Indian Paper Industry

Positive upcycle or an aberration?

Introduction

With an annual turnover of Rs 50,000 Cr., the Indian Paper Industry accounts for about 3% of the world's total production. In the last two decades, the industry has managed to provide sustainable employment to more than 20 lakh people. The Indian paper industry has been going through some turbulent times ever since the government's push towards cashless economy followed by the GST rollout in 2017. Although the pessimism in the paper industry has aggravated, still there is some scope for growth considering traditional practices followed in the allied sectors such as Education, Print Media, Tissue Papers and Packaging etc.

How is Paper made?

The paper was invented in China, some centuries ago, although there is no official record regarding when it actually happened.

The paper is produced by converting wood logs into chips. The chips are mixed with water and are allowed to boil until the pulp is formed. (Pulp, basically, is the primary raw material used for manufacturing paper, and it can be obtained through processing of wood, wastepaper and agriculture residue like bagasse and wheat straw). The pulp is then left to dry in a rectangular vessel. The solution then gradually and completely assumes the shape of its container and materialized into a rectangular sheet of paper.

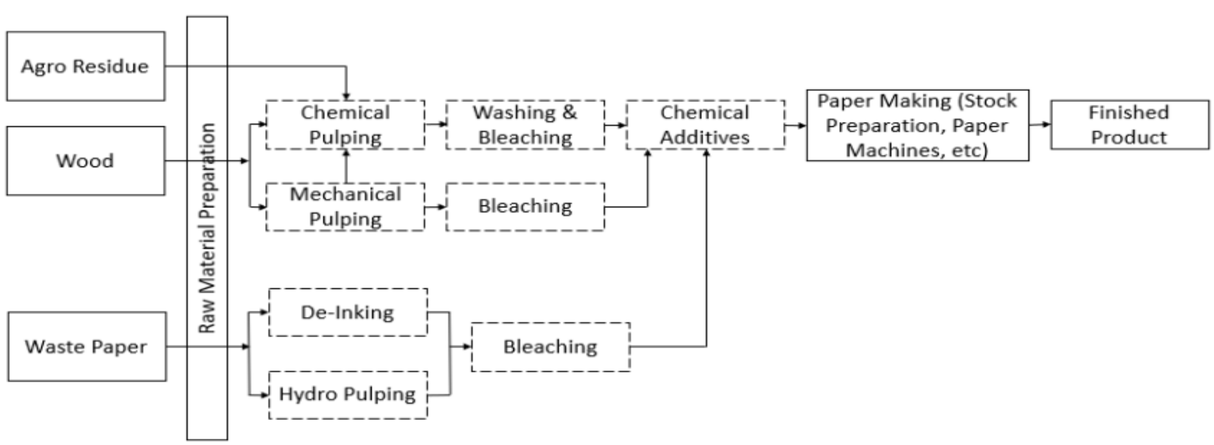
In the olden days, the process was quite inefficient while the quality of the paper obtained was quite crude.

The advent of a Paper Mill

Since the advancement in technology, there has been an exponential improvement in the paper production process.

Step 1: Now, the chips are mixed with a solution of acid which separates the desirable plant fibers from the undesirable lignin (which turns the paper yellow with time) making the solution pulpy and fibrous. The pulp is then described as wood-free because it only contains plant fibers.

Step 2: The pulp is, then, cleaned and bleached with water to remove the acid and ensure that no residual lignin survives. The treatment with water helps it to acquire a white color, which is characteristic of paper.



Non-wood Fibre as a source for paper manufacturing:

Softwood, used for making newsprint and high-quality printing papers, is the primary source of raw material in India. But, India is a wood pulp deficient country as perennially it has scarce forest resources. Also, the tropical climate in India is not suitable for softwood as it thrives in the temperate region. Hence, India has to depend on 'bamboo' as the main source of raw material for making paper in the country.

India has a total land area of 3.3 million sq km with forests covering only 0.7 million sq km. About 78% of the total land area is the non-forest area. Due to the limited availability of wood, agro-based raw materials and waste paper are generally used as substitutes for manufacturing paper.

The paper production using Agri residue as a source of raw material is quite efficient in nature as it requires less time to process with fewer usage of water, chemicals and energy. Higher availability of Agri residue coupled with financial incentives provided by the govt. has led to an increase in its usage as compared to wood pulp.

In India, Wood accounts for 30-35% of production, while wastepaper and Agri-residues account for 45-50% and 20-22%, respectively. For a variety of reasons including seasonal availability, problems with chemical recovery, a brightness of the pulp etc, non-wood fibre sources account for a very small portion of global pulp production.

Apart from the wood itself, water is the most important ingredient of the process. At least 100L of water is required to make 1kg of paper. There are a number of chemicals required to be added, particularly in the pulping and bleaching stage of paper production. Hence, chemicals represent one of the major cost drivers of the paper industry.

Geographical presentation of Indian Paper Industry- driven by water & raw material availability

Around 72% of the total installed capacity in India is concentrated in the states of Andhra Pradesh, Tamil Nadu, Gujarat, Maharashtra, Punjab and Madhya Pradesh. The usage of raw material is dependent on the geographical location of the paper mills.

Company	Location	Paper Type	Raw Material	Paper Capacity (MTPA)	Pulp Capacity (MTPA)	Integration Levels*	Captive Power	Major RM Constrain?
JK Paper	Gujarat & Orissa	WPP and Packaging Board	Wood Pulp and Waste Paper	455,000	276,000	76%	Yes	No Constrain
Ballarpur Industries	Maharashtra	WPP, Speciality and Tissue Paper	Wood Pulp	856,000	420,000	61%	Yes	Labour
TNPL	Tamil Nadu	WPP	Bagasse &Wood Pulp	600,000	377,600	79%	Yes	Water
ITC	Telangana	Specialty Paper and Paperboard	Wood Pulp and Waste Paper	742,000	350,000	59%	Yes	No Constrain
Century Textiles	Uttarakhand	WPP, Paperboard & Tissue Paper	Wood Pulp ,Waste Paper & Bagasse	413,810	193,320	58%	No	No Constrain
WCPM	Karnataka	WPP and Kraft	Wood Pulp	320,000	232,000	91%	Yes	No Constrain
Astron Paper	Gujarat	Kraft Paper	Waste Paper	128,000	NA	NA	No	No Constrain
Genus Paper	Uttar Pradesh	Kraft Paper	Waste Paper	140,000	NA	NA	Yes	No Constrain
South India Paper	Karnataka	Kraft Paper	Waste Paper	60,000	NA	NA	Yes	Labour
Shree Ajit Pulp & Paper	Gujarat	Kraft Paper	Waste Paper	90,000	NA	NA	No	No Constrain
Ruchira Papers	Himachal Pradesh	Kraft and WPP	Agricultural residues and Waste Paper	85,800	NA	NA	Yes	No Constrain
IP APPM	Andhra Pradesh	WPP	Wood Pulp	241,000	181,500	94%	Yes	Labour
Seshasayee Paper	Tamil Nadu	WPP	Wood Pulp	210,000	145,000	86%	Yes	Water
Emami Paper	West Bengal	Newsprint,WPP & Packaging Board	Waste Paper	3,30,000	NA	NA	Yes	No Constrain
N R Agarwal	Gujarat	Newsprint,WPP & Duplex Board	Waste Paper	354,000	NA	NA	Yes	No Constrain
Pudumjee Paper Products	Maharashtra	Specialty Paper	Wood Pulp & Waste Paper	60,000	NA	NA	No	No Constrain
Star Paper Mills	Uttar Pradesh	Kraft and WPP	Wood Pulp & Waste Paper	75,000	NA	NA	Yes	No Constrain
Orient Paper	Madhya Pradesh	WPP and Tissue Paper	Wood Pulp	1,05,000	72,500	86%	Yes	Water

*Assuming 0.8 tonnes Pulp required for 1 tonne of Paper

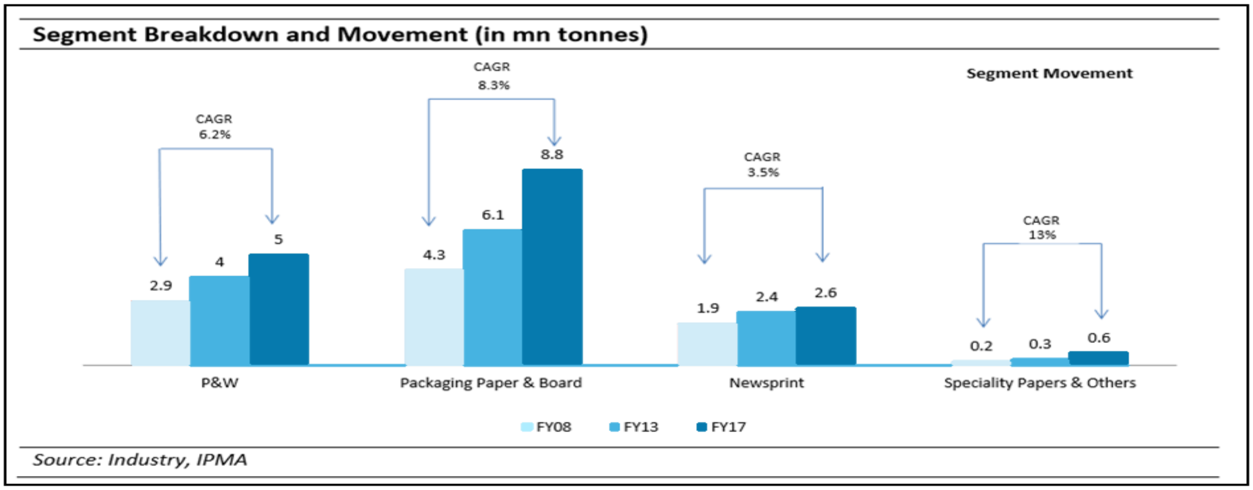
Proximity and assured availability of forest resources, availability of water, forest policy of the state, and closeness to clients (for the prompt delivery of products) are some of the factors that influence the location of the manufacturing facility.

In India, the paper mills have to strategically choose a location which has an adequate supply of water as the industry is one of the largest consumers of water. Surface water is the primary source of water for large integrated mills while small and medium-sized mills are dependent on the groundwater for their water consumption. Indian paper mill's fresh water consumption is in the range of 120-200 cubic meter/ton which is quite high compared to their global counterparts (20-60 cubic meter/ton). This is largely on account of the use of obsolete technology and poor water management practices.

Despite being closer to the raw material supplies and water resources, the Indian players have to consistently depend on imports as there are a lot of issues pertaining to the availability of quality of raw material in India.

Industry Segmentation

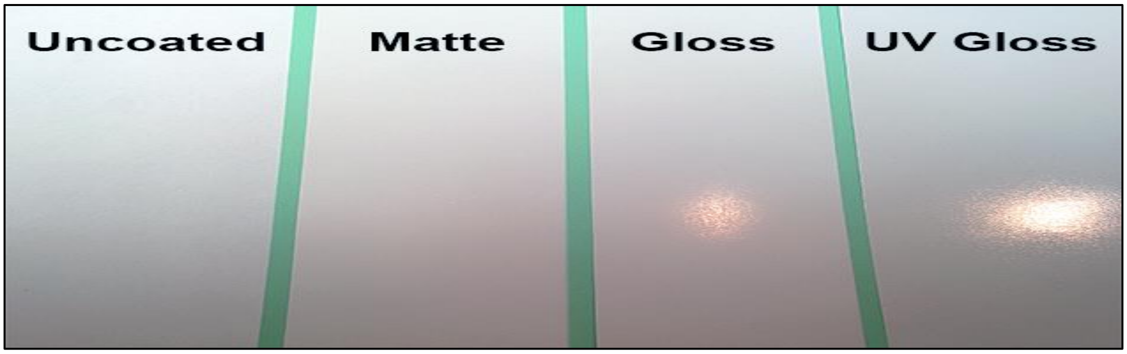
The paper industry is classified into four segments, Printing & Writing (P&W), Packaging Paper & Board, Specialty Papers & Others, and Newsprint.



1) The **Printing and Writing (P&W) paper segment** forms ~29% of the domestic paper market. Domestic demand for P&W paper is approx 5 million tonnes. P&W segment can be sub-categorized into 4 parts:

    i. Uncoated Wood-Free (UWF)
    ii. Coated Wood-Free (CWF)
    iii. Uncoated Mechanical (UM)
    iv. Coated Mechanical (CM).

- The porous surface of the uncoated paper makes it easier to absorb more ink compared to coated paper. Uncoated paper is often referred to as bond paper and is used for printed materials like student workbooks, letterheads, envelopes etc.
- During the manufacturing process, a coating is applied on the uncoated paper which gives the paper a glossy, matt or silky finish. That paper is referred to as a 'coated paper'. This type of paper offer sharper details to images hence is used extensively for brochures or anything that has images and design elements.
- Wood free papers (also called free sheet) are made when the wood is chemically treated to release lignin and produce a pulp that is nearly pure cellulose. Lignin is essentially the glue that holds the cellulose fibers together in the tree. It is dark and gives paper opacity, but does not add strength and makes the paper less white.
- Mechanical (or ground wood) papers are made by mechanically grinding the wood to produce pulp. In mechanical pulp, the lignin remains and thus Mechanical Paper has low brightness and is primarily used in printing.
- The domestic channel produces an adequate quantity of UWF and CWF papers while the demand for UM and CM grades is met through imports as there's a lack of availability of softwood or mechanical pulp in India.

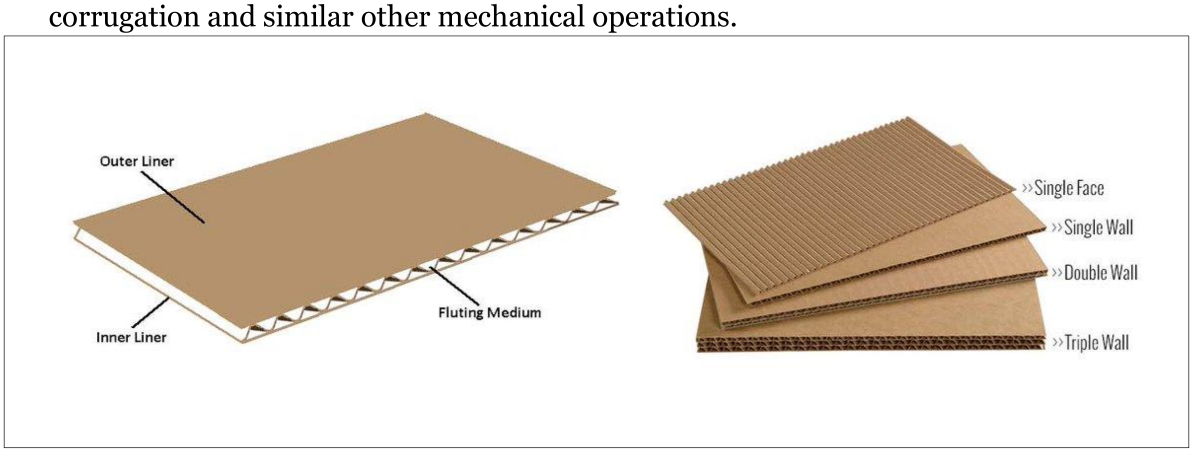


The last decade has witnessed rising literacy rates in India and the trend is expected to continue as the government is actively promoting the campaign "Sarv Shiksha Abhiyaan". This initiative has led to increased spending on education thereby increasing the demand for Printing and Writing Paper.

2) In the last decade, the **Newsprint Segment** has grown at a CAGR of 3.5% and today constitutes about 15% of the Indian Paper Industry. It has been largely dependent on the print media and is growing on the back of rising literacy and increased circulation of vernacular dailies. The newsprint import has sharply increased (around 60% now) in the last few years due to the terms of the ASEAN free tree agreement which brought the customs duty of 2.5% down to zero, much to the detriment of domestic players.

3) With a market share of 28%, the **Kraft Paper** finds extensive use in the manufacturing of corrugated boxes, packing and fold insertion material in the textile industry, ordinary boxes (Card Board, Mill Board boxes etc.) manufacturing, book/notebook/register binding, envelope manufacturing etc.

- The number of Corrugated Sheets per side of the Box denotes the nomenclature of the Box e.g. Single Ply (for Single Corrugated Sheet pasted with Single Insertion of Plain Sheet), Double Ply (with the obvious combination), and Triple Ply and so on so forth. Needless to say, that the weight of a Corrugated Box is totally attributed to the Kraft Paper used for its manufacturing.
- Paper is classified by its Weight and Strength. Its nomenclature is based on either the Weight per Square Meter i.e. Grams per Square Meter (GSM) or the Strength i.e. the Bursting Factor B/F. The Kraft Paper is available from 70 GSM to 270 GSM or 12 B/F to 35 B/F. Obviously, the higher GSM or B/F would denote better qualities. The higher Bursting Factor of Kraft Paper as compared to other Papers makes it most suitable for corrugation and similar other mechanical operations.



Paper Types in Packaging	
Kraft Liner	Kraft Liner is defined as one of the types of packaging paper or paperboard, whose fiber content has no less than 80% Virgin fibers obtained by the chemical sulfate or soda processes. Due to its high strength and moisture resistance, kraft liner is used as an outer and intermediate ply, especially in corrugated board. The high strength is achieved due to the use of virgin fiber in the production of kraft liner, which has low recycled fiber content.
Test Liner	The term testliner refers to types of packaging paper with different bursting strengths. Since some grades of testliner have lower burst factors as they contain high amounts of recycled fibers Testliner, like kraft liner, is used for the outer and intermediate plies of corrugated board. However, its strength is not quite as high as that of kraft liner, as it has a higher recycled fiber content.
Fluting Paper	Fluting Paper is the middle liner of the corrugated board, which may be supplied individually as a type of protective packaging. It provides protection by filling empty spaces in the outer case and providing a cushioning effect for the primary product. Fluting paper is 100% recyclable and made from a renewable resource.

4) **Specialty papers & others** is the smallest segment, accounting for around 4% of the industry's total revenues. It is used for packaging of gift items, grocery bags, etc. and tissue papers. This segment especially tissue papers is the fastest growing segment. Its demand is derived out of a general improvement in the standard of living which allows for the substitution of paper for general packing purpose.

Industry Dynamics

Since 2016, there has been a marginal increase in the demand for paperboard on the global front while the WPP and the newsprint segment has witnessed a de-growth mainly on the account of the general preference towards the cashless economy along with high penetration of digital media. Globally, the proportion of WPP segment is substantially smaller as compared to the specialty segment while it is the opposite in the domestic market.

Products	Volume (mn tons FY17)		Projected CAGR [2021/2017]		India's segmental Market Share	Players
	Global	India	Global	India		
Newsprints	46.6	2.6	-2.8%	1%	15%	NR Agarwal, Shree Rama Newsprint
Writing and printing paper - Coated Paper	25.8	0.8	-0.5%	6%	5%	Ballarpur Industries, JKPL
Writing and printing paper - Uncoated Paper	54.2	4.3	-0.3%	3.7%	25%	TNPL, WCPM, IP APPM, JKPL, Emami Paper, Seshasayee
Paperboards - Virgin	43.7	0.8	2%	12.9%	5%	ITC, TNPL, WCPM, Emami Paper, JKPL
Paperboards -Recycled		3.2		7.1%	19%	TC, TNPL
Industrial Paper incl. Kraft Paper	165.7	4.8	2.2%	9.1%	28%	Astron, Ruchira, Genus Paper, South India Paper, Shree Ajit Pulp & Paper
Tissue paper	33.6	0.1	3.2%	15.5%	1%	Century textiles, Ballarpur Industries, Orient Paper
Specialty paper like Cigarette Paper, Décor Papers	36.7	0.5	-1%	7.5%	3%	ITC, WCPM
Total	**406.3**	**17.1**	**1%**	**6.3%**	**100%**	

Source: JK Paper

Demand Supply Mismatch

The Indian paper industry has managed to grow from 12.8 MMT to 17 MMT in the last 5 years at a CAGR of 7.35%. The demand for books and textbooks has been accentuated by the rise in the literacy rates while the emergence of E-commerce giants has paved the way for phenomenal growth in the paperboard & packaging industry.

The growing concern over the plastic packaging as an environmental hazard along with the recent plastic packaging by the Maharashtra government has led to the emergence of paper packaging as the next best alternative. In the last few years, consumer product companies have been actively using premium packaging as a way to differentiate themselves from their competitors.

While the demand has been steadily increasing, Indian paper companies have been the direct beneficiary of tight supply scenario and falling costs over the period. Over the last 7 years, incremental demand for paper has outstripped supply and the gap is expected to widen till 2021.

The Indian paper companies have increased production which is evident from the industry's average capacity utilization rate which has hit a peak of 86%. In absolute terms, the demand for paper is expected to rise by 53% over the next few years. Meanwhile, some companies are planning to expand their capacities to take advantage of these industry tailwinds.

Supply Side

In 2010, the Indian companies started to aggressively expand their capacities on the account of demand-supply mismatch. The capacities were specifically built in Printing & Writing Paper segment. The total expansion was around 1.6 MMT which was 15% of the total paper production in the country at the time.

During the same time, the wood pulp prices increased which is the main raw material for printing and writing paper. Added capacity expansion led to a build-up of inventories and with pricing pressures due to high RM Cost led to stress on profit margins for most players during this period. The companies were unable to pass on the higher prices to consumers and at the same time also faced stiff competition from cheap imports from China and other ASEAN countries. Profits were severely impacted, especially for leveraged companies.

What has changed now?

Ballarpur Industries (BILT), the largest paper manufacturer in India, went on aggressive capacity expansion and is now saddled with huge debt on their balance sheet. The situation was exacerbated by the shrinking margins through rising raw material costs and severe competition in the industry. Due to lack of working capital in the last few years, the company's production kept falling thereby creating a supply gap in the industry.

Similarly, majority of the firms were reeling under a lot of pressure and were trying to keep their heads above the water. Around two-third of the firms succumbed to the pressure and eventually shut their shops due to mounting losses. Since then, there hasn't been any major capacity expansion by the paper companies. Only a few of them have planned to add some new capacities over the coming few years.

With the support from the Indian Government, the mills bought second hand imported machinery for commissioning agro or secondary fibre based paper plants in the 1980s. Now, these plants cannot be modernized further and setting up a new state of the art plant involved huge costs. Hence, a lot of companies had to shut down their operations.

The current installed capacity of the industry stands at around 14 million tonnes per annum and the industry is operating at a capacity utilization level of around 85 - 90%. 26 out of approximately 50 paper companies listed on BSE have stressed balance sheets. This gave an opportunity to big players to acquire small plants. It usually takes 18-24 months for a brown-field expansion and 24-30 months for a green-field expansion after receiving clearance. So, the company has to acquire smaller players if they immediately want to increase their capacity in order to take advantage of the current demand supply mismatch.

Other triggers

1. **Ban on waste paper import by China**

The consumption of paper and paperboards in China has continued to rise over the last two decades. Today, China has become the largest producer of paper and paperboards in the world with 125.42 million tonnes of production per annum. The paper industry in China has registered a CAGR of around 4.9% from 2007 to 2017. With the limited availability of wood pulp as a source of raw material, China had to resort to waste paper as a major source of raw material for its paper mills. In a few years, China became the world's largest importer of waste paper.

In order to feed their paper mills, China started importing waste paper constituting around 60% of the global trade. The imported waste paper contains a lot of impurities like plastic which causes pollution in the environment. As a result, China banned the import of mixed grade waste paper. Lots of small-scale producers (~3 million tonnes) have shut down due to non-compliance of environment norms.

In 2017, the import volume of waste paper in China reached 25.72 million tons, decreasing by 9.8% YOY. The average price of imported waste paper in 2017 reached USD 824.9/ton, increasing by 36.1% YOY.

From Mar. 1, 2018, Regulations on the Environmental Protection of Imported Waste Paper was implemented, which stipulated that the production capacity of enterprises applying for import permits must reach 50,000 tons/year and that the impurity rate of waste paper was adjusted from 1.5% to 0.5%.

When importing waste paper, enterprises must apply for import quotas from the Ministry of Environmental Protection and be allowed to import only after the approval. In 2017, a total of 28.10 million tons of waste paper import quota were approved.

For example, the three companies namely 'Nine Dragons Paper Company Ltd', 'Lee & Man Paper Manufacturing Ltd' and 'Shanying Paper' account for more than 50% of the total quota while some small and medium-sized companies struggle to get the approval. Permits of several companies were said to be cancelled due to alleged illegal activities. With the better quality of imported waste paper at lower prices, the large-scale papermaking enterprises will grow more competitive which will eventually lead to the industrial concentration in China.

The sudden slowdown in the demand has created an oversupply of waste paper around the world which has put downward pressure on its price. China, imports around 30% of its waste paper consumption, has seen a 34% reduction in its total imports in 2018 as compared to last year. This has resulted in an increase in the price of domestic waste paper in China thereby driving up the prices of paper and paperboards.

Indian manufacturers using waste paper stand to benefit on account of lower global waste paper prices (on excess supply) and higher realization for recycled paper.

2. Global Rise in Wood Pulp Price

The aggregate capacity of the paper mills which were impacted in China due to environmental concerns was to the tune of 3 lacs tonnes per annum. Now, the Chinese paper mills started using the wood pulp as a major source of raw material which led to enormous amounts of imports from countries like Indonesia, Chile, and Malaysia etc. This resulted in a meteoric rise in wood pulp prices thereby pushing up the price of the end product.

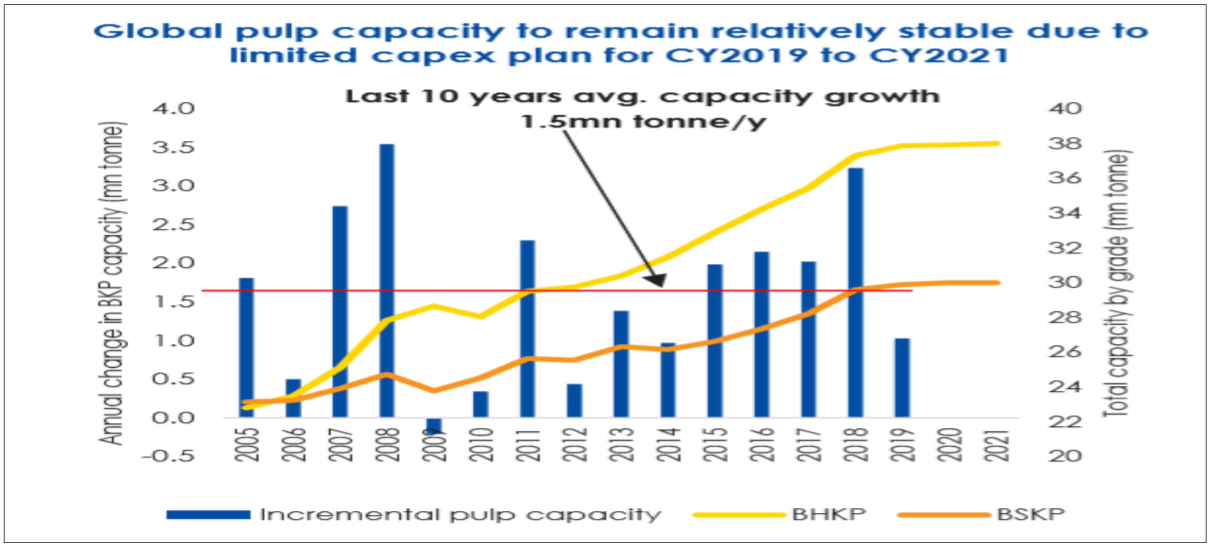
Eucalyptus plant usually takes around 3-4 years to grow. When the wood prices shot up in the year 2013-14 due to a shortage, the farmers were encouraged to cultivate wood plantations for better realizations. These wood plantations have now increased the supply in the domestic market which has resulted in softening of the domestic wood pulp prices.

In November 2017, the government of India reclassified bamboo from forest produce to non-forest produce. Hence, bamboo can be grown outside the reserved forest area as well. This would increase the supply of bamboo and will prevent domestic wood prices to rise as compared to global prices.

The global wood pulp prices are expected to remain firm or increase for quite some time because:

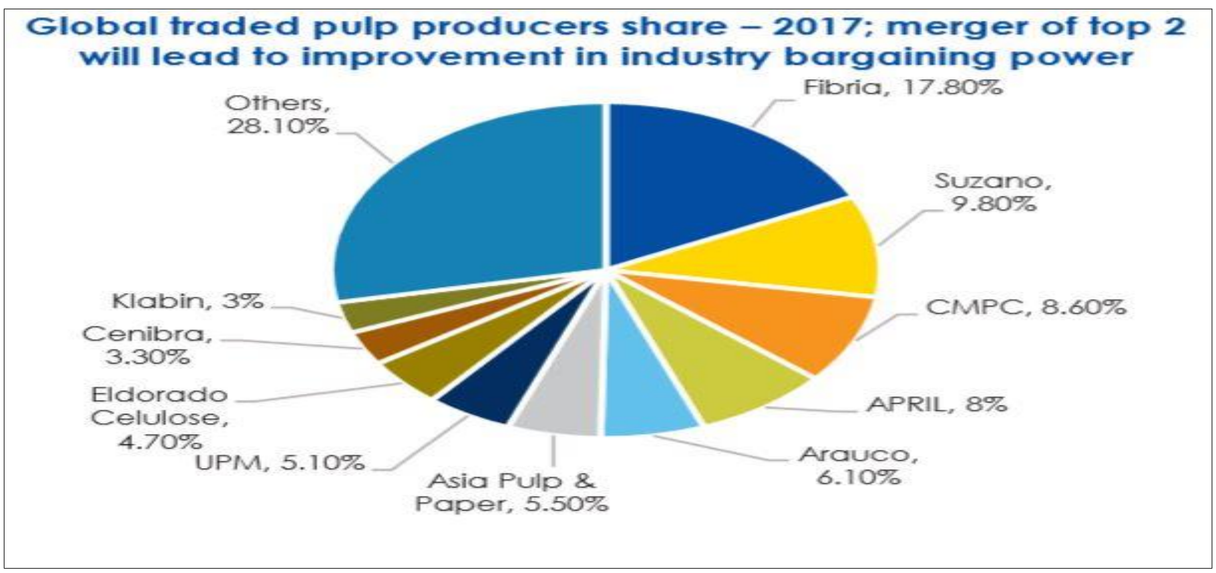
i) There has been an increase in demand from China

ii) No new capacity in the pulp is expected to come soon. Hence, prices are expected to remain firm because there is more demand than supply.



Source: Hawkins Wright, CMPC

iii) The two largest wood pulp companies by market share: Suzano and Fibria have merged in April 2018. This combined entity will further have more bargaining power as they now have a combined market share of 28%.



Source: Hawkins Wright, CMPC

From 2017, there were two events happened in the industry:

1. In Jan 2017, Wildfires sweeping across Chile have destroyed more than 40,000 hectares (98,842 acres) of forestry land belonging to companies, most of it growing pine and eucalyptus for the wood, pulp and paper industry. Chile is one of the leading exporters of wood pulp in the world.

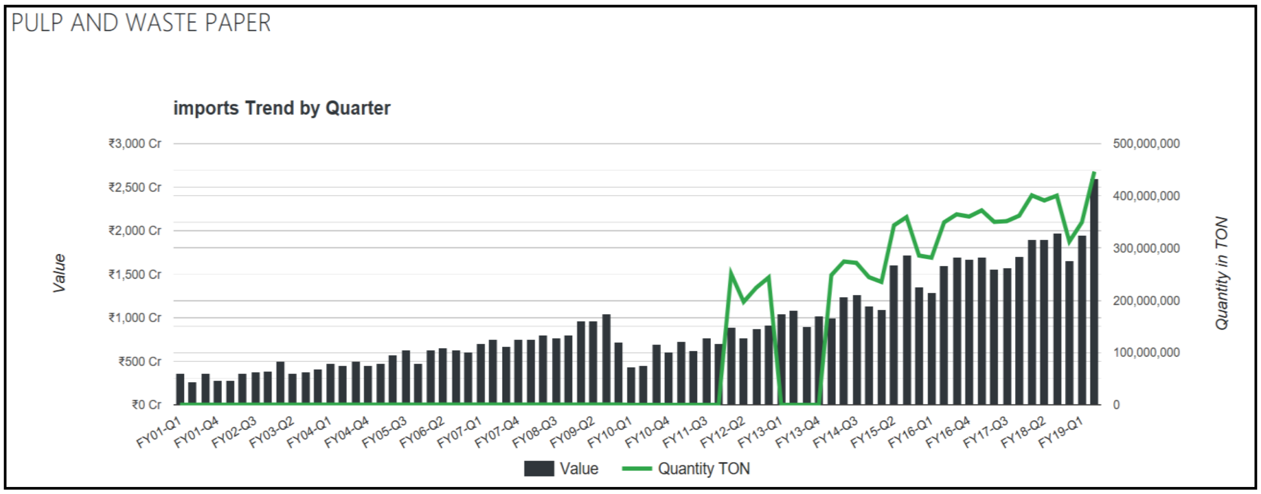
2. Around Sept 2017, Chinese proposed to ban the import of low-grade waste paper from Jan 2018.

Now, two kinds of companies will be able to take advantage of the above situation:

1. The companies which use waste paper as a raw material have a notable advantage to those companies which use other sources, as there has been a considerable fall in the waste paper prices.
2. The companies, which have captive forestry to produce wood pulp, will get the benefit. As prices of end products will get increased hence boosting their profit margins.

While the aforementioned situation will be negative for the company which imports wood pulp as prices of wood pulp across the world rose sharply further exacerbated by precipitous fall in the value of rupee compared to dollar thereby, making the imports even more expensive.

Increase in imports of Pulp and Waste Paper



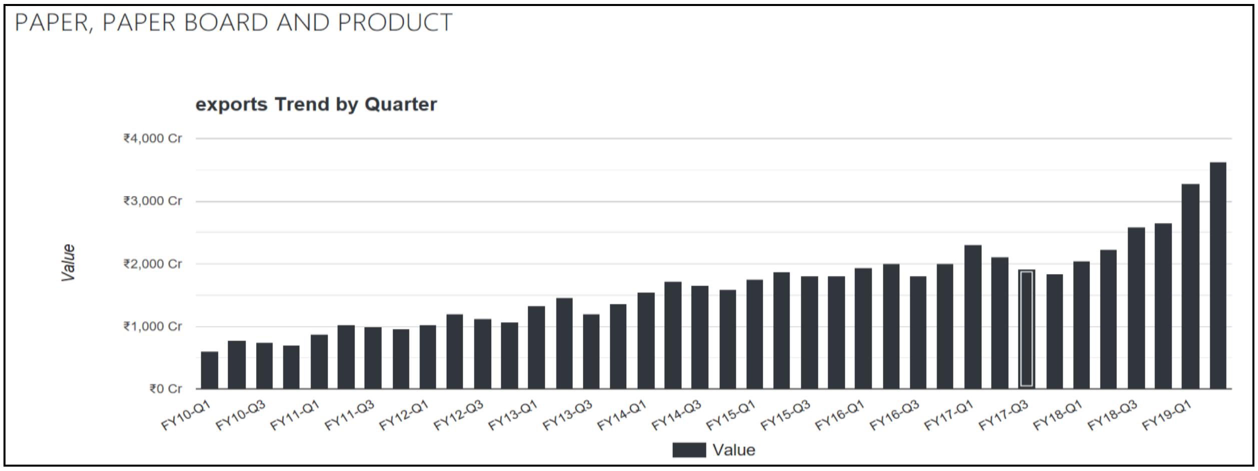
Source: Phreakonomics

3. Decrease in Import of Paper & Paper Products

According to Indian Paper Manufacturer Association (IPMA), the paper produced from raw wood in ASEAN countries is available at $40 per tonne as compared to $110 per tonne in India.

The cheap exports from ASEAN countries were reaching US shores at an unprecedented level. In response, the US established a case against Indonesia and China for dumping and subsidization and hence, has successfully levied anti-dumping and anti-subsidization duties. Post antidumping duties in the US, China and Indonesia started dumping their products in the Indian markets at cheaper prices. Thus, rising imports at predatory prices became a major concern for the domestic paper mills in India.

However, production cut in China and a simultaneous increase in demand has induced China to import from other countries. The weakening of rupee further makes import expensive. In fact, Indian companies are now exporting more as compared to the past few years.



Source: Phreakonomics

4. Imposition on Anti-dumping duty

Paper mills in South-East Asian countries have a distinct advantage over their Indian counterparts as their government promotes wood plantations by providing generous subsidies thereby reducing the wood cost for the local manufacturers. They have adopted scientific plantation practices which have improved both the yield and quality of the paper.

Thus, the cost differential today is around $50-$60 per tonne of wood. The ASEAN-India Free Trade Agreement has further exacerbated the situation for the Indian paper mills by progressively reducing the import duties since 2011. The basic customs duty on paper products was reduced to nil for most products from Jan 2014. Similarly, India - Korea CEPA progressively reduced customs duty since 2009 and fully exempted since Jan 2017

As the import of paper products has seen a sharp increase over the last few years, The Directorate General of Foreign Trade has initiated an investigation on the import of paper under the free agreement act. The investigation started in November'17 and is expected to conclude in around 9-12 months. There is an expectation that the government may impose anti-dumping duties on some kinds of uncoated paper from Indonesia, Thailand and Singapore to protect the domestic firms against cheap imports. The DGAD in its probe has concluded that the product primarily used as a photocopy or copy paper, has been exported to India from these countries below their normal values and consequently, the domestic industry has suffered material injury. The restriction will result in a shortage and, thus, the price would increase.

Consolidation in the Indian Market?

The global consumption of paper and paper products is around 400 million tonnes per annum. The world's three largest paper producing countries are China, the United States, and Japan (these three countries account for around 50% of the world's total paper production), while the Indian paper industry has a turnover of Rs. 50,000cr/annum, and accounts for 3% of the global market.

The global paper and pulp industry has contracted slightly over the past five years, primarily due to disruptive technology, and shift in customer demand. However, the decline in growth in developed markets is expected to be offset by the demand growth in India, Middle East, Africa and Asia.

Production Country wise

- USA: 70mn tones
- China: 109mn tones
- India: 17mn tonnes [out of this only 1.53mn tonnes is produced by top 3 players]

The US market is quite concentrated with 75% of the total paper market controlled by four players. As far as China is concerned, the share of big Chinese firms is consistently rising due to permanent shut down of smaller domestic mills which were not environmentally compliant. As a result, the top three players in China control around 21% of the overall market.

The Indian paper Industry, on the other hand, is highly fragmented in nature. There are more than 750 operational mills around the country with an installed capacity of 25.17 million tonnes. Only 50 companies out of those 750 have installed capacity greater than 50,000 MT/ annum. The top three players account for only 9% of the domestic market in India which is way below their US and Chinese counterparts.

The average capacity of an Indian Paper Mill is about 21,373 MT/annum, which is less than a fifth of the average capacity of European mills, and about a ninth of the size of the average US mill. The water, power and chemical requirements for paper production reduce as the mills grow larger. Typically, smaller sized mills make technology up-gradation difficult which leads to inefficient production and inconsistent quality.

Reasons for impending consolidation of Indian Paper Industry

High Capital Intensity

The paper industry is quite capital intensive in nature as it requires huge investments in land & machinery of paper mills, repair & maintenance of mills, cost of technology up-gradation, environmental compliance, plantation of wood and establishing a wide distribution network. The condition is further exacerbated by the cyclicality of the industry. This makes it quite difficult for a small firm to maintain these high costs and stay competitive.

High costs of environmental compliance

The pulp and paper industry is among the world's largest producers of water pollutants and waste products. This makes the industry heavily regulated, and requires heavy investment from companies to be environmentally compliant. Recently, CPCB has classified the Pulp and Paper industry into the Red category, which means stricter environmental clearance for new factories.

Aftermath of GST: GST is levied on most paper products in the range of 12%-18%. Earlier, the small firm used to keep competitive pricing by avoiding taxes. With the stringent GST norms, the small firm will find it difficult to stay competitive and may drive them further towards the path of consolidation with the larger firms.

This is a natural trend which has been seen in most countries, now the Indian paper Industry could be poised to embrace the next phase of consolidation.

Risks and challenges

1. Access to quality and cost competitive raw material

India has perennially been a wood deficient country due to the strict stance of the government to not allow industrial plantations in the country. Hence, inadequate availability of raw material is the major concern for the Indian Paper Industry. Another major source of raw material is the 'Waste Paper' which is marred by low recovery rates (around 30%) due to lack of effective collection mechanism. Hence, for a consistent supply of raw material, many players depend on imports of pulp, wastepaper etc at a premium which further impacts their margins.

The Indian paper mills are struggling to maintain their margins with a consistent rise in commodity prices both for production and transportation. The energy cost of an Indian paper mill accounts for around 13% of the overall cost as compared to 8% for international players. *The government has recently banned the use of Pet coke as a fuel which will eventually lead to increased energy cost for some players. Also, the oil prices recently have been on an upswing which has increased the logistics cost of paper as well.*

2. Imports

The imported paper accounts for about 20% of the total paper production in India. The demand for imported paper has grown at a CAGR of around 10% in the last five years which is more than the rate at which the domestic demand is growing. The reason for this high growth is attributable to its superior and lower price (due to the reduction in customs duty).

<u>Strategy to tackle cheap foreign imports</u>

In the quest to survive the onslaught of cheap imports, many companies have started backward integration process or captive plantation facilities in order to improve operational efficiencies and save costs. The water availability is better in the northern regions of India as compared to the south. Hence, in a bid to save costs, many companies have started shifting their plants from south to north.

Even, Indian Paper Manufacturer Association has proposed to the government to include paper mills in the 'Make in India' project so as to cut imports and promote domestic expansion. Moreover, complete digitization would prove more hazardous as paper waste is easier to decompose than e-waste, and wood, which is the biggest raw material, can be multiplied by planting more or recycling.

3. Technological obsolescence

The Indian paper industry is largely fragmented and prone to using outdated technologies. Consequently, it is estimated that both the raw material as well as the power consumption are higher compared to a competing global mill. The adoption of the state of the art technology may help the companies reduce costs and also will put pressure on the other players to remain competitive.

In this report, I have deliberately not included big companies like JK Paper, West Coast Paper Mills and Tamil Nadu Newsprint& Papers as they are quite extensively covered by all major research houses. For those who are interested in reading about these companies can find the Investec report here.

Listed below are a few small companies that I have covered in this report.

Sr. No	Company	Page No.
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Astron Paper & Board Mill Limited

Introduction

Astron Paper and Board Mills Limited was incorporated in December 2010 and is engaged in the manufacturing of Kraft Paper which finds application in packaging industries for textiles, white goods, pharmaceutical and chemicals.

Journey so far

2010	• Incorporation of Company
2012	• Commencement of commercial production.
2014	•Achieved turnover of more than Rs.100 crores.
2014	•Received ISO 9001: 2008 and ISO 14001: 2004 certification in respect of in respect of manufacture and dispatch of Kraft Paper.
2014	•Received FSC- STD-40-004 V2/1 Standard for COC Certification – October 2011 and FSC-STD-40-007 V2-0 Sourcing reclaimed materials – April 2011 in respect of purchase of pre and post-consumer recycled carton boxes and manufacture of 100% FSC Recycled Kraft paper in rolls containing at 85% post-consumer material under percentage system.
2016	•Received Authorised Economic operator- T1 certificate.
2017	•Received permission for availing Direct Port Delivery facility.

Product Portfolio

The company offers a wide range of products ranging from High RCT (Ring Crush Testing- It gives information on the ability of a particular board construction to resist crushing), Kraft Liner, and Liner to Corrugated Medium Paper, ranging mainly from 140 GSM to 350 GSM and 22-35 BF. These products are used in the corrugation industry for manufacturing various types of packaging boxes and packaging products.

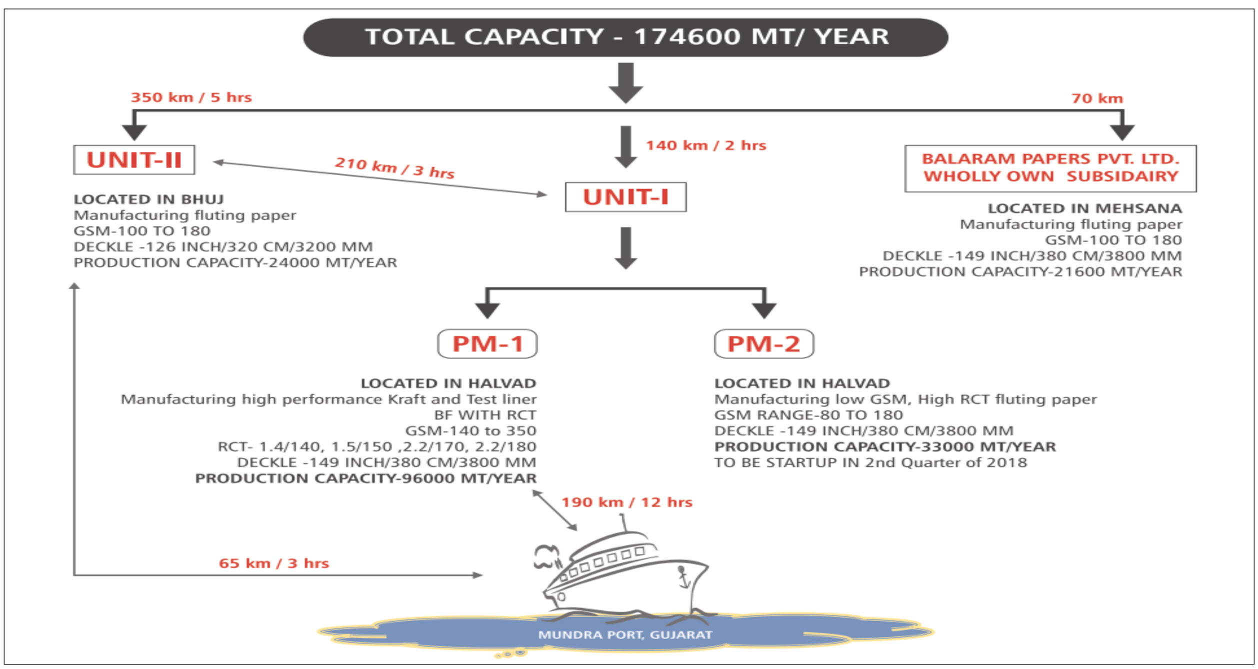
Manufacturing Location

The manufacturing unit of the company was set up at Halvad and became operational in October 2012. The unit is approximately 200 km away from the Mundra Port which facilitates ease in import both in terms of reduction of time and cost of procurement of imported waste paper.

The company has two operational plants with an installed capacity of 96,000 MT/annum (PM1) and 32,000 MT/annum (PM2) respectively. Both the plants are situated in the same premises. The company has also made some value addition in products like manufacturing paper bags (80 to 120 GSM and BF of 40-42) to take advantage of the recent ban on plastic in Maharashtra by making some modification in PM2.

In the last one year, the company has acquired two plants. The first plant has a capacity of around 24,000 MT/annum and is situated in Bhuj, Gujarat. This plant was acquired by an auction from Union Bank of India in December 2017 and commenced commercial production in February 2018. Currently, the Bhuj plant is running at full capacity. The company also acquired Balaram Papers Pvt Ltd located at Mehsana, Gujarat. The plant has an installed capacity of 21,600 MT/annum was bought by the company at a consideration of Rs 21 Cr. (Long Term Debt of 10 Cr. and 11 Cr. from internal accruals) Now, the company, overall, has four manufacturing units with the total capacity of 174,600 MT/annum at three locations in Gujarat.

The paper industry had numerous acquisition opportunities, with 2 out of every 3 mills having shut operations as per IPMA. In the listed space itself, 26 out of 50 paper companies on BSE have gone into BIFR. Astron has managed to take advantage of the situation by expanding through inorganic route which will also help the company reduce the geographical risk due to the presence of multiple plants in Gujarat.



Source: Company Annual Reports

Tapping Export Opportunity

The acquired facilities produce lower GSM and lower BF kraft paper which mainly caters to the export markets which demands value-added products along with providing more range of product for existing customers. Also, this facility will complement the company's existing capacity as the Kraft paper used in the inner layer of corrugated boxes is generally of lower GSM and lower B.F which was not manufactured by Astron till now.

Further, the company is accredited with 'Authorized Economic Operator T1' certificate. The certificate entitles many benefits such as it accords better facilitation in the import and export of consignments, thereby ensuring shorter cargo release time *(earlier, it used to take seven days and some charges to release cargo from port which is now shortened to just two days with reduction/elimination of charges)*, facility of Direct Port Delivery (DPD) of import Containers and/ or Direct Port Entry (DPE) of Export Containers.

Raw Material

The company uses waste paper as raw material instead of wood and the waste paper is imported from the USA and Europe as these countries are known for their quality standards. The other raw material used are chemicals like starch powder, rosin, etc. Therefore, the company is exposed to international price fluctuations of waste paper prices (RM) which directly impacts their gross margins.

Captive Power Plant

The company has also installed an in-house captive thermal power plant of 3MW to support power and steam requirements. Besides, they also have an electricity supply agreement, with Paschim Gujarat Vij Company Limited for a supply of up to 2.9MW, to meet additional electricity requirements at Halvad Plant. For acquired plants, Astron has already entered into an electricity supply agreement with Paschim Gujarat Vij Company Limited.

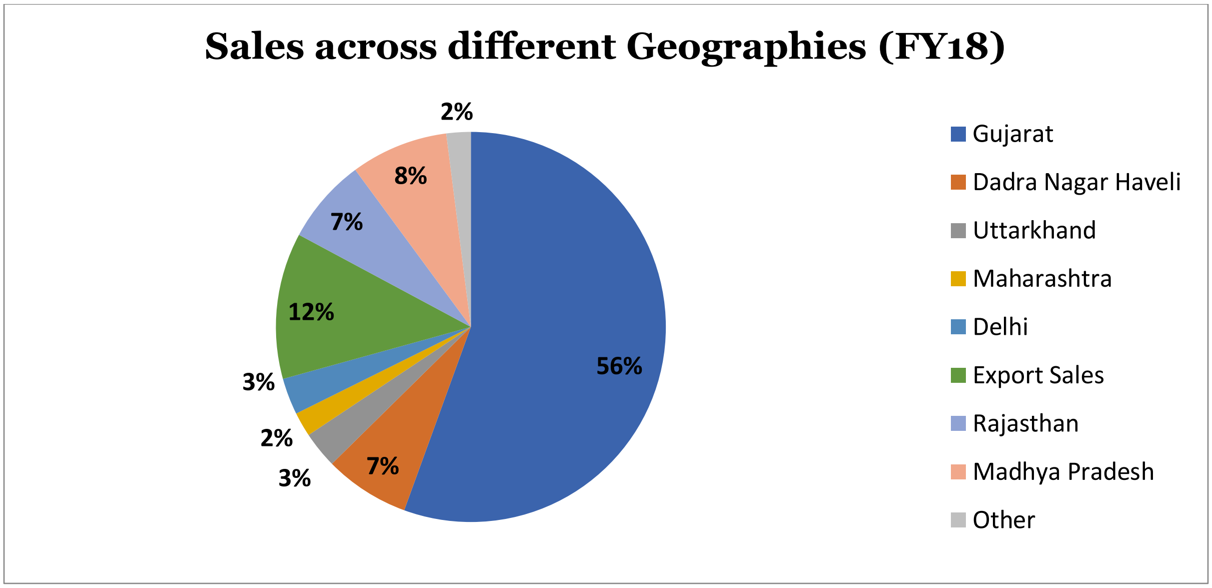
Water facilities

In order to meet the water requirements for the factory and for drinking and gardening purposes, adequate arrangements have been made through bore wells at both the current and acquired plants.

Sales and Distribution

The clients of Astron Paper convert Kraft paper into cartons and supply to the companies in FMCG, home appliances, pharmaceuticals, Auto, Food & Beverages, E-Commerce etc including large MNC's. Company's sale is mostly dominated in the western region (mostly Gujarat as the plant is situated there) and some parts of North. Freight cost impacts the company's sale in other parts of India. Therefore, the companies which have plants at multiple locations are benefitted more in comparison to Astron as they can target different markets along with reducing the geographical risk for them.

Astron also has export channels spread across different countries like China, Nepal, Malaysia, Dubai, Saudi, etc.



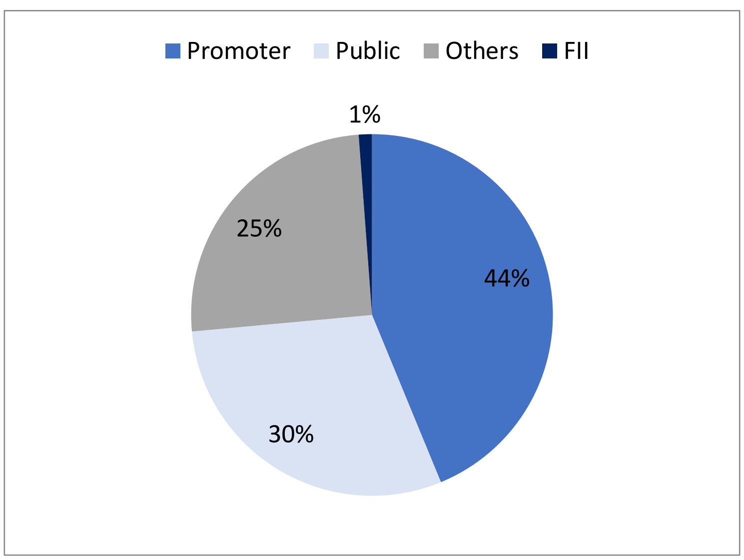
Source: Company Presentation

Their marketing team continuously interacts with customers to understand the requirements and analyze the market dynamics.

Management and Board of Directors

Astron is promoted by Kirit Patel (Age 45), Ramakant Patel (Age 52), and Karshanbhai Patel (Age 65) along with Asian Granito India Limited.

Shareholding Pattern



Promoter holding as follows:

1. Kirit Patel- 14.41%

2. Ramakant Patel- 2.54%

3. Karshanbhai Patel-7.68%

4. Asian Granito India Limited-18.87%

Dividends: Astron does not pay any dividend due to the requirement of capital for expansion purpose and has not paid any dividend from the past five years.

Board of Directors

Name	Designation	Experience
Kirit Patel	Chairman and Managing Director	He holds a Bachelor's degree in Commerce from Gujarat University. He has over 2 (two) decades of work experience in the trading and paper packaging industry by virtue of being the proprietor of M/s. Mitul Enterprises, which was engaged in the business of paper packaging, from 1997 onwards till 2015. He is currently responsible for the management of the entire operations of the Company, including strategic initiatives of the business.
Ramakant Patel	Executive Director	He has over two decades of work experience in packaging and paper industry. Prior to joining Astron, he was a Promoter and Director of Shreenath Packaging Private Limited from July'95 to January'06. Subsequently, he joined Shreerangam Packaging Private Limited as a Director in January, 2006 and continues to be a director till date. He currently looks after the marketing strategies of the Company.
Karshanbhai Patel	Executive Director	He has approximately 6 years of experience in the industry in which the Company operates. Presently, he is also a Director at Specific Ceramics Limited and Pokar Agrotech Private Limited.
Kanubhai Patel	Executive Director	He has approximately 5 years of work experience and currently holds directorship in Asian Granito India Limited. He currently handles the production related activities of the Company.
Dr. Shyam Agrawal	Independent Director	He has obtained a degree as a Doctor of Philosophy from University of Rajasthan. He is a Fellow Member of the Institute of Company Secretaries of India (ICSI) is also the President of the Institute of Company Secretaries of India for the year 2017 -18.
Ms. Chaitali Parikh	Independent Director	She holds a Bachelor's degree in Commerce from Gujarat University. She is an Associate Member of the Institute of Company Secretaries in India. She was associated with Sambhaav Media Limited from March 1, 2012 to March 31, 2015. She is currently working with City Tiles Limited as a Company Secretary.
Mr. Sudhir Maheshwari	Independent Director	He is a member of Institute of Chartered Accountants of India. He has been a partner in M/s. Sudhir Maheshwari and Associates since 1997 till date.
Mr. Sanjiv Srivastava	Independent Director	He joined the Company on May 1, 2017. He currently holds directorship in JMC Paper Tech Global Services Private Limited

Source: Company Annual Reports

Astron Paper & Board Ltd. - Common Size P&L Account

Year / Rs Cr.	FY14	FY15	FY16	FY17	FY18
Expenditure					
Cost of Raw Material Consumed	65.7%	63.9%	61.9%	60.5%	62.5%
Purchase of Traded Goods	0.0%	0.0%	1.1%	3.1%	1.8%
(Increase)/Decrease in Inventories	0.5%	-0.3%	0.0%	0.6%	-1.4%
Employees Benefit Expenses	5.1%	4.1%	4.1%	4.2%	3.7%
Other Expenses	19.1%	19.7%	19.8%	19.9%	20.9%
Total Operating Expenditure	**90.3%**	**87.3%**	**87.0%**	**88.3%**	**87.5%**
Gross Profit	**33.8%**	**36.5%**	**36.9%**	**35.8%**	**37.2%**
Operating Profit / EBITDA	**9.7%**	**12.7%**	**13.0%**	**11.7%**	**12.5%**
Other Income	0.3%	0.1%	0.2%	0.7%	0.3%
Depreciation	3.0%	1.8%	1.8%	1.8%	1.4%
Profit Before Interest & Tax (PBIT)	**7.0%**	**11.1%**	**11.4%**	**10.6%**	**11.4%**
Interest/Finance Costs	9.1%	7.0%	6.8%	6.2%	3.9%
Profit Before Tax	**-2.1%**	**4.0%**	**4.6%**	**4.4%**	**7.5%**
Tax	1.5%	1.2%	0.2%	-0.9%	-0.8%
Profit After Tax	**-3.7%**	**2.8%**	**4.4%**	**5.3%**	**8.3%**

Source: Company Annual Reports

- **Gross profit** increased in FY18 because of the decrease in prices of waste paper (RM) due to China's ban on the import of waste paper. Also, there is an increase in final paper prices which resulted in higher price realization for the company.
  - However, margins could have been much better but depreciation of rupee impacted the company's margins as they mainly import raw material from the USA and Europe.

- **Employee cost** has increased in absolute amount as the company is continuously hiring employees for their new plants & also for the acquired facility in Mehsana.

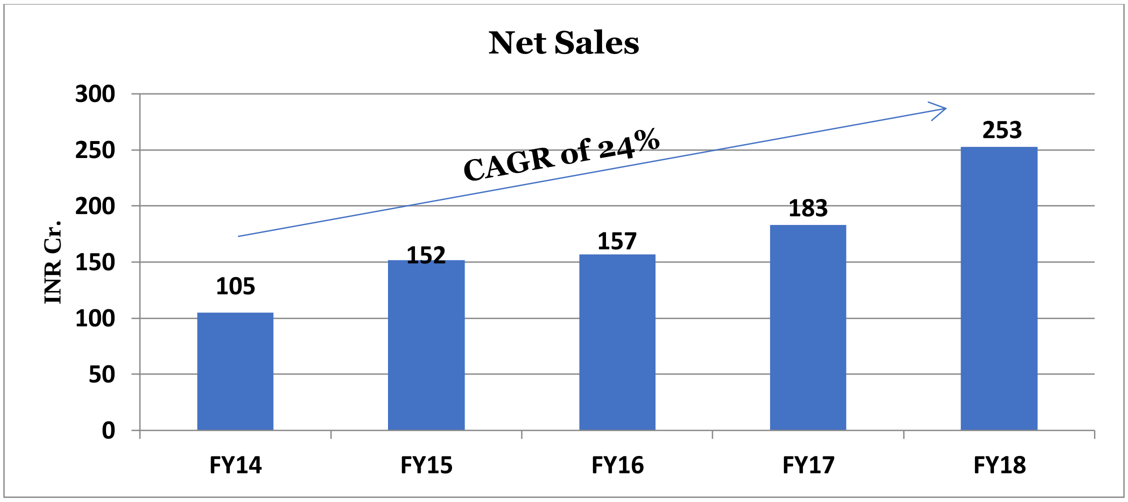
- **Other expenses** include mainly manufacturing, administrative and selling & distribution expenses. Major expenses are fuel & electricity expenses which constitute around 13-16% of revenues. The sharp increase in electricity charges (as company source electricity for new plants from the government) and fuel prices has impacted the company's margins in FY18.

- **Taxes:** The Company has not paid any significant taxes in the last 5 years mainly because of the MAT Credit and some accelerated depreciation which resulted in taxable income to be negative.

- **Net Profit:** Net Profit has been increasing in tandem with gross profits as operating a paper plant is an asset-heavy business, hence operating leverage kicks in and any incremental benefit like reduction in RM cost and increase in realization will usually flow to the bottom line (Profitability)

- Moreover, the company started exporting products from FY18 which according to the management is 18% higher margin business than the domestic market.

➢ **Revenue**: Astron Paper & Board Ltd. has grown its Revenue at a CAGR of 24% from the last 5 years.



Source: Company Annual Reports

➢ The growth of revenue in FY18 by 38% achieved due to an increase in production by 26% and also by improvement in realization.

➢ The company started exporting its products from Q3FY18 and within six months, exports constituted 12% of total sales. These products were mainly exported to China with marginal contribution from different countries. The management of the company has also given guidance of increasing exports to 30% of sales till FY19.

Capacity Utilization

Particulars	FY15	FY16	FY17	FY18	FY19 Estimated
Installed MTPA	66000	72000	80000	101500	174600
Utilization MTPA	54340	56669	63371	80096	151000
% Utilization	82.3%	78.7%	79.2%	78.9%	86.5%
Sales (Rs Cr.)	152	157	183	253	
Price Realization (Rs/MT)	27972	27704	28878	31587	
Profit (Rs Cr.)	4	7	10	21	
ROE (%)	14%	17%	22%	17%	
ROCE (%)	16%	15%	15%	14%	

Source: Company Annual Reports

➢ Astron has almost doubled its installed capacity in the last two years and management also expects to utilize these plants at around 85% capacity in the coming years mainly catering demand from export markets.

➢ Price Realization has improved which has resulted in a steep jump in the company's profitability.

- Due to environmental concerns, the Chinese government has ordered numerous paper plants to shut down their operations. Currently, Astron is one of the companies which is taking advantage of the situation and is exporting paper products to China. But this advantage might be short-lived as the Chinese paper industry might pick up gradually with the reopening of the paper plants leaving their current capacities idle in the future.
- The demand for the Kraft paper is growing at a healthy pace mainly due to the rise in the E-commerce Industry, which might help the company consume some portion of their installed capacity in the future, in case the demand from China dwindles due to re-opening of the Chinese Plants.

IPO Proceeds Utilization

- The company has completed IPO of 1.4 Cr. equity shares of face value of Rs 10 each and got listed in Dec 2017.
- The IPO issue proceeds of Rs. 6982.50 lacs have been fully utilized as under:

Object stated in Prospectus	Amount Utilized up to 30th June'18 (Rs. millions)
Setting Up New Manufacturing Facility with lower GSM Kraft Paper	230.20
Part Repayment of Unsecured Loan	81
Funding Working Capital requirements of the Company	239
General Corporate Purpose	50.27
Total	**600.47**

Balance Sheet Strength

- Astron Paper & Board Mill Ltd. has an equity base of Rs 46.50 Cr. divided into 4.65 Cr. shares of Rs 10 each. The net worth stands at Rs 126.13 Cr. as on March'18.
- The company has total debt of Rs 74.86 Cr and an Interest Coverage Ratio of 4.64 suggesting that the company has five times EBITDA as compared to interest payments. The company is in a fair position to pay off their interest and principal payments.
- Astron has doubtful debtors amounting to Rs. 59.11 lacs against which the company has not made any provision. They have initiated a legal proceeding for recovery of doubtful debtors, so the provision was not made as the management is confident of recovering amount on adjudication of matters.

Cash Conversion Cycle

Year	FY14	FY15	FY16	FY17	FY18
Receivable Days	71	64	72	66	60
Inventory Days	60	64	76	71	48
Payable Days	56	45	52	52	39
Cash Conversion Cycle	75	83	95	86	70

Source: Ratestar.in

- The company generally gives around 60 day's credit period in India. While in exports, the company has been selling goods either by receiving advance payments or on cash basis up till now. Increase in exports might lead to reducing receivable days in the coming years.
- Astron's raw material consists mainly of waste paper which is imported and it takes lead time of around 2.5 months for the raw material to reach the company. They are keeping sufficient inventory of raw material for proper utilization of their existing capacity and additional manufacturing facility for producing lower GSM and lower B.F products.
- Creditors primarily comprise of payables for raw material, Coal, Packing & Stores and service providers. Payable days have reduced as the company has infused capital towards working capital from net issue proceeds.

Cash Flow: Company has been generating positive operating cash flows. But, OCF was not enough to fund the expansion. So, the company mainly funded through equity dilution. Improvement in WC cycle along with increasing profits can bolster operating cash flow in the coming years.

Free Cash Flow

Year	FY14	FY15	FY16	FY17	FY18
Cash from Operating Activity	-6.61	10.72	15.69	15.95	5.19
Purchased of Fixed Assets	4.21	2.17	10.61	8.94	26.74
Free Cash Flow	**-10.82**	**8.55**	**5.08**	**7.01**	**-21.55**

Source: Ace Equity

Key Risks

1. **Adverse currency movement**: - Astron mainly imports raw materials hence any sharp INR movement could impact the company's earnings adversely. Though the company has started hedging its foreign currency transaction recently.
2. **Disputed Tax Liability**: - Company has a contingent liability of Rs. 2.93 Cr. mainly comprising of disputed income tax matter and disputed CENVAT Claim on Fixed Assets for which the company has made no provision.
3. **Re-opening of Plants in China: -** Astron has been benefited because of the China factor. So, any reversal on the ban of waste paper could impact the company's performance severely.
4. **Exposed to fluctuation in raw material prices**: The company use waste paper as RM, so the company is always exposed to waste material prices in the International market which can lead to fluctuation in margins.

Key Takeaways

Particulars	Explanation
Raw Material	The company mainly imports RM, thus exposed to currency fluctuation as well as International market prices of Waste Paper.
Electricity	Mostly dependent on State Government for the supply of Power.
Water	Self-sufficient capacity using bore wells.
Multiple Plants	Recently acquired two plants at a different location in Gujarat which might help them reduce some geographical risk.
Installed Capacity and Utilization (%)	Installed capacity increased from 101,500 MT/annum in FY18 to 174,600 MT/annum in FY19 due to the recent acquisition of two plants. Capacity utilization was around 80% in FY18, expected to increase around 87% in FY19 as per management.
Experience	Relatively new company with track record of only five years, present mostly in lower GSM Kraft Paper (Low GSM and BF has lesser margins due to inferior quality as compared to higher GSM and BF Kraft Paper)

Conclusion

Astron Paper & Board Mill Ltd. is a new company with a history of five years present mostly in lower GSM Kraft Paper. They raised cash for expansion when Paper witnessed an upturn in prices. The company had employed the same expansion strategy in the past as well when they raised significant debt to set up their first plant and for managing their working capital requirements. Moreover, the company is also exposed to fluctuation in RM prices, exchange rate and fuel prices. They also need to work on establishing a strong distribution network like their experienced counterparts like Shree Ajit Pulp and Paper Ltd., South India Paper mills, etc. which has better sales network due to decades of presence in the Industry.

However, the company is in a good position to cater to the demand for Kraft Paper especially by utilizing their expanded capacities. They have four plants with water and electricity availability near the port. Another positive aspect of Astron is that the company has not witnessed any labor strike in the past.

Genus Paper & Boards Ltd

Introduction

Incorporated on Jan'12, Genus Paper & Boards Ltd (GPBL) is mainly engaged in the manufacturing of Kraft paper and mild steel ingots. In FY14, Genus Paper Products Limited (GPPL) was merged into Genus Power Infrastructures Limited (GPIL) and the 'Non-Power Infrastructure Business' of GPIL was demerged into Genus Paper & Boards Ltd.

The Company offers a range of Kraft papers varying from 100 GSM to 400 GSM. Apart from Kraft Paper, the company also manufacturers Mild Steel Ingot (M. S. Ingot) using the excess power generated in the co-generation plant after meeting the requirement for Kraft paper. Steel ingots are used for manufacturing various types of steel bars by rolling mills. This product division contributes to less than 5% of the company's total business.

Journey so far:

2002
- Genus Paper purchased the Paper Unit having installed capacity of 16600 p.a. and 13.557 hectare of Land situated at Moradabad from DSM Group and also 5000 TPA Particle Board Plant from Dhampur Sugar Mills Limited, situated in the same industrial premises.

2003
- Completion of modernization and upgradation of existing Paper Plant particularly in Pulp Mill section.

2004
- Installation of Steel ingot plant with a capacity of 23760 TPA.
- Installation of a waste paper based 140 TPD Multi Layer Kraft Paper Plant

2005
- Installation of a 6 MW Co-genaration Power Plant

2006
- Commissioning of 140 TPD Multilayer kraft paper plant

2011
- Approval for the Demerger of Non Power Infrastructure Business

2013
- Post the scheme of Arrangement, Genus Paper & Boards Limited was formed as a public limited company and listed on the NSE & BSE.

2015
- Enhance Production capacity from 100,000 to 140,000

Manufacturing Facility

The manufacturing facility is located at Moradabad, Uttar Pradesh with an installed capacity of 140,000 MT/annum for 'Kraft paper' and 23,760 MT/annum for 'mild steel ingot' as on March 31, 2018.

The facility houses two paper mills manufacturing 'multi-layered Kraft paper' by recycling waste paper. These are triple layer wire machines with the calendaring process (which makes the product more glazy and with a smooth finish) that manufacture high tear strength paper ranging from 120- to 450 GSM and a burst factor of 18BF to 40BF.

Genus Paper's Geographic Edge

The market size of the corrugated boxes is estimated around Rs. 18,000 Cr. with Northern India comprising 35% of this demand. Only 5% of the Kraft paper production units in North India have large capacities for catering voluminous demand. GPBL is strategically placed near several consumer durable manufacturers in the region, thereby giving them a distinct advantage over the other firms.

Besides this, of all the Kraft paper production units in North India, only 5% have large capacities to cater to the voluminous demand. GPBL is tactically placed in this region which is beneficial as several consumer durable manufacturers are located around the company's facility.

Upcoming Projects

The company also has plans for capacity expansion to the tune of 50,000 MT/annum at their Moradabad (UP) facility. *The total project cost is expected to be around Rs. 111 Cr. which is to be financed through a term loan of Rs. 85 Cr. and balance Rs. 26 Cr. through the internal accruals and is expected to be completed during H2FY20.*

The company also entered into two non-binding MOUs with the Government of the Maharashtra and Uttar Pradesh respectively. The contract entails with Maharashtra government to invest Rs. 1050 Cr. and with Uttar Pradesh government to invest Rs. 600 Cr. for setting up Kraft paper manufacturing plants over the next 5 years. According to the management, within the next six-nine months, all required approvals will be obtained by the company and they will be focusing on how to raise funds in order to set-up in the plants at the respective locations.

GPBL, after conducting a market survey with respect to liner board/Kraft paper, has decided to locate a Duplex Grade Kraft paper mill at village Prakasha of Nandurbar district in Maharashtra. Total land required for the proposed project is 40.5 hectares, out of which 22 hectares have been acquired till now. The capacity of the proposed plant will be 300,000 MT/ annum. GPBL has decided to be self-sufficient in power requirement for the proposed Kraft paper project. Therefore, a coal-based thermal power plant of 22 MW has been included in the project proposal.

The company has already received environmental clearance for setting up of the thermal plant at Prakasha village which is expected to commence soon. As per environmental clearance report, the total cost of Kraft Paper project will be approx. Rs. 573 Cr. and an additional Rs. 101 Cr. for thermal power Plant.

Raw Material

Earlier, Bagasse and wheat straw were the main sources of raw material used by Genus Paper for the manufacturing of single layer kraft paper. The company procures the raw material from agro-based sugar mills from the nearby areas. But looking at the shortage of Agro waste, the company entirely shifted to waste paper based capacity by upgrading the machines and also expanded its capacity.

Now, the key raw material is waste paper (55% of the total raw material cost in FY18) which is procured both from the domestic market (especially Delhi) and from imports. The main chemicals used by the company include Caustic Soda, Alum, and Rosin which are easily available in the local market. The key raw material for Steel ingots viz. Sponge Iron is procured mainly from Bihar, Chhattisgarh and Orissa and Scrap is secured from the local area.

Power: The Company is self-dependent in relation to power. They have 11 MV co-generation captive Power plants for Kraft paper processing. It also serves as an input for the production of Mild Steel Ingots; GBPL second business division. Since the enforcement of a ban on pet coke, the company had to resort to costly alternative fuel i.e. steam coal which has impacted the financials of the company.

Water: The Company's present water requirement is being catered through bore wells installed inside the plant premises.

Sales and Distribution Network

GPBL has developed a strong presence in North India and has managed to become a preferred supplier to corrugated box manufacturers due to its close proximity to the end-user industries.

The company has a network of 15 dealers spread across different states of India. They have managed to establish strong relations with their customer which is evident from the fact that the bulk of the revenues come from repeat sales. They have a diversified customer base with top 10 clients contributing around 30% of the revenue from Kraft Paper in FY18.

GPBL caters to the needs of a variety of industries ranging from FMCG, pharmaceuticals and E-Commerce. Major customers include HUL, Dabur, Onida, Moser Baer, Samsung, LG, Whirlpool, Eveready etc.

Source: Company Presentation

Management and Board of Directors

- GPBL belongs to the 'Kailash' group and is controlled by Mr. Ishwar Chand Agarwal, who has a rich experience of over three decades in the industry. The day to day operations is looked after by his son, Mr. Kailash Chandra Agarwal, who is the Managing Director of GPBL and has an experience of 15 years in the business of power infrastructure, electronics, steel and paper products etc.

- GPBL has a long track record of more than 22 years over which management has developed a healthy relationship with customers and suppliers and has established itself as a high-quality Kraft paper producer.
- At present, the promoter holdings are 50.48 % suggesting their confidence in the business. Genus does not pay any dividend due to the requirement of capital for expansion purposes.

Board of Directors

Name	Designation	Experience
Mr. Ishwar Chand Agarwal	Chairman	Ventured into business at an early age and now has more than four decades of experience in diverse businesses of Power, Electronics, Coke, Sugar, Cement, Paper, Agro-processing etc. He is the founder of Kailash Group & also the driving force behind the success achieved by the Group.
Mr. Kailash Chandra Agarwal	Managing Director	He has experience of around two decades in the business of power infrastructure, electronics, paper products, iron ingots, coal, coke, sugar, cement and apparels.
Mr. Himanshu Agarwal	Executive Wholetime Director	He has started his carrier by joining Genus Paper in the year 2004 and has been involved in the family business for over 12 years. He has gained extensive experience in the Paper Industry Sector and has developed an understanding of risk management, efficient processes and operational excellence
Mr. Surya Prakash Sinha	Executive Wholetime Director	He has been in the employment of the Company since its inception. He has a vast experience of 40 years in the field of human resources and administration and currently serving as Director in Human Resources
Wg. Cdr. Bhairon Singh Solanki (Retd.)	Independent, Non-Executive Director	B.E. (Hons.) from BITS, Pilani and M.Sc. (Engg.) from Cranfield Institute of Technology. He looks after the formulation and implementation of the company's policies of technology up-gradation and development, corporate governance, social responsibility, and auditing etc.
Mr. Rameshwar Pareek	Independent, Non-Executive Director	He has extensive experience of more than 36 years in implementation of Government policies and their governance. He has worked as Senior Executive of Rajasthan Financial Corporation, Jaipur and also served on deputation to Bureau of Industrial Promotion (BIP), Jaipur.
Mr. Udit Agarwal	Independent, Non-Executive Director	He belongs to a reputed business house 'Saran Group' and has over one and a half decade experience in the development and exports of handicraft items. He is a young and energetic businessman with a strong ability to provide insightful analysis and recommendations
Mr. Rajendra Aggarwal	Independent Director	He is having vast experience in the field of business management.
Mr. Yash Todi	Non-Independent, Non-Executive Director	Before Genus, he was working as an Operations Analyst at Goldman Sachs & Co. and has played a pivotal role in driving the operational functions of the organization. He looks after the formulation and implementation of Co's operational policies
Mrs. Anu Sharma	Independent, Non-Executive Director	She has a rich experience of insurance business management and worked as an insurance consultant in the reputed insurance company Max Bupa Life Insurance.

Genus Paper & Boards Ltd. - Common Size P&L Account

Year / Rs Cr.	FY18	FY17	FY16	FY15	FY14
Expenditure					
Cost of Raw Material Consumed	69.1%	74.1%	70.1%	70.0%	72.0%
(Increase)/Decrease in Inventories	-1.4%	-1.9%	2.9%	-0.1%	-1.1%
Employees Benefit Expenses	3.7%	3.4%	1.9%	1.8%	1.0%
Other Expenses	18.1%	17.3%	16.8%	19.1%	20.3%
Total Operating Expenditure	**89.6%**	**92.9%**	**91.8%**	**90.9%**	**92.1%**
Gross Profit	**32.2%**	**27.8%**	**27.0%**	**30.1%**	**29.1%**
Operating Profit / EBITDA	**10.4%**	**7.1%**	**8.2%**	**9.1%**	**7.9%**
Other Income	1.6%	2.0%	1.3%	1.5%	2.7%
Depreciation	3.7%	4.1%	3.7%	3.5%	2.9%
Profit Before Interest & Tax (PBIT)	**8.3%**	**5.0%**	**5.8%**	**7.1%**	**7.6%**
Interest/Finance Costs	1.8%	1.9%	2.0%	2.1%	2.3%
Exceptional Income / Expenses	0.0%	0.0%	-1.0%	0.0%	0.0%
Profit Before Tax	**6.5%**	**3.1%**	**2.8%**	**4.9%**	**5.3%**
Current Tax	2.2%	0.8%	1.3%	1.6%	1.2%
Profit After Tax	**4.3%**	**2.3%**	**1.5%**	**3.3%**	**4.2%**

Source: Ace Equity

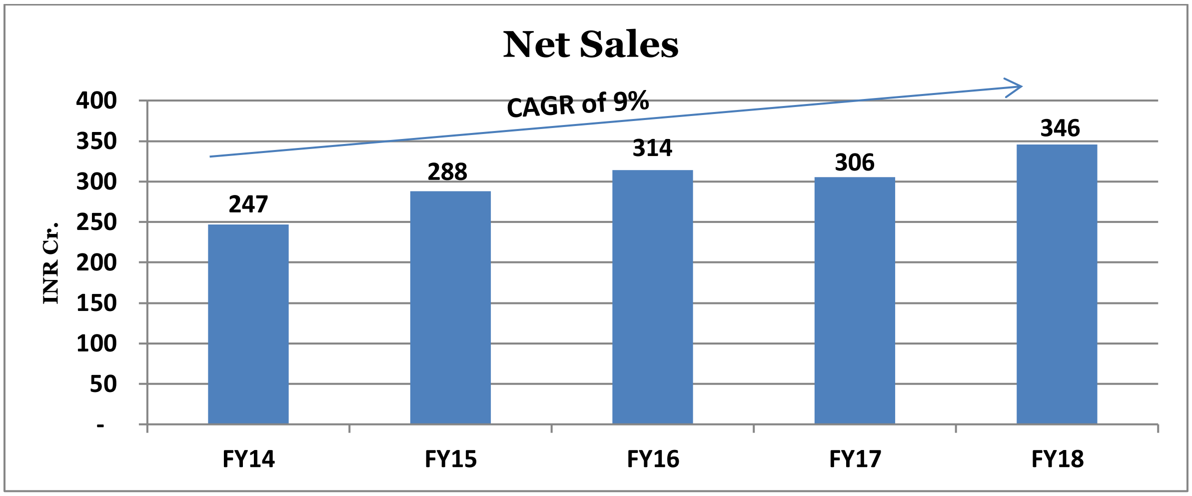
- **Gross profit** has increased in FY18 as like, most Kraft players; GPBL has been benefitted because of the twin impact of a reduction in the price of waste paper and increase in the price realization of end products. Also, margins got impacted due to the depreciation of rupee as the company mainly imports the raw materials like other players.

- **Employee cost** has increased due to a hike in employee salaries and also, there has been an increase in provident fund contribution by the company which was recognized in employee expense in FY18.

- **Other expenses**: Major expense like Power & fuel constitute around 11-15% of revenues.
  - The recent ban on pet coke has led to a continuous rise in the Power & Fuel cost over the last 12 months. The P&F cost has increased from 9.5% in H1FY18 to 12.4% in H2FY18.
  - However, the actual impact of an increase in energy cost would be evident in FY19 which is expected to be around 16%.
- **Operating leverage:** Operating Profit has been increasing in tandem with gross profits as an incremental benefit like reduction in waste paper cost and increase in price realization has been reflected in the EBIT.

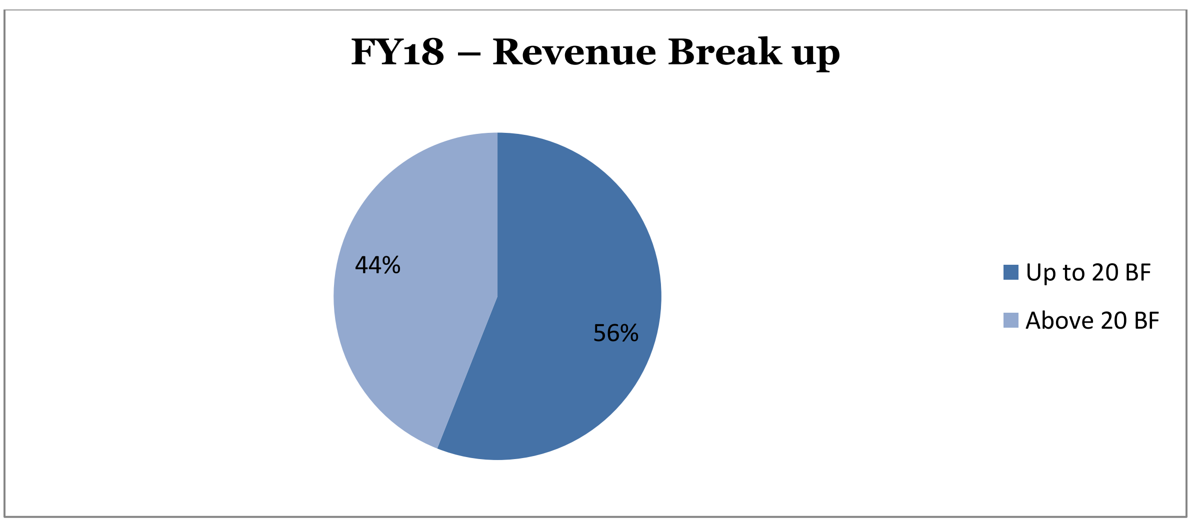
- **Exceptional Item** in FY16 consists of loss on sale of investments in the subsidiary company 'Genus Prime Infra Ltd' which ceased to be a subsidiary from thereon.

- **Revenue**: Genus Paper & Board Ltd. has grown its Revenue at a CAGR of 9% for the last 5 years.



Source: Screener.in

- The company clocked a revenue growth of 13% in FY18 due to increased production from newly leased Kashipur plant along with better price realization of Kraft paper.
- In H1FY19, Genus has grown its revenue by 58% compared to H1FY18, due to a rapid rise in capacity utilization to 86%. Also, the company produces Kraft paper with higher BF (Bursting Paper) which is of superior quality and has a better realization compared to lower BF paper. Thus, Genus is enjoying higher realization as well as volume growth in sales in the last year leading to higher overall sales growth.



Source: Company Presentation

Capacity Utilization

Particulars	FY14	FY15	FY16	FY17	FY18
Installed MTPA	1,00,000	1,40,000	1,40,000	1,40,000	1,52,500
Utilization MTPA	80,017	83,907	100404	109310	114343
% Utilization	80%	60%	72%	78%	75%
Sales (Rs Cr.)	247	288	314	306	346
Price Realization (Rs/MT)	30868	34324	31274	27994	30260
Profit (Rs Cr.)	10	10	5	7	15
ROE (%)	7%	3%	2%	2%	2%
ROCE (%)	11%	6%	4%	4%	7%

Source: Company Presentation

- FY18 figures include Kashipur Capacity adjusted for 2 months of operations. The company's management said that it has taken on lease a Kraft paper manufacturing facility for 5 years with effect from 22 January 2018. This Facility was located at Kashipur, Uttarakhand and has a manufacturing capacity of 75,000 MT/annum.
- Rationale the management gave was that it was an operational plant and the leasing would help them to start production on an immediate basis and cater to the demand of existing clients of the company.
- But, suddenly Genus came with an announcement on 1st December 2018, that they have terminated the lease agreement for Kraft paper manufacturing facility located at Kashipur, Uttarakhand without stating any reason.
- Increase in price realization in FY18 has reflected in the sales as well as the profits of the company.
- ROE & ROCE of the company are very poor compare to its peers like Astron, Ruchira, Shree Ajit pulp, etc.

Balance Sheet Strength

- Genus Paper & Boards Ltd. has equity of Rs 25.71 Cr. divided into 25.71 Cr. shares of Rs 1 each. The net worth stands at Rs 329.11 Cr. as on March'18.
- The company has total debt of Rs 73.69 Cr and an Interest Coverage Ratio of 4.71 suggesting that the company has five times EBITDA as compared to its interest payments.
- The company has investments of around Rs. 75 Cr. and cash equivalents of around Rs 5 Cr. Investment mostly comprises of shares of group companies like Genus Electrotech Limited, Kailash Coal & Coke Company Limited, etc.
- GPBL regularly invests in its group companies either in the form of loans & advances or equity investments. By the end of FY18, the company had investments worth Rs. 72.45 Cr. in the form of equity instruments, preference shares and debentures and Rs. 72.17 Cr. in the form of loans & advances.

Cash Conversion Cycle

Year	FY14	FY15	FY16	FY17	FY18
Receivable Days	57	55	62	71	73
Inventory Days	61	60	50	35	32
Payable Days	21	44	42	49	59
Cash Conversion Cycle	97	71	70	57	46

Source: Ace Equity

- The company has managed to maintain an industry average credit period of around 60-70 days.
- The improvement in the working capital cycle was largely on the account of increase in creditor's period. Moreover, Inventory days also has reduced drastically in the last two years as the company has been able to churn its Inventory quicker. Inventory turnover ratio was 11.41 compared to 7.25 in FY15.

Cash Flow: The Company has been consistently generating positive operating cash flows. But, due to an increase in working capital requirements of the company, OCF has been on a declining spree. Moreover, present cash flows are not enough to fund capacity expansion in Moradabad, so Genus is opting for long term debt route along with some internal accruals.

Free Cash Flow

Year	FY14	FY15	FY16	FY17	FY18
Cash from Operating Activity	36	41	7	16	10
Purchased of Fixed Assets	13	33	12	3	5
Free Cash Flow	**23**	**8**	**-5**	**13**	**5**

Source: Ace Equity

Key Risks

1. **Project Finance risk:** The company has not given any clarity regarding the sources of finance for their non-binding MOUs with the governments of Uttar Pradesh and Gujarat which entails a total cost of Rs. 1650 Cr. that will be incurred over a period of five years.

2. **Exposure to the group companies**: GPBL has a large exposure to group companies in the form of investments, debentures and preference shares. On the other hand, the company is raising debt in order to fund their CAPEX requirements. Genus might decrease their investments from unassociated companies and utilize the proceeds for the internal operations of the company.

3. **Disputed Tax Liability**: - The Company has a contingent liability of Rs. 13.64 Cr mainly comprising of disputed income tax matter and disputed CENVAT Claim on Fixed Assets.

Key Takeaways

Particulars	Explanation
Raw Material	The raw material cost as a percentage of sales is in the vicinity of 74%-75% which exposes the company to the volatility of raw material prices and also exposes to foreign exchange fluctuation as company mainly imports RM.
Electricity	Self-dependent with 11 MV co-generation captive Power plants for Kraft paper processing.
Water	Sufficient capacity using bore wells.
Installed Capacity and Utilization (%)	Installed capacity around 140,000 MT/annum at Moradabad (UP) and Utilization was around 86% in H1FY19.
Distribution Network	Strong presence in North India as decades of presence helped company to built healthy relationship with customers.

Conclusion

GPBL has a distinct advantage over its peers due to highly experienced promoter group with a sustained long term track record in the kraft paper industry which is equally complemented by an established dealer network and a diversified & loyal customer base. Moreover, Genus has also posted tremendous results in last one year due to higher price realization of Kraft Paper and decrease in waste paper prices. Operating leverage has kicked in due to asset intensive nature of company. But, the company seems to be on an expansion spree with plans for both Greenfield & Brownfield expansion. Signing memorandum with state governments for approx Rs. 1600 Cr. investment is massive if we compare with current size of company (current market cap 235 Cr.). It remains to be seen how the management will arrange funding for this expansion as they have not given any clarity on the same.

South India Paper Mills Limited

Incorporated in the year 1959, the South India Paper Mills (SIPML) manufactures paper and paper products like Kraft liners, test liners, machine glazed Kraft paper, corrugated boards and wrap-around boxes.

Business Model

SIPML recycles waste paper into various grades of Kraft paper and sells it to local vendors who convert these Kraft Papers into customized boxes for various companies. The company uses waste paper as raw material and around 50% of raw material is imported from North America and Europe while the rest of the material is sourced locally.

Forward Integration into Box Manufacturing

In 2008, SIPML forward integrated its operations by setting up Corrugated Box Manufacturing Facility near the Paper mill. This manufacturing unit consumes around 50% of the Kraft Paper produced in-house by the company.

Particulars	FY16	FY17	FY18
Production of paper/paperboard (MT/annum)	56,268	52,752	32,687
Conversion at box plant (MT/annum)	26,659	26,196	15,522
Conversion	**47.4%**	**49.7%**	**47.5%**

Source: Company Annual Reports

Manufacturing Facility

SIPML operates a manufacturing facility at Nanjangud in Mysore. The facility has an installed capacity of 60,000 MT/annum in the paper and pulp division and 36,000 MT/annum in Printing and Packaging division. Paper is manufactured on three paper machines of capacity 45 Tonnes-per-day (1.83m wide), 50 TPD (2.55m wide) and 115 TPD (2.88m wide).

In Fy16, the company had invested Rs. 48 Cr. in the installation of 11MW captive power plant. The company utilizes the power plant to supply power to the existing mill and sell the excess power to the grid. SIPML has also commissioned a new 'Effluent Treatment Plant' (ETP) at an expenditure of Rs. 10.5 Cr. The ETP had sufficient capacity to absorb the effluent (liquid waste or sewage) for both existing and the new plant.

Labor Strike

There was a halt in operations at SIPML's paper and box manufacturing unit for approximately five months due to a labor strike. The reasons for the strike were twofold: revision in wage rates and changes in the terms of the employment agreement. The strike finally ended with the signing of a six year agreement in place of four years at the paper mill, which will be in force up to March'22. At the box unit, the agreement is covering four years up to March'20.

The labor strike resulted in sub-optimal capacity utilization of the manufacturing unit as the company's plant was operated only for two quarters in FY18.

Technology Up-gradation in Packaging Segment

The BOBST FFG 8.20 Discovery was installed in 2017. It takes sheets up to 2,180 mm wide and has four flexo color units. Running at full speed it can produce up to 300 boxes per minute (18,000 per hour) on coated/uncoated duplex board with white or Kraft liners of all types.

The BOBST machine is intended to be effectively used in changing many single or two-color orders, to cater for a wide range of segments with a just-in-time supply concept. This ensures the best use of available resources of SIPML which helps them maintain a competitive edge in the market.

Increasing Paper Mill Capacity through Brownfield Investment

SIPL is coming up with a highly automatic 112,000 MT/annum plant aiming to produce Fluting Media paper, Test Liner and White Test Liner and it will take around 1.5 yrs to commission. The expansion was delayed due to labor strike but the company will be able to use full capacity in six months once the plant gets commissioned.

The planned expansion is for the production of paper in the upper band of segment i.e. 24BF and above (less than 24BF is common grade which is produced by every other player in the industry). With full capacity at present prices, SIPML has the potential to double its revenue to around Rs. 450-500 Cr. by FY 20.

The company did a lot of research before finalizing the machine. The core part of the machine will be imported from Europe and non-critical hardware will be procured from China. The *total cost of expansion will be around 150 Cr. to be arranged from the bank (around 90 cr.) and around 60 cr. from internal accruals.*

Tapping Export Opportunities

South India Paper Mills envision good demand for Kraft paper in the export markets due to a ban on import of waste paper in China. Hence, in the last few months, the company started exporting its products to countries like China, Bangladesh and Sri Lanka. These vendors are now buying Kraft paper from India and converting these papers into boxes and selling them.

From last few months, Indian Paper Manufacturers are importing low-grade waste paper at low prices from North America and Europe and selling them at much higher prices to China after processing them.

SIPML also joined the party by exporting their Kraft Papers to Chinese vendors as margins on exports are much better compared to the domestic market. However, the company has limited capacity to export Kraft paper as they need them for internal consumption for manufacturing of boxes.

Sales and Distribution Network

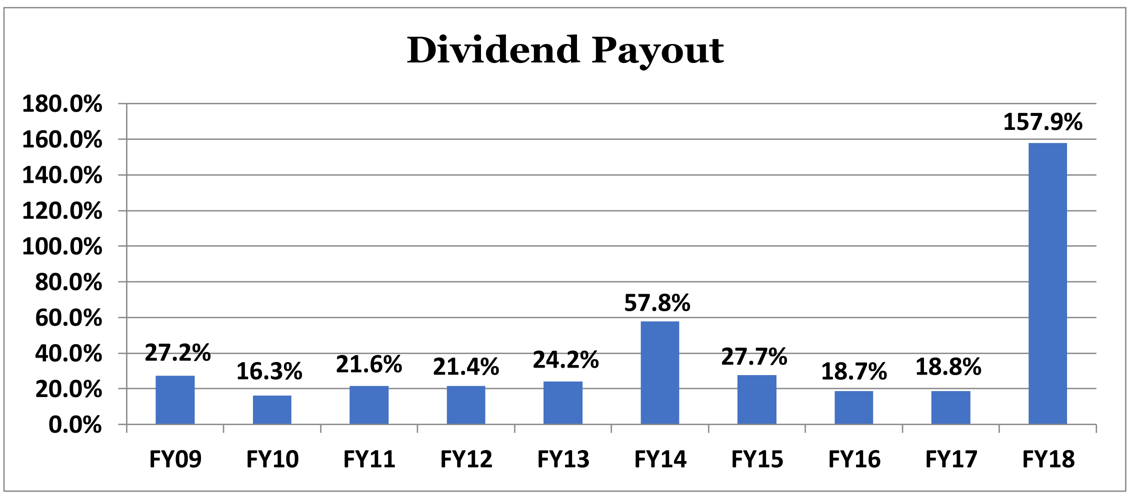
SIPM-Printing and Packaging division is a strategic supplier to multi-nationals including GSK, RB, Britannia, ITC, UB, USL, RSIL, Adani Wilmer, Nestle, American Power Conversion, Unilever, Coca Cola and others.

The company has a much-diversified portfolio, as carton boxes are supplied to various industry segments such as food, beverages, alcohol and spirits, edible oils, copier paper, fresh agricultural produce, white goods, automobiles, footwear, textiles and many others. Most deliveries of the company are within a 250 to 300 km radius, though some special orders may go up to 1,000 km away within India.

The Company also sells its products through appointed agents. The Company has established a credit policy under which every agent is analyzed individually for creditworthiness. Also, each agent places a security deposit based on the quotas allocated to him. Though the invoices are raised on the individual customer, the agent is responsible for the collection and in case of default by such customer; the dues from the customer are withheld/adjusted against the payables to the agent.

Management and Board of Directors

- Mr. Manish Patel, B.E., M.B.A., has been the Managing Director of the South India Paper Mills Limited since May 20, 2004, and also serves as a Chairman.
- Being a technocrat, Mr. Patel is aware of the minute details of each and every machine in the company. He himself visited Europe for selection of machinery required for upcoming Brownfield expansion and has continuously focused on technology up-gradation in order to improve the quality of products and production efficiency of the company.
- At present, Promoter holdings are 43.2 % and well-known investor Anil Kumar Goel holds 6%. The company has also been maintaining a healthy dividend payout ratio of 56% on average from the last five years.



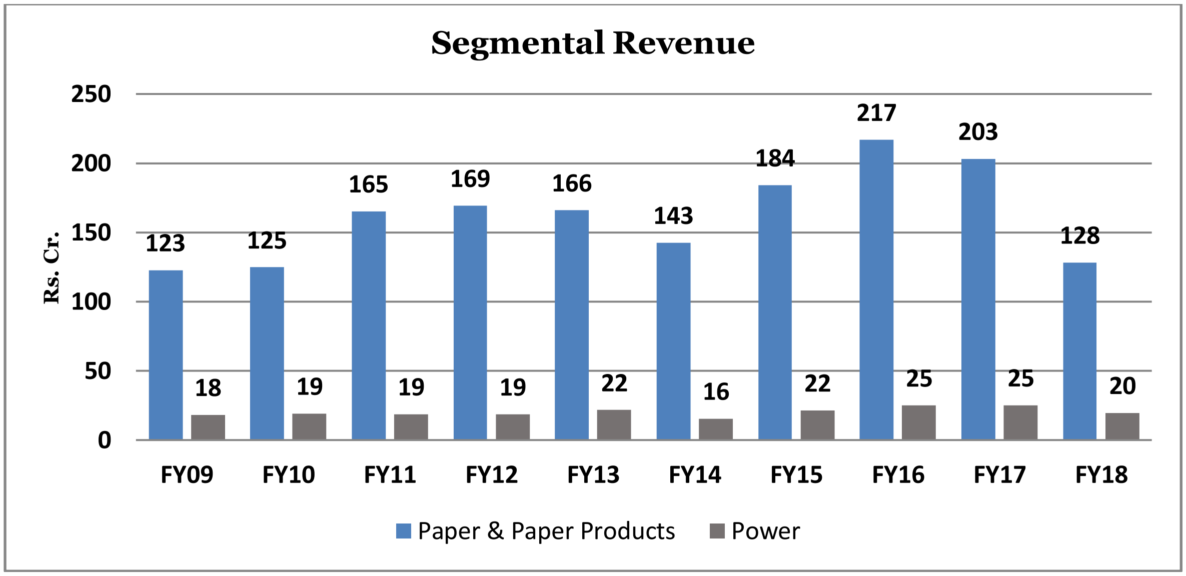
Board of Directors

Name	Designation	Experience
Mr. Manish M. Patel	Chairman and Managing Director	Mr. Manish Patel, B.E., M.B.A., has been the Managing Director of The South India Paper Mills Limited since May 20, 2004, and serves as its Chairman. Mr. Patel is a Self Employed Executive of Personal Banking Division at Comerica Inc., Detroit, MI, USA. He serves as a Director at Laxmi Board & Paper Mills Ltd.
Mr. Dineshchandra C. Patel	Non-Executive Director	Mr. Dineshchandra C. Patel, Bar-At-Law, serves as Managing Director and Chairman of the Board at Laxmi Board & Paper Mills Ltd. Mr. Patel has been a Non-Executive Director of The South India Paper Mills Limited since August 30, 1975.
Mr. Jagdish M. Patel	Independent, Non-Executive Director	Mr. Jagdish M. Patel has experience in the paper industry, general management & providing market information and helping promotion of sales in the western region.
Mr. M.G. Mohan Kumar	Independent, Non-Executive Director	Mr. M. G. Mohan Kumar has Experienced in the field of Finance. He holds B.Sc., LLB, FCA, and Licentiate ICSI.
Mr. S.R.Chandrasekara Setty	Independent, Non-Executive Director	Mr. S. R. Chandrasekara Setty is a practicing chartered accountant. Retired as Executive Director of Karnataka State Financial Corporation in 1998. His experience in the financial sector will be beneficial to the company.
Mr. Ajay D. Patel	Non-Executive Director	Mr. Ajay Dinesh Patel, B.E., M.B.A., serves as an Executive Director of Laxmi Board & Paper Mills Ltd. Mr. Patel has been a Non-Executive Director of The South India Paper Mills Limited since August 31, 1996. He has 17 years experience in Paper Industry.
Mr. N.S. Kishore Kumar	Independent, Non-Executive Director	Mr. N. S. Kishore Kumar is is a banker with 33 years of experience in SBI Group Companies & HDFC Bank covering SME Banking, Corporate Banking, International Banking, Merchant Banking. He was also responsible for setting up Micro Finance and Investment Banking at HDFC Bank, Mumbai.
Mr. Jitendra A Patel	Non-Executive Director	Mr. Jitendra Ambalal Patel, Diploma in Paper Technology (Sweden), has been a Non-Executive Director of The South India Paper Mills Limited since September 27, 2012. Mr. Patel serves as a Director of Laxmi Board & Paper Mills Ltd. and Indo Afrique Paper Mills Pvt Ltd. He holds a diploma in Paper Technology from Sweden.
Mrs. Girija Shankar	Independent, Non-Executive Director	Mrs. A. Girija Shankar, BA, LLB, has been a Non-Executive Independent Director of The South India Paper Mills Limited since March 31, 2015.

Source: Company Annual Reports

Financial Analysis

South India Paper Mills Ltd. revenues in FY18 were lower, owing to a labor strike at the Paper Mills up-to 26th July'17 and at Printing & Packaging Division up to mid-August'17. So in total, the company was able to operate plants only for the last two quarters in FY18.



Operation at the Paper Mill was lower by about 38% during the year. Printing & Packaging Division too operated with lower volumes & the Conversion tonnage was down by 41%. *Overall, Kraft Paper segment constituted 46.72% of revenue whereas, Printing and packaging division contributed 48.53% in FY18.*

The company's financials were severely impacted due to a labor strike in the first quarter and slowdown in demand for printing & packaging division.

In FY19, SIPML is expected to perform well as the company is receiving good demand of Kraft Paper domestically as well as internationally. Moreover, the realization of paper has increased in the last few months which can further help the company to achieve a higher sales growth rate.

Recent Price hike by SIPML

Presently, SIPML is selling paper at Rs. 34,000/tonne on average to local vendors who in turn convert them into corrugated boxes and sell them in the market. According to Management, the company has got a price increase of around Rs. 2000/tonne from paper customers.

Average selling price for corrugated Box customer (MNCs) is Rs. 42,000/tonne. The Company is trying to push price increase by Rs. 3000 /ton for corrugated boxes. However, it is very difficult to get price hike from MNCs as the company does not want to lose their regular customers so they are trying to negotiate for price increase but are not quite sure of getting it.

South India Paper Mills Ltd. - Common Size P&L Account

Year / Rs Cr.	FY09	FY10	FY11	FY12	FY13	FY14	FY15	FY16	FY17	FY18
Expenditure										
Raw Material Consumed	57.0%	43.3%	52.6%	50.6%	45.8%	54.0%	48.0%	46.9%	46.4%	48.9%
(Increase)/Decrease in Inventories	1.7%	-0.3%	0.0%	0.2%	-0.5%	1.5%	-0.1%	0.0%	-0.7%	0.7%
Employees Benefit Expenses	5.5%	7.0%	6.5%	6.8%	7.3%	7.9%	8.2%	7.9%	9.3%	10.7%
Other Expenses	24.7%	30.3%	25.8%	29.3%	30.7%	27.9%	27.9%	27.8%	28.6%	30.3%
Total Expenditure	89.0%	80.2%	85.0%	86.8%	83.3%	91.3%	84.1%	82.7%	83.6%	90.6%
Gross Profit	41.3%	57.1%	47.4%	49.3%	54.7%	44.5%	52.0%	53.1%	54.3%	50.4%
Operating Profit / EBITDA	11.0%	19.8%	15.0%	13.2%	16.7%	8.7%	15.9%	17.3%	16.4%	9.4%
Other Income	0.7%	0.3%	0.5%	3.5%	0.3%	0.4%	0.4%	4.3%	0.6%	1.4%
Depreciation	3.1%	3.6%	2.9%	3.6%	4.3%	5.2%	4.0%	3.9%	4.9%	6.5%
PBIT	8.7%	16.5%	12.7%	13.1%	12.7%	4.0%	12.3%	17.8%	12.2%	4.3%
Interest/Finance Costs	1.9%	1.9%	1.4%	1.5%	1.2%	1.5%	1.1%	0.9%	2.1%	3.7%
Profit Before Tax	6.8%	14.6%	11.3%	11.6%	11.5%	2.5%	11.2%	16.9%	10.0%	0.6%
Current Tax	1.0%	3.6%	2.9%	2.5%	3.1%	1.2%	3.6%	3.6%	2.1%	0.1%
Other Taxes	0.9%	-0.1%	0.1%	0.2%	-0.2%	0.1%	0.3%	1.6%	1.1%	-0.2%
Total Tax	1.9%	3.6%	3.0%	2.8%	2.8%	1.3%	3.9%	5.2%	3.2%	-0.1%
Profit After Tax	4.9%	11.1%	8.3%	8.9%	8.6%	1.2%	7.4%	11.7%	6.8%	0.7%

Source: Ace Equity

- **Gross profit** has been increasing gradually from FY15 because of strong contribution margins generated on the back of better product mix of the company in Kraft Papers.
  - In FY14, steep depreciation of rupee led to an increase in the raw material prices. The company was not able to pass on all price increase due to demand-supply situation in the paper market.

- **Employee cost** is more or less stable but is expected to increase in coming years as the company has signed new contracts with workers at higher wages. Moreover, the company is coming up with a new plant which will further increase the need for manpower to facilitate smooth operations of the company.

- **Other expenses**: Major expense is power & fuel cost which constitutes around 17% of the revenues in FY18. The sharp increase in fuel charges is due to the sudden increase in prices of pet coke and coal.

- **Finance Cost**: The Company has raised term loan which has resulted in an increase in interest cost in the last few years. According to management, interest cost can rise up to Rs 8 Cr. in coming years once new plant became operational (as the plant is mostly funded by debt) compared to interest cost of Rs 5 Cr. in FY18.

- **Net Profit:** The plant remained non-operation for half of the period due to labor strike. This severely reduced the top line while the fixed costs (depreciation, employee expenses, interest cost etc.) remained the same. Hence, the net profits got severely impacted in FY18.
    - **Higher Margins from Corrugated box Manufacturing Segment:** According to management, SIPML earns a margin of Rs. 6750/ton after deducting all expenses if they sell Kraft paper at Rs. 34,000/ton on average.
    - On the other hand, conversion cost from paper to boxes is around Rs. 5,000/ton and the company is selling corrugated boxes at Rs. 42,000/ton. So, Rs. 3,000/ton is the additional margin SIPML gets from box conversion + 6,750/ton from Kraft paper. In total, they get around Rs.9750-10,000/ton by selling corrugated boxes.
    - Therefore, the company earns higher margins from printing and packaging segment as compared to Kraft Paper.

Balance Sheet Strength

- South India Paper mills Ltd. has equity of Rs 15 Cr. divided into 1.50 Cr. shares of Rs 10 each. The net worth stands at Rs 519.86 Cr. as on March'17.
- The company has total debt of Rs 52.95 Cr. and an Interest Coverage Ratio of 5.56 suggesting the company has six times EBITDA compared to interest payments.
- Gross Block of the company has increased in recent times. In FY16, the company spent on up-gradation / modernizing /balancing of the existing paper machines with a focus on quality & higher grades.
- SIPML has been purchasing land near their existing manufacturing facility keeping future expansion in mind which also gives them access to use water from a nearby reservoir.
- Capital Expenditure has been mostly funded by a mix of debt and internal accruals until now. The new Brownfield expansion will also be funded by 75% debt and 25% from internal accruals.

Year / Rs Cr.	FY10	FY11	FY12	FY13	FY14	FY15	FY16	FY17	FY18
Gross Block	**95**	**104**	**123**	**129**	**140**	**146**	**190**	**221**	**218**
Secured Loans	16	19	12	11	13	15	30	45	53
Unsecured Loans	1	2	2	2	2	2	4	0	0
Total Debt	**18**	**21**	**14**	**13**	**15**	**17**	**34**	**45**	**53**

Source: Ace Equity

- Let's look at cash flow in order to gauge the capability of the company for paying back debt. In the last decade, the company has managed to stay cash flow positive expect FY18 due to a labor strike. Average operating cash flow from the last 10 years has been Rs. 16 Cr.
- As SIPML is raising more debt to fund future expansion, the debt on the company is expected to reach around 60 Cr. in the next two years. With the average cash flow of 16 Cr. per year, the company is in a fair position to pay off the debt in the next four to five years.

Free Cash Flow

Year	FY10	FY11	FY12	FY13	FY14	FY15	FY16	FY17	FY18
Cash from Operating Activity	18	14	21	16	11	15	30	26	-2
Purchased of Fixed Assets	7	10	19	8	13	8	53	30	3
Free Cash Flow	**11**	**4**	**2**	**8**	**-2**	**7**	**-23**	**-4**	**-5**

Source: Ace Equity

- Labor strike disrupted the company's operations as well as the working capital days. There was a sudden spike in credit days in FY18 otherwise the company generally gives credit period of around 60 days. Payables and Inventory days also seems stretched in FY18 but this should be considered as one-offs and working capital days is expected to normalize in the upcoming years.

Cash Conversion Cycle

Year	FY09	FY10	FY11	FY12	FY13	FY14	FY15	FY16	FY17	FY18
Receivable Days	55	52	37	39	41	56	53	55	58	93
Inventory Days	43	55	53	57	65	82	73	67	66	103
Payable Days	32	28	22	27	31	36	34	37	45	56
Cash Conversion Cycle	66	79	68	69	75	102	92	85	79	140

Source: Ace Equity

- ROE and ROCE of the company started improving from FY15 once the labor strike was resolved. A similar incident of labor strike happened last year as well which again impacted the return ratios significantly.
- FY10 was the best year for the company when Paper Industry was at peak & SIPML ROE was around 23% and ROCE 25%, after which many companies in Industry started adding more capacities leading to oversupply in the market.

Year	FY09	FY10	FY11	FY12	FY13	FY14	FY15	FY16	FY17	FY18
ROE (%)	16	22	19	15	15	4	13	16	9	0
ROCE (%)	17	25	23	18	19	7	18	19	12	2
Fixed Asset Turnover	1.67	1.45	1.75	1.58	1.41	1.13	1.38	1.3	1.01	0.61

Source: Ace Equity

- Asset turnover is expected to improve in the coming years with technology up-gradation and de-bottlenecking done by the company in the past two years.

Key Risks

1. **Labor union strike:** SIPL has faced this issue twice in the last seven years affecting the company's performance. It can happen again if the company does not reach an agreement in time with the labor union.
2. **Disputed Tax Liability**: - The Company has a contingent liability of Rs. 3.72 Cr. mainly comprising of disputed CENVAT Claim on Fixed Assets and demand by Chamundeshwari Electricity Supply Corporation Ltd (CESC) for alleged breach of PPA and has claimed damages on account of reduction in the supply of power to CESC.
3. **Environmental Concern:** Waste generated by paper mills has to be disposed of properly. Any mismanagement in disposing of waste by SIPL can result in serious trouble as it is surrounded by agriculture area.

Key Takeaways

Particulars	Explanation
Raw Material	Company's profitability is exposed to volatility in the raw material price and foreign exchange rates (given that the company imports ~50% of its Waste Paper requirements).
Electricity	11MW captive power plant produces more than the company can consume. Hence, they sell excess power of 4MW to the grid
Labor	SIPL has faced labor strike twice in last seven years which has affected the company's operations severely.
Installed Capacity	Installed capacity of 60,000 MT/annum is expected to increase by 112,000 MT/annum till FY20.
Forward Integration	SIPML also manufacturers Corrugated Boxes and consumes around 50% of the in house production of Kraft Paper

Conclusion

While the manufacturing of Kraft paper and related products continuous to dominate the core business revenues, the company has been trying to mitigate the product concentration risk to a certain extent through forward integration in high yielding packaging segment. The company has managed to reset the product prices in conjunction with the rise in input prices. However, in the past, they found it difficult to pass on the increase in raw material costs in the Kraft paper industry due to high competitive intensity in the segment.

Shree Ajit Pulp and Paper Limited

Introduction

Shree Ajit Pulp & Paper Limited (SAPPL) is also engaged in the manufacturing of Kraft paper that finds application in the packaging industry, particularly in the manufacturing of corrugated boxes. It was incorporated on 23rd March 1995 as M/s Ajit Pulp and Paper Private Limited and was subsequently converted into a Public Limited Company on 13th November 1995. The company came out with an IPO aggregating 3.15 Cr. in Oct 1996.

Subsidiary Companies

SAPPL has two group concerns:
1. Shree Samrat Pulp and Paper Private Limited
2. Shree Samrudhi Industrial Papers Private Limited.

The company holds 50% stake in Shree Samrat, which manufactures low burst factor (BF) Kraft paper while Shree Samrudhi, incorporated in the year 2011, is a fully owned subsidiary of a company which is intended to act as a marketing arm for SAPPL, though it is yet to commence operations.

Products: The Company's principal products include Multilayer Testliner & Testliner Paper ranging from 70 to 300 grams per square meter (GSM) and 16 to 35 busting factor (BF). These products are available in two shades, which include Natural and Golden Yellow.

Manufacturing Facility

SAPPL started its operation of Kraft paper mill with an installed capacity of 16,500 MT/annum, located in the Salvav, Vapi-Gujarat. Gradually, the production capacity of the company increased from 16,500 MT/annum to 42,000 MT/annum.

Then in FY14, the company invested for the modernization of the unit and enhanced the production capacity from 66,000 MT/annum to 90,000 MT/annum. The company also invested Rs. 24.81 Cr. during FY16-17 for up-gradation and improvement in existing manufacturing facilities.

Currently (FY19), the company has made a further investment of Rs. 10.50 Cr. in plant and machinery mainly for improvement in quality and reduction in the cost of production. Cost of the project is mainly funded by term loans and partly using internal accruals.

Forward Integration

In FY18, the board approved the proposal of setting up a new plant for manufacturing corrugated boxes as a step towards forward integration. The cost of installing the new plant is in the vicinity of Rs. 80 Cr. and the company has already obtained sanction for the term loan from their bankers. However, the management has kept the project on hold for the moment and is examining certain critical aspects of the project.

We saw that South India Paper mill earns higher margins in the manufacturing of corrugated boxes as compared to Kraft paper manufacturing which reduces product concentration risk for the company as well. As most the Kraft paper gets consumed within premises, dependence on other vendors gets reduced especially during downturn. If Shree Ajit Pulp & Paper Ltd forayed into box manufacturing; they can also enjoy same benefits as the company is in a fair position to leverage their distribution network created through two decades of presence in the industry. They are considered to be the most trustworthy and dominant player in Kraft Paper in Gujarat.

Raw Material

SAPPL procures waste paper from both domestic and international markets. Around 50% of the raw material is imported primarily from the USA, the Middle East and Europe through various indenting agents. Thus, its margins remain vulnerable to any adverse fluctuations in foreign exchange in the absence of a firm hedging mechanism.

Electricity: SAPPL has installed two wind mills in Rajkot (1.50 MW, installed in FY 2010) and Jamnagar (1.25 MW, installed in FY 2012). The company also commissioned a 1.50 MW co-generation unit at its manufacturing unit in October 2013.

SAPPL has secured a wheeling arrangement (transfer of electrical power through transmission and distribution lines from one utility's service area to another's) with Gujarat Energy Transmission Corporation Ltd (GETCO) and Dakshin Gujarat Vij Company Ltd (DGVCL) whereby the set off is given to the Company for the generation of electricity from the wind mills. The steam generated from the captive power plant is used for pulping, digesting and drying purposes. The PLF level of the co-generation unit has been steadily increasing over the past few years leading to significant cost savings for the company.

Sales and Distribution Network

The company has a well-established marketing network of agents spread across western and southern region to sell the products. It serves textiles, automobiles, appliances and consumer durables, foods and beverages, and fruits and vegetables industries.

SAPPL has been manufacturing kraft paper since 1995 and has developed an extensive distribution network in the last two decades

Management and Board of Directors

- Mr. Gautam D. Shah has been the Managing Director of Shree Ajit Pulp & Paper limited since July 1, 2005.
- At present, Promoter holding is 55.60 % out of which 25.98% of shares are pledged by the promoters. Promoter's Stake has been divided among various members of Shah Family, with Gautam Shah holding maximum 19.88%. *Promoters have increased their holdings by 6.32% in Dec 2018 quarter*.
- The company has not been paying much dividends considering they need capital for expansion and modernization of plants & machinery.

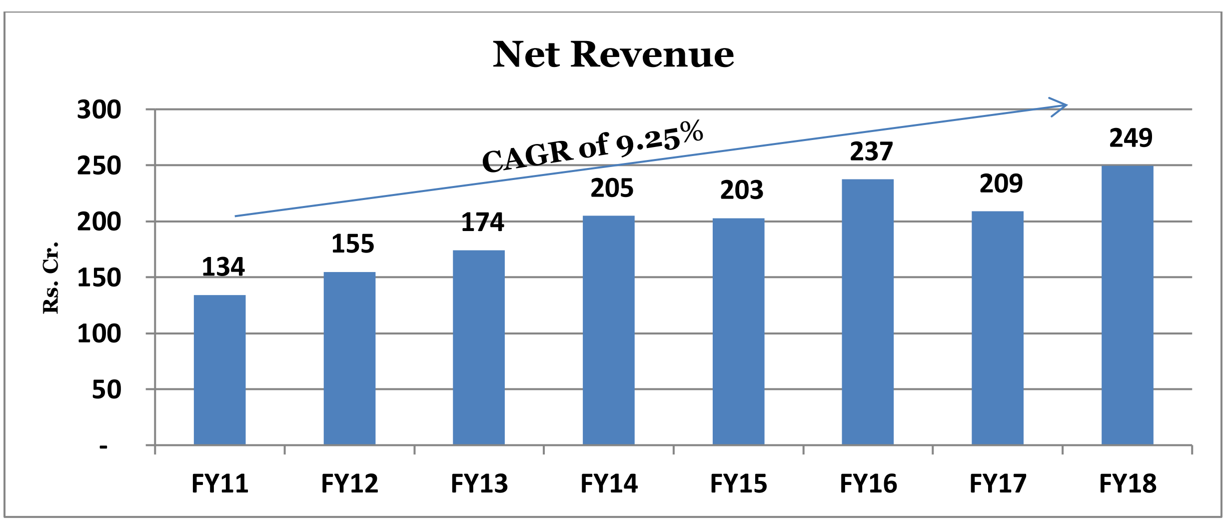
Board of Directors

Name	Designation	Experience
Mr. Gautam D. Shah	Chairman and Managing Director	Mr. Gautam D. Shah has been the Managing Director of Shree Ajit Pulp & Paper limited since July 1, 2005. He is on the Board of Directors at Ajeet Buildsteel Pvt Ltd., Shree Samarpan Pulp & Paper Pvt Ltd., Shree Samrat Pulp & Paper Pvt Ltd. and Shree Samrudhi Industrial Papers Pvt Ltd.
Mrs. Bela G. Shah	Executive Director	Mrs. Bela Gautam Shah is a member of the promoter group of the Company. She is a Bachelor degree in Science with mathematics and has wide experience and expertise in the field of business and finance.
Mr. Darshak B Shah	Non-Executive Director	Mr. Darshak B. Shah has been an Independent Non-Executive Director of Shree Ajit Pulp & Paper limited since July 11, 2014.
Mr. Dhansukhlal G Shah	Non-Executive Director	Mr. Dhansukhlal G. Shah has been a Non-Executive Director of Shree Ajit Pulp & Paper limited since March 23, 2005. Mr. Shah has expertise in management of business undertakings. He serves as a Director of Ajeet Buildsteel Pvt. Ltd.
Mr. Nawal kishor D. Modi	Independent Director	He is a Chartered Accountant. He has wide entrepreneurial skills, experience and expertise in the field of finance, Management and business administration for over twenty years.

Financial Analysis

Shree Ajit Pulp and Paper Limited (SAPPL) revenues in FY17 were lower, owing to a decline in the volume of goods sold on the account of the temporary shutdown of operations for maintenance as well as due to a decline in demand post demonetization.

The company also seems to get benefit from the shutdown of Paper plants in China as they also received an export order worth 4.06 Cr for the first time. The order for supply of 1,240 tonnes of kraft paper was executed in Q2FY19. Overall, the net revenue of the company has grown at a CAGR of 9.25% in the last 8 years.



Source: Ace Equity

Shree Ajit Pulp and Paper Ltd - Common Size P&L Account

Year / Rs Cr.	FY18	FY17	FY16	FY15	FY14	FY13	FY12	FY11	FY10	FY09
Expenditure										
Raw Material Consumed	66.1%	64.9%	62.1%	64.8%	63.8%	59.7%	61.2%	60.5%	55.4%	63.1%
Increase/Decrease in Stock	-1.2%	0.0%	1.2%	-0.3%	-1.1%	0.0%	0.7%	-1.2%	-0.4%	0.1%
Employees Benefit Expenses	5.5%	5.8%	5.4%	4.7%	4.3%	4.2%	3.2%	2.8%	2.9%	3.0%
Other Expenses	19.7%	20.4%	19.1%	20.6%	19.5%	20.6%	23.2%	23.0%	24.0%	24.9%
Total Expenditure	90.2%	91.1%	87.8%	89.7%	86.6%	84.4%	88.3%	85.2%	81.9%	91.1%
Gross Profit	35.1%	35.1%	36.7%	35.5%	37.3%	40.4%	38.1%	40.6%	45.1%	36.8%
Operating Profit / EBITDA	9.8%	8.9%	12.2%	10.3%	13.4%	15.6%	11.7%	14.8%	18.1%	8.9%
Other Income	0.1%	0.0%	0.0%	0.0%	0.0%	0.2%	0.1%	0.1%	0.2%	0.4%
Depreciation	2.6%	2.6%	2.3%	2.7%	2.4%	2.2%	2.2%	2.2%	2.4%	1.8%
PBIT	7.3%	6.3%	9.9%	7.6%	11.1%	13.6%	9.6%	12.7%	15.9%	7.4%
Interest/Finance Costs	2.3%	2.0%	1.8%	2.4%	1.6%	2.1%	2.4%	3.0%	3.6%	1.7%
Profit Before Tax	4.8%	4.3%	8.1%	5.2%	9.4%	11.5%	7.2%	9.7%	12.3%	5.7%
Tax	1.5%	1.3%	2.6%	1.5%	3.0%	3.4%	2.2%	3.1%	3.9%	2.4%
Profit After Tax	3.3%	3.1%	5.4%	3.8%	6.4%	8.1%	5.0%	6.5%	8.4%	3.3%

Source: Ace Equity

- **Gross profits are** more or less stable since lower raw material prices are offset by rupee depreciation for the company. Since the company imports, more than 50% waste paper and there are no major export orders, rupee fluctuation will continue to hinder SAPPL margins.

- **Employee cost** has increased as the company has increased its spending on employee welfare schemes and provident fund in the last few years.

- **Other expenses**: Fuel expenses constitute around 11-12% of revenues of the company. Continues increase in fuel price coupled with an increase in raw material prices has been impacting the company's margins from last few years. However, PLF levels of the company are increasing which can help in cost savings if coupled with a reduction in coal prices in future.

- **Finance Cost**: The Company has raised debt to fund capital expenditure and working capital requirements for expansion which has resulted in an increase in interest cost in the last few years.

- **Net Profit:** Higher depreciation expense coupled with higher interest costs impacted margins despite an increase in production capacity of the company.

Capacity Utilization

Particulars	FY12	FY13	FY14	FY15	FY16	FY17	FY18
Installed MTPA	66,000	66,000	-	-	90,000	90,000	90,000
Production MTPA	57,160	64,455	68,145	68,018	80,010	77,363	82,478
% Utilization	87%	98%	-	-	89%	86%	92%
Sales	57,617	64,410	67,424	67,729	81,084	77,363	81,599
Sales (Rs Cr.)	155	174	205	203	237	209	249
Price Realization (Rs/MT)	26,902	27,014	30,405	29,972	29,229	27,015	30,515
Profit (Rs Cr.)	8	14	12	7	12	6	8
ROE (%)	19%	28%	19%	10%	15%	7%	8%
ROCE (%)	19%	27%	21%	13%	20%	10%	12%

Source: Company Annual Reports

- The company has maintained healthy utilization levels of 85% and has managed to support the increasing scale of operation s through regular capacity expansion.
- SAPPL manufactures kraft paper of various grades with BF ranging from 16 to 35. However, the company's kraft paper product portfolio is heavily tilted towards lower grade kraft paper (20 BF and lower) which contributes more than 50% of the overall revenues.
- SAPPL earns lower margins on these papers and also faces stiff competition from other players in the segment, which limits its pricing flexibility.
- Despite higher realization in FY18, margins of the company were impacted due to higher depreciation expense and interest costs due to recent capacity expansion by the company mainly using debt.
- ROE and ROCE slightly improved in last year and suggest scope for improvement in coming years with higher price realizations and lower RM costs.

Balance Sheet Strength

- Shree Ajit Pulp and Paper Ltd. has an equity base of Rs 5.36 Cr. with 0.54 Cr. shares outstanding at a Face Value of Rs. 10. The net worth stands at Rs 100.18 Cr. as on Sept'18.
- The company has total debt of Rs 50.93 Cr. and Interest Coverage Ratio of 7.61 suggesting the company has seven times EBITDA compared to interest payments.
- Gross block of the company has increased in recent times. The company has also been investing in up-gradation and modernization of plants since last two years.
- Capital Expenditure has been mostly funded by a mix of debt and internal accruals.

Year / Rs Cr.	FY11	FY12	FY13	FY14	FY15	FY16	FY17	FY18
Gross Block	65.74	76.36	79.38	105.75	113.82	115.53	94.16	122.96
Borrowings	36.17	37.3	34.64	42.92	40.52	32.73	44.2	50.93

Source: Screener.in

- The company has been generating positive cash flow from operations. Average operating cash flow from the last nine years has been Rs. 14 Cr.
- Assuming the debt of the company will reach Rs 60 Cr. in coming two years due to SAPPL raising more debt to fund the up-gradation and modernization of plant, Company can pay back the debt (along with interest of Rs. 7 Cr.) in seven to eight years with an average cash flow of 14 Cr.

Free Cash Flow:

Year	FY11	FY12	FY13	FY14	FY15	FY16	FY17	FY18
Cash from Operating Activity	15	14	17	14	16	17	14	18
Purchased of Fixed Assets	7	11	13	17	9	37	26	18
Free Cash Flow	**8**	**3**	**4**	**3**	**7**	**-20**	**-12**	**0**

Source: Company Annual Reports

- Cash conversion cycle of the company has been increasing mainly due to an increase in credit days. The company faces stiff competition as they sell mainly lower BF papers where other players generally provide a two month credit period. So, the company also seems to be following Industry practice resulting in an increase in the working capital days.

Cash Conversion Cycle

Year	FY11	FY12	FY13	FY14	FY15	FY16	FY17	FY18
Receivable Days	34	37	39	44	46	48	56	52
Inventory Days	30	27	28	26	31	27	31	31
Payable Days	36	36	31	21	23	24	30	25
Cash Conversion Cycle	28	28	36	49	54	51	57	58

Source: Ace Equity

Key Risks

1. **Global volatility in waste paper prices may affect profit margins:** In the last two years, the profit margins of the firm have remained vulnerable to the fluctuations in the waste paper prices and the inability of the company to pass on the costs to the customers.

2. **Vulnerable to fluctuation in foreign exchange rate:** Around 50% of the waste kraft paper requirement is managed through imports. Thus, the absence of a proper hedging mechanism may severely expose the company to foreign exchange risk.

3. **Highly competitive Market**: SAPPL is present in the highly competitive Kraft paper industry with stiff competition, particularly in the lower BF segment that limits the company's ability to raise prices

Key Takeaways

Particulars	Explanation
Raw Material	The company mainly imports RM, thus exposed to currency fluctuation as well as International market prices of Waste Paper.
Electricity	Mostly dependent on the State Government for power supply.
Water	Self-sufficient capacity using bore wells.
Installed Capacity and Utilization (%)	Installed capacity around 90,000 MT/annum and Utilization was around 85% in FY18.
Distribution Network	Strong presence in western and southern India due to decades of presence in the kraft paper industry.

Conclusion

SAPPL has demonstrated a long track record over the last two decades in the kraft paper industry. The company has established a wide distribution network across western and southern India. The utilization continues to remain more than 85% and expected to go up in the coming few years. However, the stiff competition from local players has ensured subdued prices despite a consistent rise in RM and fuel costs. The company might see better days ahead in terms of profitability due to a reduction in waste paper prices and power cost.

Ruchira Papers Limited

Introduction

Ruchira Papers Ltd (RPL) is engaged in the manufacturing of Kraft Paper and Writing & Printing Paper (WPP). WPP is used for multiple purposes like printing, Note Books, Publications, stationery etc whereas Kraft Paper finds its application in the packaging Industry especially for making Corrugated Boxes/Cartons and for other packaging requirements.

Journey so far:-

- **1980**
  - Ruchira Papers was incorporated in 1980.
- **1983**
  - Commenced Commercial production of Kraft Paper with 2310 TPA
- **1992-94**
  - PM-2 installed for manufacturing of Kraft Paper and production capability increased 21000 TPA
- **2006-07**
  - Came up with an IPO and got listed on BSE & NSE.
- **2007-08**
  - Launched Writing & Printing paper production in 2008
- **2008**
  - Production increased by de-bottlenecking at various intervals post from 2008 on continuos basis.
- **2015-16**
  - Certified for FSC chainof custody by Rainforest allaince
- **2017-18**
  - Implemented Modernization and Debottlenecking programmee
  - Announced Greenfield project for Writing & Printing Paper at Chamkaur Sahib, Punjab.

Raw Material

The primary source of raw material for the company is agricultural residues which include wheat straw, bagasse, sarkanda and other materials. Agro-based paper manufacturing requires less energy, less water, fewer chemicals and is environmental-friendly compared to companies using wood pulp, resulting in lower cost of production.

The company is strategically located in the outskirts of Himachal Pradesh which allows them to procure Agri-residues from agricultural rich states of Haryana and Punjab.

Until a few years ago, the farmers used to burn the straw to clear the fields for the next harvest as it had no economic value. This used to cause immense pollution in the states like Delhi, Haryana and Punjab. Consequently, these states are now pushing for their alternative uses in a bid to reduce pollution in these states.

Manufacturing paper from agricultural residue has several benefits:

- Reduced C02 emission by 25% compared with conventional wood fiber pulping.
- Promotes the use of the renewable crop, reducing the demand for wood-based fiber.
- Reduced cost from the transportation of wood-based molded to a lighter, stronger alternative.

The company manufactures Writing & Printing Paper by using agricultural residues, such as wheat straw, Bagasse, sarkanda (80%-85%), Softwood Pulp (4% -5%) and other materials (10%-15%). While Kraft Paper is manufactured by using agriculture residues, such as Bagasse, wheat straw, sarkanda (50%-55%) and indigenous and imported waste paper(45% -50%).

The Company‘s water requirement is sourced from groundwater through tube-wells.

Electricity: The Company has its own co-generation captive Power Plant of 8.1 MW for Printing and Writing Segment whereas, for Kraft Paper Plant, electricity is procured from state electricity board. Ruchira uses a combination of Agri Residues (Rice husk and other materials) and Pet Coke (Residue of Crude Oil) as feedstock for this Power Plant.

Manufacturing Facility

Ruchira paper's facility is based in Sirmaur District, Himachal Pradesh which has close proximity to Baddi where a cluster of FMCG and Pharma manufacturing companies are located.

The company commenced its operations in 1983 with the manufacturing of Kraft papers with a meager capacity of 2,310 MT/annum. In the next three and a half decades, the company grew its capacity to around 52,800 MT/annum via several phases of expansion.

In 2008, Company set up a 33,000 MT/annum manufacturing facility for writing and Printing paper while prior to that it was manufacturing only Kraft Paper.

Capacity Expansion

The company's production capacity remained stagnant at 85,800 TPA for a few years. In order to improve capacity, the company started with various debottlenecking initiatives which paid rich dividends to the company as they were successful to increase their capacity to 128,000 MT/annum in FY18. The company production capacity is expected to increase to 133,000 MT/annum by FY19 and 142,000 MT/annum by FY20. As per the management, the company will have an estimated production of 55000 MT/annum of writing and printing paper and 78000 MT/annum of Kraft paper in FY 2018-19

The company is planning for a Greenfield expansion by setting up 100,000 MT/annum production capacity for Writing & Printing Paper segment at Chamkaur Sahib in Punjab. They have started with the land aggregation process by purchasing 104 acres of land through internal accruals. Currently, the company is in the process of purchasing another 78 acres of land for the proper execution of the expansion plan. Although the exact funding mix is yet to be decided, the initial estimates suggest that the company will opt for a term loan of Rs. 450 Cr. while the rest of the amount will be aggregated through a mix of internal accruals, promoter funding and QIP.

For a company with an annual profit of around Rs 40 Cr., an 800 Cr. expansion plan is a tall task and hence there will be a lot of challenges related to execution risk. It has been observed that some of the companies which undertook an ambitious capex plan had to endure challenging times for a year or two during and post-expansion.

Product Portfolio

Virgin Pulp (agro based) is used for manufacturing Writing and Printing Paper which finds its application in Notebooks, Publications, etc. Ruchira also manufactures a special grade of Paper (Colored Paper) for Wedding & Greeting cards, Art sheets & Colored scrapbooks, Drawing sheets and Papers for multipurpose office use. Writing and Printing paper brands are 'Tarang'. 'Safeda', 'Kora', 'Savera', 'Karigar', 'Gehua', 'Mela', 'Pahari.

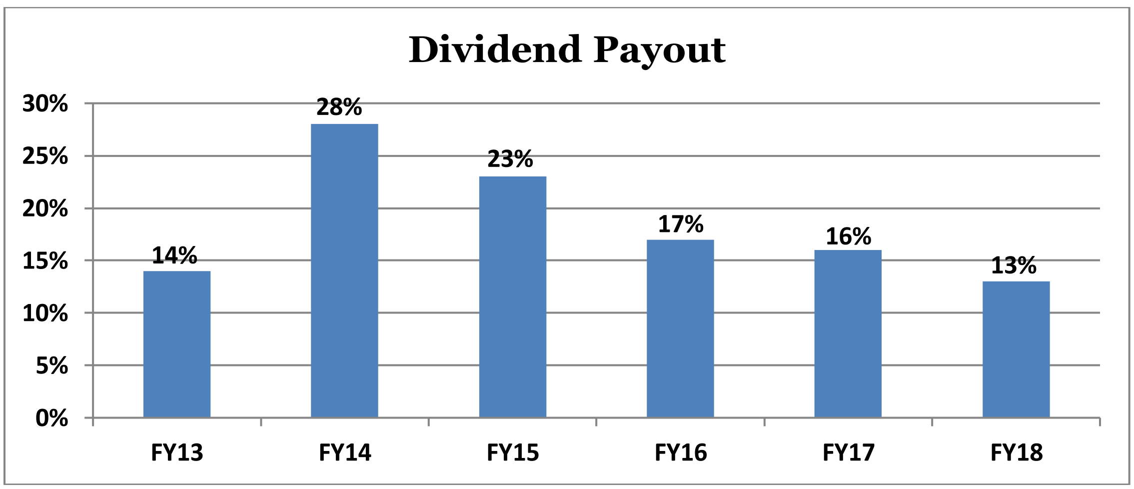
After the up-gradation of Kraft Paper plant, the company can now produce color papers with more than 20 BF (earlier the company used to manufacture only 20 BF paper). Higher bursting factor improves quality as well as yields higher realization for the company. The company also started using imported waste known as KCB (Kraft Carrier Board) as it has better properties at lower cost and yields high price realization as well. Only Ruchira is able to use this RM because KCB requires certain manufacturing facility which is similar to facility required for using agricultural Raw material.

The Company also manufactures a special grade of Kraft Paper known as DTY/POY grade which is used in the manufacturing of textile tubes and in a wrapping of different types of Yarn. Kraft paper brands include 'Multani', 'Maati', 'Khadi'.

Sales and Distribution Network: The Company enjoys enduring engagements with 45-50 dealers and more than 25 customers, facilitating wide product distribution in North India.

Management and Board of Directors

- Ruchira Paper is promoted by three technocrats - Mr. Umesh Chander Garg, Mr. Jatinder Singh and Mr. Subhash Chander Garg.
- Promoters have been continuously increasing their stake in the company through open market purchases and through conversion of equity warrants. Over the last 8 years, the promoters have increased their stake in the company from 54.82% at the end of Dec'11 to 64.07% at the end of Dec'18.The company has been maintaining a healthy dividend payout ratio of 20% on average from the last five years.



Board of Directors

Name	Designation	Experience
Shri Subhash Chander Garg	Whole Time Director	Subhash Chander Garg, aged 76 years, is Law graduate and has expertise in the field of taxation. He has been looking after the Taxation, Marketing and Sales functions of Ruchira Papers Limited since its inception and has acquired rich marketing experience.
Shri Umesh Chander Garg	Managing Director	Umesh Chander Garg, aged 69 years is a Graduate and has been associated with Ruchira Papers Limited right from the conceptual stage. He has been the key man in the selection of various types of machinery and all expansion projects were executed under his guidance. He has been looking after the Production, Maintenance and Technical aspects of the company.
Shri Jatinder Singh	Whole Time Director	Jatinder Singh, aged 64 years, is an Engineering Graduate from Punjab University. Over the years, he has acquired deep insight into the working of Paper Industry. He has been looking after the Finance, Administration and Raw Material Procurement of the company.
Shri Vipin Gupta	CFO & Whole Time Director	Mr. Vipin Gupta, aged 48 Years is heading the Finance and Accounts of the Company. He is associated with the Company for the past 26 Years.. He is a Post Graduate in Commerce.
Shri Dalbir Singh	Independent Director	Shri. Dalbir Singh is Non-Executive Independent Director of Ruchira Papers Limited. He is M. A. and LLB. He retired from the post of Executive Director of the Yamuna Syndicate Limited.
Shri Avtar Singh Bajwa	Independent Director	Colonel Retired Shri. Avtar Singh Bajwa is Non-Executive Independent Director of Ruchira Papers Limited. He is Arts Graduate by Qualification. He is a retired Army Officer and has experience in Material Management and Civil Personnel Management.
Shri Surinder Gupta	Independent Director	He is a Chartered Accountant and practicing as a Chartered Accountant since 1983. He has earlier worked in Karamchand Thapper & Brothers (CS) Ltd.
Shri Swatantar Kumar Dewan	Independent Director	Shri. Sawtantar Kumar Dewan is Non-Executive Independent Director of Ruchira Papers Limited. He has done B.Sc. (Engg.) Hons. (Mechanical).

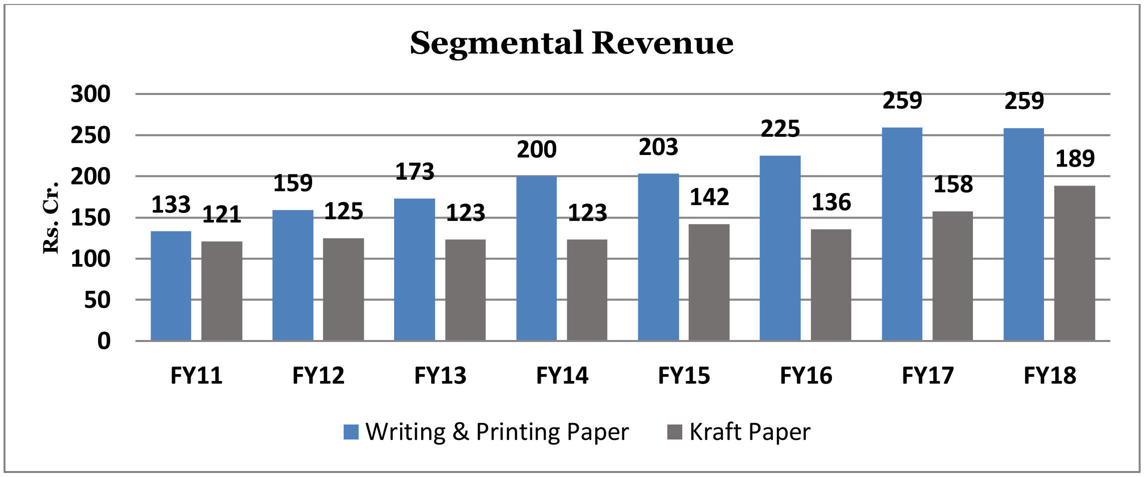
Source: Company Annual Reports

Ruchira Papers Ltd. - Common Size P&L Account

Year / Rs Cr.	FY18	FY17	FY16	FY15	FY14	FY13	FY12	FY11	FY10	FY09
Expenditure										
Raw Material Consumed	37.0%	40.2%	38.1%	42.8%	63.2%	32.8%	47.2%	37.9%	35.7%	33.7%
Increase/Decrease in Stock	0.0%	-0.6%	0.9%	-1.1%	0.3%	0.1%	0.4%	-0.7%	-0.1%	-2.5%
Employee Expenses	7.5%	7.1%	7.3%	6.3%	6.1%	5.3%	4.5%	5.1%	5.3%	5.2%
Other Expenses	38.9%	38.1%	40.6%	40.6%	15.1%	44.8%	33.6%	44.7%	49.5%	54.3%
Operating Expenditure	**83.4%**	**84.7%**	**86.9%**	**88.7%**	**84.8%**	82.9%	85.8%	87.0%	90.4%	90.8%
Gross Profit	**63.0%**	**60.5%**	**61.0%**	**58.2%**	**36.5%**	67.1%	52.4%	62.8%	64.4%	68.7%
Operating Profit / EBITDA	**16.6%**	**15.3%**	**13.1%**	**11.3%**	**15.2%**	17.1%	14.2%	13.0%	9.6%	9.2%
Other Income	0.8%	0.2%	0.3%	0.4%	0.6%	0.6%	0.5%	0.5%	0.4%	0.9%
Depreciation	2.7%	2.5%	2.6%	2.8%	3.6%	3.7%	3.7%	4.2%	5.2%	4.3%
PBIT	**14.7%**	**13.0%**	**10.8%**	**8.9%**	**12.2%**	14.0%	11.0%	9.4%	4.8%	5.9%
Interest/Finance Costs	1.7%	1.9%	2.0%	3.0%	4.2%	5.7%	7.0%	7.0%	8.3%	7.1%
Profit Before Tax	**13.0%**	**11.1%**	**8.7%**	**5.9%**	**7.9%**	8.3%	4.0%	2.3%	-3.5%	-1.2%
Tax	4.5%	3.3%	3.4%	2.2%	3.2%	2.8%	1.3%	0.8%	-1.3%	-0.2%
Profit After Tax	**8.5%**	**7.8%**	**5.4%**	**3.7%**	**4.8%**	5.5%	2.7%	1.5%	-2.2%	-1.0%

Source: Ace Equity

- **Gross profit:** During FY13-15, drought in certain parts of the country caused Agri-raw material prices going up significantly and impacted margins adversely. Out of total raw material used by the company, 4% to 5% is imported wood pulp and rest raw material is agriculture residues.
  - According to the management, agriculture residue prices have reduced now and they are expected to remain stable for some time.
- **Employee cost** has risen as salaries of employees and contribution to gratuity fund has been increased by the company.
- **Other expenses**: Major expenses are related to fuel and repairs to machinery which together constitute around 7% of the revenues in FY18.
- **Finance Cost**: The Company has repaid some debt which has resulted in a decrease in interest cost in the last few years.
- **Tax**: Tax exemptions for WPP plant expired in 2018 while for kraft paper plant, tax exemptions have already expired in 2014. Now, the company would pay full tax from FY19 onwards which will have some impact on net profit margins.
- **Net Profit:** Profitability in FY18 has been increased due to a reduction in raw material prices, increase in realization, reduction in interest cost and reduction in depreciation cost due to economies of scale.



- From 2005-2011, the company's sales grew at a robust CAGR of 30%. Although, the profitability of the company suffered as they took huge debt for setting up WPP manufacturing facility.
- Since then, the company has relentlessly focused on efficient utilization of the existing capacity which has led to substantial improvement in the gross margins, reduction in interest cost and lower depreciation as a % of sales.
- From FY11 to FY18, sales had grown at a paltry CAGR of 8.21% and are expected to improve going forward owing to capacity expansion and rise in exports. According to the management, Ruchira paper's export to China will account for around 10% of total sales in FY19. Exports to China yields higher realization as compared to domestic market which might lead to higher sales growth in the coming year.

Capacity Utilization

Particulars	FY13	FY14	FY15	FY16	FY17	FY18
Writing & Printing						
Installed MTPA	33,140	33,140	33,140	33,140	33,140	33,140
Production MTPA	40,791	41,425	43,387	47,074	50,351	47,425
Utilization (%)	123%	125%	131%	142%	152%	143%
Sales (Rs Cr.)	173	200	203	225	259	259
Price Realization (Rs/MT)	42,411	48,280	46,788	47,797	51,439	54,613
Kraft Paper						
Installed MTPA	52,800	52,800	52,800	52,800	52,800	52,800
Production MTPA	49,706	47,722	54,021	52,028	66,426	67,999
Utilization (%)	94%	90%	102%	99%	126%	129%
Sales (Rs Cr.)	123	123	142	136	158	189
Price Realization (Rs/MT)	24,746	25,774	26,286	26,140	23,786	27,795
Total Sales (Rs Cr.)	**296**	**319**	**345**	**361**	**417**	**448**
Profit (Rs Cr.)	**16**	**15**	**13**	**19**	**32**	**38**
ROE (%)	**20%**	**16%**	**12%**	**16%**	**21%**	**20%**
ROCE (%)	**22%**	**21%**	**17%**	**20%**	**26%**	**25%**

- Promoters have been able to achieve production higher than the installed capacity with help of the debottlenecking. In FY18, the Kraft Paper production reached 129% while that of Writing paper reached to 143% of its capacity.
- The management is gung-ho about the growth in the Writing & Printing paper segment due to a rise in education expenditure. The writing paper segment is a higher margin business with better realizations compared to kraft paper.
- Within the WPP Segment, the company has gradually evolved from the manufacturing of ordinary paper to the value-added products. The proportion of the revenues from colored paper, since its introduction in the year 2011, has been consistently rising. Color paper trade at a premium of Rs 2 to Rs 3 per kg compared to the average rate of WPP segment. Given the higher revenue realization of WPP products as compared to kraft paper, WPP accounts for more than 58% of the overall sales of the company despite lower tonnage.
- As far as return ratios are concerned, the company has consistently been recording ROE and ROCE in excess of 15%.

Balance Sheet Strength

- Ruchira Papers has an equity base of Rs 22.42 Cr. with 2.18 Cr. shares outstanding at a Face Value of Rs. 10. The net worth stands at Rs 191 Cr. as on Mar'18.
- The company has a total debt of Rs 75.89 Cr and an Interest Coverage Ratio of 7.49 suggesting that the company has seven times EBITDA compared to interest payments.
- They have been reducing debt since last three to four years using internal cash flows of the company. But the company is planning to increase debt in the coming years as funds are required for new Greenfield expansion.

Year / Rs Cr.	FY12	FY13	FY14	FY15	FY16	FY17	FY18
Borrowings	124	106	93	71	73	61	76

Source: Screener.in

- The company has been generating positive cash flow from operations. Management is using the cash for debottlenecking of its current plant as they are utilizing more capacity compared to their current installed one.

Free Cash Flow:

Year	FY12	FY13	FY14	FY15	FY16	FY17	FY18
Cash from Operating Activity	27	43	31	38	40	33	47
Purchased of Fixed Assets	0	4	6	5	32	20	61
Free Cash Flow	**27**	**39**	**25**	**33**	**8**	**-13**	**-14**

Source: Screener.in

Cash Conversion Cycle

Year	FY12	FY13	FY14	FY15	FY16	FY17	FY18
Receivable Days	45	52	50	35	35	38	39
Inventory Days	53	47	43	44	43	41	50
Payable Days	33	28	25	24	21	17	18
Cash Conversion Cycle	65	71	68	55	57	62	71

Source: Ace Equity

- The operating cycle of the company elongated to ~78 days, as on March 31, 2018, from ~65 days, as on March 31, 2017, on the account of rise in the inventory holding period.
- Continues decrease in payables days and an increase in inventory days has been impacting the operating cycle of the company since last few years.

Key Risks

1. **Volatility in input prices:** Prevalence of seasonality in raw material availability has contributed to increased volatility in the input prices for the company thereby impacting its profitability.

2. **Proposed Expansion:** The Company's plan to set up a Greenfield project in Punjab with an estimated cost of around Rs. 800 Cr. seems exorbitant considering the current size of the company and its past track record.

Key Takeaways

Particulars	Explanation
Raw Material	The company mainly uses agricultural residues, whose prices have reduced recently and also expected to remain stable in the coming years as per management.
Electricity	Self-sufficient with Captive Power Plant of 8.1 MW for Printing and Writing Segment whereas, for Kraft Paper Plant, electricity is procured from state electricity board.
Water	Self-sufficient capacity using bore wells.
Installed Capacity and Utilization (%)	Installed capacity around 85,800 MT/annum and Utilization level of 129% in Kraft Paper Plant and 143% in WPP in FY18.
Strong Brand with Multiple product offerings and a strong distribution network	Ruchira has a strong brand and is able to charge a premium for its products. Its presence in multiple products along with a strong network in North India ensures the ability to operate at optimal capacity.

Conclusion

RPL has been engaged in the paper industry for more than three and a half decades now. The promoters of RPL have an industry experience of over three decades each. The company has been debottlenecking its existing plant which has led to an increase in margins of the company due to economies of scale as well as a higher realization of prices in the market.

Till now, Ruchira has also been judiciously utilizing cash flows for debottlenecking and for reducing the debt of the company. But there is a possibility that the Greenfield expansion might drag returns for the company in the coming years as it happened in the past. Any news of a reduction in paper product prices in the market will put the company in a difficult situation where it will under pressure to utilize the expanded capacity as well as to repay the debt. Moreover, they are also exposed to fluctuation in raw material prices which can also drag the company's performance.

International Paper APPM Limited

Introduction

Incorporated in 1964 at Rajahmundry in Andhra Pradesh for manufacturing of paper by L.N. Bangur group, International Paper APPM Ltd. produces writing, printing and copier papers for foreign and domestic markets. Each of these products offers a differentiated proposition and is targeted to meet the unique needs of discerning customers. International Paper APPM Ltd. (formerly known as The Andhra Pradesh Paper Mills Ltd.) has more than five decades of experience in the paper industry.

Brief History:

The mill was initially incorporated as 'Carnatic Paper Mills' at Rajahmundry, Andhra Pradesh in the year 1921. In the initial years, the mill was struggling to stay profitable and eventually had to shut down due to insolvency.

The promoters established another company by the name 'Andhra Paper Mills' to take over the assets of 'Carnatic paper Mills' in the year 1929. The company had a capacity of around 10 TPD when it was taken over by Andhra Government after the formation of the state of Andhra Pradesh in 1953.

The government got into a joint venture with an industrialist Mr. G.D Somani wherein the assets of the company were transferred to a new company which got incorporated on 29th June 1964 under the company's act 1956.

In the next 50 years, the company's ownership status changed multiple times. In the year 1966, Mr. Somani transferred the company's ownership to West Coast Paper Mills limited which in turn transferred it to LN Bangur led Digvijay Investments in 1981. The Bangurs ran the company till 2011 before it was acquired by International Paper, a 30 billion dollar American Pulp and paper company founded in 1898. It was the first major domestic acquisition by a foreign-based paper company. Later in December 2013, the company name was changed to 'International Paper APPM Limited'.

Products

The company mainly manufactures uncoated writing & Printing Paper (WPP). The porous surface of the uncoated paper makes it easier to absorb more ink compared to coated paper. Uncoated paper is often referred to as bond paper and is used for printed materials like student workbooks, letterheads, envelopes etc.

Major varieties of WPP are

- Cream wove- Wove paper is a writing paper with a uniform surface, not ribbed or watermarked.
- Maplitho- Maplitho Paper is widely used in office application like computer stationery, bills, invoices, cash books etc.
- Cut-size- Cut Size simply refers to paper that is pre-cut and packaged in convenient sizes, usually 13" x 19" or smaller. The company offers well-known cut-size papers in a wide range of office documentation and multipurpose papers, from economy to premium grades, ideal for both home and commercial use.

- <u>Coated paper</u>- During the manufacturing process, a coating is applied on the uncoated paper which gives the paper a glossy, matt or silky finish. That paper is referred to as a 'coated paper'.

In recent times, the industry trends are tilting towards higher quality paper segments with cut-size and coated varieties consistently gaining volumes while cream wove has seen subdued growth in volumes. Hence, Maplitho, cut size and coated paper segments command higher price realization while cream wove has become a volume game with lower margins. According to industry estimates, cream wove commands 46% of the WPP market, Maplitho occupies 34% and cut-sizes constitute the balance 20%.

The Company has achieved leadership positions in terms of product quality over the decades in some of the key segments such as cut-size and high-grade writing and printing papers.

Some products of the company include:

i. **Reflection:** a premium grade 70 GSM copier.
ii. **Star white**: a high bright paper.
iii. **Primavera**: high-end writing and printing paper.
iv. **Royal Silk**: a premium grade Maplitho paper.
v. **Hi Brite Blade Wrapper-** a superior special grade paper designed to perform in blade packing applications that involve multi-step converting processes.
vi. **Skytone and Starliner** in the premium non-surface sized category primarily cater to the notebook conversion segment.

Raw Material

Subabul, Casuarina and Eucalyptus are the three varieties majorly used by IP APPM as raw materials for paper production. Subabul, Casuarina and Eucalyptus are disease and drought-resistant and can be grown in a variety of climatic conditions. A large part of this wood is grown in backward marginal/sub-marginal land, which is potentially unfit for other use.

The company has managed to procure raw material within a 300 radius of the mill by distributing saplings to farmers at a cheaper rate along with counseling them on the best method to grow them.

Electricity: IP APPM has invested in a recovery boiler (heat is used to produce high-pressure steam which is used to generate electricity in a turbine), a coal-fired boiler and a 34 MW turbine to supplement the power drawdown from the grid. The recent ties with Singareni Colleries and Mahanadi Coalfields have ensured adequate availability and better quality of coal supplies.

Water: Even though the Rajamundry and Kadiyam mills are situated adjacent to the River Godavari, the company has consistently strived to conserve water by investing in processes to recycle water.

Labor Strike

There was a halt in operations at IP APPM Rajahmundry plant for approximately two months, due to the labor strike which resulted in the loss of production of approximately 7,000 tonnes in FY18. The company has faced similar incident in the past when the production stopped for a month in FY 17 while they received potential strike threats from labor union in FY14.

It seems like new management has not been able to maintain a healthy relationship with workers which is a sign of worry as strikes have continuously impacted the company's operational performance in the last few years.

Manufacturing Facilities

The company has two manufacturing facilities in Rajamundry and Kadiyam which are located in the East Godavari district of Andhra Pradesh.

Rajahmundry Mill is an integrated wood-based paper mill with a rated capacity to produce 174,000 MT/annum of finished paper and 181,500 MT/annum of bleached pulp annually. The unit manufactures uncoated writing and printing paper - mainly cut-sizes, industrial papers and posters using Casuarina, Eucalyptus and Subabul as main sources of pulpwood.

The Kadiyam mill has a capacity to produce 67,000 MT/annum of finished paper such as cream wove, azure laid, colored cut sizes and kraft liner which uses recycled fiber and purchased pulp as raw material.

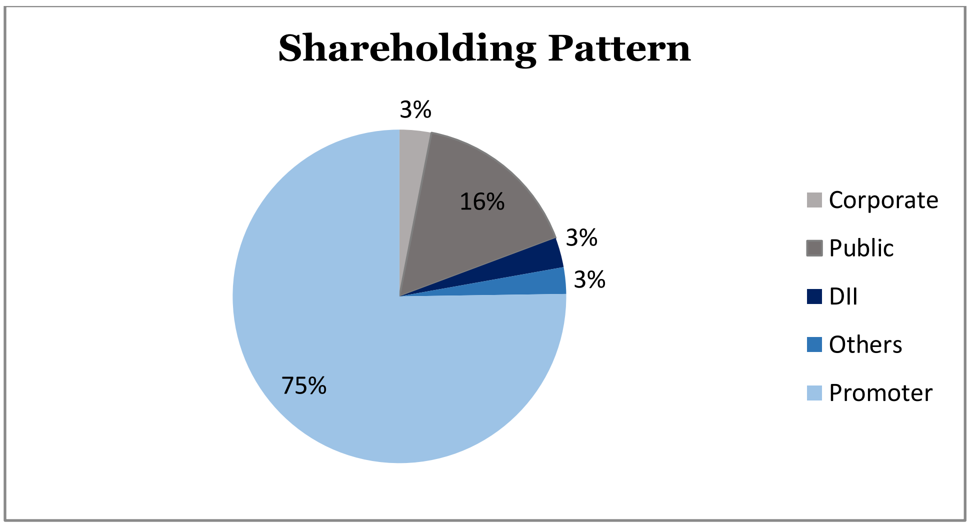
The total production capacity of the two mills is around 241,000 MT/annum. There are nine paper machines installed at the two locations which produce papers of different machine finished (uncoated mechanical printing paper) and machine glazed (with gloss on one side and a bit coarse surface on the other side of the paper) varieties in the range of 21 to 250 GSM. Since, the commissioning of the largest continuous digester (used to remove lignin which is the primary reason why the paper turns yellow with time), the company has managed to produce around 181,500 MT/annum of bleached pulp production which is sufficient for captive consumption.

Sales and Distribution

The company has been in existence since decades which has resulted in a strong distribution network, especially in Southern India. For all grades, marketing and distribution is done primarily through a network of dealers. Some large consumers are also being catered to directly and the company also participates in government tenders. IP APPM products are exported to Middle East, North Africa and Latin America, etc through a network of indenting agents across 20 countries.

Management and Board of Directors

- IP Holding Asia Singapore Pte Ltd, a subsidiary of International Paper Company (IPC), USA, has acquired entire stake (53.46%) held by the previous promoters (Bangur Group) of IPAPPM with a massive 319 million dollar deal. The deal includes 257 million dollars in cash for the promoters' 53.5% stake besides an additional payment of 62 million dollars for a non-compete arrangement.
- In addition, IP Holding Asia Singapore Pte Ltd has acquired an additional 21.5% in IPAPPM in a public tender offer (Open Offer), which was completed in Oct'11. Presently 54.96% stake is held by International Paper Investments Luxembourg, sarl and 20.04% by IP International Holdings, Inc. With this, IPC holds 75% of the IPAPPM through its subsidiaries.



Shareholders with more than 1% equity (as on 31st March'18)

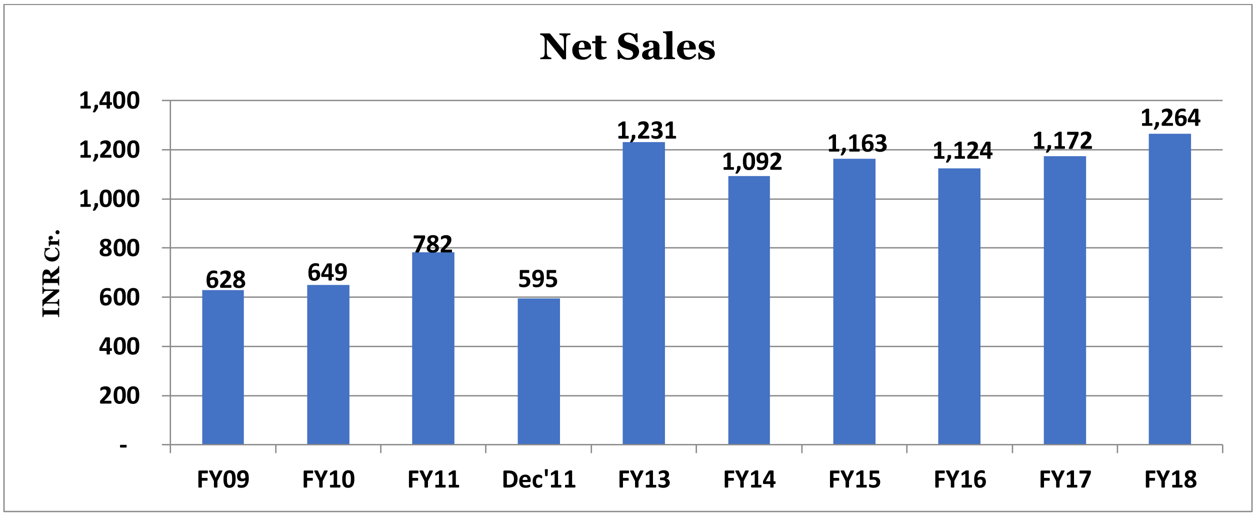
1. Dilipkumar Lakhi-1.69%
2. The Oriental Insurance Company Ltd-1.72%
3. Chirag Dilipkumar Lakhi- 1.53%
4. Manish Lakhi- 1.17%

Board of Directors

Name	Designation	Experience
Mr. Donald Paul Devlin	Chairman and Managing Director	Mr. Donald Paul Devlin has Twenty-nine years of diverse experience and leadership with international and U.S. based businesses. A graduate of Siena College in Albany, NY with a BBA and major in Accounting. He was appointed as Director of the Company effective February 22, 2017. He assumed charge as Chairman and Managing Director with effect from April 28, 2017.
Ms Megan A. F. Bula	Non-Executive Director	Ms Megan Bula joined International Paper, USA (IP) in 2007 as a litigation attorney supporting the company's xpedx distribution division. She has been appointed as Non-Executive Director of the company effective January 31, 2018.
Mr. Adhiraj Sarin	Independent Director	Mr. Adhiraj Sarin was appointed as Independent Director of the Company in December 2011. He holds a Bachelor's Degree in Engineering from IIT, Kanpur.
Mr. W. Michael Amick Jr.	Non-Executive Director	Mr. Mike was appointed as Non-Executive Director of the Company effective January 18, 2017. Mike began his career with International Paper at the Louisiana Mill in Bastrop in 1990. Since then he has served in various capacities and businesses across Papers, Coated Papers, Industrial Packaging, xpedx and Coated Paperboard and led the company's supply chain transformation.
Mr. Milind Sarwate	Independent Director	Mr. Milind Sarwate was appointed as Independent Director of the Company in December, 2011. He holds a Bachelors Degree in Commerce. He brings over 30 years of experience in Finance, HR, Strategic Planning, Corporate Development and Product Supply, across Marico, Godrej and Sanofi Aventis.
Mr. Praveen P Kadle	Independent Director	He is an Honors Graduate in Commerce & Accountancy. He was also the founding Managing Director & CEO of Tata Capital Limited and also Managing Director & CEO of Tata Capital Financial Services Ltd., and has been with the Tata Group for over 18 years.
Mr. M.S. Ramachandran	Independent Director	He holds a Bachelor's Degree in Mechanical Engineering. He has held numerous senior positions in the Indian energy sector. He has extensive corporate and operational experience spanning over 35 years with Indian Oil Corporation Limited, where he started as a Management Trainee in 1969 and, eventually left as chairman of the board in 2005.
Ms Ranjana Kumar	Independent Director	She is a prominent Indian Banker with varied experience of over four decades. She held many significant positions in her career, including that as the Chairperson and Managing Director of Indian Bank, Chairperson of NABARD, Executive Director holding a concurrent charge as Chairman and Managing Director of Canara Bank and CEO of the US operations of Bank of India based in New York.

Financial Analysis

- International Paper APPM Ltd. clocks around 80% of revenue from Domestic Market and 20% from Exports. Ever since the acquisition of the company by International paper, the export contribution to sales has significantly increased from 8% in FY14 to 20% in FY 18.



Source: Screener.in

- The company has changed the financial year from January-December to April-March from FY13. Accordingly, FY13 annual accounts are for a period of 15 months from Jan'12 to Mar'13 which cannot be compared with FY12.
- However, the company's revenue picked from FY14 due to higher sales volume and realization prices of products in the market. But from FY14 to FY18, revenue of the company grew at a mere 3% CAGR which was quite similar to the overall paper demand of uncoated free sheet in the market.
- However, the company has witnessed some signs of improvement in FY18 due to increase in prices of end products in the overall market along with improvement in sales volume despite the labor strike in a company.

Capacity Utilization

Particulars	FY14	FY15	FY16	FY17	FY18
Installed MTPA	241,000	241,000	241,000	241,000	241,000
Production MTPA	210,584	216,619	217,283	215,700	228,900
% Utilization	87%	90%	90%	90%	95%
Sales Volume	208,089	215,846	217,706	220,900	230,900
Sales (Rs Cr.)	1,092	1,163	1,124	1,172	1,264
Price Realization (Rs/MT)	52,461	53893	51,610	53,072	54,742
Profit (Rs Cr.)	-42	0	37	32	83
ROE (%)	-10%	0.1%	8%	7%	16%
ROCE (%)	-1%	4%	11%	9%	19%

Source: Company Annual Reports

- The capacity utilization for finished paper production improved to 95% in FY18 on the account of enhanced productivity and overall machine efficiency despite two months halt in production due to a labor strike.
- In FY17, the company managed to operate at 90% capacity utilization which is similar to FY16 despite outages and employee strikes during the year.
- Price realization has also improved significantly in FY18 boosting overall net profitability of the Company.

International Paper APPM Limited - Common Size P&L Account

Year / Rs Cr.	FY18	FY17	FY16	FY15	FY14	FY13	FY12	FY11	FY10	FY09
Expenditure										
Raw Material Consumed	38.2%	41.6%	43.8%	45.0%	43.3%	31.1%	32.5%	25.7%	24.1%	30.0%
(Increase)/Decrease in Inventories	1.3%	2.0%	0.7%	-0.3%	-2.8%	6.3%	-13.4%	1.8%	2.8%	-4.9%
Employees Expenses	12.0%	11.9%	11.1%	10.4%	9.9%	9.1%	11.0%	9.2%	8.4%	8.5%
Other Expenses	31.0%	30.0%	33.1%	36.6%	44.0%	44.1%	58.6%	44.5%	42.5%	48.0%
Total Expenditure	82.5%	85.5%	88.8%	91.8%	94.4%	90.6%	88.7%	81.2%	77.8%	81.7%
Gross Profit	60.5%	56.4%	55.5%	55.3%	59.5%	62.6%	80.9%	72.5%	73.1%	74.9%
EBITDA	17.5%	14.5%	11.2%	8.2%	5.6%	9.4%	11.3%	18.8%	22.2%	18.3%
Other Income	0.4%	0.5%	0.6%	0.9%	1.1%	1.9%	1.1%	2.1%	1.3%	1.6%
Depreciation	5.2%	6.0%	6.3%	5.9%	8.0%	7.1%	8.5%	8.6%	8.6%	8.6%
PBIT	12.7%	9.0%	5.5%	3.2%	-1.2%	4.1%	3.9%	12.4%	15.0%	11.3%
Interest/Finance Costs	2.1%	2.9%	3.5%	3.8%	4.0%	4.5%	6.1%	5.1%	5.0%	7.9%
Exceptional Item	-0.7%	-2.4%	2.8%	0.1%	0.0%	-1.3%	0.0%	0.0%	0.0%	0.0%
Profit Before Tax	10.0%	3.8%	4.9%	-0.5%	-5.2%	-1.7%	-2.2%	7.3%	10.0%	3.5%
Total Tax	3.4%	1.0%	1.7%	-0.6%	-1.4%	0.2%	14.2%	1.6%	1.7%	0.5%
Profit After Tax	6.6%	2.8%	3.2%	0.0%	-3.8%	-1.9%	-16.4%	5.7%	8.3%	3.0%

Source: Ace Equity

- **Gross profit** increased in FY18 because of an increase in sales volume as well as higher selling prices.
  - In FY18, the 4% increase in the price of waste paper was offset by a 7% reduction in hardwood prices. This has resulted in improved profit margins for the company.

- **Employee cost** has risen as the company has increased employees salary and spending on welfare schemes in the last few years

- **Other expenses**: Power & Fuel expenses constitute around 7-8% of the revenues in FY18. The company has been able to successfully reduce power cost by adopting different methods to generate electricity in-house.

- **Finance Cost**: The Company has repaid some debt which has resulted in a decrease in interest cost in the last few years.

- **Exceptional Item:** Company made a one-time provision related to electricity duty dues as high court decision went against them and they have taken their plea to the supreme court
  - However, management, on grounds of prudence and abundant caution, has made a provision amounting to Rs 2,357.43 lakh during the year which resulted in a reduction of PAT in FY17.

- **Net Profit:** In FY14, there was a loss of Rs. 41.61 Cr in view of a longer outage at Rajahmundry unit, rupee depreciation and adverse input raw material costs. However, things have improved since then and the company has generated 10% margin in FY18 despite labor strike mainly due to higher sales realization and volume along with some cost reduction of Raw materials.

Balance Sheet Strength

- IP APPM has an equity base of Rs 39.77 Cr. with 3.99 Cr. shares outstanding at a Face Value of Rs. 10. The net worth stands at Rs 564 Cr. as on Mar'18.
- The company has total debt of Rs 207.52 Cr. Interest Coverage Ratio of 21.04 suggests the company has 21 times EBITDA compared to interest payments.
- The company has been reducing debt since the last three to four years using internal cash flows of the company. Moreover, the cost of debt is also quite favorable around 7-8% which is easily manageable considering the current financial position of the company.

Year / Rs Cr.	FY14	FY15	FY16	FY17	FY18
Borrowings	564	502	477	359	208

Source: Screener.in

- IP APPM has been generating positive cash flow from operations. Also, the free cash flow of the company is around Rs.182 Cr which is quite close to the current debt of the company. Hence, IP APPM is in a comfortable position as far as debt position and cash flows are concerned.

Free Cash Flow:

Year	FY14	FY15	FY16	FY17	FY18
Cash from Operating Activity	20	128	111	171	215
Purchased of Fixed Assets	91	37	40	31	33
Free Cash Flow	**-71**	**91**	**71**	**140**	**182**

Source: Screener.in

- Cash conversion cycle of the company decreased mainly due to a decrease in inventories days in FY18.
- The company charges no interest on receivable for the first 30 days from the date of invoice. Thereafter, they charge interest at 15% per annum on the outstanding balance.
- Before accepting any new customer, the company has a credit evaluating system to assess the potential customer's credit quality and defines credit limits by customer.

Cash Conversion Cycle

Year	FY14	FY15	FY16	FY17	FY18
Receivable Days	16	18	20	20	19
Inventory Days	55	61	62	59	48
Payable Days	42	41	34	42	47
Cash Conversion Cycle	29	38	48	37	20

Source: Ace Equity

Key Risks

1. **Labor union strike:** IP APPM has faced this issue twice in the last two years which has severely affected the company's performance. It can happen again if the company does not reach an agreement in time with the labor union.
2. **Disputed Tax Liability**: - The Company has a contingent liability of Rs. 104.77 Cr. mainly comprising of disputed CENVAT claim on Fixed Assets and electricity duty towards consumption of energy generated by the captive power unit. The company made provisions amounting to Rs. 10.9 Cr related to contingent liabilities of a company after the high court made a decision against the company in electricity duty dues and excise case.
3. **Volatility in input prices:** Prices of hardwood and wastepaper are highly volatile in nature and in turn affect the profitability of the companies in the paper industry. IP APPM has been making efforts to keep themselves immune to these fluctuations of RM prices through various forestry initiatives, which has helped the company in improving profitability in the last few years.

Key Takeaways

Particulars	Explanation
Raw Material	The company mainly uses the wood pulp as raw material and has sufficient integrated pulp capacity to meet current RM requirements.
Electricity	Self-sufficient with 34 MW captive power plants.
Water	Sufficient water availability due to manufacturing facility situated adjacent to the River Godavari in Andhra Pradesh.
Labor	SIPL has faced labor strike twice in last two years affecting the company's operations severely.
Multiple Plants	Operate at two different locations in Andhra Pradesh- Rajamundry and Kadiyam which help to reduce some geographical risk.
Installed Capacity and Utilization (%)	Installed capacity of 241,000 MT/annum with around 95% Utilization in FY18

Conclusion

IP APPM has demonstrated a long track record over the last five decades in the uncoated paper, paper & board pulp industry. The company has established a wide distribution network across southern India. The capacity utilization continues to remain more than 90% and is expected to go up in the coming year.

IP APPM has also been generating positive free cash flows and judiciously utilizing it for reducing the debt of the company. Integrated pulp plant, in-house electricity and strong distribution network have enabled the company to take advantage of the current price hike in the endpaper products. The company has been focusing on exports as well which has higher realizations as compared to the domestic market. However, labor strikes have been a major impediment to the company's operational performance in the last few years.

Seshasayee Paper and Boards Limited

Introduction

SPBL was founded in the year 1960 by Mr. S Viswanathan. The company belongs to the Esvin group and runs an integrated pulp and paper mill based out of Pallipalayam, Erode along with a paper manufacturing mill at Tirunelveli in Tamil Nadu.

Subsidiaries:

1. Esvi International (Engineers & Exporters) Limited is a wholly owned subsidiary of the Company. *Currently, Esvin holds properties and derives property income.* Net profit of Esvi International was Rs. 0.07 Cr. as on March'18.
2. Ponni Sugars Ltd is an associate company; SPBL has invested Rs. 19.6 Cr. for holding 27.45% of shares. Net profit of Ponni Sugars ltd was Rs. 3.34 Cr. as on March'18.

Products

SPBL manufactures a variety of papers such as printing and writing (P&W), grade papers (WPP), packing and wrapping grade papers, specialty grade papers, etc. under the brand names, such as SPrint, Color Sprint, Index, Sprint Plus, Success, etc.

Manufacturing Facilities

The company had a production capacity of around 20,000 MT/annum when it started operations at Erode in 1962. Since then, the company has expanded its capacity to 120,000 MT/annum.

SPBL acquired Subburaj Papers Limited (SPL) in 2011 – a Company based out of Tirunelveli with a paper manufacturing capacity of 60,000 TPA. The company was amalgamated with SPBL in April 2012 and has ever since been operational.

Raw Material

Erode manufacturing unit is based on hardwoods and utilizes 'Eucalyptus' and 'Casuarina' trees for wood pulp besides bagasse. The company has integrated pulp plant with 145,000 MT/annum capacity at Erode. They have also taken initiatives to secure long term availability of raw material by supporting the farmers in planting casuarinas and eucalyptus seedlings to the tune of Rs. 12 Cr. in around 7,000 hectares of land in Tamil Nadu. Due to this initiative, SPBL has managed to reduce its reliance on imported pulp.

Electricity: The Company has a 20 MW Captive Power Plant at Erode Unit which is sufficient for internal consumption of the Company. The Power & Fuel cost has significantly increased due to a rise in the international coal prices (up 70-80%) and weakening of Indian rupee.

In FY12, the company chose to grow inorganically by acquiring a defunct paper manufacturing unit in Tirunelveli. They revived the company's operations which played an instrumental role in overcoming the project execution risk and provided SPBL with an opportunity to maintain its market share in the ever competitive paper industry.

With the integration of pulp manufacturing capacities at the Erode unit, the company's pulp production has managed to outstrip their requirement for the paper manufacturing process. SPBL has now started to utilize excess pulp production for manufacturing paper at Tirunelveli unit which has significantly reduced its dependence on imported pulp. Even the power requirement at Tirunelveli is adequately met by the captive power generation at the Erode unit.

Water: The Company has been quite vulnerable to the unforeseen water shortages either due to the inadequate monsoon and absence of water flow in River Cauvery, which has led to severe problems for the company in the past. In FY17, the Tamil Nadu government advised the company to restrict the water usage for drinking purposes only. Hence, the company had to curtail its production and alter the product mix.

The political/legal issue surrounding the inter-state sharing of River Cauvery has been the primary reason for the company's initiatives to curtail the quantum of water used in the process. The company has been trying to identify groundwater resources within the mill's premises as well.

Expansion Plans:

Erode: The Mill Development Plan - Phase I has been completed at a cost of Rs. 75 Cr. where Wood Pulp Line was upgraded to produce 145,000 MT/annum of wood pulp. Further, major retrofit was carried out in Power Boiler to generate additional steam and power. This has helped SPBL to wheel 3 MW of power from Erode unit to Tirunelveli unit.

SPBL has also commenced work for Phase-II Plan at an estimated cost of Rs. 50 Cr to enhance paper production and upgrading Bagasse Pulping facility and Waste Water Treatment Plant. Phase II at Erode unit is currently in progress.

Phase II will be implemented with convenient phases with an estimated cost of Rs. 300 Cr. to increase Paper production capacity from 115,000 MT/annum to 165,000 MT/annum per annum and augmentation of Captive Power Plant capacity by 15 MW.

Tirunelveli: Mill Expansion Plan in Unit: Tirunelveli has been undertaken at a cost of Rs. 75 Cr. Film Press (where starch and other chemicals are applied on the surface of the paper by dipping or spraying, with residual water being removed in a short, after-drying section) and Top Wire Former (A top wire improves formation and also gives more drainage, which is useful for machines that have been sped up) were installed in the paper machine to help in improving the quality of paper as well as step up production.

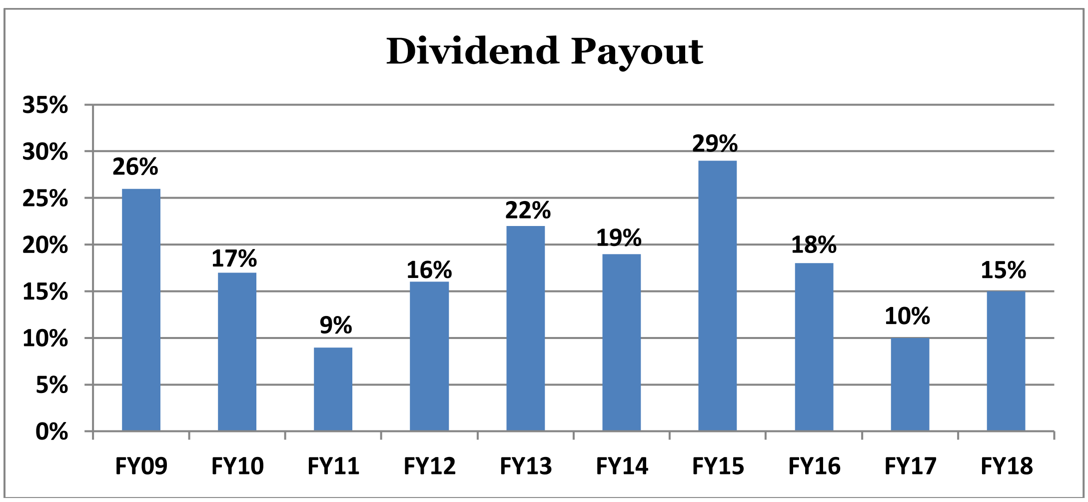
Similarly, the company plans to increase its paper production capacity at Tirunelveli from 72,000 MT/annum to 110,000 MT/annum by various debottlenecking measures and up-gradation of quality. They plan to install an 18 MW coal based captive power plant. The total cost of the mill's expansion plan is in the vicinity of Rs. 180 Cr.

Sales and Distribution Network

The company also has a strong marketing team and well-established distribution network. Being located in south India for decades, the company has a strong presence in Southern India which contributes majority i.e. 65-70% of its total sales. The company primarily divides its markets as primary (Southern India), Secondary (Rest of India) and Exports. The company has a network of approximately 30 dealers appointed on a commission basis and eight depots in other parts of India. SPBL mainly exports to Sri Lanka, Nepal and Middle East countries.

Management and Board of Directors

- SPBL was incorporated in the year 1960 and is promoted by Mr. Vishwanathan of Seshasayee Brothers Pvt Ltd. The promoters of the company have over five decades of experience in the Indian paper industry and thus have managed to become an established player in southern India.
- The company is currently headed by Mr. N. Gopalaratnam as Chairman and runs under the tutelage of professional management which oversees the overall operations of both Erode and Tirunelveli units. SPBL has established a core team of qualified and experienced professionals which assists the management with the technical and managerial inputs.
- At present, Promoter holdings are 42.65 % and the company has also been maintaining a healthy dividend payout ratio of 19% on average from the last five years.



Board of Directors

Name	Designation	Experience
Sri N Gopalaratnam	Chairman Executive Director	He is a Mechanical Engineer with nearly 40 years of specialization in design, operation and management of Pulp and Paper Industry.
Sri R V Gupta, IAS (Retd.)	Independent Director	Sri R V Gupta, IAS (Retd.) belongs to the 1962 Batch of Indian Administrative Service. He has held important positions in various State and Central Government Departments.
Mr Md. Nasimuddin, IAS	Non-Independent Director	He is the Chairman and Managing Director of The Tamilnadu Industrial Investment Corporation Limited. Mr. Nasimuddin served as Managing Director at Tamil Nadu Newsprint and Papers Ltd.
Dr S Narayan, IAS (Retd.)	Independent Director	Dr S Narayan, IAS (Retd.) has to his credit nearly four decades (1965 to 2004) of public service in the State and Central Governments, in Development administration. Lastly (2003-04), he was Economic Adviser to the Prime Minister and was responsible for implementation of economic policies of several Ministries
Sri A L Somayaji	Independent Director	Mr. A. L. Somayaji was a partner with Aiyar & Dolia, Advocates High Court, Chennai. Mr. Somayaji holds a Degree in Bachelor of Commerce and Bachelor's Degree in Law. In the year 1967, he enrolled himself with Bar Council of Madras. He is also the Editor at various magazines like Supreme Today, Current Tamil Nadu Cases, Labour Law Journal and Sales Tax Cases.
Sri K S Kasi Viswanathan	Whole time Director Non-Independent Director	He is a Chemical Engineer (B Tech. from the Regional Engineering College, Tiruchi and MMS from University of Madras). He is largely responsible for the efficient operations of the Mill. He is in charge of production operations, Project implementation and Human Resources Development.
Sri V Sridar	Independent Director	Sri V Sridar is a Science Graduate and a Chartered Accountant with a brilliant academic record. He has to his credit more than three decades (1975 to 2007) of service in large public sector nationalized Banks.
Sri V Pichai	Whole time Director (Non-Independent Director)	He is a Chartered Accountant and a Company Secretary. His qualifications are B. Com., ACA, ACS and CAIIB. He has to his credit nearly 43 years of experience. He has managed admirably various functional areas of the Company, viz., Accounts, Finance, Legal, Taxation, Secretarial, etc. He is in charge of the Finance, Accounts, and Taxation, Legal and Secretarial functions of the Company. He reports to the Chairman.

Source: Company Annual Reports

Financial Analysis

- Seshasayee Paper and Boards Ltd. clocks around 86% of revenue from Domestic Market and 14% from Exports.
- The realization for exports has increased on the account of higher prices of writing & printing papers because of the rapid depreciation of rupee.

Particulars	FY14	FY15	FY16	FY17	FY18
Exports (MT/annum)	24,441	25,617	30,057	26,585	29,120
Total Exports (Rs. Cr.)	126	132	151	139	159
Realization (Rs/MT)	51,463	51,712	50,258	52,131	54,753
% of Total Sales	13%	13%	15%	13%	14%
Total Sales (Rs. Cr.)	996	998	1,008	1,108	1,105

- Overall sales of the company have increased on account of higher sales volume as well as higher price realizations. But the shortage of water and electricity has halted the company's operations in the past leading to production loss for the company.

Capacity Utilization

Particulars	FY13	FY14	FY15	FY16	FY17	FY18
Erode						
Production MTPA	119,366	118,197	118.378	123,630	125,662	121,594
Sales	120,023	117,138	117,806	123,011	124,230	119,986
Tirunelveli						
Production MTPA	50,072	60,075	59,526	59,004	69,751	66,609
Sales	50,056	60,642	59,309	59,210	69,747	66,609
Total Installed Capacity	210,000	210,000	210,000	210,000	210,000	210,000
Total Production	169,438	178,272	177,904	182,634	195,413	188,203
% Utilization	81%	85%	85%	87%	93%	90%
Total Sales	170,079	177,917	177,150	182,230	193,977	186,595
Total Sales (Rs Cr.)	821	996	998	1,008	1,108	1,105
Price Realization (Rs/MT)	48,272	55,981	56,336	55,315	57,120	59,219
Profit (Rs Cr.)	**21**	**27**	**17**	**36**	**128**	**123**
ROE (%)	**6%**	**7%**	**4%**	**8%**	**22%**	**18%**
ROCE (%)	**8%**	**10%**	**9%**	**11%**	**25%**	**22%**

- The company has maintained 90% capacity utilization in FY18 as some production loss occurred as the company had to shut down its plant for up- gradation of machinery
- Increase in price realization of Printing & Writing Paper products benefitted the company in terms of improvement in profitability and Return on Equity for last two years.

- The company has been taking measures like de-bottlenecking and up-gradation in order to enhance plant capacity. However, the production was affected in both the units due to a severe shortage of water faced during the summer season due to the continuous failure of monsoon.
- Management is expecting 100% capacity utilization in FY19 as they indicated that the company got sufficient water in the current financial year.

Seshasayee Paper and Boards Ltd - Common Size P&L Account

Year / Rs Cr.	FY18	FY17	FY16	FY15	FY14	FY13	FY12	FY11	FY10	FY09
Expenditure										
Raw Material Consumed	35.4%	37.1%	41.3%	42.1%	39.3%	32.7%	29.6%	26.1%	23.8%	32.4%
Increase/Decrease in Stock	0.2%	-0.2%	0.4%	-0.2%	0.1%	0.8%	-1.8%	-0.3%	0.0%	0.6%
Employees Expenses	6.2%	6.3%	7.8%	6.3%	5.5%	6.5%	7.6%	8.9%	6.4%	5.8%
Other Expenses	39.5%	37.5%	40.1%	43.0%	42.8%	47.3%	48.5%	46.1%	47.5%	48.6%
Total Expenditure	**81.2%**	**80.7%**	**89.6%**	**91.2%**	**87.8%**	**87.3%**	**83.8%**	**80.7%**	**77.8%**	**87.5%**
Gross Profit	**64.5%**	**63.1%**	**58.3%**	**58.1%**	**60.6%**	**66.5%**	**72.3%**	**74.3%**	**76.1%**	**67.0%**
Operating Profit	**18.8%**	**19.3%**	**10.4%**	**8.8%**	**12.2%**	**12.7%**	**16.2%**	**19.3%**	**22.2%**	**12.5%**
Other Income	0.9%	0.7%	0.4%	0.6%	0.5%	0.5%	0.8%	1.1%	1.7%	1.9%
Depreciation	2.9%	2.8%	2.8%	2.9%	4.8%	5.9%	5.6%	5.9%	6.6%	5.0%
PBIT	**16.7%**	**17.3%**	**8.1%**	**6.5%**	**7.9%**	**7.3%**	**11.3%**	**14.4%**	**17.3%**	**9.4%**
Interest Costs	1.3%	2.1%	3.1%	3.7%	3.8%	5.3%	4.0%	3.8%	5.6%	4.9%
Profit Before Tax	**15.9%**	**15.2%**	**4.9%**	**2.5%**	**4.1%**	**2.0%**	**7.4%**	**10.6%**	**11.7%**	**4.5%**
Tax	4.7%	3.6%	1.4%	0.8%	1.4%	-0.5%	1.8%	-0.7%	3.9%	1.7%
Profit After Tax	**11.1%**	**11.6%**	**3.5%**	**1.7%**	**2.7%**	**2.5%**	**5.6%**	**11.3%**	**7.8%**	**2.8%**

Source: Ace Equity

- **Gross profit:** The Company purchases some pulp for Tirunelveli as integrated pulp plant is located at Erode Unit. SPBL also purchases bagasse and waste paper from the domestic market. Recently, the company has made some arrangements regarding the transfer of pulp from erode to Tirunelveli thereby reducing the raw material cost of the company.
  - Gross profit improved due to a reduction of raw material prices as well as an increase in the price realization of writing & printing papers.
  - The company's profit margins are vulnerable to adverse price movements of key raw material prices, like Bamboo, wood, wood pulp, waste paper and bagasse.

- **Other expenses**: Power & Fuel expenses constitute around 18% of the revenues in FY18. Water and electricity expenses have been hindering the company's profits.
  - Management has made an arrangement to wheel electricity from Erode to Tirunelveli but recent price hike by Tamil Nadu government for water arrangement has continued to Impact Company's profitability.

- **Finance Cost**: The Company has repaid some debt which has resulted in a decrease in interest cost in the last few years.

- **Net Profit:** The overall profitability of the company has seen substantial improvement on the account of improved captive power generation from its power plant after retrofit and wheeling of power to Tirunelveli unit, which has virtually eliminated the need for purchasing power from a third party.
    - The benefit is further accentuated by the increased pulp supply from its Erode unit which has led to reduced dependence on costly imported pulp. This has resulted in a significant reduction in the raw material cost thereby improving the profit margins of the company.
    - In FY 15- Overall Profit before tax for the year registered a steep fall due to extremely unfavorable market conditions that prevailed throughout the year when cost increases could not be passed on to the customers and discounts had to be offered to push-up sales. The necessity to purchase expensive 'market power', to maintain production when the Captive Power Plant was taken 'off stream' for retrofit, also contributed to the erosion in the profits.

Balance Sheet Strength

- SPBL has an equity base of Rs 12.61 Cr. with 1.27 Cr. shares outstanding at a Face Value of Rs. 10. The net worth stands at Rs 701.56 Cr. as on Mar'18.
- The total debt of the firm is Rs 149.21 Cr. Interest Coverage Ratio of 17.65 suggesting the company has 18 times EBITDA compared to interest payments.
- The company also has cash & bank balance of Rs 143 Cr. and Rs. 99 Cr. in Investments.
- They have been reducing debt from the last two years owing to a decrease in the working capital borrowings and term loans. Moreover, the cost of debt is around 10% which is easily manageable considering the current financial position of the company.

Year / Rs Cr.	FY14	FY15	FY16	FY17	FY18
Borrowings	389	323	302	171	149

Source: Screener.in

- The company has been generating positive cash flow from operations. Also, free cash flow of the company is around Rs.175 Cr. Hence the company is in a quite comfortable position as far as debt position and cash flows are concerned.
- The management is also exploring an inorganic route for further capacity expansion as they can comfortably manage their finances considering the current debt and cash flow position of the company.

Free Cash Flow

Year	FY13	FY14	FY15	FY16	FY17	FY18
Cash from Operating Activity	209	66	105	112	200	227
Purchased of Fixed Assets	14	13	20	46	36	52
Free Cash Flow	**195**	**53**	**85**	**66**	**164**	**175**

Source: Company Annual Reports

- The overall working capital profile of the company has improved with the negative operating cycle from FY17. Management has worked tremendously on managing working capital requirement which is quite evident from the operating cycle.
- Negative working capital has led to a reduction in working capital requirement of the company, thereby increasing overall returns on the total capital.

Cash Conversion Cycle

Year	FY14	FY15	FY16	FY17	FY18
Receivable Days	44	45	47	35	35
Inventory Days	34	42	42	38	47
Payable Days	59	79	88	83	86
Cash Conversion Cycle	19	8	1	-10	-4

Source: Ace Equity

Key Risks

1. **Shortage of water:** SPBL faces a severe shortage of water owing to low rainfall in Tamil Nadu. Further, inter-state sharing of River Cauvery water has become a political/legal issue in recent times. The Company is taking various initiatives to curtail the quantum of water used in the process and has taken steps to identify groundwater resources (which are meager) within the Mill's premises.
2. **Disputed Tax Liability**: - The company has a contingent liability of Rs. 47.64 Cr. mainly comprising of disputed CENVAT Claim and Demand by Public Works Department based on a Sanctioned quantity of water as against actual water drawn contested in a writ petition before Hon'ble High Court of Madras.

Key Takeaways

Particulars	Explanation
Raw Material	The company mainly uses the wood pulp as raw material and has sufficient integrated pulp capacity after recent expansion to meet current RM requirements.
Electricity	Self-sufficient with 20 MW captive power plants at Erode and transfers excess power to the Tirunelveli unit.
Water	Water shortage, being present in a drought-prone state is a problem.
Multiple Plants	Operate at two different locations in Tamilnadu- Erode and Tirunelveli which help to reduce some geographical risk.
Installed Capacity and Utilization (%)	Installed capacity of 210,000 MT/annum with around 90% Utilization in FY18

Conclusion

SPBL has demonstrated a long track record over the last five decades in the Writing & Printing paper industry. The company has established a wide distribution network across southern India. The capacity utilization continues to remain more than 95% in H1FY19 and is expected to reach 100% in the coming year.

SPBL has also been generating positive free cash flows and judiciously utilizing it for reducing the debt of the company. Integrated pulp plant, in-house electricity for erodes plant and strong distribution network has enabled the company to take advantage of the current price hike of endpaper products in the market. However, Water and electricity problems have been hindering the company's operational performance in the last few years.

Emami Paper Mills Limited (EPML)

Introduction

Emami Paper (established in 1982) is a part of the Kolkata-based Emami Group with extensive business interests in cosmetics, healthcare, edible oil, and paper, retail, cement, and power and real estate sectors. EMPL specializes in the manufacturing of Newsprint, Writing & Printing Paper (WPP) and Paperboards manufacturing.

Journey so far:

1983
- Initial Commissioning with 15 TPD capacity at Balasore facility.

1998
- Capacity increased to 100TPD with successful commissioning of PM#2.

2000
- Merged with Gulmohar Paper Mill

2001
- 5 MW Power Plant commissioned.

2005
- Expansion of capacities to 135 TPD

2007
- Commissioning of Power Plant15MW, DIP-300TPD, Paper MachineIII-250TPD

2008
- One of the Largest Manufacturer of Newsprint & Market Leader in the Country

2010
- Listed on BSE

2015
- Paper Board Plant of 132,000 TPA with 10.5 MW power plant commissioned

2017
- Capacity of Board Plant increased to 180,000 TPA
- PM-II Newsprint machine converted into writing & printing grade and commissioned in July-2017
- 15MW Power Plant upgraded to 18MW in June-2017

Manufacturing Facility

Newsprint and Writing & Printing Paper (WPP)

Emami Paper is involved in the manufacturing of Newsprint (NP) and Writing & Printing Paper (WPP). The company's aggregate installed capacity is around 150,000 MT/annum and operates a captive power plant with capacity of up to 20 MW.

With the increasing adoption of Digital Media and the meteoric rise in the Smartphone users, the demand for newsprint industry is expected to witness a significant decline going forward. With the rapidly shifting eyeballs to Digital Media, the advertisement revenues are also going downhill which led to a severe impact on the Newsprint Industry.

EPML is a dominant Newsprint player in Eastern India. The company has an established position in the Newsprint Industry with pristine brand image and superior quality of its products. However, the company is trying to reduce its dependence on Newsprint Industry by gradually shifting its Newsprint facilities to a combination of 'Writing & Printing Paper' and 'Newsprint'. This move will help the company to improve its operating margin.

The Company made two machines having a capacity of 48,000 MT/annum fungible for manufacturing writing and printing paper as well as newsprint.

Packaging Board

The market for packaging board is segregated into two parts, Recycled board and Value-Added Product (VAP). The current total size of the market is estimated at 3.5 million tonnes with Recycled board accounting for 2.7 Million Tonne while VAP contributes the remaining 0.8 Million Tonne. The packaging board segment is expected to grow at a CAGR of 8-9% while the CAGR for VAP is estimated to be around 12.13%.

The packing board segment's demand is propelled by the requirements of FMCG, Pharma, Food & Beverages, garments, publishing etc.

The increase in demand for branded packaged products is propelled by the growth in organized retail, increased awareness of food safety & hygiene packaging. Moreover, the rising trend of using packaging as a key differentiator among brands can also translate into faster growth rate for Value-Added Products (VAP).

In response to high growth expected in the packaging board market, EPML has invested around Rs 650 Cr. in March'16 to set up a Multi-layer coated board paper plant with the production capacity of 132,000 MT/annum. The company has installed a 10.5 MW captive power plant unit near its existing plant in Balasore, Orissa. During FY18, the packaging board plant capacity increased from 132, 000 MT/annum to 180, 000 MT/annum at an incremental cost of Rs 50 Cr. The company is looking to further augment the production capacity to 2, 00, 000 MT/annum during FY19.

The newly commissioned plant finds its usage in food, cosmetics, pharmaceuticals, healthcare and other consumer product industries in a variety of sizes and GSMs ranging between 170-450. Very few players in the industry like ITC, JK Paper, Century and Emami etc have a high level of expertise and state of the art technology to manufacture premium packaging products. The company has achieved tremendous success in this segment and managed to acquire a 15% market share within three years.

The Company's 330,000 MT/annum assets are located in Balasore (Odisha) and Kolkata (West Bengal) – 150,000 MT/annum newsprint & Writing & Printing Paper (WPP) and 180,000 MT/annum packaging board across five paper machines.

Expansion Plan

The company is planning to invest around Rs. 2000 Cr for setting up a Greenfield multi-layer packaging board plant in Gujarat. The management will execute the expansion in two phases. In the first phase, the company will set up a manufacturing facility spread across 103 acres land in Bharuch district. This will require an investment of Rs. 1000 Cr. and would have a production capacity of 225,000 MT/annum with an 18 MW captive power plant. In the second phase of the project, the company is planning to double the manufacturing facility's capacity with an equal additional investment towards the installation of a new machine.

It is estimated that the project cost will be funded by a mix of debt (around Rs 700 Cr.) and equity (around Rs 300 Cr.). Financial closure for the project is yet to be achieved though. While project land has been acquired, EPML is going slow with the project execution until the debt and equity portion is achieved.

The company has strategically located its plant in Gujarat for providing better services to its customers as the western and northern region already form a major part of the packaging board segment in India. With the commissioning of the Gujarat plant, the overall capacity of the company across segments will reach 550,000 MT/annum.

Raw Material

EPML is the largest manufacturer of newsprint in India and their quality of newsprint is considered the best in the industry. The manufacturing facilities mainly use recycled fibre/waste paper as the source of raw material and more than 50% of the total RM consumption (pulp and waste paper) is met through imports.

Electricity: The plant possesses a 33.5 MW captive power plant, making it one of the lowest cost newsprint manufacturers in India.

Due to its close proximity to Haldia Port, the company gets easy access to imported raw material like waste paper, pulp, chemicals, spares & Machinery. Also, EPML is strategically located near the Mahanadi Coalfields, which helps the company in ensuring regular supplies of coal. Both these strategic plant placements give the company a distinct cost advantage compared to the rest of their peers.

Products

The Company is engaged in the manufacturing of two principal products – Multilayer packaging board and newsprint. EMPL manufactures internationally benchmarked newsprint with the largest market share (7% in FY17) in India. The company also manufactures white cream wove, ledger and Maplitho paper.

The company has been focusing on the high-end segment of virgin fibre board through brands like 'Emami Maxo Fold' & 'Emami Glamkot' and has established a brand called 'Emami Eco Strong' for the recycled board.

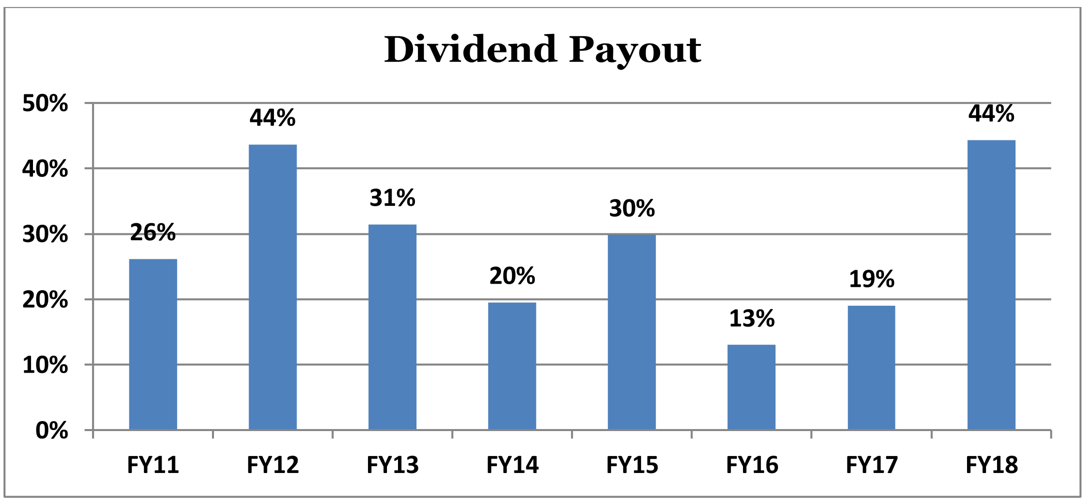
Sales and Distribution Network

The Company's newsprint customers comprise of The Times of India, The Economic Times, The Hindustan Times, Dainik Jagran, Dainik Bhaskar, ABP Group (The Telegraph, Ananda Bazar Patrika), and The Hindu and so on.

The Company appointed 39 dealers across the country and markets its packaging board pan-India through these dealers. EMPL packaging board customers comprise TCPL Packaging Limited, Parksons Packaging Limited, Borkar Packaging Private Limited, York Print Private Limited, Navneet Education Limited, and others. The Company has also received nominations for its packaging board from Aurobindo Pharma, Dr Reddy's Laboratories Limited, Colgate Palmolive, Hindustan Unilever Limited, Kellog's and so many others.

Management and Board of Directors

- The flagship company of the group, Emami Ltd is a prominent player in personal and healthcare products. The promoters of the group, Mr. R. S. Agarwal and Mr. R. S. Goenka, are qualified professionals with business experience of over three decades.
- *At present, Promoter holding is 74.97 % out of which 61.75% of shares are pledged by the promoters.*
- The Company has also been maintaining a healthy dividend payout ratio of 25% on average from the last five years.



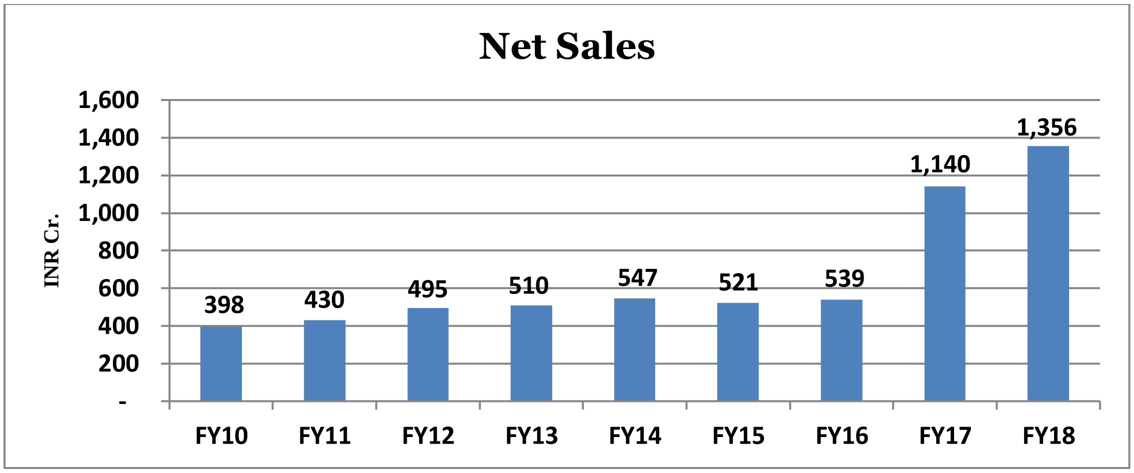
Board of Directors

Name	Designation	Experience
Mr. A. V. Agarwal	Executive Chairman	Well known Industrialist. Rich and varied experience of 19 years in Marketing, Corporate Planning, Business Development, Strategy Formulation and Overall Management.
Mr. Manish Goenka	Non-Executive Director	An Industrialist with extensive business experience of 19 years, expertise in Marketing, Corporate Planning, Business Development, Strategy Formulation and Overall Management.
Mr. P. S. Patwari	Executive Director and CEO	Chartered Accountant, extensive experience of 37 years in the area of Corporate Planning, Business Development, Strategy Formulation and Overall Management.
Mr. Ashish De	Whole Time Director	A renowned Paper and Paper Board Technologist with Rich and varied experience of 45 years in setting up of Big Paper Board Mill projects and also an expert in global marketing network. He is also an expert in the area of corporate planning, strategy formulation and marketing management.
Mr. J. Godbole	Independent Director	He is former Chairman of IDBI having extensive experience in the area of Finance, in particular, Bank Finance, Accounting Corporate Planning and strategy formulation.
Mr. S. Balasubramanian	Independent Director	Former Chairman of Company Law Board has rich and varied experience in the Corporate Law. He is a well-known personality for his valuable contribution to the Corporate world. He was also a former member of Indian Postal Service and having senior level experience in the public sector.
Mr. U. G. Bhat	Independent Director	Well known Technocrat and reputed project consultant in the paper industry with rich and varied experience in setting up of project
Mr. J. K. Khetawat	Independent Director	An Industrialist with extensive business experience in the area of Corporate Planning, Strategy Formulation and Overall Management.
Mr. H. M. Marda	Independent Director	An Industrialist with extensive business experience over 3 decades. Rich and varied experience in the area of Corporate Planning, Strategy Formulation and Overall Management.
Mrs. Richa Agarwal	Independent Director	Extensive experience in the area of Corporate Planning, Business Development, Marketing and Overall Business Management.

Source: Company Annual Reports

Financial Analysis

Net sales of the company grew by 17% in FY18 over FY17 because of an increase in average sales realization of newsprint. The Company embarked on setting up a paper board plant to cater to the growing demand of kraft paper in Industry. This decision of management seems to have yielded fruits as within three years; the contribution of Paperboard to total sales is around 60%.



Source: Screener.in

Global newsprint industry had been suffering from surplus capacities and low demand scenario resulting in dumping of NP in India at low cost over the last few years. Yet, since 2018, there has been a radical shift in the prices & the demand of Newsprint due to the implementation of pollution control policies resulting in the ban of import of waste paper in China which affected the production of Newsprint in China. This has benefitted the domestic NP players with low waste paper cost and improved realizations of NP.

Capacity Utilization

Particulars	FY13	FY14	FY15	FY16	FY17	FY18
Installed MTPA	145,000	145,000	145,000	277,000	282,000	330,000
Production MTPA	145,816	-	145,378	-	278,489	290,778
% Utilization	101%	-	100%	-	99%	88%
Sales (Rs Cr.)	510	547	521	539	1,140	1,356
Price Realization (Rs/MT)						
➢ **NP&WPP**	34,976	-	35,838	-	27,363	41,658
➢ **Paperboard**	-	-	-	-	55,015	50,517
Profit (Rs Cr.)	12	19	12	28	19	16
ROE (%)	5%	6%	3%	7%	8%	7%
ROCE (%)	6%	5%	3%	2%	6%	6%

Source: Company Annual Reports

- The company has been able to maintain its capacity utilization of the plant at around 90% for the last three years (FY16-FY18), driven by stable demand and established market position.
- The company has enhanced its board plant capacity from 132,000 MT/annum to 180,000 MT/annum w.e.f from Jan'18. The capacity use moderated to 88% in FY18 as compared to 98.1% in FY17 due to increase in production capacity of board plant in January 2018.
- Realization of Newsprint suddenly rose in FY18 due to a sudden rise of Newsprint prices and reduction in waste paper prices.
- EPML also manufactures high value-added products in paperboard which has higher realization compare to normal kraft papers.

Emami Paper Mills Limited (EPML) - Common Size P&L Account

Year / Rs Cr.	FY18	FY17	FY16	FY15	FY14	FY13	FY12	FY11	FY10
Expenditure									
Raw Material Consumed	62.9%	64.5%	59.0%	61.6%	56.6%	55.2%	56.6%	60.5%	53.6%
(Increase)/Decrease in Stock	0.2%	-1.9%	1.9%	-2.2%	-0.3%	1.4%	1.3%	-2.2%	3.5%
Employees Expenses	4.6%	5.0%	6.3%	6.0%	5.3%	4.8%	4.4%	6.4%	5.7%
Other Expenses	20.8%	21.2%	24.0%	24.8%	25.5%	24.5%	24.9%	20.9%	21.3%
Total Expenditure	88.4%	88.8%	91.2%	90.1%	87.1%	85.9%	87.2%	85.6%	84.1%
Gross Profit	36.9%	37.5%	39.1%	40.6%	43.7%	43.4%	42.2%	41.8%	42.9%
Operating Profit / EBITDA	11.6%	11.2%	8.8%	9.9%	12.9%	14.1%	12.8%	14.4%	15.9%
Other Income	1.1%	2.1%	2.4%	3.8%	3.5%	2.5%	1.2%	2.1%	0.5%
Depreciation	4.7%	4.9%	5.0%	5.1%	5.8%	5.9%	5.5%	6.1%	7.4%
PBIT	7.9%	8.4%	6.2%	8.5%	10.6%	10.6%	8.5%	10.5%	9.0%
Interest/Finance Costs	6.2%	6.2%	4.2%	5.2%	6.3%	8.1%	6.2%	6.3%	6.0%
Profit Before Tax	1.8%	2.3%	2.0%	3.3%	4.2%	2.5%	2.3%	4.2%	3.0%
Total Tax	0.6%	0.6%	-3.2%	1.0%	0.8%	0.3%	0.7%	1.0%	1.2%
Profit After Tax	1.2%	1.7%	5.2%	2.3%	3.4%	2.3%	1.7%	3.2%	1.8%

Source: Ace Equity

- **Gross profits are** more or less stable since lower raw material prices are offset by rupee depreciation for the company. Since the company imports more than 50% waste paper, the exchange rate will keep hindering the company’s margins.

- **Employee cost** has increased as the company has increased its spending on employee welfare schemes and Gratuity fund in the last few years.

- **Other expenses**: Major expense is fuel cost which constitutes around 10-12% of revenues of the company.

- **Finance Cost**: The Company has raised debt to fund the capital expenditure and working capital requirements for expansion which has resulted in an increase in interest cost in the last few years.

- **Net Profit:** Higher depreciation expense coupled with higher interest costs impacted margins despite an increase in the production capacity of the company. The profitability margin is expected to improve going forward with a higher sale of higher margin board paper and also focus of the management to shift from low margin NP segment to WPP.

Balance Sheet Strength

- Emami Paper Mills Limited (EPML) has an equity base of Rs 12.10 Cr. with 6.05 Cr. shares outstanding at a Face Value of Rs. 2. The net worth stands at Rs 242.76 Cr. as on Mar’18.
- The company has total debt of Rs 1530 Cr and has an Interest Coverage Ratio of 1.68 suggesting that they have just two times EBITDA compared to interest payments.

- Gross block of the company has increased in recent times due to set up of Paperboard plant by a company in Mar'16. The Company also has also been investing in up-gradation and modernization of plants since last two years.
- Capital Expenditure has been mostly funded by a mix of debt and internal accruals.
- The company avails loans in foreign currency which is kept un-hedged (approx. 122 million dollars as on March 31, 2018). Moreover, foreign currency loan has variable interest rates like LIBOR+ spread, so the company is exposed to both interest and exchange rate fluctuations.

Year / Rs Cr.	FY11	FY12	FY13	FY14	FY15	FY16	FY17	FY18
Gross Block	575	658	682	729	720	1,494	1,276	1,402
Borrowings	385	510	472	556	835	1,074	1,392	1,530

Source: Ace Equity

- Let's look at the cash flows in order to gauge the capability of a company for paying back its debt. The Company has been generating positive cash flow from operations except in FY16 & FY17 where cash flow was affected due to working capital changes as EPML stored more waste paper to protect them from the further price increase of Raw material. Average operating cash flow from the last eight years has been Rs. 41 Cr.
- EPML's long term debt repayment obligations are sizeable at around Rs.154 Cr. in FY19 and Rs.207 Cr. in FY20. The company is expecting to generate high cash accruals in the coming years, but looking at debt position and Cash Flows, the company seems to be in a very tight financial position.
- Looking at current cash flow, debt position and EMPL plan of raising more debt for Gujarat Greenfield Plant; any negative news regarding reduction in the realization of Paper prices or increase in Raw material prices will put the company's financials in jeopardy.

Free Cash Flow

Year	FY11	FY12	FY13	FY14	FY15	FY16	FY17	FY18
Cash from Operating Activity	73	58	88	95	39	-80	-15	69
Purchased of Fixed Assets	22	121	37	105	465	117	63	126
Free Cash Flow	**51**	**-63**	**51**	**-10**	**-396**	**-197**	**-78**	**-57**

Source: Ace Equity

- Cash conversion cycle of the company has been elongated mainly due to an increase in inventory days as company stocked raw material to protect from a further price increase in FY16. EPML has the policy to keep an inventory of about 2-2.5 months.
- The company generally allows credit of 45 days to its dealers/ retailers and accordingly, its average collection period stood around 50 days during FY15- FY18.
- The Company has been increasing payable days which have helped to offset some resources stocked in inventory and receivables.

Cash Conversion Cycle

Year	FY11	FY12	FY13	FY14	FY15	FY16	FY17	FY18
Receivable Days	61	37	34	31	31	70	48	60
Inventory Days	61	56	55	49	65	97	62	65
Payable Days	5	7	9	15	36	55	27	25
Cash Conversion Cycle	117	66	80	65	60	112	83	100

Source: Ace Equity

Key Risks

1. **Proposed Greenfield Expansion:** EPML is in the process of setting up a Greenfield project with an estimated cost of Rs.1000 Cr. mainly funded by Debt.
    - Debt repayment will remain a crucial factor for the company in the coming years as the company seems to be expanding in very aggressive mode. For an Rs 16 Cr net profit company, Rs 1000 Cr. capex is a big ask and there might be several challenges on the execution front.

2. **Vulnerable to fluctuation in foreign exchange rate:** Around 50% of the waste paper & Pulp requirement is managed through imports. Moreover, the company also has exposure to foreign currency loans. Thus, the absence of a proper hedging mechanism may severely expose the company to foreign exchange risk.

Key Takeaways

Particulars	Explanation
Raw Material	The company mainly imports RM, thus exposed to currency fluctuation as well as International market prices of Waste Paper.
Electricity	Self-sufficient with Captive Power Plant of 33.5 MW.
Multiple Plants	Operate at two different locations in East India which helps to reduce some geographical risk.
Installed Capacity and Utilization (%)	Installed capacity around 330,000 MT/annum and Utilization level of around 88% in FY18.
Strong Brand with Multiple product offerings and a strong distribution network	Emami has a strong brand and is one of the few companies to manufacture premium segment Paperboard. Its presence in multiple products along with a strong network in East India ensures the ability to operate at optimal capacity.

Conclusion

EPML is the largest NP manufacturer in India; moreover, management decision of foraying into Paperboard segment has yielded positive results for the company. The Company no longer is dependent on declining Newsprint demand as 60% of revenues are contributed by Paperboard Segment. Moreover, it is one of the few players which manufacture high value-added kraft paper which will help the company to achieve higher realization as well as cater to the rising demand of VAP Kraft Paper. They have in-house electricity plant sustainable for both Paper plants of the company.

The company has huge debt on their balance sheet and at the same time, they are also planning a Greenfield plant of Paperboard in Gujarat majorly funded through debt. Moreover, even though the company is utilizing more than 90% capacity, depreciation and interest expense are dragging returns.

N R Agarwal Industries Ltd.

Introduction

Incorporated in 1993, NRAIL is one of the prominent manufacturers of duplex boards (paper packaging), Writing & Printing Paper (WPP) and newsprint (N/P) papers. The manufacturing facilities comprise of five mills at Vapi and Sarigam, both located in Valsad District, Gujarat. NRAIL was more focused on duplex boards and newsprint until the setting up of new WPP capacity in FY15.

Products

Duplex Boards: The packaging paper and board segment can be divided into packaging boards (recycled duplex boards and virgin boards) and packaging paper (Kraft). NRAIL already has a strong presence in the duplex board segment (it accounted for 47% of its revenues in FY18).

The Coated Duplex Boards are widely used for manufacturing of cartons and packing boxes of various sizes. These are used in packaging the products manufactured by various industries such as Food, Hygienic & Toiletry Cosmetics & Pharmaceutical Products, and also the number of other consumer goods.

NRAIL also manufactures duplex boards suitable for gravure printing; embossing and foil stamping (are types of printing methods by pressing an image into paper or cardstock to create a three-dimensional design. Text, logos and other images can be formed using these printing methods). The company produces the White Back and Grey Back varieties across diverse GSMs, making it possible to address the widest requirements of a growing market segment.

Writing and Printing: The Company manufactures writing and printing paper products which are high in brightness, have shade stability and smoothness. The products comprise high tensile strength and surface properties suitable for high-speed multicolor printing.

In this segment, NRAIL produces all GSMs of the SS (surface Sized) and NSS (Non-surface Sized) Maplitho varieties generally used in printing textbooks and the publishing segment. The company plans to introduce copier paper and virgin Maplitho paper variety as the industry trends are tilting towards higher quality copier papers which are consistently gaining volume and have higher realization.

Manufacturing Facility

The company started its operations with the manufacturing of Kraft Paper/Duplex paper by setting up a plant in GIDC Vapi, Gujarat. In the year 1998, NRAIL diversified its operation by commissioning a 'Newsprint' plant at its Units-II, GIDC Vapi. Initially, when the plant was set up in 1997, it had a production capacity of 3000 MT/annum of Newsprint paper. Currently, the production capacity is 36,000 MT/annum.

Upon the receiving the approval from Mumbai High Court, the two associate companies namely, N.R Paper & Boards Limited and Suman Paper & Boards Limited, were amalgamated with N.R Agarwal Industries Limited, effective from Mar'07. As a result of the amalgamation, there are total four units under the company, out of which three units are dedicated to manufacturing Coated Duplex Boards and one unit is used to manufacture Newsprint/Writing & Printing Paper.

Along with it, the Company also commissioned a fifth unit of 108,000 MT/annum for manufacturing writing and printing paper in 2014.

Switching NP Facility to W&P

Earlier, the management had been mulling over the idea of exiting the newsprint business due to higher import costs and a gradual shift in user preferences to online news platforms which had an adverse impact on the newsprint prices. Thus, they switched their entire NP capacity of 36,000 MT/annum to WPP capacity of 54,000 MT/annum (total W&P capacity expanded to 162,000 MT/annum from 108,000 MT/annum) in 2017 at a cost of Rs 50 Cr. which went on stream in Q2FY18. However, recently the NP prices have soared and are now at lifetime highs of Rs 47,000/MT in FY18 as compared to Rs 32,000/MT in FY17, thereby, reducing the gap in prices of NP and WPP to less than 10%.

Historically, Russia and Europe used to dump their newsprint production in countries like China and India which led to a reduction in Newsprint prices due to oversupply. In the aftermath of the ban on low-grade waste paper products, China is now able to absorb all the supply thereby leading to a sudden surge in prices due to a shortage of supply in other countries. As India is dependent on imports for over 50% of their NP consumption, higher import prices have instigated a rise in domestic prices as well.

Due to these global developments, the company has modified its equipment, at one of their units, to manufacture a mix of newsprint and Writing & Paper products. Although, the company is not going to altogether exit the newsprint segment, it is quite likely that its contribution to the revenue will go down in future.

The company augmented the capacity of Duplex boards by 20,000 MT/annum, thereby increasing the current capacity of the Duplex board plant to 175,000 MT/annum. No more expansion plans are expected in writing & printing segment as the capacity enhanced to 162,000 MT/annum after recent conversion from Newsprint facility to WPP (from 36,000 MT/annum to 60,000 MT/annum). The cost incurred for conversion and expansion of the plant was around Rs 55 Cr. for conversion & expansion and Rs 45 Cr. was invested for improvement in power plant efficiency. So, overall the company increased the total capacity from 306,000 MT/annum in FY17 to 354,000 MT/annum in FY18.

Capex Plans

The management of the company has recently announced that it will undertake a techno-economic viability study under the guidance of Ernst & Young. The study will entail the nuances of setting up a new manufacturing unit with a capacity of 160,000 MT/annum. Based on the report submitted by E&Y a decision will be made in FY19.

Up till now, China is the only country in the world which is using this technology. If all goes as planned, NRAIL will be the first company to bring this technology in India. Generally, Kraft paper is manufactured from brown paper wastes only but this technology will enable the company to manufacture Kraft paper using mixed wastes paper which in turn will help reduce raw material costs by 5% as compared to its competitors. The company already has 100 acres of surplus land which can be used for setting up the plant. The plant will take around two years to commission and the project's cost is estimated to be around Rs 350 Cr. which will be funded by a mix of debt and internal accruals.

With this NRAIL will be present across all segments of PPB (packaging paper and board). NR's clients include packaging companies like TCPL, Parksons, REPRO, Navneet etc. which are approved by FMCG companies such as Amul, Godrej, Kellogs, Lakme, Ponds, etc.

Raw Material

Around 52-54% of the waste paper is imported and rest is availed through domestic markets. Within India, the company sources the raw material within a radius of 175 km from their facilities thereby saving on logistics cost.

Earlier, the company used to source an inferior grade of waste paper in order to reduce costs. However, the company changed its strategy and starting importing 50% of its raw materials containing a higher proportion of virgin fiber. The superior product quality and strength with moderate resource consumption have translated into better realizations and margins.

Electricity: NRAIL owns a cogeneration power plant of 25 MW (out of which a 15 MW power plant is at Sarigam plant for Writing & Printing Segment) which is used to produce power and steam for all the facilities.

Management and Board of Directors

- Late Shri N R Agarwal was a first generation entrepreneur and founder of N R Agarwal Industries Ltd. (NRAIL). He was a qualified Chemical Engineer with over 40 years' experience in the paper industry. It was under his leadership that the company became a recognized player in the paper industry.
- Now Mr. R N Agarwal having more than two decades of experience in the paper industry handles the company's operation.
- At present, Promoter holding is 73.32 % suggesting management confidence in Business and the company does not pay much dividends considering they need capital for expansion and modernization of plants & machinery.

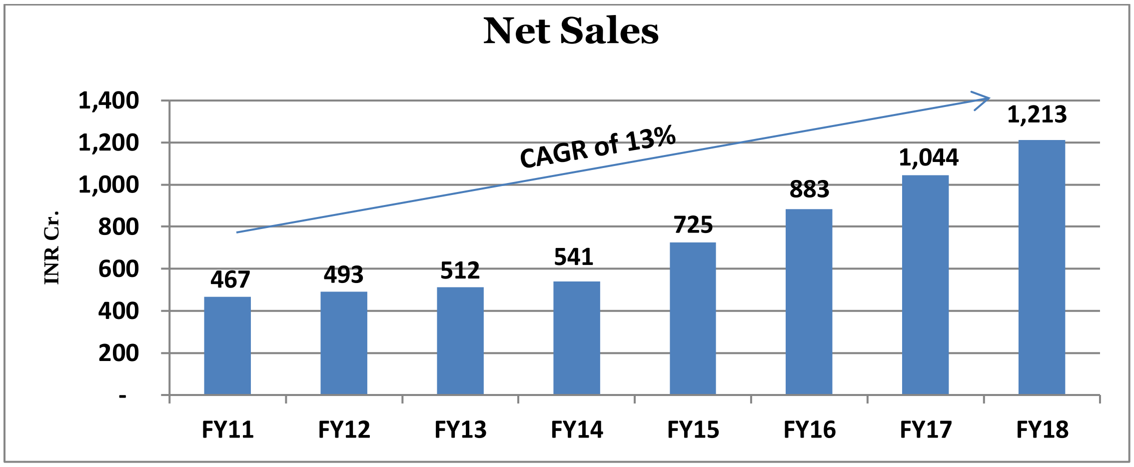
Board of Directors

Name	Designation	Experience
Shri R N Agarwal	Chairman & Managing Director	An Electrical Engineer and a Management Graduate from the U.S.A, Mr. R N Agrawal is the Promoter, Chairman and the Managing Director of the Company. He has more than two decades of experience in the paper industry.
Shri Raunak Agarwal	Whole-time Director	A member of Agarwal family and a Graduate in Business Administration from Kingston University, U. K., Mr. Raunak Agarwal is an also Promoter and Whole Time Director of the Company.
Smt. Reena Agarwal	Whole-time Director	Mrs. Agarwal also belongs to the Agarwal family and is an Executive Director of N R Agarwal Industries Ltd. She is a Graduate in Commerce and has over 17 years of experience in Human Resource Management & Administrative functions. She also heads the Corporate Social Responsibility Committee of the Company.
Shri A K Bansal	Whole-time Director	A Paper Technologist by profession, Mr. Ashok Kumar Bansal is an Executive Director of the Company. He earned his degree from the Institute of Paper Technology, Roorkie University.
Shri P Kumar	Non-Executive Independent Director	Mr. Kumar, an Independent Director of the Company, holds a degree of Masters in Arts and a Diploma in Banking & Industrial Finance. He is a highly experienced banker in commercial and development banking, with the extensive project.
Shri C R Radhakrishnan	Non-Executive Independent Director	A former Chief General Manager of State Bank of India, Mr. Radhakrishnan has been on the Board of the Company since 2007 as an Independent Director.
Shri Ajay Nair	Non-Executive Independent Director	A Law Graduate by profession, Shri Ajay Arvind Nair, an Independent Director of the Company, is a member of the Bar Council of Maharashtra and Goa. He has been a practicing Lawyer in the Supreme Court & Bombay High Court for 10 years in areas of civil, criminal, corporate and commercial laws.
MR. S N CHATURVEDI	Independent Director	Mr. Chaturvedi, an Independent Director of the Company is a fellow member of the Institute of Chartered Accountants of India and also holds a Masters Degree in Business Administration.

Financial Analysis

- In FY18, NRAIL's revenue rose by 16% YOY driven by an increase in sales volume and realization. During FY18, its production rose by 5.7% YOY and blended realizations increased by 9.6% YOY.
- Incorporated in FY15, Writing & Printing division contributes 51% of the company's sales in spite of lower volume than Duplex board due to more realization from WPP sales.
- Contribution from Duplex Board segment is around 46% while Newsprint just contributes a meager 3% to the revenues.
- However, the company is planning to increase sales by operating at 100% capacity in the near future. They are also planning to expand its presence into new markets and increase its revenue share of exports from 11% in FY18 to 20% in the coming years.

- As of now, the company mainly exports to Sri Lanka, Middle East, Bangladesh and Africa. But the company is also receiving inquiries from Europe and China recently.



Capacity Utilization

Particulars	FY16	FY17	FY18*
Writing & Printing			
Installed MTPA	108,000	108,000	162,000
Production MTPA	76,680	91,800	135,698
Utilization (%)	71%	85%	84%
Sales (Rs Cr.)	452	360	651
Price Realization (Rs/MT)	58,964	39,251	47,975
Duplex Board & NP			
Installed MTPA	201,000	201,000	175,000
Production MTPA	181,081	191,025	164,223
Utilization (%)	90%	95%	94%
Sales (Rs Cr.)	431	684	562
Price Realization (Rs/MT)	23,808	35,812	34,221
Total Installed MTPA	256,000	306,000	354,000
Total Production MTPA	257,761	282,825	299,921
% Utilization	101%	92%	85%
Total Sales (Rs Cr.)	**883**	**1,044**	**1,213**
Blended Realization (Rs/MT)	**34,266**	**36,928**	**40,448**
Profit (Rs Cr.)	**18**	**50**	**90**
ROE (%)	**19%**	**37%**	**41%**
ROCE (%)	**11%**	**28%**	**27%**

Note: Newsprint contribution in FY18 is part of W&P in the above table as company converted Newsprint plant to W&P.

- The Writing & Printing Paper manufacturing unit of NRAIL was established in July 2014 at Sarigam, Gujarat. In the initial years, the plant had to endure teething problems but now the company has managed to stabilize its operations in the last two years and have improved its capacity utilization from 71% in FY16 to 85% in FY17.
- However, as converted capacity (newsprint capacity to W&P) started operating from Q2FY18, affected the overall utilization in FY18.
- There has been an increase in realization across all segments but WPP segments have higher realizations as compared to Duplex board and NP. In order to get the benefit of this high price realization in the market, management expanded the capacity of WPP segment recently.
- Since no new capacity will be added in the next two years, the company's plan is to operate at 100% utilization and take advantage of the current hike in price realizations of various products.

N R Agarwal Industries Ltd - Common Size P&L Account

Year / Rs Cr.	FY18	FY17	FY16	FY15	FY14	FY13	FY12	FY11	FY10	FY09
Expenditure										
Raw Material Consumed	58.3%	58.5%	62.0%	64.2%	63.6%	62.3%	63.3%	60.3%	58.7%	61.1%
Increase/Decrease in Stock	-0.1%	0.2%	0.2%	-1.1%	-0.1%	-0.1%	-0.3%	-0.2%	0.0%	-0.3%
Employees Expenses	4.7%	4.8%	5.0%	4.8%	4.0%	4.1%	3.9%	3.6%	3.2%	2.8%
Other Expenses	24.3%	23.2%	25.5%	28.0%	29.0%	29.6%	26.5%	25.8%	29.0%	29.7%
Total Expenditure	**87.2%**	**86.8%**	**92.6%**	**95.8%**	**96.5%**	**95.8%**	**93.4%**	**89.5%**	**90.9%**	**93.4%**
Gross Profit	**41.8%**	**41.3%**	**37.8%**	**37.0%**	**36.5%**	**37.8%**	**37.0%**	**39.9%**	**41.3%**	**39.2%**
Operating Profit	**12.8%**	**13.2%**	**7.4%**	**4.2%**	**3.5%**	**4.2%**	**6.6%**	**10.5%**	**9.1%**	**6.6%**
Other Income	0.5%	0.6%	0.9%	0.8%	0.7%	0.7%	0.9%	0.7%	0.8%	0.8%
Depreciation	2.2%	2.3%	2.7%	2.4%	1.9%	1.8%	1.8%	1.8%	2.1%	2.2%
PBIT	**11.1%**	**11.5%**	**5.6%**	**2.5%**	**2.3%**	**3.0%**	**5.7%**	**9.4%**	**7.7%**	**5.3%**
Interest Cost	3.1%	4.1%	5.2%	4.9%	2.1%	2.0%	2.1%	1.6%	2.3%	2.7%
Profit Before Tax	**8.0%**	**7.5%**	**0.5%**	**-2.4%**	**0.1%**	**1.0%**	**3.6%**	**7.8%**	**7.5%**	**3.2%**
Tax	0.6%	2.7%	-1.6%	2.2%	0.0%	0.1%	0.7%	1.8%	1.9%	0.8%
Profit After Tax	**7.4%**	**4.8%**	**2.0%**	**-4.6%**	**0.1%**	**0.9%**	**2.9%**	**6.0%**	**5.6%**	**2.4%**

Source: Ace Equity

- **Gross profits** increased because of a decrease in the prices of waste paper (RM) and an increase in the final paper prices which resulted in higher price realization for the company.

- **Other expenses**: Fuel expenses constitute around 12-13% of revenues of the company.
    - The power cost forms a significant portion of the overall sales of any paper manufacturing company. By setting up a captive power plant, the company has reduced this cost from 15% in FY12 to 13% in FY18 thereby improving the cost competitiveness among its peers.

- **Finance Cost**: Interest cost has reduced due to the reduction of interest rates after the company was given a clean chit from the CDR cell in FY16 and some repayment of a loan by the company.

- **Net Profit:** Net Profit has been increasing in tandem with gross profits as operating leverage kicked in. Moreover, a decrease in fuel and interest cost has further strengthened the bottom line in the last few years.

Balance Sheet Strength

- N R Agarwal Industries Ltd. has an equity base of Rs 17.02 Cr. with 1.70 Cr. shares outstanding at a Face Value of Rs. 10. The net worth stands at Rs 219.39 Cr. as on Sept'18.
- The company has a total debt of Rs 289.48 Cr and has an Interest Coverage Ratio of 5.19 suggesting that the company has five times EBITDA compared to its interest payments.
- The gross block of the company has increased in recent times. The company has also been investing in up-gradation and modernization of plants and successfully expanded its capacity from 256,000 MT/annum to 354,000 MT/annum in the last three years.

Corporate Debt Restructuring

- In 2010, the company undertook an expansion plan for setting up a Writing & Print Paper unit with a capacity of around 176,000 MT/annum. In the first year of construction, the company expanded capital in the vicinity of Rs. 200 Cr. The plant was scheduled to commence in operations in the year 2012.
- While the construction was going on, there was a policy change and the company had to approach the centre for clearance instead of the state government which resulted in a delay of over two years then it was earlier scheduled. The plant eventually started in 2014. However, the company was not in a position to service its interest payments. Hence, the company had no other option but to go under CDR (Corporate Debt Restructuring) in March 2013.
- On 30th August 2016, the CDR cell approved the exit of NRAIL from the CDR subject to the payment of the recompense amount. The company deposited the Rs 7.98 Cr. towards recompense amount in Oct'16. The loan restructured earlier had a step up interest rate schedule (16.37% in FY17) which put a dent on the company cash flows. When the company was given a clean chit from the CDR cell, they negotiated hard with the banks and made them reduce the cost of debt from 17%-21% in the last few years to an average cost of 12.3%.
- In the first half of FY17, the company sold a commercial property for Rs. 14.57 Cr. which was party used for the repayment of the debt.
- Bank of Baroda also has sanctioned the release of the entire pledged holding of the promoters totaling to 12.5 mn shares.

Year / Rs Cr.	FY11	FY12	FY13	FY14	FY15	FY16	FY17	FY18
Gross Block	182	194	211	224	574	586	461	515
Borrowings	181	212	221	302	365	347	300	289

Source: Ace Equity

- Let's look at the cash flows in order to gauge the capability of the company for paying back its debt. The company has been generating positive cash flow from operations. Average operating cash flow from the last eight years has been Rs. 59 Cr.
- The company is expecting to generate better cash flows going forward due to low-interest costs, sufficient capacity to take advantage of the recent hike in Paper product prices and reduction in the price of raw material (waste paper).
- But the company might fund major capex of new Kraft plant through Debt, which might put pressure on earnings due to rising interest cost.

Free Cash Flow

Year	FY11	FY12	FY13	FY14	FY15	FY16	FY17	FY18
Cash from Operating Activity	43	66	20	38	63	38	91	111
Purchased of Fixed Assets	123	77	22	100	65	34	31	49
Free Cash Flow	**-80**	**-11**	**-2**	**-62**	**-2**	**-4**	**-60**	**62**

Source: Ace Equity

- Earlier, the company used to have a negative working capital cycle due to high Payable days. But recently, there has been a reduction in payable days significantly increasing the working capital requirement of the company.

Cash Conversion Cycle

Year	FY11	FY12	FY13	FY14	FY15	FY16	FY17	FY18
Receivable Days	33	36	38	37	34	32	29	31
Inventory Days	27	28	26	25	27	31	28	25
Payable Days	67	67	72	73	57	45	22	9
Cash Conversion Cycle	-7	-3	-8	-11	4	18	35	47

Source: Ace Equity

Key Risks

1. **Global volatility in waste paper prices may affect profit margins:** In the last two years, the profit margins of the firm have remained vulnerable to the fluctuations in the waste paper prices and an inability of the company to pass on the costs to the customers.

2. **Vulnerable to fluctuation in foreign exchange rate:** Around 50% of the waste paper requirement is managed through imports. Thus, the absence of a proper hedging mechanism may severely expose the company to foreign exchange risk.

Key Takeaways

Particulars	Explanation
Raw Material	The company mainly imports waste Paper, thus exposed to currency fluctuation as well as International market prices of Waste Paper.
Electricity	Self-sufficient with Captive Power Plant of 25 MW.
Water	Self-sufficient capacity using bore wells.
Multiple Plants	Operate at two different locations in Gujarat- Vapi and Sarigam which help to reduce some geographical risk.
Installed Capacity and Utilization (%)	Installed capacity around 354,000 MT/annum and Utilization level of around 85% in FY18.

Conclusion

NRAIL has demonstrated a long track record over the last two decades in the Newsprint & Duplex board segment. Company's decision of setting up of WPP plant has been beneficial and contributed immensely in the last two years. The utilization continues to remain more than 85% and expected to go up in the coming few years. Going forward, lower interest cost due to the company's exit from corporate debt restructuring and lower RM cost along with an increase in realization will help the company to boost its margins. Moreover, the company has enough capacity to take advantage of recent up-cycle in paper prices. Thus, there is a lot of scope of improvement in the financial performance of the company in the next two years.

Pudumjee Paper Products Ltd

Introduction

Pudumjee Paper Products Ltd. is a newly incorporated company which came into existence post the demerger of Paper Manufacturing & related businesses from the erstwhile Pudumjee Industries Ltd, Pudumjee Pulp & Paper mills Ltd and Pudumjee Hygiene Products Ltd.

Pudumjee Paper Products Ltd has now emerged as the single largest Specialty Paper Producer in the Country with an annual installed capacity of 60,000 Tons (out of this, 22000 MT/annum belongs to crepe tissue products). The residual companies i.e. Pudumjee Pulp & Paper Mills Ltd and Pudumjee Industries Ltd. operate as a real estate development companies with the available land bank. Pudumjee Pulp & Paper Mills Ltd also has wind power generation business with 4600 KW installed capacity. Pudumjee Hygiene Products Ltd (100% subsidiary of Pudumjee Industries Ltd) will concentrate on Machinery Leasing business.

Products

The Company has two business divisions, namely, 'Paper Division' and 'Hygiene Division'.

With its four paper machines, the company is equipped with the ability to produce a wide range of products from 17 GSM to 100 GSM and is capable to go even higher. The company is able to offer a wide range of tailor-made products to its customers by virtue of an experienced and dedicated team and access to superior technology. Some products include:

1. Opaque Laminating Base - used for laminating, printing, packaging, Chocolate & Toffee wrapping
2. Glassine for packing of food products, soaps etc.
3. Base paper for melamine crockery, Paper for decorative laminates for furniture.
4. Bible Printing Paper used in Printing of Bible, Dictionary, Books, Pharma leaflets.
5. Vegetable parchment paper for packing of butter, cheese etc.
6. Kraft papers used as a release liner for the label, Incense stick packaging etc.
7. Tissue paper used as napkins, kitchen towel, Toilet rolls products and several others.

Vegetable parchment paper

Natural Tissue Paper

The hygiene product division of the company primarily sells its products to institutional buyers like Luxury Hotels, Airports, Corporate offices etc. The products are sold under the brand name 'Green-lime' and the range includes bathroom rolls, kitchen towel, napkins, dispensers etc..

The company has around 40% market share in the various sub-segments of the domestic specialty paper segment. There is intense competition from import, which caters to about 60% of domestic demand for specialty paper. Moreover, the company faces competition from other large domestic players like Orient paper, Century Paper, ITC etc in segments such as writing and printing paper, and hygiene and tissue paper.

Manufacturing Facility

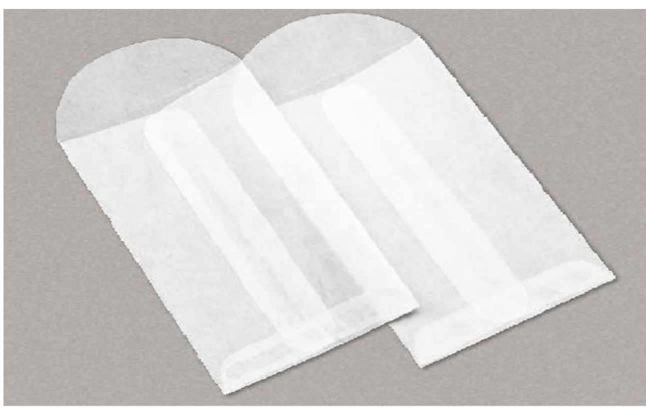
The company's manufacturing facility is located in Pune, Maharashtra. With the city's expansion over time, the manufacturing site is now surrounded by local inhabitants. This development has led to limited access to land for further installation of new machines to expand capacity. Being closer to the inhabitants has also resulted in several environmental restrictions on the company.

The mills at an existing site having expanded from time to time do not have an optimal energy balance in terms of process steam and power and thus not allowing potential in-house cogeneration power benefit.

The company has planned for installation of additional machines at their new site in Mahad, Maharashtra where the company has around 80 acres of land at the Industrial Development Corporation in Mahad. The company has been gradually relocating its manufacturing facilities from Pune to Mahad in order to expand its capacity, incorporate superior technology to enhance its product quality.

With the growth in the Indian middle class with higher disposable income and rising standards of living, the specialty paper segment is all poised to grow at a healthy rate over the coming years. The product portfolio of specialty paper includes Glassine products, food packaging, baking, Décor paper for furniture and laminates etc.

Although, the company has the potential to enhance its capacity by revamping the existing paper machines which would not only increase production and improve quality but also helps in reducing costs for the company. The company also plans to expand in other segments where they would require additional paper machines for manufacturing Release liner paper for the application in 'Label Industry'. Pudumjee is targeting a niche market which is presently served through the imported paper which will enhance its product portfolio as well. Hence, relocating to Mahad for setting up additional facilities is imperative.



Glassine Paper

Release Liner Paper

Raw Material

The company entirely procures its raw material, market pulp and waste paper, through imports. The prices of the raw materials have been on a continuous rise in the international market in FY18. The Market Pulp prices combined with the effect of the weakening of Rupee against Dollar have risen from Rs.39, 300 per MT in April'17 to Rs. 53,900 per MT in April'18.

Electricity: The Company is dependent on the state grid to fulfill its power requirements. Since June 2014, the state government has enhanced its cross-subsidy surcharge which has dampened the company's prospects in terms of profitability.

Distribution Network

PPPL has a strong pan India distribution network with 30+sales distributors which ensure the company's presence across the country in the specialty paper segment. The distributors are strategically placed in all major cities thereby providing easy access to its customers.

Although the exports are just 3% of the company's total sales in FY18, the company has a decent distribution reach in countries like Europe, South-East Asia, UAE and Iran among other countries. Similarly for the hygiene products, as a commitment to high service standards, the company has established branch offices in all major towns and cities across India.

Management and Board of Directors

- More than four decades ago, Pudumjee group has pioneered the specialty paper products segment in India and since then, has developed advanced technology for a wide range of specialty paper products.
- At present, the promoter holding is 67.11 % and the company has also maintained a dividend payout ratio of meagre 8% for the last three years.

Board of Directors

Name	Designation	Experience
Mr. A. K. Jatia	Chairman and Promoter Director	Mr. Jatia is associated with the Pudumjee Group for more than 17 years and has contributed towards its growth. Mr. Jatia is B.S. (Finance and Business Economics) from the University of Southern California – the USA and an Alumni of Harvard Business School.
Mr. V. P. Leekha	Executive Director	Mr. Leekha is B.E. (Mechanical) and is associated with the Pudumjee Group for more than 15 years. He has a wide and varied experience over the decades in Paper Industry in various positions. He has expertise in Paper Technology, Project & Development and General management etc.
Mr. S. K. Bansal	Director	Mr. Bansal is a Bachelor of Commerce, Associate member of the Institute of Chartered Accountants of India and Institute of Company Secretaries of India. Mr. Bansal is associated with the Pudumjee Group since 1984. He has wide and varied experience in finance, Legal, corporate laws and taxation matters.
Dr. Ashok Kumar	Executive Director	He is M.E. (Chemical Engineer) and PhD. (Pulp Processing) and has wide and varied experience over three decades in the Paper Industry.
Mr. V. K. Beswal	Independent Director	Mr. Beswal is a Bachelor of Commerce & a practicing Chartered Accountant and has a vast and varied experience in Tax and Financial Matters.
Mr. Nandan Damani	Independent Director	Mr. Damani is a Bachelor of Science and Chairman and Managing Director of Simplex Realty Ltd. and possesses wide and varied experience in Business and Finance.
Mrs. Madhu Dubhashi	Independent Director	Mrs. Madhu Dubhashi is a post graduate in Business Management from the Indian Institute of Management, Ahmedabad. She has experience of more than four decades in the capital market and financial service sector.
Mr. Basant Kumar Khaitan	Independent Director	Mr. Basant Kumar Khaitan is a Bachelor of Commerce and a noted Industrialist. He has 45 years of industrial management experience and also possesses varied experience in the manufacturing and marketing of Paper Machine Clothing used in the Paper industry.

Source: Company's Website

Segmental Revenue

Year / Rs Cr.	FY16	FY17	FY18
Paper Sales	417	494	466
% of Sales	**89%**	**91%**	**92%**
Hygiene Products	52	50	52
% of Sales	**11%**	**9%**	**10%**
Total Sales	**469**	**544**	**506**

Source: Company Annual Reports

- The company has witnessed a 7% overall decline in its revenues part of which was a calculated move by the management to gradually change the product mix towards better realization and higher margins products. The higher fiber cost and the inability to pass on the cost to the customers was the reason for the lackluster margins which necessitated this move.
- Pudumjee tissue segment is now marketed and sold through the hygiene business segment. This segment is expected to register high growth in the near term for the company as a realization for the products has increased due to high pulp prices and also imports are expensive due to rupee depreciation.

Pudumjee Paper Products Ltd - Common Size P&L Account

Year / Rs Cr.	FY18	FY17	FY16
Expenditure			
Cost of Raw Material Consumed	60.1%	58.5%	55.0%
(Increase)/Decrease in Inventories	-1.8%	3.4%	-1.6%
Employees Benefit Expenses	8.2%	7.3%	7.9%
Other Expenses	25.3%	21.5%	32.9%
Total Operating Expenditure	91.9%	90.8%	94.2%
Gross Profit	41.7%	38.0%	46.7%
Operating Profit / EBITDA	8.1%	9.2%	5.8%
Other Income	1.0%	0.8%	1.7%
Depreciation	1.3%	1.3%	1.1%
Profit Before Interest & Tax (PBIT)	7.8%	8.6%	6.3%
Interest/Finance Costs	1.8%	2.0%	3.6%
Profit Before Tax	6.0%	6.1%	2.7%
Total Tax	2.2%	2.1%	0.6%
Profit After Tax	3.8%	4.0%	2.2%

Source: Ace Equity

- **Gross profit** has not increased despite the increase in a realization of paper prices in the market as the company imports most of the raw materials whose prices have increased, and rupee depreciation further dented the margins of the company.

- **Employee cost** has risen as the company has increased its spending on gratuity and provident fund in the last few years.

- **Other expenses**; Major expenses are fuel expenses which constitute around 15-16% of revenues of the company. The company depends on the state grid department for the supply of electricity as of now, shifting the plant at Mahad where the company is planning to set up co-generation power plant will help decrease power cost in coming years.

- **Finance Cost**: Interest cost of the company has reduced as the company has paid back some long term and working capital loans.

- **Net Profit:** Higher raw material expense coupled with lower sales impacted margins. However, the company is now producing product mix having higher revenue realization and better margins which will help them increase the profitability from FY19 onwards.

Balance Sheet Strength

- Pudumjee Paper Products Ltd. (PPPL) has an equity base of Rs 9.50 Cr. with 9.50 Cr. shares outstanding at a Face Value of Rs. 1. The net worth stands at Rs 242.69 Cr. as on Mar'18.
- The company has a total debt of Rs 64.41 Cr and an Interest Coverage Ratio of 4.43 suggesting company that they earn four times EBITDA compared to interest payments.
- Pudumjee has a contingent liability of Rs 5.46 Cr. mainly related to electricity duty matter and excise duty. However, they have made provisions for disputed statutory liabilities of electricity duty under litigation with Electricity department.

Free Cash Flow

Year	FY16	FY17	FY18
Cash from Operating Activity	15	82	24
Purchased of Fixed Assets	9	18	14
Free Cash Flow	**6**	**64**	**10**

Source: Ace Equity

- Cash flow from operation in FY18 was impacted due to changes in working capital requirement. However, the company has been generating positive cash flow from operations from last three years after they have made an investment for enhancement of capacity.
- The company has plans of spending Rs 80 Cr. in the next two years for up-gradation of plant and also on making some arrangement for power in order to reduce the electricity cost of the company.

Cash Conversion Cycle

Year	FY16	FY17	FY18
Receivable Days	46	42	45
Inventory Days	74	52	44
Payable Days	15	37	52
Cash Conversion Cycle	105	57	37

Source: Ace Equity

- The improvement in the working capital cycle was largely on account of increase in the Payable days. Moreover, Inventory days has also reduced drastically in the last two years as the company has been able to churn its inventory quickly.

Key Risks

1. **Global volatility in waste paper and Pulp prices may affect profit margins:** In the last two years, the profit margins of the firm have remained vulnerable to the fluctuations in the Pulp paper and waste paper prices as the company is completely dependent on the market pulp for manufacturing of its products.

2. **Vulnerable to fluctuation in foreign exchange rate:** the company meets all of its raw materials requirements through imports thus getting affected by fluctuations in the exchange rate. The recent depreciation of rupee also impacted the company's margins.

3. **Highly competitive Market**: There is intense competition from imported paper, which caters to about 60% of the domestic demand for specialty paper. Moreover, the company faces competition from other large domestic players in segments such as writing and printing paper, and hygiene and tissue paper.

Key Takeaways

Particulars	Explanation
Raw Material	The company imports its entire raw materials- waste paper and market pulp; thus is exposed to currency fluctuation as well as International market prices of RM.
Electricity	Mostly dependent on State Government for the supply of Power.
Installed Capacity and Utilization (%)	Installed capacity around 60,000 MT/annum and Utilization was more than 95% in FY18
Multiple product offerings and a strong distribution network	PPPL offer its customers a wide range of tailor-made specialty products for various applications and have a strong distribution network in Western India.

Conclusion

PPPL is an established player in the specialty paper segment. The company has established a wide distribution network across western and southern India. The utilization continues to remain more than 95% and expected to operate at full capacity in the coming year.

The company has been facing margin pressure mainly due to increase in raw material prices and fuel cost. They have taken steps to produce different product mix with higher margins where they can easily pass on raw material cost due to higher realizations and are making arrangements for electricity as well to reduce some costs.

Star Paper Mills Limited

Introduction

Incorporated in 1936, Star Paper mills Limited is a part of Duncan Goenka Group which produces a range of products used in industrial, packaging and cultural papers. The company mainly caters to writing, printing and packaging paper and is one of the largest manufacturers in the absorbent Kraft and Virgin Kraft segment and also enjoys a leading market share.

Products

The company produces a wide range of papers such as SS Maplitho White/Natural Shade, Greeting Paper, Kraft Paper, Padding Paper, MG Poster, Stiffner Cover, cartridge Paper and many more.

These products have application in paper printing, lottery printing, computer stationery, book printing, packaging various products, Defense/Ammunition Packing and many more. The company sells its products under the 'Star' brand.

Raw Material

SPML uses wood pulp for Writing & Printing Paper segment and waste paper for Kraft Paper segment. In order to reduce its dependence on external sources for raw material, the company has around 35,000 hectares of land where they have planted around 3.18 Cr. saplings across Western Uttar Pradesh and Uttaranchal. Despite the company initiatives on plantations of clonal saplings, still, the dependence of the company on external wood/bamboo is high which exposes the company to the risk of raw materials availability and volatility in its prices.

The company is strategically located close to Yamuna Nagar (35 km away), which is the procurement hub of wood chips and gives the plant easy access to the raw materials which translates into lower inventory and logistic cost for the company.

Electricity: The Company has two captive power plants of five MW each; one plant runs on diesel while the other is coal-based.

The recent decline in the diesel prices along with using pet coke in place of coal has resulted in a reduction in the power cost for the company in FY16. The company's power consumption from its own captive plants has increased from 48% in FY15 to around 90% in FY 16. The company procures the rest 10% power shortfall from the state grid which costs around Rs. 8.5 per unit.

However, the Supreme Court's verdict on the ban on Industrial use of pet-coke and furnace oil from Nov'17 onwards led to a steep rise in fuel costs. This has steeply increased the overall power cost of the company from FY18 onwards.

Manufacturing Facility

The company has an installed capacity of around 75,000 TPA of paper and paperboard products in Saharanpur, Uttar Pradesh.

On the growth front, the company's management is not planning to increase the capacity any further; rather they want to focus on modernizing the plant in order to manufacture more value-added products (VAP) which have higher price realization and better margins. The company wanted to increase the share of Value-added Products (currently at 35% of the total revenue) along with spending more capital on captive power plants in order to reduce the dependence on the state grid for power.

The first phase of the project will cost Rs 150 Cr. out of which Rs 60-65 Cr. would be external borrowings and rest will be funded by internal accruals.

Sales and Distribution Network

The company has established a pan India presence through its dealer network which has reached a tally of 50. Its clients include Century, Laminating, Eveready, Greenply, Thomson Press, Hindustan Lever, ITC, Pearson Education (Singapore), Shree Krishna Paper and Thomson Press, among others. Along with a strong domestic presence, the company also exports its products to neighboring countries.

Management and Board of Directors

- The company has a long track record of more than 8 decades in the paper industry. Star was initially managed by Baldeodass Bajoria and later was acquired by Duncan Goenka group in the year 1986.
- The Duncan Goenka Group (DPG) is one of the oldest business houses in India with a diversified product portfolio of Tea, FMCG, Engineering, Paper, Synthetic Fibers, Chemicals and Polymers.
- Srivardhan Goenka is the one currently managing the company (Son of GP Goenka). Since the last few years after his son took over the company, there has been a lot of positive developments in the company.
- At present, the promoter holding is 45.87 % out of which 48.30% of shares are pledged by the promoters. Promoter's Stake has been divided among various group entities with ISG Traders Limited holding a maximum of 32.17%.
- The company has not been paying much dividend considering they need capital for modernization of plants & machinery.

Shareholders with more than 1% equity (as on Sept'18)

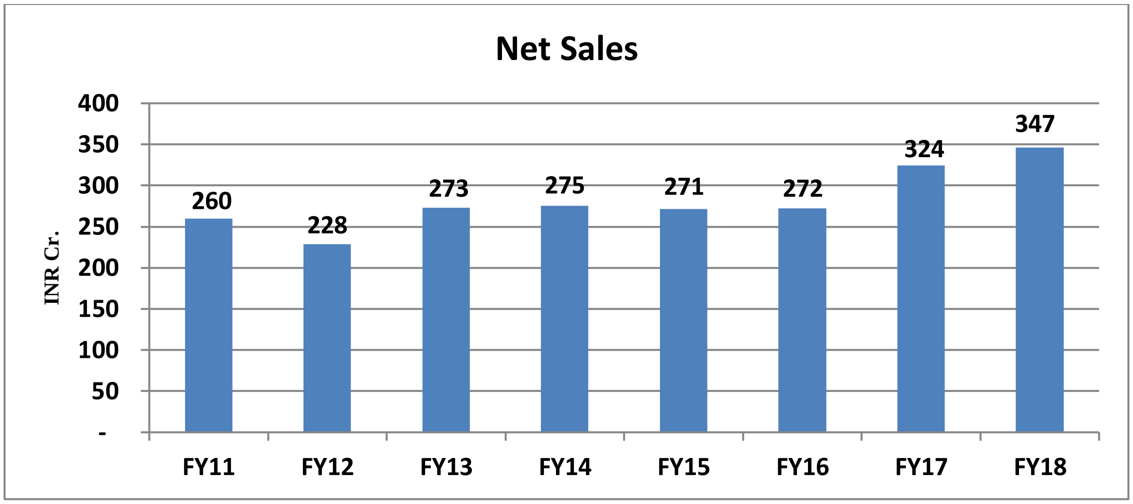
1. Anil Kumar Goel-1.98%
2. Sunita Santosh Goenka-1.24%
3. Santosh Sitaram Goenka- 1.33%
4. Kanta Chhajer-2.58%

Board of Directors

Name	Designation	Experience
Mr. G.P. Goenka	Executive Chairman and Promoter	He has a vast experience of over 51 years in management, strategic planning, acquisitions and expansion, administration etc. He has been associated with the company since 1986 as a promoter director and has been instrumental in establishing the company as a recognized player in the paper Industry.
Mr. Madhukar Mishra	Managing Director	Mr. Madhukar Mishra, B.Sc, DMS (Mgt.) has been the Managing Director of Star Paper Mills Limited since July 1, 2010, and has been it is Executive Director since September 30, 2009. Mr. Mishra has a wide range of industries like Pharmaceuticals, chemicals, food Ingredients, Cement, Synthetic Fibres etc. He holds BSc and DMS (Mgd).
Mr. Shrivardhan Goenka	Non-executive Director	Mr. Shrivardhan V. Goenka has been a Non-Executive Director of Star Paper Mills Limited since September 9, 2002. Mr. Goenka holds a BCom in Commerce from St. Xavier's College, Calcutta and Master of Business Administration from Kellogg School of Management, Northwestern University, USA.
Mr. Shiromani Sharma	Independent Director	Mr. Sharma has wide experience in various positions held by him in the Government as well as in public and private sector Companies. He has been an Independent Non-Executive Director of Star Paper Mills Ltd., since June 29, 1993.
Mr. C.M. Vasudev	Independent Director	Mr. Vasudev holds a Master's degree in Economics and Physics from University College of Swansea, UK and from Punjab University, Chandigarh. He has extensive experience in policy - making and management in the financial sector at both the national and international level.
Mr. M.P. Pinto	Independent Director	He holds a Master degree both in Arts and Public Administration (USA). Sh. Pinto has vast experience of over 35 years in Management & Administration. Sh. Pinto has served the company earlier as IDBI nominee director
Ms. Savita Laxmipathy Acharya	Independent Director	Ms. Savita Laxmipathy Acharya is a qualified chartered accountant having expertise in accounting, finance and taxation. She has a vast experience of about 20 years in finance & accounts, taxation, corporate laws etc.

Financial Analysis

- The rise in the top line is on the account of better utilization of the installed capacity in FY17 & FY18 coupled with improvement in realization from Writing and Printing products.
- The capacity utilization level improved to 88% in FY17 as compared to 74% in FY16. According to the management, currently, they are running at more than 100% capacity utilization.
- The realization for writing and printing papers improved to Rs 53,198 per MT in FY17 from Rs 52,154 in FY 16.



Source: Ace Equity

Star Paper Mills Limited - Common Size P&L Account

Year / Rs Cr.	FY18	FY17	FY16	FY15	FY14	FY13	FY12	FY11	FY10
Expenditure									
Raw Material Consumed	22.0%	22.6%	28.6%	32.0%	36.7%	41.0%	41.2%	39.6%	31.5%
(Increase)/Decrease in Stock	0.0%	1.0%	0.4%	0.5%	1.0%	0.1%	0.0%	-1.9%	2.5%
Employees Expenses	8.1%	9.0%	9.6%	10.0%	9.3%	9.6%	10.5%	9.9%	10.1%
Other Expenses	49.1%	45.6%	51.7%	52.0%	55.9%	55.4%	65.3%	56.8%	51.6%
Total Expenditure	79.1%	78.1%	90.2%	94.5%	102.9%	106.1%	117.0%	104.5%	95.6%
Gross Profit	78.0%	76.4%	71.0%	67.5%	62.3%	58.9%	58.8%	62.3%	66.1%
EBITDA	20.9%	21.9%	9.8%	5.5%	-2.9%	-6.1%	-17.0%	-4.5%	4.4%
Other Income	1.5%	0.6%	0.3%	0.3%	0.4%	0.3%	4.8%	4.0%	4.3%
Depreciation	1.2%	1.3%	1.6%	1.8%	4.0%	4.1%	5.0%	4.5%	4.8%
PBIT	21.1%	21.2%	8.6%	4.0%	-6.6%	-9.9%	-17.2%	-5.1%	3.9%
Interest/Finance Costs	0.3%	0.4%	0.9%	1.2%	1.7%	1.7%	1.4%	0.8%	1.3%
Profit Before Tax	20.8%	20.8%	7.6%	2.8%	-9.5%	-11.6%	-18.6%	-5.8%	2.6%
Total Tax	5.2%	2.2%	1.6%	-3.0%	-1.5%	-0.7%	0.0%	-1.9%	-0.7%
Profit After Tax	15.7%	18.6%	6.1%	5.7%	-8.0%	-10.8%	-18.6%	-3.9%	3.3%

Source: Ace Equity

- **Gross profit** has been increasing because of the increase in utilization levels as well as a higher realization of products. The company is also planning to diversify into more value-added products having higher realization and margins by modernizing Current Plant Machines.
    - The company's cost of raw material has also been decreased due to management efforts of procuring raw material by planting more seedlings around the plant under the social farm forest program.

- **Other expenses:** Power & Fuel expenses constitute around 22-24% of the revenues in FY18. The company has been able to successfully reduce the power cost by adopting different methods to generate electricity in-house. However, the recent increase in pet coke prices has impacted power and fuel cost of the company.
  - The company also relies on the state grid for the supply of electricity as the current 10 MW of power plant is not sufficient to meet the plant's power requirements. So the management is planning to augment power plant capacity in order to reduce dependence on the state grid and decrease the power cost of the company.

- **Finance Cost**: The Company has repaid debt (almost debt free) which has resulted in a decrease in interest cost in the last few years.

- **Net Profit:** Profitability has been rising due to a reduction in raw material prices, increase in realization, and reduction in interest and depreciation cost due to higher economies of scale.

Balance Sheet Strength

- Star Paper mills ltd has an equity base of Rs 15.61 Cr. with 1.56 Cr. shares outstanding at a Face Value of Rs. 10. The net worth stands at Rs 406 Cr. as on Mar'18.
- The company has a total debt of Rs 1.53 Cr. (working capital loan and has no long term debt). *The company also has cash & bank balance of Rs 26.21 Cr. and Rs. 61.57 Cr. in Investments (mutual funds).*
- They have also been investing in up-gradation and modernization of plants since the last few years which has helped the company in increasing efficiency of the plants.
- The company has been reducing debt (almost debt free) owing to a decrease in the working capital borrowings and term loans. All the investments related to plant up-gradation has been done through internal accruals.
- The management is planning to spend another Rs 150 Cr. using around Rs 90 Cr. from internal accruals and around Rs 60 Cr. through external borrowings.
- Increase in profitability due to higher volumes and realization along with judiciously utilizing capital resulted in higher ROE and ROCE for the company.

Year / Rs Cr.	FY11	FY12	FY13	FY14	FY15	FY16	FY17	FY18
Gross Block	254	255	255	257	257	260	408	413
Borrowings	15	20	20	20	14	7	4	2
ROE	-8%	-51%	-54%	-68%	33%	26%	17%	13%
ROCE	-10%	-38%	-36%	-41%	18%	33%	19%	18%

Source: Screener.in

- The company has been generating positive cash flow from operations. Average operating cash flow from the last five years has been around Rs. 20 Cr.
- SPML has not expanded the capacity of its plant as the management believes current capacity is sufficient considering paper demand in the market. The management is working towards changing product mix (with minimum investment) tilted towards more value-added products rather than undertaking capacity expansion which requires a huge investment.

Free Cash Flow

Year	FY11	FY12	FY13	FY14	FY15	FY16	FY17	FY18
Cash from Operating Activity	-7	-1	4	3	15	12	39	32
Purchased of Fixed Assets	2	1	0	0	1	0	0	0
Free Cash Flow	**-9**	**-2**	**4**	**3**	**14**	**12**	**39**	**32**

Source: Company Annual Reports

- The overall working capital profile of the company has improved with the negative operating cycle from FY13. The company's management has worked tremendously on managing the working capital requirement which is quite evident from the operating cycle.
- The company has maintained healthy relations with the dealer network which has resulted in timely collection translating into lower debtor days. The location advantage of the company for procuring raw material has made them efficiently manage their inventory days to around 35 days.
- Being present in the business for the last eight decades has resulted in strong bargaining power with the suppliers, which is evident from the high creditor days.

Cash Conversion Cycle

Year	FY11	FY12	FY13	FY14	FY15	FY16	FY17	FY18
Receivable Days	13	11	10	9	9	14	8	8
Inventory Days	42	46	35	32	30	32	32	40
Payable Days	42	42	70	89	106	109	82	60
Cash Conversion Cycle	13	15	-25	-48	-67	-63	-42	-12

Source: Ace Equity

Key Risks

1. **Volatility in input prices:** Even though the company has taken initiatives to plant clonal saplings still the dependency on bamboo continues to remain high hence the company is expected to stay vulnerable to volatility in the raw material prices.

2. **Exposure to group companies:** As on March 31, 2018, the net exposure of SPML to its associate company (ISG Traders Ltd) continues to be at Rs.16.89 Cr. The company recognized this investment at Fair Value in FY18 which resulted in a decrease in an amount from Rs 32 Cr. (quoted investment) in FY17.

Key Takeaways

Particulars	Explanation
Raw Material	The company mainly uses the wood pulp as raw material and is reducing dependence on external supplies by a plantation of clonal saplings.
Electricity	90% requirement met through 10 MW captive power plant while rest through State Grid.
Installed Capacity and Utilization (%)	Installed capacity around 75,000 MT/annum and Utilization was more than 85% in FY18
Experience	The Duncan Goenka Group (DPG) is one of the oldest business houses in India and SPML has a long track of over five decades in the Industrial, cultural and packaging segment.

Conclusion

SPML has demonstrated a long track record over the last five decades in the Industrial, cultural and packaging segment by producing various product mix which caters to different customers. The utilization continues to remain more than 85% and expected to go up in the coming few years. The company is almost debt-free with positive free cash flow and no major plans for expansion in the near term. They also hold around Rs 85 Cr in cash equivalents and liquid investments.

The management has successfully turned around business operations by reducing the dependence of raw material by a plantation of seedling, requiring less investment for working capital, judiciously utilizing current capacity by altering product mix and continuously making efforts to reduce the power and fuel cost.

Orient Paper & Industries Limited

Introduction

Incorporated in July 1936, Orient Paper & Industries Ltd. (OPIL) is managed by G.P. - C.K. Birla group and is currently engaged in manufacturing of WPP, tissue paper and caustic soda and derivatives.

Journey so far:

- 1936
  - Started manufacturing of printing & writing paper
- 1982
  - Entered cement manufacturing business
- 1997
  - Entered tissue paper segment, set up a manufacturing capacity of 10 ktpa
- 2010
  - Expanded tissue paper manufacturing capacity from 10 ktpa to 25 ktpa
- 2013
  - Demerged cement business into a separate company, Orient Cement Ltd
- 2017
  - Expanded tissue paper capacity from 25 ktpa to 50 ktpa and demerged electricals business into a separate company, Orient Electric Ltd.

Products

- **Tissue paper-** includes High-quality facial, toilet, napkin and toweling papers.
- **Writing and printing paper**- manufactures papers for the publication and notebook segments
- **Caustic soda and derivatives**- Caustic soda & flakes, chlorine and HCL

The paper products are sold under the brand names ‘Diamond Touch’, ‘Orient’ and ‘First Choice’.

Orient Paper has upgraded its facility to provide superior quality and different varieties of tissue paper to both domestic and export markets. The different tissue paper segments include facial, toilet, toweling and napkin grades. In the Writing & Printing Paper segment, the company has developed expertise in publishing grade papers in addition to its dominant position in the notebook segment.

Manufacturing Facility

The Orient Paper & Industries Limited was incorporated in the year 1965 on the west bank of river Sone at Village Amlai in Madhya Pradesh. The Company is having a capacity of 105,000 MT/annum (Printing and Writing Paper 55,000 MT/annum and Tissue paper 50,000 MT/annum). The company also manufactures Caustic Soda with an annual capacity of around 36,000 MT/annum, contributing ~20% to revenues; the company does not have ambitious growth plans for this division. The caustic soda unit caters to the needs of diverse industrial sectors such as paper, aluminum and power etc.

Tissue Paper Industry

Tissue paper is the fastest growing segment in the global paper industry. The demand for a tissue as a proportion of global demand for paper grew from 7.2% in FY10 to 8.2% in FY16. The tissue paper industry is highly concentrated in nature as it is essential to set up small-sized facilities and the intensive efforts in scaling up its operations as the tissue paper products are largely consumed in small quantities.

The typical capacity of a tissue paper facility is 15,000-60,000 MT/annum as compared to 150,000-200,000 MT/annum for WPP segments. The key domestic paper manufacturers like JK Paper, TNPL, AP Paper, West Coast Paper, Seshasayee Paper etc are yet to enter the market. In the organized segment, the tissue paper market is dominated by very few players. Orient Paper is the largest tissue paper producer in India with an annual capacity of 50,000 MT/annum, followed by Century Textiles (36,000 MT/annum), ITC (36,000 MT/annum) and Pudumjee Paper (22,000 MT/annum)

According to the management of the company, the demand for tissue paper in India is expected to grow at a CAGR of 7%-8% per annum (in volume terms) due to steady domestic demand. India's per capita consumption of 0.14 kg is way below their global counterparts like Russia (3.2 Kg), South Africa (4 Kg), and Brazil (5.4 kg). India is the net exporter in the tissue paper segment with OPIL being the largest exporter with a 44% share. Due to a sharp increase in the global pulp prices and weak wood price in the domestic market, the competitive position of quality tissue paper manufacturers in India has improved over the last two years which has translated into phenomenal growth in net exports of the company (208% in FY18 and 98% in 2MFY19).

Largest player in tissue paper segment

In 1997, Orient Paper became India's first paper company to venture into manufacturing tissue. The company commenced its operations from 10,000 MT/annum in 1997 to 25,000 MT/annum in 2010 to around 50,000 MT/annum in FY18. Their WPP segment is growing at a rate of 4%-5% while tissue paper segment is registering a growth rate of 12% per annum. With a market share of around 17% in terms of capacity, Orient Paper is the largest player in the tissue paper segment in India. The company enjoys a distinct edge over its competitors due to its first mover advantage in the domestic tissue paper segment. With the commissioning of new tissue paper capacity in May 2017, the company is all set to take advantage of the recent rise in pulp prices.

Tissue paper is highly recyclable and biodegradable products and mainly finds its use in the Food & Beverage Industry as well as hygiene-related areas in other industries. With the rising awareness related to hygiene as well as environmental issues, this industry is expected to grow at a stupendous pace over the coming years.

Orient Paper sells a variety of tissue which includes paper towels, napkins, toilet paper and facial tissues etc. These products find extensive use in Hospitals, Hotels, restaurants, institutions and households etc.

Raw Materials

The company's manufacturing plant is based on hardwoods and eucalyptus wood pulp and currently, they have pulp capacity of 72,500 MT/annum. The company is increasing its emphasis on development and plantation of clonal saplings and thereby reducing the dependence of external wood/ bamboo supplies.

OPIL plans to increase its pulp capacity from 72,500 MT/annum to 100,000 MT/annum by Sep 2020 at a cost of Rs 75 Cr, which will completely reduce its reliance on market pulp over the long-term (currently 80% of pulp requirement is met in-house while 20% is imported) and setting up of new recovery boiler at a cost of Rs 150 Cr. The project is expected to be funded using internal accruals.

Electricity: The manufacturing unit has an installed captive power plant capacity of 55 MW. The current power consumption for the existing paper operations was reported to be in the range of 36 MW. The company sources its entire requirement of coal from M/s. South Eastern Coalfield Ltd.

Water: The Company has gradually constructed four reservoirs (375mn gallons) in order to mitigate plant shutdown owing to a potential water shortage. As in FY17, there was a 35-day shutdown of the plant due to water scarcity which impacted the company's operations.

Sales and Distribution Network

The Company's products are being sold throughout the country through a wide range and well-established dealer network. The main markets in the country are in the Central & Northern regions particularly Delhi, U.P., and Punjab & Haryana. The products are also exported to different countries mainly Sri Lanka, Nepal, Bangladesh, Singapore, Myanmar etc.

Management and Board of Directors

- G.P. - C.K. Birla group, established by late Shri B.M. Birla, is a leading industrial group of the country and has a major interest in a diverse range of products like automobiles, auto ancillary products, earthmoving equipment, engineering products, chemical, cement, paper, fan and consumer electrical items.
- With the objective of aligning management focus on a single line of business and unlocking shareholder value in the process, Orient Paper went on a demerger spree starting FY13.
- Orient Paper first de-merged the cement business in FY13 in Orient Cement Ltd. In November 2017, it demerged its electrical appliances business, which got listed on the stock exchanges as a separate entity as Orient Electric Ltd. The de-merger also enhanced accountability and ensures management focus to explore various options to augment growth plans.

- At present, Promoter holdings are 38.52 % and the company has also been maintaining a healthy dividend payout ratio of 41.13%.

Board of Directors

Name	Designation	Experience
Mr. C. K. Birla	Chairman, Promoter	Mr. Chandra Kant Birla, B.A., is an industrialist with rich experience. He is associated with various group companies (Orient Cement Ltd, HIL Ltd, National Engineering Ind. Ltd., etc).
Mr. M. L. Pachisia	Managing Director	Mr. Manohar Lal Pachisia, B.Com has been OPIL's MD and CEO since April 1991. He serves as a non-executive independent director in various CK Birla group companies
Shri Amitabha Ghosh	Independent Director	An eminent Chartered Accountant with additional professional qualification in Banking, he is a former Chairman and Managing Director of Allahabad Bank and a former Governor of Reserve Bank of India.
Shri Michael Bastian	Independent Director	Mr. Michael Bastian is a graduate in commerce and a Chartered Accountant, Fellow of the Institute of Chartered Accountants of India. He has over four decades of experience in managing public and private sector enterprises, especially in the field of Finance and Management.
Shri Narendra Singh Sisodia	Independent Director	He holds an Honours degree from St. Stephen's College Delhi and a Master's degree from Harvard University, USA. During his 37 years as a civil servant, he served on a number of key positions in the state of Rajasthan and Government of India. He was Secretary, Department of Industries and Commerce for 7 years. He also served as Chairman, State Industrial and Infrastructure Development Corporation and the State Electricity Board.
Ms. Gauri Rasgotra	Independent Director	She is an Advocate and has a rare combination of advisory and litigation experience of 21 years in both academic and corporate settings. She has 15 years of active experience in litigation in the Supreme Court as well as other courts in India on behalf of Ms. Khaian & Co LLP. She also worked in the U.S.A. at the George Washington University Law School. She is also Director on the Boards of VISA Steel Ltd. and HIL Ltd.

Source: Company's Website

Financial Analysis

Orient paper's tissue paper segment enjoys higher price realizations and better margins as compared to the Writing & Printing Paper Segment. The company has state of the art facilities to produce premium quality tissue paper of better quality and higher bulk, thereby making it possible for the company to earn decent returns in this higher realization market segment.

The commissioning of the new capacity of 25,000 MT/annum in FY18 will allow the company to better penetrate both the domestic as well as the export market. The company has also started with the production of facial and toilet grade tissues where they still have a limited presence. Currently, tissue paper segment accounts for 41% of its production out of which around 50% is exported.

Given the growing demand and higher revenue realization in the tissue paper, the company has gradually increased the proportion of tissue paper in the overall product mix. At full utilization, management expects the newly added capacity to generate additional revenue of Rs 170 Cr.

Capacity Utilization

Particulars	FY16	FY17	FY18
Writing & Printing			
Installed MTPA	55,000	55,000	55,000
Production MTPA	54,656	52,074	55,068
Utilization (%)	99%	95%	100%
Sales (Rs Cr.)	285	279	311
Price Realization (Rs/MT)	52,176	53,606	56,497
Tissue Paper			
Installed MTPA	25,000	25,000	50,000
Production MTPA	22,273	20,643	32,931
Utilization (%)	89%	83%	66%
Sales (Rs Cr.)	150	130	220
Price Realization (Rs/MT)	67,510	63,009	66,806
Total Sales	**518**	**409**	**531**
Total Production	**76,929**	**72,717**	**87,999**
Total Installed Capacity	**80,000**	**80,000**	**105,000**
Utilization (%)	**96%**	**91%**	**84%**

In WPP segment, the Company is operating at 100% Capacity Utilization and Management does not plan to add more capacity in this segment but has undertaken major cost optimization over the last two to three years. With better realizations, the Company is in a strong position to take full advantage of growth opportunities.

In FY18, Paper segment accounts for ~79% of the company's revenues with Caustic soda contributing ~18%. Due to higher sales volume and improved revenue realizations, the company's revenue grew by 28.3% to 661 Cr. in FY18.

The improvement in performance is also attributed to the sharp increase in the prices of Caustic Soda (Increased by more than 30% in FY18) as a consequence of plant shutdown in China due to environmental concerns.

Orient Paper has a strong presence in exports, particularly in the Middle East, and is making inroads into newer markets such as South Africa, Australia, Zimbabwe, Tanzania, and Ghana. Currently, exports contribute around 18% contribution to total revenues.

Orient Paper & Industries Limited - Common Size P&L Account

Year / Rs Cr.	FY18	FY17
Expenditure		
Cost of Raw Material Consumed	27.8%	30.6%
(Increase)/Decrease in Inventories	0.8%	0.6%
Employees Benefit Expenses	12.1%	16.0%
Other Expenses	42.3%	46.7%
Total Operating Expenditure	83.1%	93.9%
Gross Profit	71.4%	68.8%
Operating Profit / EBITDA	16.9%	6.1%
Other Income	1.7%	9.2%
Depreciation	4.3%	4.9%
Profit Before Interest & Tax (PBIT)	14.3%	10.3%
Interest Costs/ Finance Costs	2.2%	4.0%
Profit Before Tax	12.1%	6.3%
Total Tax	4.7%	-1.0%
Profit After Tax	7.5%	7.3%

Source: Ace Equity

- **Gross profits** increased backed by a reduction in raw material prices and an increase in the realization of end product prices. Moreover, OPIL is the largest producer of tissue paper which has the highest realizations compared to other types of paper. The surge in caustic soda prices also contributed to a recent hike in the company's margins.

- **Other expenses**: Major expenses are fuel expenses which constitute around 15% of the company's revenues. The company invested in variable frequency drivers, energy efficient compressors and pumps in various mill locations to reduce power consumption.

- **Finance Cost**: The Company has repaid part of their debt by liquidating some investments which have resulted in a decrease in interest cost.

- **Net Profit:** overall, reduction in raw material prices, increase in realization, and decrease in power and interest costs together boosted the bottom line.

Balance Sheet Strength

- Orient Paper & Industries Ltd. (OPIL) has an equity base of Rs 21.22 Cr. with 21.22 Cr. shares outstanding at a Face Value of Rs. 1. The net worth stands at Rs 1018 Cr. as on Mar'18.
- The company has a total debt of Rs 69 Cr as on Jun'18. Orient paper holds a stake in some listed securities and other group entities which have a combined market value of around Rs. 274 Cr. These investments are quite liquid and the management has already received the approval of the Board to dispose of the asset anytime.

- During FY18, the company divested some portion of its investment for a net consideration of Rs. 31 Cr. Apart from this; the company has significant land bank worth Rs. 400 Cr.
- The company has recently announced its plan to enhance pulp capacity at a cost of Rs. 75 Cr. and setting up of a new recovery boiler at a cost of Rs. 150 Cr. According to management, the proposed capex will be funded out of internal accruals so the management is not planning to raise more debt.
- The company has been generating positive cash flow from operations. In FY18, the company generated operating cash flow of Rs. 126 Cr. Thus, the company is in a comfortable position as far as debt and cash flows are concerned.

Key Risks

1. **Shortage of Water:** In FY17, there was a 35-day shutdown of Plant due to water scarcity which impacted the company's operations. Thus, the company has faced problems related to water reservoirs in the past. However, the company has gradually constructed four reservoirs (375mn gallons) - adequate for about five months of operations, in order to mitigate plant shutdown due to water shortage.

2. **Disputed Tax Liability**: The company has a contingent liability of Rs. 279.89 Cr (original amount was less than 10 Cr way back in the late 1990s) mainly comprising of water tax along with sales tax and excise duty.

3. **Volatility in input prices:** Prices of hardwood and wood are highly volatile in nature and in turn affect the profitability of the companies in the paper industry. Company's profit margins are exposed to fluctuations in key raw material prices of bamboo, wood, wood pulp, depending on the supply side i.e. availability and demand for raw material. Moreover, 20% of pulp requirements are imported which is exposed to fluctuation in the exchange rate as well.

Key Takeaways

Particulars	Explanation
Raw Material	The company mainly uses the wood pulp as a raw material and meets 80% of its requirement through their integrated pulp capacity. They are planning to expand its pulp city in the next two years to reduce its reliance on market pulp.
Electricity	Self-sufficient with Captive Power Plant of 55 MW.
Water	Faced water shortages in past, however, constructed four reservoirs (375mn gallons) to mitigate plant shutdown due to water problems.
Installed Capacity and Utilization (%)	Installed capacity around 105,000 MT/annum and Utilization level of around 84% in FY18.

Conclusion

Orient Paper & Industries Ltd. (OPIL) has the largest market share in Tissue Paper Segment which has higher realization and expected growth rate is more than Writing & Printing Paper. Moreover, the company has successfully reduced debt, increased Tissue Paper plant capacity, taken several measures to reduce the overall cost of power and fuel in order to boost margins.

According to management, they are not planning to increase debt from the current level and future capex cost of around Rs 200 Cr will be funded through internal accruals without even selling any liquid investments (around Rs 274 Cr). Also, they have a parcel of land which according to the management is worth around Rs 400 Cr which they are not planning to sell as of now. The company might earn decent returns from here utilizing the increased capacity to take advantage of higher realizations in domestic as well as export market.

Companies at a Glance

Company	Paper Type	Raw Material	Paper Capacity (MTPA)	Capacity Utilization (%) (FY18)	Pulp Capacity (MTPA)	Integration Levels*	Mutiple Plants (Yes/No, # of plants)	Captive Power	Major RM Constrain?
Astron Paper	Kraft Paper	Waste Paper	128,000	80%	NA	NA	Yes, three	No	No Constrain
Genus Paper	Kraft Paper	Waste Paper	140,000	86%^	NA	NA	No	Yes	No Constrain
South India Paper	Kraft Paper	Waste Paper	60,000	NA	NA	NA	No	Yes	Labour
Shree Ajit Pulp & Paper	Kraft Paper	Waste Paper	90,000	85%	NA	NA	No	No	No Constrain
Ruchira Papers	Kraft and WPP	Agricultural residues and Waste Paper	85,800	129% in Kraft Paper & 143% in WPP	NA	NA	No	Yes	No Constrain
IP APPM	WPP	Wood Pulp	241,000	95%	181,500	94%	Yes, two	Yes	Labour
Seshasayee Paper	WPP	Wood Pulp	210,000	90%	145,000	86%	Yes, two	Yes	Water
Emami Paper	Newsprint,WPP & Packaging Board	Waste Paper	3,30,000	88%	NA	NA	Yes, two	Yes	No Constrain
N R Agarwal	Newsprint,WPP & Duplex Board	Waste Paper	354,000	85%	NA	NA	Yes, two	Yes	No Constrain
Pudumjee Paper Products	Specialty Paper	Wood Pulp & Waste Paper	60,000	95%	NA	NA	No	No	No Constrain
Star Paper Mills	Kraft and WPP	Wood Pulp & Waste Paper	75,000	more than 85%	NA	NA	No	Yes	No Constrain
Orient Paper	WPP and Tissue Paper	Wood Pulp	1,05,000	84%	72,500	86%	No	Yes	Water

*Assuming 0.8 tonnes Pulp required for 1 tonne of Paper

^ H1FY19

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