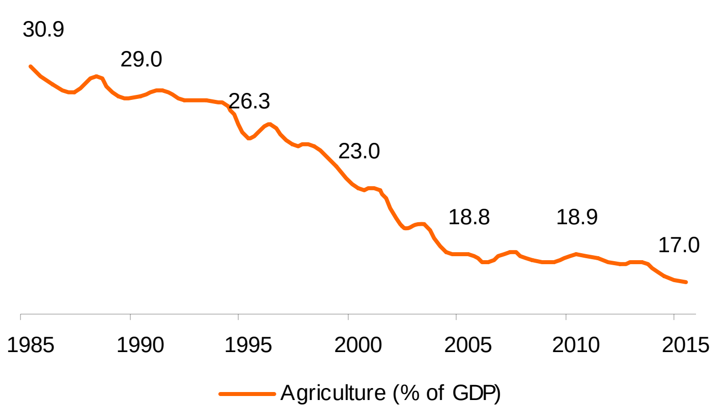
Although the contribution of Agriculture to India's economy has progressively reduced over the decades (~17% of India's GDP off-late as against ~30% three decades ago), the sector continues to remain a significant driver of employment in the country. Nearly two third of the Indian population continue to live in rural parts where agriculture remains the prime source of livelihood, growth and prosperity (~60% of rural households are directly dependent on agriculture). In terms of area, ~54% (~157mn Ha) of land in India is arable land, a combination of crops (double-cropped areas counted once), temporary meadows for mowing or for pasture and land temporarily fallow. Within this arable land ~46% is irrigated and remaining 54% still is dependent on monsoon. As per a Pradhan Mantri Krishi Sinchayee Yojana (PMKSY) report, only 19% of the sown agri land in the state of Maharashtra has irrigation facilities as against national average of 46%, signifying scope ahead, that too under the present central government which has been much more focused towards the irrigation projects post seeing a couple of below-par monsoon years.

Large swathes of agricultural land still dependent on rain

Despite agriculture's importance to the overall economy, agricultural yields have lagged behind global peers. Although average agricultural yield (across crops) has improved ~2.4% CAGR to ~3,000 kg/ha over the past decade, this is still lower than the global average of ~4,500 kg/ha, despite increasing awareness of high yielding seeds, proper usage of fertilizers & adoption of farm mechanization.

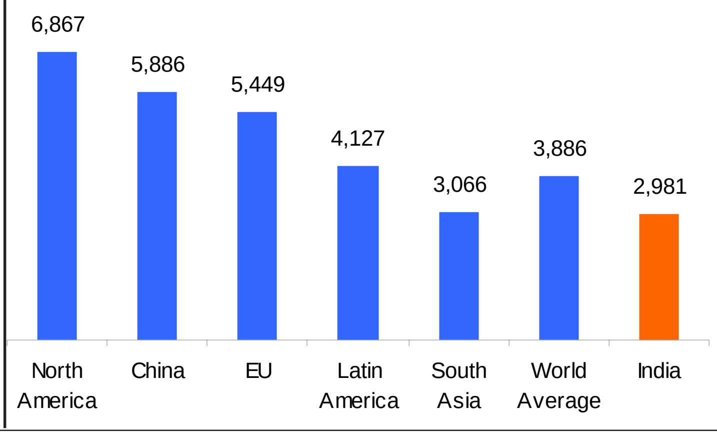
A major reason for the low yield is the dependency on rains with regards to water supply for most farms in India. Almost half of India's agricultural land remains non-irrigated. Even within land under irrigation, a substantial portion continues to remain dependent on wells, which in turn are usually dependent on normal rains.

Agriculture still is a major driver of Indian economy



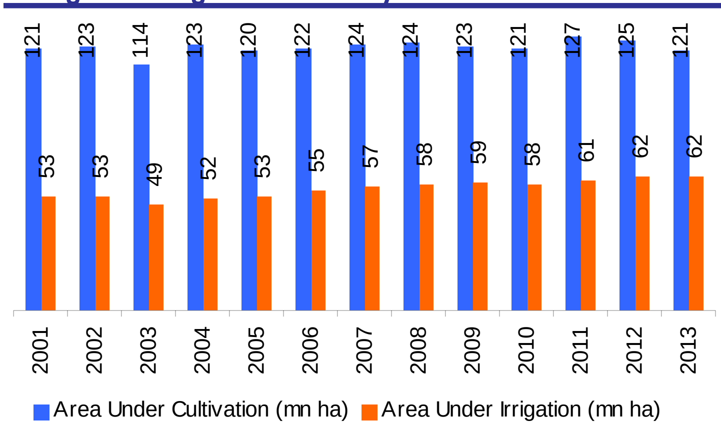
Source: World Bank

Cereal Yields - India still lags global peers (kg/ha)



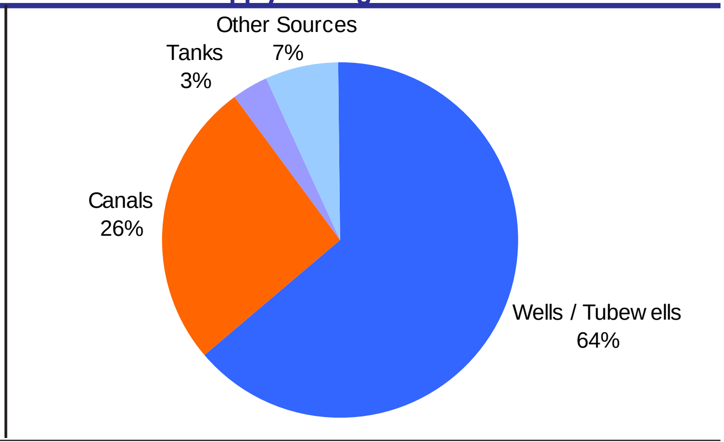
Source: World Bank (Data for Year 2014)

Food grains - Irrigated area barely half of cultivated land



Source: Agricultural Statistics at a Glance 2015

Sources of Water Supply for Irrigation in India



Source: Agricultural Census 2010-11

Renewed central government focus on irrigation, farm incomes

Given the near over dependence on rains as a source of water for Indian agriculture, successive governments have tried to push irrigation projects in the past. However, many remain stuck at various stages. The present central government has renewed its focus on irrigation and has initiated its flagship programme in the form of PMKSY (allocation of INR180bn p.a) and has amalgamated most of its previous stalled/slow moving irrigation projects like the Accelerated Irrigation Benefit Programme (AIBP) under this scheme. Also state specific projects like Sardar Sarovar Narmada Nigam (SSNN, with allocation of INR90bn), projects in Telengana, Rajasthan, Maharashtra etc have been initiated in recent years. Also, the central government has announced various measures like Crop Insurance, Disaster Relief schemes, interest subvention etc. to support farmer level incomes which would also translate into spending on irrigation projects at the ground level.

Initiatives launched by the central government in support of irrigation / rural economy

Pradhan Mantri Krishi Sinchayee Yojana (PMKSY):	**Accelerated Irrigation Benefit Programme (AIBP):**
■ INR865bn budgeted for next 5 years for improving irrigation infrastructure (enhanced from INR500bn).	■ 89 irrigation projects to be fast tracked (capacity of ~8mn hectares). Near-term deadline of 23 projects to be completed by FY17E end.
■ ~3mn hectares to be brought under irrigation.	■ INR170bn budgetary allocation for FY17E.
■ Improve utilization of 185 irrigation projects across India. (Each project has the potential to irrigate ~300k acres vs ~200-250k currently).	■ Amalgamated into PMKSY recently.
Other Irrigation Initiatives announced:	**Other Initiatives announced to support Farmers:**
■ INR200bn dedicated Long-Term Irrigation Fund to be created in National Bank for Agriculture and Rural Development (NABARD).	■ INR150bn budgeted towards interest subvention allocation under Pradhan Mantri Fasal Bima Yojana (Crop Insurance Scheme).
■ Sustainable ground water resource management at an estimated cost of INR 60 bn.	■ Krishi Kalyan Cess (0.5%) on service tax and 7.5% surcharge on undisclosed income (as part of IDS) to be used to mobilize resources for rural economy.
■ 500k farm ponds and dug wells in rain fed areas to be taken up under MGNREGA.	■ Special focus to ensure credit flow to farmers.

Source: Company, Media Reports, Antique

State level irrigation initiatives to also support market growth

Besides support for irrigation projects at the Central Government level, state governments, where irrigated land (as a % of total agricultural land) is on the lower side, are also announcing budgetary schemes to support or fast-track irrigation projects. We expect more such announcements from state governments in the near-to-midterm as states focus on infrastructure to make their regions relatively 'drought-free'.

State Government	**Announcements / Comments**
Maharashtra	■ 'Jalayukta Shivar' launched to cover localized, need-based water management programs in response to 2015 drought condition. ■ INR1.4tn irrigation related spend estimated in the state over next five years.
Gujarat	■ Raised irrigation budget to INR90bn (from INR40bn) under the Sardar Sarovar Narmada irrigation project. ■ Allocated INR52bn for other ongoing water resource schemes
Karnataka	■ Doubled irrigation investment budget to INR 1 tn over next five years. ■ 45 irrigation projects currently in progress (across segments)
Chhattisgarh	■ To double irrigation potential to 3.2mn hectares by 2028.

Source: Company, Media Reports, Antique

Micro Irrigation (MI) - The next big opportunity

Given the uncertainty regarding quantum of rainfall in India, especially with regards to farmlands, acceptance of micro-irrigation systems gradually has been a boon from both water conservation as well as improving farm productivity point of view. Although the costs involved for undertaking MI projects are at a significant premium of 3x-5x as against cost involved for normal furrow-based irrigation practices, the gain in productivity (~40-60% depending on the crop), saving in terms of water, power consumption, fertilizer needs and seeds usage, more than makes up for the incremental cost. Also at present there are well defined subsidy schemes across states for MI usage, where quantum of subsidy is as high as ~50-90% with PMKSY allocation for MI subsidy being around INR23bn in FY16. With talks of individual eligibility criterion for getting MI subsidy being raised to 10Ha from 5Ha presently in order to make inroads in the under penetrated states, government is focusing on increasing the MI across India and we would not be surprised to see higher allocation going ahead. Typically PVC pipes constitute 25-30% by value of the MI system and thus with rising focus of government towards MI penetration, PVC pipe demand would also get enhanced in turn.

Micro Irrigation Systems - Drip Irrigation and Sprinkler Irrigation

Source: Jain Irrigation PPT , Antique

Although MI penetration has grown at a CAGR of 9.6% since 2005, penetration levels continue to remain insignificant vis-à-vis its current potential of ~5% of net sown area as against total potential of 70mn Ha or ~50% of net sown area. The government continues to remain supportive of this segment through regular budgetary allocations and making available subsidized MIS kits available for farmers.

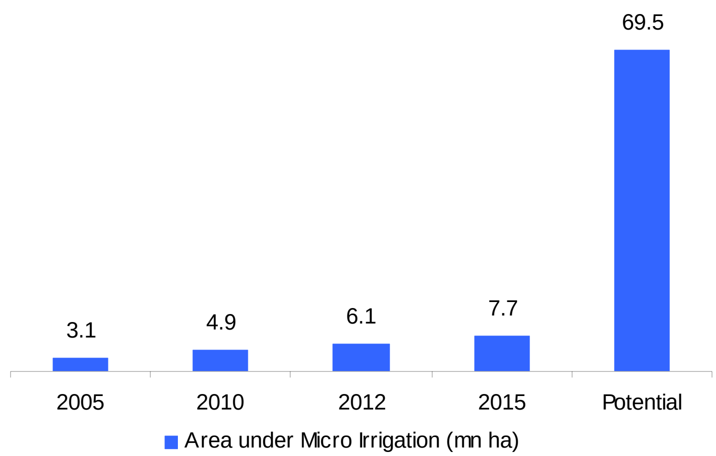
MI Expenditure - Budgeted vs Actual

INR bn	FY09	FY10	FY11	FY12	FY13	FY14	FY15	FY16
Budgeted	5.0	4.3	10.0	11.5	15.0	13.4	11.2	23.4
Actual Expenditure	4.7	4.8	9.7	12.3	12.0	12.7	10.0	18.0
Actual (Utilized %)	94.0	111.6	97.2	106.7	80.2	94.7	89.2	76.9

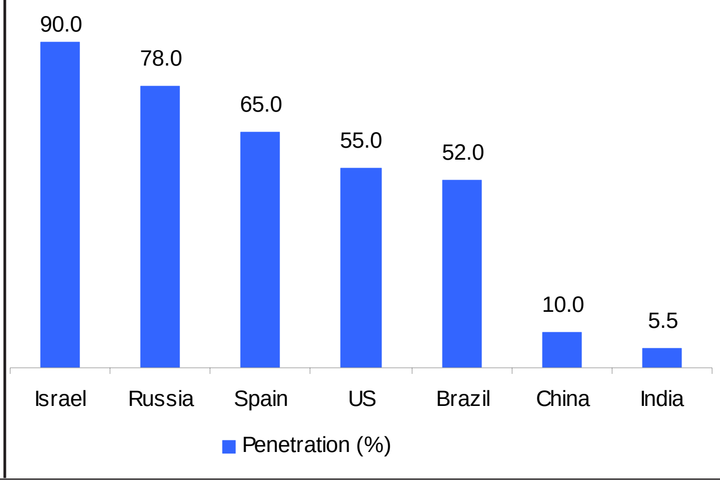
Source: Ministry of Agriculture Note: MI Expenditure was amalgamated as part of PMKSY in Budget 2015-16.

The MI industry is estimated at INR 30 bn currently and is growing at ~20% p.a. in value terms. We believe any incremental initiatives by state governments other than central government would potentially further boost growth. For example, the Maharashtra government has made it mandatory for sugarcane growers to shift to drip irrigation systems over the next 3 years (a means to conserve water as a response to the drought in 2015). Currently ~10% of ~1 mn hectares of sugarcane cultivation in the state is covered by drip irrigation. Given the low penetration of MI in India (vs other global peers), there is a tremendous opportunity for PVC pipe players to tap this emerging segment.

MI - Tremendous potential from current levels

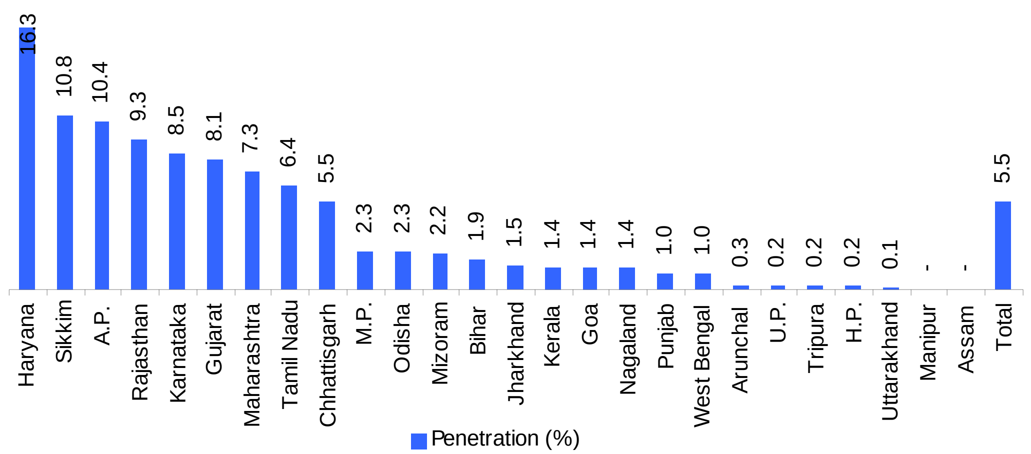


MI Penetration far behind vis-à-vis global peers



Source: Ministry of Agriculture

State-wise penetration of Micro Irrigation projects (% of net sown area)



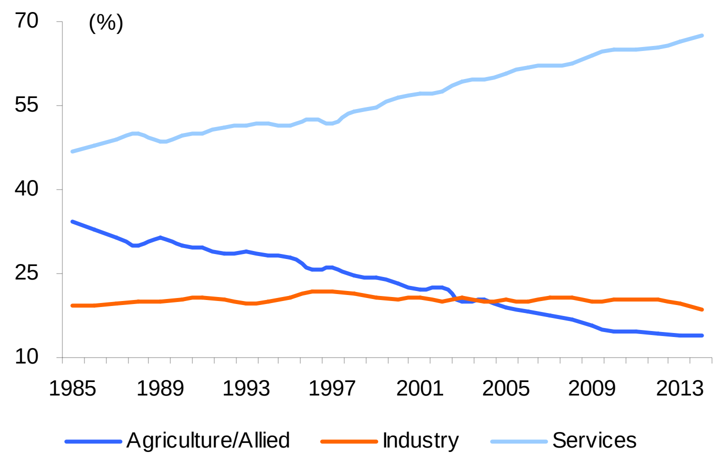
Source: Ministry of Agriculture

Housing - replacement demand, focus on low cost housing and rising urbanization the key drivers

Structural growth drivers in place

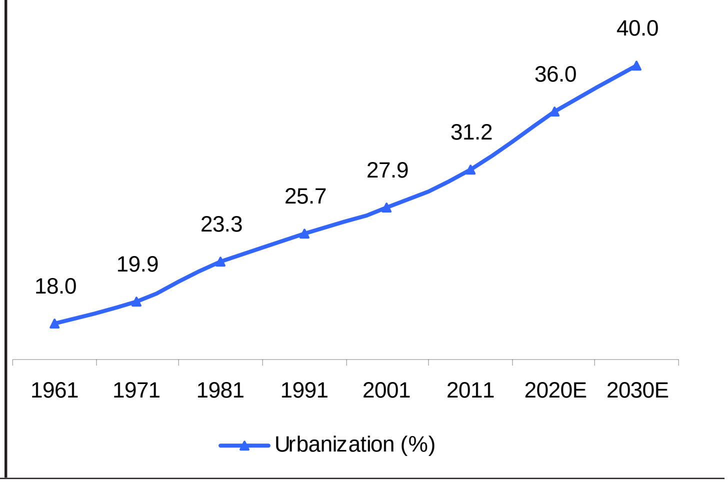
On the background of the muted demand from real estate sector, the B2B business (~25% of the demand) anyhow was barely growing at low single digit levels in past couple of years. Over and above that, the impact of the ongoing demonetization would only incrementally impact the cash transaction intensive Indian real estate market. Thus we are factoring in the negative impact of this weakness in the B2B business in our estimates. In the longer run real estate industry has a robust future as many strengthening growth drivers are falling in place to build a strong foundation for the industry in the longer run. India is one of the youngest nations in the world (average age 29 years), which aspires to grow economically. In terms of jobs, people have gradually shifted away from the agrarian segments over the years to industry and service segments, thus leading to migration towards cities/towns and driving the need for urban housing. Migration for jobs as well as instances of congested houses has also led to increasing nuclearization of families, which further lends credence to the case of rising real estate demand, may be in the form of low cost housing at suburbs of existing cities or through the rise in smart cities.

Services (as % of GDP) has risen over the years…



Source: RBI; Note: Base Year 2004-05. Data available till 2014.

…leading to rapid urbanization in the country



Source: Census of India, Antique

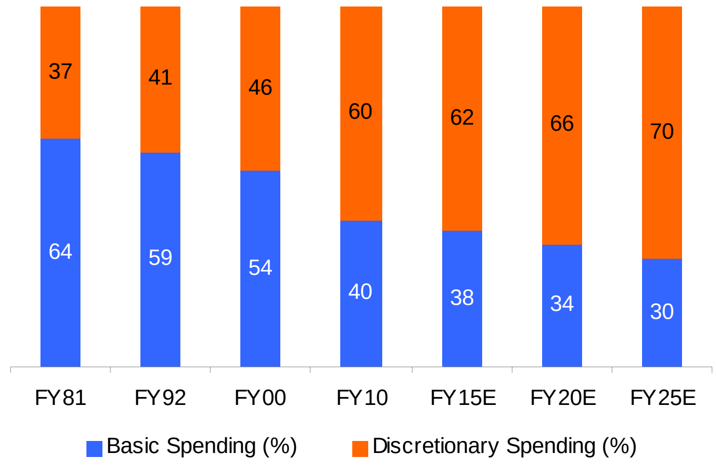
Estimated Housing Shortage in India

Housing Units (mn)	Urban	Rural	Total
Current Shortage	19	40	59
Additional requirement by 2022	26-29	23-25	49-54
Total Requirement	**44-48**	**63-65**	**107-113**

Source: FICCI report, Media reports

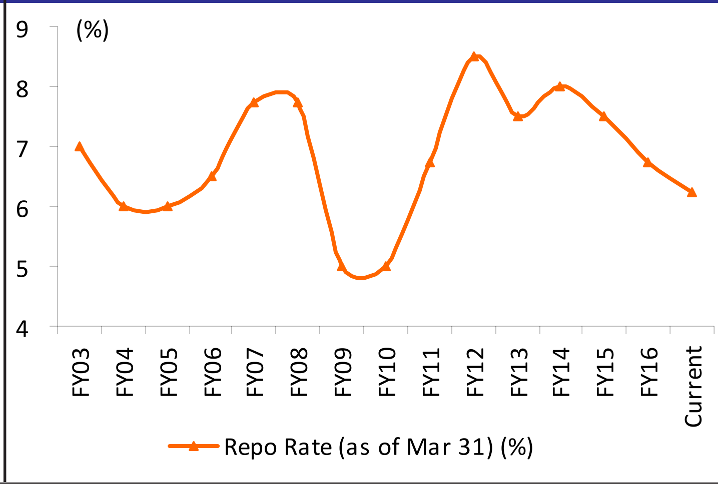
In addition to residential demand, the real estate industry would also be supported by the commercial sector (office space, shopping centers, etc.) and the hospitality sector. Increasing proportion of jobs in the services sector, an increasing pool of highly-skilled employees, rising disposable incomes, and aspirations to break out from routine lifestyles have been driving demand for commercial space. Interest rates, which have started coming down since past couple of years at a slow pace, also expected to trend lower in the coming quarters on back of visibility of control over inflation by the domestic central bank.

Disposable incomes are expected to rise further…



Source: CSO

…while interest rates are expected to trend lower



Source: RBI

Even if we assume that ~3-5% of total real estate cost accrues to piping systems, this still translates into a healthy growth opportunity for the pipes industry as government is focused towards low cost urban housing and improvement in rural infrastructure. Thus proper sanitation in rural housing would need plastic piping, thus enhancing the demand in the longer run. Today the housing related plastic piping market size is close to INR80bn, with CPVC and PVC having largely equal share, though acceptance of CPVC is much more in urban markets.

The central government launched the **Clean India campaign (Swachh Bharat Abhiyaan)** in 2014, which envisions sanitary facilities to be developed for every household which does not have access to one today. Although not directly linked to the real estate development story, this campaign too would be beneficial for PVC players as it opens up a market for plumbing and sewage pipes.

Initiatives launched by the central government in support of real estate / sanitation

Pradhan Mantri Awas Yojana (Housing For All)	**Atal Mission for Rejuvenation & Urban Transformation (AMRUT):**
■ To provide ownership of 20 mn houses in urban areas and 40 mn in rural areas for low income households by 2022.	■ To provide basic amenities and improve infrastructure in 500 urban environments (100k+ population). This includes steady clean water supply and sewerage facilities for every household.
■ Govt. support through cheaper loans for home owners and partial house construction cost support (~Rs 0.1-0.3 mn per house).	■ Total project cost is estimated at INR 39.2 tn of which INR 8 tn would go towards water supply, sewerage, storm water drains, and solid waste management.
■ To cover 100 cities in the first phase. Will eventually cover all 4,041 statutory towns in the country.	
Smart Cities Mission:	**Swachh Bharat Abhiyaan (Clean India Mission):**
■ 100 select smart cities to be developed by focusing on optimizing urban services/infrastructure management. This would involve proactive use of technology.	■ To build toilets/sanitation facilities in urban and rural areas across India and provide water supply for existing toilet blocks where the same is not available.
■ Each selected city would get INR 1 bn per year for five years in support of these developments.	■ Assistance through partial funding of construction of household toilets. Community toilets to be built in areas where individual household toilets are not feasible.
■ Optimization efforts would include clean water supply, sewerage, electricity, public transport, etc.	■ INR 2 tn allocated for this project.

Source: Company, Media Reports, Antique

Legislations to increase transparency, investments in real estate

Over the past few years, many real estate projects have run aground due to funding issues (high prices leading to poor sales, high interest rates, working capital stretching balance sheets, etc.). Given the opaque nature of Indian real estate industry in general, the government, through various bodies, has cleared (or is in process to clear soon) various legislations to help increase transparency in the system, and build confidence amongst investors in the sector. These initiatives should ease financing issues of real estate players.

- **Real Estate Regulation Act (RERA):** Expected to be implemented in 2017, the act has many consumer-friendly provisions (including setting up an industry regulatory body) that would increase transparency and ensure that launched projects have adequate financial closures and that projects are delivered with minimal delay.
- **Real Estate Investment Trusts (REIT):** SEBI has cleared norms (first announced in 2014) for the listing of REITs on Indian exchanges. Such investments would allow companies to raise funds to support construction of rent yielding assets like commercial spaces.
- **Reducing Gap between Ready Reckoner Rates and Market Prices:** Shrinking differential between Ready Reckoner Rates (Circle Rates published by governments for various jurisdictions annually for calculating Stamp Duty) and actual current market prices of properties would reduce the incentive for direct cash payments (over banking channels), thus bringing in more transparency in deal prices.
- **Benami Transactions (Prohibition) Amendment Act:** Implemented as recently as November 1, 2016, the Act seeks to give the government powers to confiscate assets held under the name of another or a fictitious person (than the one whom the property actually belongs to). The Act is expected to help the government fight black money in asset transactions (especially real estate).

Replacement market - PVC/CPVC preferred over GI

In existing real estate units, the market is fast moving away from cement-based, cast iron and galvanized iron (GI) pipes towards plastic-based PVC/CPVC pipes, as there is growing awareness about the advantages of the latter over the former ones. PVC/CPVC pipes are economic and last 2x longer than GI pipes. PVC/CPVC pipes are also increasingly being preferred by industries given their relative durability and strength versus conventional iron or lead pipes. As per our interactions with the companies, it can be estimated that the replacement market for housing related plastic piping is valued at ~INR60bn (~25% of total plastic pipe demand).

GI vs PVC vs CPVC - Why PVC/CPVC pipes are preferred over GI

Parameters	GI	PVC	CPVC
Life	15-20 years	20-25 years	30-35 years
Cost	Costliest vs PVC/CPVC	Cheapest vs GI/CPVC	Cheaper vs GI
Corrosion Resistance	No	Yes	Yes
Fire Resistance	Yes	No	Yes
Leakage	Vulnerable to leakage	Leakage Free	Leakage Free
Installation Issues	Time/Energy Consuming	Easier through Cold Welding	Easier through Cold Welding
Hot Water Usage	Requires extra insulation	No	Yes

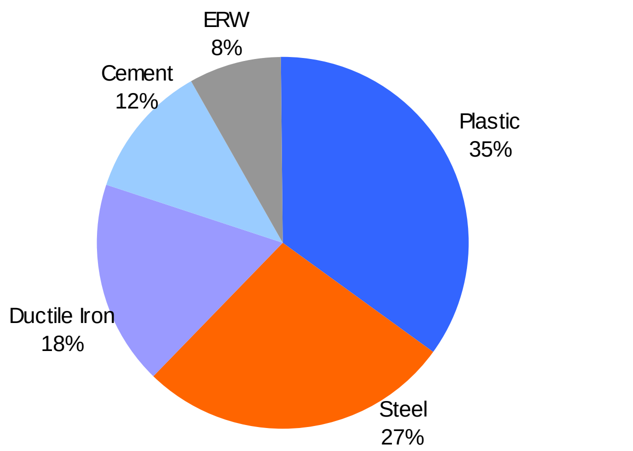
Source: Astral, Antique Note: GI - Galvanised Iron; PVC - Poly Vinyl Chloride; CPVC - Chlorinated Poly Vinyl Chloride

Advantage - Organized Industry Players

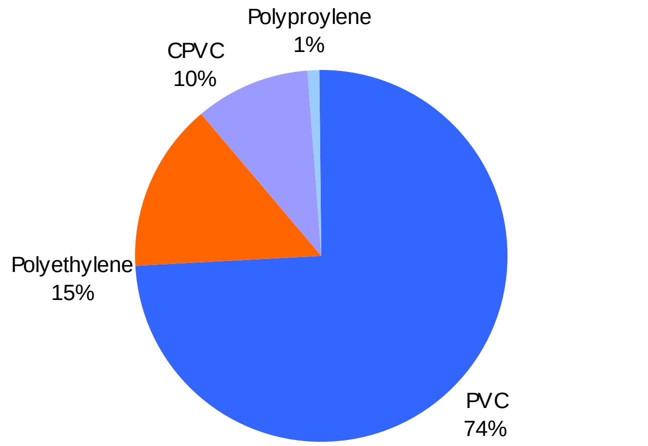
Industry State - largely organized in nature in the housing segment though agri segment is still having large unorganized presence

India Plastic Pipes industry remains a fairly organized industry, in comparison to other building product companies like tiles and plywood. Within the industry, the organized industry enjoys ~60% market share in the Agricultural/MIS and PVC segments each, while it is even higher at ~80% in the CPVC segment (purely household). However, the unorganized segment continues to remain fragmented with numerous local players, especially in the PVC pipes segment (~600 manufacturers constitute 40% of PVC Pipes market-share, while the rest is concentrated amongst ~20 large players).

Indian Pipe Market (~5 mn MTPA)

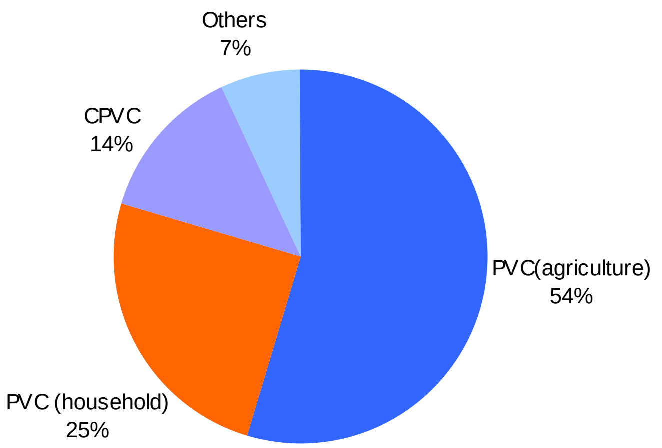


Indian Plastic Pipes Market (~2 mn MTPA)

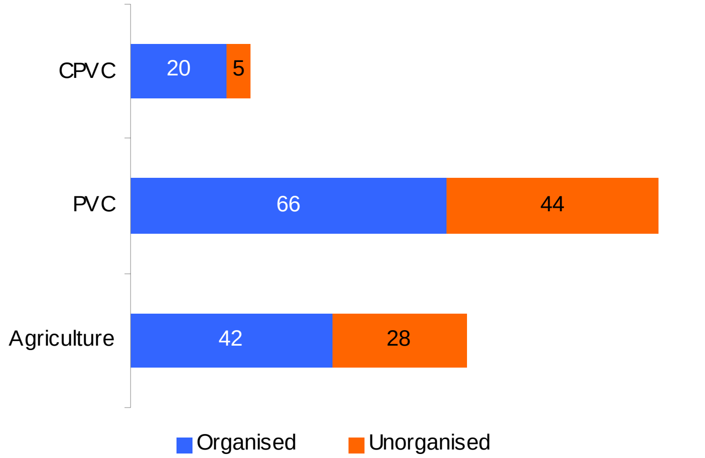


Source: Company data, Antique

Indian Plastic Pipes Market (~INR 220 bn)



Pipes Segments Industry Break-Up (INR bn)



Source: Company data, Antique

Organized share to expand due to competitive advantages

The overall plastic pipes market has grown by ~15% CAGR in FY10-15 period and the industry is expected to continue to grow at a similar annual rate in the FY15-20E period, pegging the overall industry at ~INR330bn by FY20e. As it capitalizes on its competitive advantages, we expect the organized industry to grow faster than the overall industry as it captures market-share from the unorganized industry post GST and recent demonetization. Around 60% of the overall plastic piping market is organised in nature with CPVC being much more organised in nature (~80%) as compared to PVC (~55%).

Top India pipe manufacturers and their future expansion plans

Company	Capacity (MT)	Products	Expansion Plans
Supreme Industries	300k	PVC/CPVC	20k MT plant in Jalgaon in FY17E. 2 other greenfield projects planned
Finolex Industries	280k	PVC/CPVC	30k MT additions for FY17E and FY18E each
Astral Poly Technik	128k	CPVC/PVC	35k MT additions planned by 2017; Facility planned at Ghiloth (Rajasthan) to produce PVC pipes as well.
Jain Irrigation	200k	PVC	N/A
Skipper	41k	PVC	100k MT capacity target by 2019
APL Pipes	55k	PVC	75k MT target by 2019
Prince Pipes	90k	PVC	
Ashirwad Pipes	130k	CPVC/PVC	

Source: Company, Media Reports, Antique

- **Wide product portfolio:** Availability of a large selection of piping products with applications across segments is the key to make a brand the preferred choice over unorganized players as it becomes a one-stop-shop solution for plumbing needs along with availability of solvent chemicals/adhesives and complex fittings further complements the portfolio.

Product Portfolio: One-stop-shops key to fight local unorganized competition

Source: Company, Media Reports, Antique

- **Pan-India reach:** Besides their large scale production capacities, a key advantage enjoyed by organized players in the pipes industry is its dealer/distributor network across the country. Besides strategically placed plants near key markets or ports, large players have also set up warehouses/depots across the country to extend their reach to various markets. A diverse product portfolio, supported by plants/warehouses reach, helps companies to quickly cater to demand arising from various parts of the country, an important advantage versus unorganized players.

Major Players have strong entrenched networks across India

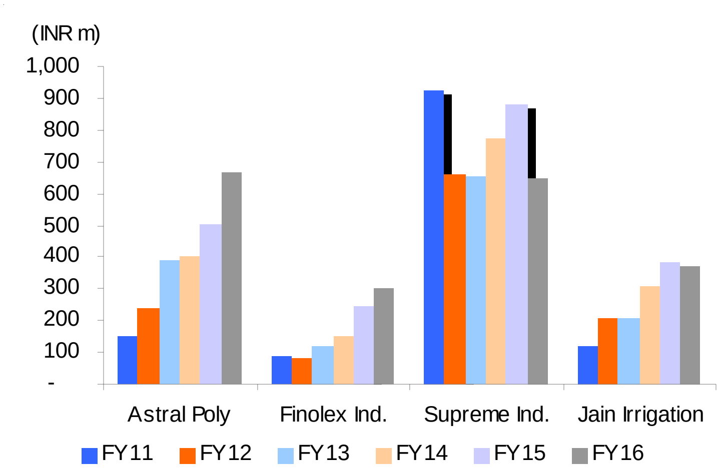
Company	Plants	Distributors
Astral Poly Technik	3	750
Finolex Industries	3	700
Jain Irrigation~	12	6,526
Skipper	5	1,500
Supreme Industries	7	887

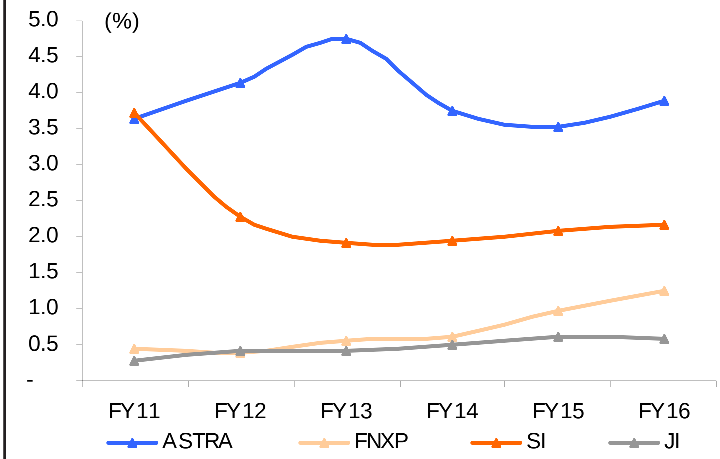
Source: Company, Antique Note: ~India operations only

- Key players like Astral Poly Technik, Finolex Industries, and Supreme Industries have extended their presence across India. Amongst unlisted players, Prince Pipes and Ashirwad too have a notable presence spread out across the country. However, most players have a weaker presence in East India (relative to other geographies within the country), with regional players Skipper and Kharagpur facility of Supreme Industries primarily catering to this part of the market.

- Brand Equity: Large players have also increasingly focused on brand building over the years to push volumes leading to improved brand recollect amongst end users and intermediaries (like plumbers). Initiatives include brand ambassadors (Salman Khan signed by Astral), TV commercials, in-movie promotions, outdoor campaigns, dealer incentives, etc. Astral Poly has been the most aggressive in terms of advertisement & promotion spending in recent years. Besides these, regular participation in industry exhibitions is also helping increase brand awareness for organized players.

Consistent Brand Building investments by players. Astral Poly is the most aggressive player in A&P spend





Source: Company, Antique

GST: Accelerate the shift from unorganized to organized players

The implementation of the Goods & Services Tax (GST) would further bring down the price differential between organized and unorganized players, as tax compliance costs would increase for the latter. Given that the unorganized segment is largely present in the replacement market, reduced price gaps, coupled with increasing brand awareness, would support organized players to further take market-share away from the unorganized players. Although the shift to organized industry won't be as dramatic in the Pipes space vis-à-vis Tiles and Plywood (given that the pipes industry is already ~60% organized), nevertheless, the secular trend in support of organized players would continue, especially in agri segment.

Demonetization- benefits of at par rainfall drying up in a quarter

We interacted with various pipes dealers/retailers in different cities and towns as well as managements of pipes companies under our coverage in recent weeks to gauge the impact of Demonetization on the industry in general. The following are our key observations from these discussions.

Agricultural pipes - a function of farm incomes/govt. subsidies

The withdrawal of old INR 500 and INR 1,000 currency notes (post the November 8, 2016 announcement) has hit the agricultural pipes market hard on the ground, as the trade was largely supported by cash dealings (instead of formal channels). Although the situation remains uncertain on the ground, the demand hit is merely due to the liquidity crunch that has emerged post the demonetization announcement. As per market participants, this demand crunch is transitionary in nature and they expect the situation to return to normal once adequate liquidity is injected into the system (availability of more INR 500 denomination currency notes).

The agricultural pipes market is largely dependent on farm incomes and government subsidies. In the near-to-mid-term, government subsidies (which are being routed through banking channels) would aid irrigation projects at the last leg including focus on MI projects. As farm incomes increase (due to reducing dependency on monsoons, government support), the demand for agricultural pipes would remain healthy ahead as more arable land gets irrigated.

Replacement market non-discretionary in nature

While the agricultural market remains secular in nature (given increasing government support and awareness to adopt micro irrigation), the replacement market remains non-discretionary in nature. **The low-ticket size of replacement pipes, availability of cheaper PVC/CPVC pipes (relative to GI), and the urgency of replacing damaged pipes, has ensured that this market has not been hit by the recent demonetization move.**

However, the replacement market fueled through interior decoration business (either remodeling of existing houses or secondary market sales in smaller towns) would be hit in the near-term as it too is largely dependent on the cash economy.

Real estate market to be hit further in the near-term

Although they were already under pressure due to sluggish sales, Real Estate developers (both organized/unorganized) are expected to be hit hard from the demonetization (given the cash involved in sales, especially in Tier I/II cities). While organized developers are expected to recover quicker from the cash crunch (due to stronger balance sheets relative to unorganized developers), the postponement of institutional demand for pipes from this sector would pinch businesses further in the near-term. (25% of housing pipe demand from B2B segment).

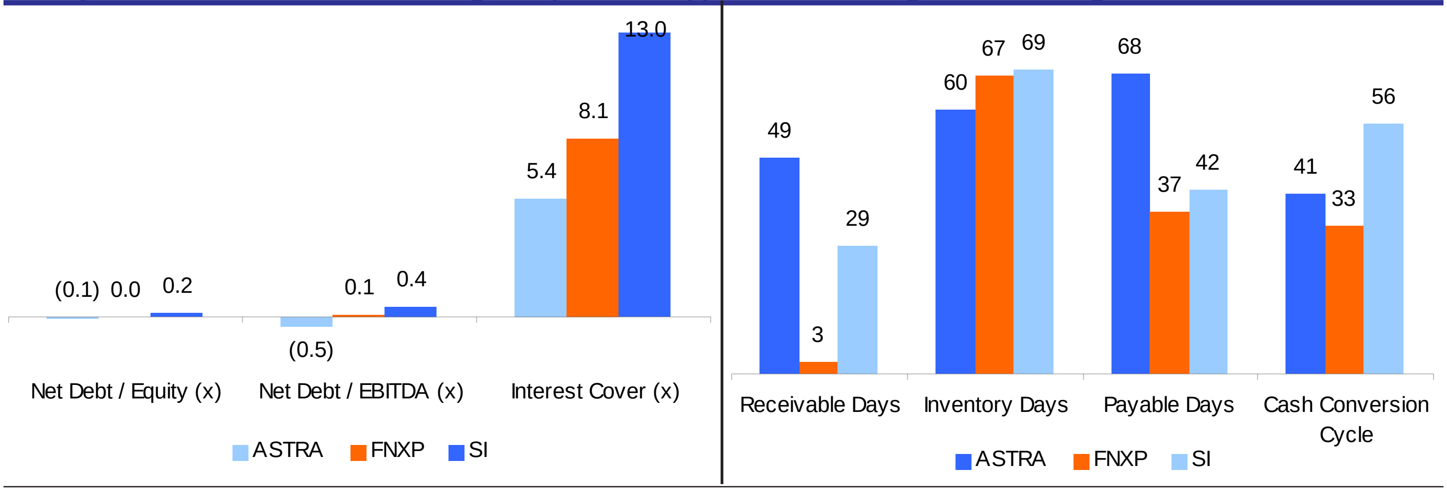
Price differential to shrink between unorganized and organized players

While the GST implementation is expected to lead to higher prices for unorganized pipe producers, on-the-ground liquidity crunch would force many unorganized players to shift to formal channels to do business (banking channels like cheques, credit cards, etc. are functioning smoothly). Shifting to formal channels to ensure business continuity, wherever possible, would lead to higher compliance costs, which in turn would lead to higher prices as players would try to protect their margins. In addition, corporate level price movements would also affect the differential between organized and unorganized players. Astral Poly Technik has reduced prices of its CPVC range by ~10% (post shifting its CPVC resin sourcing from Lubrizol to Sekisui from October 2016). From our interactions, Astral B2C dealers confirmed the price cut, increasing chances of market share gain for Astral now as pricing gap with peers have narrowed down significantly. Post this cut and recent surge in PVC prices, the price differential between PVC and CPVC pipes is barely 10-15% on a per unit length basis, resulting in potential recovery in CPVC demand.

Stronger balance sheets to support organized segment players

Organized players with strong balance sheets have the wherewithal to support their dealers through relaxed payment terms or credit period extensions to push sales during the current tight liquidity scenario. Although we barely found any retailer/dealer who received support from the organised manufacturer, nevertheless, companies said that they are open to considering exercising this option in select markets where it is seeing demand to be temporarily hit most due to the lack of cash in the system. Across the distribution chain, dealers/end retailers are tending to move away from the cash system to formal banking channels (through installation of card POS machines).

Healthy balance sheets afford our coverage companies to support dealers during the current tough times



Source: Company, Antique

2HFY17 numbers to be on the weaker side; expect normalcy in agri pipes segment by end of fiscal

While the segment as a whole is expected to come out of the lurch faster than other building product categories, 2HFY17E would remain under pressure. The month of November 2016 saw decent inventory movement at the dealer level due to (1) No business problems for first eight days of the month, (2) advancement of procurement plans by institutional users, (3) possibly back-dated contracts, and potential usage of old currency notes for product sales at the dealer/retail level in the immediate aftermath of the old currency note ban.

December on the other hand has been a weaker month with sales declining further MoM slightly with normalcy restoration set to get initiated from February onwards. The situation is expected to alleviate somewhat once the availability of INR100/INR500 currency notes normalize at the ground level (expected sometime in February/March 2017). Along with a weak 4Q, it is possible that 1HFY18E might also be affected slightly if the liquidity situation remains tight for longer than expected.

Demonetization Aftermath - Management Commentary

Company	Comments
Astral Poly Technik Ltd.	■ Plastic pipe demand remains normal as of mid November, but slowdown expected as the quarter ends. Trying its best to gain market share in order to protect revenue. ■ Branded players like Astral would be able to pull up quicker than unorganized/localized players as pricing would converge and demand would shift more towards organized players (~60% industry is organized currently).
Finolex Industries Ltd.	■ Demand fell ~20% post November 8. December is also expected to witness volume decline YoY though stable (or slight improvement) from a MoM perspective. ■ Expect Agriculture-based demand to remain unaffected over the mid-term. Agriculture segment will pull up overall volumes for the company over the next 3-6 months.
Supreme Industries Ltd.	■ Company's plastic pipe business, especially those in the replacement market and Silpaulin products are non-discretionary in nature and demand is not expected to be hit in the mid-term.
	■ Confident of achieving ~12% volume growth across product segments in FY17E.

Source: Company, Antique

Current Reco	:	BUY
Previous Reco	:	BUY
CMP	:	INR385
Target Price	:	INR476
Potential Return	:	24%

Basudeb Banerjee
+91 22 4031 3443
basudeb.banerjee@antiquelimited.com

Aasim Bharde, CFA
+91 22 4031 3429
aasim.bharde@antiquelimited.com

Market data

Sensex	:	26,366
Sector	:	Mid Cap
Market Cap (INRbn)	:	46.4
Market Cap (USDbn)	:	0.682
O/S Shares (m)	:	119.8
52-wk HI/LO (INR)	:	528/333
Avg Daily Vol ('000)	:	12
Bloomberg	:	ASTRA IN

Source: Bloomberg

Valuation

	FY17e	FY18e	FY19e
EPS (INR)	9.0	13.1	19.1
P/E (x)	42.9	29.2	20.2
P/BV (x)	5.2	4.5	3.8
EV/EBITDA (x)	21.7	15.9	11.5
Dividend yield (%)	0.1	0.3	0.5

Source: Bloomberg

Returns (%)

	1m	3m	6m	12m
Absolute	(4)	(13)	(17)	(11)
Relative	(4)	(8)	(16)	(12)

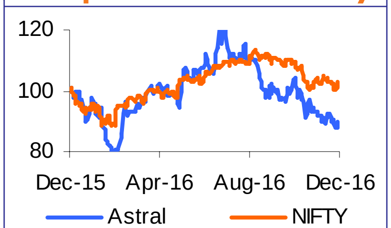
Source: Bloomberg

Shareholding pattern

Promoters	:	59%
Public	:	41%
Others	:	0%

Source: Bloomberg

Price performance *vs* Nifty



Source: Bloomberg Indexed to 100

COMPANY UPDATE

Astral Poly Technik Limited

Bright sunlight at the end of the short dark tunnel

Astral Poly Technik Ltd. (ASTRA) is in pole position to spring into a period of high growth with improving return ratios. Given that its two businesses - Pipes and Adhesives - are entering a high growth phase as they enter new market segments, increasing plant-level utilization (currently at ~60%), lower raw material costs (due to lower costing of CPVC compound), and minimal future capex, ASTRA would double its free cash flow (FCF) by FY19E from current levels of INR930mn. We are building in revenue and net income CAGR of ~18%/46% respectively for the FY17E-19E period. We maintain our BUY recommendation on ASTRA with a target price of INR 476 (valuing it at 25x FY19E EPS).

Agricultural Pipes - an untapped market for ASTRA

Until recently, ASTRA was not present in the Agri pipes market, which anyhow is the largest segment under the plastic piping market in India with a size of ~INR120bn. With the company now increasing focus on this segment, and given the immense potential up for grabs in the Agri pipes space, we believe that ASTRA can easily outpace the expected industry growth of 15% CAGR over the next few years. The company can leverage its brand equity and dealer network to tap this market segment with minimal incremental spending on distribution and branding expense. Even if ASTRA achieves a market-share of ~3% in this segment by FY19E (~INR4bn), this itself would propel ~20%+ revenue CAGR in FY17E-19e.

Resin backward integration to support margin sooner the later

The new CPVC resin sourcing arrangement with Sekisui involves procuring resin from its Thailand plant and mixing other essential chemicals (from Lubrizol suppliers) in its own plant at Santej (Gujarat). As a result, its CPVC resin cost will reduce by ~15-20%. As the resin consists of the bulk of raw materials for its products, ASTRA is in a position to boost margins from its current 12-13%, while consequently reducing prices of its CPVC pipes by ~8-10% (the company has launched Astral CPVC Pro brand of pipes).

Adhesives - an additional growth/margin lever

Adding new products especially in the B2C segment under its portfolio, adding Southern markets in its distribution and shifting production to a new facility in Gujarat, saving logistics costs to cater to West and Central markets, ASTRA has effectively set the stage for a 16-18% revenue CAGR in this segment in the forthcoming years. Joint branding expenses sharing with piping segment coupled with strong distribution of Resinova should propel adhesives revenue to ~INR5.5bn by FY19E (FY17E-19E CAGR of ~15%).

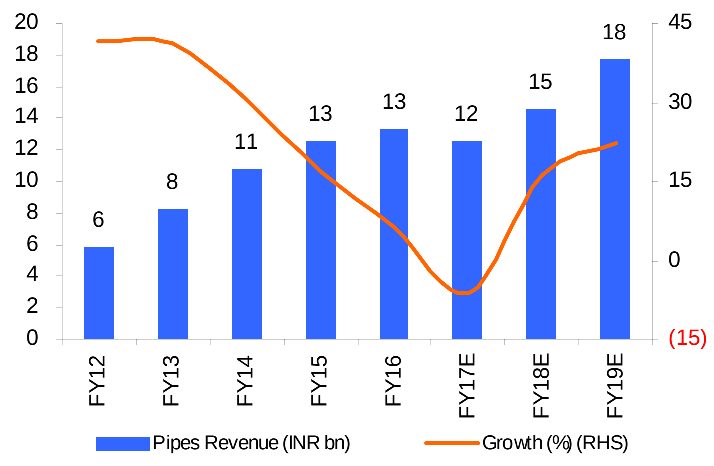
All set for strong FCF generation ahead

ASTRA pipe business capacity utilization stood at ~60% in FY16, post capacity additions during the year. With minimal capex expectations over the next 2 years (~30k MTPA additions; ~INR800mn per year), increasing utilization as the company increases focus on the Agri space and increasing growth from the adhesives business (which commands asset turns of ~5-6x at its peak), ASTRA is in a sweet spot to increase its FCF from current levels. We estimate FCF to double by FY19E from its FY16 level to ~INR2bn.

Outlook & Valuation:

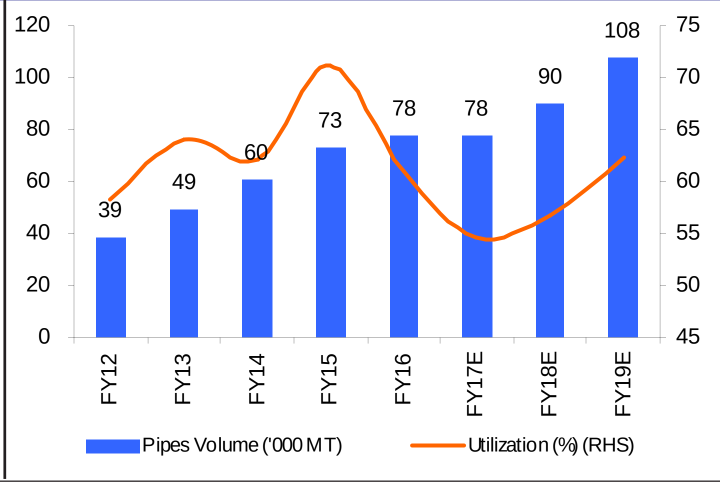
While demonetization is a temporary hiccup for ASTRA, the long-term remains bright as the company focuses on increasing its revenue from the highly underpenetrated agricultural segment as well as the adhesives business. We expect ASTRA to post revenue/net income CAGR of ~18%/~46% respectively in the FY17E-19E period, while FCF is expected to double to ~INR2bn by 19E over FY16. Given the high growth opportunity along with strong ROCE and FCF generation, we maintain our BUY on ASTRA with a target price of INR 476, valuing it at 25x FY19E earnings.

Pipes Revenue Trend



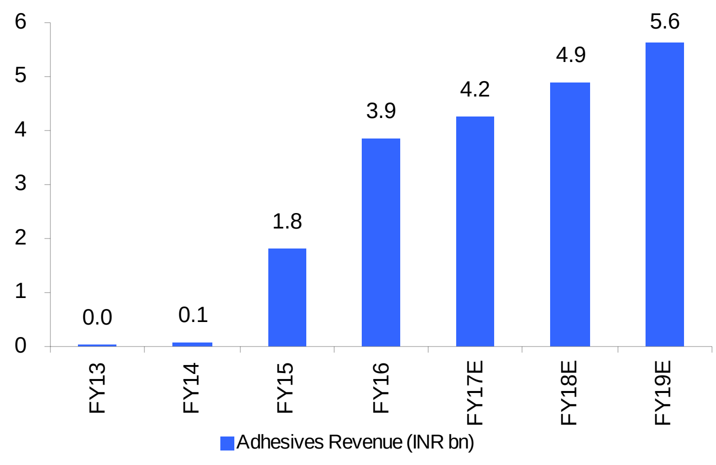
Source: Company, Antique

Pipes Volumes + Utilization Trend



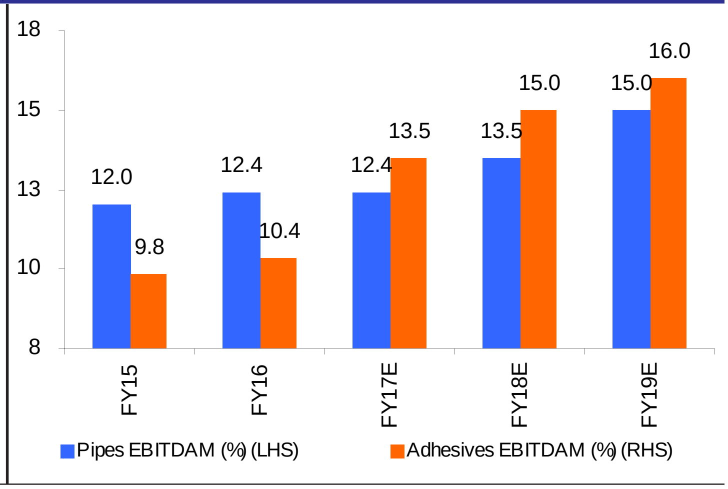
Source: Company, Antique

Adhesives Revenue Trend



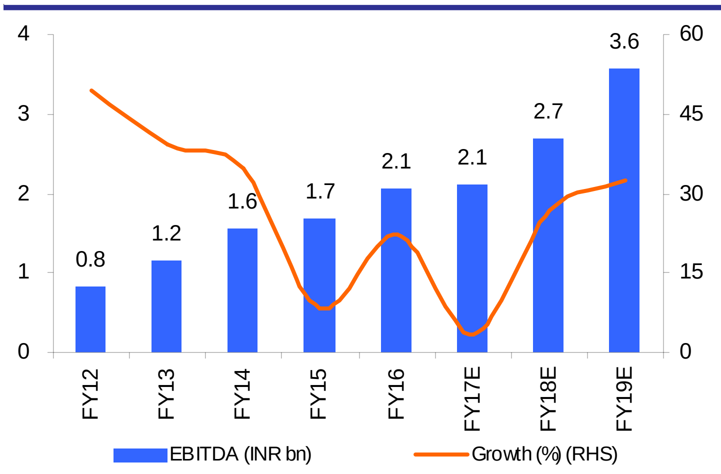
Source: Company, Antique

Pipes / Adhesives EBITDA Margin trend



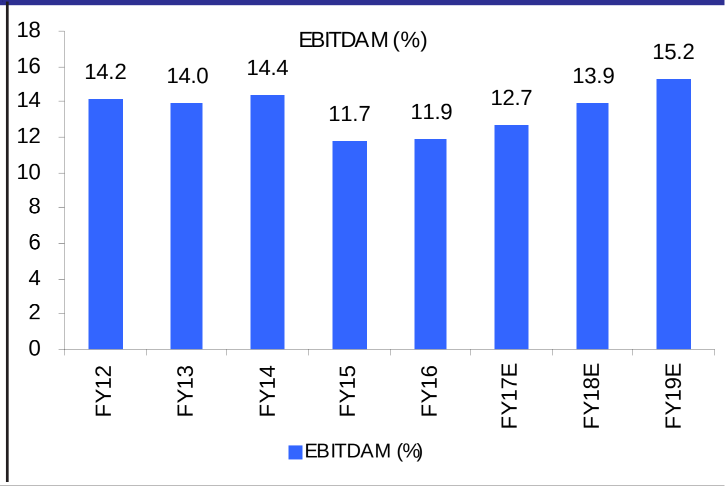
Source: Company, Antique

Consolidated EBITDA Trend



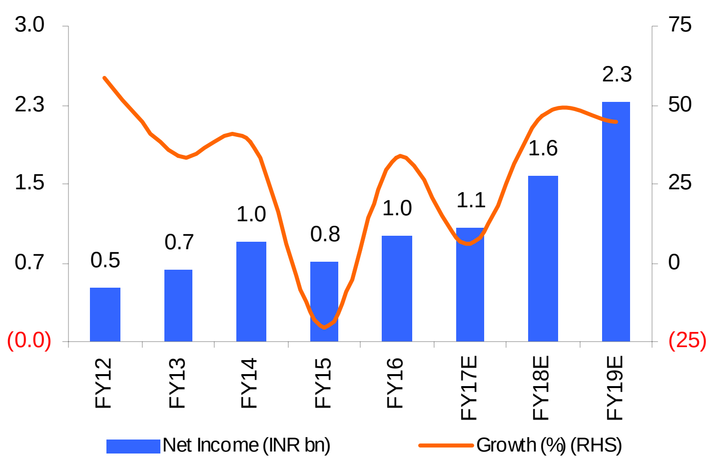
Source: Company, Antique

Consolidated EBITDA margin trend



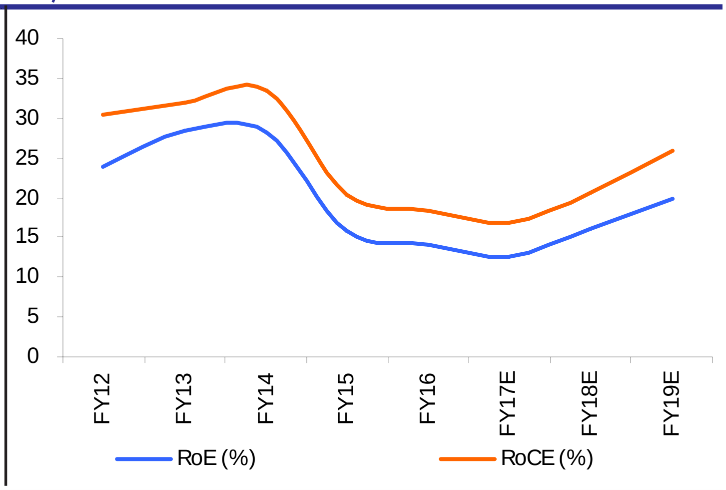
Source: Company, Antique

Net Income Trend



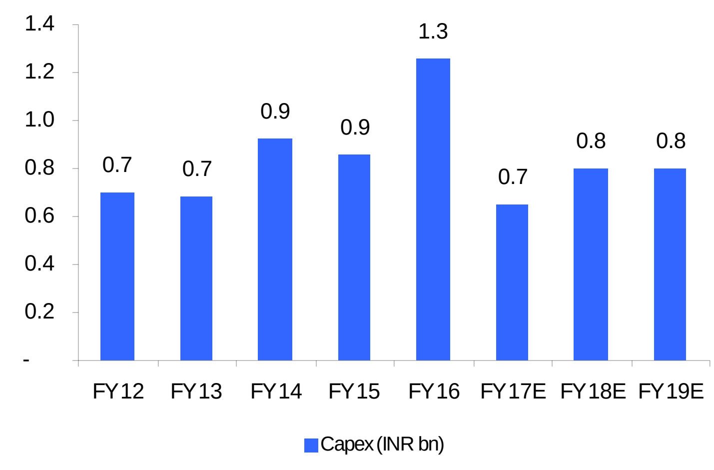
Source: Company, Antique

RoE / RoCE Trend



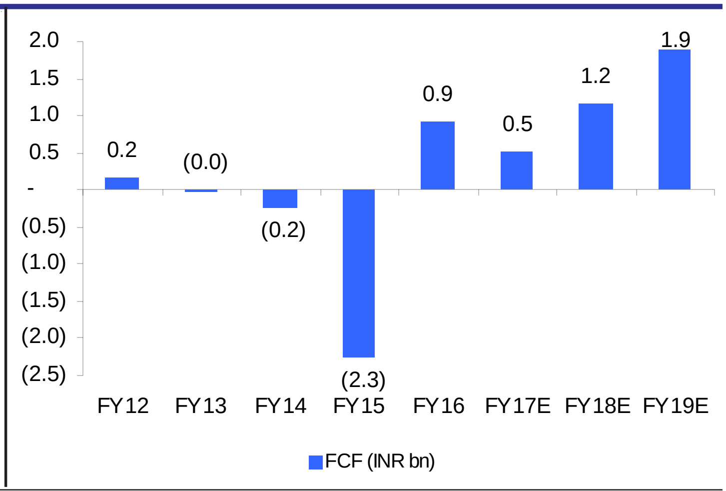
Source: Company, Antique

Capital Expenditure Trend



Source: Company, Antique

Free Cash Flow Trend



Source: Company, Antique

Financials

Profit and loss account (INRm)

Year-ended March 31	FY15	FY16	FY17e	FY18e	FY19e
Revenue	**14,294**	**17,183**	**16,745**	**19,381**	**23,394**
Expenses	12,616	15,138	14,622	16,691	19,829
Operating Profit	**1,678**	**2,045**	**2,123**	**2,690**	**3,566**
Other income	36	21	50	50	120
EBIDTA	**1,714**	**2,065**	**2,173**	**2,740**	**3,686**
Depreciation	364	424	485	520	560
Interest expense	255	305	200	80	40
Profit before tax	**1,095**	**1,337**	**1,488**	**2,140**	**3,086**
Taxes incl deferred taxation	313	319	387	535	771
PAT before MI & EO Items	**782**	**1,017**	**1,101**	**1,605**	**2,314**
Extra ordinary Items	-	8	-	-	-
Minority Interest	23	10	28	30	32
Profit after tax	**759**	**999**	**1,073**	**1,575**	**2,282**
Diluted EPS (INR)	**6.4**	**8.4**	**9.0**	**13.1**	**19.1**

Balance sheet (INRm)

Year-ended March 31	FY15	FY16	FY17e	FY18e	FY19e
Share Capital	118	120	120	120	120
Reserves & Surplus	6,069	7,696	8,700	10,134	12,136
Networth	**6,188**	**7,816**	**8,819**	**10,254**	**12,256**
Minority Interest	165	132	160	190	222
Debt	2,026	1,327	1,240	440	240
Deferred Tax Liability	177	234	234	234	234
Capital Employed	**8,556**	**9,510**	**10,454**	**11,118**	**12,952**
Gross Fixed Assets	4,826	6,354	7,004	7,804	8,604
Accumulated Depreciation	1,402	1,825	2,310	2,830	3,390
Net Assets	3,424	4,529	4,694	4,974	5,214
Capital work in progress	268	0	0	0	0
Goodwill	2,144	2,874	2,874	2,874	2,874
Current Assets					
Inventory	2,656	2,804	2,477	2,761	3,205
Debtors	2,327	2,308	2,386	2,655	3,077
Cash & Bank balance	115	542	739	916	2,311
Loans & advances and others	718	807	903	1,013	1,073
Current Liabilities & Prov					
Creditors	2,657	3,187	3,074	3,504	4,230
Other liabilities & provisions	440	1,165	545	570	570
Net Current Assets	**2,719**	**2,107**	**2,886**	**3,271**	**4,865**
Application of Funds	**8,556**	**9,510**	**10,454**	**11,118**	**12,952**

Per share data

Year-ended March 31	FY15	FY16	FY17e	FY18e	FY19e
No. of shares (m)	118	120	120	120	120
BVPS (INR)	52.3	65.3	73.6	85.6	102.3
CEPS (INR)	9.5	11.9	13.0	17.5	23.7
DPS (INR)	0.3	0.4	0.5	1.0	2.0

Source: Company, Antique

Cash flow statement (INRm)

Year-ended March 31	FY15	FY16	FY17e	FY18e	FY19e
EBT	**1,095**	**1,325**	**1,460**	**2,110**	**3,054**
Depreciation & amortisation	364	424	485	520	560
Interest expense	255	305	200	80	40
Interest / Dividend received	(7)	-	-	-	-
Other Adjustments	34	88	-	-	-
(Inc)/Dec in working capital	(306)	367	(581)	(207)	(199)
Tax paid	(264)	(319)	(387)	(535)	(771)
CF from operating activities	**1,170**	**2,190**	**1,177**	**1,967**	**2,683**
Capital expenditure	(3,449)	(1,260)	(650)	(800)	(800)
Net Investments	6	-	-	-	-
Income from investments	7	-	-	-	-
CF from investing activities	**(3,435)**	**(1,260)**	**(650)**	**(800)**	**(800)**
Inc/(Dec) in share capital	2,359	590	-	-	-
Inc/(Dec) in debt	313	(699)	(87)	(800)	(200)
Dividends & Interest paid	(301)	(361)	(270)	(220)	(320)
Other Adjustments	-	(33)	28	30	32
CF from financing activities	**2,371**	**(504)**	**(329)**	**(990)**	**(488)**
Net cash flow	**106**	**426**	**197**	**177**	**1,394**
Opening balance	10	115	542	739	916
Closing balance	**115**	**542**	**739**	**916**	**2,311**

Growth indicators (%)

Year-ended March 31	FY15	FY16	FY17e	FY18e	FY19e
Revenue	32.4	20.2	(2.5)	15.7	20.7
EBITDA	8.1	22.3	3.5	26.7	32.6
PAT	(3.8)	32.6	6.7	46.7	44.9
EPS	(8.7)	31.0	6.7	46.7	44.9

Valuation (x)

Year-ended March 31	FY15	FY16	FY17e	FY18e	FY19e
PE	60.0	45.8	42.9	29.2	20.2
P/BV	7.4	5.9	5.2	4.5	3.8
EV/EBITDA	28.3	22.6	21.7	15.9	11.5
EV/Sales	3.3	2.7	2.7	2.2	1.8
Dividend Yield (%)	0.1	0.1	0.1	0.3	0.5

Financial ratios

Year-ended March 31	FY15	FY16	FY17e	FY18e	FY19e
RoE (%)	16.0	14.1	12.7	16.2	19.9
RoCE (%)	20.4	18.3	16.9	20.6	26.0
Debt/Equity (x)	(0.0)	(0.1)	(0.1)	(0.2)	(0.2)
EBIT/Interest (x)	5.3	5.4	8.4	27.7	78.1

Margins (%)

Year-ended March 31	FY15	FY16	FY17e	FY18e	FY19e
EBITDA	11.7	11.9	12.7	13.9	15.2
EBIT	9.4	9.6	10.1	11.5	13.4
PAT	5.3	5.9	6.4	8.1	9.8

Source: Company Antique

Current Reco	:	BUY
Previous Reco	:	BUY
CMP	:	INR447
Target Price	:	INR522
Potential Return	:	17%

Basudeb Banerjee
+91 22 4031 3443
basudeb.banerjee@antiquelimited.com

Aasim Bharde, CFA
+91 22 4031 3429
aasim.bharde@antiquelimited.com

Market data

Sensex	:	26,366
Sector	:	Plastic Piping
Market Cap (INRbn)	:	55.8
Market Cap (USDbn)	:	0.820
O/S Shares (m)	:	124.1
52-wk HI/LO (INR)	:	498/258
Avg Daily Vol ('000)	:	29
Bloomberg	:	FNXP IN

Source: Bloomberg

Valuation

	FY17e	FY18e	FY19e
EPS (INR)	24.7	26.4	29.0
P/E (x)	18.1	17.0	15.4
P/BV (x)	4.9	4.4	4.0
EV/EBITDA (x)	11.4	10.7	9.9
Dividend yield (%)	2.7	3.1	3.6

Source: Bloomberg

Returns (%)

	1m	3m	6m	12m
Absolute	6	(1)	6	50
Relative	6	4	8	48

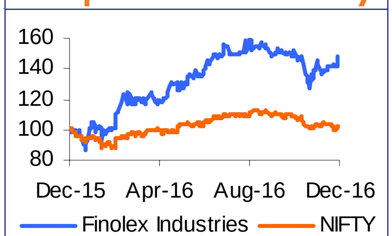
Source: Company, Antique

Shareholding pattern

Promoters	:	52%
Public	:	48%
Others	:	0%

Source: Bloomberg

Price performance *vs* Nifty



Source: Bloomberg Indexed to 100

COMPANY UPDATE

Finolex Industries Limited

Leading contender to benefit from government's thrust on irrigation

Finolex Industries Ltd. (FNXP) is in a strong position to benefit from the immense scope in the agricultural plastic piping space, given its experience in this space over decades along with scale and reach. Various government initiatives like the PMKSY, as well as state-level initiatives like the Jalyukt Shivar Abhiyaan (Maharashtra) would mandate ordering from approved organized vendors where FNXP would be one of the topmost contenders in addition to rising need for Micro Irrigation projects. Also, increasing contribution from Pipes & Fittings to the overall revenue mix with rising scale and capacity in the pipes segment, at the cost of PVC resin where it would not expand capacity beyond present 272MT, would reduce volatility in margins going ahead. However, given the higher PVC realisation levels presently along with favorable PVC-EDC spread supporting the margin now, we are building in lower revenue/ earnings CAGR of ~7%/~8% respectively for FY17E-19E. On the other hand, valuations remain comforting amid strong balance sheet and robust FCF generation. We maintain our BUY recommendation on FNXP with a price target of INR 522 based on 18x FY19E EPS.

Major player in the agricultural pipes space

FNXP is the largest player in the organized PVC pipes market (~25% organized market share; ~15% total market share) and derives the bulk of its revenue (~70% as of FY16) from the Agricultural Pipes market. Given its brand resonance amongst agri-pipe users, and its close proximity to markets like Maharashtra, Gujarat, and Karnataka where irrigation potential is high, FNXP is placed well to capitalize on the high growth opportunity arising from the underpenetrated agricultural pipes space.

Expansion plans in place to spread out of core markets

FNXP has ~280k MTPA pipes & fittings capacity currently and has warehouses in Cuttack, Delhi, and Indore which allows it to extend its reach to markets across North and Central India. The company has plans to add ~30k MTPA additional capacity for FY18E/19E each (capex ~INR600mn total) and is currently exploring technological solutions to cut transport time between factories and warehouses (which could lead to reduction in setting up of new warehouses) and reduce logistics costs too in turn.

Revenue mix to move in favour of Pipes & Fittings

Increased capacities in the Pipes & Fittings space, given the huge potential for pipes in the Indian market, would lead to more captive consumption of FNXP's PVC resin plant output in the coming years (Pipes + Fittings revenue in overall mix increased from 46% in FY11 to 70% in FY16). As a result, EBITDA margins should become stable going ahead (PVC resin margins are highly volatile). Increasing share of Fittings in the overall mix could even aid margins from current levels. We expect FNXP to post steady EBITDA margins in the 15-15.5% range in the FY17E-19E period, with present ~19% not being sustainable.

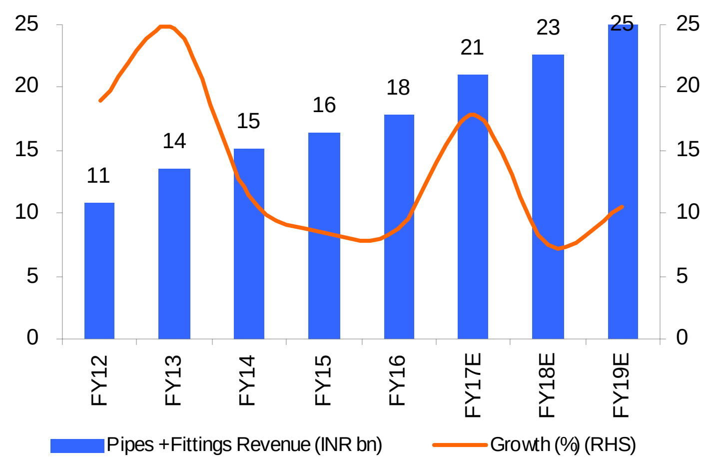
PVC-EDC spreads slowly reversing back towards normalcy

While PVC Resin contribution to overall revenue mix is expected to reduce going forward, given the EDC glut in the global markets, vis-à-vis PVC (whose prices have risen ~8% since October), the spread between PVC and EDC is expected to remain healthy as compared to historical normative levels of USD500-550 though lower than the recent highs of ~USD 680-660. The higher than normal spread is expected to provide a cushion to overall 2HFY17E margin, which otherwise would be affected by lower volume in the Pipes & Fittings space as a result of the ongoing demonetization.

Outlook & Valuation:

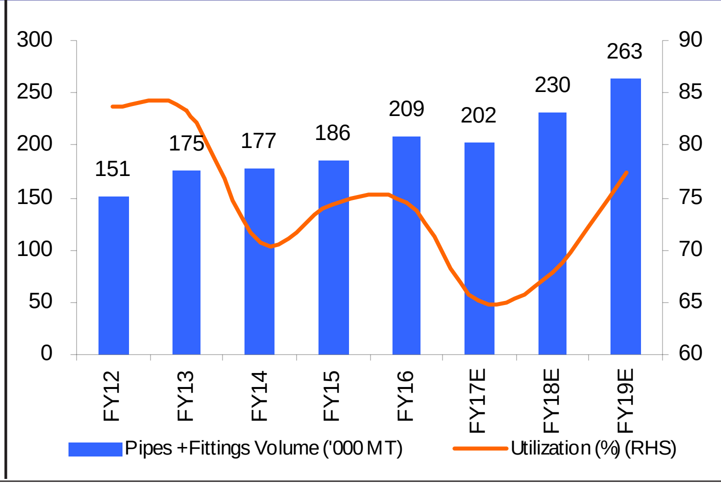
Though our revenue and net income CAGR assumptions of ~7% and ~8% for FY17E-19E period reflects low and steady growth by FNXP, nevertheless on back of robust capital efficiency, clean balance sheet and strong FCF generation we maintain our BUY with a target price of INR 522, valuing FNXP at 18x FY19E earnings.

Pipes + Fittings Revenue Trend



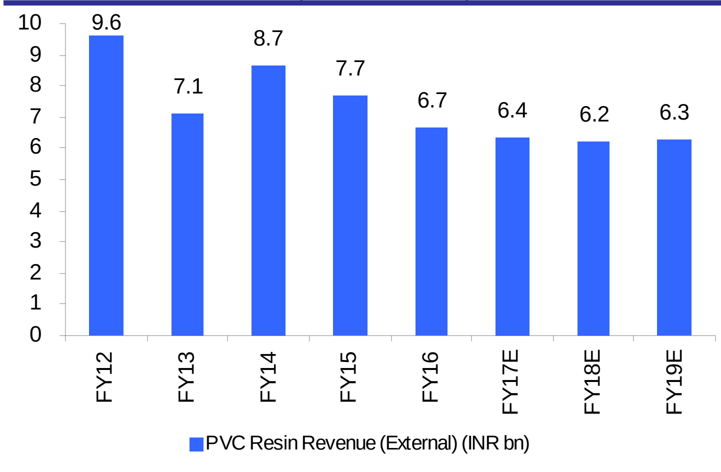
Source: Company, Antique

Pipes + Fittings Volume / Utilization Trend



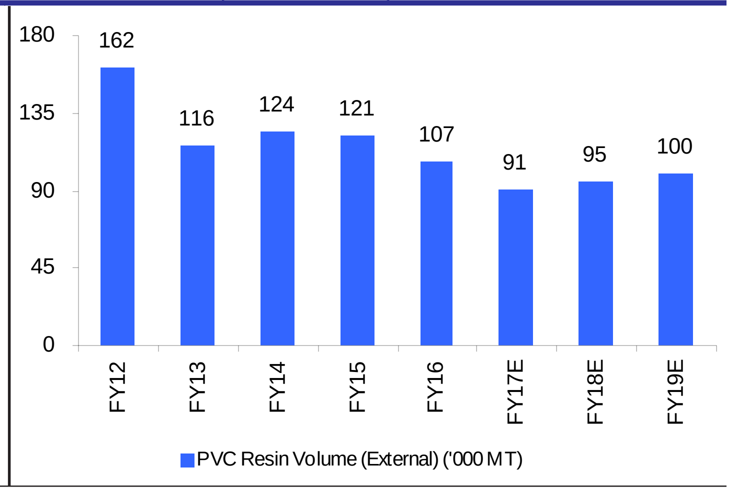
Source: Company, Antique

PVC Resin Revenue Trend (External Sales)



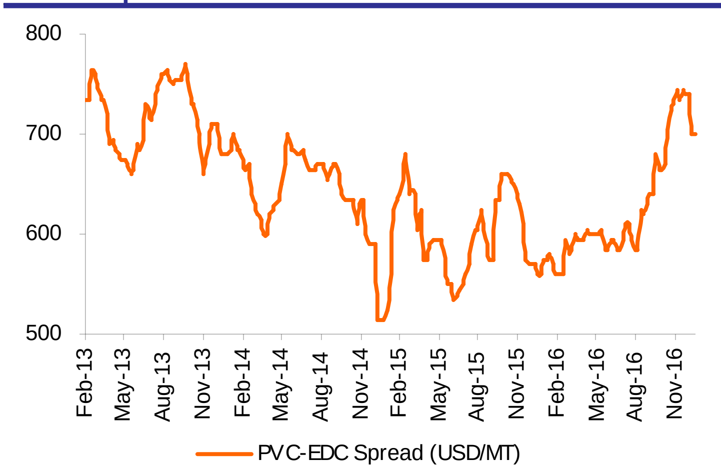
Source: Company, Antique

PVC Resin Volume (External Sales)



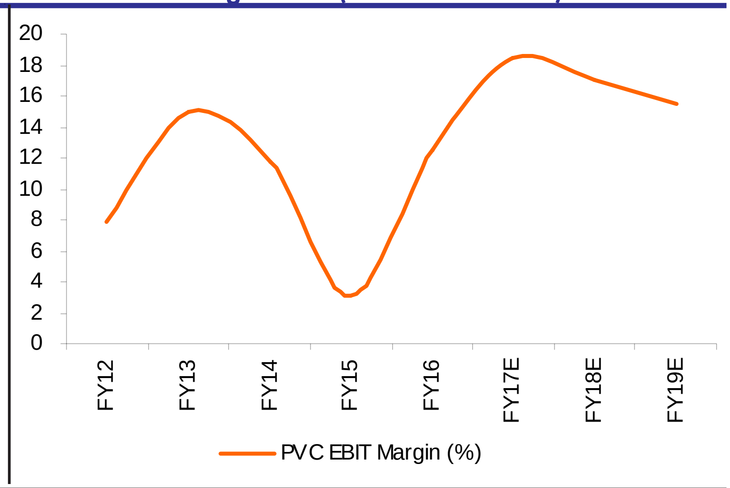
Source: Company, Antique

PVC-EDC Spread



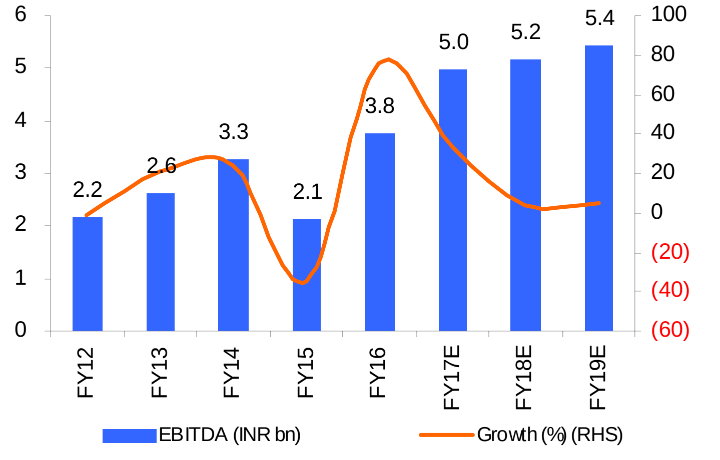
Source: Company, Antique

PVC Resin EBIT Margin Trend (External + Internal)



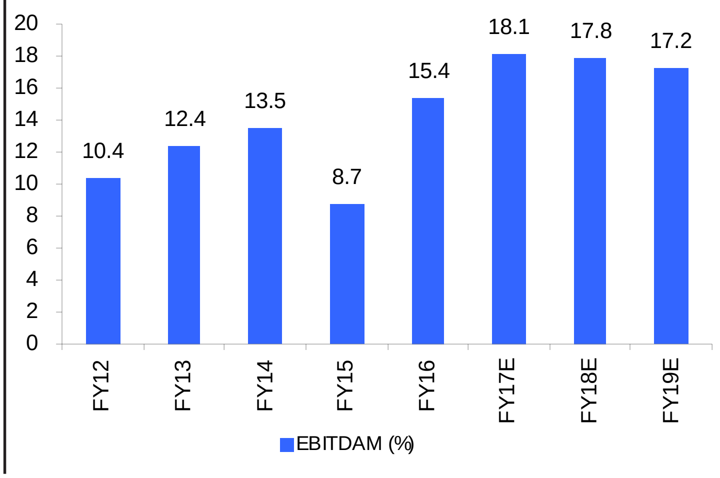
Source: Company, Antique

Consolidated EBITDA Trend



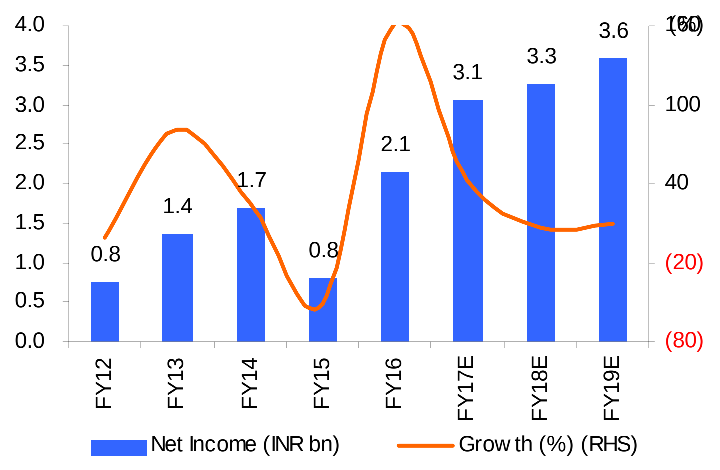
Source: Company, Antique

EBITDA Margin Trend



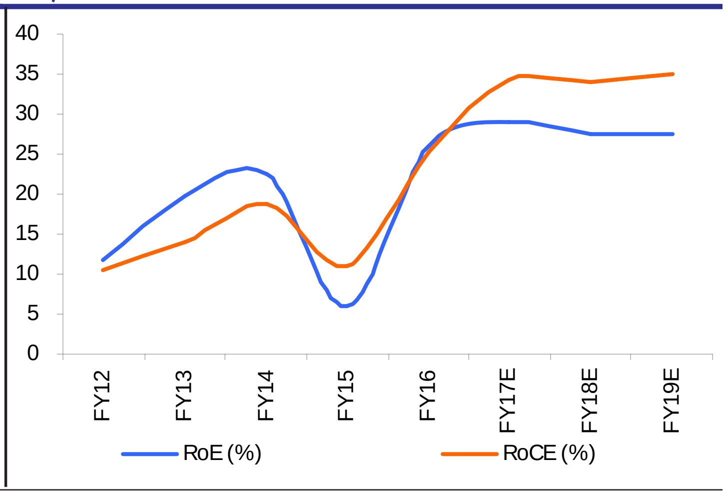
Source: Company, Antique

Net Income Trend



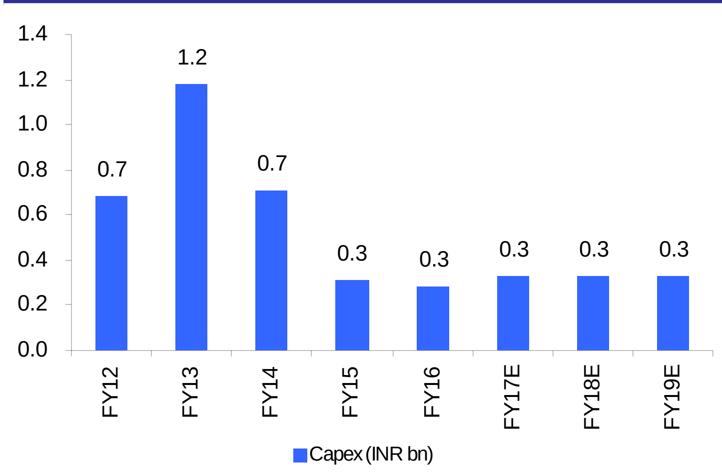
Source: Company, Antique

RoE / RoCE Trend



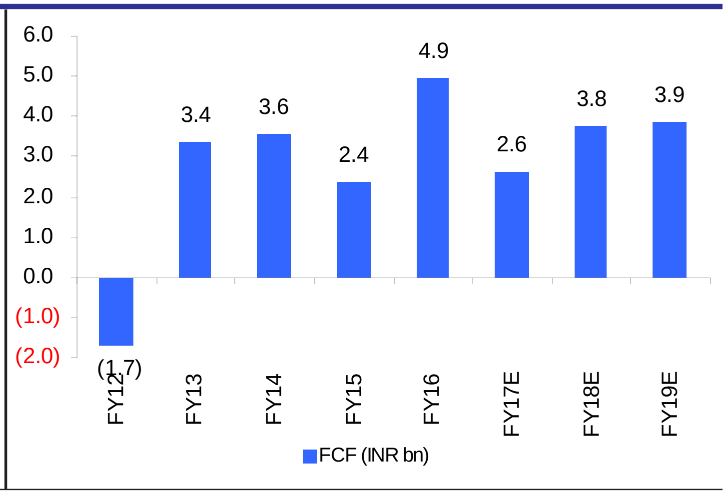
Source: Company, Antique

Capital Expenditure Trend



Source: Company, Antique

Free Cash Flow Trend



Source: Company, Antique

Financials

Profit and loss account (INRm)

Year-ended March 31	FY15	FY16	FY17e	FY18e	FY19e
Revenues	**24,761**	**24,528**	**27,561**	**28,996**	**31,516**
Expenses	22,628	20,777	22,577	23,830	26,081
Operating Profit	**2,134**	**3,751**	**4,984**	**5,167**	**5,435**
Other income	202	382	300	330	400
EBIDT	**2,336**	**4,133**	**5,284**	**5,497**	**5,835**
Depreciation	587	506	541	550	559
Interest expense	598	446	170	130	60
Profit before tax	**1,152**	**3,181**	**4,572**	**4,816**	**5,215**
Taxes incl deferred taxation	330	1,099	1,509	1,541	1,617
PAT before MI & EO Items	**822**	**2,082**	**3,063**	**3,275**	**3,598**
Extra ordinary Items	(344)	245	-	-	-
Share of JV/ Associate	-	63	-	-	-
Profit after tax	**478**	**2,389**	**3,063**	**3,275**	**3,598**
Reported EPS (INR)	**3.9**	**19.3**	**24.7**	**26.4**	**29.0**
Adjusted EPS (INR)	**6.6**	**17.3**	**24.7**	**26.4**	**29.0**

Balance sheet (INRm)

Year-ended March 31	FY15	FY16	FY17e	FY18e	FY19e
Share Capital	1,241	1,241	1,241	1,241	1,241
Reserves & Surplus	6,633	8,702	10,023	11,265	12,541
Networth	**7,874**	**9,943**	**11,264**	**12,506**	**13,782**
Debt	6,369	2,117	2,041	1,000	500
Deferred Tax Liability	1,108	1,180	1,180	1,180	1,180
Capital Employed	**15,351**	**13,240**	**14,485**	**14,686**	**15,462**
Gross Fixed Assets	18,939	19,043	19,330	19,655	19,980
Accumulated Depreciation	10,262	10,767	11,309	11,859	12,418
Net Assets	8,678	8,276	8,021	7,796	7,562
Capital work in progress	104	287	325	325	325
Goodwill	0	0	0	0	0
Investments	1,797	3,245	3,245	3,245	3,245
Current Assets					
Inventory	5,587	4,472	5,286	5,561	6,044
Debtors	487	176	378	318	345
Cash & Bank balance	123	104	715	1,271	2,242
Loans & advances and others	1,817	1,999	2,100	2,200	2,300
Current Liabilities & Prov					
Creditors	2,000	2,432	2,416	2,542	2,763
Other liabilities & provisions	1,241	2,888	3,168	3,487	3,838
Net Current Assets	**4,772**	**1,432**	**2,894**	**3,320**	**4,330**
Application of Funds	**15,351**	**13,240**	**14,485**	**14,686**	**15,462**

Per share data

Year-ended March 31	FY15	FY16	FY17e	FY18e	FY19e
No. of shares (m)	124	124	124	124	124
BVPS (INR)	63.5	80.1	90.8	100.8	111.1
CEPS (INR)	8.6	23.3	29.0	30.8	33.5
DPS (INR)	6.8	10.0	12.0	14.0	16.0

Source: Company, Antique

Cash flow statement (INRm)

Year-ended March 31	FY15	FY16	FY17e	FY18e	FY19e
EBT	**808**	**3,426**	**4,572**	**4,816**	**5,215**
Depreciation & amortisation	587	506	541	550	559
Interest expense	573	446	170	130	60
Interest / Dividend received	(48)	-	-	-	-
Other Adjustments	139	-	0	0	0
(Inc)/Dec in working capital	478	3,393	(851)	130	(40)
Tax paid	(392)	(1,099)	(1,509)	(1,541)	(1,617)
CF from operating activities	**2,144**	**6,672**	**2,924**	**4,086**	**4,178**
Capital expenditure	(312)	(287)	(325)	(325)	(325)
Net Investments	480	(1,448)	-	-	-
Income from investments	53				
CF from investing activities	**221**	**(1,735)**	**(325)**	**(325)**	**(325)**
Inc/(Dec) in debt	(923)	(4,252)	(76)	(1,041)	(500)
Dividends & Interest paid	(1,558)	(1,898)	(1,912)	(2,163)	(2,383)
Other Adjustments	30	1,194	-	-	-
CF from financing activities	**(2,452)**	**(4,956)**	**(1,988)**	**(3,204)**	**(2,883)**
Net cash flow	**(86)**	**(19)**	**611**	**557**	**970**
Opening balance	209	123	104	715	1,271
Closing balance	**123**	**104**	**715**	**1,271**	**2,242**

Growth indicators (%)

Year-ended March 31	FY15	FY16	FY17e	FY18e	FY19e
Revenue	1.0	(0.9)	13.4	5.2	8.7
EBITDA	(34.7)	75.8	32.9	3.7	5.2
PAT	(51.7)	153.4	47.1	6.9	9.9
EPS	(51.7)	161.1	42.8	6.9	9.9

Valuation (x)

Year-ended March 31	FY15	FY16	FY17e	FY18e	FY19e
PE	67.6	25.9	18.1	17.0	15.4
P/BV	7.1	5.6	4.9	4.4	4.0
EV/EBITDA	28.9	15.3	11.4	10.7	9.9
EV/Sales	2.5	2.4	2.1	1.9	1.7
Dividend Yield (%)	1.5	2.2	2.7	3.1	3.6

Financial ratios

Year-ended March 31	FY15	FY16	FY17e	FY18e	FY19e
RoE (%)	6.1	26.1	28.9	27.6	27.4
RoCE (%)	11.1	25.4	34.2	33.9	35.0
Debt/Equity (x)	0.8	0.2	0.2	0.1	0.0
EBIT/Interest (x)	2.9	8.1	27.9	38.0	87.9

Margins (%)

Year-ended March 31	FY15	FY16	FY17e	FY18e	FY19e
EBITDA	8.6	15.3	18.1	17.8	17.2
EBIT	7.1	14.8	17.2	17.1	16.7
PAT	1.9	9.7	11.1	11.3	11.4

Source: Company Antique

Current Reco	:	BUY
Previous Reco	:	BUY
CMP	:	INR900
Target Price	:	INR995
Potential Return	:	11%

Basudeb Banerjee
+91 22 4031 3443
basudeb.banerjee@antiquelimited.com

Aasim Bharde, CFA
+91 22 4031 3429
aasim.bharde@antiquelimited.com

Market data

Sensex	:	26,366
Sector	:	MIDCAPS
Market Cap (INRbn)	:	114.1
Market Cap (USDbn)	:	1.675
O/S Shares (m)	:	127.0
52-wk HI/LO (INR)	:	1025/640
Avg Daily Vol ('000)	:	60
Bloomberg	:	SI IN

Source: Bloomberg

Valuation

	FY17e	FY18e	FY19e
EPS (INR)	26.3	36.4	42.8
P/E (x)	39.5	27.8	23.7
P/BV (x)	7.6	6.4	5.3
EV/EBITDA (x)	18.5	14.3	12.5
Dividend yield (%)	1.5	1.7	1.8

Source: Bloomberg

Returns (%)

	1m	3m	6m	12m
Absolute	5	(1)	(1)	32
Relative	5	5	0	30

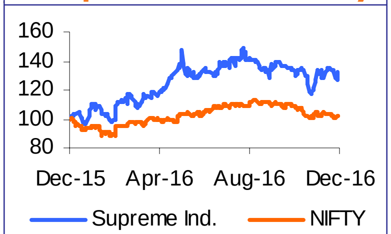
Source: Bloomberg

Shareholding pattern

Promoters	:	50%
Public	:	50%
Others	:	0%

Source: Bloomberg

Price performance *vs* Nifty



Source: Bloomberg, Indexed to 100

COMPANY UPDATE

Supreme Industries Limited

The name says it all!

Supreme Industries Ltd. (SI) is a strong play on the rising government thrust on low cost housing, urban and rural infrastructure, agricultural and allied activities. The company is well positioned to capitalize on this market opportunity due to its diversified product portfolio, pan India presence, strong distribution network & brand equity. In addition to operating leverage, SI's strategy to stay away from commoditized product categories, and increase the share of value added products (VAP) in its revenue mix, especially in the consumer products & protective packaging divisions, augurs well for its long-term profitability. Pick-up in Composite Cylinders segment/complete monetization of Supreme Chambers could be additional revenue kickers in the future (not factored in our estimates). We remain positive on the prospects of SI, given its strong business attributes, management bandwidth, robust balance sheet/FCF generation capabilities, and superior return ratios. We maintain our BUY recommendation on SI with a price target of INR 995 factoring in 25x core-business earnings of FY19e.

Pipes/Consumer Products to drive growth

The ongoing thrust by the central government on irrigation/agriculture and low cost housing (urban/rural) should drive SI's Pipes and Consumer Products segments in the years to come with continued focus on new product development. SI's diverse product portfolio, strong manufacturing base, pan-India distribution network and high brand equity combinedly supports its leadership and would drive growth ahead too. We estimate the Pipes/ Consumer Products segments to grow at a CAGR of ~17%/~16% respectively in the FY17E-19E period.

Increasing VAP mix to boost margins in the long run

SI has consistently focused on products where it can command pricing power (vis-à-vis commoditized plastic products). As a result, the company's value-added-products (VAP; defined as products with 17%+ margin) contribution to total revenue has progressively increased from ~30% in FY11 to ~37% in FY16. SI expects to take this contribution to ~40% in the next 2-3 years as it launches new premium products. Increasing VAP contribution to SI's mix would lead to margin expansion over the next few years. We expect SI's consolidated EBITDA margin to increase from ~15.5% in FY16 to ~16% in FY19E (building in ~15% margin for FY17E).

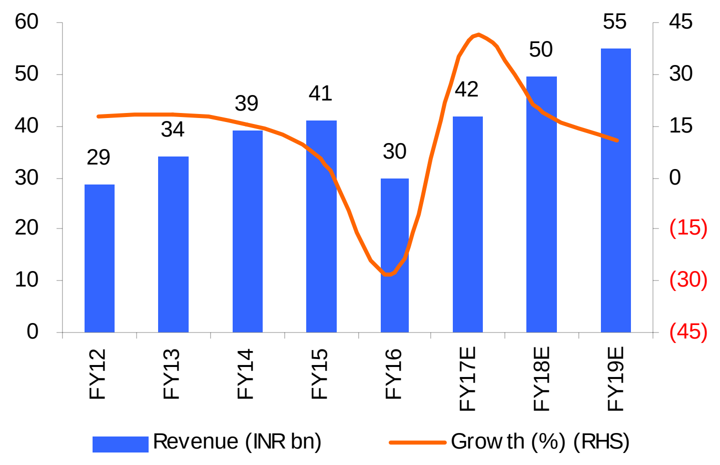
Internal accruals to finance capex; to be debt free by FY19E

SI has envisioned a ~INR15bn capex plan which would increase its capacity by ~40% by FY21E (~700k MTPA). The company is confident of financing this capex purely through internal accruals. In the first phase, the company has earmarked a ~INR2.5bn plan for FY17E which would be spent on adding 3 new factories. We estimate that SI will generate enough internal accruals to finance capex as well as reduce debt to negligible levels in the FY17E-19E period.

Outlook & Valuation:

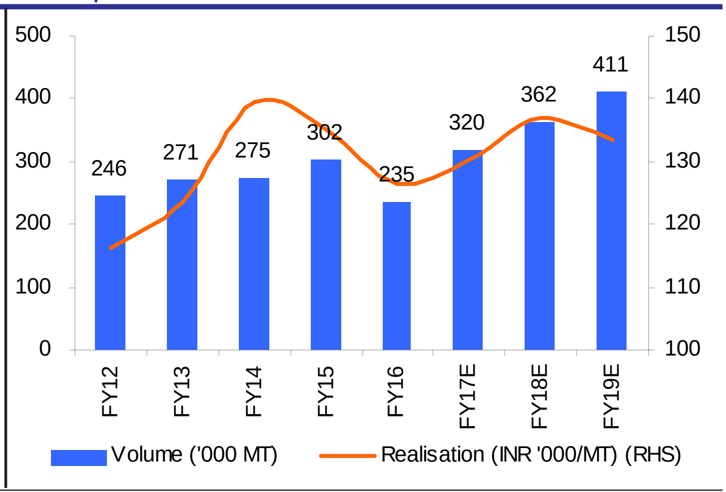
We believe SI is one of the best diversified plays in the building materials space. Given, its strong expected FY17E-19E revenue/earnings CAGR of ~15%/~30%, debt free balance sheet, high return ratios, we remain positive on the long-term prospects of the company. We maintain our BUY recommendation on the stock. Our INR995 target price values SI at 25x FY19E core earnings plus INR 44 per share for its ~30% stake in Supreme Petrochem Ltd.

Revenue Trend



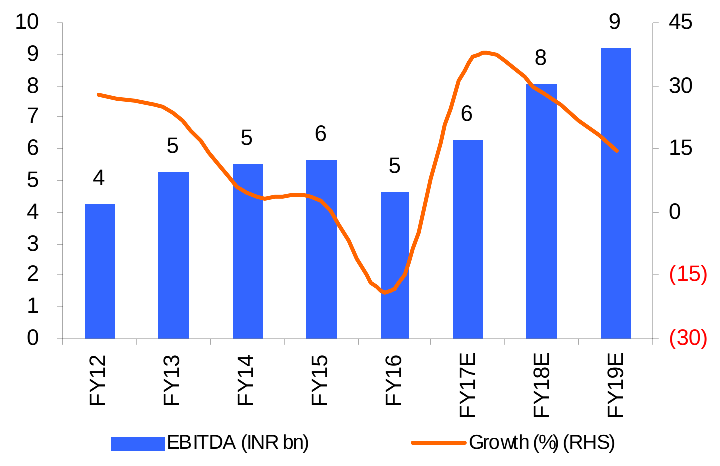
Source: Company, Antique

Volume / Realisation Trend



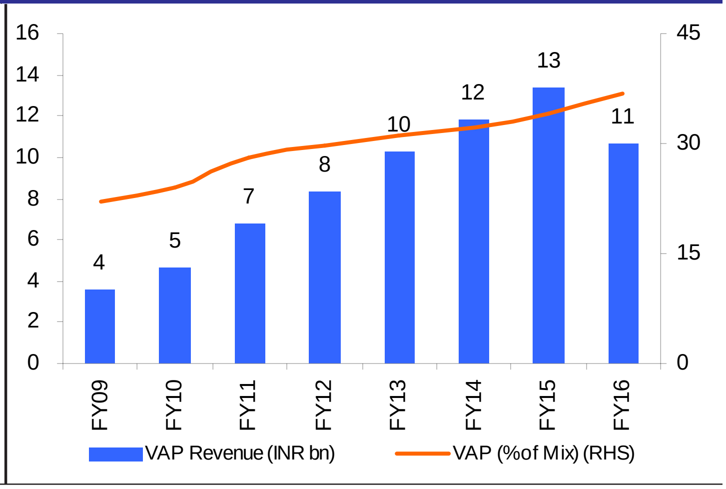
Source: Company, Antique

EBITDA Trend



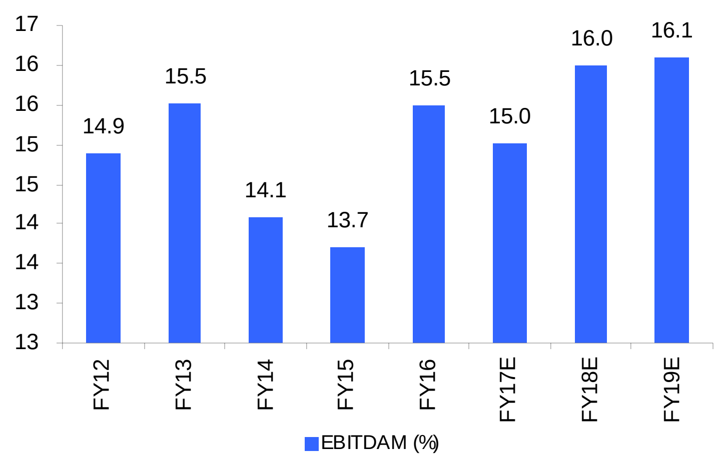
Source: Company, Antique

Value-Added-Products (VAP) Contribution to Mix



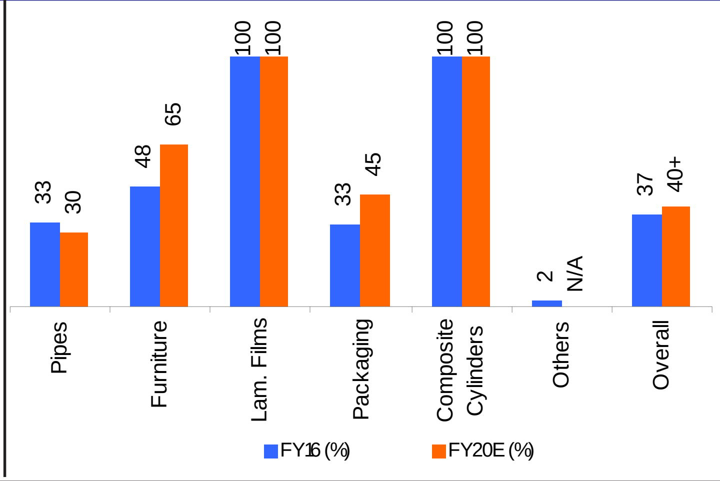
Source: Company, Antique

EBITDA Margin Trend



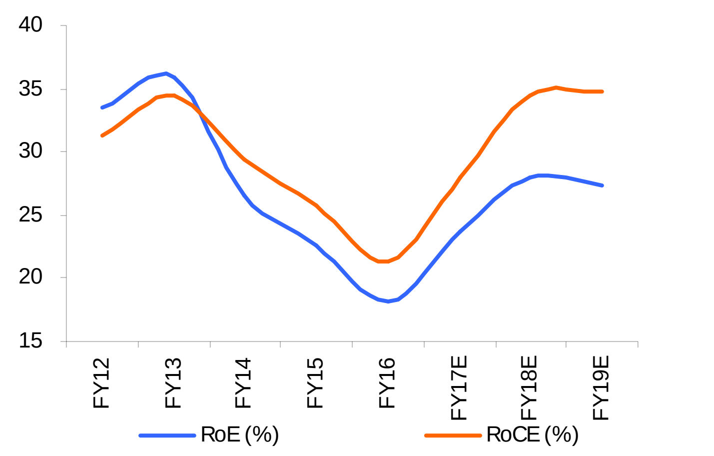
Source: Company, Antique

SI's FY20E VAP Share Target



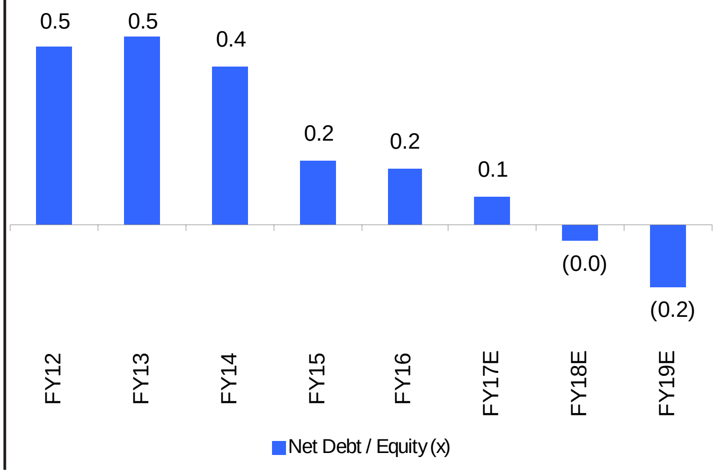
Source: Company, Antique

RoE / RoCE Trend



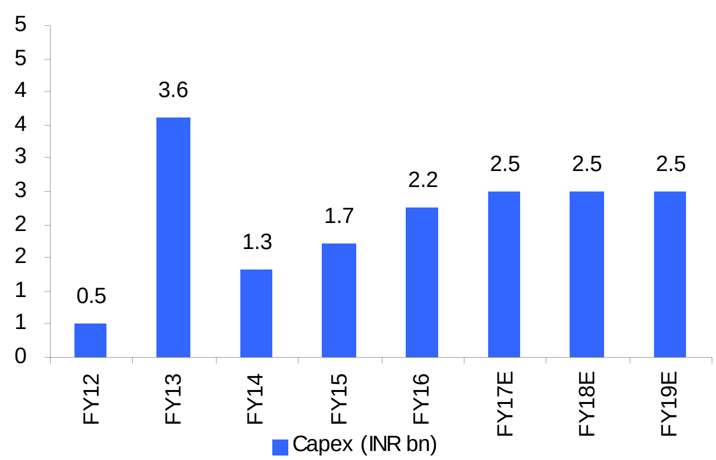
Source: Company, Antique

Net Debt / Equity Trend



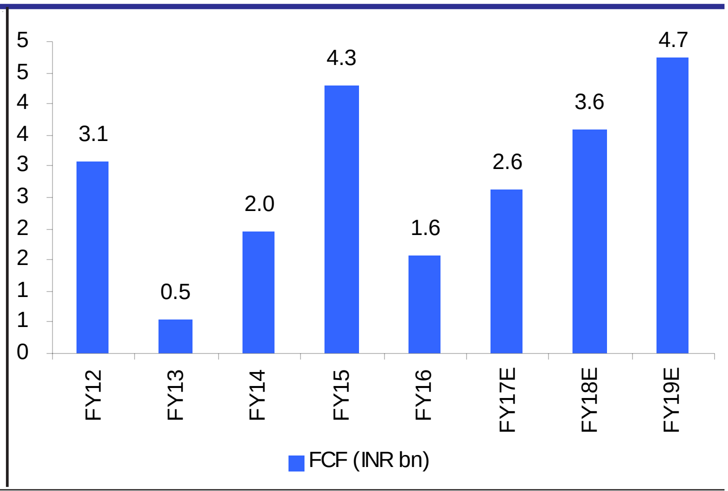
Source: Company, Antique

Capital Expenditure Trend



Source: Company, Antique

Free Cash Flow Trend



Source: Company, Antique

Financials

Profit and loss account (INRm)

Year-ended June 30	FY15	FY16*	FY17e	FY18e	FY19e
Revenue	**40,802**	**29,586**	**41,634**	**49,582**	**54,898**
Operational Income	357	163	-	-	-
Total Income	41,159	29,748	41,634	49,582	54,898
Expenses	35,516	25,137	35,385	41,649	46,063
Operating Profit	**5,642**	**4,611**	**6,249**	**7,933**	**8,835**
Other income	24	10	45	125	400
EBIDT	**5,667**	**4,621**	**6,294**	**8,058**	**9,235**
Depreciation	1,390	1,046	1,539	1,709	1,879
Interest expense	580	276	300	108	36
Profit before tax	**3,698**	**3,300**	**4,454**	**6,241**	**7,320**
Taxes incl deferred taxation	1,263	1,178	1,559	2,122	2,489
Profit after Tax - Core Operations	2,434	2,122	2,895	4,119	4,831
Extra ordinary Items (EOI)	683	(77)	-	-	-
Share in Associates	106	167	441	504	602
Reported Profit after tax	**3,224**	**2,212**	**3,336**	**4,623**	**5,433**
Adj. Profit after Tax (Excl EOI)	**2,541**	**2,289**	**3,336**	**4,623**	**5,433**
Diluted EPS (INR) - Core Oper.	**19.2**	**16.7**	**22.8**	**32.4**	**38.0**
Diluted EPS (INR) - Reported (incl. SPL)	**25.4**	**17.4**	**26.3**	**36.4**	**42.8**

Balance sheet (INRm)

Year-ended June 30	FY15	FY16*	FY17e	FY18e	FY19e
Share Capital	254	254	254	254	254
Reserves & Surplus	11,861	12,899	14,749	17,737	21,387
Networth	12,115	13,153	15,003	17,991	21,641
Debt	3,928	2,287	1,500	300	300
Deferred Tax Liability	895	1,053	1,053	1,053	1,053
Capital Employed	**16,939**	**16,492**	**17,555**	**19,344**	**22,993**
Gross Fixed Assets	18,158	21,388	23,888	26,388	28,888
Accumulated Depreciation	8,120	9,166	10,705	12,415	14,294
Net Assets	10,037	12,222	13,182	13,973	14,594
Capital work in progress	998	300	300	300	300
Goodwill	288	0	0	0	0
Investments	1,207	1,262	1,262	1,262	1,262
Current Assets, Loans & Advances					
Inventory	4,647	5,586	5,019	5,977	6,618
Debtors	2,380	2,362	2,281	2,717	3,008
Cash & Bank balance	1,818	289	353	1,005	3,934
Loans & advances and others	2,196	2,150	2,180	2,385	2,590
Current Liabilities & Provisions					
Creditors	3,004	3,383	3,422	4,075	4,512
Other liabilities & provisions	3,627	4,296	3,600	4,200	4,800
Net Current Assets	**4,409**	**2,709**	**2,811**	**3,809**	**6,838**
Application of Funds	**16,939**	**16,492**	**17,555**	**19,344**	**22,993**

Per share data

Year-ended June 30	FY15	FY16*	FY17e	FY18e	FY19e
No. of shares (m)	127	127	127	127	127
BVPS (INR)	95.4	103.5	118.1	141.6	170.4
CEPS (INR)	36.3	25.6	38.4	49.9	57.6
DPS (INR)	9.0	7.5	10.0	11.0	12.0

Source: Company Antique * Data for 9 months

Cash flow statement (INRm)

Year-ended June 30	FY15	FY16*	FY17e	FY18e	FY19e
EBT	**4,487**	**3,390**	**4,895**	**6,745**	**7,922**
Depreciation & amortisation	1,390	1,046	1,539	1,709	1,879
Interest expense	580	276	300	108	36
Other Adjustments	(57)	-	-	-	-
(Inc)/Dec in working capital	1,016	328	(39)	(345)	(100)
Tax paid	(1,263)	(1,178)	(1,559)	(2,122)	(2,489)
CF from operating activities	**6,152**	**3,862**	**5,137**	**6,095**	**7,248**
Capital expenditure	(1,724)	(2,244)	(2,500)	(2,500)	(2,500)
Net Investments	(133)	(55)	-	-	-
CF from investing activities	**(1,858)**	**(2,300)**	**(2,500)**	**(2,500)**	**(2,500)**
Inc/(Dec) in share capital	-	-	-	-	-
Inc/(Dec) in debt	(771)	(1,641)	(787)	(1,200)	-
Dividends & Interest paid	(1,951)	(1,390)	(1,786)	(1,743)	(1,819)
Other Adjustments	-	-	-	-	-
CF from financing activities	**(2,722)**	**(3,032)**	**(2,573)**	**(2,943)**	**(1,819)**
Net cash flow	**1,572**	**(1,469)**	**63**	**653**	**2,929**
Opening balance	246	1,818	289	353	1,005
Closing balance	**1,818**	**349**	**353**	**1,005**	**3,934**

Growth indicators (%)

Year-ended June 30	FY15	FY16*	FY17e	FY18e	FY19e
Revenue	6.1	(27.5)	40.7	19.1	10.7
EBITDA	2.7	(18.3)	35.5	27.0	11.4
PAT - Core operations	(0.9)	(12.8)	36.4	42.3	17.3
EPS - Core operations	(0.9)	(12.8)	36.4	42.3	17.3

Valuation (x)

Year-ended June 30	FY15	FY16*	FY17e	FY18e	FY19e
PE - Core Operations	47.0	53.9	39.5	27.8	23.7
PE - Consolidated (Excl EOI)	45.0	49.9	34.3	24.7	21.0
P/BV	9.4	8.7	7.6	6.4	5.3
EV/EBITDA	20.6	25.2	18.5	14.3	12.5
EV/Sales	2.9	3.9	2.8	2.3	2.0
Dividend Yield (%)	1.4	1.1	1.5	1.7	1.8

Financial ratios

Year-ended June 30	FY15	FY16*	FY17e	FY18e	FY19e
RoE (%)	22.6	18.1	23.7	28.0	27.4
RoCE (%)	25.7	21.4	27.9	34.4	34.7
Debt/Equity (x)	0.3	0.2	0.1	0.0	0.0
EBIT/Interest (x)	7.4	13.0	15.8	58.8	204.3

Margins (%)

Year-ended June 30	FY15	FY16*	FY17e	FY18e	FY19e
EBITDA	13.7	15.5	15.0	16.0	16.1
EBIT	10.5	12.1	11.4	12.8	13.4
PAT	6.2	7.7	8.0	9.3	9.9

Source: Company Antique * Data for 9 months

Reco:	:	Not Rated
CMP	:	INR132

Basudeb Banerjee
+91 22 4031 3443
basudeb.banerjee@antiquelimited.com

Aasim Bharde, CFA
+91 22 4031 3429
aasim.bharde@antiquelimited.com

VISIT NOTE

Skipper Limited

Scaling up in terms of reach and capacity in the piping segment

Skipper Ltd.'s (SKIPPER) plastic piping business is primarily East India focused and has strong brand recall in this part of the country. Following are the key highlights of the business: (1) With close to 41,000 MT of plastic pipe capacity spread across five locations, SKIPPER is primarily into the PVC agri pipe segment (80% of the segmental revenue comes from the agri applications), (2) Pipe segment contributes close to 10-12% of consol revenue with the state of West Bengal itself contributing 70% of its piping revenue, (3) With utilisation levels at ~85%, SKIPPER (after having added 12,000 MT capacity in FY15) is set to add another 30,000 MT in FY17, looking at the level of demand visibility, (4) Presently, SKIPPER has 2,000 MT CPVC capacity at its Kolkata facility, with CPVC resin being sourced from Sekisui, (5) Primarily operates out of multi brand retail outlets rather than having exclusive distributors. With new plants getting added in Gujarat, UP, Assam and Andhra Pradesh, SKIPPER is looking forward to enhance its presence beyond West Bengal much more aggressively, 6) From an industry perspective, management is confident of seeing 18-20% CAGR in the agri pipe market in the coming years with rising focus of government post impact of demonetization settles down, (7) Confident of retaining ~11-12% margin in the PVC pipe segment in the years ahead and gradually inch up with rising scale and mix of fitting.

Expanding capacity pretty briskly; going pan India from being East India centric

Post having set up its brand equity in the eastern part of the country, Skipper is looking forward to aggressively expand capacity at its new plants in Ahmedabad, Ghaziabad, Guwahati and Hyderabad in order to garner share in those regional markets. As typically the PVC pipe target market should be in the close vicinity of the extrusion plant, Skipper is aiming to enhance its pan India market share from a mere ~1% presently by focusing more on these new plants. With CPVC being barely 5% of the existing capacity, prime area of focus would be PVC agri pipes, which anyhow is 80% of its piping revenue presently and is the focus area of the government. Skipper has plans to augment its PVC capacity by 30,000 MT in FY17-18e with a target capex of INR350mn as land and shed would be leased and only machinery would be purchased. It is also aiming to reach a capacity of 100,000MT by FY20 in order to keep pace with the rising scope. In terms of pricing, Skipper sells its PVC products at a ~10-15% discount as compared to the market leaders along with giving ~2% higher margin to its dealers. Skipper in general follows the multi brand distribution model and it doesn't have any major exclusive dealer and operates out of 750 outlets presently. Skipper also participates in the government tenders for agri pipes with ~25% of its piping revenue coming from the government projects. Mix of fittings is currently low at ~9% of piping revenue and management is keen to take this up to ~15% in years to come, giving scope for margin enhancement. Thus having started its journey in PVC pipes barely 5 years back, Skipper has done a commendable job of garnering scale and leadership just by targeting East India market. With number of SKUs being a prime driver of market share, Skipper would focus on increasing SKUs going ahead to gain share in new markets. With Supreme Industries opening its extrusion facility at Kharagpur, West Bengal, it is clearly evident that players need to open local facilities to tap the regional markets and thus we believe Skipper is moving in the right direction of opening small extrusion facilities spread across regions to become a pan India large scale PVC pipe maker. Work for the 7,000 MT Guwahati PVC pipe facility is going on in full stream & is expected to be ready by FY17E end.

Margin to move up with scale: huge scope of mix of fittings to increase

Skipper is operating at an EBITDA margin of 10-12% in its PVC piping business on the back of recent capacity additions. Thus with scale and distribution enhancement related expenses settling down by FY18E, management expects margin to reach 13-14% levels, broadly in sync with large scale peers. Skipper in general gives 200bps higher margin to its dealers in the multi brand outlets to push its products and is expecting the same strategy to play out as it becomes more of a pan India player ahead. Also with retail level pricing being 10-15% cheaper than the leaders, Skipper has the leeway of increasing pricing post it gains market share down the line.

Market data

Sensex	:	26,366
Sector	:	MIDCAPS
Market Cap (INRbn)	:	13.8
Market Cap (USDbn)	:	0.203
O/S Shares (m)	:	102.3
52-wk HI/LO (INR)	:	220/122
Avg Daily Vol ('000)	:	21
Bloomberg	:	SKIPPER IN

Source: Bloomberg

Returns (%)

	1m	3m	6m	12m
Absolute	(5)	(10)	(3)	(17)
Relative	(5)	(5)	(1)	(18)

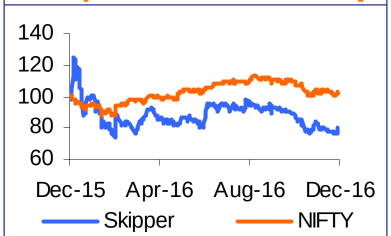
Source: Bloomberg

Shareholding pattern

Promoters	:	72%
Public	:	28%
Others	:	0%

Source: Bloomberg

Price performance *vs* Nifty



Source: Bloomberg, Indexed to 100

Reco	:	Not Rated
CMP	:	INR286

Basudeb Banerjee
+91 22 4031 3443
basudeb.banerjee@antiquelimited.com

Aasim Bharde, CFA
+91 22 4031 3429
aasim.bharde@antiquelimited.com

Market data

Sensex	:	26,366
Sector	:	MIDCAPS
Market Cap (INRbn)	:	1.4
Market Cap (USDbn)	:	0.021
O/S Shares (m)	:	5.0
52-wk HI/LO (INR)	:	449/95
Avg Daily Vol ('000)	:	11
Bloomberg	:	AMLF IN

Source: Bloomberg

Returns (%)

	1m	3m	6m	12m
Absolute	(16)	25	90	102
Relative	(16)	32	93	99

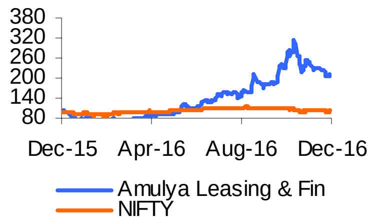
Source: Bloomberg

Shareholding pattern

Promoters	:	35%
Public	:	65%
Others	:	0%

Source: Bloomberg

Price performance *vs* Nifty



Source: Bloomberg, Indexed to 100

VISIT NOTE

Amulya Leasing & Finance Ltd

A strong brand in NCR & UP markets

Amulya Leasing & Finance Ltd. (AMLF) is primarily into plastic piping and caters mainly to the NCR, Uttarakhand and Uttar Pradesh markets. Its factory being located at Dadri, Uttar Pradesh, with a capacity of 55,000 MT (mainly constituting PVC pipes), AMLF is a North centric Agri PVC pipe maker with access to household CPVC/PVC and infrastructural PVC markets too. Close to 7-8% of its volume comes from CPVC with compound being sourced from KemOne, France. We recently interacted with the management post demonetization to understand the near term impact on demand and the long term strategies of the company. In mid CY17, AMLF is expected to be renamed as Apollo Pipes and through the reverse merger route, the existing listed entity would be the one representing the plastic piping business. Presently, 75% of its distribution is through the dealer route with rest of it being spread across direct supply to builders, government bodies and irrigation projects. Apollo Pipes, with the linkage to the well established APL Apollo Tubes Ltd promoters, is in a good position to leverage the established pipe brand (Apollo) along with utilising the distribution network too. Apollo Pipes is operating under the leadership of Mr. Samir Gupta, younger brother of Mr. Sanjay Gupta, the person driving APL Apollo Tubes. Following are the key takeaways:

1. Present capacity of 55,000 MT at Dadri, UP and is expected to ramp it up to 70,000 MT by FY19E in tranches with capex cost of INR60mn for each incremental 10,000 MT. FY16 production from the Dadri plant was at 30,000 MT and in 1HFY17 production was at 15,000 MT. To cater to the strong Western India markets, AMLF is envisaging a green-field project somewhere in Gujarat or Maharashtra with an initial capacity of 10,000 MT at a cost of INR150mn for the first tranche, which later can be further enhanced to 20,000 MT through incremental capex of INR100mn. Post announcement of the demonetization process, demand at ground level was severely impacted and volume declined by ~30% from normal levels and is expected to remain weak at least till mid-4QFY17. Though demand from government projects and irrigation projects is expected to resume soon, B2C demand got impacted led by lack of cash availability in the system. Thus company is expecting FY17E volume to be lower than FY16 volume (1H volume growth was flat). Also led by forthcoming elections In UP, demand is expected to remain weak in the near term. Strategically management is aiming to increase the mix of B2C business to 50% by FY19E by focusing more on household pipes and fittings down the line (fittings mix stands at ~12% currently), especially with the Western India operations start. Seasonally government orders and demand from irrigation projects tends to be higher in 4Q and thus management is hoping for some solace as rest of the household led demand is set to remain weak in 4Q. Apollo Pipes does not have any exclusive sales outlet and it operates through multi brand retail only. It has 250 dealers and in general one dealer deals with 20 end retailers. Thus ~500 touch points are presently catering to the markets of NCR, UP, MP, Haryana and Rajasthan.
2. Employee count is close to 300 now and is set to get ramped up with rise in capacity and distribution. With rising focus on household B2C segment, investment on brand building would also increase ahead. Being a follower brand behind the leaders like Supreme, Finolex, Astral, Ashirwad etc, Apollo sells its plastic pipes at ~5-10% lower rates along with providing much higher dealer incentives as compared to the leaders. Over the past couple of months, with PVC prices increasing by ~10% amid weak demand on back of demonetization, it had been pretty tough to pass on the prices as compared to the leaders. Thus going ahead with higher scale and better brand presence and recall, Apollo Pipes would be aspiring to have a better pricing power to take care of all commodity related volatilities. AMLF is presently operating at robust ~11-12% EBITDA margin levels and is confident of improving it further with scale and mix enhancement.
3. Confident of generating cash from internal accruals to fund the needs for Dadri expansion and fresh green field facility fund needs. Temporary hiccups in credit lending period getting extended led by demonetization to get resolved with demand situation normalizing. Do not see any need for equity dilution or major debt increase to fund the capex plans and grow in size as strong margin profile and visibility of strong demand for agri pipes and improved distribution for Apollo pipes would generate the necessary cash flows.

Important Disclaimer:

This report has been prepared by Antique Stock Broking Limited (hereinafter referred to as ASBL) to provide information about the company(ies) and/sector(s), if any, covered in the report and may be distributed by it and/or its affiliated company(ies).

ASBL is a Stock Broker and Depository Participant registered with and regulated by Securities & Exchange Board of India.

ASBL and its affiliates are a full-service, integrated investment banking, investment management, brokerage and financing group.

This report is for personal information of the selected recipient/s and does not construe to be any investment, legal or taxation advice to you. This research report does not constitute an offer, invitation or inducement to invest in securities or other investments and ASBL is not soliciting any action based upon it. This report is not for public distribution and has been furnished to you solely for your general information and should not be reproduced or redistributed to any other person in any form. This report does not constitute a personal recommendation or take into account the particular investment objectives, financial situations, or needs of individual clients. Before acting on any advice or recommendation in this material, investors should consider whether it is suitable for their particular circumstances and, if necessary, seek professional advice. The price and value of the investments referred to in this material and the income from them may go down as well as up, and investors may realize losses on any investments. Past performance is not a guide for future performance, future returns are not guaranteed and a loss of original capital may occur.

We and our affiliates have investment banking and other business relationships with a some companies covered by our Research Department. Our research professionals may provide input into our investment banking and other business selection processes. Investors should assume that ASBL and/or its affiliates are seeking or will seek investment banking or other business from the company or companies that are the subject of this material and that the research professionals who were involved in preparing this material may educate investors on investments in such business. The research professionals responsible for the preparation of this document may interact with trading desk personnel, sales personnel and other parties for the purpose of gathering, applying and interpreting information. Our research professionals are paid on the profitability of ASBL which may include earnings from investment banking and other business.

ASBL generally prohibits its analysts, persons reporting to analysts, and members of their households from maintaining a financial interest in the securities or derivatives of any companies that the analysts cover. Additionally, ASBL generally prohibits its analysts and persons reporting to analysts from serving as an officer, director, or advisory board member of any companies that the analysts cover. Our salespeople, traders, and other professionals or affiliates may provide oral or written market commentary or trading strategies to our clients that reflect opinions that are contrary to the opinions expressed herein, and our proprietary trading and investing businesses may make investment decisions that are inconsistent with the recommendations expressed herein. In reviewing these materials, you should be aware that any or all of the foregoing among other things, may give rise to real or potential conflicts of interest. ASBL and its affiliated company(ies), their directors and employees and their relatives may; (a) from time to time, have a long or short position in, act as principal in, and buy or sell the securities or derivatives thereof of companies mentioned herein. (b) be engaged in any other transaction involving such securities and earn brokerage or other compensation or act as a market maker in the financial instruments of the company(ies) discussed herein or act as an advisor or lender/borrower to such company(ies) or may have any other potential conflict of interests with respect to any recommendation and other related information and opinions.; however the same shall have no bearing whatsoever on the specific recommendations made by the analyst(s), as the recommendations made by the analyst(s) are completely independent of the views of the affiliates of ASBL even though there might exist an inherent conflict of interest in some of the stocks mentioned in the research report

Reports based on technical and derivative analysis center on studying charts company's price movement, outstanding positions and trading volume, as opposed to focusing on a company's fundamentals and, as such, may not match with a report on a company's fundamental analysis. In addition ASBL has different business segments / Divisions with independent research separated by Chinese walls catering to different set of customers having various objectives, risk profiles, investment horizon, etc, and therefore may at times have different contrary views on stocks sectors and markets.

Unauthorized disclosure, use, dissemination or copying (either whole or partial) of this information, is prohibited. The person accessing this information specifically agrees to exempt ASBL or any of its affiliates or employees from, any and all responsibility/liability arising from such misuse and agrees not to hold ASBL or any of its affiliates or employees responsible for any such misuse and further agrees to hold ASBL or any of its affiliates or employees free and harmless from all losses, costs, damages, expenses that may be suffered by the person accessing this information due to any errors and delays. The information contained herein is based on publicly available data or other sources believed to be reliable. Any statements contained in this report attributed to a third party represent ASBL's interpretation of the data, information and/or opinions provided by that third party either publicly or through a subscription service, and such use and interpretation have not been reviewed by the third party. This Report is not intended to be a complete statement or summary of the securities, markets or developments referred to in the document. While we would endeavor to update the information herein on reasonable basis, ASBL and/or its affiliates are under no obligation to update the information. Also there may be regulatory, compliance, or other reasons that may prevent ASBL and/or its affiliates from doing so. ASBL or any of its affiliates or employees shall not be in any way responsible and liable for any loss or damage that may arise to any person from any inadvertent error in the information contained in this report. ASBL or any of its affiliates or employees do not provide, at any time, any express or implied warranty of any kind, regarding any matter pertaining to this report, including without limitation the implied warranties of merchantability, fitness for a particular purpose, and non-infringement. The recipients of this report should rely on their own investigations.

This report is intended for distribution to institutional investors. Recipients who are not institutional investors should seek advice of their independent financial advisor prior to taking any investment decision based on this report or for any necessary explanation of its contents.

ASBL and it's associates may have managed or co-managed public offering of securities, may have received compensation for investment banking or merchant banking or brokerage services, may have received any compensation for products or services other than investment banking or merchant banking or brokerage services from the subject company in the past 12 months.

ASBL and it's associates have not received any compensation or other benefits from the subject company or third party in connection with the research report.

Subject Company may have been a client of ASBL or its associates during twelve months preceding the date of distribution of the research report

ASBL and/or its affiliates and/or employees may have interests/positions, financial or otherwise of over 1 % at the end of the month immediately preceding the date of publication of the research in the securities mentioned in this report. To enhance transparency, ASBL has incorporated a Disclosure of Interest Statement in this document. This should, however, not be treated as endorsement of the views expressed in the report.

There are no material disciplinary action that been taken by any regulatory authority impacting equity research analysis activities

Analyst Certification

The views expressed in this research report accurately reflect the personal views of the analyst(s) about the subject securities or issues, and no part of the compensation of the research analyst(s) was, is, or will be directly or indirectly related to the specific recommendations and views expressed by research analyst(s) in this report. The research analysts, strategists, or research associates principally responsible for preparation of ASBL research receive compensation based upon various factors, including quality of research, investor client feedback, stock picking, competitive factors and firm revenues

Disclosure of Interest Statement Companies where there is interest

- Analyst ownership of the stock - No

- Served as an officer, director or employee - No

Regional Disclosures (outside India)

This report is not directed or intended for distribution to or use by any person or entity resident in a state, country or any jurisdiction, where such distribution, publication, availability or use would be contrary to law, regulation or which would subject ASBL & its group companies to registration or licensing requirements within such jurisdictions.

For U.S. persons only: This research report is a product of Antique Stock Broking Limited, which is the employer of the research analyst(s) who has prepared the research report. The research analyst(s) preparing the research report is/are resident outside the United States (U.S.) and are not associated persons of any U.S. regulated broker-dealer and therefore the analyst(s) is/are not subject to supervision by a U.S. broker-dealer, and is/are not required to satisfy the regulatory licensing requirements of FINRA or required to otherwise comply with U.S. rules or regulations regarding, among other things, communications with a subject company, public appearances and trading securities held by a research analyst account. This report is intended for distribution by Antique Stock Broking Limited only to "Major Institutional Investors" as defined by Rule 15a-6(b)(4) of the U.S. Securities and Exchange Act, 1934 (the Exchange Act) and interpretations thereof by U.S. Securities and Exchange Commission (SEC) in reliance on Rule 15a 6(a)(2). If the recipient of this report is not a Major Institutional Investor as specified above, then it should not act upon this report and return the same to the sender. Further, this report may not be copied, duplicated and/or transmitted onward to any U.S. person, which is not the Major Institutional Investor. In reliance on the exemption from registration provided by Rule 15a-6 of the Exchange Act and interpretations thereof by the SEC in order to conduct certain business with Major Institutional Investors, Antique Stock Broking Limited has entered into a chaperoning agreement with a U.S. registered broker-dealer, Marco Polo Securities Inc. ("Marco Polo"). Transactions in securities discussed in this research report should be effected through Marco Polo or another U.S. registered broker dealer.

SEBI Registration Number: INH000001089 as per SEBI (Research Analysts) Regulations, 2014.

CIN: U67120MH1994PLC079444

BANERJEE BASUDEB

Digitally signed by BANERJEE BASUDEB
DN: c=IN, o=ANTIQUE STOCK BROKING LTD, ou=RESEARCH, 2.5.4.20=9525d6e419c854c3c7fe89392c655417dd367e47ba46c2c38e00a58f5becf004, postalCode=400013, st=MAHARASHTRA, serialNumber=d566a75057864a580fa40e068cad1298b384b59e12599adbba8881bab26b2625, cn=BANERJEE BASUDEB
Date: 2016.12.30 08:51:35 +05'30'

ANTIQUE

Antique Stock Broking Limited
20th Floor, A Wing, Naman Midtown
Senapati Bapat Marg, Elphinstone (West)
Mumbai 400013
Tel. : +91 22 4031 3444 • Fax : +91 22 4031 3445
www.antiquelimited.com

BHARDE AASIM

Digitally signed by BHARDE AASIM
DN: c=IN, o=ANTIQUE STOCK BROKING LIMITED, ou=RESEARCH, 2.5.4.20=78689a26ae2ae00645419dcf8a28fee95196849789e5337c73f9e3412c076109, postalCode=400013, st=MAHARASHTRA, serialNumber=cb7bd412ac1b5a18987960017a96df962066826de658a4f2be370a8c2b5fea1d, cn=BHARDE AASIM
Date: 2016.12.30 08:31:22 +05'30'