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Prince Pipes and Fittings

BUY

Perception makeover; rerating inevitable

Rs197

We believe investor perception in Prince Pipes and Fittings (PPF) should improve (eventually) considering a) the transformation of its brand equity in PVC pipes segment over the past few years; b) recent tie-up with US-based Lubrizol for sourcing of CPVC compound which further reaffirms its aspiration of transforming itself into one of the top marquee premium (plumbing) pipe brands; c) improving growth visibility, being one of the top beneficiaries of industry consolidation; d) stricter balance sheet discipline in last 12-15 months and expected increase in CF generation enabling it to become a net cash company by FY21E. Also, easing of overhang w.r.t. its earlier related party transactions and promoter financial leverage would further boost investor confidence. Initiate coverage with a BUY.

► **Big getting bigger:** We expect large plastic pipe players to witness significant market share gains in PVC/CPVC pipes segment aided by a) existing large organised players like Prince SWR, Kisan, Jain Irrigation, etc. facing serious liquidity issues; b) semi organised/unorganised brands facing working capital and raw material sourcing challenges and c) anti-dumping duty imposed on CPVC resin/compound imports from China/Korea into India. Aided by its rapid transformation from a mediocre legacy to a reputed brand, we believe, PPF is well placed to leverage strong market share gains in PVC/CPVC pipes and fittings segment going forward.

► **Transformation from a mediocre legacy to a reputed and leading brand.** Post 2013, PPF in the quest to improve its brand equity and to differentiate it versus its immediate peers, undertook several corrective actions like improvement in quality parameters, evolution of product range, initiating aggressive branding measures, tightening of credit policy and investment in people and processes – leading to PPF monetising its brand and gaining market share in PVC pipe segment in particular. Its recent tie-up with US-based Lubrizol for sourcing of CPVC compound is expected to transform it into a premium brand in CPVC pipes segment that would also have a ripple effect on its PVC pipe business.

► **Easing of promoter-related concerns/transactions:** PPF, in the past, has had concerns related to: a) Pledging of promoter's shares; b) related party transactions; c) higher quantum of contingent liability; and d) promoter's exposure to real estate sector. However, in the recent past, the company has started taking corrective measures in overcoming these concerns - revocation of pledge shares post IPO, reducing promoter financial leverage and exposure to real estate sector and minimising related party transactions with group companies. This should gradually lead to restoration of trust and confidence of its stakeholders.

► **Initiate with a BUY with a target price of Rs295 based on 24x FY22E earnings.** We expect PPF's revenue/EBITDA/PAT to grow at CAGR of 5.3%/8.3%/9.5% over FY20-FY22E, respectively. Recent equity dilution through IPO in Dec'19 and incremental large capex in FY21 is likely to put pressure on its RoCEs in the near term. However, steadily improving governance, expected premium positioning and ramping up of Telangana facility would drive higher RoCEs in medium to long term. Considering the perception makeover, we believe, PPF's re-rating is inevitable with the stock trading at a significant discount versus its major peers - ASTRA and SI.

Market Cap	R21.5bn/US\$295mn	Year to Mar	FY19	FY20	FY21E	FY22E
Bloomberg	PRINCPIN IN	Net Revenue (Rs mn)	15,719	16,357	15,104	18,125
Shares Outstanding (mn)	110.0	Net Profit (Rs mn)	821	1,125	912	1,350
52-week Range (Rs)	201/75	Dil. EPS (Rs)	7.5	10.2	8.3	12.3
Free Float (%)	36.7	% Chg YoY	12.9	37.0	(18.9)	48.1
FII (%)	7.0	P/E (x)	26.4	19.3	23.8	16.1
Daily Volume (US\$'000)	35	CEPS (Rs)	11.4	14.9	13.7	18.6
Absolute Return 3m (%)	85.0	EV/EBITDA (x)	12.9	8.3	9.8	6.8
Absolute Return 12m (%)	NA	Dividend Yield (%)	-	0.5	0.8	1.0
Sensex Return 3m (%)	22.6	RoCE (%)	22.0	20.5	13.0	17.2
Sensex Return 12m (%)	5.4	RoE (%)	22.9	18.2	10.4	14.0

Please refer to important disclosures at the end of this report

Initiating coverage

Plastic

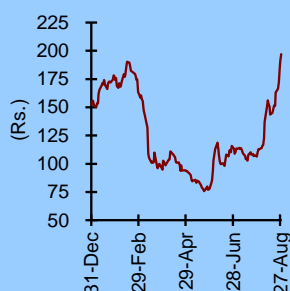
Target price Rs295

Shareholding pattern

	Dec '19	Mar '20	Jun '20
Promoters	63.3	63.3	63.3
Institutional investors	15.4	20.2	19.5
MFs and others	5.3	11.1	12.5
Insurance Cos.	3.3	1.8	0.0
FIs	6.8	7.3	7.0
Others	21.3	16.5	17.2

Source: CMIE

Price chart



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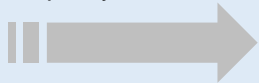
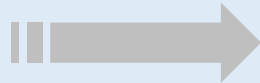
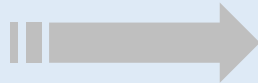
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Prince Pipes and Fittings: Story at a glance

A) Perception makeover (offering rerating potential)

1995-2008	2009-2012	2013-2018	2019 onwards
Establishment of brand 'Prince'	Prince vs Prince leading to significant brand dilution	Building blocks of brand transformation	Seizing the opportunity at right time
<ul style="list-style-type: none"> Restructuring of Prince Group took place in 90s The plastic piping business was taken over by PPF (Parag Chheda Group) and PSWR (Piyush Chheda Group) Agricultural pipe business and plumbing PVC pipe business was transferred to PPF while PSWR took over SWR (drainage) pipe business Brand 'Prince' was shared by both the companies with identical logo Both the companies had a successful journey during the phase focusing on their inherent strengths PPF was the first mover in agricultural fittings It became reputed and a leading brand in agricultural PVC pipes and fittings and blue threaded UPVC plumbing pipes segment First mover in North India with Haridwar unit operational in 2008 Sound quality focused 	<ul style="list-style-type: none"> Post 2008, PPF entered into drainage space while PSWR launched agricultural and plumbing PVC pipe systems leading to cut throat competition between the duo. This led to significant deterioration in its brand equity Compromise on quality standards Extended credit policy Related party transaction (RPT) with Ace Polyplast (group company) for sourcing some of its raw materials to avail Special Additional Duty benefit (which continued till 2018) Investments made by promoters (in individual capacity) in real estate Aditya Developers (PPF promoters holding 20% stake) enters into JV with MDPL for developing a real estate property in Vasai Financial leverage of promoters (backed by unsecured debt) 	<ul style="list-style-type: none"> Corrective actions initiated <ul style="list-style-type: none"> Change in quality standards (as per BIS specifications) Change in company logo gives a renewed identity Credit policy tightening Decentralisation process started with Trubore acquisition through its Chennai and Kolhapur units (marked its footprint in South India) Brand extension through Trubore acquisition First player to resort to contract manufacturing Induction of professional team in areas like marketing (ex-Jaquar and Pidilite), finance (ex-UPL) and HR (ex-TBZ and Bharat Gears) Channel financing facility for dealers introduced (with recourse on PPF) RPT: Capital advance to Prince Marketing (PM) for the purchase of Mumbai-based property 	<ul style="list-style-type: none"> Sudden market consolidation post 2018 - a defining moment for PPF Ropes in Akshay Kumar as brand ambassador Brand monetisation process starts Market share gains accrue to PPF Tie up with Lubrizol for sourcing of CPVC compound – a bold move towards premium positioning. Induction of professional team continues in areas like marketing (ex-Asian Paints), finance (ex-ACC) and COO (ex-HUL) Aggressive distribution network expansion Further decentralisation (Jaipur plant becomes operational) Deleveraging of balance sheet Extension of asset-light model Successful launch of IPO (growth capital raised for Telangana project and easing of promoter's financial leverage through OFS) Revocation of promoters pledge (35%) post IPO (which was created in Apr'19) Resolution of RPT with Ace Polyplast; RPT with PM to be resolved by Nov'21 (MoU already been signed in Nov'19)

B) PPF is one of the biggest beneficiaries of PVC pipe industry consolidation (existing growth lever likely to sustain)

- Perception makeover (fast increasing brand equity in the segment)
- Likely traction in projects (post Lubrizol tie up)
- Further decentralisation with the upcoming Telangana facility to open up South India market for PPF (weakest market at present)

Likely major market share gainers and losers in PVC pipe industry

Source: Company data, I-Sec research

C) Lubrizol tie-up offers PPF a market share gain opportunity in CPVC pipe segment with industry consolidation likely over next 4 years

- Timing of Lubrizol tie-up offers PPF a market share gain opportunity on account of likely consolidation in CPVC pipe industry (post ADD imposition on China/Korea CPVC imports)
- Bundling (cross-selling) opportunity along with its PVC pipe segment offerings (its key moat)
- Seamless entry into projects with *Prince FlowGuard Plus* co-branding arrangement
- Decentralisation with the upcoming Telangana facility to open up South India market for PPF (South being the biggest market for CPVC pipes)

Likely market share gainers and losers in CPVC pipe industry

Source: Company data, I-Sec research

D) Easing of promoter-related concerns/transactions – current trust deficit (read: Management) of investors to recede

- Revocation of promoter's pledge (post IPO)
- Related part transactions: Corrective actions initiated and partially resolved
- Financial leverage of promoters eased post IPO
- Contingent liability on account of Montana JV – promoters / asset value of the land well covered in case contingency arises

E) Compelling valuations

- Balance sheet discipline in last 12-15 months and IPO proceeds likely to transform PPF into a net cash company in FY21E (despite Telangana capex)
- PPF is trading at a significant discount (16x FY22E earnings) to its peers - ASTRA (47x) and SI (31x)
- We assign PE multiple of 24x to PPF considering its growing similarities to SI model (product range, manufacturing capabilities and distribution network). PPF's rising brand equity, professional-driven approach and likely growth and margin levers in near-to-medium term is likely to offer rerating potential for the stock.

Transforming from a mediocre legacy to a reputed / leading brand

Until 2008, PPF was seen as one of the top reputed names in agricultural and plumbing PVC pipes and fittings category with extremely strong presence in North and West India. However, fortunes of the company changed post 2008 when its then nearest competitor Prince SWR Systems (PSWR) entered into agricultural pipes and fittings segment (PPF's forte at that point in time) and PPF forayed into SWR pipes and fittings (PSWR's key product line at that time) segment. Post 2008, both the companies started competing aggressively against each other and in the process started tinkering with its quality parameters and credit policy. This led to a considerable drop in their brand equity during 2009-2013.

Post 2013, PPF in the quest to improve its brand equity and to differentiate it versus PSWR (which has seen its brand equity on a steadily declining trend), PPF undertook several corrective actions which led to significant improvement in its brand equity over the last 4-5 years as under:

Chart 1: Transformation drivers: From a mediocre legacy to a reputed, leading brand



1. Considerable improvement in quality parameters

PPF's quality parameters have seen significant improvement over the past five years with the company trimming the usage of calcium carbonate (used as filler in the pipe manufacturing process; the excessive usage of which makes the PVC pipe brittle but cheaper). **Our comprehensive market feedback in 2012 and 2013 on pipes industry clearly revealed the company is increasingly using calcium carbonate (in excess of the permissible limit as prescribed by the BIS) to make the pipe cheaper and thus, managing to effectively compete in the trade.**

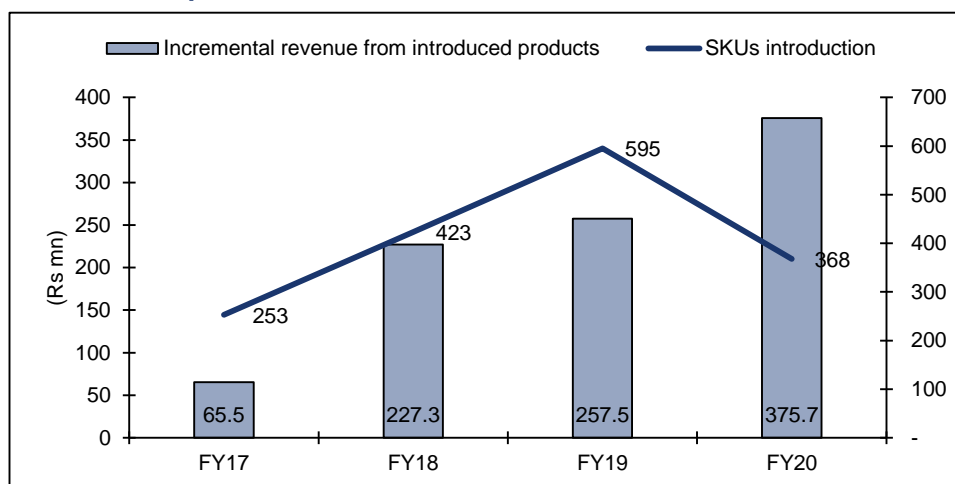
However, post 2013, PPF started taking corrective measures in improving its quality standards and has since then considerably reduced the proportion of calcium carbonate to the extent as permissible by the BIS. This has led to considerable strengthening of its brand equity over the past 3-4 years.

2. Multi-polymer portfolio + innovation + first mover in UGD systems = Evolution of product range

PPF offers a wide and comprehensive product range comprising 7,200+ SKUs – one of the largest among its peer set. PPF currently manufactures polymer pipes and fittings using four different polymers - UPVC, CPVC, HDPE and PPR – thereby, having presence across major pipe segments.

The company has created a separate product development vertical headed by an industry veteran and an experienced team under him. This vertical is responsible for introducing niche products and technologies in the trade. With this intensified focus, PPF with its innovative capabilities has introduced several new products over the last 3-4 years and has played a significant role in contributing to the company's growth profile.

Chart 2: New product launches and their incremental contribution



Source: Company data, I-Sec research

Continuous innovation driving new product launches at regular intervals

- **First mover advantage in DWC pipes to give a distinct advantage in medium-long term:** Until Q4FY18, PPF's focus was on products for above-ground applications, namely, plumbing, irrigation, and sewage disposal. In Jan'18, PPF was among the first ones to expand its reach from above-the-ground applications to underground drainage (UGD) application by entering into HDPE segment with manufacturing of DWC pipes at its Haridwar unit.
- Besides DWC pipes, the company has recently diversified its presence into the water storage space by launching **three layered overhead storage solutions under the brand name 'Prince STOREFIT'**. With the largest competitor – Sintex Industries facing liquidity issues and losing significant market share in tanks segment, the company expects to leverage its multi-location manufacturing footprint (being a highly freight sensitive product) and its existing deep-rooted distribution network to effectively market this product and become a meaningful player in the segment.
- It has also introduced **cable ducting pipes under the brand 'Prince Cablefit'**. These pipes which are made of HDPE and have a unique double wall construction make them light weight and facilitate easy insertion of ducts and cables.

Chart 3: Recent product launches



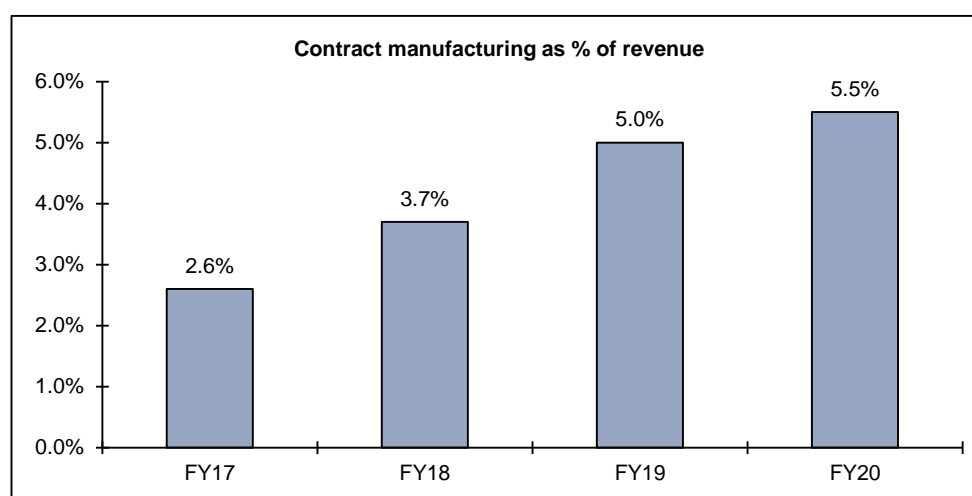
- **Technical collaboration with Tooling Holland:** Its recent tie-up with Tooling Holland would enable PPF to offer superior products, aligned to global standards and at competitive costs. Besides this, it would also drive productivity improvements and leverage their strong inclination towards research & innovation right from designing to mould manufacturing aimed at offering a superior product.
- **Plans to foray into plumbing ball valves:** PPF is in the process of adding in-house capability for manufacturing of value-added plumbing ball valves (initially with running range) at its Haridwar plant. This is likely to commence production by end-FY22. The company would also enter into manufacturing of slow-moving plumbing ball valves in due course so as to have a complete range of offering.
- With emerging opportunities in **underground drainage systems**, the company also plans to launch inspection chambers, manhole and chamber covers by end-FY22 to enable it to complete its range of offering (with its existing presence in solid wall pipes and DWC pipes) in UGD systems.

3. Only large player moving towards asset-light model

Besides its focus on creating a multi-location manufacturing model, PPF in 2014 started outsourcing uPVC pipes from Aurangabad, Maharashtra and Hajipur, Bihar through contract manufacturing model to improve proximity to these markets – thereby, enabling it to become more competitive versus its peers. PPF was thus one of the earlier movers in East India with unique asset-light model strategically positioned in Bihar to cater to the demand of the Eastern region.

In Jun'18, it also replicated this model in DWC pipes segment (which entails high logistic costs) by entering into contract manufacturing with a regional player in Aurangabad, Maharashtra to ensure lower lead time to market, thus making it more efficient and competitive in the process.

Chart 4: Trend in share of outsourced revenues since FY15



Source: Company data, I-Sec research

4. Introduction of new logo – finally creating a distinct identity for PPF

Other than the brand name, the company logo is one of the most important things that consumers/influencers notice every time they encounter with the brand. The key to the logo is that it should be immediately recognisable as a unique one for the company.

Traditionally, PPF used to operate under the brand name 'Prince' but with a different logo. It used to have similar logo which is currently used by PSWR. Both the companies – PSWR and PPF marketed their products under the same brand name and similar logo – which created a lot of confusion in differentiating their products and creating a mind recall for each of them.

Finally, in July 2014, PPF took a bold step out of its legacy and redesigned its company logo to a three-pointed crown vs a five-pointed crown traditionally used, in order to clearly differentiate it versus that used by PSWR. The addition of words 'PIPING SYSTEMS' beneath the word 'PRINCE' also gives a clear identity to PPF vs word 'PRINCE' traditionally used.



5. Initiating aggressive branding measures over the last few years

In the quest to strengthen its brand equity and also differentiate itself versus PSWR, PPF over the past 3-4 years has been aggressively spending on branding activities. Its A&P spends have seen a marked increase from Rs150mn (1.1% of revenues) in FY17 to Rs321mn (2% of revenues) spent in FY20. Besides undertaking various brand promotional activities through above-the-line (ATL) and below-the-line (BTL), PPF has over the past 3-4 years spent aggressively on two niche initiatives – a) introducing loyalty programme (which commenced in Nov'16) and b) roping in celebrity brand ambassador 'Mr. Akshay Kumar' in Feb'18.

- **Loyalty programme 'Prince Udaan':** PPF was the first plastic pipe player in the industry to launch a loyalty programme called 'Prince Udaan' in Nov'16 to connect with and reward its distributors, retailers, wholesalers and plumbers – thereby, focusing on improving its brand loyalty. Under this loyalty programme, buyers of PPF products, who are enrolled in the loyalty programme receive reward points on every purchase and they can then redeem the points against a number of gifts available. This loyalty programme is currently operational in North India (except Madhya Pradesh), West India, South India and

East India (limited to few states as of now - Bihar, Jharkhand and West Bengal). The company is now in the process of rolling it out pan-India soon.

- **Roped in Akshay Kumar as brand ambassador and initiating integrated branding approach:** To gain better recall in the minds of consumers/influencers, PPF entered into an endorsement agreement in Feb'18 with Bollywood celebrity Mr. Akshay Kumar for roping him as a brand ambassador which has been recently renewed for another two years. The company's focus is to increase its brand visibility by leveraging its brand ambassador through 360-degree branding approach i.e. exposure across various means like pre-rolled ads on social media, hoardings and signboards, meet and greet contest at its dealers meet in particular, in-film branding and transit media advertising (branding on trains, buses, etc).



Our checks suggest that both these activities have aided PPF in not only differentiating itself from PSWR but also improve its overall brand equity. Going forward, PPF has guided to maintain its brand spends at 2-2.5% of revenues over the next 2-3 years.

6. Recently initiated brand monetisation process

Over FY11-FY16, PPF was traditionally operating at lower margins versus its peers in PVC pipes segment. This was largely due to its low brand equity and stiff competition with PSWR until FY14 which saw its margins being impacted due to its aggressive pricing and liberal credit policy. The next two years saw PPF taking corrective actions – quality improvement and increasing brand spends in the quest to increase brand equity – resulting in muted margins.

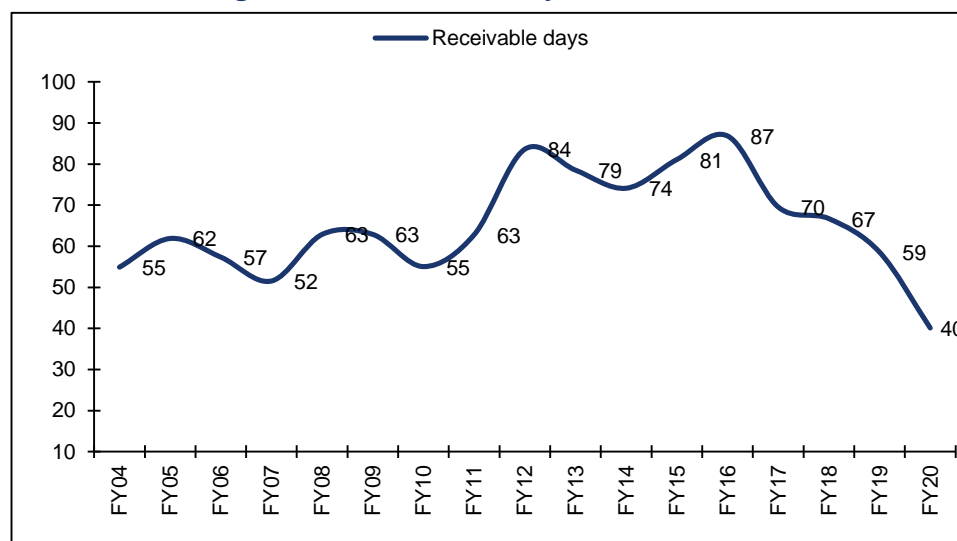
However, post FY16, margins particularly in its PVC pipes segment have been on a rising trend. Besides the change in product mix (declining trend of agricultural pipe revenues), PPF has been gradually taking corrective actions in its pricing policy by taking higher/lower price increases/cuts at the time when polymers prices are rising/falling, respectively.

This brand monetisation strategy was particularly more visible over the past 12-15 months which has seen a period of consolidation in PVC pipes industry where players like PSWR, Jain Irrigation, Kisan Industries, Skipper, etc have seen a significant decline in their market share. This has further boosted PPF's brand equity.

7. Tightening of credit policy

PPF's aggressive competition with PSWR during the last decade resulted in both the companies giving excessive credit to their channel partners to outpace and gain market share over the other. PPF, which always maintained its receivables in the range of 52-63 days from FY04-FY11, saw that slipping considerably to an average of 80days during FY12-FY16. This was also corroborated during our extensive checks done during that period where we witnessed both the group companies offering credit period to as high as 4-5 months in select cases. This led to considerable weakening of its brand equity.

Chart 5: Declining trend in receivable days



Source: Company data, I-Sec research

Over the past five years, PPF has made concerted efforts to bring down its receivables by making relevant changes in its credit policy circulated to its distributors. PPF, over the last three years, has considerably scaled down/tightened its credit policy from 60 days for pipes and fittings in FY17 to 45 days for pipes and fittings in FY18 and to 21 days for pipes and 30 days for fittings in FY19 as well as FY20.

The tightening of credit policy along with PPF's offering of channel financing facility to select distributors in the recent past has been clearly reflected upon its receivables reducing sharply from an average of 80days to 59days in FY19 and further to 40days in FY20. **Even after grossing up the impact of channel financing arrangement** done with its select distributors, gross receivables still stand significantly corrected to ~59days.

8. Investing in people and processes

Hired reputed professionals in the recent past

PPF over the past few years has hired reputed professionals thereby transforming the company from a 'BABU' management to a professionally-driven management. The key professionals hired and their managerial roles are as under:

Key personnel	Overall work-ex	Past affiliations	Present role	Year of induction
Mr. Anand Gupta	17+ years	ACC	Deputy CFO	FY21
Mr. Vininder Baweja	15+ years	HUL, VOLVO Eicher	Chief Operating Officer	FY20
Mr. Ashok Mehra	30+ years	Jaquar and Pidilite Industries	VP – Sales and Marketing	FY18
Mr. Hemant Kumar	35+ years	Pidilite Industries	GM - Marketing and New Product Development head	FY07
Mr. Shyam Sarda	22+ years	UPL & S. Kumars	CFO	FY15
Mr. Umesh Pillai	21+ years	Asian Paints and Godrej & Boyce	National Head Sales & Marketing – Trubore	FY19
Mr. Prakash Hegde	30+ years	VP and Chief HR Officer	TBZ and Bharat Gears	FY14

First mover in introducing Dealer Management Interface (DMI)

PPF introduced its in-house developed web portal 'IMON' for efficient supply chain management. Using 'IMON' its distributors can order, track orders, see their account details and reports, process sale returns, and file complaints as well. The portal, which was launched in FY16, has aided the company in reducing its turnaround time for processing orders as these orders are now entered directly into its portal whereas it was previously taken by its sales force manually which were then inputted into the system.

Chart 6: Screenshots of IMON interface used by its channel partners

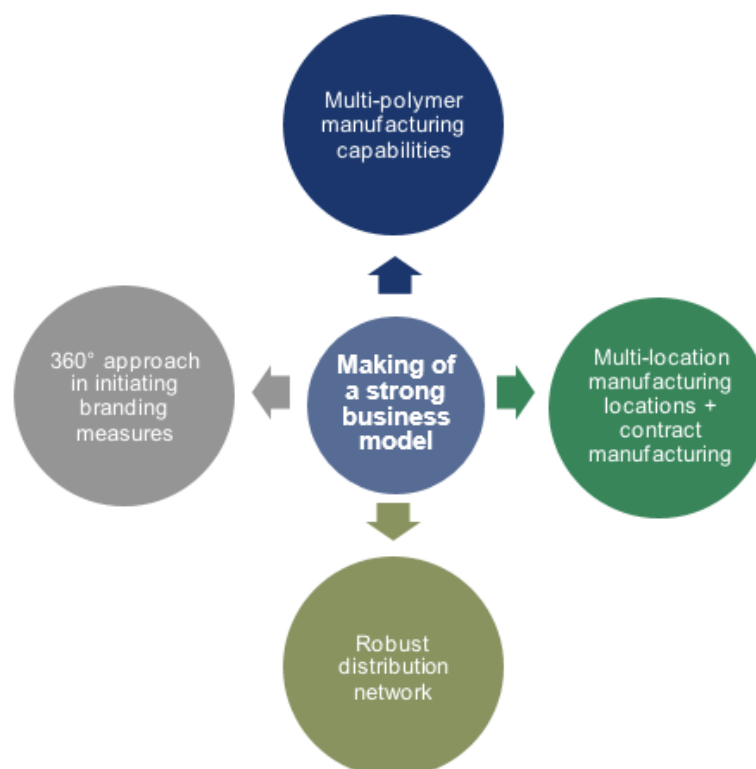


Source: Company data, I-Sec research

Making of a holistic business model in pipes segment

Over the past decade, PPF has transformed itself into a multi-polymer, multi-brand and multi-location player with a widespread and strong distribution network. Its brand equity too has seen a meteoric rise in the past 4-5 years with the company taking aggressive steps in improving its quality parameters and resorting to aggressive brand building and brand differentiation measures over the past 2-3 years. This makes PPF a force to reckon with and among the top five leading players in the plastic piping industry.

The key pillars behind the making of a strong and a successful model



Source: Company data, I-Sec research

Three decades of experience in manufacturing multi-polymer piping systems

PPF offers a wide and comprehensive product range comprising 7,200+ SKUs – one of the largest among its peer set. PPF currently manufactures polymer pipes and fittings using four different polymers - UPVC, CPVC, HDPE and PPR – thereby, having presence across major pipe segments. These products are used for varied applications in the fields of plumbing, irrigation and drainage management.

Until Q4FY18, PPF's focus was on products for above-ground applications, namely, plumbing, irrigation, and sewage disposal. In Jan'18, PPF was among the first ones to

expand its reach from above-the-ground applications to underground drainage (UGD) application by entering into HDPE segment with manufacturing of DWC pipes at its Haridwar unit.

Besides DWC pipes, the company has also added Foamcore underground drainage pipes to its UGD portfolio. Going forward, the company also plans to launch inspection chambers, manhole and chamber covers to enable it to complete its range of offering in UGD systems.

PPF was the first and only plastic piping company to foray in this industry with manufacturing of PVC fittings in the year 1995. With its first mover advantage, PPF has over the years developed a comprehensive range of fittings portfolio – thereby, becoming one of the leading plastic piping players in fittings category. Its fittings- to-pipe ratio, which is currently at 32-33% of its pipes and fittings revenues, is one of the highest among industry peers. Further, the company is in the process of putting up a capacity to manufacture value-added plumbing ball valves of the running sizes at its Haridwar plant. The project is likely to complete by end-FY22.

Strategic multi-location manufacturing network

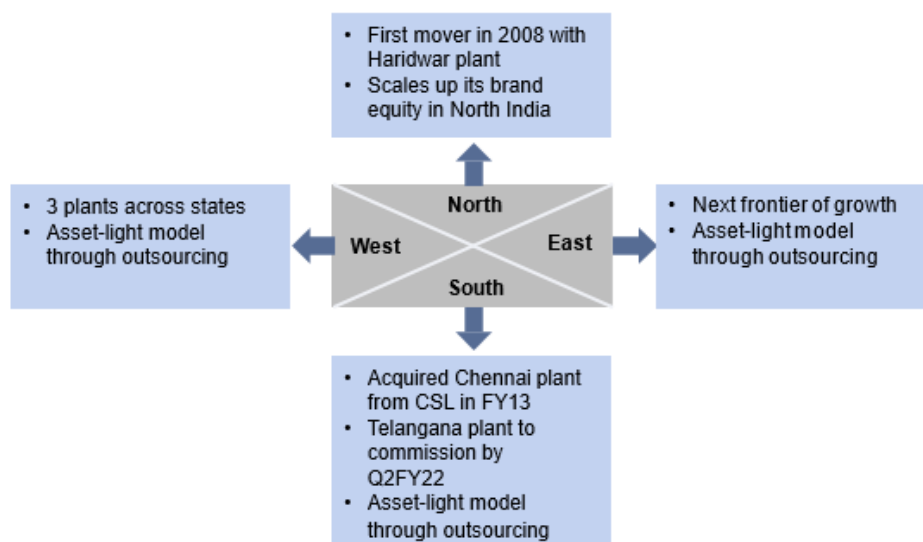
PPF has six state of the art manufacturing facilities located across Northern (Jaipur, Rajasthan and Haridwar, Uttarakhand), Western (Kolhapur (Maharashtra), Athal and Dadra (Union Territory of Dadra and Nagar Haveli) and Southern (Chennai, Tamil Nadu) India. Besides its widespread manufacturing footprint, PPF also resorts to asset-light model through contract manufacturing arrangement with five players (two in Maharashtra and one each in Andhra Pradesh, Bihar and Odisha) for manufacturing PVC as well as DWC pipes. While the company has no manufacturing plants in East India, it has a unique outsourcing strategy wherein it procures PVC as well as DWC pipes from two players (one each in Bihar and Odisha) for catering to East India market. As on FY20, the North/South/West/East zone contributed 36%/24%/25%/15% to the revenue, respectively.

Table 1: PPF's facility-wise capacities, capacity utilisation and products manufactured

Locations (FY20)	Installed capacity (MTPA)	Capacity utilisation	Year of commencement	Products
Haridwar	77,588	78%	2008	Pipes & Fittings
Dadra	59,232	76%	2000	Pipes
Chennai (Trubore)	62,143	75%	2012	Pipes
Kolhapur (Trubore)	20,045	76%	2012	Pipes
Athal	15,982	85%	1995	Fittings
Jaipur	20,909	76%	2019	Pipes
Total capacity	255,899	196,774		
Capacity addition:				
Telangana (greenfield)	51,943	NA	Sep'21	Pipes & Fittings
Likely capacity - FY22	307,842			

Source: Company data, I-Sec research

Chart 7: PPF's pan-India manufacturing approach; asset-light model aids traction in East India



Source: Company data, I-Sec research

Key salient features of PPF's manufacturing footprint

- **Early entry into North India led to higher market share in the region:** PPF was the first company to set up its manufacturing base in North India in Haridwar in 2008 vs peers. This has led to its strong penetration and brand equity in the region which contributed 37% to its overall revenues in FY20. With PPF setting up another plant in Jaipur in FY20, and currently expanding its capacity through brownfield expansion, the region is likely to remain the largest contributor to its overall revenues going forward as well.
- **Entry into South India through acquisition in FY13:** PPF's presence in the Southern region has traditionally been the weakest compared to peers. However, through the acquisition of Trubore brand from Chemplast Sanmar in Oct'12, PPF came in closer proximity to the South region (with its plant in Chennai and Kolhapur) which helped increased its share in the Southern region. The region contributed 24% in FY20 to the overall revenues.

Currently, fittings for the South India market are catered to by plants in Athal and Haridwar. With the company currently in the process of setting up Telangana facility for manufacturing both pipes and fittings (likely to come on stream by Q2FY22), PPF would be able to compete more effectively which would drive regional contribution higher post FY22.

- **Contribution from Western region likely to remain stable:** PPF boasts of having three manufacturing plants in Western India – two in Dadra and one in Kolhapur. With its strong brand equity and close proximity to the region, the region may continue to contribute in excess of 20% to its overall revenues (25% in FY20) going forward.
- **East region remains the new growth frontier for PPF:** For PPF, East region remains the next frontier of growth with the company taking active steps in increasing its reach through asset-light model. The share of Eastern region, which was 5.7% in FY15, has increased to 15% in FY20. With the company scaling up

its presence through outsourcing model and with the regional/few organised brands (like PSWR, Ori-Plast, Utkarsh, Skipper, etc) losing market share in the region, we expect PPF's share to improve going forward.

Only large brand in the industry to resort to contract manufacturing: Besides its strong manufacturing footprint, PPF has leveraged its fast-improving brand by opting for contract manufacturing especially in regions where the demand for his products is higher. By doing this, the company is not only able to gear up for timely opportunities (without any gestation period) but also save logistic costs as well.

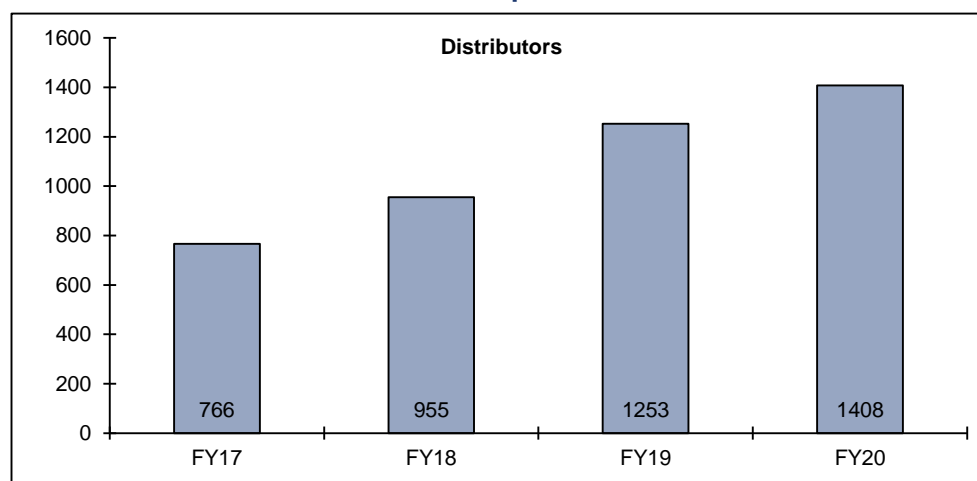
In all, the company has tied up with five manufacturers - four for PVC plumbing and drainage pipes and one for DWC pipes. Currently, 4.1% of the overall revenue is generated through contract manufacturing arrangement vs 2.6% of overall revenue in FY17. **The salient futures of these asset-light models are as under:**

- PPF has entered into agreements with each of these contract manufacturers which are renewable on yearly basis on the mutual consent of both the parties.
- Each agreement may be terminated by either party giving 60 days prior written notice to the other party
- These contract manufacturers (who are provided raw material by the company) charge company an agreed amount per kilo to manufacture the pipes.
- One of the company employees is stationed at each plant for quality control check to maintain quality standards.

Robust pan-India distribution network

PPF sells piping systems products under 'Prince' brand to distributors, who then resell the products to wholesalers, retailers, and plumbers. While in case of dealing in piping products under the brand 'Trubore', it sells directly to wholesalers and retailers.

Chart 8: PPF's trend in distribution expansion



Source: Company data, I-Sec research

It has approximately 1,408 distributors pan-India. As on FY20, PPF deals with 1,151 distributors while dealing with brand 'Prince' and has a network of 257 wholesalers and retailers in South India for its brand 'Trubore'. It has a strong presence in retail segment with retail to projects ratio at 90:10.

Table 2: Comparison of PPF's distribution network with peers

Distribution network	PPF	Supreme Industries	ASTRA
No. of distributors	1,408	1,214	800+
Core products	Agri pipes and plumbing	Agri pipes and plumbing	Plumbing pipes
Geographical strength	Urban, semi-urban and rural	Urban, semi-urban and rural	Largely urban and semi-urban

Source: Company data, I-Sec research

Adopting 360° approach in initiating branding measures

PPF's branding measures include above-the-line (ATL) activities viz. television commercials, outdoor hoardings and wall paintings, transit media advertisement on trains, buses & autos, magazine advertisements, and digital marketing campaign. Its below-the-line (BTL) activities largely include conducting regular dealer, retailer, architect, plumbing consultant and plumber meets, undertaking branding activities in rural areas and tier-II and III towns, media event sponsorship and participation in trade shows and exhibitions. Apart from this routine, PPF over the past 3-4 years has spent aggressively on two niche initiatives – a) introducing loyalty programme (which commenced in Nov'16) and b) roping in celebrity brand ambassador 'Mr. Akshay Kumar' in Feb'18.

Chart 9: Transit media



Chart 10: Digital marketing campaign



Chart 11: Celebrity endorsement including various media apertures around it

Source: Company data, I-Sec research

Influencer and channel engagement activities (BTL)**Chart 12: Dealer meets - Prince Parivaar****Chart 13: Plumber meets - Prince Mitra**

Source: Company data, I-Sec research

PPF targets to spend ~70% of its advertising budget on below-the-line (BTL) activities focusing on influencers and channel partners. It plans to spend the balance (~30% of its advertising budget) on above-the-line (ATL) activities like advertising, along with in-film and co-branding arrangements. As a part of its digital marketing strategy, it also plans to focus on cost effective mediums, such as digital and mobile solutions, which would increase its presence across popular social media platforms, such as Facebook, Instagram and Twitter, and associating with various e-commerce B2B portals.

One of the biggest beneficiaries of industry consolidation in PVC pipes segment

Despite sustained headwinds in real estate sector, pipe volumes of large organised plastic piping players have grown in double-digits in the pre-Covid-19 era. While the volumes have got severely impacted over the past two quarters due to sudden outbreak of Covid-19, **we believe volume growth of these players would regain its lost momentum starting FY22 led by:**

- **Buoyancy in underlying demand** despite muted growth in real estate sector – aided by replacement demand, growth in affordable housing and initiation of Govt. reforms - piped water for all rural homes by 2024 with impetus to be on water conservation and supply;
- **Growth traction in niche products** like double wall corrugated (DWC) pipes and underground drainage system (UDS); and
- **Market share gains** aided by weakening competitive intensity in the PVC pipe industry. We expect large plastic piping players to witness significant market share gains in the near term aided by a) existing large sized organised players like Prince SWR, Kisan, Jain Irrigation, etc facing serious liquidity issues and b) semi organised / regional brands / unorganised players facing working capital challenges and/or raw material sourcing challenges.

Chart 14: Likely market share gainers and losers in this period of industry consolidation



Source: Company data, I-Sec research

Table 3: Key companies losing market share and likely beneficiaries in respective states

Key companies losing market share	Jain Irrigation	Kisan Moulding	Prince SWR	Regional brands – Nandi, Kaasta, Ori-Plast, etc
Key products	- PVC Agricultural pipes - PE pipes	- PVC Agricultural pipes - PVC plumbing pipes - PVC drainage pipes	- PVC drainage pipes - PVC plumbing pipes	- PVC Agricultural pipes - PVC plumbing / drainage pipes
Key markets	- Maharashtra - Karnataka	- Rajasthan, - Karnataka, - Uttar Pradesh - Madhya Pradesh	- Maharashtra - Uttar Pradesh - Telangana - East India	- Andhra Pradesh (Nandi) - Uttar Pradesh, Rajasthan (Kaasta) - West Bengal (Ori-Plast)
Key beneficiaries likely to gain market share	- Finolex Industries - Supreme Industries - PPF	- Astral Poly Technik - PPF - Supreme Industries	- PPF - Astral Poly Technik - Supreme Industries	- Supreme Industries - Astral Poly Technik - PPF - Finolex Industries

Source: Company data, I-Sec research

PPF is likely to be one of the biggest beneficiaries: As illustrated in the table above, PPF along with Astral Poly Technik and Supreme Industries will be major beneficiaries of the current consolidation happening in PVC pipes industry.

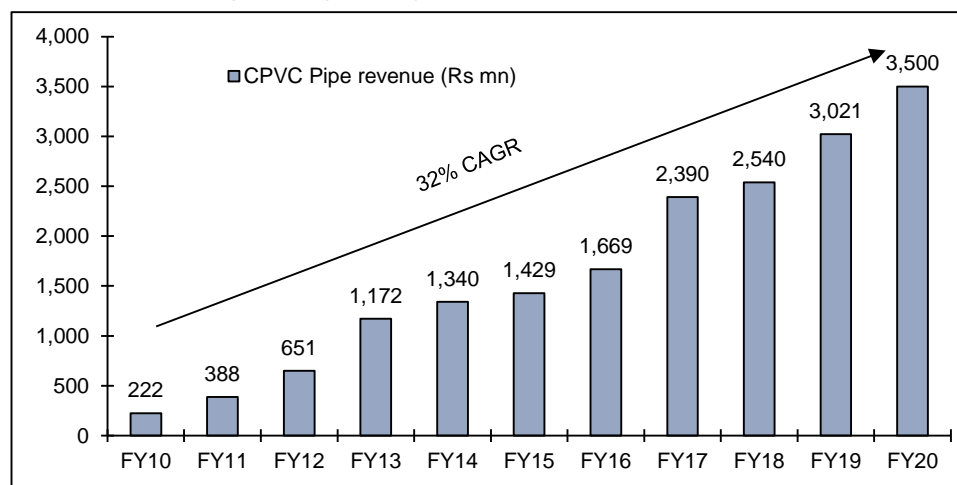
We would, however, expect strong market share gains for PPF (mainly due to fast declining market share of its immediate peer) due to the legacy of the brand 'Prince'. It also helps from the fact that PPF has predominantly been strong in markets like Maharashtra and Uttar Pradesh which should drive impressive market share gains going forward with its immediate peer (leading player in these states) currently losing market share.

Telangana market, which has traditionally been a strong forte of its immediate peer, could also provide an impressive opportunity for PPF with its Telangana plant likely to commission in a year's time.

CPVC pipes segment: Putting all concerns to rest; upward journey beckons

PPF forayed into manufacturing of CPVC pipes in FY09. The company initially started manufacturing CPVC pipes by sourcing compound from Japanese players. With the company growing at 45% CAGR in CPVC pipes over FY10-FY15 and attaining a size in excess of Rs1.4bn, PPF in FY16 set up its own compounding unit. PPF then started sourcing resin from China/Korea which continued until Aug'19. The lower sourcing cost from China/Korea led to PPF's pricing of CPVC pipes competitive vs large peers – thereby, enabling it grow at 22% CAGR in CPVC pipes segment over FY16-FY19.

Chart 15: PPF's growth journey in CPVC pipes revenues so far



Source: Company data, I-Sec research

In Feb'20, DGTR imposed definitive anti-dumping duty on imports of CPVC resin/compound from China/Korea into India for a period of five years – thereby, making resin/compound imports from China/Korea non-competitive versus imports from US and Japan. In lieu of this, PPF after sourcing resin from Japan, Europe and India for an intermittent period has now tied-up with US-based Lubrizol in Aug'20 for sourcing of CPVC compound.

While putting all concerns to rest as far as sourcing of CPVC resin (traditionally) was concerned, the recent tie-up with US-based Lubrizol throws up several opportunities for PPF over the next few years:

- Sourcing of best-in-class quality CPVC compound from Lubrizol to enable PPF to market and sell superior quality CPVC pipes and fittings in the country.
- Premium brand positioning in CPVC pipe segment across the value chain could have a ripple effect on the positioning of its PVC product portfolio as well
- Higher acceptability into projects (B2B) with FlowGuard being specified by most plumbing consultants and real estate developers.
- Cross selling of CPVC pipes through its existing robust distribution network (B2C) along with its PVC piping products.

Higher operating leverage and pricing premium may drive higher segmental margins over medium-to-long term.

Promising levers for EBITDA margin expansion

Despite near-term (2-3 quarters) margin pressure in CPVC pipes segment (as PPF would see staggered price increases in CPVC pipe segment as opposed to immediate increase in its sourcing costs post the Lubrizol tie-up), we expect its overall EBITDA margins to improve starting FY22 mainly led by a) higher margins in CPVC pipes segment driven by price increases and operating leverage; b) further brand monetisation in PVC pipe segment driven by premium positioning in CPVC pipes segment, c) superior product mix and c) logistic cost savings. Each margin lever is explained as under:

Higher margins in CPVC pipes segment: Post FY22, we expect PPF's CPVC pipe margins to improve with the company likely to take price increases in-line with the expected increase in its CPVC compound sourcing costs post tie-up with Lubrizol. We also expect operating leverage to start kicking-in from FY22 driven by its higher acceptance of CPVC pipes and fittings in projects and gradual traction in its B2C segment (retail) as well.

Further brand monetisation driven by premium positioning in CPVC pipes segment: Post FY16, the margins particularly in PVC pipes segment have been on a rising trend. PPF has been gradually taking corrective actions in its pricing policy by taking higher/lower price increases/cuts at the time when polymer prices are rising/falling respectively.

This brand monetisation strategy was particularly more visible over the last 12-15 months which has seen a period of consolidation in PVC pipes industry where players like PSWR, Jain Irrigation, Kisan Industries, Skipper, etc have seen a significant decline in their market share.

We expect the brand monetisation in PVC pipes segment to sustain in the near term:

- With few organised players as well as some regional and unorganised players continuing to face growth and liquidity headwinds alongside raw material sourcing challenges
- With the company likely to have ripple effect of premium positioning in CPVC pipes segment post Lubrizol tie up.

Superior product mix: Over the last 2-3 years, we have seen a gradual improvement in its product mix with the company scaling up PVC plumbing and drainage pipes and PVC fittings segment. We expect the product mix improvement to continue over the next 2-3 years driven by a) strong volume traction in CPVC pipes segment starting FY22; b) higher share of fittings revenues post the commissioning of Telangana facility and c) lower share of agricultural pipe revenues.

Logistic and operational cost savings: With the Telangana plant likely to commission next year and PPF recently entering into contract manufacturing agreement with Ohm Pipes in Balasore, Odisha and Swetha PVC Industries in Guntur, Andhra Pradesh, we expect logistic savings to accrue with Telangana facility able to service Telangana and other South India markets (specifically for PVC fittings which was earlier serviced from its Haridwar facility) and Balasore/Guntur to service East India/AP markets (vs Dadra/ Chennai facility earlier).

Well geared to capture big opportunity in DWC pipes in medium to long term

DWC pipes are largely used in irrigation sector, sewerage and underground drainage, city-gas distribution and in chemical and processing industries. These pipes have been gaining prominence over traditional metal and cement (RCC) pipes due to durability, low maintenance and longevity versus metal pipes.

In Jan'18, PPF was among the first ones to expand its reach from above-the-ground applications to underground drainage application by entering into the HDPE segment with manufacturing of DWC pipes at its Haridwar unit having an installed capacity of 8,820te per annum.

First DWC player to have geographical presence across key zones: Besides setting up DWC operation at its Haridwar (**North**) unit, PPF subsequently installed two machines to produce DWC pipes at its Chennai (**South**) plant with an aggregate capacity of 14,364te per annum. Besides entering into contract manufacturing arrangement with a regional player in Maharashtra in Jun'18, PPF installed another machine for manufacturing DWC pipes (with an installed capacity of 13,440te per annum) at its Dadra (**West**) plant in Oct'18.

This has led to PPF having geographical footprint across North, South and West region for its DWC pipes which are very freight sensitive. Besides this advantage, the company has already developed capabilities to manufacture large dia. DWC pipes up to 1,000mm and has already received a patent for its innovative and technological superior product design of the DWC coupler. This is likely to give PPF a strategic advantage in dealing with DWC pipes segment as compared to peers.

Near-term growth headwinds to persist in DWC pipes segment; however, mid-long term offers big opportunity

In FY19, PPF has already achieved a revenue size to the tune of Rs470mn in DWC pipes constituting 3% of its overall revenue. However, delayed monsoon and election period in the 1st half of the current fiscal led to slowdown in demand for DWC pipes in FY20. We expect near-term demand headwinds for the segment to sustain in the current fiscal (FY21) with EPC contractors currently facing funding issues in the post Covid-19 environment in executing government projects.

With the product being a strong replacement to traditionally used RCC pipes and underground drainage likely to be the next frontier of growth and focus area for the government, we expect a big opportunity on offer in DWC pipes segment over mid-long run, particularly, for players like PPF who have already demonstrated a wide geographical footprint and in-house capability to manufacture these pipes with a wide range of offerings – starting from 100mm up to 1,000mm.

Improving governance: Correcting actions in the recent past provide much needed relief

PPF has had its baggage of poor governance in the past. Besides the legacy of poor trade practices impacting the management integrity in the past, the company has seen instances of poor governance namely: a) Pledging of promoter's shares; b) related party transactions; c) higher quantum of contingent liability; and d) promoter's exposure to real estate sector.

However, in the recent past, the company besides undergoing significant improvement in its trade practices, has also started taking corrective measures in improving its governance standards which should gradually lead to restoration of trust and confidence of its stakeholders.

- **Significant improvement in trade practices:** This includes – sharp improvement in (product) quality parameters, evolution of product range, initiation of aggressive branding measures, brand monetisation, change in credit policy resulting in sharp curtailment in receivables and investment in people and processes in the recent past. With these measures, the company has not only been able to materially improve its balance sheet quality (largely led by its working capital improvement) but has also seen significant improvement in its brand equity and trade loyalty towards the brand and the company.
- **Revoking of pledge shares:** Immediately after the IPO, the promoters of the company have revoked all their shares pledged with IDBI Trusteeship Services earlier. The promoters had pledged 35% of their shareholding in PPF for availing a debt of Rs2bn from KKR for one of its promoter group entity Express Infra Projects LLP. The promoters repaid the entire outstanding debt of Rs1.9bn (as at Oct'19) immediately after the IPO from the proceeds of the secondary issue.
- **Financial leverage of promoter group entities not a cause for concern:** Contrary to the street concerns, we believe, outstanding debt standing in the books of promoter group entities can be comfortably serviced going forward. While EIP was incorporated to raise funds to the tune of Rs2bn from KKR in FY19, Arena Enterprise (AE), Pinnacle Realty Projects (PRP) and Ellora Chemical Works (ECW) are real state companies which have developed lease rental projects wherein the debt is comfortably serviced out of their lease rental income.

Table 4: Group companies – financial leverage and the potential serviceability

Particulars	AE	PRP	ECW
Promoters stake	20%	100%	16%
Year of completion of lease rental project	Oct'13	Apr'13	Nov'09
No of rental projects	1	1	1
Commercial project location	NA	Goregaon, Mumbai	Andheri, Mumbai
Debt outstanding (Rs)	1.45bn	200mn	247mn
Monthly debt servicing (Rs)	14.5mn	3.2mn	1.3mn
Monthly rental income (Rs)	15.8mn	3.7mn	1.9mn

Source: Company data, I-Sec research

The table indicates that the serviceability of debt in each promoter entity (as illustrated in the table) is not a concern and also the exposure to real estate sector (across the above entities) is merely restricted to one commercial property and the lease rental accruing to it. This is likely to result in increased mindshare and time share of PPF promoters towards their core business (PPF) and reduce their exposure to real estate sector.

- **Related party transactions with Prince Marketing and Ace Polyplast – unlikely to recur beyond FY22**

Raw material sourcing through group companies: PPF used to procure nearly 20-30% of its raw materials through group companies - Prince Marketing (PM) and Ace Polyplast (AP) to avail 4% Special Additional Duty (SAD) benefit. Since this benefit is no longer available under the new GST regime, PPF has started procuring raw materials on its own post FY19. The operations of these two group companies have thus been discontinued and the bank limits availed by these companies have also been surrendered.

Advance amount paid to PM for sale of Mumbai-based property: Based on the MoU entered into between PM and PPF for the sale of Mumbai-based property (valued at Rs545mn) to the later, PPF has given an advance amount of Rs400mn to PM in Sep'17. However, since the conveyance of premises is not complete, a fresh agreement is entered into between PPF, its promoters and PM (as on Nov'19) which requires PM to repay the advance amount of Rs400mn within 24 months from the date of the fresh agreement.

Any failure on the part of PM, PPF promoters would be required to settle the outstanding amount with PPF within 7 days from the expiration date. Failing which an interest of 12% p.a. would be levied on the promoters from the paying date to the date of actual repayment.

- **Contingent liability**
 - **Finance arrangement (channel financing with recourse) with its distributors:** In order to improve its working capital cycle further, PPF shifted few of its major distributors under channel financing (CF with recourse). PPF had a contingent liability of Rs853mn as on Mar'20 of which Rs830mn was in relation to guarantees given to Yes Bank and ICICI Bank for channel financing facility availed by its distributors. **Considering the improving creditworthiness of its distributors (availing CF facility), PPF expects such arrangement to get renewed on non-recourse basis over the next couple of years.**
 - **Montana vs Aditya developer case involving PPF promoters (not the company):** Promoters of PPF (namely Mr. Jayant Chheda and Mrs. Heena Chheda) own 10% interest each in a partnership firm, M/s Aditya Developers (Aditya). In Dec'10, Aditya entered into a joint venture (JV) agreement with Montana Developers Private (MDPL). MDPL made an interest-free deposit of Rs462.5mn to JV to develop a real estate property.
 - With the project still under wraps, MDPL initiated arbitration proceedings and claimed Rs9.05bn from Aditya and its promoters and also filed a criminal complaint against Aditya and its partners, alleging: a) Misrepresentation of certain material information leading to fraudulent inducement to enter into the

JV agreement and making an interest free deposit; and (ii) forgery of a letter from MDPL, countersigned by two partners of Aditya on behalf of Aditya, mutually terminating the JV agreement.

- In the worst-case scenario, if PPF promoters lose the case, they would be liable to pay 20% of the original claim amount (i.e. 20% of Rs9.05bn = Rs1.81bn). We believe PPF promoters / asset value of the land is well covered in case contingency arises.
- **No cross-holdings in any company run by the promoter's (JSC) brothers:**
The family reorganisation which happened in early 90s resulted in PPF going to JSC (Jayant Shamji Chheda - CMD of PPF) while ownership of other group companies namely PSWR, Prince Realty, Prince Multiplast and Prince Care were given to JSC's brothers. It may be noted that JSC or any PPF promoter does not have any holdings in these group companies and vice versa.

Chart book: Improving financials

Chart 16: Volume and volume growth trend

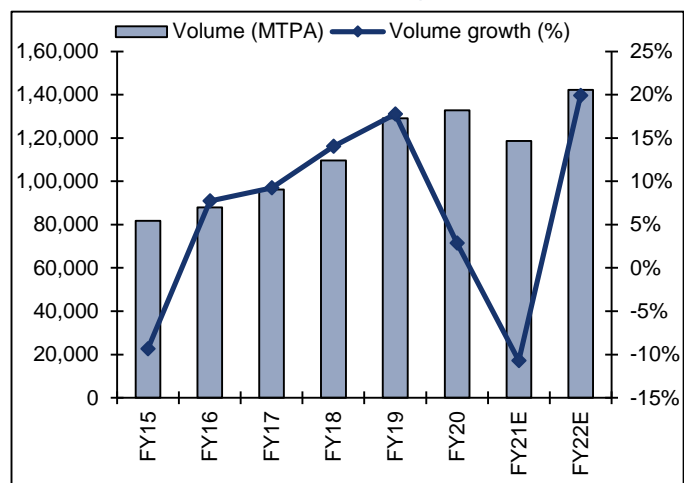


Chart 17: Realisation & realisation growth trend

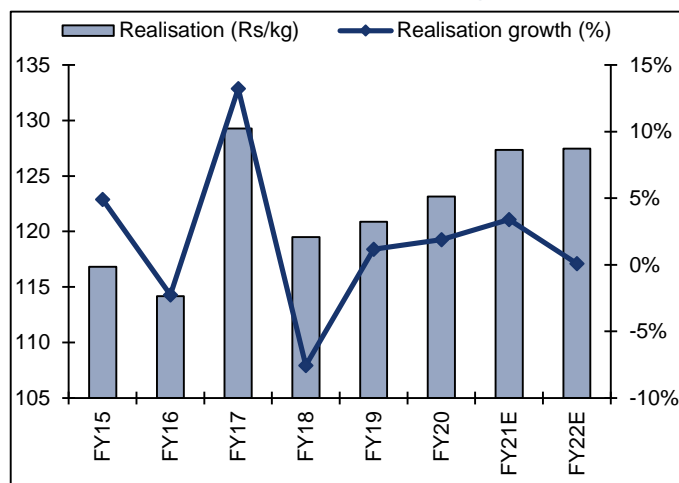


Chart 18: Net sales and sales growth trend

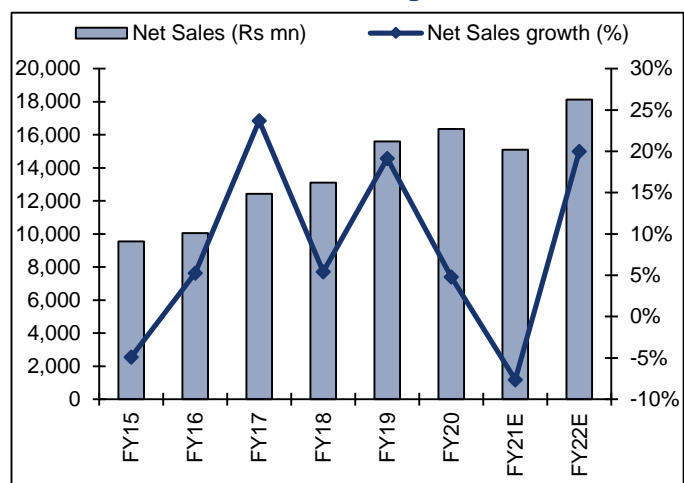


Chart 19: EBITDA and EBITDA growth trend

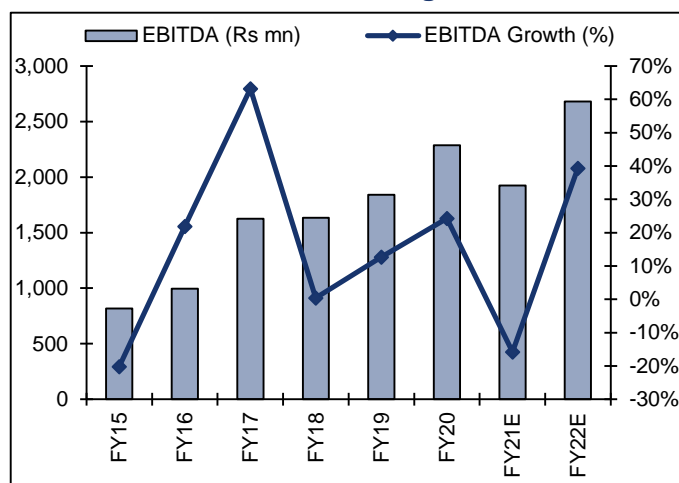


Chart 20: EBITDA margin trend

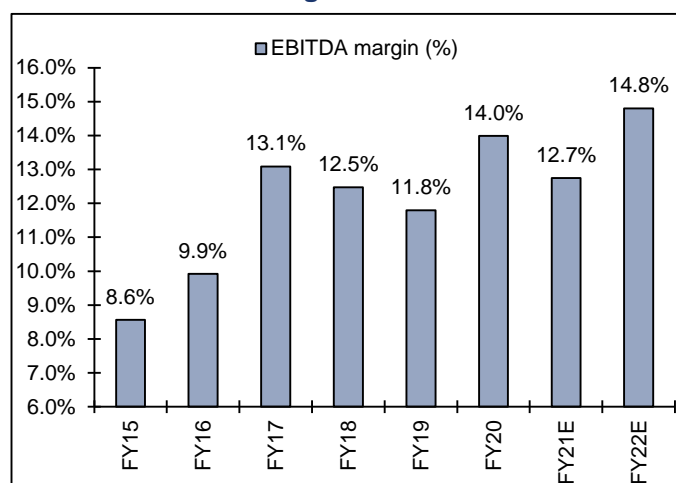
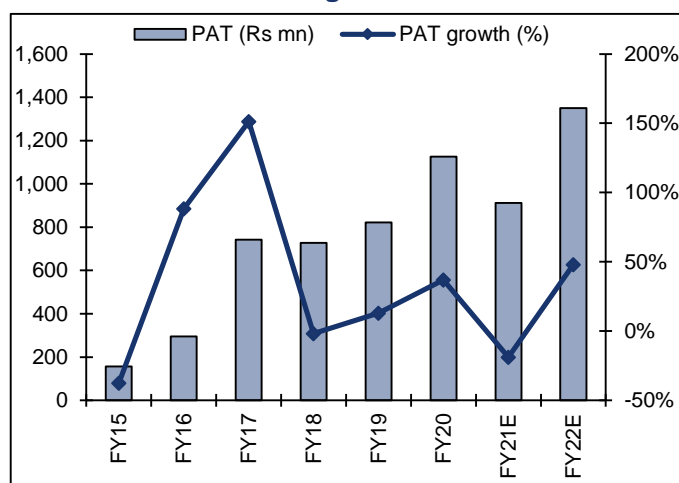
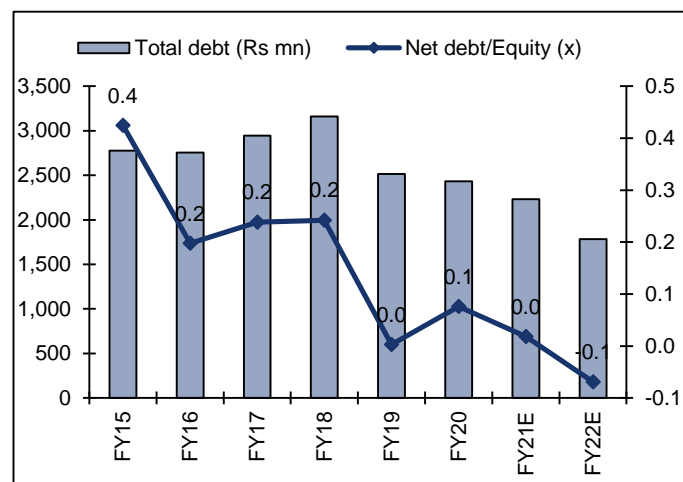
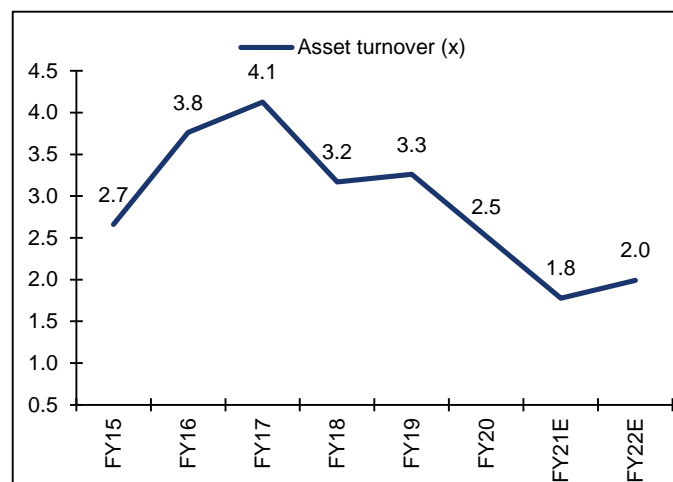
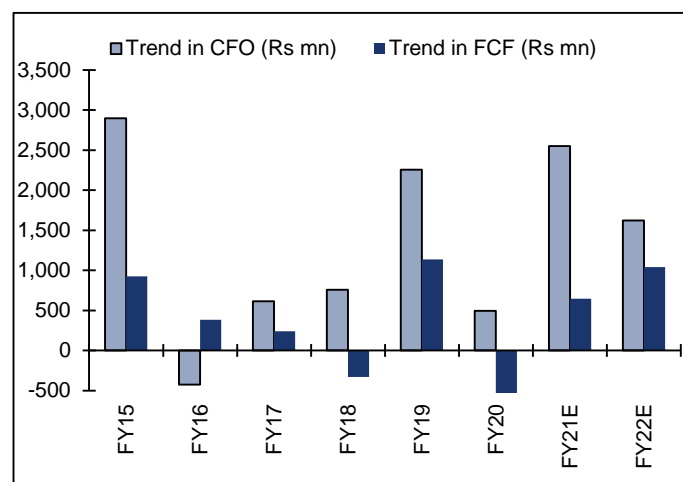
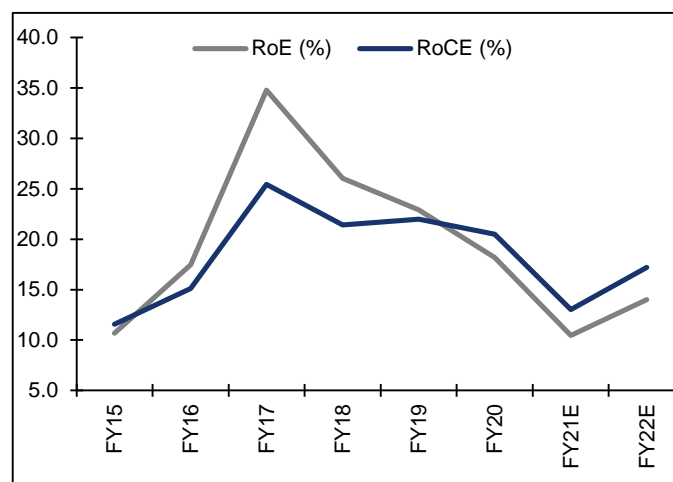
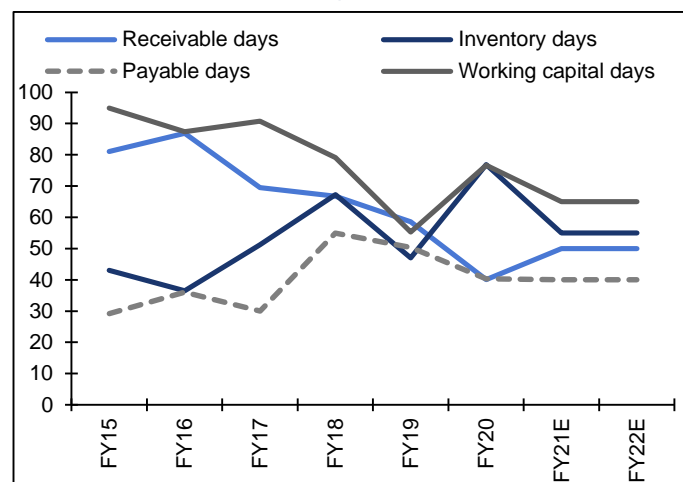


Chart 21: PAT and PAT growth trend



Source: Company data, I-Sec research

Chart 22: Net debt/equity trend

Chart 23: Asset turnover trend

Chart 24: Trend in CFO and FCF

Chart 25: Trend in RoE and RoCE

Chart 26: Trend in working capital days


Source: Company data, I-Sec research

Peer comparison

Under this section, we have compared PPF versus its immediate listed players – Astral Poly Technik (ASTRA) and Supreme Industries (SI) with respect to various parameters – branding spends, volume growth, realisations, EBIDTA/kg, EBIDTA margins, fixed asset turns, working capital management and RoCEs.

A&P spends to revenues

Advertisement & Sales promotion expenses (Rs mn)	FY17	FY18	FY19	FY20
PPF	150.2	202.0	432.8	321.2
% of net sales	1.1	1.5	2.8	2.0
Astral Poly Technik	544.5	670.2	872.9	909.0
% of net sales	2.9	3.2	3.5	3.5
Supreme Industries	509.5	600.1	774.8	725.6
% of net sales	1.1	1.2	1.4	1.3

Source: Company data, I-Sec research

Key takeaways for PPF:

- PPF's A&P spend has seen a sharp increase from Rs150mn (1.1% of revenues) in FY17 to Rs433mn (2.8% of revenues) spent in FY19. However, the same has declined in FY20 to Rs321mn (2% of revenues).
- Besides undertaking various brand promotional activities through above-the-line (ATL) and below-the-line (BTL), PPF has over the past two years spent aggressively on two niche initiatives – a) introducing loyalty programme (which commenced in Nov'16) and b) roping in celebrity brand ambassador 'Mr. Akshay Kumar' in Feb'18 – leading to aggressive branding spends in the recent past.
- PPF has guided for ad-spends in the range of 2-2.5% of revenues going forward.

Volume growth

YoY Growth (%)	FY11	FY12	FY13	FY14	FY15	FY16	FY17	FY18	FY19	FY20
PPF	24%	4%	34%	29%	-9%	8%	9%	14%	18%	3%
SI	23%	14%	16%	7%	9%	-20%	44%	9%	9%	8%
ASTRA	46%	37%	27%	22%	21%	7%	15%	16%	18%	7%

Source: Company data, I-Sec research

Key takeaways for PPF:

- PPF's corrective actions during the years - FY15 & FY16 - led to its muted volume growth versus its peers
- Pick-up in PPF's volume growth in FY18/FY19 was aided by its improving proximity to markets and gradual improvement in its brand equity.
- Low single-digit growth registered by PPF in FY20 was primarily led by sudden Covid-19 led lockdown in Mar'20. The growth was, however, lower than peers mainly due to its stricter discipline on its receivables.

Realisation per kg (Rs)

Realisation per kg	FY11	FY12	FY13	FY14	FY15	FY16	FY17	FY18	FY19	FY20
PPF	83.4	94.4	114.5	111.3	116.8	114.2	129.3	119.5	120.9	123.2
SI	77.7	87.3	96.3	109.6	103.5	97.2	104.9	106.4	113.2	114.5
ASTRA	145.2	149.7	165.9	177.6	171.9	169.1	164.9	154.8	155.8	154.5

Source: Company data, I-Sec research

Key takeaways for PPF:

- Post FY16, PPF's realisations have improved led by declining share of agricultural PVC pipes and increasing share of PVC/CPVC plumbing pipes and PVC fittings.
- Brand monetisation too has helped the company improve its realisations (particularly in the PVC plumbing pipe and fittings segment) over the past 12-15 months.

EBITDA margin

EBITDA margin (%)	FY11	FY12	FY13	FY14	FY15	FY16	FY17	FY18	FY19	FY20
PPF	9.0	8.1	12.2	10.3	9.0	9.9	13.1	12.5	11.8	14.0
SI	11.5	13.4	16.1	15.0	13.4	14.4	16.0	14.3	12.8	16.1
ASTRA	13.6	14.1	13.6	14.0	12.0	12.4	13.9	15.0	15.9	18.1

Source: Company data, I-Sec research

Key takeaways for PPF:

- Superior product mix and operating leverage led to double-digit margins for PPL post FY16.
- Over the past 12-15 months, PPF started taking corrective actions in its pricing policy by taking higher/lower price increases/cuts at the time when polymers prices are rising/falling respectively. This brand monetisation strategy has led to material improvement in its margins in FY20.

EBITDA/Kg

EBITDA per kg	FY11	FY12	FY13	FY14	FY15	FY16	FY17	FY18	FY19	FY20
PPF	7.5	7.7	14.0	11.5	10.6	11.3	16.9	14.9	14.4	17.2
SI	8.9	11.7	15.6	16.4	13.8	14.0	16.8	15.2	14.5	18.5
ASTRA	19.8	21.1	22.6	25.0	20.7	20.9	22.9	23.2	24.7	28.0

Source: Company data, I-Sec research

Key takeaways for PPF:

- Superior product mix and brand monetisation has led to significant improvement in PPF's EBITDA/kg post FY16.
- Sourcing of low cost CPVC resin and brand monetisation in PVC segment resulted in highest ever EBITDA/kg in FY20 for PPF.

Receivable days

Receivable days	FY11	FY12	FY13	FY14	FY15	FY16	FY17	FY18	FY19	FY20
PPF	63.0	84.0	79.0	74.0	81.0	87.0	70.0	67.0	59.0	40.0
SI	23.0	22.0	22.0	22.0	21.0	29.0	23.0	28.0	25.0	21.0
ASTRA	70.0	65.0	47.0	48.0	55.0	50.0	66.0	51.0	43.0	25.0

Source: Company data, I-Sec research

Key takeaways for PPF:

- PPF over the last three years has considerably scaled down/ tightened its credit policy offering to its distributors from 60 days for pipes & fittings in FY17 to 45 days for pipes & fittings and to 21 days for pipes and 30 days for fittings in FY19.
- The tightening of credit policy along with PPF's offering of channel financing facility to select distributors in the recent past has been clearly reflected upon its receivables reducing sharply from an average of 80days to 59days in FY19 and further to 40days in FY20.

- Even after grossing up the impact of channel financing arrangement done with its select distributors, gross receivables still stand corrected to ~59days in FY20.

Net fixed asset turnover

Fixed Asset turnover (x)	FY13	FY14	FY15	FY16	FY17	FY18	FY19	FY20
PPF	4.2	4.5	4.2	4.2	4.6	4.1	3.9	3.5
SI	3.6	3.5	3.6	2.5	3.5	3.6	3.7	3.3
ASTRA	4.3	4.3	4.3	3.9	3.7	3.4	3.0	2.6

Source: Company data, I-Sec research

Key takeaways for PPF:

- Fixed asset turnover of PPF has been higher than peers led by adoption of outsourcing model for a part of its sales.
- Revenue from contract manufacturing contributed 5.5% of its overall revenues in FY20.

RoCEs

RoCE (%)	FY12	FY13	FY14	FY15	FY16	FY17	FY18	FY19	FY20
PPF	10.9	42.1	20.1	10.7	17.4	34.8	26.0	23.2	18.2
SI	33.5	35.9	26.6	22.6	17.9	28.6	24.0	18.8	21.2
ASTRA	23.8	27.8	27.7	14.8	10.7	13.5	13.3	13.5	16.2

Source: Company data, I-Sec research

Key takeaways for PPF:

- Higher cashflow from operations driven by improvement in working capital management and improvement in profitability has led to higher RoCEs post FY15.
- Equity dilution through IPO in Dec'19 impacted its FY20 RoCE by 150bps to 20.5%.

Peer comparison table

Particulars	PPF	SI	Astra
Capacity (MTPA)	255,899	440,000	238,730
FY20 volume (MTPA)	132,816	300,772	132,200
FY20 Revenue (Rs mn)	16,357	34,449	20,428
EBITDA margin (%)	14.0	16.1	18.1
SKUs	7,200	8,314	
Plant locations	Union Territory (Dadra, Athal), Uttarakhand (Haridwar), TN (Chennai), MH (Kolhapur), RJ (Jaipur)	MH (Gadegaon, Jalgaon), Telangana (Jadcherla), UP (Kanpur), WB (Kharagpur), MP (Malanpur)	Guj (Santeh, Dholka), MH (Sangli), TN (Hosur), RJ (Ghilothe), Uttarakhand (Sitarganj)
Dealer network	1,408	1,214	800+
B2C:B2B	80-20	70-30	55-45
Valuation parameters			
Mcap to sales (x)	1.2	2.8	5.8
PE (x)	16.1	30.6	46.8
P/B (x)	2.0	6.3	9.3
EV/EBITDA (x)	6.4	17.8	30.5
Pre-tax RoCE (%)	16.7	24.6	24.5

Source: Company data, I-Sec research

Valuation & recommendation

Initiate with a BUY: We expect PPF's revenue/EBITDA/PAT to grow at a CAGR of 5.3%/8.3%/9.6% over FY20-FY22E, respectively. Recent equity dilution through its IPO in Dec'19 and large incremental capex at Telangana in FY21 is likely to put pressure on its RoCEs in the near term. However, steadily improving governance, expected premium positioning and ramping up of Telangana facility would drive higher RoCEs in medium to longer term. Considering the perception makeover, we believe, PPF's re-rating is inevitable with the stock trading at a significant discount versus its major peers - ASTRA and SI.

Table 5: PPF trading at a significant discount to its large peers – ASTRA and SI

	EPS (Rs)				P/E (x)				EV/EBITDA (x)			
	FY19	FY20	FY21E	FY22E	FY19	FY20	FY21E	FY22E	FY19	FY20	FY21E	FY22E
Supreme Industries	37	37	29	43	44	36	46	31	22	21	24	18
Astral Poly Technik	13	17	18	25	91	72	67	47	47	40	41	31
PPF	8	10	8	12	26	19	24	16	13	8	10	6

Source: Company data, I-Sec research

PPF is trading at a significant discount to its peers - ASTRA (66%) and SI (48%) who are trading at a multiple of 47x and 31x based on FY22E projected earnings. We assign PE multiple of 24x to PPF (20% discount to SI) considering its growing similarities to SI model (product range, manufacturing capabilities and distribution network) and PPF's rising brand equity, professional approach and likely growth and margin levers in near-to-medium term.

Key risks & concerns

- **CPVC pipe margins may come under pressure in the near term:** We may see margin pressure in CPVC pipes segment over the next two quarters (as PPF would see staggered price increases in CPVC pipe segment as opposed to immediate increase in its sourcing costs post the Lubrizol tie-up).
- **Contingent liabilities, if materialised, may adversely impact the profitability of the company:** As of March 31, 2020, PPF had contingent liabilities amounting to Rs853.3mn, including Rs830mn in relation to guarantees given to Yes Bank and ICICI Bank on behalf of its dealers opting for its channel financing facility. This may adversely affect the profitability of the company, if they materialise.
- **Outstanding litigation in Aditya Developers vs MDPL case, if lost, may compel promoters to dilute their PPF holdings:** In the worst-case scenario, if PPF promoters lose the case, they would be liable to pay 20% of the original claim amount (i.e. 20% of Rs9.05bn = Rs1.81bn) in which case they may be required to dilute their equity holding in PPF to honour the payment. We, however, understand that the value of the asset may well cover the liability amount in case it arises.
- **Personal guarantees given by promoters:** There are some sanctioned loans and debt facilities obtained by promoter group companies and/or promoters against which the promoters have provided personal guarantees and/or acted as co-borrowers. Some of the major amounts include: 1) Arena Enterprises with sanctioned loan of Rs1.46bn (where two of the promoters have given guarantee), 2) Pinnacle Realty Projects with a loan of Rs200mn (where three of the promoters have given guarantee) and 3) Ellora Chemical Works with a loan of Rs87.5mn (where one of the promoters have given guarantee). **In the event of a default in servicing those debt obligations, the promoters may be required to dilute their equity holding in PPF to honour the payment.**

Company background

PPF is recognised as one of the leading polymer pipes and fittings manufacturers in India. It has more than 30 years of experience in polymer pipes segment. It markets its products under two brand names – ‘Prince’ and ‘Trubore’. Over the years, the company has been able to set up a strong business model in plastic pipe segment with multi-polymer and multi-location presence and has also built a strong and a widespread distribution network.

- **Multi-polymer presence:** PPF currently manufactures polymer pipes and fittings using four different polymers: UPVC; CPVC; PPR; and HDPE. As of March 31, 2020, it had a product range of 7,200+ SKUs. The products are used for varied applications in plumbing, irrigation, and soil, waste and rain water (SWR) management.
- **Multi-manufacturing model:** PPF has six strategically located manufacturing plants, which gives them a strong presence in North, West and South India. The plants are located at the following locations: Athal (Union Territory of Dadra and Nagar Haveli); Dadra (Union Territory of Dadra and Nagar Haveli); Haridwar (Uttarakhand); Chennai (Tamil Nadu); Kolhapur (Maharashtra) and Jobner (Rajasthan). The total installed capacity of the six existing plants is 255,899te per annum as of Mar’20. It also deals with five contract manufacturers, of which, two are in Aurangabad (Maharashtra), one in Guntur (Andhra Pradesh), one in Balasore (Odisha) and one in Hajipur (Bihar).

Expansion: PPF recently expanded its installed capacity at Jobner (Rajasthan) unit from 6,221te per annum to 20,909 te per annum in FY20. PPF also plans to set up a new manufacturing plant at Sangareddy (Telangana), with a total estimated installed capacity of 51,943te per annum which is likely to commence production by Q2FY22E.

- **Distribution network:** PPF distributes its products from its six plants and 11 warehouses. It sells its products (under brands ‘Prince’ and ‘Trubore’) to 1,408 distributors who then resell the products to wholesalers, retailers, and plumbers. Under the brand ‘Prince’ the company currently deals with 1,151 distributors in India while dealing with 257 distributors for marketing its Trubore’ brand of piping products.
- **Multi-brand model: PPF operates under two brands:**

‘Prince’ brand: Until 2014, PPF’s business was carried on under the brand ‘Prince’ with a different logo. One of its near competitors PSWR used the same logo. Thus, in order to differentiate it, the company changed its logo to Prince Piping Systems. PPF currently sells its widest range of products under this brand. The Prince brand accounted for over 90% of its overall revenues in FY20.

‘Trubore’ brand: In Oct’12, PPF acquired the legal and proprietary rights, title, interest and property of the trademarks of Chemplast Sanmar besides acquiring its two manufacturing plants in Kolhapur and Chennai. Trubore brand products are currently sold in South India, primarily in Tamil Nadu.

Company plans to increase sales of Trubore brand products by increasing marketing efforts and the number of wholesalers and retailers for Trubore brand products. It plans to expand the presence of Trubore brand initially in all other states in South India and then gradually expand in North, East and West India, thereby, making Trubore brand a pan-India brand in the next three or four years. Trubore brand accounted for less than 10% of its overall revenues in FY20.

- **Products:** PPF currently manufactures polymer pipes using four different polymers: UPVC; CPVC; PPR; and HDPE, and fittings using three different polymers: UPVC; CPVC; and PPR. As at Mar'20, it had a product range of 7,200+ SKUs

Table 6: PPF's product portfolio and the timelines of launch

Product portfolio	Systems	Year of introduction
Plumbing Solutions		
Smartfit CPVC	Plumbing systems	2008
Easyfit UPVC	Plumbing systems	1992
Greenfit PP-R	Plumbing & Industrial systems	2003
Rainfit UPVC	Roofwater systems	2000
Sewage & Underground drainage		
Ultrafit UPVC	SWR systems	2008
Silentfit UPVC	Low noise SWR systems	2015
Foamfit UPVC	Underground drainage piping systems	2014
Corfit HDPE	Underground DWC pipes	2017
Irrigation solutions		
Aquafit UPVC	Pressure & Non-pressure agricultural pipes & fittings	1989
Safefit UPVC	Borewell systems	2000

Source: Company data, I-Sec research

- **PPF – Historical timelines**

Table 7: Key events

Calendar Year	Details
1987	Incorporated as a private limited company
1995	Set up a large-scale plastic injection moulding and extrusion unit in Athal, Dadra and Nagar Haveli
2000	New plant set up at Dadra for pipe manufacturing
2008	New plant set up at Haridwar for manufacturing pipes and pipe fittings
2012	Acquisition of plants in Chennai and Kolhapur of Trubore Piping System, a division of Chemplast Sanmar Limited
2013	Merger of Kenson Manufacture Private Limited into Company
2016	First player to launch loyalty program called 'Prince Udaan' to reward its value chain
2017	Conversion from a private limited company to a public limited company
2018	Appointed Akshay Kumar as Brand Ambassador and rolled out campaigns across platforms
2019	New plant set up at Jaipur for pipe manufacturing
2020	Got listed on BSE & NSE with an IPO of Rs5bn including Rs2.5bn of OFS

Source: Company data, I-Sec research

- **PPF promoter group profile**

Table 8: Promoter family, their designation and primary roles

Promoter family	Designation	Key areas of responsibility
Jayant Shamji Chedda (Age: 73)	CMD	Finance & Procurement
Parag Jayant Chedda (Age: 48)	ED	Production, IT, Marketing, HR
Vipul Jayant Chedda (Age: 44)	ED	Institutional Sales and head of PPR segment
Heena Parag Chhedda (Age: 48)	VP, Finance	Accounts & Admin
Nihar Parag Chhedda (Age: 34)	AVP	Strategy & New product development

Source: Company data, I-Sec research

Financial summary

Table 9: Profit and Loss statement

(Rs mn, year ending Mar 31)

	FY18	FY19	FY20	FY21E	FY22E
Net Sales	13,099	15,606	16,357	15,104	18,125
Add: Other Operating Income	51	113	-	-	-
Net revenue	13,150	15,719	16,357	15,104	18,125
Less:					
Cost of goods sold	9,214	11,274	11,264	10,384	12,488
Employee cost	726	817	902	785	852
Others	1,577	1,788	1,903	2,009	2,103
Total Operating Expenses	11,517	13,878	14,069	13,179	15,443
EBITDA	1,633	1,841	2,288	1,926	2,683
Depreciation	381	436	520	590	700
Other income	60	71	69	144	73
EBIT	1,313	1,476	1,838	1,479	2,055
Less: Financial expenses	361	363	332	258	250
Recurring Pre-tax Income	952	1,113	1,506	1,221	1,805
Less: Taxation	224	292	381	309	455
Less: Minority Interest / Subsidiary loss	-	-	-	-	-
Net Income (Reported)	728	821	1,125	912	1,350
Extraordinary Items	-	-	-	-	-
Recurring Net Income	728	821	1,125	912	1,350

Source: Company data, I-Sec research

Table 10: Balance sheet*(Rs mn, year ending Mar 31)*

	FY18	FY19	FY20	FY21E	FY22E
ASSETS					
Current Assets, Loan & Advances					
Inventories	2,415	2,011	3,445	2,276	2,731
Sundry debtors	2,394	2,504	1,797	2,069	2,483
Cash and bank balances	96	223	2,570	2,558	2,635
Other current assets	1,214	1,178	1,047	1,100	1,150
Loans and advances	79	170	275	300	400
Total Current Assets	6,198	6,085	9,135	8,303	9,399
Current Liabilities & Provisions					
Current Liabilities	1,970	2,152	1,808	1,655	1,986
Provisions and other liabilities	1,375	1,595	1,352	1,494	1,524
Total Current Liabilities & Provisions	3,345	3,747	3,160	3,149	3,510
Net Current Assets	2,853	2,339	5,975	5,154	5,889
Investments	7	8	6	6	6
Fixed Assets					
Gross block	4,135	4,787	6,496	8,496	9,096
Less: depreciation	688	1,091	1,611	2,201	2,901
Net block	3,447	3,696	4,886	6,296	6,196
CWIP	147	615	75	-	-
Goodwill	-	-	-	-	-
Total Assets	6,453	6,658	10,943	11,456	12,091
LIABILITIES AND SHAREHOLDERS' EQUITY					
Shareholders Fund					
Equity share capital	900	900	1,100	1,100	1,100
Reserves and surplus	2,266	3,108	7,277	7,990	9,075
Total Shareholders Fund	3,166	4,008	8,377	9,090	10,175
Borrowings					
Secured loans	1,462	1,058	395	195	195
Unsecured loans	1,698	1,457	2,038	2,038	1,588
Total Borrowings	3,160	2,514	2,433	2,233	1,783
Deferred Tax Liability	127	135	133	133	133
Minority Interest	-	-	-	-	-
Total Liabilities & Shareholders' Equity	6,453	6,658	10,943	11,456	12,091

Source: Company data, I-Sec research

Table 11: Cashflow statement*(Rs mn, year ending Mar 31)*

	FY18	FY19	FY20	FY21E	FY22E
Cash Flow from Operating Activities					
PAT	728	821	1,125	912	1,350
Add: Depreciation	381	436	520	590	700
Add: Other Operating activities	(450)	(10)	(183)	(20)	(20)
Operating Cash Flow Before Working Capital change (a)	658	1,247	1,462	1,482	2,031
Changes in Working Capital					
(Increase) / Decrease Trade & Oth receivables	(27)	(110)	707	(272)	(414)
(Increase) / Decrease Inventories	(673)	405	(1,435)	1,169	(455)
Increase / (Decrease) Current liab and provisions	1,221	399	(596)	(10)	361
Others	(794)	(55)	26	(78)	(150)
Working Capital Inflow / (Outflow) (b)	(273)	638	(1,299)	809	(658)
Net Cash flow from Operating Activities (a) + (b)	386	1,885	164	2,291	1,373
Cash Flow from Capital commitments (c)	(1,089)	(1,120)	(1,170)	(1,925)	(600)
Free Cash flow after capital commitments (a) + (b) + (c)	(704)	765	(1,006)	367	773
Cash Flow from Investing Activities					
Purchase of Investments	1	(0)	10	20	20
Change in goodwill	-	-	-	-	-
Net Cash flow from Investing Activities (d)	1	(0)	10	20	20
Cash Flow from Financing Activities					
Equity raised/(repaid)	450	-	3,560	-	-
Proceeds from fresh borrowings	215	(646)	(82)	(200)	(450)
Dividend paid including tax and others	-	-	(133)	(199)	(265)
Net Cash flow from Financing Activities (e)	665	(646)	3,346	(399)	(715)
Change in Deferred Tax Liability (f)	10	8	(2)	-	-
Total Increase / (Decrease) in Cash (a) + (b) + (c) + (d) + (e) + (f)	(27)	127	2,347	(12)	77
Opening Cash and Bank balance	124	96	223	2,570	2,558
Closing Cash and Bank balance	96	223	2,570	2,558	2,635
Increase / (Decrease) in Cash and Bank balance	(27)	127	2,347	(12)	77

Source: Company data, I-Sec research

Table 12: Key ratios*(Year ending Mar 31)*

	FY18	FY19	FY20	FY21E	FY22E
Per Share Data (Rs)					
EPS	6.6	7.5	10.2	8.3	12.3
Cash EPS	10.1	11.4	14.9	13.7	18.6
Dividend per share (DPS)	-	-	1.0	1.5	2.0
Book Value per share (BV)	28.8	36.4	76.1	82.6	92.5
Growth (%)					
Net Sales	5.4	19.1	4.8	(7.7)	20.0
EBITDA	0.4	12.7	24.3	(15.8)	39.3
PAT	(1.9)	12.9	37.0	(18.9)	48.1
Cash EPS	(1.9)	12.9	37.0	(18.9)	48.1
Valuation Ratios (x)					
P/E	29.8	26.4	19.3	23.8	16.1
P/CEPS	19.6	17.2	13.2	14.4	10.6
P/BV	6.8	5.4	2.6	2.4	2.1
EV / EBITDA	15.1	12.9	8.3	9.8	6.8
EV / Sales	1.9	1.5	1.2	1.2	1.0
Operating Ratio					
Raw Material / Sales (%)	68.2	68.7	71.4	68.8	68.9
Employee cost / Sales (%)	5.5	5.2	4.4	5.2	4.7
SG&A / Sales (%)	6.3	6.7	6.7	8.1	6.9
Other Income / PBT (%)	6.3	6.4	4.6	11.8	4.0
Effective Tax Rate (%)	23.5	26.2	25.2	25.3	25.2
Working Capital (days)	79.1	55.3	76.6	65.0	65.0
Inventory Turnover (days)	67.3	47.0	76.9	55.0	55.0
Receivables (days)	66.7	58.6	40.1	50.0	50.0
Payables (days)	54.9	50.3	40.3	40.0	40.0
Net D/E Ratio (x)	0.2	0.0	0.1	0.0	(0.1)
Return/Profitability Ratio (%)					
Net Income Margins	5.6	5.3	6.9	6.0	7.5
RoACE	21.4	22.0	20.5	13.0	17.2
RoAE	26.0	22.9	18.2	10.4	14.0
Dividend Payout	-	-	11.8	21.8	19.6
Dividend Yield	-	-	0.5	0.8	1.0
EBITDA Margins	12.5	11.8	14.0	12.7	14.8

Source: Company data, I-Sec research

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